VALLEJO PLANNING COMMISSION
REGULAR MEETING 7:00 PM

JANUARY 21, 2026

HYBRID MEETING
www.Cityofvallejo.net

Council Chambers
555 Santa Clara Street
Vallejo, CA 94590

COMMISSIONERS
Anthony Taylor, (Chair)
Donald Douglass, (Vice-Chair)
Phillip Balbuena
Eric Blind
Tara Beasley-Stansberry
Wanda Madeiros
Chris White

NOTICE: Members of the Public will be able to participate in-person or remotely via Zoom	City Hall and the Council Chambers will be open to members of the public 30 minutes prior to the start of the meeting.
PUBLIC COMMENT: Members of the Public may provide public comments during the City Council Meeting in person or via ZOOM (https://ZoomRegular.Cityofvallejo.net), or via phone, by dialing (669) 900-6833.	**For additional instructions on how to speak remotely during public comment, please visit, www.cityofvallejo.net/publiccomment**
VIEW THE MEETING: **There are four different ways you can view this public meeting:** • **In Person** • **Watch Vallejo local channel 28** • **Stream from the City website: www.cityofvallejo.net/Streaming** • **Join the Zoom webinar: https://ZoomRegular.Cityofvallejo.net**	Scan QR code for live captions and translation in Spanish and Tagalog.

Hybrid Options are available for members of the public to participate. To participate remotely

Option to Join by Computer	**Option to Join by Phone**
From your browser go to https://ZoomRegular.CityofVallejo.net to launch and join the zoom application. Meeting ID: 914 0075 0676# Meeting Password: 131313	Dial (669) 900-6833 Enter Meeting ID: 914 0075 0676# Meeting Password: 131313 Press *9 to digitally raise your hand from the phone. Press *6 to unmute/mute

Any supplemental writing related to an agenda item for an open session of a regular meeting that is distributed to all or a majority of all members of the Commission less than 72 hours before the meeting will be posted concurrently on the City's website at www.cityofvallejo.net/agendas Written material distributed during the meeting, will be available at the meeting if prepared by the City or after the meeting if prepared by someone else. Such materials may be obtained from the Commission Secretary

Vallejo City Council Chambers is ADA compliant. Devices for the hearing impaired are available from the Staff Secretary. Requests for disability related modifications or accommodations, aids or services may be made by a person with a disability to the Staff Secretary's office by contacting via email Dalia.Vidor@cityofvallejo.net or via telephone at (707) 648-4326 no less than 72 hours prior to the meeting as required by Section 202 of the Americans with Disabilities Act of 1990 and the federal rules and regulations adopted in implementation thereof

AGENDA

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

4. CONSENT CALENDAR AND APPROVAL OF THE AGENDA

Consent Calendar items appear below, with the Secretary's or City Attorney's designation as such. Members of the public wishing to address the Commission on Consent Calendar items are asked to address the Secretary and submit a completed speaker card prior to the approval of the agenda. Such requests shall be granted, and items will be addressed in the order in which they appear in the agenda. After making any changes to the agenda, the agenda shall be approved. All matters are approved under one motion unless requested to be removed for discussion by a commissioner or any member of the public.

A. **APPROVAL OF THE AGENDA**

B. **APPROVAL OF THE MINUTES**

Recommendation: By motion, approve the December 15, 2025, regular meeting mintues.

5. REPORT OF THE CITY COUNCIL LIAISON

6. COMMUNITY FORUM

Anyone wishing to address the Commission on any matter for which another opportunity to speak is not provided on the agenda, and which is within the jurisdiction of the Commission to resolve, is requested to submit a completed speaker card to the Secretary. When called upon, each speaker should step to the podium, state his/her name and address for the record. The conduct of the community forum shall follow those as the City Council and shall be limited to a maximum of fifteen (15) minutes, with each speaker limited to three minutes pursuant to Vallejo Municipal Code Section 2.20.300. The Commission may take information but may not take action on any item not on the agenda.

7. PUBLIC HEARING

A. **CONTINUE THE PUBLIC HEARING TO CONSIDER ADOPTING A RESOLUTION RECOMMENDING THE CITY COUNCIL ADOPT AN ORDINANCE AMENDING THE VALLEJO MUNICIPAL CODE BY ADDING A NEW CHAPTER 16.216 TO TITLE 16 (ZONING) AND AMENDING THE ZONING MAP TO ESTABLISH A BY-RIGHT HOUSING OVERLAY DISTRICT FOR HOUSING ELEMENT INVENTORY SITES: #41 (APN 0052110140); #42 (APN 0051250230); AND #55 (APN 0069032240) TO IMPLEMENT HOUSING ELEMENT PROGRAMS A1.1.6 AND A1.1.7**

Project Summary: The Project consists of amendments to Title 16 (Zoning) of the Vallejo Municipal Code and the Official Zoning Map to establish a By-Right Housing Overlay District (BRH Overlay) applicable to three Housing Element inventory sites identified in the 2023–2031 Housing Element (Sites #41, #42, and #55). The proposed amendments would implement

	State housing law and Housing Element Programs A 1.1.6 and A 1.1.7 by: (1) establishing a minimum residential density of 20 dwelling units per acre; (2) limiting allowable uses on these parcels to residential uses only (with mixed-use allowed if at least 50 percent of floor area is residential); and (3) consolidating previously adopted by-right approval provisions for qualifying lower-income housing developments into a new Chapter 16.216 (By-Right Housing Overlay District).
Application Number:	PLN25-0222
Location:	Housing Element Sites Inventory – Sites #41 (APN 0052110140); #42 (APN 0051250230); and #55 (APN 0069032240)
Applicant:	City of Vallejo Planning and Development Services Department
Owners:	TRA Lending LLC (Site #41); Param Dhillon (Site #42); and Michael & Beverly Garton (Site #55)
General Plan Land Use Designation:	Primarily Multi-Family (R-MF)
Zoning District:	Residential High Density (RHD)
CEQA:	An Addendum to the General Plan 2040 FEIR was adopted by the City Council for the 2023–2031 Housing Element pursuant to the California Environmental Quality Act (CEQA). The current request is within the scope of that project. Accordingly, no further environmental review is required.

B. **ADOPT A RESOLUTION OF THE PLANNING COMMISSION MAKING A RECOMMENDATION TO CITY COUNCIL TO (1) ADOPT A SUBSEQUENT MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM PURSUANT TO CEQA GUIDELINES SECTION 15162 AND PUBLIC RESOURCES CODE SECTION 21166 AND (2) APPROVE A TENTATIVE MAP (TM23-0001), PLANNED DEVELOPMENT (PD24-0001), DEVELOPMENT REVIEW (DVR23-0017), DESIGN REVIEW (DR23-0006) AND LANDSCAPE REVIEW (LR23-0002) FOR THE DEVELOPMENT OF 51 SINGLE-FAMILY RESIDENCES ("VISTA COVE SUBDIVISION") ON A 20.13 ACRE SITE AT THE NORTHEAST CORNER OF SHADY LANE AND WILDFLOWER AVENUE (APNs: 0079-171-170 & 0079-120-100)**

Project Name:	**Vista Cove Subdivision**
Project Summary:	
	The proposed project includes a Tentative Map, Planned Development (rezoning), Development Review, Design Review, and Landscape Review to allow the subdivision of two vacant parcels totaling

	approximately 20.13 acres into 57 parcels for the development of 51 detached single-family residences, and four parcels for open space and bioretention, one parcel for a new private roadway network, and one parcel for a new sewer pump station. The new single-family homes would include four distinct modern farmhouse-style floor plans ranging in size from 2,494 to 2,674 square feet, each featuring an attached two-car garage and driveway parking. The development also includes construction of a new private street, sidewalks, curbs and gutters, private alleys, street lighting, landscaping, and other related site improvements to support the proposed residential neighborhood.
Project Number(s):	Tentative Map (TM23-0001) Planned Development (PD24-0001) Development Review (DVR23-0017) Design Review (DR23-0006) Landscape Review (LR23-0002)
Location:	Northeast corner of Shady Lane and Wildflower Avenue APNs:0079-171-170 & 0079-120-100
Applicant:	Sancerra Vista Cove, LLC
Owner(s):	Litton Chen, Tammy Dong, Terrence F. Wei, Thomas Chen, Tiffancy Chen Herrero, Timothy Wei, Tina T. Dong, Troy Chuang, Tyler C. Chung
General Plan Land Use Designation:	Primarily Single-Family and Mix of Housing Types/Medium Density
Zoning District:	Residential Low Density and Residential Medium Density
CEQA:	Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15162 (“Subsequent EIRs and Negative Declarations”), the City of Vallejo has prepared a Subsequent Mitigated Negative Declaration (MND).

8. WRITTEN COMMUNICATIONS

9. REPORT OF THE PRESIDING OFFICER AND MEMBERS OF THE PLANNING COMMISSION

10. OTHER

11. ADJOURNMENT

ADDITIONAL CITY INFORMATION

Members of the public can:

- Like us on Facebook and Instagram (@cityofvallejo)
- Sign up to receive City Communications via e-mail (www.cityofvallejo.net/subscribe)
- Sign up for emergency alerts at: alertsolano.com

I, Dalia Vidor, Staff Secretary do hereby certify that I have caused a true copy of the above notice and agenda to be delivered to

Anthony Taylor, (Chair)
Donald Douglass, (Vice-Chair)
Phillip Balbuena
Eric Blind
Tara Beasley-Stansberry
Wanda Madeiros
Chris White,

at the time and in the manner prescribed by law and that this agenda was posted at City Hall, 555 Santa Clara Street, CA at 5:00 PM, January 16, 2026.

Dated: January 16, 2026	*Dalia Vidor* Dalia Vidor, Staff Secretary

CITY OF VALLEJO PLANNING COMMISSION
REGULAR MEETING MINUTES
COUNCIL CHAMBERS
December 15, 2025

1. CALL TO ORDER

The meeting was called to order at 7:04 p.m.

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Present: Vice-Chair Douglass, Commissioners Blind, Madeiros, Beasley-Stansberry, Balbuena, White

Absent: Chair Taylor

Staff present: Assistant City Attorney Zagaroli, Planning and Development Services Director Pollot, Planning Manager Orozco and Planning Manager Rojas.

4. CONSENT CALENDAR AND APPROVAL OF AGENDA

A. APPROVAL OF THE AGENDA
B. APPROVAL OF Minutes

Action: Commissioner Madeiros, second by Commissioner Beasley-Stansberry, and carried unanimously approved the agenda and the November 3, 2025 – regular meeting minutes.

5. REPORT OF THE CITY COUNCIL LIASION

See Secretary's Report.

6. COMMUNITY FORUM – Paul T.

7. PUBLIC HEARING

A.

PROJECT TITLE:	Vista Cove Subdivision
RECOMMENDATION:	Continue the public hearing to consider a resolution recommending the City Council approve a Tentative Map (TM23-0001), Planned Development (PD24-0001), Development Review (DVR23-0017), Design Review (DR23-0006), and Landscape Review (LR23-0013) for

DRAFT

the development of 51 single-family residences)"Vista Cove Subdivision") at Shady Land and Wildflower Avenue (APNs:0079-171-170 & 0079-120-100) to January 21, 2026 at 7:00 p.m.

Action: Moved by Commissioner Madeiros, Second by Commissioner Blind, to continue the public hearing to consider a resolution recommending the City Council approve a Tentative Map (TM23-0001), Planned Development (PD24-0001), Development Review (DVR23-0017), Design Review (DR23-0006), and Landscape Review (LR23-0013) for the development of 51 single-family residences)"Vista Cove Subdivision") at Shady Land and Wildflower Avenue (APNs:0079-171-170 & 0079-120-100) to January 21, 2026 at 7:00 p.m, by the following vote:

AYES: Douglass, Blind, Madeiros, Beasley-Stansberry, White
NOES: Balbuena
ABSENT: Taylor
ABSTAIN: None

B.

PROJECT TITLE: By-Right Housing Overlay District Ordinance

RECOMMENDATION: Hold a public hearing to consider adopting a resolution recommending the City Council adopt an ordinance amending the Vallejo Municipal by adding a new Chapter 16.216 to Title 16 (Zoning) and amending the zoning map to establish a By-Right Housing Overlay District for Housing Element inventory sites: #41 (APN:0052110140); #42 (APN:0051250230) and #55 (APN0069032240) to implement Housing Element programs A1.1.6 and A1.1.7.

Planning Manager Rojas presented the item.

Planning Commissioners asked questions and staff responded.

Vice Chair Douglass opened the public hearing.

Speakers: Matthew S. and Dana P.

Vice Chair Douglass closed the public hearing.

Commissioners deliberated, made comments and asked questions.

DRAFT

Action: Moved by Vice-Chair Douglass, second by Commissioner Madeiros, and carried unanimously to continue the public hearing to consider adopting a resolution recommending the City Council adopt an ordinance amending the Vallejo Municipal by adding a new Chapter 16.216 to Title 16 (Zoning) and amending the zoning map to establish a By-Right Housing Overlay District for Housing Element inventory sites: #41 (APN:0052110140); #42 (APN:0051250230) and #55 (APN0069032240) to implement Housing Element programs A1.1.6 and A1.1.7. to January 21, 2026 – Regular Planning Commission Meeting.

8. WRITTEN COMMUNICATIONS - NONE

9. REGULAR REPORTS

A. SECRETARY'S REPORT

City Council Member Matulac shared the great feedback he has received regarding the recent joint meeting the Planning Commission and City Council had regarding the inclusionary housing ordinance and suggested the commission listen to the commissions and City Council meetings.

Planning Manager Orozco reminded the commission about a special joint meeting with the Architectural Heritage and Landmark Commission and pulled the commission for their availability, reminded them regarding a training video they received via email and for the upcoming training held by the League of California Cities.

B. CITY ATTORNEY'S REPORT - NONE

C. REPORT OF THE PRESIDING OFFICER AND MEMBERS OF THE PLANNING COMMISSION - NONE

D. REPORT OF THE SUBCOMMITTEES – None

10. ADJOURNMENT

The meeting was adjourned at 8:15 p.m.

ATTEST:

_____
Donald Douglass,VICE-CHAIR

ATTEST:

_____
Kristin Pollot, AICP
SECRETARY

DRAFT

STAFF REPORT – PLANNING
CITY OF VALLEJO
PLANNING COMMISSION

DATE: January 21, 2026
TO: Planning Commission
FROM: Hector Rojas, Long-Range Planning Manager
SUBJECT: **CONTINUE THE PUBLIC HEARING TO CONSIDER ADOPTING A RESOLUTION RECOMMENDING THE CITY COUNCIL ADOPT AN ORDINANCE AMENDING THE VALLEJO MUNICIPAL CODE BY ADDING A NEW CHAPTER 16.216 TO TITLE 16 (ZONING) AND AMENDING THE ZONING MAP TO ESTABLISH A BY-RIGHT HOUSING OVERLAY DISTRICT FOR HOUSING ELEMENT INVENTORY SITES: #41 (APN 0052110140); #42 (APN 0051250230); AND #55 (APN 0069032240) TO IMPLEMENT HOUSING ELEMENT PROGRAMS A1.1.6 AND A1.1.7**

PROJECT INFORMATION

Project Summary:	The Project consists of amendments to Title 16 (Zoning) of the Vallejo Municipal Code and the Official Zoning Map to establish a By-Right Housing Overlay District (BRH Overlay) applicable to three Housing Element inventory sites identified in the 2023–2031 Housing Element (Sites #41, #42, and #55). The proposed amendments would implement State housing law and Housing Element Programs A 1.1.6 and A 1.1.7 by: (1) establishing a minimum residential density of 20 dwelling units per acre; (2) limiting allowable uses on these parcels to residential uses only (with mixed-use allowed if at least 50 percent of floor area is residential); and (3) consolidating previously adopted by-right approval provisions for qualifying lower-income housing developments into a new Chapter 16.216 (By-Right Housing Overlay District).
Application Number:	PLN25-0222
Location:	Housing Element Sites Inventory – Sites #41 (APN 0052110140); #42 (APN 0051250230); and #55 (APN 0069032240)
Applicant:	City of Vallejo Planning and Development Services Department
Owners:	TRA Lending LLC (Site #41); Param Dhillon (Site #42); and Michael & Beverly Garton (Site #55)
General Plan Land Use Designation:	Primarily Multi-Family (R-MF)
Zoning District:	Residential High Density (RHD)
CEQA:	An Addendum to the General Plan 2040 FEIR was adopted by the City Council for the 2023–2031 Housing Element pursuant to the California Environmental Quality Act (CEQA). The current request is within the scope of that project. Accordingly, no further environmental review is required.

RECOMMENDATION

Continue the public hearing to February 18, 2026, at 7:00 p.m., to consider adoption of a Resolution recommending that the City Council adopt an ordinance amending Title 16 (Zoning) of the Vallejo Municipal Code by adding new Chapter 16.216 and amending the Zoning Map to establish a by-right housing overlay district for Housing Element Inventory Sites #41 (APN 0052110140), #42 (APN 0051250230), and #55 (APN 0069032240).

ATTACHMENTS
None

CONTACT
Hector Rojas, Long-Range Planning Manager, (707) 553-7283
Hector.Rojas@cityofvallejo.net

STAFF REPORT – PLANNING
CITY OF VALLEJO
PLANNING COMMISSION

DATE: January 21, 2026
TO: Planning Commission
FROM: Cesar Orozco - Planning Manager: Current Development
SUBJECT: **ADOPT A RESOLUTION OF THE PLANNING COMMISSION MAKING A RECOMMENDATION TO CITY COUNCIL TO (1) ADOPT A SUBSEQUENT MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM PURSUANT TO CEQA GUIDELINES SECTION 15162 AND PUBLIC RESOURCES CODE SECTION 21166 AND (2) APPROVE A TENTATIVE MAP (TM23-0001), PLANNED DEVELOPMENT (PD24-0001), DEVELOPMENT REVIEW (DVR23-0017), DESIGN REVIEW (DR23-0006) AND LANDSCAPE REVIEW (LR23-0002) FOR THE DEVELOPMENT OF 51 SINGLE-FAMILY RESIDENCES ("VISTA COVE SUBDIVISION") ON A 20.13 ACRE SITE AT THE NORTHEAST CORNER OF SHADY LANE AND WILDFLOWER AVENUE (APNs: 0079-171-170 & 0079-120-100)**

PROJECT INFORMATION

Project Name: **Vista Cove Subdivision**

Project Summary:

The proposed project includes a Tentative Map, Planned Development (rezoning), Development Review, Design Review, and Landscape Review to allow the subdivision of two vacant parcels totaling approximately 20.13 acres into 57 parcels for the development of 51 detached single-family residences, and four parcels for open space and bioretention, one parcel for a new private roadway network, and one parcel for a new sewer pump station. The new single-family homes would include four distinct modern farmhouse-style floor plans ranging in size from 2,494 to 2,674 square feet, each featuring an attached two-car garage and driveway parking. The development also includes construction of a new private street, sidewalks, curbs and gutters, private alleys, street lighting, landscaping, and other related site improvements to support the proposed residential neighborhood.

Project Number(s):

Tentative Map (TM23-0001)
Planned Development (PD24-0001)
Development Review (DVR23-0017)
Design Review (DR23-0006)
Landscape Review (LR23-0002)

Location:

Northeast corner of Shady Lane and Wildflower Avenue
APNs:0079-171-170 & 0079-120-100

Applicant:

Sancerra Vista Cove, LLC

Owner(s):

Litton Chen, Tammy Dong, Terrence F. Wei, Thomas Chen, Tiffancy Chen Herrero, Timothy Wei, Tina T. Dong, Troy Chuang, Tyler C. Chung

General Plan Land Use Designation:	Primarily Single-Family and Mix of Housing Types/Medium Density
Zoning District:	Residential Low Density and Residential Medium Density
CEQA:	Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15162 ("Subsequent EIRs and Negative Declarations"), the City of Vallejo has prepared a Subsequent Mitigated Negative Declaration (MND).

RECOMMENDATION

Staff recommends that the Planning Commission adopt:

1. A resolution recommending City Council to adopt a Subsequent Mitigated Negative Declaration to the certified EIR for General Plan 2040, after making findings pursuant to CEQA guidelines Sections 15162 and public resources code 21166; and

2. A Resolution recommending City Council approve Tentative Map (TM23-0001), Planned Development (PD24-0001), Development Review (DVR23-0017), Design Review (DR23-0006), and Landscape Review (LR23-0002) for the development of 51 single-family residences ("Vista Cove Subdivision"), subject to the conditions of approval as Exhibit A to the Resolution for the project.

ATTACHMENTS

1.	Staff Report
2.	Recommended Resolution - For CEQA_final
3.	Exhibit A - Subsequent Mitigated Negative Declaration (SMND)
4.	Appendix A to SMND: CalEEMod Output
5.	Appendix B to SMND: HRA Model Outputs
6.	Appendix C to SMND: Biological Resources
7.	Appendix D to SMND: Cultural Resource Assessment
8.	Appendix E to SMND: Geotechnical Investigation
9.	Appendix F to SMND: Phase 1 ESA
10.	Appendix G to SMND: Drainage Memorandum, Preliminary Stormwater Control Plan, and Drainage Study
11.	Appendix H to SMND: Noise Impact Analysis
12.	Appendix I to SMND: Transportation Analysis and LOS Worksheets
13.	Exhibit B - Errata to Subsequent Mitigated Negative Declaration

14.	Exhibit C - Mitigation Monitoring and Reporting Program
15.	Exhibit D - Response to Comments Memo
16.	Attachment A - Comment Letters
17.	Attachment B - Updated Figure 2-4
18.	Attachment C - Geotech Report Update Memo
19.	Attachment D - Evacuation Assessment
20.	Attachment E - Phase I ESA
21.	Recommended Resolution - For Project_Final
22.	Exhibit A - Conditions of Approval_Final
23.	Exhibit B - General Plan Consitency
24.	Exhibit C - Planned Development Consistency
25.	Exhibit D - Vista Cove Planned Development
26.	Exhibit E - Tentative Map Dated June 2024
27.	Design Review Board Resolution #DRB25-02
28.	Public Comments
29.	Zoning Map - Existing
30.	Zoning Map - Proposed

CONTACT

Cesar Orozco
Planning Manager: Current Development
707.648.5436
cesar.orozco@cityofvallejo.net

BACKGROUND AND DISCUSSION

Background

On November 29, 2022, the applicant, Sancerra Vista Cove, LLC, ("applicant") submitted a Preliminary Review request pursuant to California Senate Bill (SB) 330, "the Housing Crisis Act of 2019," which was found to be in compliance with the SB330 preliminary review checklist on December 28, 2022.

On February 13, 2023, the applicant formally applied for a Tentative Map, Development Review, Design Review, Landscape Review and Minor Use permit, to develop 51 detached single-family homes under the "small lot development" standards of the Vallejo Municipal Code ("VMC", Section 16.202.05). The project plans were routed to various city departments and outside agencies for review, and the application was determined to be complete on December 18, 2023.

On May 16, 2024, the applicant revised the project description to withdraw the Minor Use Permit application and add a request for a Planned Development and Zoning Map amendment to amend the Zoning Map from Residential Low Density and Residential Medium Density Zoning District to Planned Development with a proposed "Vista Cove Planned Development Plan."

On August 1, 2024, an environmental consultant was selected to begin the process of preparing an Environmental Impact Report (EIR) for the project. A public EIR Scoping Session was held on April 10, 2025, to solicit comments on the planned environmental analysis. However, after completion of the Initial Study, it was determined that there is no substantial evidence that the Project would result in significant environmental impacts because any potential impacts could be mitigated to a less-than-significant level, thereby supporting preparation of a Subsequent Mitigated Negative Declaration (SMND) in lieu of an EIR.

On July 10, 2025, the Design Review Board (DRB) held a duly public noticed public hearing to consider testimony and evidence, both written and oral, as well as other documents contained in the record of the proceedings relating to the project. Following the public hearing, the DRB voted 3-0, with one absence, to adopt Resolution No. DRB25-02, recommending approval of Design Review (DR23-0006) and Landscape Review (LR23-0002) to the Planning Commission.

On November 10, 2025, the final draft of the SMND was circulated for a 30-day public comment period extending from November 10, 2025 to December 10, 2025.

On December 15, 2025, the Planning Commission held a duly public noticed public hearing to consider testimony and evidence, both written and oral, as well as other documents contained in the record of the proceeding relating to the project. Staff requested the project be continued to the January 21, 2026, Planning Commission regular meeting to allow additional time for staff and the CEQA consultant provide responses to comments received on the SMND and finalize the conditions of approval on the project. The Planning Commission voted 5-1 to continue the meeting to the January 21, 2026 PC regular meeting.

Location and Land Use Context

The project site is located at the intersection of Shady Lane and Wildflower Avenue. It is surrounded by existing residential roadways and open space. The subject site is bounded to the north by Interstate 780 (I-780), across from which are the California Highway Patrol Office, Benicia Road, and Saint Vincent's High School. Immediately east and

south of the site is a large area of city-owned open space (designated 'Parks, Recreation & Open Space' in the General Plan, and located within the 'Resource Conservation' zoning district), beyond that to the east is the existing city limit line, followed by the Benicia State Park which extends down to the Carquinez Strait. To the west and southwest (beyond the open space areas) are existing single-family residences. (see Figure 1).

I-780 is approximately 0.1 miles to the north and Interstate-80 (I-80) is approximately 1.7 miles to the west. Each provides regional access to the project site, while the intersection of Shady Lane and Wildflower Avenue provides direct access to the project site. The immediate vicinity of the project site is characterized by existing single-family residential uses and open space. The site's General Plan 2040 Land Use Designation is Primarily Single Family (R-SF) and Mix of Housing Types (R-MH) which is implemented by the Residential Low Density and (RLD) Residential Medium Density (RMD) Zoning District.

The project site is made up of undulating hills and flat areas, with elevations ranging from approximately 70 feet above mean sea level (amsl) in low lying areas along the eastern portion of the project site up to approximately 290 feet amsl along the southwestern boundary of the project site. The southern portion of the site is generally lower in elevation and increases in elevation towards the west.

Figure 1 – Location and Land Use Context

Project Description

The proposed project consists of a Tentative Map, Planned Development, Development Review, Design Review, and landscape review for the Vista Cove Subdivision. The project includes a tentative map to subdivide two vacant parcels, totaling 20.13-acres, into a total of 57 new parcels. Of the 57 new parcels proposed, four would be dedicated to open spaces and bio-retentions swales, one is proposed for the new private roadway network, one is proposed for a sewer sanitary pump station, and the remaining 51 would be for detached single-family residences (see Figure 2). To facilitate the proposed development plan with special development standards crafted for the unique site conditions, the project includes a request for rezoning to Planned Development (PD). The PD zone allows for one or more properties to be developed under a plan that would provide better opportunities for coordinated development, while still ensuring substantial compliance with, and implementation of, the applicable land use and density policies of the General Plan.

Development of the 51 detached single-family residences and associated infrastructure, such as the private roadway network, would be concentrated on the northern 10.39-acres of the total 20.13-acre site, while the southern half would remain as un-developed open space. The 51 single-family lots are proposed to be developed with four different floor plans to be dispersed throughout the subdivision, each offering a modern farmhouse architectural variation. The four different floor plans range from 2,494 square feet to 2,674 square feet with an overall maximum building height of 30 feet and four inches. The base model floor plan has a total of three bedrooms and two and half bathrooms. The second model has an additional bedroom and bathroom, and the third and fourth models have an additional bedroom and bathroom plus a loft. Each model floor plan would have an attached two-car garage, approximately 444 square feet, and there would be two uncovered parking spaces within the driveway on each lot.

In addition to the residential units, the proposed subdivision would include development of new private streets, sidewalks, curbs and gutters, new lighting, various bioretention basins, and open space areas. New landscaping, including street trees, shrubs and ground cover, is also proposed for installation within all new residence front yards.

Figure 2 – Proposed Site Plan

Code Compliance

I. Required Entitlements and Findings

The project requires a Tentative Map[1] for the creation of 57 parcels, a Planned Development[2] for the rezone of the subject property and to facilitate the project development, Development Review[3] for the construction of 51 single-family residences, Design Review[4] for a residential project of 51 units or more, and Landscape Review[5] for the proposed landscaping throughout the project.

The Planning Commission will consider the recommendations of the Design Review Board in its recommendation for the full project entitlement, including Tentative Map, Planned Development, Development Review, Design Review, and Landscape Review, with final actions subject to City Council approval.

a. Tentative Map Findings

VMC Section 15.08.050 – Required Findings, requires the review authority make the following findings:
[That the Project:]

1. Is consistent with the goals and policies of the Vallejo general plan and any applicable specific plans; and
2. Conforms with this title and the zoning ordinance; and
3. Conforms with the Subdivision Map Act.

b. Planned Development Findings

VMC Section 16.610.03 – Required Findings, states that the proposal shall only be approved if the city council, based on a recommendation from the planning commission, makes the following findings:

1. The proposed development is consistent with the general plan, including the density and intensity limitations that apply;
2. The subject site is physically suitable for the type and intensity of the land use being proposed;
3. Adequate transportation facilities and public services exist or will be provided in accord with the conditions of development plan approval, to serve the proposed development; and the approval of the proposed development will not result in a reduction of traffic levels of service or public services so as to be a detriment to public health, safety, or welfare;
4. The proposed development will not have a substantial adverse effect on surrounding land uses and will be compatible with the existing and planned land use character of the surrounding area;
5. The development generally complies with applicable adopted design guidelines; and

[1] VMC Chapter 15.08 – Tentative Maps
[2] VMC Chapter 16.610 – Planned Development Districts
[3] VMC Chapter 16.605 – Development Review
[4] VMC Chapter 16.604 – Design Review
[5] VMC Chapter 16.504 - Landscaping

6. The proposed development is demonstratively superior to the development that could occur under the standards applicable to the underlying base district, and will achieve superior community design, environmental preservation, and/or substantial public benefit. In making this determination, the following factors shall be considered:
   a. Appropriateness of the use(s) at the proposed location.
   b. The mix of uses, housing types, and housing price levels.
   c. Provision of units affordable to persons and families of low and moderate income or to lower income households, if applicable.
   d. Provision of infrastructure improvements.
   e. Provision of open space.
   f. Compatibility of uses within the development area.
   g. Quality of design, and adequacy of light and air to the interior spaces of the buildings.
   h. Overall contribution to the enhancement of neighborhood character and the environment of Vallejo in the long term.
   i. Creativity in design and use of land; and
7. The proposed PD rezoning and planned development plan has been reviewed in compliance with the California Environmental Quality Act, if applicable, and the requirements of this chapter.

c. Development Review Findings

VMC Section 16.605.03 – Required Findings, requires the review authority to make findings with regard to the project, to confirm that the project:

1. Complies with all applicable specific standards and criteria of this Zoning Code;
2. Is consistent with the general plan and any applicable approved specific plan or planned development;
3. Complies with any design conditions, standards, or requirements imposed by a discretionary approval including but not limited to a major or minor use permit, variance, specific plan, planned development, or tentative map applicable to the project or the location where it is proposed;
4. Is in substantial compliance with any applicable adopted design guidelines;
5. Will serve to achieve groupings of structures that are well related one to another and which, taken together, will result in a well-composed urban design, with consideration given to site, height, arrangement, texture, material, color and appurtenances, the relation of these factors to other structures in the immediate area, and the relation of the development to the total setting as seen from key points in the surrounding area; only elements of design which have some significant relationship to outside appearance shall be considered;
6. Will be of a quality and demonstrates thoughtful site planning that will serve to protect the value of private and public investments in the area; and
7. That the project has been reviewed in compliance with the California Environmental Quality Act, if applicable, and the requirements of this chapter.

d. Design Review Findings

VMC Section 16.606.03 (B) – Required Findings, requires the review authority to make findings with regards to the project, to confirm that the project:

1. Is consistent with the purposes of this chapter, the design policies of the general plan and any applicable specific plan, any adopted applicable design guidelines;
2. Is consistent with any planning are zoning approvals by the director or the planning commission;
3. Complies with any other relevant city policies or regulations; and
4. Meets the following criteria:
    a. The aesthetic design, including its exterior design and landscaping, is appropriate to the function of the project and will provide an attractive and comfortable environment for occupants, visitors, and the general community.
    b. Project details, colors, materials, and landscaping are fully integrated with one another and used in a manner that is visually consistent with the proposed architectural design.
    c. The project has been designed with consideration of neighboring development.
    d. The project contributes to the creation of an attractive and visually interesting built environment that includes well-articulated structures that present varied building facades, rooflines, and building heights and encourages increased pedestrian activity and transit use.
    e. Street frontages are attractive and interesting for pedestrians, address the street and provide for greater safety by allowing for surveillance of the street by people inside buildings and elsewhere.
    f. The proposed design is compatible with the historical or visual character of any area recognized by the city as having such character.
    g. The aesthetic design preserves significant public views and vistas from public streets and open spaces and enhances them by providing areas for pedestrian activity.
    h. The proposed landscaping plan is suitable for the type of project and will improve the appearance of the community by enhancing the building, minimizing hardscape and softening walls; and the landscape plan incorporates plant materials that are drought-tolerant, will minimize water usage, and are compatible with Vallejo's climate.
    i. The project has been designed to be energy efficient including, but not limited to, landscape design and green or eco-friendly design and materials.
    j. The project design protects and integrates natural features including creeks, open space, significant vegetation, and geologic features.

e. Landscape Review

VMC Section 16.504.09 (E) requires approval of a Landscape Review Permit to confirm consistency with applicable code requirements; however, there are no findings required to be made in conjunction with that permit.

II. Staff Analysis

Staff believe all the applicable Tentative Map, Planned Development, Development Review and Design Review findings listed above can be made for the proposed project. A summary of staff's analysis is included below, with specific analyses associated with each required finding included in the attached Resolution (Attachment 3).

a. General Plan Consistency

The project site has a General Plan Land Use Designation of Primarily Single-Family (P-SF) and Mix of Housing Types/Medium Density (R-MH). The General Plan provides the following description for the P-SF land Use Designation:

> *The R-SF designation applies to residential neighborhoods primarily characterized by detached single-family homes, although some older areas have attached dwellings and small stores. Dwellings typically have front and rear yards, as well as side setbacks. Permitted land uses include single-family homes, in some instances duplexes, triplexes, fourplexes, and small commercial spaces, and public facilities such as schools, religious institutions, parks, and other community facilities appropriate within a residential neighborhood. The maximum permitted residential density in the R-SF designation is nine dwelling units per acre; however, in single-family areas where accessory dwelling units are allowed, maximum permitted residential density is 12 dwelling units per acre.*

The General Plan provides the following description for R-MH land Use Designation:

> *The R-MH designation applies to residential neighborhoods largely characterized either by 1) single-family homes but with a mix of other housing types, including duplexes, triplexes, fourplexes, some smaller scale apartment buildings and small commercial spaces; or 2) primarily single-use, multi-family developments with common outdoor spaces. The residential neighborhoods with single-family and other housing types are typically located in the central and more historic parts of Vallejo. Dwellings typically have front and rear yards, as well as side setbacks. Zero side lots (zero lot lines) may be appropriate where they can be visually integrated into the existing neighborhood context. Permitted land uses include single-family homes; in some instances duplexes, triplexes, fourplexes, smaller scale apartment buildings, and small commercial spaces; and public facilities such as schools, religious institutions, parks, and other community facilities appropriate within a residential neighborhood. For primarily single-use, multi-family development, the R-MH designation applies to residential areas primarily characterized by parcels and buildings containing multiple residences, sometimes on several floors, and, in some instances, small commercial spaces. They are similar in character to those permitted in Primarily Multi-Family (R-MF), but with a lower residential density. The maximum permitted residential density in the R-MH designation is 25 dwelling units per acre.*

The proposed project includes the development of 51 detached single-family residences on a vacant 20.13-acre site with proposed side yard setbacks ranging from three to 11-feet, and front yard setbacks ranging from seven to 14-feet. With regard to density, the proposed project would yield an overall average density of 2.5 dwelling units per acre (du/ac) if calculating for the entire 20.13-acre site, or 4.9 du/ac if calculating for only

the northern 10.39-acres proposed to be developed. In either measurement, the proposed project would meet the maximum density allowed for the site as set forth in the General Plan.

The subject site has been identified as housing opportunity site number 85 in the Housing Element (HE) Sites Inventory List (adopted on December 30, 2024). The Sites Inventory List envisions the site to accommodate 51 units, which is consistent with the proposed project. The proposed project is therefore implementing the HE. In addition to meeting the density for the land use designations, the project is also consistent with General Plan and HE Policies and Actions as illustrated in Exhibit B of the recommended resolution for the project.

b. Zoning Code Compliance

The applicant has requested a rezoning of the subject site from Residential Low Density (RLD) and Residential Medium Density (RMD) to Planned Development (PD) zoning district in accordance with VMC Chapter 16.610. The rezoning request includes a Draft Planned Development Plan (See Exhibit D of the recommended Resolution for the project) which would impose new development standards specific to the site. This request requires City Council approval, with the Planning Commission as the recommending body for the action.

The proposed project complies with all applicable base zoning development standards and supplemental regulations of the RLD and RMD zoning districts, with the exception of minimum lot size, front yard setbacks, garage setbacks, lot coverage, rear setbacks, design standards for single-unit housing, and parking location from the street facing property line. To address these deviations, the applicant is requesting the following special Planned Development zoning standards (as adjustments to the base zoning), as part of the proposed Planned Development Plan:

1. Minimum Lot Size: The minimum lot size in the RLD and RMD zoning district is 5,000 square feet. The PD Plan proposes a minimum lot size of 2,800 square feet to accommodate the proposed development.

2. Front Yard Setbacks: The minimum front yard set back in the RLD and RMD zoning district is 15 feet. The PD Plan proposes a minimum front yard setback from the street of seven feet, and zero feet for residences accessed off alleys.

3. Garage Setbacks: The minimum garage setback is 20 feet in the RLD zoning district and 40 feet in the RMD zoning district. The PD Plan proposes a garage setback of seven feet from the street, and zero feet for residences accessed off alleys.

4. Lot Coverage: The maximum lot coverage is 50 percent in the RLD zoning district and 60 percent in the RMD zoning district. The PD Plan proposes a maximum coverage of 85 percent for all residential lots.

5. Rear Setbacks: The minimum rear yard setback is five feet in the RLD zoning district and 10 feet in the RMD zoning district. The PD Plan proposes a rear yard setback of 10 feet for all residential lots, to be consistent with the RMD zoning district.

6. Design Standards for Single-Unit Housing: VMC Section 16.202.03 provides design standards for single-unit housing (detached and attached), including: (i) requiring building entrances to incorporate a minimum

projection or recess of five feet; (ii) prohibiting garage frontages from exceeding fifty percent of the width of the front façade of the building; and (iii) imposing a maximum amount of paving in street-facing yards of 50 percent. The project is: (i) satisfying the five-foot minimum recess standard for building entrances, (ii) proposing to allow the garage frontages to constitute 75 percent of the front façade, and (iii) satisfying the front yards not exceed the 50 percent pavement standard for street-facing yards.

7. Parking location from the street facing property line: The minimum distance for the location of parking in the RMD zoning district is 40 feet from the front property line. The project is proposing to allow parking located in adjoining front driveways, which would be less than 40 feet from front property lines.

c. Architecture

As previously mentioned, the proposed 51 single-family residences would be developed with four different floor plans to be dispersed throughout the subdivision, each offering a modern farmhouse architectural variation (see figure 3). The architectural character of the project draws on the project site's proximity to California's wine country and the community's natural topography. The proposed architectural style integrates traditional rural forms with modern design elements to create a cohesive and contemporary residential expression. The design is made up of seven different features, such as Building Massing, Main Entrances and Porches, Roofs, Window Openings, Garage Doors, exterior materials and colors and architectural detailing. Below is a description of each element:

1. Building Massing

The proposed two-story homes are designed with appropriately articulated wall planes on all four sides, featuring recessed windows that enhance visual depth and interest. Entry porticos are positioned forward of the garage plane to create a more welcoming and pedestrian-oriented streetscape. The building massing incorporates varying projections that provide shadow, depth, and visual relief, contributing to a dynamic overall composition. The homes feature clean, simple forms consistent with the architectural characteristics of the Modern Farmhouse style and utilize complementary exterior finish materials that reinforce the intended architectural character.

2. Main Entrances and Porches

The entries are designed as focal points by using covered porches, recessed entryways, or trellises. These elements not only provide functional shelter and shade but also reinforce a welcoming, pedestrian atmosphere.

Figure 3 – Architectural Style

3. Roofs

The roofscape is designed to be visually consistent with the modern farmhouse character. Homes feature varied roof forms including hip, gable, and shed roofs, deliberately avoiding styles that fall outside the rural aesthetic such as gambrel, flat or mansard roofs. To avoid uniformity and promote interest, multiple plate heights and slopes are utilized where appropriate. A diversity of roofing materials and colors, such as concrete tiles and shakes, contributes to a varied yet harmonious neighborhood composition.

4. Window Openings

Windows are integral design elements of the proposed homes, providing both architectural articulation and natural light and ventilation for occupants. To ensure consistency with the overall design intent, windows set within stucco walls are recessed a minimum of two inches from the wall plane to create depth and shadow. Window types may include casement, slider, single-hung, and fixed glass styles, with any window grids or divided lights designed to complement the architectural character of the home. Frame colors are selected to match or harmonize with each home's color scheme, and any shutters are

appropriately sized and shaped to align with the corresponding window openings. Reflective glass is prohibited in all locations to maintain visual cohesion and reduce glare.

5. Garage Doors

The design of the proposed two-story homes incorporates measures to minimize the visual prominence of garage doors and enhance the pedestrian orientation of street-facing elevations. Garage doors are recessed a minimum of six inches from the adjacent wall plane to introduce shadow lines and reduce massing impacts. Additional architectural articulation is provided at the garage openings to further define and soften the visual transition between the garage and primary building façade. The overall building design utilizes garage-recessed and house-forward configurations, in which entry porches, porticos, or habitable spaces are positioned forward of the garage plane. In certain instances, second-floor projections are located above garage doors to provide additional shading, visual relief, and architectural definition consistent with the overall design intent.

6. Exterior Materials and Colors

The proposed two-story homes utilize a variety of exterior materials and colors to create an architecturally cohesive and visually appealing streetscape consistent with the Modern Farmhouse style. Exterior surface materials and treatments are designed to appear as integral components of the building architecture rather than as applied finishes, with materials wrapping columns, porches, and balconies in their entirety. Color and material transitions occur at inside corners, and materials applied to any elevation turn the outside corner and terminate at logical points that align with rooflines, building masses, or wall returns. The field color at the base of walls extends to finished grade to ensure visual continuity, and where masonry veneer is used, the exposed wall surface below the weep screed is painted to closely match the veneer above. Exterior materials may include, but are not limited to, stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and batten siding, and naturally decay-resistant wood, all selected to reinforce the intended architectural character and material quality of the development.

The architectural vision for Vista Cove subdivision is grounded in the principles of Wine Country Agrarian designs. Through thoughtful massing, material quality and variation, and detailed craftsmanship, the homes at Vista Cove subdivision would contribute to and enhance the aesthetic of the existing surrounding development.

d. Landscaping and Open Space

The project site has existing trees located primarily near the perimeter of the site. An arborist report was prepared for the existing site, and a total of 83 trees were assessed, identifying seven different tree species, e.g. Coast Live Oak, Plum Cherry, Apple, Monterey Pine, Valley Oak, Toyon, and Strawberry Tree, with Coast Live Oak as the most common species. The trees ranged from poor to good condition. The report concluded with a recommendation for removal of 69 of the 83 existing on-site trees, which is reflected in the development plans.

VMC Section 16.504.07(C) - Replacement of Significant Trees Required states, *Trees shall be replaced at a ratio of at least three new trees for every tree removed except for the fire-prone species identified above. The minimum size of a replacement tree shall be fifteen gallons. Exceptions to this requirement may be approved by the director when site conditions warrant. Replacement trees shall be planted in the following order of priority:*

1. *On the project site;*
2. *On any adjacent property subject to approval of the owner; or*
3. *In the public right-of-way adjacent to the property subject to approval of the director of public works.*

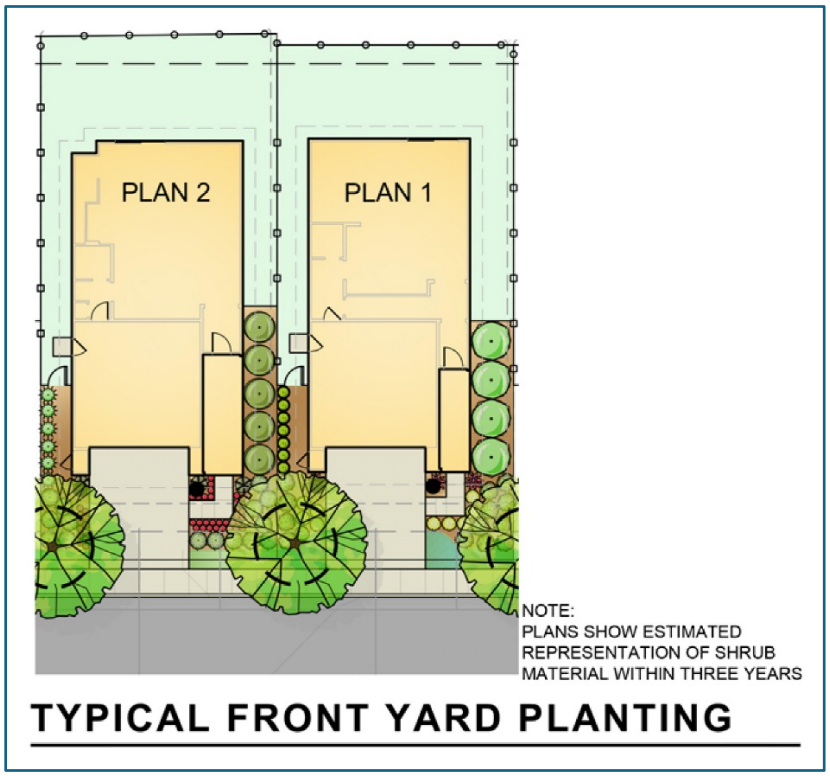
Of the 69 trees proposed to be removed, 47 of the trees are considered to be significant (as defined in VMC 16.701) and as such, shall be replaced at a three to one ratio. A total of 141 new trees are proposed as part of the project, to be planted throughout the project site (see Figure 4). Primary trees would include Armstrong Red Maple, Autumn Gold Maidenhair Tree, Coast Live Oak, Valley Oak, Skyrocket English Oak, and Greenspire Littleleaf Linden.

Figure 4 – Proposed Landscaping

New landscaping would be provided in the front yards of each new residential lot. The proposed landscape plan includes a typical front yard landscape design and layout for both interior and corner lots. Each lot would

include one shade tree, small shrubs, and ground cover (see Figure 5). The project also includes stormwater detention basins that would be improved with landscaping including a native ornamental bioswale seed mix and would contain tree and shrub buffers adjacent to the basins.

Figure 5 – Front yard landscaping



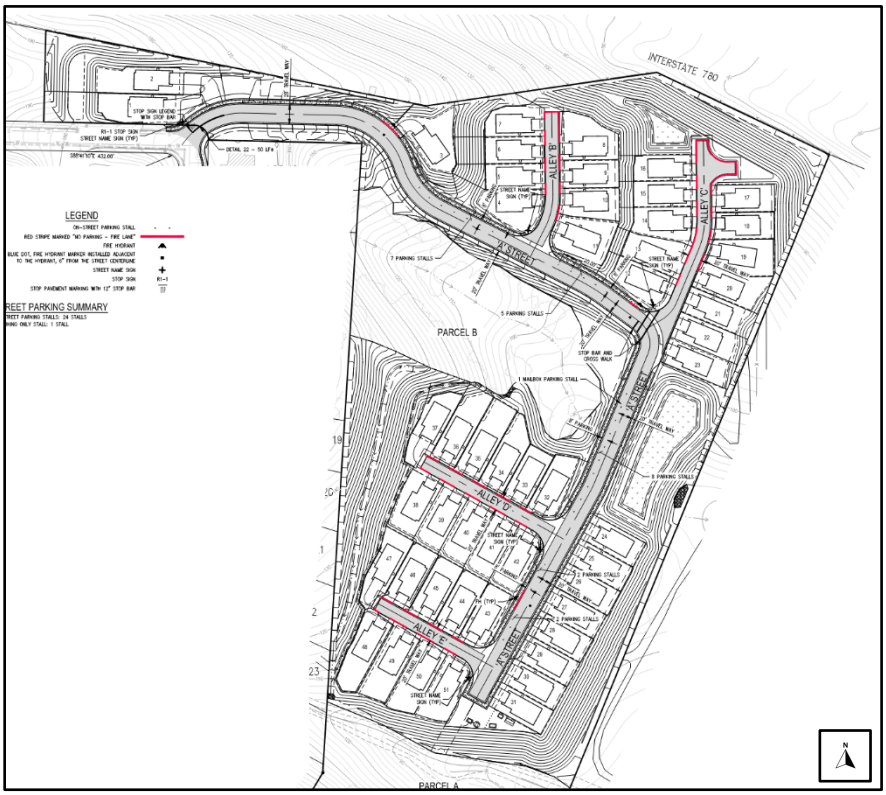
As proposed, the project includes a total of 9.74 acres of undisturbed open space across two parcels: Parcel A (8.36-acres) and Parcel B (1.38-acres). These undisturbed open space areas would be fenced with access via private gates to facilitate maintenance activities only, and they would have signage installed to prevent trespassing. Future development would not be allowed on either of the two parcels. The project would also include 3.55 acres of common open space, across two parcels (Parcel C and D), that would include one bioretention area, walkways, a loop walk around a flexible use turf area, and a vista overlook for residents. The proposed landscape design includes drought-tolerant and native landscaping to transition between the proposed residential area and adjacent open space.

e. Access, Circulation and Parking

Primary access to the new subdivision would be provided via a new private street ("A Street") located at the corner of Shady Lane and Wildflower Avenue. The new street would extend from west to east, curve slightly south, and then continue southward. From this street, a total of four private alleys ("Alleys B-E") would provide direct access to the new single-family residences, except for the first two residences, which would be

accessed via a private driveway. The new street would include a 40-foot right-of-way, consisting of two 14-foot travel lanes and 4.5-foot attached sidewalks, with limited parking on one side only, in certain areas (see Figure 6). The new alleys would include a 21-foot right-of-way, consisting of two 10.5-foot travel lanes, with no on-street parking permitted (see Figure 6).

Figure 6 – Proposed Circulation



Each dwelling unit would include two off-street parking spaces within an attached 444-square-foot garage, as well as two additional uncovered parking spaces on the driveway pad directly in front of each garage, providing a total of 204 off-street parking spaces. In addition, a total of 24 on-street parking spaces and one mail-bay parking space would be provided with the development, for a total of 229 parking spaces within the subdivision.

ENVIRONMENTAL REVIEW

The City retained LSA to prepare a Subsequent Mitigated Negative Declaration (SMND) to the existing Vallejo General Plan 2040 Environmental Impact Report (EIR) (State Clearing House [SCH]#20141120356), certified by the City Council on August 29, 2017, to evaluate whether the proposed project would result in any new or substantially more adverse significant effects or require new mitigation measures not identified in the General Plan 2040 EIR. The SMND by LSA is included as Exhibit A to the recommended Resolution for the Environmental Review.

Given the analysis contained in the SMND, development of the project would not cause any new or substantially more sever significant environmental effects that were not previously examined in the Cerfitied EIR and would not require additional mitigation measures. Therefore, no further environmental analysis is required pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15162 and Public Resources Code 21166.

NOTICE AND COMMENTS

On November 24, 2025, pursuant to VMC Section 16.602.08(A), a notice of this hearing was published in the Times Herald, mailed to all active neighborhood groups, all property owners within 1,500 feet of the subject property, any other interested parties, the Vallejo Unified School District, local agencies expected to provide water, wastewater treatment, and/or other essential facilities or services to the project, the property owner's, the applicant, and electronically sent to the members of the Planning Commission. Additionally, a notice for the hearing was posted at the site at three different locations.

As of writing this report, staff has received several public comments regarding the proposed project.

CONCLUSION

Based on the analysis contained in this staff report, staff recommend that the Planning Commission adopt:

1. A resolution recommending City Council to adopt a Subsequent Mitigated Negative Declaration to the certified EIR for General Plan 2040, after making findings pursuant to CEQA guidelines Sections 15162 and public resources code 21166; and

2. A Resolution recommending City Council approve Tentative Map (TM23-0001), Planned Development (PD24-0001), Development Review (DVR23-0017), Design Review (DR23-0006), and Landscape Review (LR23-0002) for the development of 51 single-family residences ("Vista Cove Subdivision"), subject to the conditions of approval as Exhibit A to the Resolution for the project.

LEVINE ACT: GOVERNMENT CODE 84308

This item is subject to the Levine Act. City elected and appointed officials, including candidates for City elected office, (City Officers) who have received a campaign contribution of more than $500 within 12 months prior from a party, participant, or their representatives involved in this proceeding may do either of the following: (1) disclose the contribution on the record and recuse themselves from this proceeding; OR (2) return the portion of the contribution that exceeds $500 within 30 days from the time the elected official knew or should have known about the contribution and participate in the proceeding.

All parties, participants, and their representatives must disclose on the record of this proceeding any contribution of more than $500 made to the City Officers, such as the mayor and/or Councilmembers, within 12 months prior to the date of the proceeding. City Officers are prohibited from accepting, soliciting, or directing a contribution of more than $500 from a party, participant, or their representatives during a proceeding and for 12 months following the date a final decision is rendered.

CITY OF VALLEJO PLANNING COMMISSION

RESOLUTION NO. PC 26-XX

A RESOLUTION OF THE PLANNING COMMISSION RECOMMENDING CITY COUNCIL ADOPT A SUBSEQUANT MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM PURSUANT TO CEQA GUIDELINES SECTION 15162 AND PUBLIC RESOURCES CODE 21166 FOR THE DEVELOPMENT OF 51 SINGLE-FAMILY RESIDENCES ("VISTA COVE SUBDIVISION") ON A 20.13-ACRE SITE AT THE NORTHEAST CORNER OF SHADY LANE AND WILDFLOWER AVENUE (APNs: 0079-171-170 & 0079-120-100)

* *

WHEREAS, on August 29, 2017, the City Council adopted General Plan 2040 and certified the Environmental Impact Report (EIR); and

WHEREAS, on June 22, 2021, the City Council adopted a new Zoning Code and Zoning Map; and

WHEREAS, on November 29, 2022, Sancerra Vista Cove, LLC., the applicant, submitted for a Preliminary Review Application pursuant to California Senate Bill (SB) 330, "the Housing Crisis Act of 2019," for development of a vacant 20.13-acre site located near the intersection of Shady Lane and Wildflower Avenue (APNs:0079-171-170 and 0079-120-100) ("Subject Property"); and

WHEREAS, on December 28, 2022, the SB 330 Preliminary Review Application was found to satisfy the checklist as listed in California Government Code Section 65941.1; and

WHEREAS, the Subject Property has a current General Plan 2040 land use designation of Primary Single-Family (R-SF) and Mix of Housing Types/Medium Density (R-MH), and a zoning designation of Residential Low Density (RLD) and Residential Medium Density (RMD); and

WHEREAS, on February 13, 2023, the applicant formally submitted an application for Tentative Map (TM23-0001), Development Review (DVR23-0017), Design Review (DR23-0006), Landscape Review (LR23-0002) and Minor Use Permit (MUP23-0010), to develop 51 detached single-family homes on the Subject Property (the "Project"); and

WHEREAS, on December 18, 2023, after multiple rounds of review, the Project was deemed complete; and

WHEREAS, on May 16, 2024, the applicant revised the Project description to withdraw the Minor Use Permit application and add a request for a Planned Development zoning map amendment (PD24-0001) to change the project site's zoning districts from RLD and RMD to Planned Development (PD) with a proposed "Vista Cove Planned Development Plan;" and

WHEREAS, on July 24, 2024, the application for the revised Project was deemed complete; and

WHEREAS, the City of Vallejo (City), as the lead agency, believed the Project would require an Environmental Impact Report (EIR) in compliance with the California Environmental Quality Act ((CEQA) California Public Resources Code, Section 2100 et. Seq.) and Title 14 of the California Code of Regulations (CEQA Guidelines); and

WHEREAS, on March 20, 2025, a Notice of Preparation (in accordance with CEQA Guidelines Section 15082) and Notice of Public Scoping Meeting was prepared and provided to adjacent property owners, all interested agencies, and to all members of the public who had previously requested notification and was posted at City Hall and on the City's Website, notifying them that the City of Vallejo was preparing an Environmental Impact Report (Draft EIR) for the proposed Project and comments should be submitted to the City commencing March 20, 2025 through April 19, 2025; and

WHEREAS, the City held a Public Scoping meeting on April 10, 2025 at 5:30 p.m. at the Vallejo Room of the John F. Kennedy Library; and

WHEREAS, an EIR was initially considered for the Project based on earlier information indicating the potential for significant environmental effects; however, after completion of the Initial Study, it was determined that there is no substantial evidence that the Project would result in significant environmental impacts because any potential impacts can be mitigated to a less-than-significant level, thereby supporting preparation of a Subsequent Mitigated Negative Declaration (SMND) in lieu of an EIR; and

WHEREAS, a Notice of Intent to adopt a SMND, which is attached hereto as Exhibit A and incorporated herein, was prepared and provided to adjacent property owners, all interested agencies, to all members of the public who had previously requested notification, and posted at City Hall and on the City's website, notifying all parties of the availability of the SMND and the 30-day public review period commencing November 10, 2025 and ending on December 10, 2025; and

WHEREA, the SMND identified potentially significant impacts to the environment including specific impacts to Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, and Tribal Cultural Resources, which would be avoided or mitigated to less than significant levels through adoption and implementation of the mitigation measures included in the Mitigation

Monitoring and Reporting Program (MMRP), which is attached hereto as Exhibit C and incorporated herein; and

WHEREAS, on November 24, 2025, pursuant to Vallejo Municipal Code Section16.602.08(A), notice of this hearing was published in the Times Herald and mailed to all active neighborhood groups and property owners within 500 feet of the Subject Property, the property owners, the Vallejo City Unified School District and any other local agency expected to provide water, wastewater treatment, streets, roads, schools, or other essential facilities or services to the Project and electronically mailed to the members of the Planning Commission, to the applicant and interested parties; and

WHEREAS, the Planning Commission conducted a duly noticed public hearing on December 15, 2025, to consider the proposed Project, including the recommended environmental review determination prepared pursuant to CEQA; and

WHEREAS, the staff requested to continue the Project to a date certain of January 21, 2026, Planning Commission regular meeting, and voted 5-1 to continue the meeting; and

WHEREAS, the Planning Commission conducted a public hearing on January 21, 2026, to consider the proposed Project, including the recommended environmental review determination pursuant to CEQA

NOW, THEREFORE, LET IT BE RESOLVED that the Planning Commission hereby finds, determines and resolves as follows:

Section 1. Recitals

The foregoing recitals are true and correct, and the same are incorporated herein by reference.

Section 2. Record

The Record of Proceedings ("Record") upon which the Planning Commission bases its decisions on the Project includes but is not limited to: (1) the staff reports, City files and records, and other documents prepared for and/or submitted to the City relating to the Project; (2) the evidence, facts, findings and other determinations set forth in this resolution; (3) Vallejo General Plan 2040 and its certified final Environmental Impact Report (“GP EIR”); the 2021 Zoning Code and its Initial Study and Mitigated Negative Declaration; the Vallejo 2023-2031 Housing Element and the Addendum to the GP EIR dated September 2025 and prepared by Environmental Science Associates; the Vallejo Municipal Code; (4) all designs, plans, studies, data and correspondence submitted to the City in connection with the Project; (5) all documentary and oral evidence received at public meetings, hearings, or submitted to the City during the comment period relating to the Project; and (6) all other matters of common knowledge to the Planning Commission

including, but not limited to, City state, and federal laws, policies, rules, regulations, reports, records, and projections related to development within the City of Vallejo and its surrounding areas.

The location and custodian of the records is the Planning and Development Services of the City of Vallejo, 555 Santa Clara Street, Vallejo, California 94590.

Section 3. Initial Study/Subsequent Mitigated Negative Declaration Considered.

Based upon information in the Subsequent Mitigated Negative Declaration (SMND), incorporated herein by reference, the Record as described above, and all other matters deemed material and relevant prior to adopting this resolution, the Planning Commission hereby recommends adoption of a Subsequent Mitigated Negative Declaration for the Project based on the following:

a. The SMND has been completed in compliance with the California Environmental Quality Act (Public Resources Code Section 21166 and CEQA Guidelines Sections 15162);

b. The Planning Commission considered the GP EIR and SMD before making its decision to recommend approval of the Project; and

c. The SMND reflects the City's independent judgment and analysis as Lead Agency.

Section 4. California Environmental Quality Act Findings.

The Planning Commission further finds that none of the circumstances set forth in CEQA Guidelines Section 15162 are present with respect to the project and no further environmental review is required based on the following findings:

1. **Substantial changes *are not* proposed in the project which will require revisions of the GP EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.**

   Facts in Support: *The Project proposes a land use that is consistent with the existing GP designations. The characteristics of the proposed Project are the same as previously assumed in the General Plan EIR. Impacts analyzed in the General Plan EIR would remain the same with the proposed Project. Thus, the proposed Project does not require a major revision to the EIR and does not substantially increase the severity of previously identified significant effects.*

2. **Substantial changes have *not* occurred with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects**.

Facts in Support: *The circumstances under which the proposed Project would occur are not changed from what was assumed in the General Plan EIR, nor does the proposed Project result in a new or substantial increase in the severity of significant impacts in the General Plan EIR, as demonstrated in the Environmental Checklist in Section 4 of the SMND. No notable circumstances pertaining to the Project site or its surroundings have occurred since the General Plan EIR analysis was prepared. While updates and changes have occurred to certain CEQA criteria, thresholds, and/or analysis approaches as a result of amendments to the CEQA Guidelines, caselaw, or other regulations or adopted standards and/or guidance, these are disclosed in the Checklist for public information and discussed to clarify that none are considered changed circumstances for purposes of this Section.*

3. ***No*** **new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the GP EIR was adopted, shows any of the following:**

    A. **The Project will have one or more significant effects not discussed in the GP EIR;**

    Facts in Support: *The GP EIR identifies significant and unavoidable impacts for air quality, GHG emissions, noise, and transportation. Because development of the proposed Project of 51 residential units on the Project site was factored into the GP EIR analysis, the Project would not exceed what was analyzed in the GP EIR, which considered a much greater level of citywide development. The proposed Project does not result in a significant effect that was not discussed in the previous GP EIR.*

    B. **Significant effects previously examined will be substantially more severe than shown in the GP EIR;**

    Facts in Support: *As explained above, because development of the proposed Project of 51 residential units on the Project site was factored into the GP EIR analysis, the Project would not exceed the General Plan EIR impacts, which considered a much greater level of citywide development of which the proposed Project is a part. The proposed Project does not result in a significant effect that is substantially more severe than shown in the previous GP EIR.*

    C. **Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or**

    Facts in Support: *The Project is not proposing any changes that would affect the feasibility of previously discussed mitigation measures or alternatives. No mitigation measures or alternatives in the GP EIR are changed in the Checklist to the Addendum, and not all of the mitigation measures are required or pertain to the proposed Project.*

D. **Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.**

Facts in Support: There are no new mitigation measures or alternatives from those adopted in the GP EIR that would substantially reduce one or more significant effects on the environment. No mitigation measures or alternatives in the GP EIR have changed in the Checklist, and not all of the mitigation measures are required or pertain to the proposed Project.

Section 3. Decision

NOW, THEREFORE, LET IT BE RESOLVED that the Planning Commission hereby recommends that the City Council adopt the Initial Study/Subsequent Mitigated Negative Declaration (IS/MND), attached as Exhibit "A," and, based thereon and on the Record as a whole, find that all potentially significant environmental effects of the Project have been eliminated or reduced to a less-than-significant level as set forth in the IS/MND, such that the Project and its associated actions will not have a significant effect on the environment.

BE IT FURTHER RESOLVED that The Planning Commission further recommends that the City Council adopt the mitigation measures identified in the IS/MND and incorporated into the Mitigation, Monitoring, and Reporting Program (MMRP), attached as Exhibit "C," which is designed to ensure implementation and compliance with all required project changes and mitigation measures to avoid or substantially lessen the significant effects identified in the IS/MND and said mitigation measures are described in the MMRP included therein and incorporated herein by reference.

Section 4. Time Limitations & Indemnity

a. Developer shall defend, indemnify, and hold harmless the City and its agents, officers, attorneys, and employees from any claim, action, or proceeding brought against the City or its agents, officers, attorneys, or employees to attack, set aside, void, or annul the action(s) at issue herein. This indemnification shall include damages or fees awarded against the City, if any, costs of suit, attorneys' fees, and other costs and expenses incurred in connection with such action whether incurred by the Developer, the City, and/or parties initiating or bringing such action.

b. Developer shall defend, indemnify, and hold harmless the City and its agents, officers, attorneys, and employees for all costs incurred in additional investigation of or study of, or for supplementing, preparing, redrafting, revising, or amending any document, if made necessary by said legal action and the developer desires to pursue securing such approvals, after initiation of such litigation, which are

conditioned on the approval of such documents in a form and under conditions approved by the City Attorney.

c. In the event that a claim, action, or proceeding described in paragraphs a. or b. above is brought, the City shall promptly notify the developer of the existence of the claim, action, or proceeding, and the City will cooperate fully in the defense of such claim, action, or proceeding. Nothing herein shall prohibit the City from participating in the defense of any claim, action, or proceeding; the City shall retain the right to: (1) approve the counsel to so defend the City; (ii) approve all significant decisions concerning the manner in which the defense is conducted; and (iii) approve any and all settlements, which approval shall not be unreasonably withheld. The City shall also have the right not to participate in said defense, except that the City agrees to cooperate with the developer in the defense of said claim, action, or proceeding. If the City chooses to have counsel of its own to defend any claim, action, or proceeding where the developer has already retained counsel to defense the City in such matters, the fees and expenses of the counsel selected by the City shall be paid by the City. Notwithstanding the immediately preceding sentence, if the City Attorney's Office participates in the defense, all City Attorney fees and expenses shall be paid by the developer.

d. The Applicant, property owner and/or any successor(s) in interest, whether in whole or in part, to either of them, indemnifies the City for the City's costs, fees, and damages which the City incurs in enforcing the above indemnification provisions.

e. Pursuant to VMC Section 16.602.14, the Applicant, or any party adversely affected by the decision of the Planning Commission, may, within ten days after the Planning Commission's decision, appeal in writing to the City Council by filing a written appeal with the City Clerk. Such written appeal shall state the reason or reasons for the appeal and why the applicant believes he or she is adversely affected by the decision of the Planning Commission. Such appeal shall not be timely filed unless it is actually received by the City Clerk or designee no later than the close of business on the tenth calendar day after the date of the decision. Fees for the appeal established by the Master Fee Schedule shall be paid by the appellant. In the event the appeal period ends on a Saturday, Sunday, or any other day the city is closed, the appeal period shall end at the close of business on the next consecutive business day.

f. The conditions of approval applicable to the Project include certain fees, dedication requirements, reservation requirements, and other exactions. Pursuant to Government Code Section 66020(d)(1), the conditions constitute written notice of a statement of the amount of such fees and a description of dedications, reservations, and other exactions. Developer is hereby further notified that the 90-day approval period in which it may protest these fees, dedications, reservations, and other exactions pursuant to Government Code Section 66020(a) has begun. If you fail to file a protest within this 90- day period complying with all of the

requirements of Section 66020, you will be legally barred from later challenging such exactions.

PASSED AND ADOPTED at a regular meeting of the Planning Commission of the City of Vallejo, State of California, on the 21st day of January 2026 by the following vote, to-wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____

ANTHONY TAYLOR, CHAIRPERSON
City of Vallejo Planning Commission

Attest:

_____

KRISTIN POLLOT, AICP - SECRETARY
City of Vallejo Planning Commission

Exhibits:

A. Subsequent Mitigated Negative Declaration
    a. Appendix A: CalEEMod Output
    b. Appendix B: HRA Model Outputs
    c. Appendix C: Biological Resources
    d. Appendix D: Cultural Resource Assessment
    e. Appendix E: Geotechnical Investigation
    f. Appendix F: Phase 1 – ESA
    g. Appendix G: Drainage Memorandum
    h. Appendix H: Noise Impact Assessment
    i. Appendix I: Transportation Analysis and LOS worksheets

B. Errata to Subsequent Mitigated Negative Declaration

C. Mitigation Monitoring and Reporting Program

D. Response to Comments Memo
    a. Attachment A: Comment Letters
    b. Attachment B: Update Figure 2-4

c. Attachment C: Geotechnical Report Updated Memorandum
d. Attachment D: Evacuation Assessment
e. Attachment E: Phase 1 ESA

INITIAL STUDY/SUBSEQUENT MITIGATED NEGATIVE DECLARATION

VISTA COVE PLANNED DEVELOPMENT PROJECT

VALLEJO, CALIFORNIA

LSA

November 2025

This page intentionally left blank

INITIAL STUDY/SUBSEQUENT MITIGATED NEGATIVE DECLARATION

VISTA COVE PLANNED DEVELOPMENT PROJECT

VALLEJO, CALIFORNIA

Submitted to:

City of Vallejo
Planning and Development Services
555 Santa Clara Street
Vallejo, California 94590

Prepared by:

LSA
157 Park Place
Pt. Richmond, California 94801
(510) 236-6810

Project No. 20241845

LSA

November 2025

This page intentionally left blank

TABLE OF CONTENTS

TABLE OF CONTENTS i
FIGURES AND TABLES ii
LIST OF ABBREVIATIONS AND ACRONYMS iv
1.0 PROJECT INFORMATION 1-1
2.0 PROJECT DESCRIPTION 2-1
2.1 Project Site 2-1
2.2 Proposed Project 2-11
2.3 Previous CEQA Approvals 2-22
2.4 Permits and Approvals 2-23
3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED 3-1
3.1 Determination 3-1
4.0 CEQA ENVIRONMENTAL CHECKLIST 4-1
4.1 Aesthetics 4-1
4.2 Agriculture and Forestry Resources 4-15
4.3 Air Quality 4-18
4.4 Biological Resources 4-31
4.5 Cultural Resources 4-50
4.6 Energy 4-59
4.7 Geology and Soils 4-64
4.8 Greenhouse Gas Emissions 4-73
4.9 Hazards and Hazardous Materials 4-90
4.10 Hydrology and Water Quality 4-97
4.11 Land Use and Planning 4-108
4.12 Mineral Resources 4-111
4.13 Noise 4-113
4.14 Population and Housing 4-123
4.15 Public Services 4-125
4.16 Recreation 4-133
4.17 Transportation 4-135
4.18 Tribal Cultural Resources 4-144
4.19 Utilities and Service Systems 4-153
4.20 Wildfire 4-160
4.21 Mandatory Findings of Significance 4-165
5.0 UPDATED MITIGATION MONITORING AND REPORTING PROGRAM 5-1
6.0 LIST OF PREPARERS 6-1
7.0 REFERENCES 7-1

FIGURES AND TABLES

FIGURES

Figure 2-1: Project Location and Regional Vicinity Map 2-3
Figure 2-2: Aerial Photograph of the Project Site and Surrounding Land Uses 2-5
Figure 2-3: Site Zoning and General Plan Land Use Designations 2-9
Figure 2-4: Conceptual Site Plan 2-13
Figure 2-5: Conceptual Building Elevations 2-15
Figure 2-6: Conceptual Landscape Plan 2-17
Figure 4.1-1: Existing Site Conditions Photographs 4-3
Figure 4.1-2: Surrounding Land Uses Photographs 4-5
Figure 4.13-1: Sensitive Receptor Locations 4-117

TABLES

Table 2.A: Potential Permits and Approvals 2-23
Table 4.3.A: Project Construction Emissions 4-24
Table 4.3.B: Project Operation Emissions 4-26
Table 4.3.C: Unmitigated Inhalation Health Risks from Project Construction to Off-Site Receptors 4-29
Table 4.3.D: Mitigated Inhalation Health Risks from Project Construction to Off-Site Receptors 4-30
Table 4.4.A: Potential Special-Status Wildlife 4-39
Table 4.6.A: Estimated Annual Energy Use of Proposed Project 4-61
Table 4.8.A: Project Greenhouse Gas Emissions 4-76
Table 4.8.B: Project Consistency with 2022 Scoping Plan Key Project Attributes 4-80
Table 4.8.C: Project Consistency with Plan Bay Area 2050 4-82
Table 4.13.A: Significance Criteria Summary 4-119
Table 4.15.A: Vallejo City Unified School District Enrollment Data 4-130
Table 4.17.A: Trip Generation 4-138
Table 4.17.B: Vehicle Level of Service Summary 4-139
Table 5.A: Updated Mitigation Monitoring and Reporting Program 5-2

APPENDICES

A: CALEEMOD OUTPUTS
B: HRA MODEL OUTPUTS
C: BIOLOGICAL RESOURCES REPORTS AND PEER REVIEWS
D: CULTURAL RESOURCES ASSESSMENT
E: GEOTECHNICAL INVESTIGATION AND PEER REVIEW
F: PHASE I ENVIRONMENTAL SITE ASSESSMENT AND PEER REVIEW
G: DRAINAGE MEMORANDUM, PRELIMINARY STORMWATER CONTROL PLAN, AND DRAINAGE STUDY
H: NOISE IMPACT ANALYSIS
I: TRANSPORTATION ANALYSIS AND LOS WORKSHEETS

LIST OF ABBREVIATIONS AND ACRONYMS

AADT	annual average daily traffic
AB	Assembly Bill
ADA	Americans with Disabilities Act
AFY	acre-feet per year
Air District	Bay Area Air District
amsl	above mean sea level
APN	Assessor's Parcel Numbers
BAAD	Bay Area Air District
BART	Bay Area Rapid Transit
Basin Plan	Water Quality Control Plan
Bay Area	San Francisco Bay Area
BMP	Best Management Practice
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission

CEQA	California Environmental Quality Act
CGP	Construction General Permit
CH_4	methane
CHRIS	California Historic Resources Inventory System
City	City of Vallejo
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DBH	diameter at breast height
DDT	dichlorodiphenyltrichloroethane
DOC	California Department of Conservation
DOT	United States Department of Transportation
DPM	diesel particulate matter
du/ac	dwelling units per acre
EIR	Environmental Impact Report
EMFAC2021	EMission FACtor model, Version 1.0.2
EOP	Emergency Operations Plan

EPA	United States Environmental Protection Agency
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FTA	Federal Transit Administration
GHG	greenhouse gas
gpd	gallons per day
GPS	global positioning system
GSA	Groundwater Sustainability Agency
GVRD	Greater Vallejo Recreation District
GWh	gigawatt-hours
GWP	global warming potential
HARP	Hotspots Analysis and Reporting Program
HFC	hydrofluorocarbons
HOA	homeowners association
HRA	health risk assessment
HVAC	heating, ventilation, and air conditioning
I-80	Interstate 80
I-680	Interstate 680
I-780	Interstate 780
in/sec	inches per second
IS	Initial Study
ISA	International Society of Arboriculture
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
kWh	kilowatt-hours

L_{dn}	day-night average sound level
L_{eq}	equivalent continuous sound level
LID	Low Impact Development
LOS	level of service
LRA	local responsibility area
mgd	million gallons per day
MJHMP	Multi-Jurisdictional Hazard Mitigation Plan
MLD	Most Likely Descendant
MND	Mitigated Negative Declaration
mpg	miles per gallon
mph	miles per hour
MRP	California Regional Water Quality Control Board San Francisco Bay Region's Municipal Regional Stormwater NPDES Permit
MT	metric tons
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
NETR	Nationwide Environmental Title Research
NIMS	National Incident Management System
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
NWIC	Northwest Information Center
O_3	ozone

OEHHA	Office of Environmental Health Hazard Assessment
OES	Office of Emergency Services
OHWM	ordinary high-water mark
OSHA	Occupational Safety and Health Administration
Pb	lead
PCBs	polychlorinated biphenyls
PD	Planned Development
PFC	perfluorocarbons
PG&E	Pacific Gas and Electric Company
Phase I ESA	Phase I Environmental Site Assessment
$PM_{2.5}$	particulate matter less than 2.5 microns in size
PM_{10}	particulate matter less than 10 microns in size
POTWs	publicly owned treatment works
PPV	peak particle velocity
PRC	Public Resources Code
project	Vista Cove Planned Development Project
project sponsor	Sancerra Vista Cove, LLC
R-MH	Mix of Housing Types
R-SF	Primarily Single Family
RCM	Regulatory Compliance Measure
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
RLD	Residential Low Density
RMD	Residential Medium Density
ROGs	reactive organic gases

RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCP	Stormwater Control Plan
SEMS	Standardized Emergency Management System
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SLF	Sacred Lands File
SO_2	sulfur dioxide
Soltrans	Solano County Transit
SR-24	State Route 24
SR-37	State Route 37
SUV	sport utility vehicle
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TDM	transportation demand management
TMDL	Total Maximum Daily Load
TPZ	tree protection zone
UCMP	University of California Museum of Paleontology
$\mu g/m^3$	micrograms per cubic meter
URF	unit risk factor
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

UWMP	Urban Water Management Plan
VCUSD	Vallejo City Unified School District
VFD	Vallejo Fire Department
VFWD	Vallejo Flood and Wastewater District
VHFHSZ	Very High Fire Hazard Severity Zone
VMC	Vallejo Municipal Code
VMT	vehicle miles traveled
VPD	Vallejo Police Department
vph	vehicles per hour
VSFCD	Vallejo Sanitation and Flood Control District
Water Board	San Francisco Bay Regional Water Quality Control Board
WWTP	wastewater treatment plant

1.0 PROJECT INFORMATION

1. **Project Title:**

   Vista Cove Planned Development Project

2. **Lead Agency Name and Address:**

   City of Vallejo
   Planning and Development Services
   555 Santa Clara Street
   Vallejo, California 94590

3. **Contact Person and Phone Number:**

   Cesar Orozco, Planning Manager
   (707) 648-5436
   cesar.orozco@cityofvallejo.net

4. **Project Location:**

   The 20.13-acre project site is located at the northeast corner of Shady Lane and Wildflower Avenue (Assessor's Parcel Numbers [APNs] 0079-171-170 and 0079-120-100) in Vallejo, Solano County. Vallejo is approximately 20 miles northeast of San Francisco, along the eastern end of San Pablo Bay. The project site is in southeastern Vallejo, west of the eastern boundary with the city of Benicia, in an area consisting primarily of residential, recreational, and public and semi-public uses.

5. **Project Sponsor's Name and Address:**

   Sancerra Vista Cove, LLC
   2618 San Miguel Drive, Suite 1223
   Newport Beach, California 92660

6. **General Plan Designation:**

   Mix of Housing Types (R-MH) and Primarily Single Family (R-SF)

7. **Zoning:**

   Residential Medium Density (RMD) and Residential Low Density (RLD)

8. **Description of Project:**

   The proposed project would result in the subdivision of the 20.13-acre site, of which approximately 10 acres would be developed, while the remaining acreage would be retained as undeveloped open space. The residential portion of the proposed project would include 51 residential lots, open space, and related infrastructure improvements. To facilitate development of the project as proposed, the site would be rezoned to the Planned Development (PD) district. Individual components of the proposed project are further described in Section 2.0, Project Description.

9. Surrounding Land Uses and Setting:

The project site is generally surrounded by residential, recreational, and public and semi-public uses.

10. Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):

See Section 2.3, Project Approvals.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

In August 2024, the City of Vallejo (City) provided formal notification to those California Native American tribes that are traditionally and culturally affiliated with the geographic area within which the proposed project is located pursuant to the consultation requirements of Assembly Bill (AB) 52. Letters were sent to all tribal representatives identified by the Native American Heritage Commission (NAHC). The City met with one tribe, Yocha Dehe Winton Nation, for consultation in January 2025.

2.0 PROJECT DESCRIPTION

This chapter describes the proposed Vista Cove Planned Development Project (project) submitted by Sancerra Vista Cove, LLC (the project sponsor) and evaluated in this document. An overview of the project site and surrounding land uses is followed by the details of the proposed project itself. A summary of required approvals and entitlements and intended uses of this document is also provided. The City of Vallejo is the Lead Agency for environmental review.

2.1 PROJECT SITE

The following describes the project's local and regional context, existing site characteristics, and surrounding land uses.

2.1.1 Project Site Location and Access

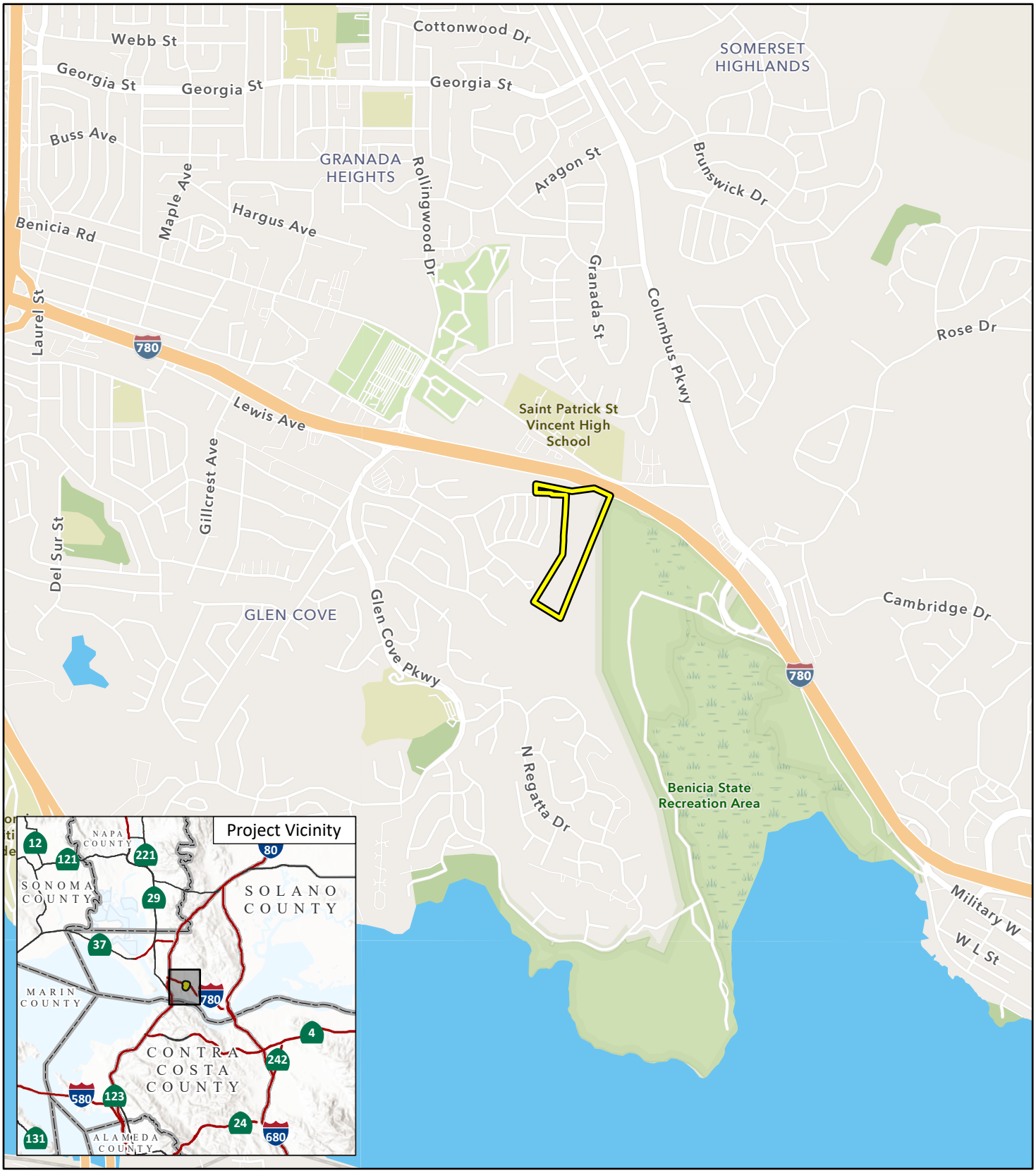
The 20.13-acre project site is located at the northeast corner of Shady Lane and Wildflower Avenue (APNs 0079-171-170 and 0079-120-100) in Vallejo, Solano County. Vallejo is approximately 20 miles northeast of San Francisco, along the eastern end of San Pablo Bay. The project site is in southeastern Vallejo, west of the eastern boundary with the city of Benicia, in an area consisting primarily of residential, recreational, and public and semi-public uses.

Regional vehicular access to the project site is provided by Interstate 780 (I-780), located immediately north of the project site. The closest on- and off-ramps to the project site are located along Glen Cove Road, approximately 0.45 mile west of the project site. Direct local access to the project site is via Shady Lane and Wildflower Avenue, which border the site immediately to the southwest.

The project site is served by SolTrans Routes 3 and 8, with the transit stops located approximately 0.5 mile to the west along Glen Cove Parkway. The Amtrak station in Vallejo is approximately 4 miles northwest of the project site, and the Vallejo Ferry Terminal, which offers ferry service between Vallejo and San Francisco, is approximately 3.5 miles northwest of the project site.

Figure 2-1 shows the regional and local context of the project site, and **Figure 2-2** depicts an aerial photograph of the project site and surrounding land uses.

This page intentionally left blank



LSA

FIGURE 2-1

SOURCE: Esri Community Map (2024)

I:\2024\20241845\GIS\Pro\Vista Cove Planned Development Project\Vista Cove Planned Development Project.aprx (5/16/2025)

Vista Cove Planned Development Project

Project Location and Regional Vicinity Map

This page intentionally left blank

LSA

Project Location

FIGURE 2-2

N

0 250 500
FEET

SOURCE: Google Maps (2024)

Vista Cove Planned Development Project

Aerial Photograph of the Project Site and Surrounding Land Uses

I:\2024\20241845\GIS\Pro\Vista Cove Planned Development Project\Vista Cove Planned Development Project.aprx (5/16/2025)

This page intentionally left blank

2.1.1 Existing Site Conditions

The project site is made up of undulating hills and flat areas, with elevations ranging from approximately 70 feet above mean sea level (amsl) in low lying areas along the eastern portion of the project site up to approximately 290 feet amsl along the southwestern boundary of the project site. The southern portion of the site is generally lower in elevation and increases in elevation towards the west.

Non-native annual grassland and scattered mature trees primarily occupy the vacant project site. There are 83 mature trees on the project site. The project site also includes one intermittent stream, connected to a seasonal wetland located in a low-lying area in the middle of the project site, and one linear freshwater marsh.[1] There is an existing access easement from Wildflower Avenue to provide access to APN 0079-120-100 from APN 0079-171-170.

2.1.2 Existing Land Use and Zoning

The City of Vallejo General Plan 2040 designates the project site as Mix of Housing Types (R-MH) and Primarily Single Family (R-SF), as shown on **Figure 2-3**. Permitted land uses within the R-MH and R-SF designations are similar and include single-family homes. In addition, the land use designations allow duplexes, triplexes fourplexes, smaller-scale apartment buildings, and small commercial spaces, as well as public facilities such as schools, religious institutions, parks, and other community facilities appropriate within a residential neighborhood. The maximum permitted residential density in the R-MH designation is 25 dwelling units per acre, and nine dwelling units per acre in the R-SF designation; however, in single-family areas where accessory dwelling units are allowed, maximum permitted residential density is 12 dwelling units per acre.

The project site is zoned Residential Medium Density (RMD) and Residential Low Density (RLD). The RMD Zoning District allows a mix of housing types, including attached and detached structures, and small apartment buildings. Development in these zones is subject to density limits (up to 25 dwelling units per acre) and design and development standards to ensure land use compatibility. The district also allows mixed-use development with residential and small commercial spaces, a variety of neighborhood supportive services, public and educational facilities, open spaces, and community facilities. In undeveloped areas of the city, it is the intent of this district to encourage the creation of multi-unit residential neighborhoods with a variety of housing types.

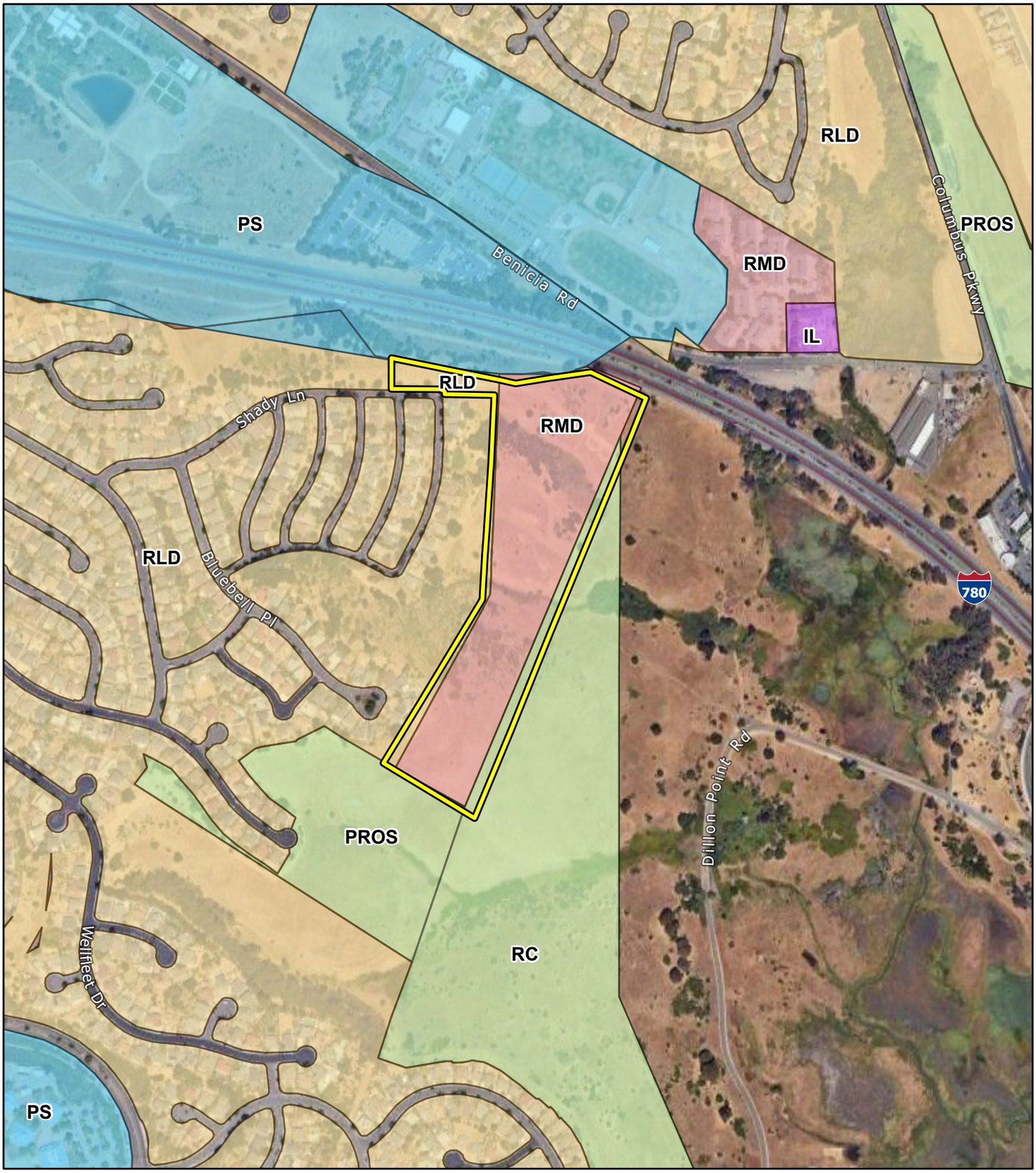
The RLD Zoning District is intended for low-density residential areas in which permanent single unit residences, including detached and attached (duplexes and townhouses) units are the primary use. This district also allows other residential types, including cottages and bungalows around courts, small neighborhood-serving retail, a variety of neighborhood supportive services, public and educational facilities, open spaces, and community facilities. The maximum permitted residential density is nine dwelling units per acre, excluding accessory dwelling units.[2]

---

1 WRA, Inc. 2024. *Biological Resources Technical Report Vista Cove Project, Vallejo, Solano County, California.* February.

2 Vallejo, City of. n.d.-d. *Vallejo, California – Municipal Code, Title 16 – Zoning, Part II – Districts and Development, Chapter 16.202 – Residential Districts.*

This page intentionally left blank



LSA

Project Location

City of Vallejo General Plan

- Parks, Recreation, and Open Space
- Public Facilities and Institutions
- Mix of Housing Types
- Primarily Single Family
- Business/ Light Industrial

City of Vallejo Zoning

- IL Industrial Light
- PROS Parks, Recreation and Open Space
- PS Public and Semi-Public
- RLD Residential Low Density
- RMD Residential Medium Density
- RC Resource Conservation

N

0 300 600

FEET

SOURCE: Google Maps (2023)

FIGURE 2-3

Vista Cove Planned Development Project

Site Zoning and General Plan Land Use Designations

I:\2024\20241845\GIS\Pro\Vista Cove Planned Development Project\Vista Cove Planned Development Project.aprx (5/16/2025)

This page intentionally left blank

2.1.1 Surrounding Land Uses

The project site is generally surrounded by residential, recreational, and public and semi-public uses, as depicted on **Figure 2-2**, above, and further described below.

- **North.** The project site is bordered to the north by I-780 and vacant land that is zoned for Public and Semi-Public uses. Farther north are a variety of Public and Semi-Public uses, including a California Highway Patrol office and Saint Patrick Saint Vincent High School, as well as single- and multifamily residential uses.

- **East.** The project site is bordered immediately to the east by vacant, undeveloped land zoned for Resource Conservation and the Benicia State Park. Farther east are commercial uses and single- and multifamily residential uses.

- **South.** The project site is bordered immediately to the south by vacant undeveloped land owned by the City and zoned for parks, recreation and open space, and resource conservation. Farther south are single-family residential uses and Glen Cove Elementary School.

- **West.** The project site is bordered immediately to the west by a 141-unit single-family residential subdivision. Farther west are commercial uses and single-family residential uses.

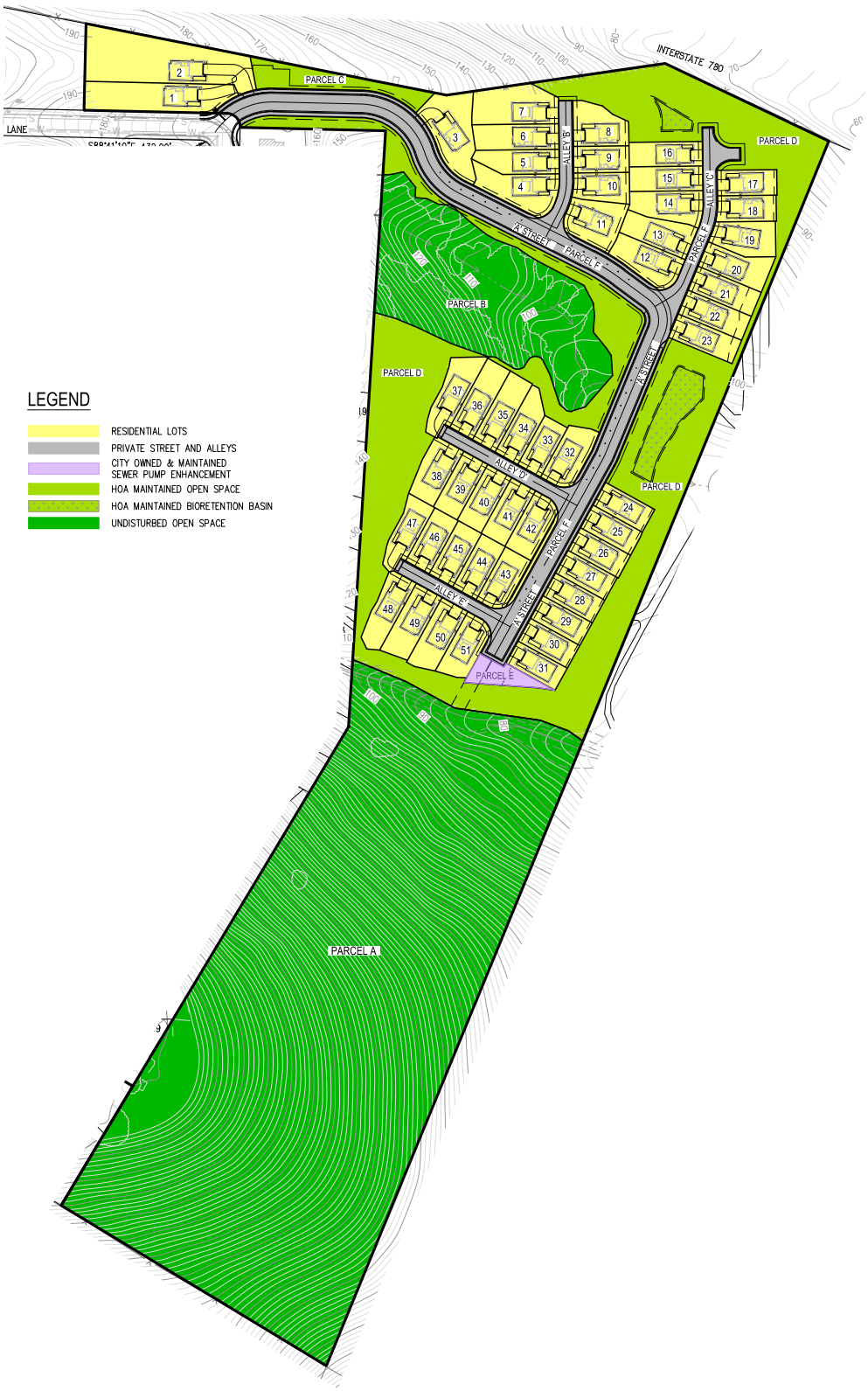
2.2 PROPOSED PROJECT

This section provides a description of the proposed project as identified in the application materials submitted by the project sponsor to the City, dated May 2024.[3,4,5] The proposed project would result in the subdivision of the 20.13-acre site, of which approximately 10 acres would be developed, while the remaining acreage would be retained as undeveloped open space. The residential portion of the proposed project would include 51 residential lots, undeveloped open space, water quality basins, and related infrastructure improvements. To facilitate development of the project as proposed, the site would be rezoned to the Planned Development (PD) district. Individual components of the proposed project are further described below.

Figure 2-4 shows the conceptual site plan for the proposed project and the conceptual building elevations are shown in **Figure 2-5**. The conceptual landscape plan is shown on **Figure 2-6**.

[3] Sancerra Vista Cove, LLC. 2024a. *Vista Cove Planned Development, Vallejo, California*. May.
[4] Sancerra Vista Cove, LLC. 2024b. *Vista Cove Vallejo, CA Overall Landscape Plan.* May 14.
[5] Sancerra Vista Cove, LLC. 2024c. *Vista Cove Planned Development, Tentative Map.* May 9.

This page intentionally left blank



LSA

FIGURE 2-4

N

0 125 250

FEET

SOURCE: DK Engineering

I:\20231133\G\Site_Plan.ai (5/16/2025)

Vista Cove Planned Development Project

Conceptual Site Plan

This page intentionally left blank

LSA

FIGURE 2-5

Vista Cove Planned Development Project
Conceptual Building Elevations

This page intentionally left blank

LSA

FIGURE 2-6

0 50 100
FEET

SOURCE: Vander Toolen Associates

I:\2024\20241845\G\Landscape_Plan.ai (5/16/2025)

Vista Cove Planned Development Project

Conceptual Landscape Plan

This page intentionally left blank

2.2.1 Rezoning

To facilitate development of the project as proposed, the project site would be rezoned as PD. As outlined in Chapter 16.209 of the City of Vallejo Municipal Code, the PD zone allows for one or more properties to be developed under a plan that would:

- Provide opportunities for coordinated development;
- Ensure substantial compliance with and implement the land use and density policies of the General Plan and any applicable Specific Plan;
- Provide for efficient and cost-effective public facilities and services;
- Allow for creative and experimental approaches to land development projects that incorporate design features that are more sensitive to site conditions;
- Facilitate projects that provide greater amenities than would likely result from conventionally planned development; and
- Protect public health, safety, and general welfare without unduly inhibiting developers attempting to secure the advantages of modern large-scale site planning for residential, commercial, or industrial purposes.

2.2.2 Proposed Building Program

Approximately 10.39 acres of the proposed developed residential space would include 51 single-family residential units and associated improvements, including front and rear yards, front driveways, two-car garages, fencing, and landscaping. The residential component of the proposed project would have an overall density of 4.9 dwelling units per acre (du/ac).[6] The proposed residential units would front new internal private roadways. The residences would consist of four different floor plans, with three elevations for each floor plan. The proposed buildings would be two stories and would not exceed 35 feet in height. A consistent architectural style is proposed for the buildings, which would consist of a modern farmhouse design. A conceptual design is shown on **Figure 2-5**.

2.2.3 Proposed Open Space and Landscaping

The proposed project would include 9.74 acres of undisturbed open space that would consist of two parcels: Parcel A would be an approximately 8.36-acre parcel and Parcel B is approximately 1.38 acres (refer to **Figure 2-4**). These areas would be fenced and have signage installed to prevent trespassing. The open space area would only be accessible via private gates to facilitate maintenance activities. Specifically, future development is not allowed on the two parcels, which would remain undeveloped open space.

The project site would also include 3.55 acres of common open space that would include one bioretention area, walkways, a loop walk around a flexible use turf area, and a vista overlook for residents. The proposed landscape design includes drought-tolerant and native landscaping to transition between the proposed residential area and adjacent open space. Landscaping would

[6] 51 units/10.395 acres.

primarily consist of trees along the internal roadways and shrubs and groundcover along the internal roadways and between the residential units. Landscaping would also be arranged to screen views of I-780. Street trees would be planted in private yards and lighting would meet City Site Development Standards.[7]

A total of 69 trees would be removed, including 47 significant trees that are protected under the City's tree protection ordinance.[8] Trees would be replaced at a ratio of 3 new trees for every significant tree removed, for a total of 141 trees that would be planted. **Figure 2-6** depicts the overall conceptual landscape plan.

2.2.4 Proposed Access, Circulation, and Parking

As shown on **Figure 2-4**, vehicular access to the project site would be provided by one full-access residential street through an established community to the west of the intersection of Shady Lane and Wildflower Avenue. The proposed project would include private internal residential streets that would be 28 feet wide curb to curb, with parking on one side as well as a 4.5-foot attached sidewalk. The project would also include private alleys, which would be smaller in scale than the private residential streets and would include shared vehicular access to houses with garages fronting onto them. Private alleys would include a 33-foot public utility easement/planting easement and a 10-foot travel way in each direction, with no parking allowed. The proposed project would provide 102 covered garage spaces (2 per unit), 102 driveway stalls (2 per unit), 24 on-street stalls, and 1 mailbox parking stall, for a total of 229 parking spaces.

2.2.5 Utilities and Infrastructure

The project site is located in an urban area that is currently served by existing utilities, including water, sanitary sewer, storm drainage, electricity, gas, and telecommunications infrastructure. The infrastructure to be provided would be a combination of public and private systems. Existing and proposed utility connections are discussed below.

2.2.5.1 Water

Water service for the proposed project would be provided by the City of Vallejo. A new 8-inch water main line would connect to an existing 8-inch water main in Shady Lane at two locations, for a looped system. The water system would be designed and installed to City of Vallejo Water Department standards.

2.2.5.2 Wastewater

The Vallejo Flood and Wastewater District (VFWD) maintains existing sanitary sewer lines within the vicinity of the project site. A new 8-inch sewer lateral would connect to the existing 8-inch public sanitary sewer main line located in Shady Lane at the northwestern corner of the project site. The sanitary sewer would be designed and installed to VFWD standards. The project would also include

[7] Vallejo, City of. n.d.-f. *Vallejo, California – Municipal Code, Title 16 – Zoning, Part V – Site Development Standards, Chapter 16.506 – Lighting and Glare.*

[8] Vallejo, City of. n.d.-g. *Vallejo, California – Municipal Code, Title 16 – Zoning, Part V – Site Development Standards, Chapter 16.504 – Landscaping, Section 16.504.07 – Tree protection.*

the replacement of the existing sewer lift station that currently serves the 141 single-family home development to the west of the proposed project site with an upgraded system to serve both communities. The lift station would be owned and maintained by the VFWD.

2.2.5.3 Stormwater

Under existing conditions, the project site consists entirely of pervious surface area consisting primarily of grassland. There is no existing stormwater infrastructure on the project site; however, under existing conditions, the project site drains from west to east to Benicia State Park, where stormwater runoff converges and is directed to the Carquinez Strait.[9]

Upon construction of the proposed project, approximately 3.95 acres (19.6 percent) of the project site would be covered by impervious surfaces and approximately 16.18 acres (80.4 percent) would be covered by pervious surfaces, consisting of landscaped areas, undeveloped open space, and bioretention areas. The proposed project would include two detention basins and approximately 7,617 square feet of bioretention space, made up of two bioretention facilities located at the northwest corner of the site and the middle east border of the site that would collect drainage from the proposed on-site stormwater infrastructure and be used for stormwater control and treatment before discharging to an 18-inch storm drain pipe which outfalls to the existing marshland area adjacent to Benicia State Park. The storm drain system would be designed and installed to VFWD standards.

2.2.5.4 Electricity and Gas

Electricity and gas service is provided to the project site by Pacific Gas and Electric Company (PG&E). The proposed project would include connections to the existing electricity and natural gas lines that run adjacent to the project site along Shady Lane and Wildflower Avenue. Additionally, the proposed sewer lift station would be designed to have a standby diesel generator with an automatic transfer switch. The generator would be housed in a weatherproof enclosure and would provide backup power in case of an electrical outage.

2.2.6 Operations and Maintenance

Within the residential areas, the individual lots, open space, common open space areas, and water quality basin would be privately owned by a dedicated homeowners association (HOA). The streets that serve the residential lots would also be dedicated to the HOA for private ownership and maintenance. The other remaining 10 acres of open space would be privately owned, managed, and maintained by the HOA.

Utility infrastructure located within the private streets would be dedicated and maintained by the City/VFWD, while infrastructure within the private alleys/paseos would be owned and maintained by the HOA.

[9] DK Engineering. 2023. *Drainage Study for Vista Cove in Vallejo, California.* May 3.

2.2.7 Grading and Construction

The proposed project would not require any demolition activities, as the site is currently undeveloped. It is anticipated that 58,700 cubic yards of soil would be cut and 59,300 cubic yards would be used for fill, resulting in a total soil import of 600 cubic yards. A total of 10.3 acres of soil would be disturbed during construction activities and excavation depths would reach up to 24 feet below the ground surface to accommodate foundations and utility infrastructure. Grading would be completed consistent with the City of Vallejo's Hillside Development Standards.[10] Cut and fill would be constructed with rounded corners to eliminate sharp angles of slopes at the contour intersections. Contour grading would also be utilized to create rounded, undulating slopes between street levels and building pads, and in transition areas from natural slopes to graded slopes. Slope gradients would vary, where feasible, to produce a more natural appearance. Construction of the proposed project is anticipated to begin in June 2026 and would occur over an approximately 1-year period.

2.3 PREVIOUS CEQA APPROVALS

The City of Vallejo General Plan 2040[11] was adopted by the City of Vallejo City Council on August 29, 2017, while the General Plan 2040 and Sonoma Boulevard Specific Plan Draft Environmental Impact Report (General Plan EIR) was certified on August 29, 2017 (SCH number 2014112035). The proposed project is consistent with the development density established by existing zoning and policies contained in the General Plan EIR.

This Initial Study has been prepared for the proposed project pursuant to the rules for supplemental environmental review under Public Resources Code (PRC) Section 21166 and *State CEQA Guidelines* Section 15162. Section 15162 states that "no subsequent EIR shall be prepared for that project unless the lead agency determines … one or more of the following:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or negative declaration was adopted, shows any of the following:
    a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

[10] Vallejo, City of. n.d.-h. *Vallejo, California – Municipal Code, Title 16 – Zoning, Part II – Districts and Development, Chapter 16.212 – Hillside Development Standards.*

[11] City of Vallejo. 2017. *Propel Vallejo General Plan 2040*. August 29. Amendments through July 24, 2018.

b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;

c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative."

This Initial Study analyzes whether development of the proposed project would result in any new or substantially more severe significant environmental impacts than those analyzed in the prior California Environmental Quality Act (CEQA) document and the reasons for the City's conclusion that the project and associated environmental effects do not meet the conditions described in CEQA Guidelines Section 15162 requiring preparation of a subsequent EIR.

2.4 PERMITS AND APPROVALS

A number of permits and approvals would be required to allow development of the proposed project. As Lead Agency for consideration of the proposed project, the City of Vallejo would be responsible for the majority of the approvals required for project development. Other agencies also may have some authority related the proposed project and its approvals. A list of required permits and approvals, including the discretionary actions described above, which may be required by the City and other agencies, is provided in **Table 2.A**.

Table 2.A: Potential Permits and Approvals

Lead Agency	Permits/Approvals
City of Vallejo	• Zoning Amendment to Planned Development • Environmental Review Permit • Development Review • Design Review • Landscape Review • Tentative Map Approval • EIR Certification • Adoption of Findings and potential Statement of Overriding Considerations • Use Permit • Zoning Compliance Review
Other Agencies	
City of Vallejo Fire Department	• Review/approve fire truck access and site fire flow design
City of Vallejo Water District	• Connection to water system • Connection to wastewater system • Approval of water improvements and connection permits
City of Vallejo Building Division	• Issuance of building permits for new home construction
PG&E	• Connection of electricity service • Approval of electric improvements and connection permits

Source: LSA (2024).
EIR = Environmental Impact Report
PG&E = Pacific Gas and Electric Company

This page intentionally left blank

3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist in Chapter 3.0.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology/Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology/Water Quality	☐ Land Use/Planning	☐ Mineral Resources
☐ Noise	☐ Population/Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

3.1 DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A SUBSEQUENT MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☒ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Digitally signed by Cesar Orozco
Date: 2025.11.06 09:30:41 -08'00'

Signature

11-6-2025

Date

This page intentionally left blank

4.0 CEQA ENVIRONMENTAL CHECKLIST

4.1 AESTHETICS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Except as provided in Public Resources Code Section 21099, would the project:					
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	☐	☐	☐	☒	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐	☒

4.1.1 Prior Environmental Analysis

Chapter 4.1 of the General Plan EIR analyzed potential impacts to aesthetics with build out of the City's General Plan, and determined that either no impact or less than significant impacts would occur due to existing regulatory requirements included in the Vallejo Municipal Code and General Plan policies and actions. No mitigation measures were prescribed. However, the General Plan includes the following goals, policies, and actions related to aesthetics which would be applicable to the proposed project:

- **Policy NBE-1.5: Scenic Vistas**: Protect and improve scenic vistas, including views from Interstate 80 and State Route 37 in Vallejo.

- **Policy NBE-2.3: Inviting, Compatible Design:** Promote attractive development that is compatible with surrounding uses.

    - **Action NBE-2.3A**: Continue to utilize development approval conditions to achieve compatibility between nearby uses and scale and style of buildings, and to establish limitations on activities that could create potential adverse effects.

- **Policy NBE-3.13: Neighborhood Character:** Preserve the character of existing single-family residential neighborhoods.

- **Action NBE-3.13B:** Continue to allow a mix of housing types along the interconnected linear street grid that contributes to the charm and walkability of Vallejo's central residential neighborhoods, where appropriate.

- **Policy NBE-3.14: Neighborhood Corridors:** Connect the community with mixed use corridors that function as neighborhood main streets for adjacent residential areas.

4.1.2 Background

The project site is located at the northeast corner of Shady Lane and Wildflower Avenue in the southeastern portion of Vallejo in Solano County, California. The areas surrounding the project site consist of a mix of land uses, including residential, recreational, and public and semi-public uses. Local access to the project site is provided by Shady Lane and Wildflower Avenue which border the site immediately to the southwest. Circulation in the surrounding area is provided by one-lane roadways.

4.1.2.1 Existing Visual Character of the Project Site

The project site consists of undulating hills and flat areas, with elevations ranging from approximately 70 feet above mean sea level (amsl) in low lying areas along the eastern portion of the project site up to approximately 290 feet amsl along the southwestern boundary of the project site. The southern portion of the site is generally lower in elevation and increases in elevation towards the west. The vacant project site is covered primarily with non-native annual grassland and scattered mature trees. There are 83 mature trees on the project site. The project site also includes one intermittent stream, connected to a seasonal wetland located in a low-lying area in the middle of the project site, and one linear freshwater marsh.[12] Representative photos of the project site are shown in **Figure 4.1-1**.

Because the project site is vacant and undeveloped, there are no existing sources of light and glare on the project site. Existing sources of light and glare in the project vicinity are typical of residential areas and include vehicle headlights on nearby roadways, streetlights in the nearby vicinity, and residential exterior and interior lighting. Lighting from existing distant development within Vallejo also contributes to the background lighting in the project vicinity.

4.1.2.2 Visual Character of the Surrounding Area

The project area is characterized by urban development with some open space and recreational uses in the nearby vicinity. Representative photos of the surrounding area are shown in **Figure 4.1-2**. The project site is bordered to the north by I-780 and vacant land that is zoned for Public and Semi Public uses. Farther north is a variety of public and semi public uses, including a California Highway Patrol Office and Saint Patrick Saint Vincent Catholic High School, and single- and multi-family residential uses. The project site is bordered immediately to the east by vacant, undeveloped land zoned for resource conservation and the Benicia State Park. Farther east are

[12] WRA, Inc. 2024. *Biological Resources Technical Report Vista Cove Project, Vallejo, Solano County, California.* February.

PHOTO 1
(FACING WEST)

PHOTO 2
(FACING EAST)

PHOTO 3
(FACING SOUTH)

PHOTO 4
(FACING WEST)

PHOTO 5
(FACING SOUTHEAST)

PHOTO 6
(FACING EAST)

PHOTO 7
(FACING SOUTH)

PHOTO 8
(FACING WEST)

PHOTO 9
(FACING EAST)

LSA

FIGURE 4.1-1

Vista Cove Planned Development Project
Existing Site Conditions Photographs

SOURCE: DK Engineering

I:\2024\20241845\G\Photos_Existing_Conditions.ai (7/1/2025)

This page intentionally left blank

Facing East from Northwest Corner of Project Area.

Facing East from Northwest Corner of Project Area.

Facing Northeast of Northeast Project Corner.

Facing Northeast from Southern Project Area.

FIGURE 4.1-2

Vista Cove Planned Development Project
Surrounding Land Uses Photographs

I:\2024\20241845\G\Photos_Surrounding_Land_Uses.cdr (7/1/2025)

This page intentionally left blank

commercial uses and single- and multi-family residential uses. The project site is bordered immediately to the south by vacant undeveloped land owned by the City and zoned for parks, recreation and open space and resource conservation. Farther south are single-family residential uses and Glen Cove Elementary School, which is approximately 0.4 mile southwest of the project site. The project site is bordered immediately to the west by a 141-unit single-family residential subdivision. Farther west are commercial uses and single-family residential uses. Light-sensitive uses near the project site include the residential uses to the west.

According to the California Scenic Highway Mapping System, there are no California Department of Transportation (Caltrans) designated scenic highways in proximity to the project site.[13]

There are no officially designated scenic vistas in Vallejo; however, the General Plan recognizes the waterfront, hillside and mountain areas, and natural areas surrounding the city as important scenic views in the city. These views include San Pablo Bay, Mare Island Strait, the Vallejo waterfront, Sulphur Springs Mountain, Vaca Mountains, White Slough, Napa River Wetlands, and Sky Valley. In order to preserve these scenic views, the City established residential view district zoning regulations for some residential neighborhoods located on the hills in Vallejo. Additionally, the Solano County General Plan recognizes "agricultural landscapes, the delta and marshlands, and the oak and grass covered hills" as valuable scenic vistas.

The project site is located approximately 0.85 mile northwest of the Carquinez Strait. The Carquinez Strait is partially visible to the southeast from the project site and surrounding areas. Undeveloped hillside and mountain areas are also visible to the northeast and south from the project site and surrounding areas. Additionally, the Benicia State Park is located approximately 0.3 mile southeast of the project site.

4.1.2.3 Views from the Project Site

Views from within the project site to surrounding areas are variable due to the topography and varying elevation at the project site. From some portions of the project site, views are largely obstructed due to existing off-site development, topography, and mature trees, while expansive views of the surrounding area are available from other portions of the project site with higher elevations.

- **Views to the North:** Foreground views to the north primarily consists of undeveloped vegetated areas, I-780, and the public and semi-public and residential uses north of I-780. Middle-ground views to the north primarily consist of surrounding hillsides that are partially undeveloped and partially developed with residential uses.

- **Views to the East:** Foreground views to the east primarily consist of undeveloped vegetated areas, the Benicia State Recreation Area, and I-780. Middle-ground views to the east primarily consist of the Benicia State Recreation Area and surrounding hillsides that are partially

[13] California Department of Transportation (Caltrans). n.d. California Scenic Highway Mapping System. Website: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed March 5, 2025).

undeveloped and partially developed with residential uses. Mount Diablo is visible in background views to the southeast.

- **Views to the South:** Foreground views to the south primarily consist of undeveloped vegetated areas. Middle-ground views to the southeast include the Benicia State Recreation Area and the Carquinez Strait, while middle-ground views to the south/southwest include undeveloped vegetated hillside and residential development. Background views to the south include undeveloped hillsides south of the Carquinez Strait.

- **Views to the West**: Foreground views to the west primarily consist of undeveloped vegetated areas and residential development. Middle-ground and background views are not largely available to the west due to dense residential development and surrounding topography.

4.1.2.4 Views of the Project Site

As previously discussed, the project site is made up of undulating hills and flat areas covered primarily with non-native annual grassland and scattered mature trees. Therefore, views of the project site are consistent from each orientation due to the uniform nature of the site. Views of the project site from areas that do not immediately border the site are generally limited due to the developed nature of areas immediately surrounding the project site, including existing mature trees and the topography of the surrounding area.

There are no significant visual resources present on the project site and the project site is not located within the residential view district as defined by Chapter 16.213 of the Vallejo Municipal Code (VMC).[14] While the project site includes undeveloped hills, the project site is not largely visible from surrounding areas due to intervening topography, existing development, and mature trees. Based on the General Plan the project site is not considered a scenic vista or important scenic view within the city.[15]

4.1.3 Impact Analysis

a. Would the project have a substantial effect on a scenic vista? ***(Less than Significant Impact, No New Impact)***

Development projects have the potential to impact scenic vistas in two ways: (1) a development could physically alter a designated scenic resource (e.g., disturb or develop upon a ridgeline, hillside, or other designated scenic resource), or (2) could block a view corridor or "vista" of the scenic resource from public view. Important factors in determining whether a project would block scenic vistas include the project's proposed height, mass, and location relative to surrounding land uses and travel corridors. These potential effects are discussed below.

[14] City of Vallejo. n.d. Zoning Map. Website: https://www.arcgis.com/apps/View/index.html?appid=7638bbc2a29d4c4387366372429f6daa&extent=-122.3063,38.0807,-122.2239,38.1134 (accessed June 12, 2025).

[15] City of Vallejo. 2017. *Propel Vallejo General Plan 2040*. August 29.

Alter Scenic Vistas. The area surrounding the project site is characterized by urban development with some open space and recreational uses in the nearby vicinity. The project site is located approximately 0.85 mile northwest of the Carquinez Strait. The Carquinez Strait is partially visible to the southeast from the project site and surrounding areas. Undeveloped hillside and mountain areas are visible to the northeast and south from the project site and surrounding areas. The Benicia State Recreation Area is located approximately 0.3 mile southeast of the project site. However, none of these features are identified as a scenic vista or significant visual resource in the City's General Plan. San Pablo Bay, Mare Island Strait, the Vallejo Waterfront, Sulphur Springs Mountain, Vaca Mountains, White Slough, Napa River Wetlands, and Sky Valley, the resources designated as scenic vistas, are not visible from the project site or nearby vicinity. These features are located over two miles from the project site and views of these resources are obstructed by intervening development, topography, and mature trees. The project site and surrounding areas are not located within the residential view district and would not impact scenic vistas of designated views; therefore, no impact would occur. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR. **Block Views of Scenic Resources.** The proposed residential project at the northeast corner of Shady Lane and Wildflower Avenue lies within a well-established, lower-density residential neighborhood of southeastern Vallejo. Per the Vallejo General Plan, while the city does not identify *official* scenic view corridors, it recognizes valued vistas toward features like the hillsides, San Pablo Bay, the Napa River wetlands, and Sulphur Springs and Vaca Mountains However. The project site is shielded from such views by existing nearby housing, mature tree canopy, and naturally varied topography, meaning it is not largely visible from public vantage points tied to recognized scenic resources. The proposed two-story, modern farmhouse style homes, that would be approximately at 35 feet in height, match the prevailing scale and massing of residences to the west. While development of this previously vacant parcel would alter its current visual character, there are no high-quality scenic vistas presently visible from the site or immediate surroundings, and it does not block or degrade landscapes noted in the General Plan. Accordingly, the project would not result in a substantial adverse effect on views of scenic vistas, and no impact would occur. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? ***(No impact, No New Impact)***

There are no officially listed or eligible State Scenic Highways in the vicinity of the project site.[16] The nearest eligible State Scenic Highway in Vallejo is a portion of State Route 37 (SR-37) that is located approximately 4.7 miles northwest of the project site. The nearest officially designated State highway is a portion of State Route 24 (SR-24) that is located approximately 13 miles south of the project site. Due to distance, topography, and intervening development, no portion of the project site or surrounding area is visible from the eligible portion of SR-37 or the officially designated portion of SR-24. Therefore, the proposed project would not substantially damage scenic resources,

[16] California Department of Transportation (Caltrans). n.d. California Scenic Highway Mapping System. Website: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed March 5, 2025).

including but not limited to trees, rock outcroppings, and historic buildings within a State Scenic Highway, and no impact would occur. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

c. In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? ***(Less than Significant Impact, No New Impact)***

The City of Vallejo General Plan 2040 designates the project site as Mix of Housing Types (R-MH) and Primarily Single Family (R-SF), as shown in **Figure 2-3** in Section 2.0, Project Description. Permitted land uses within the R-MH and R-SF designation are similar and include single-family homes. In addition, the land use designations allow duplexes, triplexes, fourplexes, smaller scale apartment buildings, and small commercial spaces; and public facilities such as schools, religious institutions, parks, and other community facilities appropriate within a residential neighborhood. The maximum permitted residential density in the R-MH designation is 25 dwelling units per acre, and the density in the R-SF designation is nine dwelling units per acre; however, in single-family areas where accessory dwelling units are allowed, the maximum permitted residential density is 12 dwelling units per acre.

The project site is zoned Residential Medium Density (RMD) and Residential Low Density (RLD). The RMD Zoning District allows a mix of housing types, including attached and detached structures, and small apartment buildings. Development in these zones is subject to density limits (up to 25 dwelling units per acre) and design and development standards to ensure land use compatibility. The district also allows mixed-use development with residential and small commercial spaces, a variety of neighborhood supportive services, public and educational facilities, open spaces and community facilities. In undeveloped areas of the city, it is the intent of this district to encourage the creation of multi-unit residential neighborhoods with a variety of housing types.

The RLD Zoning District applies to low-density residential areas in which permanent single unit residences, including detached and attached (duplexes and townhouses) units are the primary use. This district also allows other residential types including cottages and bungalows around courts, small neighborhood serving retail, a variety of neighborhood supportive services, public and educational facilities, open spaces and community facilities. The maximum permitted residential density is nine dwelling units per acre, excluding accessory dwelling units.[17]

General Plan. The City of Vallejo General Plan guides future growth and development in the city. The R-MH and R-SF General Plan land use designations are similar and allows single-family homes. The land use designations also allows duplexes, triplexes, fourplexes, smaller scale apartment buildings, and small commercial spaces; and public facilities such as schools, religious institutions, parks, and other community facilities appropriate within a residential neighborhood. The maximum

[17] City of Vallejo. *Vallejo, California – Municipal Code, Title 16 – Zoning, Part II – Districts and Development, Chapter 16.202 – Residential Districts.*

permitted residential density in the R-MH designation is 25 dwelling units per acre, and nine dwelling units per acre in the R-SF designation. In single-family areas where accessory dwelling units are allowed, the maximum permitted residential density is 12 dwelling units per acre. The proposed project would develop approximately 10 acres of the project site with 51 residential units, resulting an overall density of 4.9 dwelling units per acre, which meets the residential density standard for both the R-MH and R-SF designations.The following General Plan policies and action statements related to aesthetics and scenic quality would apply to the proposed project:

- **Policy NBE-2.3: Inviting, Compatible Design:** Promote attractive development that is compatible with surrounding uses.
    - **Action NBE-2.3A**: Continue to utilize development approval conditions to achieve compatibility between nearby uses and scale and style of buildings, and to establish limitations on activities that could create potential adverse effects.

The proposed project proposes a consistent architectural style of a modern farmhouse design. The proposed project would be required to undergo Development Review and Design Review consistent with Sections 16.604 and 16.605 of the VMC, which would provide for the review of the physical improvements to the project site, to ensure compatibility and compliance with City requirements. With the approval of a Development Permit, the proposed project would be consistent with the General Plan land use designation. Therefore, the proposed project would be consistent with the City's General Plan as it relates to aesthetics and scenic quality, and this impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Zoning Code. Title 16 (Zoning Ordinance) of the VMC is the primary tool that shapes the form and character of physical development in Vallejo. The Zoning Ordinance contains all the Zoning Districts, and identifies land use standards, site development regulations, and other general provisions that ensure consistency between the General Plan and proposed development projects. The PD District is established to encourage the arrangement of a compatible variety of uses on suitable lands in such a manner that the resulting development will be in accord with the policies of the VMC Chapter 16.209 to provide flexibility by allowing diversification in regulations such as building relationships, setbacks, height limitations, lot sizes, types of structures, parking and the amount and location of open space[18]. As outlined in Chapter 16.209 of the VMC, the PD zone allows for one or more properties to be developed under a plan that would: Provide opportunities for coordinated development;

- Ensure substantial compliance with and implement the land use and density policies of the General Plan and any applicable Specific Plan;

- Provide for efficient and cost-effective public facilities and services;

[18] City of Vallejo. *Vallejo, California – Municipal Code*, Title 16 – Zoning, Part II – Districts and Development Types, Chapter 16.209 – Planned Development District.

- Allow for creative and experimental approaches to land development projects that incorporate design features that are more sensitive to site conditions;

- Facilitate projects that provide greater amenities than would likely result from conventionally planned development; and

- Protect public health, safety, and general welfare without unduly inhibiting developers attempting to secure the advantages of modern large-scale site planning for residential, commercial, or industrial purposes.

The project site is 20.13 acres and, as discussed above, the proposed development would be consistent with the existing General Plan land use designations and would not exceed the allowable densities associated with the R-MH and R-SF designations. Minimum lot area, yard requirements, building heights, and other physical development standards would be as prescribed by the PD Plan, outlined in Chapter 3.0, Project Description. The proposed project would be consistent with the development regulations of the PD Zoning District. The project is subject to Development Review and Design Review as required by VMC Sections 16.604 and 16.605. These procedures are mandatory for new construction and ensure that all proposed physical improvements to the site—including building orientation, architectural design, grading, landscaping, and lighting—are evaluated for consistency with the City's zoning regulations, design objectives, and adopted plans.

Pursuant to VMC Section 16.604.02, Design Review evaluates projects for compatibility with adjacent development in terms of scale, massing, materials, and overall visual character, as well as conformance with the City's adopted design guidelines. Approval of the project through these processes is required prior to the issuance of any building permits. The proposed project must comply with all applicable standards and any conditions of approval imposed during the review process. As the proposed project would require building permits, a use permit, Landscape Review, and Tentative Map Approval, it would neither substantially degrade the visual character of the project site nor conflict with applicable zoning and other regulations governing scenic quality. The proposed project would have a less than significant impact related to conflicts with applicable zoning and other regulations governing scenic quality. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? ***(Less than Significant Impact, No New Impact)***

Because the project site is vacant and undeveloped, there are no existing sources of light and glare on the project site. Existing sources of light and glare in the project vicinity are typical of residential areas and include vehicle headlights on nearby roadways, streetlights in the nearby vicinity, and residential exterior and interior lighting. Lighting from existing distant development within Vallejo also contributes to the background lighting in the project vicinity. Potential impacts to light and glare during construction and operation of the proposed project are discussed separately below.

Construction. Construction activities would occur only between the hours of 7:00 a.m. and 6:00 p.m. Any construction-related illumination during evening and nighttime hours would be used for safety

and security purposes only, would be downlit to minimize light spillage onto adjacent properties, and would occur only for the duration required for the temporary construction process. Because any necessary night lighting resulting from construction activities would be minimal, would not spill onto adjacent properties, and would be temporary, it would not substantially impact sensitive uses, substantially alter the character of surrounding uses, or interfere with the performance of off-site activities. Construction activities associated with the proposed project would not introduce flat or highly reflective surfaces capable of producing significant solar glare. While limited glare may occur from sunlight reflecting off construction equipment and vehicle windshields, such effects would not result in adverse visibility impacts for the following reasons: (1) construction activity would involve a relatively small number of vehicles and equipment—estimated at no more than nine units during peak building phases—and (2) the construction site would be enclosed with fencing and temporary screening that would substantially limit public visibility from adjacent roadways and pedestrian areas. Furthermore, construction operations would be restricted to daytime hours, and no artificial lighting or vehicle activity would occur during nighttime periods that could contribute to glare or light spill. As such, construction of the proposed project would not introduce a new or substantial source of light or glare that would adversely affect daytime or nighttime views. Impacts related to construction-period light and glare would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Operation. Project lighting would be required to comply with Section 16.506 of the VMC, which requires that lighting be confined to the project site and that adjacent properties are protected from glare. The proposed project would include streetlights and exterior wall-mounted light fixtures on the residences that would be dark-sky compliant and aimed away from neighbors to avoid light trespass.[19] All project lighting would be hooded or shielded to focus the light downward and prevent light spillage onto adjacent properties. All new lighting would comply with applicable regulations of the 2019 State Building Energy Efficiency Standards (Title 24). Because the project site is vacant and undeveloped, there are no existing sources of light and glare on the project site. Existing sources of light and glare in the project vicinity are typical of residential areas and include vehicle headlights on nearby roadways, streetlights in the nearby vicinity, and residential exterior and interior lighting. Lighting from existing distant development within Vallejo also contributes to the background lighting in the project vicinity. Therefore, sources of light and glare associated with the proposed project would be consistent with the existing surrounding uses during both daytime and nighttime hours.

The proposed building materials (e.g., stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and batten siding, wood, and glass) and uses of these materials are typical of those found in the surrounding areas and are not anticipated to create unusual or isolated glare effects that would affect daytime visibility or views in the project vicinity. The proposed structures would not include large or expansive areas of glass, polished metal, or other reflective surfaces and therefore, are not anticipated to collectively generate significant amounts of glare onto adjacent properties.

Overall, sources of light and glare associated with the proposed project would be consistent with the existing surrounding uses during both the daytime and nighttime hours. Furthermore,

[19] Sancerra. 2024. *Vista Cove Planned Development, Vallejo, California*. May.

compliance with the applicable lighting standards set forth in Section 16.506 of the VMC and General Plan and adherence to Title 24 requirements would ensure that the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Impacts would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

4.2 AGRICULTURE AND FORESTRY RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒	☒

4.2.1 Prior Environmental Analysis

The topic of agriculture and forestry resources was discussed in Chapter 6.0 of the General Plan EIR, which determined that no impact to agriculture or forestry resources with build out of the General Plan would occur because there are minimal farmland and forest land areas located within the city and future development would generally occur in previously urbanized areas that are not designated as farmland or forest land. No mitigation measures were prescribed. There are no General Plan goals, policies, or actions related to agriculture and forestry resources which would be applicable to the proposed project.

4.2.2 Background

The project site consists of undeveloped grassland with scattered mature trees with no existing development or improvements. No agricultural uses are located within or adjacent to the project site. The project site is classified as "Grazing Land" and "Urban and Built-Up Land" by the DOC.[20] The project site is currently zoned Residential Medium Density (RMD) and Residential Low Density (RLD) on the City Zoning Map and would be rezoned to Planned Development (PD), none of which are intended for agricultural uses. The project site is not subject to a Williamson Act contract.

4.2.3 Impact Analysis

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? ***(No Impact, No New Impact)***

The project site consists of undeveloped grassland with scattered mature trees with no existing development or improvements. No agricultural uses are located within or adjacent to the project site. Further, the project site is classified as "Grazing Land" and "Urban and Built-Up Land" by the DOC.[21] Therefore, the site is not classified as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (collectively known as "Important Farmland"). As such, the proposed project would not result in the conversion of Important Farmland to another use. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract? ***(No Impact, No New Impact)***

The project site is currently zoned Residential Medium Density (RMD) and Residential Low Density (RLD) on the City Zoning Map and would be rezoned to Planned Development (PD), none of which are intended for agricultural uses. The project site is not subject to a Williamson Act contract. Therefore, development of the proposed project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? ***(No Impact, No New Impact)***

The project site is currently zoned RMD and RLD on the City's Zoning Map and would be rezoned to PD. No parcels adjacent to or near the project site are zoned for forest land, timberland, or

[20] California Department of Conservation (DOC). 2018. Division of Land Use Resource Protection. California Important Farmland Finder. Website: maps.conservation.ca.gov/dlrp/ciff (accessed February 28, 2025).

[21] Ibid.

timberland production. The proposed project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland. As such, no new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

d. Would the project result in the loss of forest land or conversion of forestland to non-forest use? ***(No Impact, No New Impact)***

The project site consists primarily of undeveloped grassland with scattered mature trees. There is no forestland on site, and no parcels adjacent to or near the project site are zoned for forest land, timberland, or timberland production. As such, the proposed project would not result in the loss of forest land or conversion of forest land to nonforest uses. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? ***(No Impact, No New Impact)***

Please refer to Sections 4.2.a. and 4.2.c. The project site is located within an urbanized area in Vallejo and would not result in the conversion of farmland to nonagricultural uses or forest land to nonforest uses. The proposed project would also not result in the conversion of forestry resources to nonforest uses. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

4.3 AIR QUALITY

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☒	☐	☐	☒
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐	☒
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐	☒
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐	☒

4.3.1 Prior Environmental Analysis

Chapter 4.2 of the General EIR analyzed potential impacts related to air quality. The General Plan EIR determined that implementation of the General Plan would reduce vehicle miles traveled (VMT) per population and VMT per service population and would not conflict with the control measures identified in the Bay Area Air District's (Air District) 2010 Clean Air Plan[22]. In addition, the General Plan EIR found that build out of the General Plan would have the potential to exceed regional significance thresholds during construction and operation activities and prescribed **Mitigation Measures AQ-2a, AQ-2b.1, and AQ-2b.2**. **General Plan EIR Mitigation Measures AQ-2a and AQ-2b.2** require a technical assessment evaluating potential operational and construction air quality impacts if a project exceeds the screening sizes in the Air District's CEQA Guidelines, and **General Plan EIR Mitigation Measure AQ-2b.1** requires compliance with the current Air District basic control measures for reducing construction-related fugitive dust emissions. However, the General Plan EIR found that construction and operational emissions would be significant and unavoidable.

In addition, the General Plan EIR concluded that implementation of the General Plan could expose sensitive receptors to substantial concentrations of air pollutants and, therefore, identified **Mitigation Measures AQ-3a and AQ-3b** to reduce these impacts. **General Plan EIR Mitigation Measure AQ-3a** requires preparation of a health risk assessment (HRA) for non-residential land uses that would generate 100 or more diesel truck trips per day or have 40 or more trucks with operating diesel-powered refrigeration units within 1,000 feet of a residential receptor. As such, **General Plan EIR Mitigation Measure AQ-3b** requires that residential and other sensitive land uses within 1,000 feet of a major source of toxic air contaminants (TACs) prepare an HRA. **General Plan EIR**

[22] Bay Area Air Quality Management District. 2010. *Bay Area 2010 Clean Air Plan*. September 15. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2010-clean-air-plan/cap-volume-i-appendices.pdf (accessed September 2025).

Mitigation Measures AQ-3a and AQ-3b would not be applicable to the proposed project as they apply to non-residential land uses or land uses within 1,000 feet of a major source of TACs. The General Plan EIR found that even with implementation of these mitigation measures, impacts to sensitive receptors would be significant and unavoidable. In addition, the General Plan EIR determined that build out of the General Plan would not create objectionable odors that could affect a substantial number of people.

Additionally, the General Plan includes the following goals, policies, and actions related to air quality which would be applicable to the proposed project:

- **Policy CP1.12: Clean Air**: Protect the community from harmful levels of air pollution.
    - **Action CP-1.12C**: Provide information regarding advances in air-quality protection measures to schools, homeowners, and operators of "sensitive receptors" such as senior and child care facilities.
    - **Action CP-1.12D**: Periodically review and update City regulations to comply with changes in State law and Air District Guidelines pertaining to coal or wood-burning devices.
    - **Action CP-1.12E**: Periodically review the Building Code for consistency with the latest California Green Building Standards Code, and assess the need for updates to require new construction and remodels to employ best practices and materials to reduce emissions, both during and after construction.

4.3.2 Background

The project site is within the jurisdiction of the Air District, which regulates air quality in the San Francisco Bay Area. Air quality conditions in the San Francisco Bay Area have improved significantly since the Air District was created in 1955. Ambient concentrations of air pollutants and the number of days during which the region exceeds air quality standards have fallen substantially. In Vallejo, and the rest of the air basin, exceedances of air quality standards occur primarily during meteorological conditions conducive to high pollution levels, such as cold, windless winter nights or hot, sunny summer afternoons.

Within the Air District, ambient air quality standards for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter (particulate matter less than 10 microns in size [PM_{10}], and particulate matter less than 2.5 microns in size [$PM_{2.5}$]), and lead (Pb) have been set by both the State of California and the federal government. The State has also set standards for sulfate and visibility. The Air District is under State non-attainment status for ozone and particulate matter (both PM_{10} and $PM_{2.5}$) standards. The Air District is classified as non-attainment for the federal ozone 8-hour standard and non-attainment for the federal $PM_{2.5}$ 24-hour standard.

4.3.3 Impact Analysis

a. Would the project conflict with or obstruct implementation of the applicable air quality plan? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

The applicable air quality plan is the Air District's 2017 Clean Air Plan (Clean Air Plan),[23] which was adopted on April 19, 2017. The Clean Air Plan is a comprehensive plan to improve Bay Area air quality and protect public health. The Clean Air Plan defines control strategies to reduce emissions and ambient concentrations of air pollutants; safeguard public health by reducing exposure to air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily affected by air pollution; and reduce GHG emissions to protect the climate. Consistency with the Clean Air Plan can be determined if the project: (1) supports the goals of the Clean Air Plan; (2) includes applicable control measures from the Clean Air Plan; and (3) would not disrupt or hinder implementation of any control measures from the Clean Air Plan.

Clean Air Plan Goals. The primary goals of the 2017 Clean Air Plan are to attain air quality standards, reduce population exposure and protect public health in the Bay Area, and reduce GHG emissions and protect climate.

The Air District has established significance thresholds for project construction and operational impacts at a level at which the cumulative impact of exceeding these thresholds would have an adverse impact on the region's attainment of air quality standards. The health and hazards thresholds were established to help protect public health.

As discussed below, implementation of the proposed project would result in less than significant operation-period emissions and, with implementation of **General Plan EIR Mitigation Measure AQ-2b.1**, as detailed under Criterion AIR-2, the project would result in less than significant construction-period emissions. Per **General Plan EIR Mitigation Measure AQ-2b.1**, the project must implement Basic Best Management Practices (BMPs) throughout all phases of construction. Measures include watering exposed surfaces, covering haul trucks, limiting vehicle speeds on unpaved roads, using wet power sweepers, and suspending work during high winds. Additional requirements involve paving surfaces promptly, washing vehicles before site exit, stabilizing unpaved access roads, and posting contact information for dust complaints. Therefore, the project would not conflict with the Clean Air Plan goals.

In addition, the project site was identified as a housing opportunity site in the General Plan EIR. As discussed in Section2.0, Project Description, the General Plan designates the project site as R-MH and R-SF. The maximum permitted residential density in the R-MH designation is 25 dwelling units per acre and nine dwelling units per acre in the R-SF designation; however, in single-family areas where accessory dwelling units are allowed, maximum permitted residential density is 12 dwelling units per acre. To facilitate development of the project as proposed, the project site would be rezoned as PD and would result in 51 new residential units. As such, the proposed project would introduce fewer residential uses and a lower density than previously assumed in the General Plan

[23] Bay Area Air Quality Management District (Air District). 2017. *Clean Air Plan*. April 19.

EIR; therefore, the proposed project would not result in new impacts or substantially more severe significant impacts when compared to those analyzed in the General Plan EIR.

Clean Air Plan Control Measures. The control strategies of the 2017 Clean Air Plan include measures in the following categories: Stationary Source Measures, Transportation Measures, Energy Measures, Building Measures, Agriculture Measures, Natural and Working Lands Measures, Waste Management Measures, Water Measures, and Super-GHG Pollutants Measures, which are discussed in more detail below.

- **Stationary Source Control Measures:**The Stationary Source Control Measures, which are designed to reduce emissions from stationary sources such as metal melting facilities, cement kilns, refineries, and glass furnaces, are incorporated into rules adopted by the Air District and then enforced by the Air District's Permit and Inspection programs. Since the project would not include any stationary sources, the Stationary Source Control Measures of the Clean Air Plan are not applicable to the project.

- **Transportation Control Measures:**The Air District identifies Transportation Control Measures as part of the Clean Air Plan to decrease emissions of criteria pollutants, TACs, and GHGs by reducing demand for motor vehicle travel, promoting efficient vehicles and transit service, decarbonizing transportation fuels, and electrifying motor vehicles and equipment. The proposed project would result in the subdivision of the 20.13-acre site, of which approximately 10.39 acres would be developed, while the remaining acreage would be undeveloped and open space. The residential portion of the proposed project would include 51 residential lots, open space, and related infrastructure improvements. The project site is located within walking or bicycling distance from the surrounding residential, recreational, and public and semi-public uses. Additionally, the project site is served by SolTrans Routes 3 and 8, with the transit stops located approximately 0.5 mile to the west along Glen Cove Parkway. The Amtrak station in Vallejo is approximately 4 miles northwest of the project site, and the Vallejo Ferry Terminal, which offers ferry service between Vallejo and San Francisco, is approximately 3.5 miles northwest of the project site. Therefore, the project would support the ability of residents and visitors to use alternative modes of transportation. As such, the proposed project would not conflict with the Air District's initiatives to increase the use of alternative means of transportation.

- **Energy Control Measures:**The Clean Air Plan also includes Energy Control Measures, which are designed to reduce emissions of criteria air pollutants, TACs, and GHGs by decreasing the amount of electricity consumed in the Bay Area, as well as by decreasing the carbon intensity of the electricity used by switching to less GHG-intensive fuel sources for electricity generation. The proposed project would comply with current California Energy Code and California Green Building Standards Code (CALGreen Code) standards regarding energy conservation and green building standards. As such, the proposed project would not conflict with the Energy Control Measures of the Clean Air Plan.

- **Building Control Measures:**The Air District has authority to regulate emissions from certain sources in buildings such as boilers and water heaters but has limited authority to regulate the

buildings themselves. Therefore, the strategies in the control measures for this sector focus on working with local governments that do have authority over local building codes to facilitate the adoption of best GHG control practices and policies. As identified above, the proposed project would be required to comply with current Energy Code and CALGreen Code standards. Therefore, the proposed project would not conflict with the Building Control Measures of the Clean Air Plan.

- **Agriculture Control Measures:**The Agriculture Control Measures are designed to primarily reduce emissions of CH_4. Because the project does not include any agricultural activities, the Agriculture Control Measures of the Clean Air Plan are not applicable to the proposed project.

- **Natural and Working Lands Control Measures:**The Natural and Working Lands Control Measures focus on increasing carbon sequestration on rangelands and wetlands, as well as encouraging local governments to enact ordinances that promote urban-tree plantings. Because the project does not include the disturbance of any rangelands or wetlands, the Natural and Working Lands Control Measures of the Clean Air Plan are not applicable to the proposed project.

- **Waste Management Control Measures:**The Waste Management Control Measures focus on reducing or capturing CH_4 emissions from landfills and composting facilities, diverting organic materials away from landfills, and increasing waste diversion rates through efforts to reduce, reuse, and recycle. Future occupants of the project would be subject to compliance with local requirements for waste management (e.g., recycling and composting services). Therefore, the project would be consistent with the Waste Management Control Measures of the Clean Air Plan.

- **Water Control Measures:**The Water Control Measures focus on reducing emissions of criteria pollutants, TACs, and GHGs by encouraging water conservation, limiting GHG emissions from publicly owned treatment works (POTWs), and promoting the use of biogas recovery systems. Because the proposed project would be required to comply with the latest CALGreen Code standards, which includes a variety of different measures, including reduction of wastewater and water use, the proposed project would not conflict with the Water Control Measures.

- **Super-GHG Control Measures:**The Super-GHG Control Measures are designed to facilitate the adoption of best GHG control practices and policies through the Air District and local government agencies. Because these measures do not apply to individual projects, the Super-GHG Control Measures are not applicable to the proposed project.

Clean Air Plan Implementation. As discussed above, the proposed project would generally implement the applicable measures outlined in the Clean Air Plan, including Transportation Control Measures; therefore, the project would not disrupt or hinder implementation of a control measure from the Clean Air Plan, and this impact would be **less than significant**.

In addition, as demonstrated below, construction and operation of the proposed project would not result in the generation of criteria air pollutants that would exceed the Air District's thresholds of significance. As discussed below, **General Plan EIR Mitigation Measure AQ-2b.1** would be required

to ensure the proposed project implements the Air District's Basic BMPs throughout all phases of construction. Measures include watering exposed surfaces, covering haul trucks, limiting vehicle speeds on unpaved roads, using wet power sweepers, and suspending work during high winds. Additional requirements involve paving surfaces promptly, washing vehicles before site exit, stabilizing unpaved access roads, and posting contact information for dust complaints. Implementation of **General Plan EIR Mitigation Measure AQ-2b.1** would further ensure that the proposed project would not disrupt or hinder implementation of a control measure from the Clean Air Plan. Therefore, this impact would be less than significant, and no new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

The Air District is currently designated as a nonattainment area for State and federal ozone standards and federal particulate matter ambient air quality standards. The Air District's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the Air District considered the emissions levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential construction- and operation-related air quality impacts and CO impacts of the proposed project.

Construction Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading, hauling, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_X (nitrogen oxides), ROGs (reactive organic gases), directly emitted particulate matter ($PM_{2.5}$ and PM_{10}), and TACs.

Site preparation and project construction would involve grading, paving, and other activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of

soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. The Air District requires the implementation of the Basic Best Management Practices for Construction-Related Fugitive Dust Emissions (Basic BMPs). With the implementation of these Basic BMPs, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_X, ROGs, and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Construction emissions were estimated for the project using CalEEMod, consistent with the Air District's recommendations. The CalEEMod modeling evaluated construction of the proposed project based on construction initiation in June 2026 and would occur over an approximately 1-year period. Project grading would result in approximately 58,700 cubic yards of soil cut and 59,300 cubic yards for fill, resulting in a total soil import of 600 cubic yards. This analysis utilizes the default construction equipment list and assumes use of Tier 2 construction equipment. All other construction details are not yet known; therefore, default assumptions (e.g., construction worker and truck trips and fleet activities) from CalEEMod were used. Construction-related emissions are presented in **Table 4.3.A**. CalEEMod output sheets are included in **Appendix A**.

Table 4.3.A: Project Construction Emissions

Project Construction	Average Daily Pollutant Emissions (pounds per day)					
	ROG	NO_X	Exhaust PM_{10}	Fugitive Dust PM_{10}	Exhaust $PM_{2.5}$	Fugitive Dust $PM_{2.5}$
2026	0.3	8.6	0.3	0.4	0.3	0.2
2027	4.0	4.6	0.2	<0.1	0.2	<0.1
Maximum Average Daily Emissions	**4.0**	**8.4**	**0.3**	**0.4**	**0.3**	**0.2**
Air District Thresholds	54.0	54.0	82.0	BMPs	54.0	BMPs
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Compiled by LSA (April 2025).
Air District = Bay Area Air District
BMPs = best management practices
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in diameter
$PM_{2.5}$ = particulate matter less than 2.5 microns in diameter
ROGs = reactive organic gases

As shown in **Table 4.3.A**, construction emissions associated with the project would be less than significant for ROG, NO_X, $PM_{2.5}$, and PM_{10} exhaust emissions. There are no adopted thresholds for

fugitive dust ($PM_{2.5}$ and PM_{10}) emissions; however, as shown in **Table 4.3.A**, the Air District requires the implementation of Basic BMPs to ensure that impacts are reduced to a less than significant level with mitigation. In addition to the Air District regulations, the General Plan EIR identified **General Plan EIR Mitigation Measure AQ-2b.1**, which requires development projects to implement the Air District's current Basic BMPs. Measures include watering exposed surfaces, covering haul trucks, limiting vehicle speeds on unpaved roads, using wet power sweepers, and suspending work during high winds. Additional requirements involve paving surfaces promptly, washing vehicles before site exit, stabilizing unpaved access roads, and posting contact information for dust complaints. These measures would ensure that short-term impacts associated with the generation of particulate matter and fugitive dust would be reduced to the extent feasible and would ensure that this impact would be less than significant.

With implementation of **General Plan EIR Mitigation Measure AQ-2b.1**, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or State ambient air quality standard. With implementation of **General Plan EIR Mitigation Measure AQ-2b.1**, no new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR

Operational Emissions. Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., natural gas), area sources (e.g., architectural coatings and the use of landscape maintenance equipment), and stationary sources (e.g., backup generator) related to the proposed project.

Mobile source emissions include ROGs and NO_X emissions that contribute to the formation of ozone. Additionally, PM_{10} emissions result from running exhaust, tire and brake wear, and the entrainment of dust into the atmosphere from vehicles traveling on paved roadways.

Energy source emissions result from activities in buildings for which natural gas is used. The quantity of emissions is the product of usage intensity (i.e., the amount of natural gas) and the emission factor of the fuel source.

Typically, area source emissions consist of direct sources of air emissions located at the project site, including architectural coatings, consumer products, and the use of landscape maintenance equipment. In addition, stationary source emissions would be associated with use of the standby backup generator.

Emissions estimates for operation of the project were calculated using CalEEMod. Model results are shown in **Table 4.3.B**. Trip generation rates for the project were based on the project's trip generation estimates as identified in Section 4.17, Transportation and Traffic. Based on the trip generation estimates, the proposed project would generate approximately 481 average daily trips. In addition, the proposed project would have a standby diesel backup generator. Therefore, this analysis conservatively assumes that there would be a 500-horsepower diesel generator that would run up to 50 hours annually. Where project-specific data were not available, default assumptions (e.g., electricity usage, water usage, and solid waste generation) from CalEEMod were used to estimate project emissions.

Table 4.3.B: Project Operation Emissions

	ROGs	NO_X	PM_{10}	$PM_{2.5}$
Pounds Per Day				
Mobile Source Emissions	1.9	1.9	3.6	0.9
Area Source Emissions	2.6	<0.1	<0.1	<0.1
Energy Source Emissions	<0.1	0.4	<0.1	<0.1
Stationary Source Emissions	0.1	0.3	<0.1	<0.1
Total Emissions	**4.7**	**2.6**	**3.7**	**1.0**
Air District Thresholds	54.0	54.0	82.0	54.0
Exceed Threshold?	**No**	**No**	**No**	**No**
Tons Per Year				
Mobile Source Emissions	0.3	0.4	0.7	0.2
Area Source Emissions	0.5	<0.1	<0.1	<0.1
Energy Source Emissions	<0.1	0.1	<0.1	<0.1
Stationary Source Emissions	<0.1	0.1	<0.1	<0.1
Total Emissions	**0.9**	**0.5**	**0.7**	**0.1**
Air District Thresholds	10.0	10.0	15.0	10.0
Exceed Threshold?	**No**	**No**	**No**	**No**

Source: Compiled by LSA (March 2025).
Note: Some values may not add up due to rounding.
Air District = Bay Area Air District
NO_X = nitrogen oxides
PM_{10} = particulate matter less than 10 microns in size
$PM_{2.5}$ = particulate matter less than 2.5 microns in size
ROGs = reactive organic gases

The primary emissions associated with the project are regional in nature, meaning that air pollutants are rapidly dispersed on release or, in the case of vehicle emissions associated with the project, emissions are released in other areas of the Air Basin. The daily and annual emissions associated with project operational trip generation, energy, and area sources are identified in **Table 4.3.B** for ROGs, NO_X, PM_{10}, and $PM_{2.5}$.

The results shown in **Table 4.3.B** indicate the project would not exceed the significance criteria for daily or annual ROG, NO_X, PM_{10}, or $PM_{2.5}$ emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under applicable federal or State ambient air quality standards. Impacts would be **less than significant**. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Localized CO Impacts. Emissions and ambient concentrations of CO have decreased dramatically in the Bay Area with the introduction of the catalytic converter in 1975. No exceedances of the State or federal CO standards have been recorded at Bay Area monitoring stations since 1991. The Air District's 2022 CEQA Guidelines include recommended methodologies for quantifying concentrations of localized CO levels for proposed projects. A screening level analysis using guidance from the Air District's 2022 CEQA Guidelines was performed to determine the impacts of the project. The screening methodology provides a conservative indication of whether the implementation of a proposed project would result in significant CO emissions. According to the Air

District's 2022 CEQA Guidelines, a project would result in a less than significant impact to localized CO concentrations if the following screening criteria are met:

- The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways and the regional transportation plan and local congestion management agency plans.
- Project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour (vph).
- The project would not increase traffic volumes at affected intersections to more than 24,000 vph where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, or below-grade roadway).

Implementation of the proposed project would not conflict with the policies or programs of the Solano County Transportation Authority. As identified in Section 4.7, Transportation and Traffic, the proposed project would generate approximately 35 a.m. vehicle trips during the morning peak hour of travel and 48 p.m. vehicle trips during the evening peak hour of travel. As the project's contribution to peak-hour traffic volumes at intersections in the vicinity of the project site would be well below 44,000 vph, the proposed project would not result in localized CO concentrations that exceed State or federal standards, and project impacts would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

c. Would the project expose sensitive receptors to substantial pollutant concentrations? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

Sensitive receptors are defined as residential uses, schools, daycare centers, nursing homes, and medical centers. Individuals particularly vulnerable to diesel particulate matter (DPM) are children, whose lung tissue is still developing, and the elderly, who may have serious health problems that can be aggravated by exposure to DPM. Exposure from diesel exhaust associated with construction activity contributes to both cancer and chronic non-cancer health risks.

According to the Air District, a project would result in a significant impact if it would individually expose sensitive receptors to TACs, resulting in an increased cancer risk greater than 10 in 1 million, increased non-cancer risk of greater than 1.0 on the Hazard Index (chronic or acute), or an annual average ambient $PM_{2.5}$ increase greater than 0.3 µg/m.[3]

The project site is in an urban area in proximity to existing single-family residential uses that could be exposed to diesel emissions exhaust during the construction period. Therefore, a construction HRA, which evaluates construction-period health risk to off-site receptors, was performed for construction of the proposed project. To estimate the potential cancer risk associated with construction activities from equipment exhaust (including DPM), a dispersion model was used to translate an emissions rate from the source location to a concentration at the receptor location of interest (i.e., a nearby residence and worksites). Dispersion modeling varies from a simpler, more conservative screening-level analysis to a more complex and refined detailed analysis.

For the purposes of an HRA, emissions are analyzed for acute health impacts, chronic, and carcinogenic health impacts. A multi-pathway assessment was conducted to evaluate the project's emissions during construction following the modeling techniques recommended in the California Environmental Protection Agency's (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA) *Air Toxic Hot Spots Program Risk Assessment Guidelines*.[24] The analysis herein has been conducted in accordance with the Air District's requirements for HRAs.

The HRA analysis was conducted using three models: (1) CalEEMod to determine DPM emissions during project construction; (2) the USEPA AERMOD air dispersion model to determine how the TACs would move through the atmosphere; and (3) CARB's Hotspots Analysis and Reporting Program (HARP2) model to translate the pollutant concentrations from AERMOD into individual health risks at any sensitive receptor locations surrounding the project site.

The OEHHA has determined that long-term exposure to diesel exhaust particulates poses the highest cancer risk of any TAC it has evaluated. Exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, DPM made people with allergies more susceptible to the materials to which they were allergic, such as dust and pollen. Exposure to DPM also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks. For risk assessment procedures, the OEHHA specifies that the surrogate for whole diesel exhaust is DPM. The HRA analyses used PM_{10} emissions to represent DPM emissions, consistent with OEHHA guidance.

The conservative nature of this analysis is due primarily to the following factors:

- The CARB-adopted diesel exhaust unit risk factor (URF) of 300 in 1 million per micrograms per cubic meter ($\mu g/m^3$) is based on the upper 95th percentile of estimated risk for each of the epidemiological studies used to develop the URF. Therefore, the risk factor is representative of DPM.

- The exposure to DPM is assumed to be constant for the given period analyzed (i.e., 70 years). However, emissions from DPM are expected to substantially decrease in the future with the implementation of standard regulatory requirements and technological advancement to reduce DPM.

Table 4.3.C, below, identifies the results of the analysis. Model outputs and snapshots of the sources are provided in **Appendix B.**

[24] California Environmental Protection Agency (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA). 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. March. Website: https://oehha.ca.gov/air/air-toxics-hot-spots (accessed March 2025).

Table 4.3.C: Unmitigated Inhalation Health Risks from Project Construction to Off-Site Receptors

	Carcinogenic Inhalation Health Risk in 1 Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index	Annual $PM_{2.5}$ Concentration ($\mu g/m^3$)
Residential Receptor MEI	67.99	0.059	0.000	0.29
Worker Receptor MEI	0.46	0.023	0.000	0.11
School Receptor MEI	2.90	0.028	0.000	0.14
Threshold	**10.0**	**1.0**	**1.0**	**0.30**
Exceed Threshold?	**Yes**	**No**	**No**	**No**

Source: Compiled by LSA (March 2025).
$\mu g/m^3$ = micrograms per cubic meter
MEI = maximally exposed individual
$PM_{2.5}$ = particulate matter less than 2.5 microns in size

As shown in **Table 4.3.C**, the maximum cancer risk for the residential receptor maximally exposed individual (MEI) associated with project construction would be 67.99 in 1 million, which would exceed the Air District's cancer risk of 10 in 1 million and would result in a potentially significant impact without mitigation. The school receptor MEI and worker receptor MEI risk would be lower at 2.90 in 1 million and 0.46 in 1 million, respectively, which would also not exceed the Air District's cancer risk threshold. The chronic hazard index would be 0.059 for the residential receptor MEI, 0.028 for the school receptor MEI, and 0.023 for the worker receptor MEI, which are below the threshold of 1. In addition, the acute hazard index would be nominal (0), which would also not exceed the threshold of 1. The results of the analysis indicate that the $PM_{2.5}$ concentration would be 0.29 $\mu g/m^3$ for the residential receptor MEI, 0.14 $\mu g/m^3$ for the school receptor MEI, and 0.11 $\mu g/m^3$ for the worker receptor MEI, which also would not exceed the Air District's significance threshold of 0.3 $\mu g/m^3$. Therefore, implementation of **Project Specific Mitigation Measure AIR-1**, which would require the use of cleaner construction equipment, would be necessary to reduce substantial pollutant concentrations during project construction.

Project Specific Mitigation Measure AIR-1

Tier 4 Final Emissions Standards. During construction of the proposed project, the project contractor shall ensure all off-road, diesel-powered construction equipment of 50 horsepower or more used for the project construction meets, at a minimum, the California Air Resources Board Tier 4 Final emissions standards or the equivalent.

Table 4.3.D identifies the results of the analysis with implementation of **Project Specific Mitigation Measure AIR-1**.

Table 4.3.D: Mitigated Inhalation Health Risks from Project Construction to Off-Site Receptors

	Carcinogenic Inhalation Health Risk in 1 Million	Chronic Inhalation Hazard Index	Acute Inhalation Hazard Index	Annual PM2.5 Concentration (µg/m3)
Residential Receptor MEI	4.52	0.004	0.000	0.02
Worker Receptor MEI	0.03	0.002	0.000	0.01
School Receptor MEI	0.19	0.002	0.000	0.00
Threshold	**10.0**	**1.0**	**1.0**	**0.30**
Exceed Threshold?	**No**	**No**	**No**	**Exceed Threshold?**

Source: Compiled by LSA (March 2025).
$\mu g/m^3$ = micrograms per cubic meter
MEI = maximally exposed individual
$PM_{2.5}$ = particulate matter less than 2.5 microns in size

As shown in **Table 4.3.D**, the mitigated cancer risk at the residential receptor MEI would be 4.52 in 1 million, which would not exceed the Air District's cancer risk threshold of 10 in 1 million. Therefore, with implementation of **Project Specific Mitigation Measure AIR-1**, construction of the proposed project would not exceed Air District thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations.

Once the proposed project is constructed, it would not be a source of substantial emissions, and consequently, implementation of the proposed project would not result in new sources of TACs. Therefore, the project would not expose sensitive receptors to substantial levels of TACs, and this impact would be less than significant with mitigation. With implementation of **Project Specific Mitigation Measure AIR-1,** no new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? ***(Less than Significant Impact, No New Impact)***

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. Once operational, the proposed project would not include any activities or operations that would generate objectionable odors and once operational, the project would not be a source of odors. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. This impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

4.4 BIOLOGICAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐	☒
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☒	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☒	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒	☒

4.4.1 Prior Environmental Analysis

Chapter 4.3 of the General Plan EIR analyzed impacts to biological resources associated with build out of the General Plan, and determined that without the implementation of adequate identification, controls and restrictions, and requirements for compensatory mitigation, build out of the General Plan could have a substantial adverse effect on special-status species, sensitive natural communities, protected wetlands, and native resident or migratory wildlife corridors and native wildlife nursery sites. The General Plan EIR prescribed **Mitigation Measure BIO-1**, which requires a biological assessment for new development proposed on sites that are determined to have some potential to contain sensitive biological and wetland resources, CEQA environmental review, the avoidance of potential impacts on jurisdictional wetlands and other waters, the protection of the nests of raptors and other birds, and the protection of the remaining woodlands and native tree resources (including the replacement of removed trees). With implementation of **General Plan EIR Mitigation Measure BIO-1**, impacts on biological resources were considered reduced to less than

significant. Additionally, the General Plan includes the following goals, policies, and actions related to biological resources which would be applicable to the proposed project:

- **Policy NBE-1.1: Natural Resources.** Protect and enhance hillsides, waterways, wetlands, occurrences of special-status species and sensitive natural communities, and aquatic and important wildlife habitat through land use decisions that avoid and mitigate potential environmental impacts on these resources to the extent feasible.
    - **Action NBE-1.1B:** Continue to participate in the implementation of regional habitat conservation and restoration programs, including the Solano Multispecies Habitat Conservation Plan and Natural Community Conservation Plan, and wetland restoration occurring in the Napa/Sonoma Marshes.
- **Policy NBE-1.2: Sensitive Resources.** Ensure that adverse impacts on sensitive biological resources, including special-status species, sensitive natural communities, and wetlands are avoided and mitigated to the greatest extent feasible as development takes place.
    - **Action NBE-1.2D:** Protect the remaining woodlands and native tree resources, and require replacement plantings where native trees must be removed.
    - **Action NBE-1.3B:** Work with landowners to facilitate assembly and retention of parcels of sufficient size to preserve valuable tidal marshes, seasonal marshes, managed wetlands and contiguous grassland areas for the protection of aquatic and wildlife habitat.
- **Policy NBE-1.6: Open Space.** Conserve and enhance natural open space areas in and adjacent to Vallejo and its waterfront.
- **Policy NBE-1.7: Green Infrastructure.** Encourage the installation of green infrastructure, including tools such as permeable pavement, rain gardens, constructed wetlands, grassy swales, rain barrels and cisterns, and green roofs, to treat stormwater, attenuate floods, increase groundwater recharge, and reduce urban heat islands.

4.4.2 Background

This section summarizes the literature review, records search, and field investigation that were completed to inform the existing conditions on the site related to biological resources and describes the existing biological resources environment of the project site and its vicinity including site soils and topography, climate, hydrology, land use, and plant and animal species and communities that have potential to occur. The analysis of potential impacts to biological resources is based on the site-specific Biological Resources Impact Analysis[25] and Arborist Report[26] completed for the proposed project by WRA. Additionally, peer reviews of the Biological Resources Technical Report[27] and

[25] WRA, Inc. 2024. *Biological Resources Technical Report Vista Cove Project, Vallejo, Solano County, California.* February.

[26] WRA, Inc. 2023. *Sancerra Vista Cove Development Project – Arborist Tree Survey and Report*. February 22.

[27] LSA Associates, Inc. (LSA). 2025. *Third-Party Review of Biological Resources Report for the Vista Cove Project in Vallejo, California.* March 17.

Arborist Report[28] were completed by LSA to determine whether the reports comply with CEQA and conform to accepted methodologies and procedures (industry standards). Peer reviews included one round of review and the submission of findings to the City detailing areas requiring modification. All reports related to Biological Resources are included in **Appendix C** of this Initial Study.

4.4.2.1 Literature Review and Records Search

Prior to conducting the field investigation for the biological resources impact analysis, a literature review and records search were conducted to assess the potential for sensitive biological communities and special-status species to occur on or within the vicinity of the project site, including the following:

- Soil Survey of Solano County, California[29]
- Benicia 7.5-minute United States Geological Survey (USGS) quadrangle
- Contemporary aerial photographs[30]
- Nationwide Environmental Title Research
- National Wetlands Inventory (NWI)
- California Aquatic Resources Inventory
- California Natural Diversity Database (CNDDB)
- California Native Plant Society (CNPS) Inventory
- Consortium of California Herbaria
- United States Fish and Wildlife Service (USFWS) List of Federal Endangered and Threatened Species
- eBird Online Database
- California Bird Species of Special Concern in California[31]
- California Amphibian and Reptile Species of Special Concern[32]

---

28 LSA Associates, Inc. (LSA). 2025. *Third-Party Review of Arborist Report for the Vista Cove Project in Vallejo, California*. March 17.

29 United States Department of Agriculture Natural Resources Conservation Service. 1969. *Soil Survey of Solano County, California.*

30 Google Earth. 2024. *Aerial Imagery 1985-2002* (most recently accessed February 2024).

31 Shuford, W.D., and T. Gardali, eds. 2008. *California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento*.

32 Thomson, R.C., A.N. Wright, and H.B. Shaffer. 2016. *California amphibian and reptile species of special concern. Co-published by the California Department of Fish and Wildlife and University of California Press, Oakland, California*.

- A Field Guide to Western Reptiles and Amphibians[33]
- A Manual of California Vegetation, Online Edition
- Preliminary Descriptions of the Terrestrial Natural Communities[34]
- California Natural Community List
- Database searches (i.e., CNDDB, CNPS) for special-status species focused on the Cuttings Wharf, Cordelia, Fairfield South, Mare Island, Benicia, Vine Hill, Richmond, Briones Valley, and Walnut Creek USGS 7.5-minute quadrangles.

4.4.2.2 Habitat Assessment/Field Investigation

Following the literature review for the Biological Resources Impact Analysis, WRA biologists conducted field assessments on February 28 and July 14, 2022 to document the following: (1) land cover types (e.g., terrestrial communities, aquatic resources), (2) existing conditions and to determine if suitable habitat is provided for any special-status plant or wildlife species, (3) the presence of aquatic natural communities (e.g., wetlands), and (4) if special-status species are present.

The Arborist Report was prepared based on an arborist survey performed on October 12, 2022, which was conducted by WRA's International Society of Arboriculture (ISA)-Certified Arborist and Tree Risk Assessment Qualified arborist for the purpose of documenting all trees with a diameter at breast height (DBH) greater than 6 inches within the project site outside of the riparian area. Relevant information was recorded for each surveyed tree, including: tree number, species, trunk DBH, max drip, condition rating, health rating, structure rating, health, and comments. Surveyed trees were recorded using sub-meter accuracy global positioning system (GPS) devices and trees were tagged with aluminum tree tags with a unique identifying number.

4.4.2.3 Site Soils and Topography

Undulating hills with flat areas, with elevations ranging from approximately 97 to 180 feet above sea level, characterize the project site topography. According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) *Web Soil Survey*, the project site is underlain by Dibble-Los Osos clay loams, including three soil mapping units: 2 to 9 percent slopes, 9 to 30 percent slopes, and 30 to 50 percent slopes. The Dibble-Los Osos Clay Loam series consists of moderately deep, well drained soils that formed in material weathered from shale, sandstone and semi consolidated densic material. The soil pH ranges from 5.6 to 7.3, resulting in neutral to acidic soils. Dibble soils are on foothills and fan remnants and have slopes of 2 to 75 percent. These soils are not considered hydric.

[33] Stebbins, R.C. 2003. *A Field Guide to Western Reptiles and Amphibians, Third edition*. Houghton Mifflin Company, Boston, MA and New York, NY.

[34] Holland, R.F. 1986. *Preliminary descriptions of the terrestrial natural communities of California*. State of California, The Resources Agency, Department of Fish and Game, Sacramento, CA.

4.4.2.4 Climate

The average monthly maximum temperature in the area is 68.6 degrees Fahrenheit, while the average monthly minimum temperature is 49.3 degrees Fahrenheit. Predominantly, precipitation falls as rainfall between November and March with an annual average precipitation of 17.7 inches.

4.4.2.5 Hydrology

The regional watershed for the project site is San Francisco Bay (Hydrologic Unit Code [HUC] 6: 180500) between the San Pablo Bay (HUC 8:18050002) and Suisun Bay (HUC 8: 18050001) watersheds. The project site is located in the central portions of the Suisun/San Pablo Bay watersheds. Two streams are mapped on the project site according to the National Wetland Inventory (NWI). However, there are no mapped blue line streams[35] on the project site according to the Benicia 7.5 minute quadrangle.

The stream features shown in the NWI start at the edge of the residential properties to the west of the project site and run east towards the marsh located in the Benicia State Recreation Area, and eventually, the Southampton Bay within the Carquinez Strait (0.9 mile south of the project site). The northern aquatic feature is a topographical low intermittent stream[36] that appears to have started conveying water and supporting riparian vegetation after the adjacent housing development was constructed in the 1980s and the stormwater basin directed runoff to this area. The southern aquatic feature within the project site is a historical drainage that coveys water from the hillside to the adjacent marsh southeast of the project site; however, additional stormwater and other runoff is directed into this feature. Both aquatic features receive runoff from the neighboring properties via culverts. Although NWI classifies the southern feature as a stream, due to wetland vegetation growing in the channel, it was classified as a freshwater marsh, which is considered a sensitive land cover type.

4.4.2.6 Land Use

The majority of the project site is dominated by non-native annual grassland. One intermittent stream, connected to a seasonal wetland, and one linear freshwater marsh are located on the project site. The area was used for agriculture as early as 1948 and was left as open space following the construction of the neighboring community to the west of the project site, in the early 1980s.

4.4.2.7 Vegetation Communities and Other Land Cover

The project site primarily includes the following vegetation communities: riparian, toyon chaparral, coyote brush scrub, poison oak scrub, artichoke thistle field, and non-native grassland. Additionally,

35 A blue-line stream is a body of concentrated flowing water in a natural low are or natural channel on the land surface and may be any creek, stream or other flowing water feature, perennial or ephemeral, indicated on USGS quadrangle maps, with the exception of man-made watercourses.

36 A topographical low is a low-lying area on the Earth's surface, typically represented by contour lines forming concentric circles on a topographic map which indicate that the elevation decreases towards the center of the depression.

the site supports aquatic resources identified as intermittent stream, seasonal wetland, and freshwater marsh.

Toyon Chaparral. Toyon chaparral is mapped in the central/southern portion of the project site on the steep slope above and adjacent to the freshwater marsh. It is characterized by open to dense shrub canopy dominated by toyon (*Heteromeles arbutifolia*) with occasional coyote brush (*Baccharis pilularis*) and poison oak (*Toxicodendron diversilobum*). This land cover type meets the membership rules for holly leaf cherry – toyon – greenbark ceonothus chaparral (*Prunus ilicifolia –Heteromeles arbutifolia – Ceanothus spinosus* Shrubland Alliance). Interstitial areas are dominated by non-native annual grasses such as wild oat (*Avena* sp.) and purple false brome (*Brachypodium distachyon*). Occasional small coast live oak trees are present at low cover. Although the general holly leaf cherry – toyon – greenbark ceonothus chaparral Alliance is not considered sensitive by the California Department of Fish and Wildlife (CDFW), the toyon – holly leaf cherry species association within that alliance is considered sensitive.

Coyote Brush Scrub. A small patch of coyote brush scrub was mapped in the northern portion of the project site. It is an open stand of shrubs dominated by coyote brush and meets the membership rules for the coyote brush scrub (*Baccharis pilularis Shrubland Alliance*). The interstitial areas are dominated by wild oat, and no trees are present. Coyote brush scrub is not considered sensitive.

Poison Oak Scrub. Poison oak scrub was mapped near the top of the steep ridge in the southern portion of the project site. It is characterized by an open shrub canopy dominated by poison oak, with occasional toyon and coyote brush present. It meets the membership rules for the poison oak scrub (*Toxicodendron diversilobum Shrubland Alliance*). The interstitial areas are dominated by non-native herbs such as fennel (*Foeniculum vulgare*), wild oat, and purple false brome. Poison oak scrub is not considered sensitive.

Artichoke Thistle Field. The artichoke thistle field was mapped on the steep slope in the southernmost portion of the project site. The vegetation is herbaceous and dominated by artichoke thistle (*Cynara cardunculus* ssp. *flavescens*), with other non-native herbs between artichoke thistle plants, including wild oat, purple false brome, black mustard (*Brassica nigra*), Italian thistle (*Carduus pycnocephalus* ssp. *pycnocephalus*), and fennel. Trees and shrubs were typically absent. This land cover type meets the membership rules for the upland mustards or star-thistle fields (*Brassica nigra – Centaurea [solstitalis, melitensis]* Herbaceous Semi-natural Alliance). Artichoke thistle field is not considered sensitive.

Non-native Grassland. Non-native grassland is the most common land cover type within the project site, occurring on all slopes and aspects. Portions of this land cover type are periodically mowed, and in the far northern portion of the project site, a two-track dirt vehicle path is present. Vegetation is herbaceous and is typically characterized by dense wild oat (*Avena* spp.), with occasional shrubs, trees, and other herbs present at low cover. It intergrades with the coyote brush scrub, poison oak scrub, and artichoke thistle fields land cover types. This land cover type meets the member rules for the wild oats and annual brome grasslands (*Avena* spp. – *Bromus* spp. Herbaceous Semi-natural Alliance). Non-native grassland is not considered sensitive.

Intermittent Stream. Intermittent streams are linear features that exhibit indicators of an ordinary high-water mark (OHWM) and due to groundwater influence, flow for a duration longer than a precipitation event but are dry for a portion of the year. The intermittent stream within the project site is defined by a clear bed and bank and exhibits OHWM indicators such as scour and wrack. Trickles of water were observed in portions of the channel during the February 28, 2022, site visit. However, the channel was dry at the time of the July 14, 2022, site visit. The intermittent stream receives drainage from a concrete channel from the residential community upstream (to the west). It occurs on a steep slope, and the channel peters out when the topography flattens out and transitions into the seasonal wetland. The intermittent stream is considered sensitive and is potentially subject to CDFW, United States Army Corps of Engineers (USACE), and Regional Water Quality Control Board (RWQCB) jurisdiction.

Seasonal Wetland. Seasonal wetlands include areas which hold water for part of the year, typically during the rainy season (between October and March) and are dominated by hydrophytic vegetative cover. The seasonal wetland within the project site occurs in the northern portion of the project site, where the topography flattens out downslope of the intermittent stream. Surface water and saturation were observed in the seasonal wetland during the February 28, 2022, site visit. At the time of the July 14, 2022, site visit no surface water or saturation was observed. The wetland is dominated by bristlox-tongue (*Helminthotheca echioides*), harding grass (*Phalaris aquatica*), iris leaved rush (*Juncus xiphioides*), and bulrush (*Schoenoplectus americanus*). Himalayan blackberry and a small number of arroyo and red willows (*Salix lasiolepis*) occur at northern edge of the seasonal wetland. The wetland narrows substantially to an incised channel just outside of the eastern edge of the project site. The seasonal wetland is considered sensitive and is potentially subject to USACE and RWQCB jurisdiction.

Freshwater Marsh. Freshwater marshes are wetlands which hold water for long periods of time and are dominated by graminoids and other herbaceous plants. The marsh on-site is a linear wetland drainage confined by steep slopes located centrally within the project site. Inundation was observed during the February 28 and July 14, 2022, site visits, but the full duration of inundation is unknown. It is dominated by dense bulrush with occasional small patches of cattails (*Typha* sp.) and is bordered by non-native annual grassland and toyon chaparral. Surface water is shallow with a very slow flow throughout the bottom of the drainage. Although this feature receives some seasonal runoff from concrete drainage channels upslope, the primary hydrological source is a culvert that drains an unknown source and was flowing at the time of the February and July site visits. The source of this water could not be confirmed, but it does include stormwater and urban residential runoff from the residential development upslope. Freshwater marsh is considered sensitive and is potentially subject to USACE and RWQCB jurisdiction.

4.4.2.8 Tree Survey

A total of 83 trees were surveyed within the project site, of which 57 trees met the Significant Tree definition under the City's local ordinance. Four non-native tree species were identified during the survey, including: two strawberry trees (Arbutus 'Marina'), one apple tree (*Malus* sp.), three Monterey pines (*Pinus radiata*), and two cherry trees (*Prunus* sp.). Three native tree species were identified during the survey, including: one toyon (*Heteromeles arbutifolia*), 73 coast live oaks

(*Quercus agrifolia*), and one valley oak (*Quercus lobata*). The diameters of surveyed trees ranged from 6 to 43.2 inches.[37]

4.4.2.9 Special-Status Plants

Based on a review of the resource databases listed in Section 4.4.2.1, 65 special-status plant species were not observed on the project site. Special-status plant species were documented in the vicinity of the project site. The species documented in the greater vicinity have unlikely or no potential to occur on the project site for the following reasons:

- Hydrologic conditions (e.g., tidal, riverine) necessary to support the special-status plant species are not present within the project site.
- Edaphic (soil) conditions (e.g., serpentine) necessary to support the special-status plant species are not present within the project site.
- Unique pH conditions (e.g., alkaline soils) necessary to support the special-status plant species are not present within the project site.
- Associated natural communities (e.g., coastal habitats, tidal marsh, vernal pools) necessary to support the special-status plant species are not present within the project site.
- The project site is geographically isolated (e.g. below elevation) from the documented range of the special-status plant species.
- Land use history and contemporary management (e.g., nearby development and the spread of invasive species) has degraded the localized habitat necessary to support the special-status plant species.

4.4.2.10 Special-Status Wildlife

Based on a review of the resource databases listed in Section 4.4.2.1, 52 special-status wildlife species have been documented in the vicinity of the project site. Of the 52 special-status species known from the region, five species were determined to have a moderate or high potential to occur within the project site, including the following: White-tailed kite (*Elanus leucurus*), Northern harrier (*Circus hudsonius [cyaneus]*), Short-eared owl (*Asio flammeus*), Silver-haired bat (*Lasionycteris noctivagans*), and Hoary bat (*Lasiurus cinereus*). A description of the potential special-status wildlife at the project site including a description of the potential habitat within the project site is provided in **Table 4.4.A**, below. The remaining species are unlikely or have no potential to occur due to the following factors:

- The project site lacks suitable hostplants;
- The project site lacks suitable perennial aquatic habitat;

[37] WRA, Inc. 2023. *Sancerra Vista Cove Development Project – Arborist Tree Survey and Report*. February 22.

Table 4.4.A: Potential Special-Status Wildlife

Scientific Name	Common Name	Conservation Status	Potential Habitat in the Study Area
Elanus leucurus	White-tailed kite	California Department of Fish and Wildlife (CDFW) Fully Protected Species	**Present.** This species was observed foraging within the project site during the February 28, 2022, site visit. There is suitable nesting habitat in the form of large oak trees within the project site.
Circus hudsonius	Northern harrier	CDFW Species of Special Concern	**Moderate Potential**. Grasslands and scrublands within the project site may provide suitable nesting habitat for this species. This species has been observed in the local area.
Asio flammeus	Short-eared owl	CDFW Species of Special Concern	**Moderate Potential**. Grasslands and scrublands within the project site may provide suitable nesting habitat for this species. This species has been observed in the local area.
Lasionycteris noctivagans	Silver-haired bat	Western Bat Working Group – Medium Priority	**Moderate Potential**. Large oak trees within the project site provide suitable roosting habitat.
Lasiurus cinereus	Hoary bat	Western Bat Working Group – Medium Priority	**Moderate Potential**. Large oak trees within the project site provide suitable roosting habitat.

Source: *Biological Resources Technical Report Vista Cove Project, Vallejo, Solano County, California* (WRA 2024).

- The project site lacks suitable wetland habitat;
- The project site is outside of the currently documented or historical range of the species; or
- The project site is outside of the distribution range for known occurrences.

4.4.3 Impact Analysis

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

Special-status species are defined as follows:

1. Species that are listed, formally proposed, or designated as candidates for listing as threatened or endangered under the federal Endangered Species Act or California Endangered Species Act.

2. Plant species assigned to California Rare Plant Ranks (CRPR) 1A, 1B, 2A, 2B, or 3.

3. Animal species designated as Species of Special Concern or Fully Protected Species by the California Department of Fish and Wildlife (CDFW).

4. Species that meet the definition of rare, threatened, or endangered under Section 15380 of the *State CEQA Guidelines*.

5. Species considered as a taxon of special concern by local agencies.

As discussed in Section 4.4.2.1, 65 special-status plant species have been documented in the vicinity of the project site; however, no special-status plant species were observed on site during the habitat assessments completed for the Biological Resources Report and the species documented in the greater vicinity have unlikely or no potential to occur on the project site. Therefore, the proposed project would result in no impacts to special-status plant species.

As discussed in Section 4.4.2.1, 52 special-status wildlife species have been documented in the vicinity of the project site. Of the 52 special-status species known from the region, five species were determined to have a moderate or high potential to occur within the project site, including the following: white-tailed kite (*Elanus leucurus*), northern harrier (*Circus hudsonius [cyaneus]*), short-eared owl (*Asio flammeus*), silver-haired bat (*Lasionycteris noctivagans*), and hoary bat (*Lasiurus cinereus*).

Construction activities associated with the proposed project could result in direct mortality of white-tailed kite, northern harrier, short-eared owl, and other native bird species nests, which would be considered a potentially significant impact. Impacts to active nests of this species and their eggs, chicks and young could occur during the removal of trees, vegetation, or other ground-disturbing activities. These activities could result in the direct removal or destruction of active nests, as well as generate audible, vibratory and/or visual disturbances that might indirectly result in nest abandonment. To reduce potential impacts to white-tailed kite, northern harrier, short-eared owl, and native nesting birds to a less than significant level, **Project Specific Mitigation Measures BIO-1a** and **BIO-1b** would be implemented, which require the completion of pre-construction bird surveys should construction activities occur during the nesting bird season.

Project Specific Mitigation Measure BIO-1a **Avoidance of Nesting Bird Season.** To avoid adverse effects to the active nests of special-status and other native bird species, tree removal, vegetation removal, and initial ground disturbance should be prioritized to occur during the non-nesting season, between September 1 through January 31.

Project Specific Mitigation Measure BIO-1b **Pre-Construction Nesting Bird Surveys.** A pre-construction nest survey for white-tailed kite, northern harrier, short-eared owl, and other native bird species shall be conducted prior to initial ground disturbance, including tree removal or vegetation removal if it begins during the nesting bird season (defined as February 1 through August 31). If active nests (containing eggs, chicks or young) are discovered during these surveys, a qualified

biologist shall establish a species-specific no-work buffer around the active nest. Work may resume in the buffer after the nesting season ends, or a qualified biologist confirms the nest is inactive.

The removal of 69 trees from the northern half of the project site could result in direct mortality of silver-haired bat and hoary bat adults and maternity roosts, which would be considered a potentially significant impact. Impacts to active maternity roosts of this species and their pups could occur during the removal of trees, vegetation, or other ground-disturbing activities in proximity to roost sites. These activities could result in the direct removal or destruction of active roosts, as well as generate audible, vibratory and/or visual disturbances that might indirectly result in roost abandonment. To reduce potential impacts to the silver-haired bat and hoary bat to a less than significant level, **Project Specific Mitigation Measures BIO-2a** and **BIO-2b** would be implemented, which require the completion of a bat roost assessment should construction activities occur during the maternity roost season.

Project Specific Mitigation Measure BIO-2a

Avoidance of Maternity Roosting Season. To avoid adverse effects to maternity roosts of special-status and other bat species, tree removal, vegetation removal, and initial ground disturbance should be prioritized to occur outside the maternity roosting season, between September 1 through April 30. Large trees (diameter at breast height [DBH] > 24 inches) removed during this season (September 1–April 30) shall be cut using a two-phased system where branches and limbs are cut and left on the ground overnight prior to chipping or removal from the site.

Project Specific Mitigation Measure BIO-2b

Pre-Construction Roost Surveys. During the maternity roost season (May 1–August 31), at least 30 days prior to the removal of any large tree (DBH > 24 inches) a bat roost assessment shall be conducted by a qualified biologist to determine if potential roost habitat is present.

If no maternity roost habitat is present, trees shall be removed using a two-phased cut. Cut branches and limbs shall be left on the ground overnight prior to chipping or removal from the site.

If potential maternity roosting habitat is present, the qualified biologist shall conduct an emergence survey to determine if the roost is occupied or assume the roost is occupied and establish a no-work buffer. If an emergence survey is conducted

and does not detect bats, the tree may be removed with no further measures required to protect roosting bats. If roosting bats are detected, or the tree is assumed to be an active roost, the tree shall be given a 100-foot no work buffer and shall be avoided until after the maternity roosting season is complete. Once the maternal roosting season is complete, tree removal shall follow the two-phase approach for tree removal.

With implementation of **Project Specific Mitigation Measures BIO-1a, BIO-1b, BIO-2a, and BIO-2b**, the proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Impacts would be less than significant with mitigation incorporated. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

As discussed in Section 4.4.2.7, the following sensitive natural communities characterize the project site: holly leaf cherry – toyon – greenbark ceonothus chaparral, which is located in the central/southern portion of the project site on the steep slope above and adjacent to the freshwater marsh; intermittent stream, which is located in the northern portion of the project site; seasonal wetland, which occurs in the northern portion of the project site where the topography flattens out downslope of the intermittent stream; and freshwater marsh, which is located in the central portion of the project site. The proposed project has been designed to avoid and minimize impacts to sensitive natural communities to the greatest extent feasible. The design plans account for total avoidance of the toyon chapparal land cover type, keeping the area south of the freshwater marsh as open space. Additionally, the project plans to avoid the intermittent stream, freshwater marsh, and riparian vegetation. However, the proposed project would convert 0.49 acre of the seasonal wetland into a stormwater basin on the project site. Although the stormwater basin would be vegetated and seasonally inundated, it would result in permanent loss of the seasonal wetland on the project site. This would be a potentially significant impact. To reduce potential impacts to the seasonal wetland, **Project Specific Mitigation Measure BIO-3a** would be implemented, which requires compensatory mitigation for permanent loss of the seasonal wetland.

Project Specific Mitigation Measure BIO-3a

Compensatory Mitigation for Loss of Seasonal Wetland. Compensatory mitigation for permanent loss of 0.49 acre of the seasonal wetland shall be required. Mitigation may be satisfied through purchase of mitigation bank credits from an approved mitigation bank, payment of in-lieu fees

to an approved public agency or conservation organization (e.g., local land trust), for implementation of compensatory mitigation projects, or via a permittee responsible mitigation involving creation, restoring, or enhancing analogous habitat. The ratio for acres of mitigation to acres impacted shall be 1:1.

Additionally, because of the proximity of the riparian and freshwater marsh land cover types to the construction footprint, the proposed project could result in increased sedimentation to the freshwater marsh or damage to roots of riparian trees due to soil disturbance and grading completed during construction of the proposed project. This would be a potentially significant impact. To reduce potential project specific impacts to the riparian and freshwater marsh and riparian trees to a less than significant level, **Project Specific Mitigation Measures**, **BIO-4a**, **BIO-4b**, and **BIO-4c** would be implemented during project construction which require installation of construction fencing or flagging to delineate the riparian and freshwater marsh boundaries, utilization of erosion control measures, and implementation of tree protection measures.

Project Specific Mitigation Measure BIO-4a

Construction Fencing. Prior to ground-disturbing activities, construction fencing or flagging shall be installed to delineate the riparian and freshwater marsh boundaries. The fencing will be checked regularly during construction activities to ensure that the fencing remains intact and functional, and that encroachment has not occurred into the sensitive habitat or boundary; any repairs to the fence or encroachment correction will be conducted immediately. At the end of the project all temporary flagging, fencing, or other materials would be removed from the work areas and vicinity of the channel.

Project Specific Mitigation Measure BIO-4b

Construction Best Management Practices. Erosion control measures would be utilized throughout all phases of the project where sediment runoff from construction may potentially enter nearby waters. Appropriate sediment and erosion control Best Management Practices (BMPs) (e.g., use of silt fencing and/or straw waddles around the perimeter of the construction zone) will be implemented during and following construction to minimize surface runoff originating from the project and thereby protect water quality of the freshwater marsh. Erosion control structures would be

monitored for effectiveness and would be repaired or replaced as needed.

i. Prior to construction, a Stormwater Pollution Prevention Plan (SWPPP) would be developed. The plan would include the implementation and maintenance of erosion control measures.

ii. Prior to construction, an Accidental Spill Prevention and Cleanup Plan would be prepared. This plan would include required spill control absorbent material, for use beneath stationary equipment, to be present on-site and available at all times.

iii. No fueling, cleaning, or maintenance of vehicles or equipment would take place within any areas where an accidental discharge may cause hazardous materials to enter waterways.

iv. Any equipment or vehicles used for the project would be checked and maintained daily to prevent leaks of fluids that could be deleterious to aquatic habitats.

v. All equipment would be cleaned before arriving on the site and before removal from the site to prevent spread of invasive plants.

vi. To avoid establishment of invasive, non-native plant species on or adjacent to the project area, the following measures will be implemented:

    a. Vegetation disturbances will be limited to those areas identified on construction plans and maps as slated for development or construction staging.

    b. Erosion and sediment control materials will be certified as weed-free.

vii. Staging and storage areas for equipment, materials, fuels, lubricants and solvents would be located outside of the stream channel banks and outside of nearby waters.

viii. Stationary equipment such as motors, pumps, and generators, located adjacent to aquatic features would be positioned over secondary containment sufficient to arrest a catastrophic failure.

ix. Stockpiles of excavated soil or other materials would be covered when not in active use (i.e. would not be used or moved for 72 hours). All trucks hauling soil, sand, and other loose materials would be covered.

Project Specific Mitigation Measure BIO-4c

Tree Protection Measures. In order to protect trees adjacent to the project area:

i. Trees not proposed for removal but adjacent to project activities shall have orange construction fencing installed at the dripline. This shall be known as the tree protection zone (TPZ).

ii. Work within the TPZ shall be minimized to the maximum extent feasible.

iii. If work must occur within the TPZ, the fence can be removed temporarily, the tree trunk shall be wrapped in a waddle, and the fence shall be placed back as soon as work is completed.

iv. All equipment and stockpiles must be in designated staging areas away from all TPZ.

v. All trees to be removed shall be felled away from any trees to be avoided.

vi. If trees not proposed for removal require pruning, pruning shall follow ANSI A300 standards or be performed by a certified arborist.

vii. If any roots are exposed from trees to be avoided, roots can be pruned up to the diameter of 2 inches and pruned at 90-degree angles. The roots shall be covered by a damp burlap sack or damp towel while exposed. **(LTS)**

With implementation of **Project Specific Mitigation Measures BIO-3a**, **BIO-4a**, **BIO-4b**, and **BIO-4c**, the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. Impacts would be less than significant with mitigation incorporated. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

As discussed in Section 4.4.2.7, the project site contains the following riparian areas: intermittent stream, which is located in the northern portion of the project site; seasonal wetland, which occurs in the northern portion of the project site where the topography flattens out downslope of the intermittent stream; and freshwater marsh, which is located in the central portion of the project site. The proposed project is designed to avoid the freshwater marsh in the southern half of the project site and the intermittent stream within the project site. However, the proposed project would convert 0.49 acre of the seasonal wetland into a stormwater basin within the project site. Although the stormwater basin would be vegetated and seasonally inundated, it would result in permanent loss of the seasonal wetland within the project site. Additionally, because of the proximity of the riparian and freshwater marsh land cover types to the construction footprint, the proposed project could result in increased sedimentation to the freshwater marsh or damage to roots of riparian trees. This would be a potentially significant impact.

To reduce potential impacts to the seasonal wetland, riparian, and freshwater marsh to a less than significant level, **Project Specific Mitigation Measures BIO-3a**, **BIO-4a**, **BIO-4b**, and **BIO-4c** would be implemented, which require compensatory mitigation for permanent loss of the seasonal wetland, installation of construction fencing or flagging to delineate the riparian and freshwater marsh boundaries, utilization of erosion control measures, and implementation of tree protection measures. With implementation of **Project Specific Mitigation Measures BIO-3a**, **BIO-4a**, **BIO-4b**, and **BIO-4c** the proposed project would not have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Impacts would be less than significant with mitigation incorporated. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? ***(Less Than Significant Impact, No New Impact)***

Wildlife movement includes migration (i.e., usually annual roundtrip), inter-population movement (i.e., long-term genetic flow), and small travel pathways (i.e., daily movement corridors within an animal's territory). While small travel pathways usually facilitate movement for daily home range activities such as foraging or escape from predators, they also provide connection between outlying

populations and the main corridor, permitting an increase in gene flow among populations. In the San Francisco Bay Area, landscape elements that facilitate local and/or regional wildlife movement include stream drainages, canyons, ridges, or other prominent natural or human-made landscape features.

Habitat linkages provide connections between larger habitat areas that are separated by development. Wildlife corridors are similar to linkages but provide specific opportunities for animals to disperse or migrate between areas. A corridor can be defined as a linear landscape feature of sufficient width to allow animal movement between two comparatively undisturbed habitat fragments. Adequate cover is essential for a corridor to function as a wildlife movement area. It is possible for a habitat corridor to be adequate for one species yet still inadequate for others. Wildlife corridors are features that allow for the dispersal, seasonal migration, breeding, and foraging of a variety of wildlife species. Additionally, open space can provide a buffer against both human disturbance and natural fluctuations in resources.

No native wildlife nursery sites are present within the project site, and the project site is not within a designated wildlife corridor.[38] Additionally, the project site does not function as a fisheries movement corridor as there are no streams or rivers within the project site capable of supporting fish.[39] The project site is located within a much larger tract of housing developments intersected with several highways and non-native grasslands in Solano County. The Benicia State Recreation Area is approximately 1,000 feet southeast of the project site; however, the project site does not provide connection to other tidal marsh habitats, nor does it contain such habitat. While common wildlife species presumably utilize the site to some degree for movement at a local scale, the project site itself does not provide corridor functions beyond connecting similar ruderal grassland parcels to surrounding areas. Therefore, the proposed project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites, and impacts would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

Chapter 16.504.07 of the City of Vallejo Municipal Code requires a tree removal permit for impacts to existing mature trees located in non-residential zoning districts if they are over 24 inches in diameter measured six inches above natural grade. Protected trees may be removed with the permission of the City upon submittal of an arborist's report, which determines that the tree is in poor health and not likely to survive; if the trees constitute a high fire hazard or a threat to persons, structures, or property; or, if they impede public works projects. Trees to be removed must be shown on the landscaping and irrigation plan and detailed on a tree inventory chart.

38 WRA, Inc. 2024. *Biological Resources Technical Report Vista Cove Project, Vallejo, Solano County, California.* February.

39 Ibid.

A total of 69 trees would be removed, including 47 significant trees that are protected under the City's tree protection ordinance.[40,41] In compliance with the City's Tree Protection Ordinance, the project applicant has prepared an arborist report,[42] would implement protection measures for trees to be retained, would pay required permit application fees, and would replace removed trees at a ratio of at least three new trees for every tree removed except for the fire-prone species identified in the City's Municipal Code. Trees would be replaced at a ratio of 3 new trees for every tree removed, for a total of 141 trees that would be planted.[43] The exact number of replacement trees required for mitigation of removed trees would be identified as part of the final landscape plan to be reviewed and approved by the City. Therefore, the proposed project would not conflict with the City's Tree Protection Ordinance.

Chapter 4, Nature and Built Environment, of the *Vallejo General Plan 2040* establishes goals, policies, and actions to protect natural resources within the city. Specifically, Policies NBE-1.1 and NBE-1.2 state:

> **Policy NBE-1.1.** Natural Resources. Protect and enhance hillsides, waterways, wetlands, occurrences of special-status species and sensitive natural communities, and aquatic and important wildlife habitat through land use decisions that avoid and mitigate potential environmental impacts on these resources to the extent feasible.
>
> **Policy NBE-1.2.** Sensitive Resources. Ensure that adverse impacts on sensitive biological resources, including special-status species, sensitive natural communities, and wetlands are avoided and mitigated to the greatest extent feasible as development takes place.

As described above, trees on the project site could provide nesting and/or roosting habitat for protecting bird and bat species. Additionally, the proposed project would convert 0.49 acre of the seasonal wetland into a stormwater basin within the project site and construction activities could result in increased sedimentation to the freshwater marsh or damage to roots of riparian trees due to the proximity of the construction footprint to the riparian and freshwater marsh land cover types. These impacts could interfere with the local policies listed above protecting biological resources and is a potentially significant impact.

To reduce potential conflicts with local policies protecting biological resources, implementation of **Project Specific Mitigation Measures BIO-1a, BIO-1b, BIO-2a, BIO-2b, BIO-3a**, **BIO-4a**, **BIO-4b**, and **BIO-4c** would be required. These measures require the completion of pre-construction surveys should construction activities occur during the nesting bird season; the completion of a bat roost assessment should construction activities occur during the maternity roost season; compensatory mitigation for permanent loss of the seasonal wetland; installation of construction fencing or

40 WRA, Inc. 2023. *Sancerra Vista Cove Development Project – Arborist Tree Survey and Report*. February 22.
41 Vallejo, City of. *Vallejo, California – Municipal Code, Title 16 – Zoning, Part V – Site Development Standards, Chapter 16.504 – Landscaping, Section 16.504.07 – Tree protection.*
42 WRA, Inc. 2023. *Sancerra Vista Cove Development Project – Arborist Tree Survey and Report*. February 22.
43 Ibid.

flagging to delineate the riparian and freshwater marsh boundaries; utilization of erosion control measures; and implementation of tree protection measures.

Compliance with the City's Tree Protection Ordinance and implementation of **Project Specific Mitigation Measures BIO-1a, BIO-1b, BIO-2a, BIO-2b, BIO-3a, BIO-4a, BIO-4b,** and **BIO-4c** would ensure that the proposed project would reduce all impacts on biological resources to a less than significant level and thus not conflict with any local policies or ordinances protecting biological resources, including General Plan Policies NBE-1.1 and NBE-1.2. This impact would be less than significant with mitigation incorporated. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? ***(No Impact, No New Impact)***

The project site is not located within the boundaries of any adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan. Although the Solano County HCP is currently in development, it does not identify individual, privately held properties such as the project site as habitat.[44] According to the Solano County HCP, the HCP is not planning to designate private properties as preserves; instead, it would focus on lands with conservation easements, existing mitigation banks, or publicly owned habitat. As such, the project would not conflict with the provisions of any adopted conservation plan. No new impacts or substantially more severe significant impacts would occur with implementation of the proposed project, compared to those analyzed in the General Plan EIR.

[44] WRA, Inc. 2024. *Biological Resources Technical Report Vista Cove Project, Vallejo, Solano County, California.* February.

4.5 CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐	☒
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐	☒
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐	☒

4.5.1 Prior Environmental Analysis

Chapter 4.4 of the General Plan EIR analyzed impacts to cultural and paleontological resources associated with build out of the General Plan, and determined adverse changes could occur to the significance of archaeological and paleontological resources through future development due to the lack of specific implementing procedures. Therefore, the General Plan EIR prescribed **Mitigation Measures CULT-2 and CULT-3**, which details procedures in the event that archaeological or paleontological resources are encountered during future development. With implementation of **General Plan EIR Mitigation Measures CULT-2 and CULT-3**, impacts on cultural resources were considered reduced to less than significant. Additionally, the General Plan includes the following goals, policies, and actions related to cultural resources which would be applicable to the proposed project:

- **Policy NBE-1.9 Cultural Resources:** Protect and preserve archaeological, historic, and other cultural resources.
    - **Action NBE-1.9A:** Continue to require that land use activities comply with State requirements and follow best practices to ensure that cultural resources are not impacted and that appropriate agencies and technical experts are involved in the evaluation and protection of resources and sites.
    - **Action NBE-1.9B:** Maintain a dialogue with local Native American groups regarding sensitive cultural resources in Vallejo.

4.5.2 Background

The analysis of potential impacts to cultural resources is based on a site-specific cultural resources assessment prepared for the proposed project, prepared by LSA in March 2025, which is included in **Appendix D** of this Initial Study.[45] This assessment included a cultural resources records search, a

[45] LSA Associates, Inc. (LSA). 2025. *Cultural Resources Assessment, Vista Cove Development Project, Vallejo, Solano County, California.* March.

review of historic-period aerial imagery and maps, and a pedestrian archaeological survey of the project site.

An archaeological records search was conducted on September 6, 2024, at the Northwest Information Center (NWIC) at Sonoma State University. The NWIC is the official repository for cultural resources records for Solano County and maintains an extensive inventory of previously recorded archaeological sites and prior survey coverage. The records search included a one-mile radius around the project site and reviewed all available documentation of prehistoric and historic-period resources, as well as prior cultural resource surveys and excavation reports.

In February 2025, historic-period aerial photographs and topographic maps were reviewed using the Nationwide Environmental Title Research (NETR) Online database. This review provided supplemental information regarding historical land use within and surrounding the project area.

An intensive pedestrian survey of the project site was conducted on January 20, 2025, by a qualified archaeologist. The survey was performed using linear transects spaced approximately 20 to 30 meters (65.6 to 98.4 feet) apart. The entire accessible area of the project site was inspected, with particular attention given to areas containing exposed native soils, rock outcrops, and rodent disturbances. All visible ground surfaces were carefully examined for the presence of prehistoric or historic-period artifacts, features, or other cultural deposits.

4.5.2.1 Natural Setting

This section summarizes the natural setting of the project site and its vicinity, including a general description of the climate and watershed, flora and fauna, and geology.

Climate and Watershed. The project region is characterized by a coastal climate, with mild summers and winters. Rainfall averages 24 inches annually. The project area is transected by two ephemeral drainages,[46] which drain to Benicia State Park in the east, where stormwater runoff converges and is directed to the Carquinez Strait.

Flora and Fauna. At an elevation of approximately 250 feet, the proposed project is just within the Lower Sonoran Life Zone of California , which ranges from below sea level to 3,500 feet. Monterey pine, coast live oak, poison oak, and other native species were noted on the property (particularly xeric grasses, oats, barley, and brome). Extensive fauna are known locally, including many endemic species of reptiles, birds, and insects.

The coastal environment of California hosted a rich variety of abundant floral and faunal resources that fostered a particularly dense Native American occupation of this region during prehistoric times, especially the coastal corridor within a day's "commuting" distance of fresh water.

Geology. Vallejo is within the Coast Ranges geomorphic province of California. The geological setting along the Coast Ranges is notably different between the East and West sides of the San Andreas

[46] A stream that has flowing water only during or for a short duration after precipitation events in a typical year.

fault. Vallejo lies to the east of the San Andreas fault, which is characterized by Mesozoic rocks of the Franciscan Complex, the Great Valley Sequence, and the Jurassic Coast Range ophiolite.

The boundaries of the proposed project are situated within the Upper Great Valley Sequence, which dates to the Late Cretaceous. The Upper Great Valley Sequence (Ku) consists of sandstone, siltstone, shale, and minor conglomerate.

4.5.2.2 Cultural Setting

This section summarizes the cultural setting of the project site and its vicinity, including a summary of the prehistory, ethnography, and general history of the project area.

Prehistory. Chronologies of prehistoric cultural change in the Northern California area have been attempted numerous times; however, no single description is universally accepted, as the various chronologies are based primarily on material developments identified by researchers familiar with sites in a particular region and variation exists essentially due to the differences in those items found at the sites. Small differences occur over time and space, which combine to form patterns that are variously interpreted. One of the regional chronologies commonly referenced in the archaeological literature is the Lower Archaic (10,000 to 6,000 A.D.), followed by the Initial Middle Archaic (6,000 to 4,500 BP), Terminal Middle Archaic (4,500 to 2,500 BP), Upper Archaic (2,500 to 1,300 BP) and, finally, the Emergent (1,200 to 200 BP).

Ethnography. The proposed project is within the traditional cultural territory of the Patwin. Tribal territories were somewhat fluid and changed over time. Like other Native American groups in Northern California, the Patwin were semi-nomadic hunter-gatherers who subsisted on seasonably available plant and animal resources. The first written accounts of Native American groups in California were by Spanish missionaries in the late 18th century. With the Spanish intrusion came a drastic change in lifestyle for the Native Americans of California. Incorporation of the indigenous populations into the mission system involved conflict, forced labor, and relocation along with decimation by European diseases, all of which led to the disruption of native cultures and changes in subsistence and land use practices. Cattle ranches/farms were established on or near ancestral Native American villages, primarily in the major drainages conducive to horticulture and animal husbandry. Water was diverted for irrigation and stock. Within a short time, the missions controlled many ranchos where Indians lived and worked.

History. In California, the historic era is generally divided into three periods: the Spanish Period (1769–1821), the Mexican Period (1821–1848), and the American Period (1848–present). Solano County was created from part of the Sonoma territory in 1850 by the first elected Legislature of the territory of California. Solano County is therefore one of the original 27 counties in California. General Vallejo, an instrumental figure in shaping Alta California, requested that this county was named after Chief Solano, a Suisun and Patwin leader who presided over this land prior to California's statehood. Seven of the 12 townships created during Solano County's early days have incorporated into cities. These include Benicia (1850 and 1851), Vallejo (1868), Suisun City (1856), Dixon (1878), Vacaville (1892), Rio Vista (1893), and Fairfield (1903).

Vallejo. The region that became Vallejo was first mapped by Spanish colonizers in 1775. However, this area remained largely unshaped by colonial influence until 1844, when General Vallejo received this area as a part of the larger Rancho Soscol land grant. General Vallejo donated land and funds for the construction of a capital city, named Vallejo, in the newly annexed state of California in 1851. Vallejo served as a temporary capitol until Benecia was formally recognized as the capital in 1853. Mare Island became the country's first permanent U.S. Naval station on the West Coast in September 1854. Vallejo formally incorporated in 1868 and experienced booms of growth reflecting periods of U.S. Naval growth during the Spanish-American War and World War I.

4.5.3 Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5? ***(Less Than Significant Impact, No New Impact)***

The project site is vacant and undeveloped and is covered primarily with non-native annual grassland and scattered mature trees. No buildings or structures are present within the project area in historic period aerial photos or as indicated on maps dating back to 1948.[47]

As discussed previously in Section 4.5.1, on September 6, 2024, a records search to identify previously recorded prehistoric and historic cultural resources and cultural resource surveys within one mile of the project area was conducted at the NWIC of the California Historical Resources Information System at Sonoma State University. According to the NWIC records search, no cultural resources were recorded within the project area, although eight historic age resources are documented within 0.5 mile. The nearest historic resources to the project site are within 0.25 mile of the project boundary.

Based on the background research conducted by LSA, it was determined that there are no known archaeological resources on the project site that would qualify as "historical resources" as defined under CEQA. Furthermore, as the project site is undeveloped and there are no existing structures at the project site to qualify as an "historical resource" as defined under CEQA. Therefore, the proposed project would have no impact associated with a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the *State CEQA Guidelines.* No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

A "substantial adverse change" to a historical resource, according to PRC Section 5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired." According to the NWIC records search, no cultural resources were recorded

[47] LSA Associates, Inc. (LSA). 2025. *Cultural Resources Assessment, Vista Cove Development Project, Vallejo, Solano County, California.* March.

within the project area, although eight historic age resources are documented within 0.5 mile. The nearest historic resources to the project site are within 0.25 mile of the project boundary.

An archaeological pedestrian field survey of the project site was conducted on January 20, 2025. During the field survey, archaeologists did not discover any cultural resources (including prehistoric or historic archaeological sites or historic-period buildings) on the project site or within the project site boundaries. The field survey indicated that there was light disturbance in some areas of the project site, where modern refuse was noted throughout the project area; however, overall visibility was generally limited by existing vegetation cover. No cultural resources were identified. Based on these results, the Cultural Resources Assessment determined that the project site has a low potential for in situ subsurface cultural resources due to the severe slopes and adjacent developments. The project would implement standard measures to address the potential to disturb subsurface archaeological resources consistent with the General Plan EIR mitigation measures to mitigate the impact to a level of less than significant. CEQA California Code of Regulations, Title 14, Chapter 3, Sections 15064.5 [e and f] require a lead agency to establish protocols for discovery of unknown archaeological resources. As such, the proposed project shall be required to implement **Project Specific Mitigation Measure CUL-1** as a standard requirement in accordance with State law.

Project Specific Mitigation Measure CUL-1

Unknown Discovery of Archaeological Resources. Should an archaeological deposit be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology contacted to assess the situation, determine if the deposit qualifies as a historical resource, consult with agencies as appropriate, and make recommendations for the treatment of the discovery.

If the deposit is found to be significant (i.e., eligible for listing in the California Register of Historical Resources), the project applicant shall be responsible for funding and implementing appropriate mitigation measures. Mitigation measures may include recording the archaeological deposit, data recovery and analysis, and public outreach regarding the scientific and cultural importance of the discovery. Upon completion of the selected mitigations, a report documenting methods, findings, and recommendations shall be prepared by the qualified archaeologist and submitted to the City of Vallejo for review, and the final report shall be submitted to the Northwest

Information Center at Sonoma State University. Significant archaeological materials shall be submitted to an appropriate local curation facility and used for future research and public interpretive displays, as appropriate.

Project Specific Mitigation Measure CUL-1 outlines procedures if archaeological resources are discovered during construction, such as work stoppage within 25 feet of the find, and a qualified archaeologist must evaluate the discovery. If the deposit is determined to be a significant historical resource, the project applicant must implement standard measures for the treatment of archaeological resources, which may include documentation, excavation, analysis, and public outreach. A final report will be submitted to the City and archived at the NWIC with significant materials curated for future research or public display. With the implementation of **Project Specific Mitigation Measure CUL-1,** the proposed project would not result in new significant or substantially greater impacts to previously undiscovered archaeological resources, as the resources would be avoided, recovered, and evaluated, as needed.

At the completion of project construction, the proposed project would not result in further disturbance of native soils on the project site and, therefore, project operations would have no potential to impact previously undiscovered archaeological resources.

Therefore, with implementation of **Project Specific Mitigation Measure CUL-1**, construction and operation of the proposed project would not result in a new significant or substantially more severe impact on cultural resources due to a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5 of the *State CEQA Guidelines*. Impacts would be less than significant with mitigation incorporated. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

*c. Would the project disturb any humans remains, including those interred outside of formal cemeteries? **(Less than Significant with Mitigation Incorporated, No New Impact)***

No human remains are documented/known to be on the project site. Furthermore, severe slopes and adjacent developments indicate that project site retains low potential for in situ subsurface cultural resources, as documented in **Appendix D**. Therefore, the likelihood of discovering unknown human remains during construction of the proposed project is low, which is consistent with its prior analysis in the General Plan EIR. However, there is still potential for unknown human remains to be discovered during construction activities, and impacts would be potentially significant if the project does not implement standard measures required by the Health and Safety Code section 7050.5 as summarized below.

In the unlikely event that human remains are discovered during construction activities, the Construction Contractor would be required to implement **Project Specific Mitigation Measure CUL-2**, which requires compliance with the State's Health and Safety Code for the treatment of human remains.

Project Specific Mitigation Measure CUL-2

Protocol for Human Remains Discovery. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State Public Resources Code (PRC) Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD), and the following provisions shall apply:

- The Medical Examiner shall immediately be notified, ground disturbing activities in that location shall cease within 25 feet of the discovery and the Tribe shall be allowed, pursuant to California PRC Section 5097.98(a) to inspect the site of the discovery and make determinations as to how the human remains and grave goods should be treated and disposed of with appropriate dignity.
- The Tribe shall complete its inspection and make its MLD recommendation within forty-eight (48) hours of getting access to the site. The Tribe shall have the final determination as to the disposition and treatment of human remains and grave goods. Said determination may include avoidance of the human remains, reburial on-site or reburial on tribal or other lands that will not be disturbed in the future.
- The Tribe may wish to rebury said remains and grave goods or ceremonial and cultural items on or near the site of their discovery, in an area which will not be subject to future disturbances over a prolonged period of time. Reburial of human remains shall be accomplished in compliance with California PRC Sections 5097.98(a) and (b). The term “human remains” encompasses more than human bones because the Tribe’s traditions call for the burial of associated cultural items with the deceased (funerary objects), and/or the ceremonial

burning of Native American human remains, funerary objects, grave goods, and animals. Ashes, soils, and other remnants of these burning ceremonies, as well as associated funerary objects and unassociated funerary objects buried with or found near the Native American remains are to be treated in the same manner as bones or bone fragments that remain intact.

- Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act (California Government Code Section 6250 et. seq). The Medical Examiner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r). The Tribe will require that the location for reburial is recorded with the California Historic Resources Inventory System (CHRIS) on a form that is acceptable to the CHRIS center. The Tribe may also suggest that the landowner enter into an agreement regarding the confidentiality of site information that will run with title on the property.
- Treatment of all cultural items, including ceremonial items and archaeological items will reflect the religious beliefs, customs, and practices of the Tribe. All cultural items, including ceremonial items and archaeological items, which may be found at a project site should be turned over to the Tribe for appropriate treatment, unless otherwise ordered by a court of agency of competent jurisdiction. The project applicant should waive any and all claims to ownership of Tribal ceremonial and cultural items, including archaeological items, which may be found on a project site in favor of the Tribe. If any intermediary (e.g., an archaeological retained by the project applicant) is necessary, said entity or individual shall not possess those items for longer than is reasonably necessary, as determined solely by the Tribe.

- If additional significant sites or sites not identified as significant in the environmental review process, but later determined to be significant are located within a project impact area, such sites will be subjected to further archaeological and cultural significance evaluation by the project applicant, Solano County and the Tribe to determine if additional mitigation measures are necessary to treat sites in a culturally appropriate manner consistent with CEQA requirements for mitigation of impacts to cultural resources. If there are human remains present that have been identified as Native American, all work will cease for a period of up to 30 days in accordance with Federal Law.

Project Specific Mitigation Measure CUL-2 outlines procedures to follow if Native American human remains are discovered during project development. If remains are found, ground-disturbing activities within 25 feet of the discovery area must immediately stop, and the County Coroner, Medical Examiner, and Tribe must be notified in accordance with State law. The NAHC would identify a Most Likely Descendant (MLD), and the Tribe, through the MLD, would have 48 hours to inspect the site and determine the appropriate dignified treatment of the remains and associated items. Treatment options may include avoidance, on-site reburial, or reburial on other lands that will not be disturbed in the future. All funerary objects, ceremonial items, and related materials—such as ashes and soil from burning ceremonies—must be treated as human remains, and the Tribe retains the right to manage their handling and final disposition, including requiring confidentiality of reburial locations. Any additional significant cultural sites identified during construction will require further evaluation and mitigation in consultation with Solano County and the Tribe, and work will pause for up to 30 days if Native American remains are present, in accordance with federal law. With implementation of **Project Specific Mitigation Measure CUL-2**, potential impacts to previously undiscovered human remains would be less than significant.

At the completion of project construction, the proposed project would not result in further disturbance of native soils on the project site and, therefore, project operations would have no potential to impact previously undiscovered human remains.

Therefore, with implementation of **Project Specific Mitigation Measure CUL-2**, construction and operation of the proposed project would have a less than significant impact on undiscovered human remains. Impacts would be less than significant with mitigation incorporated. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those impacts analyzed in the General Plan EIR.

4.6 ENERGY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	☐	☐	☒	☐	☒
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐	☒

4.6.1 Prior Environmental Analysis

Chapter 4.15 of the General Plan EIR analyzed impacts related to energy associated with build out of the General Plan, and determined that either no impact or less than significant impacts would occur due to compliance with existing energy standards including the California Code of Regulations Title 24, the City's Green Building Code, CALGreen Building Code requirements, the City's Climate Action Plan and GHG reduction measures, and other applicable State and local energy efficiency measures. No mitigation measures were prescribed. There are no General Plan goals, policies, or actions related to energy which would be applicable to the proposed project.

4.6.2 Background

Electricity and gas service is provided to the project site by Pacific Gas and Electric Company (PG&E). Energy demand is typically associated with day-to-day operations and fuel consumption associated with project construction. The proposed project would result in a small increase in demand for electricity and gasoline. The discussion and analysis provided below is based on data included in the California Emissions Estimator Model version 2022.1 (CalEEMod) output, which are included in **Appendix A**.

4.6.3 Impact Analysis

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation? ***(Less than Significant Impact, No New Impact)***

Construction-Period Energy Use. The proposed project would require grading, site preparation, and building activities during construction. Construction of the proposed project would require energy for the manufacture and transport of construction materials, preparation of the site for grading activities, and construction of the proposed residential development. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. In order to increase energy efficiency on the site during project construction, the idling times for construction vehicles would be restricted to 5 minutes or less and construction workers would be required to shut off idle equipment, as required by the Air District. In addition, construction activities are not anticipated to result in inefficient use of energy, as gasoline and diesel fuel would be supplied by construction contractors which would conserve the use of their supplies to minimize their costs on the project.

Energy usage on the project site during construction would be temporary in nature, and no unusual project characteristics would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or the State. Therefore, construction energy impacts would be less than significant.**Operational Energy Use.**Operational energy usage is typically associated with natural gas use, electricity consumption, and fuel used for vehicle trips. The proposed project would also result in diesel usage associated with the standby backup generator; however, the backup generator would operate for up to 50 hours annually, primarily for testing purposes. Therefore, use of the emergency backup generator is not expected to substantially increase diesel fuel usage and is not evaluated further. Electricity and natural gas consumption were estimated for the project using default energy intensities by land use type in CalEEMod. The 2022 Title 24 Building Energy Efficiency Standards (Title 24 Standards) contain energy efficiency requirements for newly constructed buildings, additions to existing buildings, and alterations to existing buildings. The Title 24 Standards establish performance metrics in the form of an "energy budget" based on energy consumption per square foot of floor space. For this reason, Title 24 Standards include both a prescriptive option, allowing builders to comply by using methods known to be efficient, and a performance option, allowing builders complete freedom in their designs provided the building achieves the same overall efficiency as an equivalent building using the prescriptive option. Reference appendices are adopted along with the Title 24 Standards containing data and various compliance tools to help builders achieve compliance.

In addition, the proposed project would result in energy usage associated with gasoline to fuel project-related trips. Based on the CalEEMod analysis, the proposed project would result in approximately 1,897,969 vehicle miles traveled (VMT) per year.[48] The average fuel economy for light-duty vehicles (autos, pickups, vans, and sport utility vehicles [SUVs]) in the United States has steadily increased from about 14.9 miles per gallon (mpg) in 1980 to 22.8 mpg in 2022, the year for which the most recent data is available.[49] The average fuel economy for heavy-duty trucks in the United States has also steadily increased, from 5.7 mpg in 2013 to a projected 8.0 mpg in 2021.[50] Therefore, using the United States Environmental Protection Agency (EPA) fuel economy estimates for 2020, the proposed project would result in the consumption of approximately 67,760 gallons of gasoline per year and 43,235 gallons of diesel fuel per year.

Electricity and natural usage estimates associated with the proposed project are shown in **Table 4.6.A**.

[48] To be conservative, LSA utilized default vehicle miles traveled in CalEEMod, which estimates trip lengths for vehicle trips traveling between home, work, shopping, and other locations (e.g., school, park, gym, etc.).

[49] United States Department of Transportation (USDOT). 2023. "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." Website: https://www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles (accessed March 26, 2025).

[50] California Energy Commission (CEC). 2015. Medium and Heavy-Duty Truck Prices and Fuel Economy 2013–2026. Website: efiling.energy.ca.gov/getdocument.aspx?tn=206180 (accessed March 26, 2025).

Table 4.6.A: Estimated Annual Energy Use of Proposed Project

Electricity Use (kWh/yr)	Natural Gas Use (therms/yr)	Gasoline (gal/yr)	Diesel (gal/yr)
434,811	14,839	67,760	43,235

Source: Compiled by LSA (March 2025).
gal/yr = gallons per year kWh/yr = kilowatt-hours per year therms/yr = therms per year

As shown in **Table 4.6.A**, the estimated potential increased electricity demand associated with the proposed project is 434,811 kilowatt-hours (kWh) per year. In 2022, California consumed approximately 287,826 gigawatt-hours (GWh), or 287,826,110,475 kWh.[51] Of this total, Solano County consumed 3,225 GWh, or 3,225,398,734 kWh.[52] Therefore, electricity demand associated with the proposed project would be less than 0.1 percent of Solano County's total electricity demand.

Additionally, as shown in **Table 4.6.A**, the estimated potential increase in natural gas demand associated with the proposed project is 14,839 therms per year. In 2022, California consumed approximately 11,171 million therms (11,710,641,194 therms).[53] Of this total, Solano County consumed 248 million therms (248,386,169 therms).[54] Therefore, natural gas demand associated with the proposed project would be less than 0.1 percent of Solano County's total natural gas demand.

In addition, the proposed project would result in energy usage associated with gasoline and diesel to fuel project-related trips. As shown above in **Table 4.6.A,** vehicle trips associated with the proposed project would consume approximately 67,760 gallons of gasoline per year and 43,235 gallons of diesel fuel per year. Based on fuel consumption obtained from CARB's EMission FACtor model (EMFAC2021), approximately 173.0 million gallons of gasoline and approximately 55.1 million gallons of diesel fuel will be consumed from vehicle trips in Solano County in 2025. Therefore, gasoline and diesel fuel demand generated by vehicle trips associated with the proposed project would be a minimal fraction of gasoline and diesel fuel consumption in Solano County. Fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

In addition, proposed new development would be constructed using energy-efficient modern building materials and construction practices, and the proposed project also would use new modern appliances and equipment, in accordance with the Appliance Efficiency Regulations (Title 20, California Code of Regulations [CCR] Sections 1601 through 1608). The expected energy

51 California Energy Commission (CEC). 2024a. Energy Consumption Data Management Service. Electricity Consumption by County. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed March 26, 2025).
52 Ibid.
53 California Energy Commission (CEC). 2024b. Energy Consumption Data Management Service. Gas Consumption by County. Website: https://ecdms.energy.ca.gov/gasbycounty.aspx (accessed March 26, 2025).
54 Ibid.

consumption during construction and operation of the proposed project would be consistent with typical usage rates for residential uses.

PG&E is the private utility that would supply the proposed project's electricity and natural gas services. In 2022, approximately 40 percent of PG&E's delivered electricity came from renewable sources, including solar, wind, geothermal, small hydroelectric, and various forms of bioenergy.[55] PG&E reached California's 2020 renewable energy goal in 2017 and is positioned to meet the State's 60 percent by 2030 renewable energy mandate set forth in Senate Bill (SB) 100. In addition, PG&E plans to continue to provide reliable service to its customers and upgrade its distribution systems as necessary to meet future demand.

Therefore, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency measures into building design, equipment use, and transportation. Construction and operation period impacts related to consumption of energy resources would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? ***(Less Than Significant Impact, No New Impact)***

In 2002, the State Legislature passed SB 1389, which required the California Energy Commission (CEC) to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and their infrastructure needs, and encouragement of urban designs that reduce VMT and accommodate pedestrian and bicycle access.

The most recently adopted CEC energy report is the *2024 Integrated Energy Policy Report Update*.[56] The *2024 Integrated Energy Policy Report Update* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the State is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs. The *2024 Integrated Energy Policy Report Update* covers a broad range of topics, including implementation of SB 350 (Clean Energy and Pollution Reduction Act of 2015), integrated resource planning, distributed energy resources, transportation electrification, solutions to increase resiliency in the electricity sector, energy efficiency barriers faced by disadvantaged communities, demand response, transmission and landscape-scale planning, the

[55] Pacific Gas & Electric (PG&E). 2023. *Exploring Clean Energy Solutions*. Website: https://www.pge.com/en/about/corporate-responsibility-and-sustainability/taking-responsibility/clean-energy-solutions.html (accessed March 5, 2025).

[56] California Energy Commission. 2024. *2024 Integrated Energy Policy Report Update.* Docket Number: 24-IEPR-01.

California Energy Demand Preliminary Forecast, the preliminary transportation energy demand forecast, renewable gas (in response to SB 1383), updates on Southern California electricity reliability, the natural gas outlook, and climate adaptation and resiliency.

As indicated above, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the State's available energy sources, and energy impacts would be negligible at the regional level. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the CEC *2024 Integrated Energy Policy Report Update*. Therefore, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and this impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

4.7 GEOLOGY AND SOILS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒	☒
ii. Strong seismic ground shaking?	☐	☐	☐	☒	☒
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒	☒
iv. Landslides?	☐	☒	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐	☒
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐	☒
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐	☒
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐	☒

4.7.1 Prior Environmental Analysis

Chapter 4.5 of the General Plan EIR analyzed the geological, seismic, and soil conditions within the city, and determined that build out of the General Plan would result in less than significant impacts related to geology and soils due to compliance with existing regulatory requirements including the California Building Code, City of Vallejo Municipal Code, and the Construction General Permit, and implementation of General Plan goals, policies, and actions. Chapter 4.4 of the General Plan EIR analyzed impacts to paleontological resources associated with build out of the General Plan, and determined adverse changes could occur to the significance of paleontological resources through future development due to the lack of specific implementing procedures. Therefore, the General Plan EIR prescribed **Mitigation Measure CULT-3**, which details procedures in the event that paleontological resources are encountered during future development. With implementation of **General Plan EIR Mitigation Measure CULT-3**, impacts on paleontological resources were considered reduced to less than significant.

Additionally, the General Plan includes the following goals, policies, and actions related to geology and soils which would be applicable to the proposed project:

- **Goal NBE-5: Hazard Protection**: Protect life and property from natural and human-made hazards.
    - **Policy NBE-5.3: Health and Safety Codes**. Enforce development regulations and building code requirements to protect residents, businesses, and employees from flooding, liquefaction, earthquakes, fires, and other hazards.
    - **Policy NBE-5.4: Project Location and Design**. Prohibit development in any area where it is determined that the potential risk from natural hazards cannot be mitigated to acceptable levels.
        - **Action NBE-5.4A**: Continue to require geotechnical studies for land use proposals to determine engineering measures that may be necessary to adequately mitigate any seismic, flooding, sea level rise, landslide, erosion, or related risk.
        - **Action NBE-5.4B**: Continue to require drainage and erosion control measures for landslide-prone or geologically hazardous hillside areas to minimize risks to downhill areas.

4.7.2 Background

Unless otherwise noted, the following analysis is based on the *Preliminary Geotechnical Exploration* prepared for the proposed project[57] and the peer review conducted as part of the environmental review process[58]. A copy of the Geotechnical Investigation and peer review are included in **Appendix E** of this Initial Study.

The project site is in a seismically active area, where earthquakes have the potential to subject the project to strong seismic ground shaking. There are no mapped faults within or adjacent to the project site, and the project site is not located within an Alquist-Priolo Zone.[59] As detailed in the *Preliminary Geotechnical Exploration* prepared for the proposed project, the soil materials encountered within the project site generally consist of clayey soil and bedrock that are not susceptible to liquefaction. As detailed in the *Preliminary Geotechnical Exploration* completed for the proposed project, the soil and bedrock at the site generally exhibit moderate to high shrink/swell potential with variations in moisture content.

57 ENGEO. 2022a. *Vallejo Properties – Vista Cove, Vallejo, California, Preliminary Geotechnical Exploration.* September 12.

58 Baseline Environmental Consulting. 2025. *Peer Review of Preliminary Geotechnical Exploration, Vista Cove Planned Development Project, Vallejo, California.* March 26.

59 California Department of Conservation, California Geologic Survey (DOC CGS). 2021. *Earthquake Zones of Required Investigation.* Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed March 5, 2025).

As detailed in the *Preliminary Geotechnical Exploration* prepared for the proposed project, geologic mapping shows a queried landslide area crossing through the site. Based on a review of published maps, interpretation of aerial photographs, and completion of subsurface exploration, six landslide areas were identified adjacent to or within the project site that have a relatively high likelihood of experiencing instability. The landslides at the site are classified as shallow soil creep/earthflows, shallow landslide deposits, and deep-seated bedrock landslides.

4.7.3 Impact Analysis

a. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. ***(No Impact, No New Impact)***

Fault rupture is generally expected to occur along active fault traces that have exhibited signs of recent geological movement (i.e., within the last 11,000 years). Alquist-Priolo Earthquake Fault Zones delineate areas around active faults with potential surface fault rupture hazards that would require specific geological investigations prior to approval of certain kinds of development within the delineated area. There are no mapped faults within or adjacent to the project site, and the project site is not located within an Alquist-Priolo Zone.[60] The nearest mapped fault to the project site is the Green Valley Fault, which is located approximately 5 miles northeast of the project site. Therefore, the project would not directly or indirectly cause substantial adverse effects related to fault rupture, and there would be no impact. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

ii. Strong seismic ground shaking? ***(No Impact, No New Impact)***

The project site is in a seismically active area, where earthquakes have the potential to subject the project to strong seismic ground shaking. The intensity of ground shaking would depend on the characteristics of the fault, distance from the fault, the earthquake's magnitude and duration, and site-specific geologic conditions.

The City requires projects to comply with the 2022 California Building Code (CBC) (Title 24, California Code of Regulations),[61] which provides stringent construction requirements on projects in areas of high seismic risk based on numerous interrelated factors. It is acknowledged that seismic hazards cannot be completely eliminated even with implementation of advanced building practices. However, the seismic design standards of the CBC are intended to prevent catastrophic structural

[60] California Department of Conservation, California Geologic Survey (DOC CGS). 2021. *Earthquake Zones of Required Investigation.* Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed March 5, 2025).

[61] Vallejo, City of. n.d.-c. *Vallejo, California – Municipal Code, Title 12 – Buildings and Construction, Chapter 12.48.010 – Existing Building Code Adoption.*

failure in the most severe earthquakes currently anticipated. Therefore, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic ground shaking, and there would be no impact. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

iii. Seismic-related ground failure, including liquefaction? ***(No Impact, No New Impact)***

Liquefaction. Soil liquefaction is a phenomenon primarily associated with saturated soil layers located close to the ground surface. During ground shaking, these soils lose strength and acquire "mobility" sufficient to permit both horizontal and vertical movements. The significant factors on which liquefaction potential of a soil deposit depends include, among others, soil type, relative soil density, intensity of earthquake, duration of ground shaking, and depth of ground water. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie relatively close to the ground surface. However, loose sands that contain a significant amount of fines (i.e., silt and clay) may also liquefy. As detailed in the *Preliminary Geotechnical Exploration* prepared for the proposed project, the soil materials encountered within the project site generally consist of clayey soil and bedrock that are not susceptible to liquefaction. Therefore, the project site would not be susceptible to liquefaction, and no impact would occur. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

iv. Landslides? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

A landslide generally occurs on relatively steep slopes and/or on slopes underlain by weak materials. Seismically induced landslides are triggered by earthquake ground shaking. The risk of this hazard is greatest in the late winter, when groundwater levels are highest and hillside colluvium is saturated. As detailed in the *Preliminary Geotechnical Exploration* prepared for the proposed project, geologic mapping shows a queried landslide area crossing through the site. Based on a review of published maps, interpretation of aerial photographs, and completion of subsurface exploration, six landslide areas were identified adjacent to or within the project site that have a relatively high likelihood of experiencing instability. The landslides at the site are classified as shallow soil creep/earthflows, shallow landslide deposits, and deep-seated bedrock landslides. The *Preliminary Geotechnical Exploration* includes conceptual mitigation measures for each landslide area and recommends a design-level geotechnical review be completed prior to issuing the plans for construction.

Project Specific Mitigation Measure GEO-1	**Design-Level Geotechnical Review.** A licensed Geotechnical Engineer or their representative shall be retained to perform a design-level geotechnical investigation once site development plans are final. The design-level geotechnical investigation shall include further evaluation of potential geologic hazards related to landslides, stability of graded slopes, corrective grading for planned building sites, and the presence of moderate to highly expansive soil and bedrock. The design-level investigation

findings shall be used to address all the geotechnical concerns described in the Preliminary Geotechnical Exploration and to develop detailed recommendations for design and construction. The recommendations of the Preliminary Geotechnical Exploration and any recommendations included in the required design-level geotechnical investigation for the project shall be incorporated into all design and engineering plans. At the end of construction, the Geotechnical Engineer shall provide a letter regarding contractor compliance with project plans and specifications and with the recommendations of the Geotechnical Investigation and any supplemental recommendations issued during construction. The letter shall be submitted for review to the City of Vallejo Building Division and confirmed prior to issuance of a certificate of occupancy.

Implementation of **Project Specific Mitigation Measure GEO-1**, which requires the project sponsor to incorporate all of the recommendations of the Geotechnical Investigation and any recommendations included in a design-level geotechnical investigation into the project development plans, would reduce the potential impacts related to landslides to a less than significant level. This is a standard measure applicable to projects located within areas that are subject to seismic activity and related hazard areas, to ensure that the most stringent building standards are implemented. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Would the project result in substantial soil erosion or the loss of topsoil? ***(Less Than Significant Impact, No New Impact)***

Topsoil is defined as the upper part of the soil profile that is relatively rich in humus and is technically known as the A-horizon of the soil profile.[62] Grading and earthmoving during project construction has the potential to result in erosion and loss of topsoil. Exposed soils could be entrained in stormwater runoff and transported off the project site. However, this impact would be less than significant through compliance with the regulatory requirements detailed in Section 4.10, Hydrology and Water Quality, which include the preparation of a Stormwater Pollution Prevention Plan (SWPPP). Although designed primarily to protect stormwater quality, the SWPPP would incorporate Best Management Practices (BMPs) to minimize impacts related to erosion to a less than significant level. Additional details regarding the SWPPP are provided in Section 4.10, Hydrology and Water Quality of this Initial Study. No new impacts or substantially more severe

[62] California State Mining and Geology Board. 2014. Surface Mining Reclamation Act Regulations. California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1.

significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

As discussed in Section 4.7.a, site soils would not be subject to liquefaction and impacts related to landslides would be reduced to a less than significant level with the implementation of **Project Specific Mitigation Measure GEO-1.**

Lateral Spreading. Lateral spreading is a form of horizontal displacement of soil toward an open channel or other "free" face, such as an excavation boundary. In a lateral spread failure, a layer of ground at the surface is carried on an underlying layer of liquefied material over a nearly flat surface toward a river channel or other bank. The lateral spreading hazard tends to mirror the liquefaction hazard for a site. Because the project site is not susceptible to liquefaction, the potential for seismically induced lateral spreading is low. Therefore, the project site would not be susceptible to lateral spreading, and no impact would occur.

Subsidence. Subsidence can result from the removal of subsurface water, resulting in either gradual depression or catastrophic collapse of the ground surface. As detailed in the *Preliminary Geotechnical Exploration* completed for the proposed project, no groundwater was encountered within the test pits, trench, and borings completed as part of the exploration. However, fluctuations in groundwater levels occur seasonally and over a period of years due to variations in precipitation, temperature, irrigation, and other factors. Therefore, dewatering may be required in isolated areas of the project site during construction. Construction-related dewatering would not be expected to result in subsidence or soil collapse as the dewatering activities would be temporary, localized, and affect only the uppermost water-bearing zone. Therefore, subsidence would not occur and there would be no impact.

Unstable Soils and Collapse. As detailed in the *Preliminary Geotechnical Exploration* completed for the proposed project, soils on site generally consist of colluvial soil overlaying mudstone bedrock interbedded with indurated sandstone, shale, siltstone, and claystone or colluvial deposits overlaying weak to very weak interbedded sandstone, siltstone, and mudstone. Colluvial deposits that include soft or compressible materials over bedrock have the potential for settlement due to building loads or engineered fill loads. To minimize settlement, the *Preliminary Geotechnical Exploration* recommends corrective grading measure including the removal of compressible materials down to a hard material/bedrock. Colluvial soil on steeper slopes is also subject to soil creep, which is the slow downslope movement of soil that occurs with the annual cycle of wetting and drying under the influence of gravity. To minimize soil creep, the *Preliminary Geotechnical Exploration* recommends benching through surficial soil during fill placement or designing drilled pier foundation systems to accommodate lateral loads from soil creep.

Due to the steep slopes at the project site, the *Preliminary Geotechnical Exploration* also includes corrective grading recommendations to ensure the stability of graded slopes, including removal of

compressible colluvium, excavation of buttress keyways, cut and cut-fill lot excavation, differential fill excavation, and construction of subsurface drainage facilities.

Implementation of **Project Specific Mitigation Measure GEO-1**, which requires the project sponsor to incorporate all of the recommendations of the Geotechnical Investigation and any recommendations included in a design-level geotechnical investigation into the project development plans, would reduce the potential impacts related to unstable soils and collapse to a less than significant level with mitigation. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

Expansive soils are characterized by the potential for shrinking and swelling as the moisture content of the soil decreases and increases, respectively. Shrink-swell potential is influenced by the amount and type of clay minerals present and can be measured by the percent change of the soil volume. As detailed in the *Preliminary Geotechnical Exploration* completed for the proposed project, the soil and bedrock at the site generally exhibit moderate to high shrink/swell potential with variations in moisture content. The *Preliminary Geotechnical Exploration* includes preliminary earthwork, foundation, and retaining wall recommendations to prevent potential impacts related to expansive soil and recommends a design-level geotechnical review be completed prior to issuing the plans for construction.

Implementation of **Project Specific Mitigation Measure GEO-1**, which requires the project sponsor to incorporate all of the recommendations of the Geotechnical Investigation and any recommendations included in a design-level geotechnical investigation into the project development plans, would reduce the potential impacts related to expansive soil to a less than significant level with mitigation. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? ***(No Impact, No New Impact)***

Development of the proposed project would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, the proposed project would have no impact related to septic tanks or alternative wastewater disposal systems. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

There are no known paleontological resources or unique geologic features within or near the project site. However, according to a search of the University of California Museum of Paleontology (UCMP) at the University of California, Berkeley, there are 296 known localities that have produced 1,699 specimens within Solano County.[63] Therefore, the possibility of accidental discovery of paleontological resources during project construction cannot be discounted. Implementation of **Project Specific Mitigation Measure GEO-2**, described below, would reduce potential impacts to paleontological resources to a less than significant level. This is a standard accidental-discovery measure required of most construction projects that include soil excavation throughout the Bay Area and the State. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Project Specific Mitigation Measure GEO-2

Discovery of Paleontological Resources. Should paleontological resources be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. For purposes of this mitigation, a "qualified paleontologist" shall be an individual with the following qualifications: (1) a graduate degree in paleontology or geology and/or a person with a demonstrated publication record in peer-reviewed paleontological journals; (2) at least 2 years of professional experience related to paleontology; (3) proficiency in recognizing fossils in the field and determining their significance; (4) expertise in local geology, stratigraphy, and biostratigraphy; and (5) experience collecting vertebrate fossils in the field. If the paleontological resources are found to be significant and project activities cannot avoid them, measures shall be implemented to ensure that the project does not cause a substantial adverse change in the significance of the paleontological resource. Measures may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Upon completion of the assessment, a report

[63] University of California Museum of Paleontology (UCMP). *Databases.* Website: https://ucmp.berkeley.edu/collections/databases/ (accessed March 5, 2025).

documenting methods, findings, and recommendations shall be prepared and submitted to the City of Vallejo for review. If paleontological materials are recovered, this report also shall be submitted to a paleontological repository, such as the University of California Museum of Paleontology, along with significant paleontological materials. Public educational outreach may also be appropriate.

The project sponsor shall inform its contractor(s) of the sensitivity of the project site for paleontological resources and shall verify that the following directive has been included in the project grading plans:

"The subsurface of the construction site may be sensitive for fossils. If fossils are encountered during project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials. Fossils can include plants and animals, and such trace fossil evidence of past life as tracks or plant imprints. Ancient marine sediments may contain invertebrate fossils such as snails, clam and oyster shells, sponges, and protozoa; and vertebrate fossils such as fish, whale, and sea lion bones. Contractor acknowledges and understands that excavation or removal of paleontological material is prohibited by law and constitutes a misdemeanor under California Public Resources Code, Section 5097.5."

4.8 GREENHOUSE GAS EMISSIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐	☒
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐	☒

4.8.1 Prior Environmental Analysis

Chapter 4.6 of the General Plan EIR analyzed impacts related to greenhouse gas (GHG) emissions associated with build out of the General Plan. The General Plan EIR determined that while implementation of the General Plan supports progress toward the long term-goals identified in Executive Order B-30-15 and Executive Order S-03-05, it cannot yet be demonstrated that the City will achieve GHG emissions reductions that are consistent with a 60 percent reduction below 1990 levels by the year 2040 based on existing technologies and currently adopted policies and programs. The General Plan EIR prescribed **Mitigation Measure GHG-1**, which requires the City to update its Climate Action Plan (CAP) to address the GHG reduction goals of Executive Order B-30-15 for GHG sectors that the City has direct or indirect jurisdictional control over. However, the General Plan EIR determined that even with implementation of **General Plan EIR Mitigation Measure GHG-1**, GHG impacts would be significant and unavoidable.

In addition, the General Plan EIR evaluated consistency with the California Air Resources Board (CARB) Scoping Plan, Plan Bay Area, and the Vallejo CAP. The General Plan EIR found that while the General Plan would be consistent with the regional objectives of Plan Bay Area and the City's CAP and the policies and programs in the General Plan would ensure substantial progress toward the long-term GHG reductions goals for 2050, additional State and federal measures are necessary to achieve the more aggressive targets established for 2050 in Executive Order S-03-05. Therefore, the General Plan EIR identified **Mitigation Measure GHG-2**, which requires implementation of **General Plan EIR Mitigation Measure GHG-1**. However, the General Plan EIR found that impacts would be significant and unavoidable, even with implementation of identified mitigation measures.

4.8.2 Background

GHGs are present in the atmosphere naturally, are released by natural sources, or are formed from secondary reactions taking place in the atmosphere. The gases that are widely seen as the principal contributors to human-induced global climate change are:

- Carbon dioxide (CO_2);
- Methane (CH_4);
- Nitrous oxide (N_2O);
- Hydrofluorocarbons (HFCs);

- Perfluorocarbons (PFCs); and
- Sulfur hexafluoride (SF_6).

Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, believed to be causing global warming. While man-made GHGs include naturally occurring GHGs such as CO_2, methane, and N_2O, some gases, like HFCs, PFCs, and SF_6, are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of global warming potential (GWP), a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

4.8.3 Impact Analysis

a. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? ***(Potentially Significant Impact, No New Impact)***

This section describes the proposed project's construction- and operation-related GHG emissions and contribution to global climate change. The Air District did not address emission thresholds for construction in its CEQA Guidelines; however, the Air District encourages quantification and disclosure. The General Plan EIR included a quantitative analysis of GHG emissions associated with operational activities from build out of the General Plan. As the proposed project is consistent with the build out assumed in the General Plan EIR and the Addendum to the General Plan EIR for the 2023-2031 Housing Element Update[64] (Housing Element Addendum), the proposed project's anticipated GHG emissions associated with project operation were included in the GHG emissions analysis contained in the General Plan EIR. As such, the following section describes potential impacts associated with GHG emissions that could occur if the construction and operation of the proposed project would result in a new significant or substantially greater impact than the impacts identified in the City's General Plan EIR and Housing Element Addendum.

Construction GHG Emissions. Construction activities associated with the proposed project would produce combustion emissions from various sources. During construction, GHGs would be emitted

[64] Vallejo, City of. 2024. *Addendum to the General Plan EIR 2023-2031 Housing Element Update*. State Clearinghouse No. 2014112035. December 6.

through the operation of construction equipment and from worker and builder supply vendor vehicles, which typically use fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change. GHG emissions generated during construction of the proposed project would be short term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions.

As discussed in Section 4.3, Air Quality, construction emissions were estimated for the proposed project using CalEEMod, consistent with the Air District's recommendations. As included in the CalEEMod modeling, construction of the proposed project is anticipated to begin in June 2026 and would occur over an approximately 1-year period. It is anticipated that 58,700 cubic yards of soil would be cut, and 59,300 cubic yards would be used for fill, resulting in a total soil import of 600 cubic yards, which was included in CalEEMod. This analysis utilizes the default construction equipment list and assumes use of Tier 2 construction equipment for all phases of project construction. CalEEMod output sheets are included in **Appendix A**.

Using CalEEMod, it is estimated that the construction of the proposed project would generate approximately 306.0 metric tons (MT) CO_2e during construction of the project. Implementation of the Air District's Basic BMPs, as required by **General Plan EIR Mitigation Measure AQ-2b.1**, would reduce GHG emissions by reducing the amount of construction vehicle idling and by requiring the use of properly maintained equipment. This measure is implemented by the City and the Air District to ensure that GHG emissions would be less than significant. In addition, construction activities would be minimal and GHG emissions generated during construction of the proposed project would be short term in nature, lasting only for the duration of the construction period. The General Plan EIR did not quantify construction-related GHG emissions; however, since GHG emissions associated with construction activities would not represent a long-term source of GHG emissions and would cease once construction is completed, project construction impacts associated with GHG emissions would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Operational GHG Emissions. Long-term GHG emissions associated with the proposed project would typically be generated from mobile sources (e.g., vehicle trips), area sources (e.g., maintenance activities and landscaping), indirect emissions from sources associated with energy consumption, waste sources (land filling and waste disposal), and water sources (water supply and conveyance, treatment, and distribution). Mobile-source GHG emissions would include project-generated vehicle trips to and from the project site. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions would be generated at off-site utility providers from increased electricity demand generated by the proposed project. Waste source emissions generated by the proposed project include energy generated by transporting and managing project generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

The General Plan EIR found that operational GHG emissions associated with development facilitated by the General Plan would result in 2.6 MT CO_2e per service population per year, above the plan-level efficiency target of 2.5 MT CO_2e per service population per year identified in the General Plan EIR, which was found to be a significant and unavoidable impact. As such, for the purpose of this analysis, the proposed project is compared to the GHG efficiency target of 2.5 MT CO_2e per service population.

Consistent with the General Plan EIR, GHG emissions were estimated using CalEEMod. **Table 4.8.A** shows the calculated GHG emissions for the proposed project. As discussed in Section 4.3, Air Quality, trip generation rates for the project were based on the project's trip generation estimates of approximately 481 average daily trips. In addition, the proposed project would have a standby diesel backup generator. Therefore, this analysis conservatively assumes that there would be a 500-horsepower diesel generator that would run up to 50 hours annually. Where project-specific data were not available, default assumptions (e.g., electricity usage, water usage, and solid waste generation) from CalEEMod were used to estimate project emissions. CalEEMod output sheets are included in **Appendix A**.

Table 4.8.A: Project Greenhouse Gas Emissions

Emissions Source Category	Operational Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	CO_2e
Mobile	664.0	<0.1	<0.1	675.0
Area	1.5	<0.1	<0.1	1.5
Energy	119.0	<0.1	<0.1	119.6
Water	2.7	0.1	<0.1	4.6
Waste	3.1	0.3	0.0	10.8
Stationary	9.5	<0.1	<0.1	9.6
Total Operational Emissions				**811.9**
Total Annual Service Population Emissions (Metric Tons/Year/Service Population)				**5.7**

Source: Compiled by LSA (September 2025).
CH_4 = methane
CO_2 = carbon dioxide
CO_2e = carbon dioxide equivalents
N_2O = nitrous oxide

As shown in **Table 4.8.A**, the proposed project would generate approximately 811.9 metric tons of CO_2e. As discussed in Section 4.14, Population and Housing, the proposed project would result in approximately 143 residents on the project site. Therefore, the total service population (residents plus employees) would be 143 people. As such, the proposed project's GHG emissions would result in a GHG efficiency of 5.7 metric tons CO_2e per service population, which would exceed the plan-level efficiency target of 2.5 MT CO_2e per service population per year identified in the General Plan EIR. As such, similar to build out under the General Plan, the proposed project would not achieve the GHG efficiency metric for the year 2040.

The project site was identified as a housing opportunity site in the General Plan EIR. As discussed in the Project Description, the General Plan designates the project site as R-MH and R-SF. The maximum permitted residential density in the R-MH designation is 25 dwelling units per acre, and

nine dwelling units per acre in the R-SF designation; however, in single-family areas where accessory dwelling units are allowed, maximum permitted residential density is 12 dwelling units per acre. To facilitate development of the project as proposed, the project site would be rezoned as PD and would result in 51 new residential units. As such, the proposed project would introduce fewer residential uses and a lower density than previously assumed in the General Plan EIR. Therefore, while the proposed project's GHG emissions per service population are higher than the service population emissions identified in the General Plan EIR, it is assumed that the proposed project would result in fewer total project operational emissions than were previously assumed for the project site in the General Plan EIR.

Further, the Housing Element sites inventory identifies 51 dwelling units on the project site. The Housing Element Addendum did not quantify GHG emissions associated with the Housing Element Update but found that GHG emissions associated with the Housing Element would be significant and unavoidable but would not exceed the significant and unavoidable impacts evaluated in the General Plan EIR. Therefore, since the proposed project would be consistent with the uses assumed in the Housing Element Addendum, the proposed project would contribute to the significant and unavoidable impacts identified in the General Plan EIR and Housing Element Addendum. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR and Housing Element Addendum.

b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? ***(Potentially Significant Impact, No New Impact)***

Applicable plans adopted for the purpose of reducing GHG emissions include the 2022 Scoping Plan, Plan Bay Area, and the City's CAP. As such, the proposed project was evaluated for consistency with those plans to demonstrate whether the proposed project would conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the GHG emissions.

Scoping Plan. The following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan, Executive Order (EO) B-30-15, Senate Bill (SB) 32, and Assembly Bill (AB) 197.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. The CARB released a second update to the Scoping Plan, the 2017 Scoping Plan, to reflect the 2030 target set by EO B-30-15 and codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps the State on the path toward achieving the 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197 provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by the CARB was posted in December 2016.

The 2022 Scoping Plan assesses progress toward the statutory 2030 target while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural

and working lands, and others, and is designed to meet the State's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California will be zero-emission by 2035, and all other fleets will have transitioned to zero-emission as fully possible by 2045, which will reduce the percentage of fossil fuel combustion vehicles.

As identified above, the 2022 Scoping Plan contains GHG reduction measures that work towards reducing GHG emissions, consistent with the targets set by EO B-30-15 and codified by SB 32 and AB 197. The measures applicable to the proposed project include energy efficiency measures, water conservation and efficiency measures, and transportation and motor vehicle measures, as qualitatively discussed below.

Energy Measures. Energy-efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. The proposed project would comply with current California Energy Code and CALGreen standards. However, the proposed project would not be all-electric and would include natural gas. The elimination of natural gas in new development would help projects implement their "fair share" of achieving long-term 2045 carbon neutrality consistent State goals. As such, if a project does not utilize natural gas, a lead agency can conclude that it would be consistent with achieving the 2045 neutrality goal and will not have a cumulative considerable impact on climate change. Therefore, since the proposed project would include natural gas, and the proposed project would not be consistent with the applicable energy measures.

Water Conservation and Efficiency Measures. Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. As identified above, the proposed project would comply with current CALGreen Code standards, which include a variety of different measures, including reduction of wastewater and water use. In addition, the proposed project would be required to comply with the California Model Water Efficient Landscape Ordinance. Therefore, the proposed project would comply with applicable water conservation and efficiency measures.

Transportation and Motor Vehicle Measures. The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. The second phase of Pavley standards will reduce GHG emissions from new cars by 34 percent from 2016 levels by 2025, resulting in a 3 percent decrease in average vehicle emissions for all vehicles by 2020. The majority of vehicles traveling to the project site would comply with the Pavley II (LEV III) Advanced Clean Cars Program. Therefore, the proposed project would comply with applicable transportation and motor vehicle measures.

The proposed project would result in the subdivision of the 20.13-acre site, of which approximately 10 acres would be developed, while the remaining acreage would not be developed and would remain as private open space. The residential portion of the proposed project would include 51 residential lots, open space, and related infrastructure improvements. The project site is located within walking or bicycling distance from the surrounding adjacent residential, recreational, and public and semi-public uses, as described in Section 2.1.4, Surrounding Land Uses. Additionally, the project site is served by SolTrans Routes 3 and 8, with the transit stops located approximately 0.5 mile to the west along Glen Cove Parkway. The Amtrak station in Vallejo is approximately 4 miles northwest of the project site, and the Vallejo Ferry Terminal, which offers ferry service between Vallejo and San Francisco, is approximately 3.5 miles northwest of the project site. Therefore, the project would support the ability of residents and visitors to use alternative modes of transportation.

In addition, the 2022 Scoping Plan includes key project attributes that reduce operational GHG emissions in Appendix D, Local Actions,[65] of the 2022 Scoping Plan. A summary of the proposed project's consistency with the 2022 Scoping Plan's key project attributes identified in Appendix D of the 2022 Scoping Plan is shown in **Table 4.8.B.**

Plan Bay Area. As described above, Plan Bay Area 2050 is a State-mandated, integrated long-range transportation and land use plan. Plan Bay Area 2050 includes 11 goals and 35 performance targets covering four broad areas: housing, economic, transportation, and environmental. These targets enable the plan to be evaluated by its performance in areas identified as key regional concerns, including equitable access, economic vitality, and transportation system effectiveness. **Table 4.8.C** includes an evaluation of the proposed project's consistency with Plan Bay Area 2050 goals and performance targets.

[65] California Air Resources Board (CARB). 2022. *2022 Scoping Plan, Appendix D Local Actions.* November. Website: https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf (accessed February 2024).

Table 4.8.B: Project Consistency with 2022 Scoping Plan Key Project Attributes

Priority Areas	Key Project Attribute	Project Consistency
Transportation Electrification	Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard in the California Green Building Standards Code at the time of project approval.	***Consistent.*** The proposed project would provide electric vehicle charging capabilities that meet the requirements of the latest version of CALGreen. As such, the proposed project would be consistent with this key project attribute.
VMT Reduction	Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).	***Consistent.*** The project site is located in an urban area in Vallejo and is generally surrounded by residential, recreational, and open space uses. In addition, the project site is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer). The proposed project would be consistent with this key project attribute.
	Does not result in the loss or conversion of natural and working lands.	***Consistent.*** The City of Vallejo General Plan 2040 designates the project site as Mix of Housing Types (R-MH) and Primarily Single Family (R-SF). The project site consists of undeveloped grassland with scattered mature trees with no existing development or improvements. The project site is classified as "Grazing Land" and "Urban and Built-Up Land" by the California Department of Conservation (DOC). The proposed project does not consist of natural or working lands; therefore, the proposed project would be consistent with this key project attribute.
	Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre) or is in proximity to existing transit stops (within 0.50 mile) or satisfies more detailed and stringent criteria specified in the region's SCS.	***Consistent.*** The proposed project would result in the development of a residential subdivision on the project site. The proposed project would result in the subdivision of the 20.13-acre site, of which approximately 10 acres would be developed, while the remaining acreage would remain undeveloped as private hillside area and open space. The residential portion of the proposed project would include 51 residential lots, open space, and related infrastructure improvements. The project site is located within walking or bicycling distance from the surrounding residential, recreational, and public and semi-public uses. Additionally, the project site is served by SolTrans Routes 3 and 8, with the transit stops located approximately 0.5 mile to the west along Glen Cove Parkway. The Amtrak station in Vallejo is approximately 4 miles northwest of the project site, and the Vallejo Ferry Terminal, which offers ferry service between Vallejo and San Francisco, is approximately 3.5 miles northwest of the project site. Therefore, the project would support the ability of residents and visitors to use alternative modes of transportation, consistent with the intent of this key attribute.

Table 4.8.B: Project Consistency with 2022 Scoping Plan Key Project Attributes

Priority Areas	Key Project Attribute	Project Consistency
	Reduces parking requirements by: eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or providing residential parking supply at a ratio of less than one parking space per dwelling unit; or for multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.	***Consistent.*** The proposed project would provide 102 covered garage spaces (2 per unit), 102 driveway stalls (2 per unit), 24 on-street stalls, and 1 mailbox parking stall, for a total of 229 parking spaces. However, as discussed above, the project would support the ability of residents and visitors to use alternative modes of transportation, consistent with the intent of this key attribute.
	At least 20 percent of units included are affordable to lower-income residents.	***Not Consistent.*** The proposed project would not include affordable units.
	Results in no net loss of existing affordable units .	***Consistent.*** The proposed project would not result in a net loss of existing affordable units. The proposed project would provide 51 dwelling units to comply with the Housing Element sites inventory which identifies 51 dwelling units on the project site and the project would be consistent with this key project attribute.
Building Decarbonization	Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking	***Not Consistent.*** The proposed project would not be all-electric.

Source: Compiled by LSA (September 2025).
CALGreen Code = California Green Building Standards Code
EV = electric vehicle
GHG = greenhouse gas
SB = Senate Bill
SCS = Sustainable Communities Strategy
TDM = Transportation Demand Management
VMT = vehicle miles traveled

Table 4.8.C: Project Consistency with Plan Bay Area 2050

Goal	Target	Project Consistency
Housing Strategies		
Protect and Preserve Affordable Housing	**H1. Further strengthen renter protections beyond state law.** Building upon recent tenant protection laws, limit annual rent increases to the rate of inflation, while exempting units less than 10 years old.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not apply to the project.
	H2. Preserve existing affordable housing. Acquire homes currently affordable to low and middle-income residents for preservation as permanently deed-restricted affordable housing.	***Not Applicable.*** The project site does not include any existing affordable housing.
Spur Housing Production for Residents of All Income Levels	**H3. Allow a greater mix of housing densities and types in Growth Geographies.** Allow a variety of housing types at a range of densities to be built in Priority Development Areas, select Transit-Rich Areas and select High-Resource Areas.	***Consistent.*** The proposed project would result in the subdivision of the 20.13-acre site, of which approximately 10 acres would be developed, while the remaining acreage would remain as private open space. The residential portion of the proposed project would include 51 residential lots, open space, and related infrastructure improvements. The project site is located within walking or bicycling distance from the surrounding residential, recreational, and public and semi-public uses. Additionally, the project site is served by SolTrans Routes 3 and 8, with the transit stops located approximately 0.5 mile to the west along Glen Cove Parkway. The Amtrak station in Vallejo is approximately 4 miles northwest of the project site, and the Vallejo Ferry Terminal, which offers ferry service between Vallejo and San Francisco, is approximately 3.5 miles northwest of the project site. Therefore, the project would support the ability of residents and visitors to use alternative modes of transportation. As such, the proposed project would not conflict with the Air District's initiatives to increase the use of alternative means of transportation, consistent with the intent of this measure.
	H4. Build adequate affordable housing to ensure homes for all. Construct enough deed-restricted affordable homes to fill the existing gap in housing for the unhoused community and to meet the needs of low-income households.	***Not Consistent.*** The proposed project would not include affordable units; however, the proposed project would help to address the California housing shortage and would increase the number of residences available to bay area residents. Through increasing housing opportunities, the proposed project would be consistent with State and regional goals to advance the availability of fair housing.

Table 4.8.C: Project Consistency with Plan Bay Area 2050

Goal	Target	Project Consistency
	H5. Integrate affordable housing into all major housing projects. Require a baseline of 10-20% of new market-rate housing developments of five units or more to be affordable to low-income households.	***Not Consistent.*** As discussed above, the proposed project would not include affordable units; however, the proposed project would help to address the California housing shortage and would increase the number of residences available to bay area residents. Through increasing housing opportunities, the proposed project would be consistent with State and regional goals to advance the availability of fair housing.
	H6. Transform aging malls and office parks into neighborhoods. Permit and promote the reuse of shopping malls and office parks with limited commercial viability as neighborhoods with housing for residents at all income levels.	***Not Applicable.*** The project site does not include an existing mall or office parks.
Create Inclusive Communities	**H7. Provide targeted mortgage, rental and small business assistance to Equity Priority Communities.** Provide assistance to low-income communities and communities of color to address the legacy of exclusion and predatory lending, while helping to grow locally owned businesses.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
	H8. Accelerate reuse of public and community-owned land for mixed-income housing and essential services. Help public agencies, community land trusts and other non-profit landowners accelerate the development of mixed-income affordable housing.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
Economic Strategies		
Improve Economic Mobility	**EC1. Implement a statewide universal basic income.** Provide an average $500 per month payment to all Bay Area households to improve family stability, promote economic mobility and increase consumer spending.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
	EC2. Expand job training and incubator programs. Fund assistance programs for establishing new businesses, as well as job training programs, primarily in historically disinvested communities.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
	EC3. Invest in high-speed internet in underserved low-income communities. Provide direct subsidies and construct public infrastructure to ensure all communities have affordable access to high-speed internet.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.

Table 4.8.C: Project Consistency with Plan Bay Area 2050

Goal	Target	Project Consistency
Shift the Location of Jobs	**EC4. Allow greater commercial densities in Growth Geographies.** Allow greater densities for new commercial development in select Priority Development Areas and Transit-Rich Areas to encourage more jobs to locate near public transit.	***Not Applicable.*** The proposed project would not include new commercial development; therefore, this measure would not be applicable to the project.
	EC5. Provide incentives to employers to shift jobs to housing-rich areas well served by transit. Provide subsidies to encourage employers to relocate off ices to housing-rich areas near regional rail stations.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
	EC6. Retain and invest in key industrial lands. Implement local land use policies to protect key industrial lands, identified as Priority Production Areas, while funding key infrastructure improvements in these areas.	***Not Applicable.*** The proposed project would not include new industrial development; therefore, this measure would not be applicable to the project.
Transportation Strategies		
Maintain and Optimize the Existing System	**T1. Restore, operate and maintain the existing system.** Commit to operate and maintain the Bay Area's roads and transit infrastructure while reversing pandemic-related cuts to total transit service hours.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
	T2. Support community-led transportation enhancements in Equity Priority Communities. Provide direct funding to historically marginalized communities for locally identified transportation needs.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
	T3. Enable a seamless mobility experience. Eliminate barriers to multi-operator transit trips by streamlining fare payment and trip planning while requiring schedule coordination at timed transfer hubs.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
	T4. Reform regional transit fare policy. Streamline fare payment and replace existing operator- specific discounted fare programs with an integrated fare structure across all transit operators.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
	T5. Implement per-mile tolling on congested freeways with transit alternatives. Apply a per-mile charge on auto travel on select congested freeway corridors where transit alternatives exist, with discounts for carpoolers, low-income residents, and off-peak travel; and reinvest excess revenues into transit alternatives in the corridor.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
	T6. Improve interchanges and address highway bottlenecks. Rebuild interchanges and widen key highway bottlenecks to achieve short- to medium-term congestion relief.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.

Table 4.8.C: Project Consistency with Plan Bay Area 2050

Goal	Target	Project Consistency
	T7. Advance other regional programs and local priorities. Fund regional programs like motorist aid and 511 while supporting local transportation investments on arterials and local streets.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
Create Healthy and Safe Streets	**T8. Build a Complete Streets network.** Enhance streets to promote walking, biking and other micro-mobility through sidewalk improvements, car-free slow streets, and 10,000 miles of bike lanes or multi-use paths.	***Consistent.*** The proposed project would result in the subdivision of the 20.13-acre site, of which approximately 10 acres would be developed, while the remaining acreage would remain undeveloped. The residential portion of the proposed project would include 51 residential lots, open space, and related infrastructure improvements. The project site is located within walking or bicycling distance from the surrounding residential, recreational, and public and semi-public uses. Additionally, the project site is served by SolTrans Routes 3 and 8, with the transit stops located approximately 0.5 mile to the west along Glen Cove Parkway. The Amtrak station in Vallejo is approximately 4 miles northwest of the project site, and the Vallejo Ferry Terminal, which offers ferry service between Vallejo and San Francisco, is approximately 3.5 miles northwest of the project site. Therefore, the project would support the ability of residents and visitors to use alternative modes of transportation. As such, the proposed project would not conflict with the Air District's initiatives to increase the use of alternative means of transportation, consistent with the intent of this measure.
	T9. Advance regional Vision Zero policy through street design and reduced speeds. Reduce speed limits to between 20 and 35 miles per hour on local streets and 55 miles per hour on freeways, relying on design elements on local streets and automated speed enforcement on freeways.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
Build a Next-Generation Transit Network	**T10. Enhance local transit frequency, capacity and reliability.** Improve the quality and availability of local bus and light rail service, with new bus rapid transit lines, South Bay light rail extensions, and frequency increases focused in lower-income communities.	***Not Applicable.*** This strategy is not applicable as the proposed project would consist of a residential development.
	T11. Expand and modernize the regional rail network. Better connect communities while increasing frequencies by advancing the Link21 new transbay rail crossing, BART to Silicon Valley Phase 2, Valley Link, Caltrain Downtown Rail Extension and Caltrain/High-Speed Rail grade separations, among other projects.	***Not Applicable.*** This strategy is not applicable as the proposed project would consist of a residential development.

Table 4.8.C: Project Consistency with Plan Bay Area 2050

Goal	Target	Project Consistency
	T12. Build an integrated regional express lanes and express bus network. Complete the buildout of the regional express lanes network to provide uncongested freeway lanes for new and improved express bus services, carpools and toll-paying solo drivers.	***Not Applicable.*** This strategy is not applicable as the proposed project would consist of a residential development.
Environmental Strategies		
Reduce Risks From Hazards	**EN1. Adapt to sea level rise.** Protect shoreline communities affected by sea level rise, prioritizing low-cost, high-benefit solutions and providing additional support to vulnerable populations.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
	EN2. Provide means-based financial support to retrofit existing residential buildings. Adopt building ordinances and incentivize retrofits to existing buildings to meet higher seismic, wildfire, water and energy standards, providing means-based subsidies to off-set associated costs.	***Not Applicable.*** This strategy is not applicable as the proposed project would not consist of a building retrofit.
	EN3. Fund energy upgrades to enable carbon neutrality in all existing commercial and public buildings. Support electrification and resilient power system upgrades in all public and commercial buildings.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
Expand Access to Parks and Open Space	**EN4. Maintain urban growth boundaries.** Using urban growth boundaries and other existing environmental protections, focus new development within the existing urban footprint or areas otherwise suitable for growth, as established by local jurisdictions.	***Consistent.*** The proposed project would develop a residential development with undeveloped open space on a project site generally surrounded by single-family residential neighborhoods.
	EN5. Protect and manage high-value conservation lands. Provide strategic matching funds to help conserve and maintain high-priority natural and agricultural lands, including but not limited to, Priority Conservation Areas and wildland-urban interface areas.	***Not Applicable.*** This is a community policy based goal; therefore, this measure would not be applicable to the project.
	EN6. Modernize and expand parks, trails and recreation facilities. Invest in quality parks, trails and open spaces that provide inclusive recreation opportunities for people of all backgrounds, abilities and ages to enjoy.	***Not Applicable.*** This strategy is not applicable as the proposed project would consist of a residential development. However, 9.74 acres of the proposed project would remain undeveloped open space. The project site would also include 3.55 acres of common area open space that would include two bioretention areas totaling 7,617 square feet, walkways, a loop walk around a flexible use turf area, and a vista overlook for residents.

Table 4.8.C: Project Consistency with Plan Bay Area 2050

Goal	Target	Project Consistency
Reduce Climate Emissions	**EN7. Expand commute trip reduction programs at major employers.** Set a sustainable commute target for major employers as part of an expanded Bay Area Commuter Benefits Program, with employers responsible for funding incentives and disincentives to shift auto commuters to any combination of telecommuting, transit, walking and/or bicycling.	***Not Applicable.*** This strategy is not applicable as the proposed project would consist of a residential development.
	EN8. Expand clean vehicle initiatives. Expand investments in clean vehicles, including more fuel-efficient vehicles and electric vehicle subsidies and chargers.	***Consistent .*** The proposed project would provide electric vehicle charging capabilities that meet the requirements of the latest version of the CALGreen. As such, the proposed project would be consistent with this measure.
	EN9. Expand transportation demand management initiatives. Expand investments in programs like vanpools, bikeshare, carshare and parking fees to discourage solo driving.	***Consistent.*** As discussed above, the proposed project would result in the subdivision of the 20.13-acre site, of which approximately 10 acres would be developed, while the remaining acreage would remain undeveloped. The residential portion of the proposed project would include 51 residential lots, open space, and related infrastructure improvements. The project site is located within walking or bicycling distance from the surrounding residential, recreational, and public and semi-public uses. Additionally, the project site is served by SolTrans Routes 3 and 8, with the transit stops located approximately 0.5 mile to the west along Glen Cove Parkway. The Amtrak station in Vallejo is approximately 4 miles northwest of the project site, and the Vallejo Ferry Terminal, which offers ferry service between Vallejo and San Francisco, is approximately 3.5 miles northwest of the project site. Therefore, the project would support the ability of residents and visitors to use alternative modes of transportation. As such, the proposed project would not conflict with the Air District's initiatives to increase the use of alternative means of transportation, consistent with the intent of this measure.

Sources: Metropolitan Transportation Commission and Association of Bay Area Governments (2021); LSA (September 2025).
CALGreen Code = California Green Building Standards Code

Vallejo Climate Action Plan. As discussed above, the City's CAP identifies emission reduction goals to reduce GHG emissions in the city by 15 percent below the 2005 emission levels by 2020, consistent with AB 32. The proposed project would not be operational until post-2020; therefore, because the City's CAP was prepared based on the 2020 GHG targets, which are now superseded by the 2030 GHG targets established in SB 32, the City's CAP would not apply for streamlining. However, the CAP sets forth goals, measures, and actions to achieve emission

reductions; therefore, a qualitative analysis of the proposed project's consistency with these goals, measures, and actions is provided. These goals include measures related to City Government Operations (CG), Community Engagement (CE), Energy (E), Renewable Energy (RE), Transportation Demand Management (TDM), Optimized Travel (OT), Water, Wastewater, and Solid Waste (W), Off-Road Equipment (OR), and Adaptation (A). The following measures are applicable to the proposed project:

- **E-2. Building Standards:** Require all new development to meet the minimum California Title 24 and California Green Building Standards Code requirements, as amended, and encourage new development to exceed the minimum requirements.

- **E-4. Cool Roofs and Pavements.** Increase tree planting and the use of cool roofs and cool pavement materials to reduce the urban heat island effect and corresponding energy consumption. Implement tree replacement policy for projects where tree removal is necessary.

- **TDM-2. Mixed-Use, Higher-Density, Transit-Oriented Development.** Promote mixed-use, higher-density development near transit nodes.

- **TDM-3. Bicycle and Pedestrian Travel.** Expand and link the network of pedestrian and bicycle paths and facilities through preparation of a Bicycle and Pedestrian Master Plan, with the goal of increasing the bicycle and pedestrian mode share 20 percent by 2035.

- **TDM-8. Jobs/Housing Balance.** Plan for an improved jobs/housing balance in order to reduce the need for long-distance travel from residences to places of work.

- **OT-1. Efficient and Alternative Fuel Vehicles.** Support the expanded use of efficient and alternative fuel vehicles.

- **OT-4. Zero Emission Vehicle Stations.** Provide electric vehicle charging stations.

- **W-2. Development Standards for Water Conservation.** Require water conservation in all new buildings and landscapes.

- **W-3. Recycling and Composting Efforts.** Support waste diversion through composting and recycling programs.

- **W-4. Development Standards for Recycling and Composting.** Require waste diversion and use of recycled materials in new development.

- **OR-2. Construction Equipment.** Reduce emissions from heavy-duty construction equipment by limiting idling and utilizing cleaner fuels, equipment, and vehicles.

The proposed project would result in the subdivision of the 20.13-acre site, of which approximately 10 acres would be developed, while the remaining portion of the project site would remain undeveloped. As demonstrated in Section 4.17, Transportation, the proposed

project is not expected to result in a significant increase in the generation of vehicle trips or VMT. Additionally, the proposed project would provide electric vehicle charging capabilities that meet the requirements of the latest version of CALGreen as part of the final project designs. The proposed project would also be required to comply with the latest Title 24 standards, regarding energy conservation and green building standards, reduction of wastewater and water use, and waste reduction. In addition, the proposed project would include an 8-acre parcel that would remain private open space and the residential portion of the project site would provide 3.55 acres of common open space, consistent with the urban cooling measure of the CAP. As such, the proposed project would be consistent with applicable CAP measures. In addition, the idling times for construction vehicles would be restricted to 5 minutes or less and construction workers would be required to shut off idle equipment, as required by **General Plan EIR Mitigation Measure AQ 2b.1** as detailed in Section 4.3, Air Quality.

Conclusion. As described above, the proposed project would generally be consistent with the 2022 Scoping Plan, Plan Bay Area 2050, and the City's CAP. The proposed project would comply with the majority of regulations adopted for the purpose of reducing GHG emissions. Although the proposed project would not install fewer on-site parking spaces than required by code, the proposed project would support the ability of residents and visitors to use alternative modes of transportation. In addition, as discussed above, the elimination of natural gas in new development would help projects implement their "fair share" of achieving long-term 2045 carbon neutrality consistent with State goals. Therefore, since the proposed project would include natural gas, it would not be considered consistent with the long-term State GHG reduction goals and emission targets required in AB 32, SB 32, EO B-30-15, EO B-48-18, and AB 1279.

As discussed above, the General Plan EIR found that while the General Plan would be consistent with the regional objectives of Plan Bay Area and the City's CAP and the policies and programs in the General Plan would ensure substantial progress toward the long-term GHG reductions goals for 2050, additional State and federal measures are necessary to achieve the more aggressive targets established for 2050 in EO S-03-05. The General Plan EIR concluded that impacts would be significant and unavoidable. Therefore, similar to the findings of the General Plan EIR and Housing Element Addendum, the proposed project would conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG emissions. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR and Housing Element Addendum. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

4.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐	☒
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐	☒
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐	☒
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐	☒

4.9.1 Prior Environmental Analysis

Chapter 4.7 of the General Plan EIR analyzed impacts related to hazards and hazardous materials associated with build out of the General Plan and determined that build out of the General Plan would result in less than significant impacts related to hazards and hazardous materials due to compliance with existing regulatory requirements including, but not limited to, the Hazardous Materials Transportation Act, the Resource Conservation and Recovery Act, the California Hazardous Materials Management Act, the California Health and Safety Code, California Code of Regulations, California Division of Occupational Safety and Health (Cal/OSHA) regulations, and other regulatory programs overseen by the Regional Water Quality Control Board, Department of Toxic Substances Control, and Solano County Department of Environmental Management. No mitigation measures were prescribed. However, the General Plan includes the following goals, policies, and actions related to hazards and hazardous materials which would be applicable to the proposed project:

- **Goal NBE-5: Hazard Protection**: Protect life and property from natural and human-made hazards.

- **Policy NBE-5.3: Health and Safety Codes**. Enforce development regulations and building code requirements to protect residents, businesses, and employees from flooding, liquefaction, earthquakes, fires, and other hazards.
  - **Action NBE-5.4C**: Continue to use the development review process to ensure that development is planned and constructed to resist the encroachment of uncontrolled fire.
- **Policy NBE-5.10: Site Safety**. Ensure that affected soil, groundwater, or buildings will not have the potential to adversely affect the environment or the health and safety of site occupants.
  - **Action NBE-5.10A**: Continue to require remediation of hazardous material releases from previous land uses as part of any redevelopment activities.
  - **Action NBE-5.10B**: Continue to require environmental site assessments stipulated by State and County regulations for potential hazardous material releases from prior uses and assessments for lead and asbestos present in building materials.
- **Policy NBE-5.11: Risk Reduction**. Reduce the risk of hazardous materials accidents, spills, and vapor releases, and minimize the effects of such incidents if they occur.
- **Policy MTC-2.3: Emergency Response Routes**. Ensure adequate emergency vehicle access in all areas of Vallejo.
- **Action MTC-2.3B**: Continue to involve the Police and Fire Departments in the development review process to ensure that applicable requirements for emergency access are met.

4.9.2 Background

The following discussion is based on the findings from the *Phase I Environmental Site Assessment*[66] (Phase I ESA) prepared for the project site and the peer review of the Phase I ESA conducted as part of the environmental review process[67]. The Phase I ESA and peer review are included in **Appendix F** of this Initial Study.

The project site is vacant and undeveloped. The Phase I ESA completed for the proposed project determined that there are no recognized environmental conditions (RECs) identified in connection with the project site after completing a review of local, State, tribal, and federal environmental record sources; standard historical sources; aerial photographs; fire insurance maps; physical setting sources; a reconnaissance of the project site; and written/oral interviews with persons knowledgeable about past and current site use.

66 ENGEO. 2022b. *Vallejo Properties – Glen Cove, Vallejo, California Phase I Environmental Site Assessment*. April 26.

67 Baseline Environmental Consulting. 2025. *Peer Review of Phase I Environmental Site Assessment, Vista Cove Planned Development Project, Vallejo, California.* March 25.

4.9.3 Impact Analysis

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

The proposed project involves the subdivision of the 20.13-acre site and construction of 51 residential lots, internal roadways, undeveloped land, and related infrastructure improvements. Because the proposed project is for private residential use, it would generally not involve transport, use, or disposal of significant quantities of hazardous materials. Only small quantities of chemicals would be used for routine maintenance that would not pose a significant threat to human or environmental health.

Construction of the proposed project would involve the use and transport of hazardous materials. These materials could include fuels, oils, paints, and other chemicals used during construction activities. Handling and transportation of hazardous materials could result in accidental releases or spills and associated health risks to workers, the public, and the environment. To prevent the accidental release of hazardous materials into aquatic features within the project site that drain to the Carquinez Strait, **Project Specific Mitigation Measures HAZ-1 and HAZ-2** would be required, which entail the preparation and implementation of an Emergency Response and Cleanup Plan and properly completing all construction equipment maintenance, refueling, and washing activities outside of riparian areas.

Transport and use of hazardous materials would be subject to all applicable State and federal laws, such as the Hazardous Materials Transportation Act, the Resource Conservation and Recovery Act, the California Hazardous Materials Management Act, the California Health and Safety Code, and CCR Title 8 and Title 22. Compliance with existing regulations and implementation of **Project Specific Mitigation Measures HAZ-1 and HAZ-2** would ensure that the proposed project would not create a significant hazard to the public or the environment associated with the routine transport, use, or disposal of hazardous materials by ensuring these materials are properly handled during construction of the proposed project. These are standard measures applied to construction activities within sensitive natural areas. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Project Specific Mitigation Measure HAZ-1	**Emergency Response and Cleanup Plan.** Prior to commencement of construction activities, the construction contractor shall prepare an Emergency Response and Cleanup Plan. The construction contractor shall implement the plan during construction. The plan shall detail the methods to be used to contain and clean up a spill of petroleum products or other hazardous materials in the work area.

Project Specific Mitigation Measure HAZ-2 **Construction Equipment Maintenance, Refueling, and Washing Activities.** During construction, the construction contractor shall ensure that all equipment maintenance, refueling, and storage are conducted on level ground outside the aquatic features within the project site, away from concentrated flows of stormwater and drainage courses. Drip pans or absorbent pads shall be used during equipment refueling and maintenance activities. Adequate quantities of absorbent spill cleanup material and spill kits shall be kept in the refueling and maintenance area and on fuel trucks. Spill cleanup materials shall be disposed of immediately after use.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

There are two main ways that the public and/or the environment could be affected by the release of hazardous materials from the project site into the environment: (1) exposing workers and/or the public to potentially contaminated soil and groundwater during construction and/or operation of the project; or (2) exposing workers and/or the public to hazardous building materials (e.g., lead-based paint, asbestos) during demolition of existing structures.

The proposed project would not involve the demolition of any existing structures. The project site is vacant and undeveloped. Therefore, it is unlikely that the soil and groundwater are contaminated with significant toxic or hazardous materials that would be released during construction. Additionally, the Phase I ESA completed for the proposed project determined that there are no recognized environmental conditions (RECs) identified in connection with the project site after completing a review of local, State, tribal, and federal environmental record sources; standard historical sources; aerial photographs; fire insurance maps; physical setting sources; a reconnaissance of the project site; and written/oral interviews with persons knowledgeable about past and current site use.

As described above, hazardous materials could be used at the project site during construction and operation of the proposed project. Improper use, storage, or handling could result in a release of hazardous materials into the environment, which could pose a risk to construction workers and the public. However, the project sponsor would be required to comply with existing government regulations related to the use and disposal of these materials, as detailed previously in Section 4.9.a, including Occupational Safety and Health Administration (OSHA) and California Division of Occupational Safety and Health (Cal/OSHA) regulations, CCR Title 8; the Construction General Permit (CGP); and United States Department of Transportation (DOT), Resource Conservation and Recovery Act (RCRA), and State regulations. Additionally, the proposed project would be subject to **Project Specific Mitigation Measures HAZ-1 and HAZ-2** would be required, which require the preparation

and implementation of an Emergency Response and Cleanup Plan and properly completing all construction equipment maintenance, refueling, and washing activities outside of riparian areas. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? ***(Less than Significant Impact, No New Impact)***

The nearest school to the project site is St. Patrick-St. Vincent High School, located approximately 0.1 mile north of the project site. During operation of the proposed residential project, only small quantities of chemicals would be used for routine maintenance, which would not pose a significant threat to human or environmental health. Additionally, as noted in Sections 4.9.a and 4.9.b, the proposed project would comply with all applicable State and federal laws, such as the Hazardous Materials Transportation Act, the Resource Conservation and Recovery Act, the California Hazardous Materials Management Act, California Health and Safety Code, and CCR Title 8 and Title 22. Construction of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or create a hazard to the public and environment through reasonably foreseeable upset and accident conditions. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? ***(No Impact, No New Impact)***

The project site is not included on any list of hazardous materials site compiled pursuant to Government Code Section 65962.5,[68] and no impact would occur. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

e. Would the project be located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? ***(No Impact, No New Impact)***

The project site is not located within 2 miles of a public airport or public use airport. The closest airports are Napa County Airport and Buchanan Field Airport, which are located approximately 9.5 miles northwest and southeast of the project site, respectively. Therefore, the proposed project would not result in a safety hazard or excessive noise for people residing or working in the area, and no impact would occur. No new impacts or substantially more severe significant impacts would

[68] California Environmental Protection Agency (CalEPA). 2024. Cortese List Data Resources. Website: https://calepa.ca.gov/sitecleanup/corteselist/ (accessed March 5, 2025).

result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ***(Less Than Significant Impact, No New Impact)***

The Vallejo General Plan 2040 Nature and Built Environment chapter addresses natural and human-made hazards and dangers and offers methods to mitigate natural hazards, enhance disaster resistance, and promote public safety. The element focuses on natural disasters, including earthquake hazards (surface faulting, ground shaking, liquefaction, landslides, and tsunamis) and weather-related hazards (flooding, landslides, wildfires, drought, and climate change). The element does not identify specific evacuation routes within Vallejo.

The Solano County General Plan Public Health and Safety chapter discusses disaster preparedness, and the Solano County Office of Emergency Services (OES) is responsible for creating and maintaining the Solano County Emergency Operations Plan (EOP). The EOP establishes management organization and assigns functions and tasks consistent with California's Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). The EOP provides for the integration and coordination of planning efforts for Solano County, and its intent is to provide direction on how to respond for an emergency form the onset through extended response, and into the recovery process. The Solano County OES also prepares and maintains the Solano County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP), which identifies risks and ways to minimize damage from natural and human-made disasters. Section 7 of the MJHMP details the hazard mitigation planning elements specific to the City of Vallejo. Neither of these plans identify specific evacuation routes within the city or the county.

The proposed project would be consistent with the policies outlined in the Solano County General Plan Public Health and Safety chapter, the City of Vallejo General Plan Nature and Built Environment chapter, the Solano County EOP, and the Solano County MJHMP. The proposed project would not alter or block adjacent roadways, and implementation of the proposed project would not be expected to impair the function of nearby emergency evacuation routes. In addition, operation of the proposed project would not cause permanent alterations to vehicle circulation routes and patterns or impede public access or travel on public rights-of-way, as the proposed internal roadways would be accessible to neighborhood users and would terminate at the project site. Prior to approval of final maps and improvement plans for any development project within Vallejo, plan review and approval by the Vallejo Fire District is required. Internal roadways and ingress/egress for the project site would be required to meet State and local standards regarding turning radius, road width, and emergency vehicle access. Therefore, potential impacts to an adopted emergency response plan or emergency evacuation plan would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires? ***(Less Than Significant Impact, No New Impact)***

According to the City of Vallejo General Plan 2040, the project site is located within a moderate- to high-risk wildfire area.[69] There are no Very High Fire Hazard Areas in or adjacent to Vallejo.

Construction of the proposed project would involve the use of some flammable materials such as gasoline, diesel fuel, hydraulic oils, paints, solvents, or other wastes. During construction, there would be increased human activity and ignition sources, including equipment that could create sparks, be a source of heat, or leak flammable materials on the project site. However, all construction equipment is required to have fire suppression equipment (such as a fire extinguisher) on board or at the work site, secondary containment would be required for fuel-powered equipment, and a spill kit would be required to be kept on site during construction for use in case of any leaks or spills of flammable materials. These existing requirements would reduce the potential exacerbation of wildfire risks related to construction activities.

Operation of the proposed project would be consistent with adjacent residential uses and the allowable zoning for the project site. The proposed project would be subject to the design standards and guidelines as outlined in the City of Vallejo Municipal Code and would undergo Development Review to ensure that proposed structures conform with all applicable regulations. The proposed project would also be subject to requirements in Section 13000 et seq. of the California Health and Safety Code, the California Building Standards Code, and the California State Fire Code, which include regulations concerning the following: building standards for fire protection; fire protection and notification systems such as extinguishers and smoke alarms; safety for firefighters and emergency responders during emergency operations; minimum standards for hazardous vegetation and fuel management, defensible space, and building construction; and minimum standards for emergency access and water supply for fire response.

Compliance with these existing regulatory requirements would ensure that the proposed project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

[69] Vallejo, City of. 2017. *Propel Vallejo General Plan 2040, Map NBE-4.* August 29.

4.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐	☒
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐	☒
i. Result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐	☒
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐	☒
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐	☒
iv. Impede or redirect flood flows?	☐	☐	☐	☒	☒
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐	☒

4.10.1 Prior Environmental Analysis

Chapter 4.8 of the General Plan EIR analyzed impacts to hydrology and water quality with build out of the General Plan, and determined that build out of the General Plan would result in less than significant impacts related to hydrology and water quality due to compliance with existing regulatory requirements including the SWRCB's CGP, the MRP, City of Vallejo Municipal Code, Vallejo Sanitation and Flood Control District Code, National Flood Insurance Program standards, and California Division of Safety of Dams standards. No mitigation measures were prescribed. However, the General Plan includes the following goals, policies, and actions related to hydrology and water quality which would be applicable to the proposed project:

- **Policy NBE-1.1: Natural Resources**. Protect and enhance hillsides, waterways, wetlands, and aquatic and wildlife habitat through land use decisions that avoid and mitigation potential environmental impacts on these resources to the extent feasible.

- **Policy NBE-1.7: Green Infrastructure**. Encourage the installation of green infrastructure, including tools such as permeable pavement, rain gardens, constructed wetlands, grassy

swales, rain barrels and cisterns, and green roofs, to treat stormwater, attenuate floods, increase groundwater recharge, and reduce urban heat islands.

- **Action NBE-1.14C**: Update the Green Building Standards Code to require the use of low flow plumbing fixtures, low volume irrigation systems, and drought-tolerant plant palettes.

- **Goal NBE-5: Hazard Protection**. Protect life and property from natural and human-made hazards.
  - **Policy NBE-5.4: Project Location and Design**. Prohibit development in any area where it is determined that the potential risk from natural hazards cannot be mitigated to acceptable levels.
    - **Action NBE-5.4A**: Continue to require geotechnical studies for land use proposals to determine engineering measures that may be necessary to adequately mitigate any seismic, flooding, sea level rise, landslide, erosion, or related risk.
    - **Action NBE-5.4B**: Continue to require drainage and erosion control measures for landslide-prone or geologically hazardous hillside areas to minimize risks to downhill areas.
    - **Action NBE-5.6D**: Continue to enforce City regulations that prohibit development, grading, and land modification activities that would adversely affect the local drainage system or create unacceptable erosion impacts.
  - **Policy NBE-5.7: Design for Stormwater Control**. Encourage new development and redevelopment to minimize the area of new roofs and paving.

4.10.2 Background

Unless otherwise noted, the following analysis is based on the *Preliminary Stormwater Control Plan*[70] and the *Drainage Study*[71] prepared for the proposed project. Copies of these reports are included in **Appendix G** of this Initial Study.

4.10.2.1 Water Quality Regulations

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) regulate the quality of surface water and groundwater bodies throughout California. In the Bay Area, including the project site, the San Francisco Bay RWQCB (Water Board) is responsible for implementation of the Water Quality Control Plan (Basin Plan). The Basin Plan establishes beneficial water uses and water quality objectives for waterways and water bodies within the region. Section 303(d) of the federal Clean Water Act (CWA) requires that states identify water bodies, including bays, rivers, streams, creeks, and coastal areas, that do not meet water quality

[70] Sancerra Vista Cove, LLC. 2023. *Preliminary Stormwater Control Plan for Vista Cove.* November.
[71] DK Engineering. 2023. Op. cit.

standards and the pollutants that are causing the impairment. Total Maximum Daily Loads (TMDLs) describe the maximum amount of a pollutant that a water body can receive while still meeting established water quality standards. A TMDL establishes limits for pollutant discharges into impaired water bodies.

Runoff water quality is regulated by the National Pollutant Discharge Elimination System (NPDES) Program (established through the federal CWA). The NPDES program objective is to control and reduce pollutant discharges to surface water bodies. Compliance with NPDES permits is mandated by State and federal statutes and regulations. Locally, the NPDES Program is administered by Water Board. Construction activities are subject to the SWRCB NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002 (CGP). Any construction activity, including grading, that would result in the disturbance of 1 acre or more would require compliance with SWRCB's CGP, which requires preparation of a SWPPP and implementation of Construction BMPs during construction activities. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site, as well as Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

The proposed project would be subject to the California Regional Water Quality Control Board San Francisco Bay Region's Municipal Regional Stormwater NPDES Permit (MRP), which went into effect on July 1, 2022, by Order R2-2022-0018, NPDES Permit No. CAS612008. The MRP covers stormwater discharges from municipalities and local agencies in Alameda, Contra Costa, San Mateo, and Santa Clara counties; the cities of Fairfield, Suisun City, and Vallejo; and the VFWD, which have joined to form the Solano Stormwater Alliance (Solano Permittees). Provision C.3 of the MRP requires new development and redevelopment projects that would replace more than 5,000 square feet of existing impervious surfaces to include post-construction stormwater control in project designs. Under the Provision C.3 requirements, the preparation and submittal of a Stormwater Control Plan (SCP) would be required. The purpose of an SCP is to detail the design elements and implementation measures necessary to meet the post-construction stormwater control requirements of the MRP. In particular, SCPs must include Low Impact Development (LID) design measures, which reduce water quality impacts by preserving and recreating natural landscape features, minimizing imperviousness, and using stormwater as a resource rather than a waste product. Additionally, the preparation of a Stormwater Facility Operation and Maintenance Plan is required to ensure that stormwater control measures are inspected, maintained, and funded for the life of the project.

4.10.2.2 Project Site Hydrology

Under existing conditions, the project site consists entirely of pervious surface consisting primarily of grassland. There is no existing stormwater infrastructure on the project site, and the project site drains from west to east to Benicia State Park, where stormwater runoff converges and is directed to the Carquinez Strait.[72] The Carquinez Strait drains to the San Pablo Bay, which drains to the San

[72] DK Engineering. 2023. Op. cit.

Francisco Bay, which drains to the Pacific Ocean. The receiving waters for stormwater runoff from the project site are listed as impaired on the 303(d) list for several constituents.[73]

4.10.2.3 Water Quality

The Carquinez Strait is listed as an impaired water body for the following pollutants: chlordane, dichlorodiphenyltrichloroethane (DDT), dieldrin, dioxin compounds (including 2,3,7,8-TCDD), furan compounds, invasive species, mercury, polychlorinated biphenyls (PCBs), PCBs (dioxin-like), and selenium. The San Pablo Bay is listed as an impaired water body for the following pollutants: chlordane, DDT, dieldrin, dioxin compounds (including 2,3,7,8-TCDD), furan compounds, invasive species, mercury, PCBs, PCBs (dioxin like), and selenium. The San Francisco Bay, Central is listed as an impaired water body for the following pollutants: chlordane, DDT, dieldrin, dioxin compounds (including 2,3,7,8-TCDD), furan compounds, invasive species, mercury, PCBs, PCBs (dioxin like), selenium, and trash.

4.10.2.4 Groundwater

The project site is not located within a mapped Division of Water Rights groundwater basin boundary.[74]

4.10.2.5 Floodplains

According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06095C0629G, the project site is located in Zone X, which is identified as an area of minimal flood hazard.[75]

4.10.3 Impact Analysis

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality? ***(Less Than Significant Impact, No New Impact)***

Construction. The proposed project involves the subdivision of the 20.13-acre site and construction of 51 residential lots, internal roadways, undeveloped land and related infrastructure improvements. Construction activities would result in the disturbance of 10.3 acres of soil. Pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products

[73] State Water Resources Control Board (SWRCB). 2024. *2024 California Integrated Report*. Website: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2024-integrated-report.html (accessed March 5, 2025).

[74] State of California Department of Water Resources (DWR). DWR Mapping Tool. Website: https://sgma.water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true (accessed September 19, 2024).

[75] Federal Emergency Management Agency (FEMA). 2016. Flood Insurance Rate Map No. 06095C0629G. Map Revised August 3, 2016. Website: https://msc.fema.gov/portal/search (accessed July 5, 2024).

(e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked, and they have the potential to be transported via stormwater runoff into receiving waters.

Because construction of the proposed project would disturb greater than 1 acre of soil, the project is subject to the requirements of the CGP, which requires preparation of a SWPPP and implementation of construction BMPs during construction activities as detailed above**.** Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site, as well as Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters.

As detailed in the *Preliminary Geotechnical Exploration*[76] completed for the proposed project, no groundwater was encountered within the test pits, trench, and borings completed as part of the exploration. However, fluctuations in groundwater levels occur seasonally and over a period of years due to variations in precipitation, temperature, irrigation, and other factors. Construction of the proposed project would require excavation to a depth of up to 24 feet below the ground surface to accommodate foundations and utility infrastructure. Therefore, dewatering and shoring of groundwater may be required during construction activities involving excavation. Release of dewatered groundwater to surface waters can introduce total dissolved solids and other constituents to surface waters and could cause degradation of the receiving water quality. In the event that groundwater is encountered during construction and groundwater dewatering is necessary, any groundwater dewatering during excavation would be conducted in accordance with the requirements of the CGP. The CGP allows the discharge of dewatering effluent if the source of the water is uncontaminated groundwater and is properly filtered or treated using appropriate technology. The discharge of dewatering effluent is authorized under the CGP if the following conditions are met:

- The discharge does not cause or contribute to a violation of any water quality standard;
- The discharge does not violate any other provision of the CGP;
- The discharge is not prohibited by the applicable Basin Plan;
- The discharger has included and implemented specific BMPs required by the CGP to prevent or reduce the contact of the nonstormwater discharge with construction materials or equipment;
- The discharge does not contain toxic constituents in toxic amounts or (other) significant quantities of pollutants;
- The discharge is monitored and meets the applicable numeric action levels; and
- The discharger reports the sampling information in the annual report.

[76] ENGEO. 2022a. *Vallejo Properties – Vista Cove, Vallejo, California, Preliminary Geotechnical Exploration.* September 12.

If any of the above conditions are not satisfied, the discharge of dewatering effluent is not authorized by the CGP and the discharger must notify the local Regional Water Quality Control Board to determine whether a separate NPDES permit is necessary.

Adherence with the CGP, including implementation of the required SWPPP, Construction BMPs, and dewatering requirements, would ensure construction impacts related to surface water quality standards, waste discharge requirements, and surface water quality would be less than significant.

Operation. Pollutants of concern from long-term operations include pathogens (bacteria/viruses), nutrients, pesticides/herbicides, sediments/total suspended solids, trash and debris, and oil and grease. The City of Vallejo is under the purview of the MRP. Therefore, the proposed project would be subject to the requirements of Provision C.3 of the MRP because the project would result in new development consisting of more than 5,000 square feet of impervious surfaces. As such, the preparation and implementation of an SCP, including a Stormwater Facility Operation and Maintenance Plan, would be required. As discussed in Chapter 2.0, Project Description, the proposed project would include two detention basins and approximately 7,617 square feet of bioretention space that would be used for stormwater control and treatment to reduce pollutants of concern in stormwater prior to release into the marshland area adjacent to Benicia State Park. Therefore, compliance with the requirements of the MRP would ensure that operational impacts to water quality would be less than significant.

Overall, because the proposed project would be required to comply with existing regulations, including the CGP and the MRP, the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. Impacts would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? ***(Less than Significant Impact, No New Impact)***

The project site is not located within a mapped Division of Water Rights groundwater basin boundary.[77] Impacts related to groundwater recharge are discussed below.

Construction. As detailed in the *Preliminary Geotechnical Exploration* completed for the proposed project, no groundwater was encountered within the test pits, trench, and borings completed as part of the exploration. However, fluctuations in groundwater levels occur seasonally and over a period of years due to variations in precipitation, temperature, irrigation, and other factors. Construction of the proposed project would require excavation to a depth of up to 24 feet below the ground surface to accommodate foundations and utility infrastructure. Therefore, dewatering and shoring of groundwater may be required during construction activities involving excavation. Such dewatering

[77] State of California Department of Water Resources (DWR). DWR Mapping Tool. Website: https://sgma.water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true (accessed September 19, 2024).

would be localized and temporary and would not result in the lowering of surrounding groundwater levels and would have to comply with the CGP, as detailed above.

Operation. The City of Vallejo provides water to the project site. The City's potable water supply is derived from various surface sources, including the Sacramento River watershed; the Solano Project from Putah Creek watershed, including Lake Berryessa; the Wild Horse Creek watershed; and the Upper Suisun Creek watershed (future water source).[78] Because the City does not use groundwater for municipal water supply, water use during operation of the proposed project would not affect groundwater supplies.

Development of the proposed project would result in an increase in impervious surfaces on the project site from 0 acres to approximately 3.95 acres, which could decrease on-site infiltration. However, in compliance with MRP, the proposed project would include two detention basins and approximately 7,617 square feet of bioretention space that would be used for stormwater control and treatment. Due to the incorporation of bioretention space and the implementation of LID techniques as required by the MRP, the proposed project would not result in a significant decrease in groundwater recharge that would result in a net deficit in aquifer volume or a lowering of the local groundwater table level. Therefore, the proposed project would not interfere with groundwater recharge.

For the reasons listed above, impacts related to the decrease of groundwater supplies or interference with groundwater recharge would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site; ***(Less than Significant Impact, No New Impact)***

During construction activities, more than 1 acre of soil would be disturbed. Soil would be exposed, and drainage patterns would be temporarily altered during grading and other construction activities, and there would be an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. As required by the CGP a SWPPP would be prepared to identify construction BMPs to be implemented as part of the proposed project to reduce impacts on water quality during construction, including those impacts associated with soil erosion and siltation. With compliance with the requirements in the CGP and implementation of construction BMPs, construction impacts related to on- or off-site erosion or siltation would be less than significant.

After the completion of project construction, operation of the proposed project would result in an increase in impervious surfaces on the project site from 0 acres to approximately 3.95 acres, which

[78] Vallejo, City of. 2021. *City of Vallejo 2020 Urban Water Management Plan.* October 12.

would result in a net increase in stormwater runoff that could lead to downstream erosion in receiving waters. However, as discussed above, two detention basins and approximately 7,617 square feet of bioretention space included in the project's design in compliance with the MRP would be used for stormwater control and treatment. Due to the incorporation of bioretention space and implementation of LID techniques as required by the MRP, operational impacts related to on- or off-site erosion or siltation would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; ***(Less than Significant Impact, No New Impact)***

Development of the proposed project would result in an increase in impervious surfaces on the project site from 0 acres to approximately 3.95 acres, which could have the potential to increase the volume and rate of stormwater runoff discharged from the project site. However, as previously discussed, the two detention basins and approximately 7,617 square feet of bioretention space included in the project's design in compliance with the MRP would be used for stormwater control and treatment. The proposed drainage facilities and BMPs needed to accommodate stormwater runoff would be appropriately sized so that on-site flooding would not occur. Therefore, due to the implementation of LID techniques as required by the MRP, the proposed project would not substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site. Impacts would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or ***(Less than Significant Impact No, New Impact)***

Stormwater Drainage System Capacity. Under existing conditions, the project site consists entirely of pervious surface consisting primarily of grassland. There is no existing stormwater infrastructure on the project site, and the project site drains from west to east to Benicia State Park, where stormwater runoff converges and is directed to the Carquinez Strait.[79]

The proposed project would include two detention basins and approximately 7,617 square feet of bioretention space, made up of two bioretention facilities located at the northwest corner of the site and the middle east border of the site that would collect drainage from the proposed on-site stormwater infrastructure and be used for stormwater control and treatment before discharging to an 18-inch storm drain pipe that outfalls to the existing marshland area adjacent to Benicia State Park. The storm drain system would be designed and installed to VFWD standards.

As detailed above, the proposed project would be required to comply with the MRP and would include the incorporation of LID design features, including bioretention areas that would be used for stormwater control and treatment. The proposed drainage facilities and BMPs needed to

[79] DK Engineering. 2023. Op. cit.

accommodate stormwater runoff would be appropriately sized such that drainage facility capacity would not be exceeded during a design storm. Therefore, the proposed project would not result in an exceedance of planned or existing stormwater drainage systems and impacts would be less than significant.

Polluted Runoff. As discussed in Section 4.10.a, pollutants of concern during construction include sediments, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. Drainage patterns would be temporarily altered during grading and other construction activities, and construction-related pollutants could be spilled, leaked, or transported via storm runoff into adjacent drainages and downstream receiving waters. However, as previously discussed, the proposed project would be required to comply with the requirements set forth by the CGP and SWPPP, which would specify BMPs to be implemented to control the discharge of pollutants in stormwater runoff as a result of construction activities. Therefore, construction-related impacts would be less than significant.

Expected pollutants of concern from long-term operations include pathogens (bacteria/viruses), nutrients, pesticides/herbicides, sediments/total suspended solids, trash and debris, and oil and grease. As previously discussed, compliance with the MRP and the implementation of LID techniques would ensure that the proposed project would not exceed the capacity of existing or planned stormwater drainage systems or discharge substantial sources of polluted runoff from the project site. Operation-related impacts would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

*iv. Impede or redirect flood flows? **(No Impact, No New Impact)***

According to Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06095C0629G, the project site is located in Zone X, which is identified as an area of minimal flood hazard.[80] Additionally, the proposed project would not substantially alter drainage patterns. Because the proposed project would not place improvements and structures directly within a 100-year floodplain, the proposed project would not impede or redirect flood flows, and there would be no impact. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

*d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? **(No Impact, No New Impact)***

Flooding. According to FEMA FIRM No. 06095C0629G, the project site is located in Zone X, which is identified as an area of minimal flood hazard.[81] Therefore, the proposed project would not risk release of pollutants due to project inundation by flood hazard.

---

80 Federal Emergency Management Agency (FEMA). 2016. Flood Insurance Rate Map No. 06095C0629G. Map Revised August 3, 2016. Website: https://msc.fema.gov/portal/search (accessed July 5, 2024).

81 Ibid.

Tsunami. The project site is not within a mapped tsunami hazard area.[82] Furthermore, the risk of flooding due to a tsunami event is considered to be low for Vallejo.[83] No impact would occur.

Seiches. Seiches are waves created in an enclosed body of water (e.g., a bay, lake, or harbor) that go up and down or oscillate and do not progress forward like standard ocean waves. Limited isolated damage to adjacent and downslope structures has been observed from seiches occurring in swimming pools and in small shallow lakes and ponds. There are no sizeable, enclosed bodies of water in the vicinity of the project site. The project site is approximately 1 mile from the Carquinez Strait; however, no seiches have ever been recorded in the Bay Area[84] and the project site is at a higher elevation and would not be inundated in the event of a seiche. No impact would occur.

Dam Inundation. The project site is not within a mapped dam failure inundation area.[85] Therefore, the project site is not at risk of inundation due to dam failure. No impact would occur.

Overall, the proposed project would not risk release of pollutants due to project inundation by flooding, tsunami, seiches, or dam inundation. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? ***(Less Than Significant Impact, No New Impact)***

In the Bay Area, including the project site, the Water Board is responsible for implementation of the Basin Plan, which establishes beneficial water uses for waterways and water bodies within the region. As previously discussed, the proposed project would comply with existing NPDES permit requirements, including the CGP and MRP, and would implement construction and operational BMPs to reduce pollutants of concern in stormwater runoff as detailed above. Compliance with these regulatory requirements would ensure that the proposed project would not degrade or alter water quality, causing the receiving waters to exceed the water quality objectives, or impair the beneficial use of receiving waters. As such, the proposed project would not result in water quality impacts that would conflict with the Basin Plan. Construction and operational impacts related to a conflict with the Basin Plan would be less than significant.

The Sustainable Groundwater Management Act (SGMA), which was enacted in September 2014, requires governments and water agencies of high- and medium-priority basins to halt overdraft of groundwater basins. The SGMA requires the formation of local Groundwater Sustainability Agencies (GSAs), which are required to adopt Groundwater Sustainability Plans to manage the sustainability of the groundwater basins. The project site is not located within a mapped Division of Water Rights groundwater basin boundary and is not subject to a sustainable groundwater management plan.

---

82 California Department of Conservation (DOC). 2024. *Solano County Tsunami Hazard Areas.* Website: https://www.conservation.ca.gov/cgs/tsunami/maps/Solano (accessed October 25, 2024).

83 Vallejo, City of. 2016. *Propel Vallejo General Plan Update and Sonoma Boulevard Specific Plan EIR for the City of Vallejo.* July.

84 Ibid.

85 Ibid.

Nevertheless, as detailed in Section 4.10.b, the proposed project would not interfere with groundwater recharge in the vicinity of the project site. For these reasons, the proposed project would not conflict with or obstruct the implementation of a sustainable groundwater management plan, and this impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

4.11 LAND USE AND PLANNING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Physically divide an established community?	☐	☐	☐	☒	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐	☒

4.11.1 Prior Environmental Analysis

Chapter 4.9 of the General Plan EIR analyzed impacts related to land use and planning associated with build out of the General Plan and determined that build out of the General Plan would result in less than significant impacts related to land use and planning and would not divide an established community or conflict with established plans, policies, and regulations. No mitigation measures were prescribed. The General Plan does not include any goals, policies, or actions related to land use which would be applicable to the proposed project.

4.11.2 Background

The project site is located in an urban area in Vallejo and is generally surrounded by residential, recreational, and open space uses. The City of Vallejo General Plan 2040 designates the project site as Mix of Housing Types (R-MH) and Primarily Single Family (R-SF). The project site is currently zoned Residential Medium Density (RMD) and Residential Low Density (RLD) on the City's Zoning Map and would be rezoned a Planned Development (PD) Zoning District.

4.11.3 Impact Analysis

a. Would the project physically divide an established community? ***(No Impact, No New Impact)***

The physical division of an established community typically refers to the construction of a physical feature (such as an interstate highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community or between a community and outlying area. For instance, the construction of an interstate highway through an existing community may constrain travel from one side of the community to another; similarly, such construction may also impair travel to areas outside the community.

The project site is located in an urban area in Vallejo and is generally surrounded by residential, recreational, and open space uses. The project site is bordered to the north by I-780 and vacant land that is zoned for Public and Semi-Public uses. Farther north is a variety of Public and Semi-Public uses, including a California Highway Patrol office, St. Patrick-St. Vincent High School, and single- and multifamily residential uses. The project site is bordered immediately to the east by vacant, undeveloped land zoned for resource conservation and the Benicia State Recreation Area. Farther east are commercial uses and single- and multifamily residential uses. The project site is bordered

immediately to the south by vacant undeveloped land owned by the City and zoned for parks, recreation and open space, and resource conservation. Farther south are single-family residential uses and Glen Cove Elementary School. The project site is bordered immediately to the west by a 141-unit single-family residential subdivision. Farther west are commercial uses and single-family residential uses. The proposed project would include the development of the project site with residential uses, consistent with the adjacent residential communities in the surrounding area west of the project site. The proposed project would not require the construction of any new infrastructure that would divide an established community and would not remove any means of access. Therefore, the proposed project would not result in the physical division of an established community or adversely affect the continuity of land uses in the vicinity and there would be no impact. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? ***(Less Than Significant Impact, No New Impact)***

The City of Vallejo General Plan 2040 designates the project site as Mix of Housing Types (R-MH) and Primarily Single Family (R-SF). Permitted land uses within the R-MH and R-SF designations are similar and include single-family homes. In addition, the land use designations allow for duplexes, triplexes fourplexes, smaller scale apartment buildings, and small commercial spaces; and public facilities such as schools, religious institutions, parks, and other community facilities appropriate within a residential neighborhood. The maximum permitted residential density in the R-MH designation is 25 dwelling units per acre, while in the R-SF designation it is 9 dwelling units per acre; however, in single-family areas where accessory dwelling units are allowed, the maximum permitted residential density is 12 dwelling units per acre. The proposed project would develop approximately 10 acres of the project site with 51 residential units, resulting in an overall density of 4.9 dwelling units per acre, which meets the residential density standard for both the R-MH and R-SF designations.

As previously stated, the project site is currently zoned Residential Medium Density (RMD) and Residential Low Density (RLD) on the City's Zoning Map and would be rezoned a Planned Development (PD) Zoning District. RLD allows for primary single-family and RMD allows for a mix of housing types/medium density. The PD District is established to encourage the arrangement of a compatible variety of uses on suitable lands in such a manner that the resulting development will be in accord with the policies of the City's Municipal Code, Section 16.209, to provide flexibility by allowing diversification in regulations such as building relationships, setbacks, height limitations, lot sizes, types of structures, parking, and the amount and location of open space[86]

The PD District requires development to conform to existing land use designations, and the minimum area of a PD Zoning District shall be 4 contiguous acres. The project site is 20.13 acres and, as discussed above, the proposed development would be consistent with the existing General Plan land use designations and would not exceed the allowable densities associated with the R-MH and

[86] Vallejo, City of. n.d.-e. *Vallejo, California – Municipal Code, Title 16 – Zoning, Part II – Districts and Development Types, Chapter 16.209 – Planned Development District.*

R-SF designations. Therefore, the proposed project would be consistent with the development regulations of the PD Zoning District.

Additionally, the proposed project would be required to undergo Site Development Review and Design Review consistent with Sections 16.604 and 16.605 of the Vallejo Municipal Code, which would provide for the review of the physical improvements to the project site, to ensure compatibility and compliance with City requirements. Additionally, the proposed project would also require building permits, a use permit, Landscape Review, and Tentative Map Approval. The proposed project would not conflict with an adopted land use plan, policy, or regulations. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to land use impacts analyzed in the General Plan EIR.

4.12 MINERAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒	☒

4.12.1 Prior Environmental Analysis

The topic of mineral resources was discussed in Chapter 6.0 of the General Plan EIR, which determined that no impact to mineral resources with build out of the General Plan would occur as there are no formal mineral resource deposits located within the city limits. No mitigation measures were prescribed. There are no General Plan goals, policies, or actions related to mineral resources which would be applicable to the proposed project.

4.12.2 Background

Minerals are any naturally occurring chemical element or compound, or groups of elements and compounds, formed from inorganic processes and organic substances, including, but not limited to, coal, peat, and oil-bearing rock, but excluding geothermal resources, natural gas, and petroleum. Rock, sand, gravel, and earth are also considered minerals by the DOC when extracted by surface mining operations.

The project site is within an urbanized area in Vallejo, and there are no known mineral resources within the vicinity of the project site that would be of value to the region or to the State.

4.12.3 Impact Analysis

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? ***(No Impact, No New Impact)***

The project site is within an urbanized area in Vallejo, and there are no known mineral resources within the vicinity of the project site that would be of value to the region or to the State. Additionally, according to the Propel Vallejo General Plan Update and Sonoma Boulevard Specific Plan Draft EIR,[87] no formal mineral resource deposits are located within the city limits. Therefore, development of the proposed project would not result in the loss of available mineral resources and no impact related to mineral resources would occur. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

[87] Vallejo, City of. 2016. Op. cit.

b. Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? ***(No Impact, No New Impact)***

Please refer to Section 4.12.a. The proposed project would not result in the loss of availability of any known locally important mineral resource recovery site. Therefore, no impact related to the availability of a locally important mineral resources recovery site would occur. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

4.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project result in:					
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐	☒
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐	☒
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒	☒

4.13.1 Prior Environmental Analysis

Chapter 4.10 of the General Plan EIR analyzed noise impacts associated with build out of the general Plan and determined that development under the General Plan would cause a substantial permanent increase in ambient transportation-related noise levels in the city during construction and operation. Therefore, the General Plan prescribed **Mitigation Measure NOI-3**, which details technological advances for noise generating vehicles and machinery and universal use of noise attenuating features, and **General Plan EIR Mitigation Measure NOI-4**, which provides specific construction noise measures to be included as conditions of approval for development projects. However, the requirements in **General Plan EIR Mitigation Measure NOI-3** were determined to be infeasible, and this impact and the cumulative noise impact was determined to be significant and unavoidable.

Additionally, the General Plan includes the following goals, policies, and actions related to noise which would be applicable to the proposed project:

- **Policy NBE-5.13: Noise Control.** Ensure that noise does not affect quality of life in the community.
  - **Action NBE-5.13A:** Continue to require that new noise-producing uses are located sufficiently far away from noise-sensitive receptors and/or include adequate noise mitigation, such as screening, barriers, sound enclosures, noise insulation, and/or restrictions on hours of operation.
  - **Action NBE-5.13C:** Update City regulations to restrict the allowable hours to between 7 a.m. and 7 p.m. on weekdays for construction, demolition, maintenance, and loading/unloading activities that may impact noise-sensitive land use.

- **Policy NBE-5.14: Vibration Control.** Ensure that vibration does not affect quality of life in the community.
  - **Action NBE-5.14A:** Update City regulations to establish quantified vibration level limits similar to commonly used guidelines found in the Federal Transit Administration document "Transit Noise and Vibration Impact Assessment."
- **Policy NBE-5.15: Noise Compatibility Standards.** Apply the General Plan noise and land use compatibility standards to all new residential, commercial, and mixed-use development and redevelopment.
  - **Action NBE-5.15A:** For new single-family residential projects, use a standard of 60 L_{dn} for exterior noise in private use areas, and require appropriate impact mitigation.
  - **Action NBE-5.15D:** Require maximum interior noise levels at 45 L_{dn} in all new residential units and require appropriate impact mitigation.
  - **Action NBE-5.15E:** When approving new development, limit project-related noise increases to the following for permanent stationary and transportation-related noise sources:
    - no more than 10 dB in non-residential areas;
    - no more than 5 dB in residential areas where the with-project noise level is less than the maximum "normally acceptable" level in the Noise and Land Use Compatibility figure; and
    - no more than 3 dB where the with-project noise level exceeds the "normally acceptable" level in Noise and Land Use Compatibility figure.
  - **Action NBE-5.15F:** Require acoustical studies with appropriate mitigation measures for projects that are likely to be exposed to noise levels that exceed the 'normally acceptable' standard and for any other projects that are likely to generate noise in excess of these standards.

4.13.2 Background

The following discussion is based on the findings from the *Noise Impact Analysis*[88] prepared for the proposed project, which is included in **Appendix H** of this Initial Study.

4.13.2.1 Existing Noise Levels

To assess the existing noise level environment, noise levels are referenced from the Propel Vallejo General Plan 2040 and Sonoma Boulevard Specific Plan Draft EIR.[89] The proposed project lies within

[88] Urban Crossroads. 2025. *Vista Cove Noise Impact Analysis, City of Vallejo.* April.
[89] City of Vallejo. 2016. *Propel Vallejo General Plan 2040 and Sonoma Boulevard Specific Plan Draft EIR.* July.

the 70 A-weighted decibel (dBA) Community Noise Equivalent Level[90] (CNEL) traffic noise contour of Interstate 780 (I-780) and the freeway segment from Columbus Parkway to Glen Cove Parkway exposes adjacent land uses to 77.7 dBA CNEL at 100 feet from the centerline. The background ambient noise levels in the vicinity of the project site is considered to be dominated by the transportation-related noise associated with I-780.

4.13.2.2 Noise Monitoring Locations

To assess the potential for long-term operational and short-term construction noise impacts and short-term vibration impacts, six sensitive receiver locations were identified as representative locations for analysis as further detailed below (refer to **Figure 4.13-1**). The selection of receiver locations is based on Federal Highway Administration (FHWA) guidelines and is consistent with additional guidance provided by the California Department of Transportation (Caltrans) and the Federal Transit Administration (FTA). Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land.

Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Sensitive receivers near the project site include single-family residences, the closest of which is approximately 30 feet south of the project site, and Saint Patrick Saint Vincent Catholic High School. Other sensitive land uses in the project vicinity that are located at greater distances than those identified in **Figure 4.13-1,** will experience lower noise levels than those identified in this analysis due to the additional attenuation from distance and the shielding of intervening structures.[91] The six identified sensitive receivers are as follows:

- **R1:** Location R1 represents existing noise sensitive single-family residence at 190 Buckeye Lane, approximately 90 feet southwest of the project site. Receiver R1 is placed near the private outdoor living area (backyard) facing the project site.

- **R2:** Location R2 represents the existing noise sensitive single-family residence at 180 Ironwood Lane, approximately 80 feet south of the project site. Receiver R2 is placed near the private outdoor living area (backyard) facing the project site.

- **R3:** Location R3 represents the existing noise sensitive single-family residence at 196 Shady Lane, approximately 30 feet south of the project site. Receiver R3 is placed near the private outdoor living area (backyard) facing the project site.

- **R4:** Location R4 represents the existing noise sensitive single-family residence at 156 Wildflower Avenue, approximately 114 feet west of the project site. Receiver R4 is placed near the private outdoor living area (backyard) facing the project site.

[90] Community Noise Equivalent Level (CNEL) is a 24-hour average noise metric that accounts for the increased sensitivity to noise during the evening and nighttime hours.

[91] Urban Crossroads. 2025. Op. cit.

This page intentionally left blank

LSA

Project Location

Limit Of Disturbance

Receiver Locations

Distance from Receiver to Project Site Boundary (ft)

FIGURE 4.13-1

0 100 200

FEET

SOURCE: Nearmap (9/4/2024)

I:\2024\20241845\GIS\Pro\Vista Cove Planned Development Project\Vista Cove Planned Development Project.aprx (5/29/2025)

Vista Cove Planned Development Project

Sensitive Receiver Locations

This page intentionally left blank

- **R5:** Location R5 represents the existing noise sensitive single-family residence at 124 Shady Lane, approximately 188 feet west of the project site. Receiver R5 is placed near the private outdoor living area (backyard) facing the project site.

- **R6:** Location R6 represents the existing noise sensitive Saint Patrick Saint Vincent High School at 1500 Benicia Road and the multi-family uses to the east of the school, approximately 339 feet north of the project site. Receiver R6 is representative of an outdoor area and the building façade, in terms of distance.

4.13.2.3 City of Vallejo Significance Criteria Summary

Table 4.13.A shows the significance criteria summary matrix. Noise and vibration impacts shall be considered significant if the project causes any of the following to occur:

Table 4.13.A: Significance Criteria Summary

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime[1]	Nighttime[2]
Off-Site Noise	Noise- Sensitive	Residential areas where with project is less than maximum "normally acceptable" level of 60 CNEL (dBA)	≥ 5 dBA CNEL Project increase[3]	
		Project exceeds "normally acceptable" level of 60 CNEL (dBA)	≥ 3 dBA CNEL Project increase[3]	
	Non-Noise Sensitive	Ambient	≥ 10 dBA CNEL Project increase[3]	
On-Site Noise	Noise- Sensitive	Exterior Noise Level Standard	60 dBA L_{dn}	
		Interior Noise Level Standard	45 dBA L_{dn}	
Operational Noise	Noise- Sensitive	Residential areas where with project is less than maximum "normally acceptable" level of 60 CNEL (dBA)	≥ 5 dBA CNEL Project increase[3]	
		Project exceeds "normally acceptable" level of 60 CNEL (dBA)	≥ 3 dBA CNEL Project increase[3]	
		Residential	60 dBA L_{eq}[4]	
Construction Noise & Vibration		Noise Level Threshold	80 dBA L_{eq}[5]	N/A
		Vibration Level Threshold	0.30 PPV (in/sec)[6]	

Source: City of Vallejo (2025).
[1] "Daytime" = 7:00 a.m. - 10:00
[2] "Nighttime" = 10:00 p.m. - 7:00 a.m.
[3] City of Vallejo General Plan Action NBE-5.15E.
[4] City of Vallejo Municipal Code, Section 16.502.09(C)(2) (Appendix 3.1).
[5] City of Vallejo Municipal Code, Section 16.502.09(D)(1) (Appendix 3.1).
[6] Caltrans Transportation and Construction Vibration Manual, April 2020 Table 19.
dBA = A-weighted decibels
in/sec = inches per second
L_{dn} = day-night average sound level
L_{eq} = equivalent continuous sound level
N/A = not applicable
PPV = peak particle velocity
VdB = vibration velocity decibels

4.13.3 Impact Analysis

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? ***(Less Than Significant Impact, No New Impact)***

Construction Noise Impacts. This section summarizes the potential increase in impacts resulting from the short-term construction activities associated with the development of the proposed project compared to the prior General Plan EIR noise impact analysis. Noise generated by the construction equipment associated with the proposed project would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. Construction activities are expected to occur in the following stages: site preparation, grading, building construction, paving, and architectural coating. Based on the construction noise levels detailed in the Noise Impact Analysis,[92] the highest anticipated noise levels during construction, occurring when the loudest equipment operates closest to the nearest sensitive receptor, would average approximately 65 dBA equivalent continuous sound level (L_{eq}). This is below the City of Vallejo's daytime construction noise threshold of 80 dBA L_{eq} at all sensitive receptor locations. In addition, the project would be required to comply with noise-related provisions of the City of Vallejo Municipal Code, Chapters 12.40 and 16.502, which establish allowable hours of construction activity and prohibit construction noise that exceeds established performance standards. According to the City of Vallejo Municipal Code, Chapters 12.40 and 16.502. During construction, construction activities shall be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, and 9:00 a.m. to 6:00 p.m. on Saturdays. Construction is prohibited on Sundays and City-observed holidays, unless a special permit is issued by the City. Compliance with these existing regulatory requirements would ensure that construction activities occur only during permitted hours and would not generate excessive noise levels. Therefore, the proposed project would not result in new significant construction-related noise impacts. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Off-Site Transportation Noise Impacts. As detailed in the Noise Impact Analysis,[93] the location with the greatest chance of an off-site transportation noise impact is at the residence near the entrance to the project site and at Shady Lane and Wildflower Avenue. Assuming a typical speed of 25 miles per hour (mph), a predominantly automobile traffic mix, and no barriers, the proposed project is predicted to generate a noise level of 50.2 dBA CNEL at the nearest building façade of 196 Wildflower Avenue. Therefore, transportation associated with the proposed project would not expose existing noise-sensitive receivers to excessive noise levels, and the off-site traffic noise level impacts due to the proposed project are considered less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR. **Off-Site Operational Noise Impacts.** Adjacent off-site land uses would potentially be exposed to stationary-source noise impacts from the proposed ground mounted air conditioning units. These units are anticipated to

92 Urban Crossroads. 2025. *Vista Cove Noise Impact Analysis, City of Vallejo.* April.

93 Ibid.

operate intermittently throughout the day and night. The analysis considered worst-case conditions, assuming 24-hour operation, seven days per week. Based on the reference noise levels detailed in the Noise Impact Analysis,[94] the highest operational noise level would average 33.3 dBA L_{eq} at the sensitive receiver locations, which would not exceed the daytime or nighttime noise level thresholds of 60 dBA L_{eq} or 50 dBA L_{eq}, respectively, at any receiver location. As such, the air conditioning units, which represent the primary source of operational noise, would not exceed the City's established thresholds for residential areas. Therefore, the operational noise generated by the proposed project would not result in a substantial permanent increase in ambient noise levels in excess of local standards as the project noise impacts were within the noise impacts evaluated in the General Plan EIR. Impacts would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR. *b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?* ***(Less Than Significant Impact, No New Impact)***

Construction. Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from project construction activities would cause only intermittent localized effects. The proposed project's construction activities most likely to cause vibration impacts are:**Heavy Construction Equipment:** Although all heavy mobile construction equipment has the potential to cause at least some perceptible vibration while operating close to buildings, the vibration is usually short-term and is not of sufficient magnitude to cause building damage.**Trucks:** Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul routes pass through residential neighborhoods on streets with bumps or potholes. Repairing the bumps and potholes generally eliminates the problem.Based on the reference construction vibration levels detailed in the Noise Impact Analysis[95] and the construction vibration assessment methodology published by the FTA, construction vibration velocity levels associated with the proposed project are estimated to range from less than 0.02 to 0.07 inches per second (in/sec) peak particle velocity (PPV) at the nearest adjacent off-site structure. Based on the maximum acceptable continuous vibration threshold of 0.10 in/sec PPV, the typical project construction vibration levels would not exceed the vibration thresholds at any local receiver. Additionally, since the vibration levels would be well below 0.30 in/sec PPV, there would be no structural vibration impacts. Therefore, the project-related vibration impacts associated with construction activities are considered less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Operation. The proposed project would not result in vibration impacts related to on-site stationary source operations because the proposed stationary equipment, ground-mounted air conditioning units, would not generate perceptible vibration levels. These units are typical residential heating, ventilation, and air conditioning (HVAC) systems designed for continuous, low-vibration operation and would be installed on vibration-isolating pads in accordance with standard construction practices.In addition, the proposed project would not result in vibration impacts from project-related traffic on site or on adjacent roadways. Project-related vehicle trips would consist of

94 Urban Crossroads. 2025. *Vista Cove Noise Impact Analysis, City of Vallejo.* April.

95 Ibid.

standard passenger vehicles traveling on paved local roads. The rubber tires and suspension systems of these vehicles effectively dampen vibration, and such activity is not typically associated with perceptible or damaging levels of groundborne vibration. Based on a reference vibration level, structures located more than 20 feet from the roadways used by project-related traffic would experience vibration levels well below the commonly used threshold for structural damage. Therefore, vibration levels generated from stationary equipment and project-related traffic would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? ***(No Impact, No New Impact)***

Aircraft flyovers may be audible on the project site due to aircraft activity in the vicinity. The nearest airports to the project site are Buchanan Airfield, located approximately 10 miles to the southeast, and Napa County Airport, located approximately 10 miles to the north of the project site. Because the project site is not within the vicinity of a private airstrip or an airport land use plan or within 2 miles of a public airport or public use airport, the proposed project would not expose people residing or working in the project area to excessive noise levels. There would be no impacts. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

4.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐	☒

4.14.1 Prior Environmental Analysis

Chapter 4.12 of the General Plan EIR analyzed impacts related to population and housing associated with build out of the General Plan and determined that build out of the General Plan would result in less than significant impacts related to population and housing. No mitigation measures were prescribed. There are no General Plan goals, policies, or actions related to population and housing which would be applicable to the proposed project.

4.14.2 Background

The proposed project would include the construction of 51 single-family residential units and associated improvements, including new private internal roadways and alleys, fencing, landscaping, and common open space areas on vacant, undeveloped land. No residential units currently exist at the project site. Based on the City of Vallejo's average household size (2019–2023) of 2.79 persons per household,[96] the proposed project would increase the local population by approximately 143 persons.

4.14.3 Impact Analysis

a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? ***(Less Than Significant Impact, No New Impact)***

The proposed project would include the construction of 51 single-family residential units and associated improvements, including new private internal roadways and alleys, fencing, landscaping, and common open space areas on vacant, undeveloped land. Based on the City of Vallejo's average household size (2019–2023) of 2.79 persons per household,[97] the proposed project would increase the local population by approximately 143 persons. The population of the City was estimated to be

96 United States Census Bureau. *QuickFacts, Vallejo city, California; United States.*2024. Website: https://www.census.gov/quickfacts/fact/table/vallejocitycalifornia,US/PST045224 (accessed February 28, 2025).

97 Ibid.

approximately 122,807 persons as of July 1, 2023.[98] The anticipated population growth associated with the proposed project represents less than a 1 percent increase in the city's current population. The City's population is projected to grow by 24,826 persons to a total of 142,744 persons by 2040.[99] The proposed project represents approximately 0.6 percent of the population growth anticipated through 2040.

Because the project would create new housing, project implementation would increase the population in the area. This population growth, however, would not be considered substantial or unplanned because the proposed project is consistent with the City's General Plan land use and zoning designations for the site and would thus be consistent with the growth assumed for build out of the General Plan. Therefore, the proposed project would not result in substantial unplanned population growth in the area, and this impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? ***(Less Than Significant Impact, No New Impact)***

The project site is currently vacant, undeveloped land consisting of undulating hills and flat areas covered primarily with non-native annual grassland and scattered mature trees. No residential uses currently exist within the project site. Because the proposed project includes the construction of 51 single-family residential units, the proposed project would contribute to the City's housing supply. Therefore, the proposed project would not result in the displacement of people or housing and would not require the construction of replacement housing elsewhere, and impacts would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

98 United States Census Bureau. *QuickFacts, Vallejo city, California; United States.*2024. Website: https://www.census.gov/quickfacts/fact/table/vallejocitycalifornia,US/PST045224 (accessed February 28, 2025).

99 Vallejo, City of. 2016. Op. cit.

4.15 PUBLIC SERVICES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
i. Fire protection?	☐	☐	☒	☐	☒
ii. Police protection?	☐	☐	☒	☐	☒
iii. Schools?	☐	☐	☒	☐	☒
iv. Parks?	☐	☐	☒	☐	☒
v. Other public facilities?	☐	☐	☒	☐	☒

4.15.1 Prior Environmental Analysis

Chapter 4.13 of the General Plan EIR analyzed impacts on public services associated with build out of the General Plan and determined that build out of the General Plan would result in less than significant impacts related to public services due to compliance with existing regulatory requirements including the California Building Code, California Fire Code, the City of Vallejo Municipal Code, and the payment of Public Facilities Impact Mitigation Fees. No mitigation measures were prescribed. However, the General Plan includes the following policies and actions related to public services which would be applicable to the proposed project:

- **Policy CP-2.3: Fire Prevention and Response Services**. Ensure the provision of fire prevention and emergency response services that minimize fire risks and protect life and property.
  - **Action CP-2.3E**: Work with property owners and public agencies to ensure that plant growth is managed to minimize fire danger.
- **Policy NBE-5.3: Health and Safety Codes**. Enforce development regulations and building code requirements to protect residents, businesses, and employees from flooding, liquefaction, earthquakes, fires, and other hazards.
  - **Action NBE-5.3B**: Continue to require development to comply with building and safety codes and continue to route plans and drawings to all relevant City departments for review.
- **Policy MTC-2.3: Emergency Response Routes**. Ensure adequate emergency vehicle access in all areas of Vallejo.

- **Action MTC-2.3B**: Continue to involve the Police and Fire Departments in the development review process to ensure that applicable requirements for emergency access are met.

4.15.2 Background

The project site is located within the City of Vallejo and is served by the following existing public services.

4.15.2.1 Fire Protection

Fire suppression, emergency medical and rescue services, and other life safety services are provided to the project area and the site by the Vallejo Fire Department (VFD). The closest active fire station to the project site is Vallejo Fire Station 24 at 1005 Oakwood Avenue, approximately 1.7 miles northwest of the project site. Fire Station 24 houses an engine company of three firefighters on each shift.[100]

4.15.2.2 Police Protection

The Vallejo Police Department (VPD) provides law enforcement services to the City of Vallejo. VPD has one station within the city limits, located at 111 Amador Street approximately 2.5 miles northwest of the project site.[101]

4.15.2.3 Schools

The project site is within the boundaries of the Vallejo City Unified School District (VCUSD). The VCUSD operates 20 schools, including 10 elementary schools serving kindergarten through 5th grade; 5 schools serving kindergarten through 8th grade; one middle school serving grades 6 through 8, two high schools serving grades 9 through 12; one adult school, and one alternative school.

4.15.2.4 Parks

The Greater Vallejo Recreation District (GVRD) currently operates 33 parks with various amenities throughout the city, including: 20 neighborhood parks, 10 community parks, 6 special-purpose parks, and 4 community centers. It also manages over 1,000 acres of public land within Vallejo and some surrounding areas.[102] The closest parks to the project site are Benicia State Recreation Area (located approximately 0.3 mile southeast of the project site), Glen Cove School Park (located approximately 0.5 mile southwest of the project site), and Glen Cove Waterfront Park (located approximately 0.9 mile southwest of the project site). Benicia State Recreation Area includes trails, picnic areas, and campsites. Glen Cove School Park includes a children's play area, tennis and pickleball courts, picnic tables, and a sports field. Glen Cove Waterfront Park includes trails that connect to the San Francisco Bay Trail.

100 Vallejo, City of. 2016. Op. cit.
101 Ibid.
102 Greater Vallejo Recreation District (GVRD). 2025. About the District. Website: https://www.gvrd.org/about-the-district (accessed March 4, 2025).

4.15.3 Impact Analysis

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire protection? ***(Less Than Significant Impact, No New Impact)***

Fire suppression, emergency medical and rescue services, and other life safety services are provided to the project area and the site by the Vallejo Fire Department (VFD). The VFD also provides a range of non-emergency services, including public education, fire prevention programs, and permit inspection services. The VFD also participates in countywide and Statewide mutual-aid programs with fire agencies in Solano County, Napa County, and Contra Costa County. There are six fire stations within Vallejo. The closest fire station to the project site is Vallejo Fire Station 26 at 1335 Fulton Avenue, approximately 0.6 mile west of the project site. However, Fire Station 26 is currently closed due to budget cuts. The closest active fire station to the project site is Vallejo Fire Station 24 at 1005 Oakwood Avenue, approximately 1.7 miles northwest of the project site. Fire Station 24 houses an engine company of three firefighters on each shift. Current VFD staffing and equipment levels allow for simultaneous dispatch of up to three engines, one truck, one paramedic unit, and the Battalion Chief.[103]

The VFD currently meets its response time goals in much of the city, where incidents are generally clustered in proximity to higher-call-volume fire stations. In outlying areas of the city, steep terrain and a winding street network make maintaining response time goals more challenging. Mutual-aid agreements with neighboring jurisdictions help ensure adequate response times in the outlying areas. Currently, VFD can dispatch firefighters to areas farthest from any station within 12 minutes of call receipt, which is generally adequate to stop serious fires from spreading to adjoining buildings and to provide medical treatment for noncritical patients.[104]

Planned growth under the General Plan would increase calls for fire protection services in Vallejo. The proposed project is consistent with the site's General Plan designations and does not represent unplanned growth given that the project site would be developed consistent with applicable land use and zoning designations. As noted in Section 4.14, Population and Housing, the proposed project would result in an incremental increase in the population of the city and therefore incrementally increase the demand for emergency fire services and emergency medical services. However, the proposed project would be required to comply with all applicable codes for fire safety and emergency access.

VFD would review the site plans, fire truck access, and site fire flow design for the proposed project to ensure that adequate emergency access is provided prior to issuance of a building permit. Project design features incorporated into the structural design and layout of the residential units would keep

103 Vallejo, City of. 2016. Op. cit.
104 Ibid.

service demand increases to a minimum. For example, the project would be constructed in accordance with the current CBC, which requires all on-site structures to incorporate construction techniques and materials such as roofs, eaves, exterior walls, vents, appendages, windows, and doors that are resistant to and/or perform at high levels against ignition during exposure to fires. Vehicular access to the project site would be provided by one full-access residential street through an established community to the west of the intersection of Shady Lane and Wildflower Avenue, and the proposed project would include new internal residential streets. The proposed roadways would be developed to City and Fire Code standards to allow emergency vehicles ease of access and maneuverability.

Furthermore, the project sponsor would be required to pay public facilities impact mitigation fees[105] used to fund capital costs associated with constructing new public facilities and purchasing equipment for new public facilities. These fees are one-time charges applied to new development and are imposed to raise revenue for the construction or expansion of capital facilities located outside of project boundaries of a new development that benefit the area. Public facilities impact mitigation fees enable the City to collect fair-share fees from new development projects to fund new infrastructure and services. These fees are collected for specific infrastructure needs and are deposited into different accounts representing these requirements. Payment of public facilities impact mitigation fees commensurate with the increased demand for services in Vallejo would offset any increase in demand for fire protection services.

Development of the proposed project would not cause fire staffing, facilities, or equipment to operate at a deficient level of service. The VFD would continue providing services to the project site and would not require additional firefighters to serve the proposed project. The construction of a new or expanded fire station would also not be required. The potential increase in demand for service is not expected to adversely affect existing response times to the site or within Vallejo.

Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection, and this impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

ii. Police protection? ***(Less Than Significant Impact, No New Impact)***

The Vallejo Police Department (VPD) provides law enforcement services to the City of Vallejo. Property crimes, including burglary, larceny, and robbery, account for most of the crime in Vallejo, and at times exceed the Bay Area and California averages.[106] The project site is located adjacent to an established residential area of the city, which is already served by the VPD. VPD has one station

[105] Vallejo, City of. *Vallejo, California Municipal Code, Title 3 – Revenue and Finance, Chapter 3.06 – Public Facilities Impact Mitigation Fee.* Website: https://library.municode.com/ca/vallejo/codes/municipal_code?nodeId=TIT3REFI_CH3.06PUFAIMMIFE (accessed March 4, 2025).

[106] Vallejo, City of. 2016. Op. cit.

within the city limits, located at 111 Amador Street approximately 2.5 miles northwest of the project site. VPD is organized into eight units providing field operations and support services. The Communications and Dispatch Unit provides public safety communications for police and fire, answering 9-1-1 calls and dispatching police, fire, and medical responses in the greater Vallejo area. The Community Services Unit, established at the end of 2013, addresses quality-of-life crimes in the city and provides assistance and support to Neighborhood Watch groups as well as public education and outreach services in the community.[107]

Planned growth under the General Plan would increase calls for police protection service in the city. The proposed project could result in an incremental increase in the demand for police protection services; however, the proposed project is consistent with the site's General Plan designation and does not represent unplanned growth. As previously discussed, development of the proposed project would increase the population on the project site and incrementally increase demand for emergency police services. However, the VPD would continue to provide service to the project site and would likely not require additional officers to serve the proposed project, considering the negligible increase in population that would result from the proposed project (less than 1 percent of the City's current population). Furthermore, the project sponsor would be required to pay public facilities impact mitigation fees[108] used to fund capital costs associated with constructing new public facilities and purchasing equipment for new public facilities. Payment of public facilities impact mitigation fees commensurate with the increased demand for services in the city would offset any increase in demand for police protection services.

The construction of new or expanded police facilities would not be required to serve the proposed project. Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for police protection. This impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

iii. Schools? ***(Less Than Significant Impact, No New Impact)***

The project site is within the boundaries of the Vallejo City Unified School District (VCUSD). The VCUSD operates 20 schools, including 10 elementary schools serving kindergarten through 5th grade; 5 schools serving kindergarten through 8th grade; one middle school serving grades 6 through 8, two high schools serving grades 9 through 12; one adult school, and one alternative school. According to the VCUSD locator map, students generated by the site's population increase are anticipated to attend the following schools: Glen Cove Elementary School, Hogan Middle School, and Jesse Bethel High School. **Table 4.15.A** shows the current and past enrollment for VCUSD, Glen Cove Elementary

[107] Vallejo, City of. 2016. Op. cit.

[108] Vallejo, City of. n.d.-a. *Vallejo, California Municipal Code, Title 3 – Revenue and Finance, Chapter 3.06 – Public Facilities Impact Mitigation Fee.* Website: https://library.municode.com/ca/vallejo/codes/municipal_code?nodeId=TIT3REFI_CH3.06PUFAIMMIFE (accessed March 4, 2025).

Table 4.15.A: Vallejo City Unified School District Enrollment Data

District/School	2021–2022 Enrollment	2022–2023 Enrollment	2023–2024 Enrollment
Vallejo City Unified School District	12,717	12,215	11,799
Glen Cove Elementary School	463	447	430
Hogan Middle School	930	867	849
Vallejo High School	1,448	1,335	1,193

Source: Enrollment data obtained from the California Department of Education, Data Quest Website: Enrollment by Grade – Vallejo City Unified (California Department of Education 2025) (accessed March 4, 2025).

School, Hogan Middle School, and Jesse Bethel High School. As shown in **Table 4.15.A**, enrollment in the VCUSD, Glen Cove Elementary School, Hogan Middle School, and Vallejo High School has decreased in the last 3 school years.

The estimated number of students the proposed project would generate is derived by multiplying the number of students per dwelling unit (the student yield factor) by the number of dwelling units in the proposed project (51 new units). The California State Allocation Board Office of Public School Construction reports that the Statewide student yield factor of 0.7 student per dwelling unit is applicable for unified school districts.[109] Applying the Statewide average student yield factor, the proposed project would generate 36 students. The proposed project is consistent with the site's General Plan designations and does not represent unplanned growth given that the project site would be developed consistent with applicable land use and zoning designations. The EIR prepared for the General Plan determined that on a district-wide level the projected growth under implementation of the General Plan would not exceed school capacity.[110] In addition, under State law, the project sponsor would be required to pay school impact fees per SB 50, prior to the issuance of a building permit, to mitigate for impacts to school facilities. Therefore, the project would not require the construction of new or physically altered educational facilities, the construction of which could result in an environmental impact. Impacts associated with the need to expand educational services and facilities in order to maintain acceptable levels of service would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

iv. Parks? ***(Less Than Significant Impact, No New Impact)***

The Greater Vallejo Recreation District (GVRD) currently operates 33 parks with various amenities throughout the city, including: 20 neighborhood parks, 10 community parks, 6 special-purpose parks, and 4 community centers. It also manages over 1,000 acres of public land within Vallejo and some surrounding areas.[111] The City has established a parkland standard of 4.25 acres per 1,000 people.

[109] California Office of Public School Construction. 2019. *School Facility Program Handbook*. January.
[110] Vallejo, City of. 2016. Op. cit.
[111] Greater Vallejo Recreation District (GVRD). 2025. About the District. Website: https://www.gvrd.org/about-the-district (accessed March 4, 2025).

Vallejo currently has 7.90 acres of parkland per 1,000 residents. Therefore, the City is currently exceeding its adopted parkland service standard.[112]

The proposed project involves the construction of 51 single-family residences and would induce minor population growth in the area. The increase in residents within the area may result in an incremental increase in demand for and use of local parks and recreation areas. However, this increase in use is not expected to adversely affect the physical conditions of local and regional open space areas or recreational facilities or require the provision of new parks or facilities because the proposed project is anticipated to increase the city's population by less than 1 percent. The closest parks to the project site are Benicia State Recreation Area (located approximately 0.3 mile southeast of the project site), Glen Cove School Park (located approximately 0.5 mile southwest of the project site), and Glen Cove Waterfront Park (located approximately 0.9 mile southwest of the project site). Benicia State Recreation Area includes trails, picnic areas, and campsites. Glen Cove School Park includes a children's play area, tennis and pickleball courts, picnic tables, and a sports field. Glen Cove Waterfront Park includes trails that connect to the San Francisco Bay Trail.

The proposed project would include 9.74 acres of undisturbed open space and 3.55 acres of common open space, including two bioretention areas, walkways, a loop walk around a flexible-use turf area, and a vista overlook for residents. The proposed single-family residences would also include private front and rear yards. However, the project does not include any outdoor areas intended for public use. The construction of these private facilities is expected to reduce the strain of use on existing neighborhood parks and recreational facilities.

Because the population increase due to the proposed project is not substantial enough to cause a strain on parks and facilities, the proposed project would not result in a substantial increase in demand for park or recreation services in the vicinity such that new facilities would be required to serve the project. Furthermore, new residential development is required to pay park impact fees, as required by Chapter 3.18 of the City's Municipal Code, to generate revenue to be used for the acquisition of land for parks, recreational facilities, or open space; for improvement thereto; or for reasonable consultation fees, feasibility studies, environmental review, and professional services performed in connection with acquisition or improvement of parks, recreational facilities, or open space.[113] Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times, or other performance objectives for recreation, and this impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

[112] Vallejo, City of. 2016. Op. cit.

[113] Vallejo, City of. n.d.-b. *Vallejo, California Municipal Code, Title 3 – Revenue and Finance, Chapter 3.18 Land Dedication and Fees for Park and Recreational Purposes.* Website: https://library.municode.com/ca/vallejo/codes/municipal_code?nodeId=TIT3REFI_CH3.18LADEFEPAREPU (accessed March 4, 2025).

v. Other public facilities? ***(Less Than Significant Impact, No New Impact)***

Development of the proposed project could also increase demand for other public services, including libraries, community centers, and public healthcare facilities. However, due to the minimal increase in population, the proposed project would not substantially increase the use of these facilities such that new facilities would be needed to maintain service standards, as these facilities are not currently overused and have the capacity to serve new demand. Therefore, impacts to other public facilities would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

4.16 RECREATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒	☒

4.16.1 Prior Environmental Analysis

Chapter 4.11 of the General Plan EIR analyzed impacts on parks and recreation associated with build out of the General Plan and determined that build out of the General Plan would result in less than significant impacts related to parks and recreation because the City exceeds its current parkland standard and existing State and local regulations would serve to ensure that future development would not result in significant impacts related to parks and recreation. No mitigation measures were prescribed. However, the General Plan includes the following policies and actions related to recreation which would be applicable to the proposed project:

- **Policy CP-3.4 Parks**. Plan for and provide parkland and facilities to support Vallejo's recreational needs.
  - **Action CP-3.4A**: Maintain a standard of 4.25 acres of parkland per thousand residents and continue to require that new residential development make a fair share contribution to future parks development.

4.16.2 Background

The Greater Vallejo Recreation District (GVRD) currently operates 33 parks with various amenities throughout the city, including: 20 neighborhood parks, 10 community parks, 6 special-purpose parks, and 4 community centers. It also manages over 1,000 acres of public land within Vallejo and some surrounding areas.[114] The closest parks to the project site are Benicia State Recreation Area (located approximately 0.3 mile southeast of the project site), Glen Cove School Park (located approximately 0.5 mile southwest of the project site), and Glen Cove Waterfront Park (located approximately 0.9 mile southwest of the project site). Benicia State Recreation Area includes trails, picnic areas, and campsites. Glen Cove School Park includes a children's play area, tennis and pickleball courts, picnic tables, and a sports field. Glen Cove Waterfront Park includes trails that connect to the San Francisco Bay Trail.

[114] Greater Vallejo Recreation District (GVRD). 2025. About the District. Website: https://www.gvrd.org/about-the-district (accessed March 4, 2025).

4.16.3 Impact Analysis

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? ***(Less Than Significant Impact, No New Impact)***

As discussed in Section 4.15, Public Services, residents of the proposed project would be expected to use local parks and community facilities within Vallejo and the surrounding neighborhoods, as well as regional recreational facilities. Although the proposed project would incrementally increase use of these facilities, this minor increase in use is not expected to result in substantial physical deterioration of local parks, trails, and community centers. As discussed in Section 4.14, Population and Housing, the anticipated population growth associated with the proposed project represents less than a 1 percent increase in the city's current population. Based on the estimated population increase, these facilities are anticipated to have the capacity to serve this increase in demand.

The project also includes the construction and development of various outdoor amenities within the project site, including 9.74 acres of undisturbed open space and 3.55 acres of common open space, including two bioretention areas, walkways, a loop walk around a flexible-use turf area, and a vista overlook for residents. The proposed single-family residences would also include private front and rear yards. The construction of these private facilities is expected to reduce the strain of use on existing neighborhood parks and recreational facilities. Furthermore, new residential development is required to pay park impact fees, as required by Chapter 3.18 of the City's Municipal Code, to generate revenue to be used for the acquisition of land for parks, recreational facilities, or open space; for improvement thereto; or for reasonable consultation fees, feasibility studies, environmental review, and professional services performed in connection with acquisition or improvement of parks, recreational facilities, or open space. [115] Therefore, the proposed project would have a less than significant impact on existing parks or other recreational facilities. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? ***(No Impact, No New Impact)***

As previously discussed, the proposed project would include the construction and development of various outdoor amenities within the project site, including 9.74 acres of undisturbed open space and 3.55 acres of common open space, including two bioretention areas, walkways, a loop walk around a flexible-use turf area, and a vista overlook for residents. These private amenities would be for use by residents of the development and not for public recreational use. The proposed project does not include or require the construction or expansion of existing public recreational facilities, which might have an adverse physical effect on the environment, and no impact would occur. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

[115] Vallejo, City of. n.d.-b. Op. cit.

4.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐	☒
b. Conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?	☐	☐	☒	☐	☒
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐	☒
d. Result in inadequate emergency access?	☐	☐	☒	☐	☒

4.17.1 Prior Environmental Analysis

Chapter 4.14 of the General Plan EIR analyzed impacts to transportation and traffic associated with build out of the proposed project and determined that development would conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system and freeway and highway facility impacts would be significant. The General Plan EIR prescribed **Mitigation Measure TRANS-1a.1**, requiring the City work to minimize congestion in the two-lane road portion of Sonoma Boulevard; **General Plan EIR Mitigation Measure TRANS-1a.2**, requiring the City make roadway improvements to Railroad Avenue; and **General Plan EIR Mitigation Measure TRANS-1b**, requiring the City work with the Solano Transportation Authority and Caltrans to study, identify, program, and build capacity improvements on SR-37 between I-80 and west of the Mare Island interchange. None of these mitigation measures would be applicable to the proposed project as the project site is not located in the vicinity of any of the proposed transportation improvements. Even with implementation of these mitigation measures, the impacts were determined to be significant and unavoidable.

Additionally, the General Plan includes the following policies and actions related to transportation and traffic which would be applicable to the proposed project:

- **Goal MTC-2: Mobile Community**: Enhance local transportation options and maintain a safe, convenient, and sustainable local transportation system.
    - **Policy MTC-2.1: Safety First**: Prioritize pedestrian, bicycle, and automobile safety over traffic flow.
    - **Policy MTC-2.3: Emergency Response Routes**: Ensure adequate emergency vehicle access in all areas of Vallejo.
        - **Action MTC-2.5B:** Set vehicle Level of Service of E or better as an advisory standard to be considered along with, but not to override, metrics for pedestrian, bicycle, transit,

and emergency access performance, with the prioritization of metrics to be determined by the street type and context.

- **Action MTC-2.5E**: Continue to collect both City and Regional transportation impact fees so that development makes fair share contribution to improvements needed to maintain established standards for all modes of transportation, including for traffic flow, roadway safety, and pavement condition.

- **Policy MTC-2.7**: **Complete Streets**: Increase accessibility for and use of streets by pedestrians, bicyclists, and transit riders.

  - **Action MTC-2.8C**: As part of the site plan approval process, require development to provide services from a menu of transportation demand management (TDM) strategies that will reduce VMT.

- **Policy MTC-2.11**: **Sustainable Transportation**: Ensure that circulation improvements can be operated and maintained within existing and future resource limitations.

- **Goal MTC-3**: **Interconnected Community**: Improve connections within and between Vallejo's neighborhoods for all travel modes.

  - **Policy MTC-3.1**: **Coordinated Transportation Planning**: Ensure that improvements to the transportation network support a land use pattern that connects the community and facilities travel among Vallejo's neighborhoods.

4.17.2 Background

The following discussion is based on the findings from the *Transportation Analysis*[116] prepared for the proposed project, which is included in **Appendix I** of this Initial Study.

4.17.2.1 Existing Circulation System

The 20.13-acre project site is located at the northeast corner of Shady Lane and Wildflower Avenue (Assessor's Parcel Numbers [APNs] 0079-171-170 and 0079-120-100) in southeastern Vallejo, west of the eastern boundary with the city of Benicia, in an area consisting primarily of residential, recreational, and public and semi-public uses. Regional vehicular access to the project site is provided by Interstate 780 (I-780), located immediately north of the project site. I-780 is an east-west route between Vallejo and Benicia, connecting Interstate 80 (I-80) to Interstate 680 (I-680) in Benicia. I-780 is a four-lane divided facility (two lanes in each direction), with a speed limit of 65 mph.[117] The route serves an annual average daily traffic (AADT) volume of 55,000 vehicles through

[116] LSA Associates, Inc. 2025. *Transportation Analysis for the Vista Cove Project (LSA Project No. 20241845)*. January 9.

[117] City of Vallejo. 2016. *Propel Vallejo General Plan Update and Sonoma Boulevard Specific Plan EIR for the City of Vallejo.* July.

Vallejo at Columbus Parkway.[118] The closest on- and off-ramps to the project site are located along Glen Cove Road, approximately 0.45 mile west of the project site.

Direct local access to the project site is via Shady Lane and Wildflower Avenue that border the site immediately to the southwest. Shady Lane and Wildflower Avenue and other roadways in the nearby vicinity of the project site are classified as local streets, which are defined as providing direct access to property, and typically have higher intersection spacing and lower speeds than the other roadway classes.[119] Glen Cove Parkway, which is located approximately 0.5 mile west of the project site, is the nearest classified collector street. Collector streets provide connectivity within the city, linking local roads to arterials. Collectors, along with local streets, provide the highest level of access from private property driveways. Collectors typically have lower speeds than arterials, and more closely spaced intersections than arterials.[120]

4.17.2.2 Existing Transit System

Solano County Transit (Soltrans) provides local bus, regional express bus, and Americans with Disabilities Act (ADA) paratransit bus services in Vallejo. Local bus service is supplemented by limited-service routes for school days and regional express bus service connecting to the Contra Costa communities of El Cerrito, Pleasant Hill, and Walnut Creek and the Fairfield Transportation Center in Fairfield. Express bus services also provide connections to San Francisco Bay Area Rapid Transit (BART), AC Transit, County Connection, Fairfield and Suisun Transit, Golden Gate Transit, San Francisco Bay Ferry, Vine Transit, and WestCAT. The project area is served by SolTrans Routes 3 and 8, with the transit stops located approximately 0.5 mile to the west along Glen Cove Parkway, which are accessible to and from the project site via sidewalks along nearby local streets. The Amtrak station in Vallejo is located approximately 4 miles northwest of the project site and the Vallejo Ferry Terminal, which offers ferry service between Vallejo and San Francisco, is located approximately 3.5 miles northwest of the project site.

4.17.2.3 Existing Bicycle and Pedestrian System

Pedestrian facilities include sidewalks, pedestrian signal phases, curb ramps, curb extension, and various streetscape amenities such as lighting and benches. In general, a network of sidewalks, crosswalks, pedestrian signals, and curb ramps provide access for pedestrians in the vicinity of the proposed project site.

Bikeways in the city are classified into the following categories:

- Class I – off-street bike paths
- Class II – on-street bike lanes marked by pavement striping and signage
- Class III – on-street designated bike routes that share the road with motorized vehicles

[118] City of Vallejo. 2016. *Propel Vallejo General Plan Update and Sonoma Boulevard Specific Plan EIR for the City of Vallejo.* July.
[119] Ibid.
[120] Ibid.

The nearest designated bikeway to the project area consists of a Class II Bikeway along Glen Cove Parkway, approximately 0.5 mile west of the project site.[121]

4.17.3 Impact Analysis

a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? ***(Less Than Significant Impact, No New Impact)***

The proposed project would include the construction of 51 single-family residential dwelling units and undeveloped open space on 10 acres within a 20.13-acre project site at the northeast corner of Shady Lane and Wildflower Avenue. The proposed project would be accessed via one full access residential street off the intersection of Shady Lane and Wildflower Avenue. The proposed project would include new internal residential streets with parking on one side and an attached sidewalk. The project would also include private alleys which would be smaller in scale than the private residential streets and would include shared vehicular access to houses with garages fronting onto them. The remainder of the project site would remain undeveloped.

Roadway Analysis. The *City of Vallejo Traffic Impact Analysis/Study Guidelines*[122] were adopted to identify the traffic impacts to traffic operation and safety and to provide the standard requirements for the preparation of a traffic study. These guidelines state that projects likely to add 500 or more daily two-way trips or 100 or more peak period two-way trips would require a traffic analysis. The trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (2021)[123] for Land Use Code 210 (Single-Family Detached Housing), as shown in **Table 4.17.A**, below.

Table 4.17.A: Trip Generation

Land Use (ITE Land Use Code)	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates									
Single-Family Detached Housing (210)[1]		DU	9.43	0.18	0.52	0.70	0.59	0.35	0.94
Proposed Project Trip Generation									
Vista Cove Planned Development	51	DU	481	9	26	35	30	18	48
Net Trip Generation			**481**	**9**	**26**	**35**	**30**	**18**	**48**

[1] Trip rates based on the ITE *Trip Generation* Manual, 11th Edition (2021).
ADT = average daily traffic
ITE = Institute of Transportation Engineers
DU = dwelling unit

As **Table 4.17.A** indicates, the proposed project is anticipated to generate 481 daily trips of which 35 would occur in the AM peak hour and 48 would occur in the PM peak hour. As such, the project's trip generation is below the thresholds established by the City's guidelines and the preparation of a traffic analysis is not required for the proposed project. The project traffic is included within the

121 City of Vallejo. 2016. Op. cit.
122 City of Vallejo Public Works Department. *Traffic Impact Analysis/Study Guidelines*.
123 Institute of Transportation Engineers (ITE). 2021. *Trip Generation Manual,* 11th Edition.

traffic generated by the General Plan build out, and the project would not result in a new significant impact or in a substantial increase in the severity of the transportation impacts identified in the General Plan EIR.

Similarly, the 2023 Solano County Congestion Management Program (CMP)[124] states that projects are reviewed if they will cause a net increase of 100 or more PM peak-hour vehicle trips. The proposed project traffic is below this threshold for review.

Action MTC 2.5-B of the City's General Plan sets a level of service (LOS) standard of E or better to be considered along with, but not to override, metrics for pedestrian, bicycle, transit, and emergency access performance. As such, an analysis was prepared to identify the project's potential to affect the operation of the intersection of Glen Cove Parkway/Robles Way. The signalized intersection of Glen Cove Parkway/Robles Way is one of the access points for the existing neighborhood adjacent to the proposed project and an intersection that traffic for most of the Glen Cove community passes through. It is anticipated that all vehicles for the proposed project will use the intersection of Glen Cove Parkway/Robles Way. LSA contracted with an independent data collection company to collect traffic volume data during the morning and afternoon peak commute periods at this intersection on Thursday, August 22, 2024. All project trips were distributed to/from the north and were added to the existing traffic volume data for the project scenario. **Table 4.17.B** summarizes the results of the LOS analysis. LOS worksheets are provided in **Appendix I**. As **Table 4.17.B** shows, the intersection operates at satisfactory LOS B in existing conditions and traffic from the proposed project would not change the delay at this intersection such that the LOS of the intersection would be reduced or degraded below LOS E, consistent with General Plan Policy MTC-2.5.

Table 4.17.B: Vehicle Level of Service Summary

Intersection	No Project				With Project				Change With Project	
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour			
	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)	LOS	AM	PM
Glen Cove Parkway/Robles Way	11.3	B	12.7	B	12.5	B	14.0	B	1.2	1.3

Source: Compiled by LSA (2024) using Synchro 11 modeling software.
LOS = level of service
sec = seconds

Because the project would generate fewer trips than the threshold for review established by the City and in the CMP, and because project traffic was not found to degrade the operation of the intersection of Glen Cove Parkway/Robles Way to below LOS E, it is determined that the project does not have the potential to significantly affect roadway operations, and the project would not conflict with General Plan policies regarding LOS. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

[124] Solano Transportation Authority. 2023. *2023 Solano County Congestion Management Program*.

Transit, Pedestrian, and Bicycle Facilities. The potential impacts of the project on pedestrian, bicycle and transit are described below.***Pedestrian Facilities.*** According to the United States Census Bureau,[125] pedestrian trips comprise approximately 1.6 percent of the total commute mode share in the City of Vallejo. The proposed project also would generate pedestrian trips to/from transit stops, recreation areas, and employment centers. The volume of pedestrian trips generated by the project would not exceed the carrying capacity of the sidewalks and crosswalks nearby.In the immediate project vicinity, there are sidewalks along Wildflower Avenue and Shady Lane up to the intersection with Robles Way and along Robles Way. There are marked crosswalks, pedestrian push buttons, and pedestrian signals provided at the signalized intersection of Robles Way with Glen Cove Parkway. Although very few pedestrian trips are anticipated to and from the site, the City's General Plan policies encourage non-motorized travel, including walking, bicycling, and transit.

Consistent with existing City policies, the proposed project would provide minimum 4.5-foot-wide pedestrian pathways to connect the single-family homes to the common open space areas within the developed portion of the proposed project and adjacent neighborhood. The proposed project would not disrupt existing pedestrian facilities and would not interfere with planned pedestrian facilities. Therefore, the proposed project would have a less than significant impact on pedestrian facilities. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Bicycle Facilities. United States Census Bureau data indicate that bicycle trips comprise approximately 1.7 percent of the total commute mode share in the City of Vallejo.[126] The low volume of bicycle trips generated by the project would not exceed the bicycle-carrying capacity of streets surrounding the site, and the increase in bicycle trips would not by itself require new off-site bicycle facilities. The nearest designated bikeway to the project area consists of a Class II Bikeway along Glen Cove Parkway, approximately 0.5 mile west of the project site. The proposed project, by itself, would not require additional bicycle service to the area. The proposed project would not preclude, modify, or otherwise affect existing or proposed bicycle projects or policies identified in the General Plan Transportation Element. Therefore, the proposed project would have a less than significant impact on bicycle facilities. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Transit Service. The project area is served by SolTrans Routes 3 and 8, with the transit stops located approximately 0.5 mile to the west along Glen Cove Parkway, which are accessible to and from the project site via sidewalks along nearby local streets. According to the United States Census Bureau, transit trips comprise approximately 5 percent of the total commute mode share in the City of Vallejo.[127] In addition to commute trips, there would be additional transit trips to

[125] United States Census Bureau. 2021 Census. *5-year ACS Data Table B08134: Means of Transportation to Work by Travel Time to Work.* Website: https://data.census.gov/table?q=B08134:+MEANS+OF++TRANSPORTATION+TO+WORK+BY+TRAVEL+TIME+TO+WORK&g=160000+0US0681554_1600000US0681666&tid=ACSDT5Y2021.B08134 (accessed February 9, 2023).

[126] Ibid.

[127] United States Census Bureau. 2021. Op. cit.

nearby schools, parks, and shopping areas. The low volume of transit trips generated by the project would not exceed the carrying capacity of the existing transit service to the site and the proposed project would not interfere with existing transit facilities or preclude the construction of any planned transit facilities or otherwise affect existing or proposed transit projects or policies identified in the City of Vallejo General Plan. Therefore, the proposed project would have a less than significant impact on transit service. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.*b. Would the project conflict or be inconsistent with CEQA Guidelines §15064.3, subdivision (b)?* ***(Less Than Significant Impact, No New Impact)***

The State revised its *State CEQA Guidelines* in January 2019. Among those revisions, the evaluation of transportation impacts on a project's effect on vehicle miles traveled (VMT) replaced consideration of vehicle delay and level of service (LOS). In July 2020, the City adopted the City of Vallejo CEQA Transportation Impact Analysis Guidelines, which were revised in October 2020.[128]

The City's guidelines include project type screening for projects presumed to have a less than significant impact. Projects generating fewer than 110 daily vehicle trips are included as projects screened from preparing additional VMT analysis. A footnote is provided with this value that indicates the threshold ties directly to the 2018 OPR Technical Advisory. The footnote further explains that the OPR Technical Advisory notes that CEQA provides a categorical exemption for existing structures up to 10,000 square feet and that general office buildings generate or attract an additional 110-124 trips per 10,000 square feet.

However, in Cleveland National Forest Foundation v. County of San Diego (2025) 110 Cal.App.5th 948 [331 Cal.Rptr.3d 264] the Fourth Appellate District of the State of California found that reliance on the OPR Technical Advisory suggestion without evidentiary support is not valid. Indeed, in the first paragraph of the introduction to the OPR Technical Advisory it states that the document does not alter lead agency discretion and that the document should not be construed as legal advice. It should further be noted that the OPR Technical Advisory explanation for the small project threshold suggestion is related to commercial and not residential development.

As part of the transportation analysis a memorandum was prepared establishing evidentiary support for a small project threshold for residential development within the Bay Area Air District (Air District).[129] That memorandum is provided in **Appendix I**. The evidence examined showed that the Air District has determined that development of fewer than 421 dwelling units would have a less than significant impact on regional GHG emissions. Furthermore, the project's 481 daily trips identified in **Table 4.17.A** would produce GHG emissions at a level below the threshold of significance, and the project would not cause an increase in emissions that would result in a new significant impact or a substantially greater impact when compared to the City's prior CEQA analysis for the General Plan.

The proposed project extends existing residential development and would have a less than significant impact on GHG emissions because it is a small project, and as such would not conflict or

[128] City of Vallejo. 2020. *City of Vallejo CEQA Transportation Impact Analysis Guidelines*. October.
[129] Bay Area Air District. 2022. *California Environmental Quality Act Air Quality Guidelines.*

be inconsistent with *State CEQA Guidelines* Section 15064.3, subdivision (b). The project would therefore have a less than significant impact on the VMT. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? ***(Less Than Significant Impact, No New Impact)***

The design of the proposed project does not include any geometric design features or incompatible uses that could substantially increase circulation/traffic hazards. The proposed project would include the construction of 51 single-family residential dwelling units, undeveloped open space, and related infrastructure improvements. Vehicular access to the project site would be provided by one full access residential street through an established community to the west off the intersection of Shady Lane and Wildflower Avenue. The proposed project would include new internal residential streets that would be 28 feet wide curb-to-curb with parking on one side and a 4.5-foot attached sidewalk. The project would also include private alleys which would be smaller in scale than the private residential streets and would include shared vehicular access to houses with garages fronting onto them. Private alleys would include a 33-foot public utility easement/planting easement, and a 10-foot travel way in each direction with no parking allowed. The design, construction, and maintenance of project access locations and on-site roads would be required to comply with the City's Municipal Code and relevant City standards. As shown previously in **Figure 2-2** in Chapter 2.0, Project Description, the project site is generally surrounded by residential, recreational, and public and semi-public uses. Therefore, the proposed project would not substantially increase hazards due to a geometric design feature or incompatible uses. This impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

d. Would the project result in inadequate emergency access? ***(Less Than Significant Impact, No New Impact)***

Vehicular access to the project site would be provided by one full access residential street through an established community to the west off the intersection of Shady Lane and Wildflower Avenue. The proposed project would include new private internal residential streets that would be 28 feet wide curb-to-curb with parking on one side and a 4.5-foot attached sidewalk. The project would also include private alleys which would be smaller in scale than the private residential streets and would include shared vehicular access to houses with garages fronting onto them. Private alleys would include a 33-foot public utility easement/planting easement, and a 10-foot travel way in each direction with no parking allowed. In accordance with the California Fire Code, the project applicant is required to design, construct, and maintain structures, roadways, and facilities to maintain appropriate emergency/evacuation access to and from the project site. The design, construction, and maintenance of project access locations and on-site roads would be in compliance with the City's Municipal Code and would meet all emergency access standards. The Vallejo Fire Department would also review the proposed site plan and Fire Access Plan and would provide input on final design in relation to emergency access prior to issuance of a building permit. Site design and compliance with standard and emergency Vallejo Fire Department and City requirements, such as

the size and location of fire access routes and fire truck turning radii, would allow for proper site evacuation, if necessary, during project operations. The proposed project would not alter or block adjacent roadways and implementation of the proposed project would not be expected to impair the function of nearby emergency evacuation routes. Therefore, the proposed project would not result in inadequate emergency access. This impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

4.18 TRIBAL CULTURAL RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:					
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or	☐	☒	☐	☐	☒
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐	☒

4.18.1 Prior Environmental Analysis

The topic of potential impacts to tribal cultural resources with build out of the General Plan was not specifically analyzed in the General Plan EIR. Since certification of the General Plan EIR, the topic of Tribal Cultural Resources has been added as a new category to be analyzed per the CEQA Guidelines. In addition, public agencies that prepare an EIR must comply with Assembly Bill (AB) 52, which requires public agencies to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. However, the General Plan EIR analyzed prehistoric and historic resources and human remains and included mitigation measures related to these resources as detailed in Section 4.5.2. Additionally, the General Plan includes the following goals, policies, and actions related to cultural resources which would be applicable to the proposed project:

- **Policy NBE-1.9 Cultural Resources:** Protect and preserve archaeological, historic, and other cultural resources.
  - **Action NBE-1.9B:** Maintain a dialogue with local Native American groups regarding sensitive cultural resources in Vallejo.

4.18.2 Background

The analysis of potential impacts to tribal cultural resources is based on a site-specific cultural resources assessment prepared for the proposed project, prepared by LSA in March 2025, which is included in **Appendix D** of this Initial Study.[130] This assessment included a cultural resources records search, a review of historic-period aerial imagery and maps, and a pedestrian archaeological survey of the project site.

An archaeological records search was conducted on September 6, 2024, at the Northwest Information Center (NWIC) at Sonoma State University. The NWIC is the official repository for cultural resources records for Solano County and maintains an extensive inventory of previously recorded archaeological sites and prior survey coverage. The records search included a one-mile radius around the project site and reviewed all available documentation of prehistoric and historic-period resources, as well as prior cultural resource surveys and excavation reports.

In February 2025, historic-period aerial photographs and topographic maps were reviewed using the Nationwide Environmental Title Research (NETR) Online database. This review provided supplemental information regarding historical land use within and surrounding the project area.

An intensive pedestrian survey of the project site was conducted on January 20, 2025, by a qualified archaeologist. The survey was performed using linear transects spaced approximately 20 to 30 meters (65.6 to 98.4 feet) apart. The entire accessible area of the project site was inspected, with particular attention given to areas containing exposed native soils, rock outcrops, and rodent disturbances. All visible ground surfaces were carefully examined for the presence of prehistoric or historic-period artifacts, features, or other cultural deposits.

4.18.2.1 Existing Environmental Setting

The project site is vacant and undeveloped and is covered primarily with non-native annual grassland and scattered mature trees. No buildings or structures are present within the project area in historic period aerial photos or as indicated on maps dating back to 1948.

The proposed project is within the traditional cultural territory of the Patwin. Tribal territories were somewhat fluid and changed over time. Like other Native American groups in Northern California, the Patwin were semi-nomadic hunter-gatherers who subsisted by exploitation of seasonably available plant and animal resources. The first written accounts of Native American groups in California were by Spanish missionaries in the late 18th century. With the Spanish intrusion came a drastic change in lifestyle for the Native Americans of California. Incorporation of the indigenous populations into the mission system involved conflict, forced labor, and relocation along with decimation by European diseases, all of which led to the disruption of native cultures and changes in subsistence and land use practices. Cattle ranches/farms were established on or near ancestral Native American villages, primarily in the major drainages conducive to horticulture and animal

[130] LSA Associates, Inc. (LSA). 2025. *Cultural Resources Assessment, Vista Cove Development Project, Vallejo, Solano County, California.* March.

husbandry. Water was diverted for irrigation and stock. Within a short time, the missions controlled many ranchos where Indians lived and worked.[131]

4.18.2.2 Sacred Lands File Search

LSA requested a Sacred Lands File (SLF) Search and Native American Contact List from the California Native American Heritage Commission (NAHC) on August 8, 2024. In its response on August 28, 2024, the NAHC indicated that the record search results were negative. However, because the absence of specific site information in the SLF does not indicate the absence of cultural resources in the project area, NAHC identified methodologies and contacts for conducting required AB 52 tribal consultation for information regarding cultural resources that could be affected by the proposed project.

4.18.2.3 Native American Consultation

In August 2024, the City provided notice of the proposed project to the Native American contacts provided by the NAHC and the tribes that had previously requested notification, pursuant to AB 52 provisions.

On October 10, 2024, the Confederated Villages of Lisjan Nation responded to the City's notice and requested a copy of the final California Historic Resources Inventory System (CHRIS) records search, EIR, the SLF search results from the NAHC, and a copy of any additional archaeological reports. The City provided a response on February 10, 2025, providing the Confederated Villages of Lisjan Nation with the database searches and available information. No further responses were received.

The Yocha Dehe Wintun Nation reached out to request consultation on the proposed project on October 24, 2024. The City responded on November 18, 2024 and a meeting took place on December 9, 2024. As part of the consultation process, the City provided the Yocha Dehe Wintun Nation with draft Tribal Monitoring Mitigations on January 17, 2025. The City resent this information on February 13, 2025, and March 17, 2025, and no additional responses were received.

No further requests for consultation were received.

[131] LSA Associates, Inc (LSA). 2025. *Cultural Resources Assessment, Vista Cove Development Project, Vallejo, Solano County, California.* March.

4.18.3 Impact Analysis

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. ***(Less Than Significant Impact with Mitigation Incorporated, No New Impact)***

As discussed above under Section 4.18.1, Native American consultation was conducted by the City in compliance with AB 52. As part of the consultation process, a review of the SLF by the NAHC indicated that the results of the file search were negative. However, because the absence of specific site information in the SLF does not indicate the absence of cultural resources in the project area, NAHC identified methodologies and contacts for conducting the required AB 52 tribal consultation. The City provided notice of the proposed project via certified mail to Native American tribal contacts provided by the NAHC as well as local Native American tribal representatives that previously requested to be notified of future projects proposed by the City in compliance with AB 52. The Confederated Villages of Lisjan Nation and the Yocha Dehe Winton Nation responded to the City's notice and consultation with the Yocha Dehe Winton Nation occurred in January 2025.

No information regarding specific known tribal cultural resources on the project site was provided to the City. Furthermore, no human remains are known to be on the project site or are anticipated to be discovered during project construction. An archaeological pedestrian field survey of the project site was conducted on January 20, 2025, as part of the Cultural Resources Assessment completed for the proposed project. No cultural resources, including tribal cultural resources, were discovered within the project site during the field survey. The field survey indicated that there was light disturbance in some areas of the project site, where modern refuse was noted throughout the project area; however, overall visibility was generally limited by existing vegetation cover. No cultural resources were identified. Based on these results, the Cultural Resources Assessment determined that the project site has a low potential for in situ subsurface cultural resources due to the severe slopes and adjacent developments. Therefore, encountering unknown buried cultural resources, including tribal cultural resources, during project construction is unlikely.

Impacts related to accidental discovery of cultural resources or human remains are addressed in Section 4.5, Cultural Resources, and impacts were determined to be less than significant with implementation of **Project Specific Mitigation Measures CUL-1 and CUL-2**, which require adherence to proper procedure for the treatment of unanticipated tribal cultural resources if discovered during construction and require compliance with PRC 5097 and the State's Health and Safety Code Section 7050.5 for the treatment of human remains or funerary/ceremonial objects.

Project ground disturbing activities would include excavation and grading requiring ground disturbance to a depth of up to 24 feet below the ground surface to accommodate foundations and utility infrastructure. Although no known tribal cultural resources are present at the site, the possibility for accidental discovery of such resources cannot be discounted. In the event that cultural items or human remains determined to be of Native American origin are encountered during project ground disturbing activities, **Project Specific Mitigation Measure TCR-1** shall be implemented.

Project Specific Mitigation Measure TCR-1

Protocol for Discovery of Native American Cultural Items. The preferred protocol upon the discovery of Native American human remains is to secure the area, stop work within 25 feet of the find, cover any exposed human remains or other cultural items and avoid further disturbances in the area. All parties are advised to treat the remains with appropriate dignity, as provided in Public Resources Code (PRC) Section 5097.98. All parties shall treat tribal representatives and the event itself with appropriate respect.

If, after the Confederated Villages of Lisjan Nation Tribal representative has been granted access to the site and it is determined that avoidance is not feasible, an examination of the human remains will be conducted to confirm they are human and to determine the position, posture, and orientation of the remains. The following procedures shall be followed:

- All excavation in the vicinity of the human remains shall be conducted using fine hand tools and fine brushes to sweep loose dirt free from the exposure.
- In order to determine the nature and extent of the grade and its contents, controlled excavation should extend to a full buffer zone around the perimeter of the remains.
- To initiate the exposure, a perimeter balk (especially, a shallow trench) should be excavated, representing a reasonable buffer a minimum of 10 centimeters around the maximum extent of the known skeletal remains, with attention to counterintuitive discoveries or unanticipated finds relating to this or other

remains. The dirt from the perimeter balk should be bucketed, distinctly labeled, and screened for cultural materials.

- Excavation should then proceed inward from the walls of the balk as well as downward from the surface of the exposure. Loose dirt should be scooped out and brushed off into a dustpan or other collective device. Considerable care should be given to ensure that human remains are not further impacted by the process of excavation.

- Buckets, collection bags, notes, and tags should be fully labeled per provenience, and a distinction should be made between samples collected from: (1) Perimeter Balk (described above), (2) Exposure (dirt removed in exposing the exterior/burial plan and associations, and (3) Matrix (dirt from the interstices between bones or associations). Thus, each burial may have three bags, "Burial 1 Perimeter Balk," "Burial 1 Exposure Balk," "Burial 1 Matrix."

- The following records should be compiled in the field: (1) a detailed scale drawing of the burial, including the provenience of and full for all human remains, associated artifacts, and the configuration of all associated phenomena such as burial pits, evidence for pre-interment grave pit burning, soil variability, and intrusive disturbance, (2) complete a formal burial record using the consultants proprietary form or other standard form providing information on site #, unit or other proveniences, level depth, depth and location of the burial from a fixed datum, workers, date(s), artifact list, skeletal inventory, and other pertinent observations, (3) crew chief and worker field notes that may supplement or supersede information contained in the burial recording form, and (4) photographs, including either standard photography or high-quality (400-500 DPI or 10 MP recommended) digital imaging.

- Photographs and images may be used only for showing location or configuration of questionable formation or for the position of the skeleton. They are not to be duplicated for publication unless a written release is obtained from the Tribe.

- Association between the remains and other cultural materials should be determined in the field in consultation with an authorized Tribal representative and may be amended per laboratory findings. Records of provenience and sample labels should be adequate to determine association or degree of likelihood of association of human remains and other cultural materials.

- For each burial, all Perimeter Balk soil is to be 1/8”-screened. All Exposure soil is to be 1/8”-screened, and a minimum of one 5-gallon bucket of excavated but unscreened Exposure soil is to be collected, placed in a plastic garbage bag in the bucket. All Matrix soil is to be carefully excavated, screened as appropriate, and then collected in plastic bags placed in 5-gallon buckets.

- Human remains are not to be cleaned in the field.

- Prior to any physical action related to human remains, a designated tribal representative will conduct prayers and blessings over the remains. The archaeological consultant will be responsible for insuring that individuals and tools involved in the action are available for traditional blessings and prayers, as necessary.

- No laboratory studies are permitted without consultation with the tribe. Lab methods are determined on a project-specific basis in consultation with Confederated Villages of Lisjan Nation representatives. The following procedures shall be implemented:

- The primary archaeological consultant shall be responsible for insuring that all lab procedures follow stipulations made by the Tribe.

- Prior to any laboratory activities related to the remains, a designated tribal representative will conduct prayers and blessings over the remains. The archaeological consultant shall be responsible for ensuring that individuals and tools involved in the action are available for traditional blessings and prayers, as necessary.

- To the extent possible, all remains, associations, samples, and original records are to be kept together throughout the laboratory process. In particular, Matrix dirt is to be kept in buckets and shall accompany the remains to the lab. The primary archaeological consultant shall be responsible for copying all field records and images and ensuring that the original notes and records accompany the remains throughout the process.

- Laboratory study should be done making every effort to identify unanticipated finds or materials missed in the field, such as objects encased in dirt or human remains misidentified as faunal remains in the field. In the event of discovery of additional remains, materials, and other associations the tribal representatives are to be contacted immediately.

- No laboratory studies are permitted on human remains and funerary objects. The preferred treatment preference for exhumed Native American human remains is reburial in an area not subject to further disturbance. Any objects associated with remains will be reinterred with the remains. Laboratory study should be done making every effort to identify unanticipated finds or materials missed in the field, such as objects encased in dirt or human remains misidentified as faunal remains in the field. In the event of discovery of additional remains, materials, and other associations the tribal

representatives are to be contacted immediately.

- Should all, or a sample, of any archaeological materials collected during the data recovery activities – with the exception of human remains – need to be curated, an inventory and location information of the curation facility shall be given to the Tribe for their records.

At the completion of project construction, the proposed project would not result in further disturbance of native soils on the project site and, therefore, project operations would have no potential to impact previously undiscovered tribal cultural resources or human remains.

Based on the findings of the Cultural Resources Assessment and AB 52 consultation, no known tribal cultural resources listed or eligible for listing in the California Register of Historical Resources (California Register) or in a local register exist within the project site, and there are no known tribal cultural resources on the project site. Therefore, the proposed project would not cause a substantial adverse change in the significance of a tribal cultural resource defined as a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is listed or eligible for listing in the California Register or in a local register of historical resources as defined in PRC Section 5020.1(k) or that is determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Nevertheless, implementation of **Project Specific Mitigation Measures CUL-1, CUL-2,** and **Project Specific Mitigation Measure TCR-1**, are required to address the potential impacts to unanticipated tribal cultural resources, human remains, and associated funerary or ceremonial objects, the implementation of which would reduce impacts to less than significant with mitigation. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

4.19 UTILITIES AND SERVICE SYSTEMS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
Would the project:					
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐	☒
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐	☒
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐	☒
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐	☒
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐	☒

4.19.1 Prior Environmental Analysis

Chapter 4.15 of the General Plan EIR analyzed impacts to utilities and service systems associated with build out of the General Plan, and determined that either no impact or less than significant impacts would occur due to compliance with the Water Conservation Act, the California Plumbing Code, the City of Vallejo UWMP, San Francisco Regional Water Quality Control Board regulations, State Water Resources Control Board regulations, VFWD standards, the Integrated Waste Management Act, the CalGreen Building Code, and the City of Vallejo Municipal Code. No mitigation measures were prescribed. However, the General Plan includes the following policies and actions related to utilities and service systems which would be applicable to the proposed project:

- **Policy NBE-1.7: Green Infrastructure**. Encourage the installation of green infrastructure, including tools such as permeable pavement, rain gardens, constructed wetlands, grassy swales, rain barrels and cisterns, and green roofs, to treat stormwater, attenuate floods, increase groundwater recharge, and reduce urban heat islands.
  - **Action NBE-5.6D**: Continue to enforce City regulations that prohibit development, grading, and land modification activities that would adversely affect the local drainage system or create unacceptable erosion impacts.

- **Policy NBE-5.7: Design for Stormwater Control**. Encourage new development and redevelopment to minimize the area of new roofs and paving.
  - **Action NBE-5.7B**: Continue to manage and maintain City-owned storm drainage infrastructure to avoid flooding and reduce the negative effects of stormwater runoff.

4.19.2 Background

The project site is located within an urbanized area with surrounding land uses supported by existing utility infrastructure.

4.19.2.1 Water Supply

Water service in Vallejo is provided by the City of Vallejo Water Department. The City of Vallejo updated its Urban Water Management Plan (UWMP) in 2020, and it was adopted in 2021. The City has numerous water supply sources that provide significant annual volumes of water, including: the Sacramento River watershed; the Solano Project from Putah Creek watershed, which includes Lake Berryessa; the Wild Horse Creek watershed through Lake Madigan, Lake Frey, and the Green Valley Diversion; and the Upper Suisun Creek watershed through Lake Curry. According to the UWMP, the average water use for the City's service area is projected to be 28,111 AFY in 2025, 30,331 AFY in 2035, and 31,892 AFY in 2045. For the purposes of adequate projections, the 2020 UWMP assumed a 0.07 percent growth rate, the growth rate necessary to achieve the City's project 2040 growth rate. The UWMP indicates the City has sufficient water supplies to meet water demands through 2045, including during multiple dry years.[132]

4.19.2.2 Wastewater

The VFWD provides wastewater collection and treatment services for Vallejo. VFWD owns and operates a collection system and secondary wastewater treatment facility located at 450 Ryder Street, Vallejo (Ryder WWTP). The Ryder WWTP has a treatment capacity of 15.5 million gallons per day (mgd)[133] and treats an average of 10 mgd of wastewater.[134]

4.19.2.3 Stormwater

Under existing conditions, the project site consists entirely of pervious surface consisting primarily of grassland. There is no existing stormwater infrastructure on the project site; however, under existing conditions, the project site drains from west to east to Benicia State Park, where stormwater runoff converges and is directed to the Carquinez Strait.[135]

4.19.2.4 Dry Utilities

Electricity and gas service is provided to the project site by Pacific Gas & Electric (PG&E).

---

132 Vallejo, City of. 2021. *2020 Urban Water Management Plan*. October 12.
133 Vallejo, City of. 2016. Op. cit.
134 Vallejo Flood and Wastewater District (VFWD). *Treatment.* Website: https://www.vallejowastewater.org/193/Treatment (accessed October 31, 2024).
135 DK Engineering. 2023. Op. cit.

4.19.2.5 Solid Waste

Solid waste, recycling, and yard waste collection services in Vallejo, including the project site, are provided by Recology Vallejo. Solid waste from Vallejo was disposed at 18 different landfills in 2014; however, nearly 99 percent of Vallejo's solid waste in 2014 went to the Potrero Hills Landfill or the Recology Hay Landfill.[136] The Potrero Hills Landfill is located at 3675 Potrero Hills Lane in Suisun City and has a maximum permitted capacity of 83,100,000 cubic yards and a remaining capacity of 13,872,000 cubic yards as of January 2006. The landfill accepts a maximum of 4,330 tons per day and has an expected closure date of 2048.[137] The Recology Hay Landfill is located at 6426 Hay Road in Vacaville and has a maximum capacity of 37,000,000 cubic yards and a remaining capacity of 30,433,000 cubic yards as of July 2010. The landfill accepts a maximum of 2,400 tons per day and has an expected closure date of 2077.[138]

4.19.3 Impact Analysis

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? ***(Less Than Significant Impact, No New Impact)***

The project site is located within an urbanized area with surrounding land uses supported by existing utility infrastructure. Implementation of the proposed project would require the connection to existing infrastructure, which would involve ground-disturbing activities and the use of heavy machinery, among other construction activities.

Water. Water service in Vallejo is provided by the City of Vallejo Water Department. The proposed project would include the installation of a new 8-inch water main line that would connect to an existing 8-inch water main in Shady Lane at two locations for a looped system. The proposed project would connect directly to existing mains and the new water lines would be constructed in conformance with City standards. Utility installation would occur within the project footprint and there would be no impacts unique to infrastructure installation that would result in significant effects beyond those evaluated in the Initial Study.

The City of Vallejo updated its Urban Water Management Plan (UWMP) in 2020, and it was adopted in 2021. According to the UWMP, the average water use for the City's service area is projected to be 30,331 acre-feet per year (AFY) in 2035 and 31,892 AFY in 2045.[139] As discussed in Section 4.19.b, the proposed project would not substantially increase demand for water and would therefore not exceed the capacity of existing water treatment facilities. The proposed project would not require

136 Vallejo, City of. 2016. Op. cit.

137 California Department of Resources Recycling and Recovery (CalRecycle). 2024a. *Solid Waste Information System (SWIS), Potrero Hills Landfill (048-AA-0075).* Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1194?siteID=3591 (accessed October 31, 2024).

138 California Department of Resources Recycling and Recovery (CalRecycle). 2024b. *Solid Waste Information System (SWIS), Recology Hay Road (48-AA-0025).* Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1184?siteID=3582 (accessed October 31, 2024).

139 Vallejo, City of. 2021. *2020 Urban Water Management Plan*. October 12.

any new infrastructure aside from the project-specific tie-ins and water pipelines to serve the proposed project, and all proposed water infrastructure would be limited to the project site. Therefore, the impact of the proposed project on water infrastructure would be less than significant.

Wastewater. The VFWD provides wastewater collection and treatment services for Vallejo. A new 8-inch sewer lateral would connect to the existing 8-inch public sanitary sewer main line located in Shady Lane at the northwestern corner of the project site. The project would also include the replacement of the existing sewer lift station that currently serves the 141 single-family-home development to the west of the proposed project site with an upgraded system to serve both communities. The lift station would be owned and maintained by the City of Vallejo and the sanitary sewer and lift station would be designed and installed to VFWD standards. Utility installation would occur within the project footprint and there would be no impacts unique to infrastructure installation that would result in significant effects beyond those evaluated in the Initial Study.

Stormwater. Under existing conditions, the project site consists entirely of pervious surface consisting primarily of grassland. There is no existing stormwater infrastructure on the project site; however, under existing conditions, the project site drains from west to east to Benicia State Park, where stormwater runoff converges and is directed to the Carquinez Strait.[140]

Upon construction of the proposed project, approximately 3.95 acres (19.6 percent) of the project site would be covered by impervious surfaces and approximately 16.18 acres (80.4 percent) would be covered by pervious surfaces, consisting of landscaped areas, undeveloped open space, and bioretention areas. The proposed project would include two detention basins and approximately 7,617 square feet of bioretention space, made up of two bioretention facilities located at the northwest corner of the site and the middle east border of the site that would collect drainage from the proposed on-site stormwater infrastructure and be used for stormwater control and treatment before discharging to an 18-inch storm drain pipe that outfalls to the existing marshland area adjacent to Benicia State Park. The storm drain system would be designed and installed to VFWD standards and in compliance with the MRP. Utility installation would occur within the project footprint and there would be no impacts unique to infrastructure installation that would result in significant effects beyond those evaluated in the Initial Study.

Electricity and Natural Gas. Electricity and gas service is provided to the project site by Pacific Gas & Electric (PG&E). The proposed project would include connections to the existing gas and electric lines that run adjacent to the project site along Shady Lane and Wildflower Avenue. The proposed project would not require any new infrastructure, aside from project-specific tie-ins and lines to serve the proposed project.

Because the proposed project would connect to existing utility services adjacent to the project site and there is sufficient excess capacity within those systems to accommodate project demands, the relocation or reconstruction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, or telecommunications facilities would not be required. No modifications to utility infrastructure would be necessary outside of the immediate project site footprint. As such,

[140] DK Engineering. 2023. Op. cit.

impacts associated with the construction or expansion of utility line facilities would be less than significant and no mitigation is required. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? ***(Less Than Significant Impact, No New Impact)***

As previously discussed, water service in Vallejo is provided by the City of Vallejo Water Department. The City of Vallejo updated its UWMP in 2020, and it was adopted in 2021. The City has numerous water supply sources that provide significant annual volumes of water, including: the Sacramento River watershed; the Solano Project from Putah Creek watershed, which includes Lake Berryessa; the Wild Horse Creek watershed through Lake Madigan, Lake Frey, and the Green Valley Diversion; and the Upper Suisun Creek watershed through Lake Curry. According to the UWMP, the average water use for the City's service area is projected to be 28,111 AFY in 2025, 30,331 AFY in 2035, and 31,892 AFY in 2045.[141] For the purposes of adequate projections the 2020 UWMP assumed a 0.07 percent growth rate, the growth rate necessary to achieve the City's project 2040 growth rate.[142]

The proposed project is within the City's planned growth, as the project site would be developed consistent with its land use designations and would represent approximately 0.6 percent of the population growth anticipated through 2040, which is inconsistent with the projected growth in the UWMP. Therefore, the proposed project would be consistent with the City's growth projections anticipated in local and regional planning documents, including the UWMP. The UWMP indicates the City has sufficient water supplies to meet water demands through 2045, including during multiple dry years. Therefore, the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be less than significant, and no mitigation is required. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? ***(Less Than Significant Impact, No New Impact)***

As previously discussed, the project site is within the sewer service area of VFWD. VFWD owns and operates a collection system and secondary wastewater treatment facility located at 450 Ryder Street, Vallejo (Ryder WWTP). The Ryder WWTP has a treatment capacity of 15.5 million gallons per

141 Vallejo, City of. 2021. Op. cit.
142 Vallejo, City of. 2021. Op. cit.

day (mgd)[143] and treats an average of 10 mgd of wastewater.[144] The Propel Vallejo General Plan Update EIR assumes a wastewater generation rate of 100 gallons per day (gpd) per resident. As detailed in Section 4.14, Population and Housing, the proposed project would generate 143 new residents. Therefore, the proposed project would generate approximately 14,300 gallons of wastewater per day[145] or 5,219,500 gallons of wastewater per year. The project's estimated wastewater treatment demand represents 0.26 percent of the Ryder WWTP's current daily surplus capacity,[146] and sufficient surplus wastewater treatment capacity is available to serve the project. Therefore, wastewater generated from the proposed project would not cause the WWTP to violate any wastewater treatment requirements and this impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? ***(Less Than Significant Impact, No New Impact)***

Solid waste, recycling, and yard waste collection services in Vallejo, including the project site, are provided by Recology Vallejo. Solid waste from Vallejo was disposed at 18 different landfills in 2014; however, nearly 99 percent of Vallejo's solid waste in 2014 went to the Potrero Hills Landfill or the Recology Hay Landfill.[147] The Potrero Hills Landfill is located at 3675 Potrero Hills Lane in Suisun City and has a maximum permitted capacity of 83,100,000 cubic yards and a remaining capacity of 13,872,000 cubic yards as of January 2006. The landfill accepts a maximum of 4,330 tons per day and has an expected closure date of 2048.[148] The Recology Hay Landfill is located at 6426 Hay Road in Vacaville and has a maximum capacity of 37,000,000 cubic yards and a remaining capacity of 30,433,000 cubic yards as of July 2010. The landfill accepts a maximum of 2,400 tons per day and has an expected closure date of 2077. [149]

As detailed in Section 4.14, Population and Housing, the proposed project would generate 143 new residents. In 2018, the average disposal rate in California was 6.4 pounds of solid waste per resident

143 Vallejo, City of. 2016. Op. cit.
144 Vallejo Flood and Wastewater District (VFWD). *Treatment.* Website: https://www.vallejowastewater.org/193/Treatment (accessed October 31, 2024).
145 100 gallons/person/day x 143 persons = 14,300 gallons per day.
146 14,300 gallons per day project demand ÷ 5,500,000 gallons per day Ryder WWTP surplus = 0.26 percent.
147 Vallejo, City of. 2016. Op. cit.
148 California Department of Resources Recycling and Recovery (CalRecycle). 2024a. *Solid Waste Information System (SWIS), Potrero Hills Landfill (048-AA-0075).* Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1194?siteID=3591 (accessed October 31, 2024).
149 California Department of Resources Recycling and Recovery (CalRecycle). 2024b. *Solid Waste Information System (SWIS), Recology Hay Road (48-AA-0025).* Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1184?siteID=3582 (accessed October 31, 2024).

per day.[150] Based on these rates, the proposed project would generate approximately 915.2 pounds of solid waste per day, or 0.46 tons per day.

This increase in solid waste would account for 0.01 percent of the Potrero Hills Landfill's maximum allowable capacity per day and 0.02 percent of the Recology Hay Road Landfill's allowable capacity per day. With this minimal increase in solid waste disposal demand, the Potrero Hills and Recology Hay Road landfills have adequate capacity to serve the proposed project. As such, the project would be served by a landfill with sufficient capacity to accommodate the project's waste disposal needs, and impacts associated with the disposition of solid waste would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste? ***(Less Than Significant Impact, No New Impact)***

The proposed project would be required to comply with all federal, State, and local solid waste statutes and/or regulations related to solid waste, and as noted above, the Potrero Hills and Recology Hay Road landfills have adequate capacity to serve the proposed project. Therefore, the proposed project would result in a less than significant impact related to solid waste regulations. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

[150] California Department of Resources Recycling and Recovery (CalRecycle). n.d. *Statewide Diversion and Per Capita Disposal Rate Statistics*. https://calrecycle.ca.gov/LGCentral/GoalMeasure/DisposalRate/ (accessed October 31, 2024).

4.20 WILDFIRE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:					
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐	☒
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐	☒
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐	☒
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☒	☐	☐	☒

4.20.1 Prior Environmental Analysis

Chapter 4.7 of the General Plan EIR analyzed impacts related to wildfire hazards associated with build out of the General Plan and determined that build out of the General Plan would result in less than significant impacts related to wildfire due to compliance with existing regulations including the California Fire Code, California Building Code, CCR, Department of Forestry and Fire Protection regulations, and the City of Vallejo Municipal Code. No mitigation measures were prescribed. However, the General Plan includes the following policies and actions related to wildfire which would be applicable to the proposed project:

- **Policy CP-2.3: Fire Prevention and Response Services**. Ensure the provision of fire prevention and emergency response services that minimize fire risks and protect life and property.
  - **Action CP-2.3E**: Work with property owners and public agencies to ensure that plant growth is managed to minimize fire danger.
- **Policy NBE-5.3: Health and Safety Codes**. Enforce development regulations and building code requirements to protect residents, businesses, and employees from flooding, liquefaction, earthquakes, fires, and other hazards.
  - **Action NBE-5.3B**: Continue to require development to comply with building and safety codes and continue to route plans and drawings to all relevant City departments for review.

- **Action NBE-5.4C**: Continue to use the development review process to ensure that development is planned and constructed to resist the encroachment of uncontrolled fire.

- **Policy MTC-2.3: Emergency Response Routes**. Ensure adequate emergency vehicle access in all areas of Vallejo.

  - **Action MTC-2.3B**: Continue to involve the Police and Fire Departments in the development review process to ensure that applicable requirements for emergency access are met.

4.20.2 Background

The project site is within a local responsibility area (LRA), meaning the local government (the City of Vallejo) is financially responsible for wildland fire protection. However, the project site is not considered to be within a Very High Fire Hazard Severity Zone (VHFHSZ). According to the City of Vallejo General Plan 2040, the project site is within a moderate- to high-risk wildfire area.[151] There are no Very High Fire Hazard Areas in or adjacent to Vallejo.

4.20.3 Impact Analysis

a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan? ***(Less Than Significant Impact, No New Impact)***

The City of Vallejo participates in a coordinated regional emergency management framework under the Solano County Emergency Operations Plan (EOP), which was most recently updated in May 2024.[152] The EOP outlines emergency response procedures and assigns responsibilities consistent with California's Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). As part of the Solano County Operational Area, Vallejo's emergency response and recovery efforts are integrated into countywide protocols that guide preparedness, initial response, extended response, and recovery activities. In addition, the Solano County Multi-Jurisdictional Hazard Mitigation Plan (2022) and the Community Wildfire Protection Plan (2023) identify local and regional risks and outline hazard mitigation and wildfire safety strategies, including those applicable to Vallejo.[153, 154]

At the local level, the Vallejo Fire Department leads public safety and emergency preparedness efforts, offering resources such as wildfire prevention brochures and defensible space guidance to residents. The City also participates in the Alert Solano emergency notification system, which provides timely information to residents during critical incidents such as natural disasters,

---

151 Vallejo, City of. 2017. *Propel Vallejo General Plan 2040, Map NBE-4.* August 29.

152 Solano County Office of Emergency Services. 2024. *Solano County Emergency Operations Plan (EOP)*. May. Website: https://www.solanocounty.com/depts/oes/emergency_plans.asp.

153 Solano County Office of Emergency Services. 2022. *Solano County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP)*. March 2022. Website: https://www.solanocounty.com/depts/oes/emergency_plans.asp.

154 Solano County Office of Emergency Services. 2023. *Community Wildfire Protection Plan (CWPP)*. November. https://www.solanocounty.com/depts/oes/emergency_plans.asp.

evacuations, and public safety threats. These coordinated planning efforts ensure that the City is prepared to manage and mitigate emergency situations in accordance with adopted regional and local plans.[155]

As previously discussed in Section 4.9, Hazards and Hazardous Materials, the proposed project would be consistent with the policies outlined in the Solano County General Plan Public Health and Safety chapter, the City of Vallejo General Plan Nature and Built Environment chapter, the Solano County EOP, and the Solano County MJHMP. The proposed project would not alter or block adjacent roadways, and implementation of the proposed project would not be expected to impair the function of nearby emergency evacuation routes. In addition, operation of the proposed project would not cause permanent alterations to vehicle circulation routes and patterns or impede public access or travel upon public rights-of-way. Prior to approval of final maps and improvement plans for any development project within Vallejo, plan review and approval by the VFD is required. Internal roadways and ingress/egress for each site would be required to meet State and local standards regarding turning radius, road width, and emergency vehicle access.

Given that the site is located within an urbanized area and not in a designated Very High Fire Hazard Severity Zone, the proposed development would not increase wildfire risks beyond what is contemplated in the plans. Moreover, compliance with local building codes, defensible space requirements, and the City's fire prevention programs would ensure alignment with the goals of these hazard mitigation frameworks. Therefore, potential impacts to an adopted emergency response plan or emergency evacuation plan would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? ***(Less Than Significant Impact, No New Impact)***

Construction of the proposed project would involve the use of some flammable materials, such as gasoline, diesel fuel, hydraulic oils, paints, and solvents. During construction, there would be increased human activity and ignition sources, including equipment that could create sparks, be a source of heat, or leak flammable materials on the project site. However, all construction equipment is required to have fire suppression equipment (such as a fire extinguisher) on board or at the work site, secondary containment would be required for fuel-powered equipment, and a spill kit would be required to be kept on site during construction for use in case of any leaks or spills of flammable materials. These existing requirements would reduce the potential exacerbation of wildfire risks related to construction activities.

Operation of the proposed project would be consistent with surrounding residential uses and the allowable zoning and General Plan land use designations for the project site. The proposed project would be subject to the design standards and guidelines outlined in the City of Vallejo Municipal

[155] Solano County Office of Emergency Services. "Alert Solano Emergency Notification System." Accessed May 10, 2025. Website: https://www.solanocounty.com/depts/oes/alertsolano/emergency.asp.

Code and would be subject to Development Review and Design Review to ensure the proposed structures conform with all the applicable regulations.

The proposed project would also be subject to requirements in Section 13000 et seq. of the California Health and Safety Code, California Building Standards Code, and California State Fire Code, which include regulations concerning the following: building standards for fire protection; fire protection and notification systems such as extinguishers and smoke alarms; safety for firefighters and emergency responders during emergency operations; minimum standards for hazardous vegetation and fuel management, defensible space, and building construction; and minimum standards for emergency access and water supply for fire response.

Compliance with these existing regulatory requirements would ensure that the proposed project would not exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant, and no mitigation is required. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? ***(Less Than Significant Impact, No New Impact)***

The proposed project involves the construction of 51 single-family residential units. Associated improvements include utility connections to existing utility facilities, including water, sanitary sewer, storm drainage, electricity, gas, and telecommunication infrastructure. Utility connections/lines would be constructed in conformance with City standards as detailed in Section 4.19, Utilities and Service Systems. In addition, all residences would include automatic fire sprinkler systems installed in accordance with the adopted building codes. The project does not propose the installation or maintenance of any other associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment, and impacts would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? ***(Less Than Significant with Mitigation Incorporated, No New Impact)***

Construction of the proposed project would be required to obtain coverage under the NPDES General Construction stormwater permit. As discussed in Section 4.10, Hydrology and Water Quality, the proposed project would implement a SWPPP that specifies BMPs and erosion control measures to be used during construction to manage runoff flows. Additionally, the proposed project would be required to implement LID techniques as required by the MRP, and as detailed in Section 4.10, would not significantly alter drainage patterns compared to existing conditions. Implementation of **Project Specific Mitigation Measure GEO-1,** which requires the project sponsor

to incorporate all of the recommendations of the Geotechnical Investigation and any recommendations included in a design-level geotechnical investigation into the project development plans, would reduce the potential impacts related to landslides to a less than significant level with mitigation. Furthermore, the project site is not located within a flood zone.[156] Therefore, the proposed project would not have the potential to expose people or structures to downslope or downstream flooding or landslides. This impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

[156] Federal Emergency Management Agency (FEMA). 2016. Flood Insurance Rate Map No. 06095C0629G. Map Revised August 3, 2016. Website: https://msc.fema.gov/portal/search (accessed July 5, 2024).

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	No New Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐	☒
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐	☒
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐	☒

4.21.1 Impact Analysis

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

As discussed and analyzed in this document, construction and operation of the proposed project would not substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples of California history or prehistory. The proposed project has been designed to minimize impacts to both biological and cultural resources, and implementation of project specific mitigation measures recommended in this Initial Study would ensure that impacts to biological and cultural resources are reduced to a less than significant level. Section 4.4, Biological Resources, includes mitigation measures to minimize impacts to nesting birds, roosting bats, sensitive natural communities, and wetlands. Additionally, Section 4.5, Cultural Resources, includes mitigation measures to minimize impacts to unknown cultural resources within the project site. With implementation of these mitigation measures, the proposed project would result in less than significant impacts to the quality of the environment.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? ***(Less Than Significant with Mitigation Incorporated, No New Impact)***

Section 15065(a)(3) of the *State CEQA Guidelines* states that a project's cumulative impacts are the possible environmental effects that may be cumulatively considerable when considered with other reasonably foreseeable projects. Cumulatively considerable impacts occur when the incremental effects of a particular project or program are significant when viewed in connection with the effects of other past, current, or reasonably foreseeable future projects. Section 15355 of the *State CEQA Guidelines* defines a cumulative impact as an impact that is created as a result of the combination of the project evaluated in the CEQA document together with other projects causing related impacts. The proposed project is located in an undeveloped area, adjacent to existing residential uses. At this time, no other reasonably foreseeable projects have been identified within the immediate surroundings. While various projects within Vallejo have the potential to be under construction concurrent with the proposed project, concurrent projects within the city would be subject to regulations similar to those outlined in this document and would incorporate mitigation measures, as necessary, that would reduce impacts of the project. As shown in the discussion above, environmental impacts associated with the proposed project can be reduced to less than significant levels with the implementation of existing regulations and/or project-specific mitigation measures, with the exception of greenhouse gas emission operational impacts that would remain significant and unavoidable. All project-related impacts are localized and confined to the immediate project area. Given that the potential project-related impacts, with mitigation, would not result in any new cumulative impacts or increase the severity of a previously identified significant cumulative impact as previously analyzed, and no other CEQA standards for supplemental review are met, no new impact would occur.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? ***(Less Than Significant with Mitigation Incorporated, No New Impact)***

Based on the analysis provided throughout this Initial Study, with incorporation of mitigation measures and regulatory compliance measures, the project would not result in any environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. Potential impacts on human beings would be less than significant with mitigation incorporated. Therefore, implementation of the proposed project would not result in any new impacts or increase the severity of a previously identified significant impact as previously analyzed, and no other CEQA standards for supplemental review are met. No new impact would occur.

5.0 UPDATED MITIGATION MONITORING AND REPORTING PROGRAM

This Updated Mitigation Monitoring and Reporting Program (MMRP), shown below in **Table 5.A**, has been prepared for use in implementing mitigation measures for the Vista Cove Planned Development Project (project)

As the Lead Agency, the City of Vallejo is responsible for ensuring full compliance with all mitigation measures adopted for the proposed project. The City will monitor and report on all mitigation activities. Mitigation measures will be implemented at different stages of development throughout the project area. In this regard, the responsibilities for implementation have been assigned to the Applicant, Contractor, or a combination thereof. If during the course of project implementation, any of the mitigation measures identified herein cannot be successfully implemented, the City shall be immediately informed, and the City will then inform any affected responsible agencies. The City, in conjunction with any affected responsible agencies, will then determine if modification to the project is required and/or whether alternative mitigation is appropriate.

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
Aesthetics						
No Mitigation Measures required.						
Agriculture and Forestry Resources						
No Mitigation Measures required.						
Air Quality						
General Plan EIR Mitigation Measure AQ 2b.1	As part of the City's development approval process, the City shall require applicants for future development projects to comply with the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of PM_{10} (Table 8-1, Basic construction Mitigation Measures Recommended for All Proposed Projects, of the BAAQMD CEQA Guidelines).	During development approval process	Construction Contractor/City	City/BAAQMD	During development approval process	Implementation of BAAQMD basic control measures for reducing construction emissions of PM_{10}.
Project Specific Mitigation Measure AIR-1	**Tier 4 Final Emissions Standards.** During construction of the proposed project, the project contractor shall ensure all off-road, diesel-powered construction equipment of 50 horsepower or more used for the project construction meets, at a minimum, the California Air Resources Board Tier 4 Final emissions standards or the equivalent.	During Construction	Project Contractor	Project Contractor	Daily monitoring during all construction activities using diesel-powered equipment	Implementation of the California Air Resources Board Tier 4 Final emissions standards or the equivalent during construction activities.

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
Biological Resources						
Project Specific Mitigation Measure BIO-1a	**Avoidance of Nesting Bird Season**. To avoid adverse effects to the active nests of special-status and other native bird species, tree removal, vegetation removal, and initial ground disturbance should be prioritized to occur during the non-nesting season, between September 1 through January 31.	During the non-nesting season, between September 1 through January 31	Qualified Biologist	Qualified Biologist	During the non-nesting season, between September 1 through January 31	Implementation of the avoidance measures during the non-nesting season, between September 1 through January 31.
Project Specific Mitigation Measure BIO-1b	**Pre-Construction Nesting Bird Surveys.** A pre-construction nest survey for white-tailed kite, northern harrier, short-eared owl, and other native bird species shall be conducted prior to initial ground disturbance, including tree removal or vegetation removal if it begins during the nesting bird season (defined as February 1 through August 31). If (containing eggs, chicks or young) are discovered during these surveys, a qualified biologist shall establish a species-specific no-work buffer around the active nest. Work may resume in the buffer after the nesting season ends, or a qualified biologist confirms the nest is inactive.	During the nesting bird season (defined as February 1 through August 31)	Qualified Biologist	Qualified Biologist	One-time pre-construction nest survey during the nesting bird season (defined as February 1 through August 31). Continued monitoring if active nests are found.	Implementation of pre-construction nest survey for white-tailed kite, northern harrier, short-eared owl, and other native bird species during the nesting bird season (defined as February 1 through August 31). If active nests are found the Qualified Biologist.

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
Project Specific Mitigation Measure BIO-2a	**Avoidance of Maternity Roosting Season.** To avoid adverse effects to maternity roosts of special-status and other bat species, tree removal, vegetation removal, and initial ground disturbance should be prioritized to occur outside the maternity roosting season, between September 1 through April 30. Large trees (diameter at breast height [DBH] > 24 inches) removed during this season (September 1–April 30) shall be cut using a two-phased system where branches and limbs are cut and left on the ground overnight prior to chipping or removal from the site.	Outside the maternity roosting season, between September 1 through April 30	Qualified Biologist	Qualified Biologist	One time pre construction verification plus monitoring during removal if it occurs near the end of season.	Implementation of the seasonal avoidance ensures no disturbance occurs to active bat maternity roosts.
Project Specific Mitigation Measure BIO-2b	**Pre-Construction Roost Surveys.** During the maternity roost season (May 1–August 31), at least 30 days prior to the removal of any large tree (DBH > 24 inches) a bat roost assessment shall be conducted by a qualified biologist to determine if potential roost habitat is present. If no maternity roost habitat is present, trees shall be removed using a two-phased cut. Cut branches and limbs shall be left on	During the maternity roost season (May 1–August 31), at least 30 days prior to the removal of any large tree	Qualified Biologist	Project Contractor/ Qualified Biologist	One time pre-construction survey per tree prior to removal; if maternity roost habitat is present, continued monitoring during emergence surveys until trees can be removed safely.	Implementation of pre-construction roost surveys to ensure that potential and active maternity roosts are identified and protected throughout the entire maternity season, with no tree removal occurring in active roosts until the season is complete.

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	the ground overnight prior to chipping or removal from the site. If potential maternity roosting habitat is present, the qualified biologist shall conduct an emergence survey to determine if the roost is occupied or assume the roost is occupied and establish a no-work buffer. If an emergence survey is conducted and does not detect bats, the tree may be removed with no further measures required to protect roosting bats. If roosting bats are detected, or the tree is assumed to be an active roost, the tree shall be given a 100-foot no work buffer and shall be avoided until after the maternity roosting season is complete. Once the maternal roosting season is complete, tree removal shall follow the two-phase approach for tree removal.					
Project Specific Mitigation Measure BIO-3a	**Compensatory Mitigation for Loss of Seasonal Wetland.** Compensatory mitigation for permanent loss of 0.49 acre of the seasonal wetland shall be required. Mitigation may be satisfied through purchase of mitigation bank credits from an approved mitigation bank,	Prior to or concurrent with construction	Qualified Biologist / Project Applicant	Project Applicant	Prior to or concurrent with construction	Implementation of compensatory mitigation to ensure permanent wetland loss is offset and the mitigation ratio of 1:1 is achieved, with restored or preserved habitat

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	payment of in-lieu fees to an approved public agency or conservation organization (e.g., local land trust), for implementation of compensatory mitigation projects, or via a permittee responsible mitigation involving creation, restoring, or enhancing analogous habitat. The ratio for acres of mitigation to acres impacted shall be 1:1.					maintained per agency-approved requirements.
Project Specific Mitigation Measure BIO-4a	**Construction Fencing.** Prior to ground-disturbing activities, construction fencing or flagging shall be installed to delineate the riparian and freshwater marsh boundaries. The fencing will be checked regularly during construction activities to ensure that the fencing remains intact and functional, and that encroachment has not occurred into the sensitive habitat or boundary; any repairs to the fence or encroachment correction will be conducted immediately. At the end of the project all temporary flagging, fencing, or other materials would be removed from the work areas and vicinity of the channel.	Prior to ground disturbance	Qualified Biologist	Qualified Biologist/ Project Contractor	Regular checks during construction; repairs as needed.	Implementation of construction fencing to delineate sensitive habitats and prevent encroachment throughout construction.

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
Project Specific Mitigation Measure BIO-4b	**Construction Best Management Practices.** Erosion control measures would be utilized throughout all phases of the Project where sediment runoff from construction may potentially enter nearby waters. Appropriate sediment and erosion control BMPs (e.g., use of silt fencing and/or straw waddles around the perimeter of the construction zone) will be implemented during and following construction to minimize surface runoff originating from the Project and thereby protect water quality of the freshwater marsh. Erosion control structures would be monitored for effectiveness and would be repaired or replaced as needed. i. Prior to construction, a Stormwater Pollution Prevention Plan (SWPPP) would be developed. The plan would include the implementation and maintenance of erosion control measures. ii. Prior to construction, an Accidental Spill Prevention and Cleanup Plan would be	Throughout all phases of construction	Qualified Biologist	Qualified Biologist/ Project Contractor	Daily/ongoing monitoring for erosion, spills, and equipment maintenance.	Implementation of BMPs, including erosion and sediment control, spill prevention, and invasive species avoidance, to protect water quality during construction.

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	prepared. This plan would include required spill control absorbent material, for use beneath stationary equipment, to be present on-site and available at all times. iii. No fueling, cleaning, or maintenance of vehicles or equipment would take place within any areas where an accidental discharge may cause hazardous materials to enter waterways. iv. Any equipment or vehicles used for the Project would be checked and maintained daily to prevent leaks of fluids that could be deleterious to aquatic habitats. v. All equipment would be cleaned before arriving on the site and before removal from the site to prevent spread of invasive plants. vi. To avoid establishment of invasive, non-native plant species on or adjacent to the Project Area, the following measures will be implemented: a. Vegetation disturbances will be limited to those					

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	areas identified on construction plans and maps as slated for development or construction staging. b. Erosion and sediment control materials will be certified as weed-free. vii. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, would be located outside of the stream channel banks and outside of nearby waters. viii. Stationary equipment such as motors, pumps, and generators, located adjacent to aquatic features would be positioned over secondary containment sufficient to arrest a catastrophic failure. **ix.** Stockpiles of excavated soil or other materials would be covered when not in active use (i.e., would not be used or moved for 72 hours). All trucks hauling soil, sand, and other loose materials would be covered.					

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
Project Specific Mitigation Measure BIO-4c	**Tree Protection Measures.** In order to protect trees adjacent to the project area: In order to protect trees adjacent to the Project Area: i. Trees not proposed for removal but adjacent to Project activities shall have orange construction fencing installed at the dripline. This shall be known as the tree protection zone (TPZ). ii. Work within the TPZ shall be minimized to the maximum extent feasible. iii. If work must occur within the TPZ, the fence can be removed temporarily, the tree trunk shall be wrapped in a waddle, and the fence shall be placed back as soon as work is completed. iv. All equipment and stockpiles must be in designated staging areas away from all TPZ. v. All trees to be removed shall be felled away from any trees to be avoided. vi. If trees not proposed for removal require pruning, pruning shall follow ANSI A300 standards or be	During construction	Qualified Biologist	Qualified Biologist/ Project Contractor	Continuous monitoring for work within tree protection zones (TPZs)	Implementation of tree protection measures, including fencing, pruning standards, and TPZ management, to protect trees adjacent to the project area.

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	performed by a certified arborist. **vii.** If any roots are exposed from trees to be avoided, roots can be pruned up to the diameter of 2 inches and pruned at 90-degree angles. The roots shall be covered by a damp burlap sack or damp towel while exposed.					
	Cultural Resources					
Project Specific Mitigation Measure CUL-1	**Unknown Discovery of Archaeological Resources**. Should an archaeological deposit be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology contacted to assess the situation, determine if the deposit qualifies as a historical resource, consult with agencies as appropriate, and make recommendations for the treatment of the discovery.	During Ground Disturbance	Construction Contractor/Qualified Archaeologist	Construction Contractor / Qualified Archaeologist	Monitoring would occur continuously during all ground-disturbing activities within 25 feet of any discovered archaeological resources.	Implementation of discovery protocol and assessment of archaeological finds, with work halted within 25 feet until evaluation is complete.

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	If the deposit is found to be significant (i.e., eligible for listing in the California Register of Historical Resources), the project applicant shall be responsible for funding and implementing appropriate mitigation measures. Mitigation measures may include recording the archaeological deposit, data recovery and analysis, and public outreach regarding the scientific and cultural importance of the discovery. Upon completion of the selected mitigations, a report documenting methods, findings, and recommendations shall be prepared by the qualified archaeologist and submitted to the City of Vallejo for review, and the final report shall be submitted to the Northwest Information Center at Sonoma State University. Significant archaeological materials shall be submitted to an appropriate local curation facility and used for future research and public interpretive displays, as appropriate.					

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
Project Specific Mitigation Measure CUL-2	**Protocol for Human Remains Discovery.** If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD) and the following provisions shall apply: • The Medical Examiner shall immediately be notified, ground disturbing activities in that location shall cease within 25 feet of the discovery and the Tribe shall be allowed, pursuant to California Public Resources Code (PRC) Section 5097.98(a) to inspect the site of the discovery and make determinations as to how the human remains and grave goods should be treated	During ground disturbance	Construction Contractor/Qualified Archaeologist	City / County Coroner/Tribe	If remains are discovered monitoring would occur during ground disturbing activities.	Implementation of human remains discovery procedures per State law and tribal consultation, including site protection and culturally appropriate treatment.

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	and disposed of with appropriate dignity. • The Tribe shall complete its inspection and make its MLD recommendation within forty-eight (48) hours of getting access to the site. The Tribe shall have the final determination as to the disposition and treatment of human remains and grave goods. Said determination may include avoidance of the human remains, reburial on-site or reburial on tribal or other lands that will not be disturbed in the future. • The Tribe may wish to rebury said remains and grave goods or ceremonial and cultural items on or near the site of their discovery, in an area which will not be subject to future disturbances over a prolonged period of time. Reburial of human remains shall be accomplished in compliance with California PRC Sections 5097.98(a) and (b). The term "human remains" encompasses more than human bones because the Tribe's traditions					

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	call for the burial of associated cultural items with the deceased (funerary objects), and/or the ceremonial burning of Native American human remains, funerary objects, grave goods, and animals. Ashes, soils, and other remnants of these burning ceremonies, as well as associated funerary objects and unassociated funerary objects buried with or found near the Native American remains are to be treated in the same manner as bones or bone fragments that remain intact. • Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act (California Government Code Section 6250 et. seq). The Medical Examiner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r). The Tribe					

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	will require that the location for reburial is recorded with the California Historic Resources Inventory System (CHRIS) on a form that is acceptable to the CHRIS center. The Tribe may also suggest that the landowner enter into an agreement regarding the confidentiality of site information that will run with title on the property. • Treatment of all cultural items, including ceremonial items and archaeological items will reflect the religious beliefs, customs, and practices of the Tribe. All cultural items, including ceremonial items and archaeological items, which may be found at a Project site should be turned over to the Tribe for appropriate treatment, unless otherwise ordered by a court of agency of competent jurisdiction. The project applicant should waive any and all claims to ownership of Tribal ceremonial and cultural items, including archaeological items, which may be found on a project site in favor of the Tribe. If any					

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	intermediary (e.g., an archaeological retained by the project applicant) is necessary, said entity or individual shall not possess those items for longer than is reasonably necessary, as determined solely by the Tribe. • If additional significant sites or sites not identified as significant in the environmental review process, but later determined to be significant are located within a project impact area, such sites will be subjected to further archaeological and cultural significance evaluation by the project applicant, Solano County and the Tribe to determine if additional mitigation measures are necessary to treat sites in a culturally appropriate manner consistent with CEQA requirements for mitigation of impacts to cultural resources. If there are human remains present that have been identified as Native American, all work will cease for a period of up to 30 days in accordance with Federal Law.					

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	Energy					
	No Mitigation Measures required.					
	Geology and Soils					
Project Specific Mitigation Measure GEO-1	**Design-Level Geotechnical Review.** A licensed Geotechnical Engineer or their representative shall be retained to perform a design-level geotechnical investigation once site development plans are final. The design-level geotechnical investigation shall include further evaluation of potential geologic hazards related to landslides, stability of graded slopes, corrective grading for planned building sites, and the presence of moderate to highly expansive soil and bedrock. The design-level investigation findings shall be used to address all the geotechnical concerns described in the Preliminary Geotechnical Exploration and to develop detailed recommendations for design and construction. The recommendations of the Preliminary Geotechnical Exploration and any recommendations included in the required design-level geotechnical investigation for the project shall be	Pre-Construction/ During Construction/ Post-Construction	Applicant / Geotechnical Engineer	**City**	One investigation before design; oversight during grading; certification at completion.	Implementation of all geotechnical recommendations in design and construction, verified by letter of compliance upon project completion.

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	incorporated into all design and engineering plans. At the end of construction, the Geotechnical Engineer shall provide a letter regarding contractor compliance with project plans and specifications and with the recommendations of the Geotechnical Investigation and any supplemental recommendations issued during construction. The letter shall be submitted for review to the City of Vallejo Building Division and confirmed prior to issuance of a certificate of occupancy.					
Project Specific Mitigation Measure GEO-2	**Discovery of Paleontological Resources.** Should paleontological resources be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. For purposes of this mitigation, a "qualified paleontologist" shall be an individual with the following	During project subsurface construction activities	Qualified Paleontologist	Project Contractor /Qualified Paleontologist	Continuous monitoring during all ground-disturbing construction activities within 25 feet of any discovered paleontological resources.	Implementation of discovery protocol; if fossils are encountered, work within 25 feet is redirected and a qualified paleontologist assesses the find, with mitigation measures applied as necessary to ensure protection and documentation of paleontological resources.

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	qualifications: (1) a graduate degree in paleontology or geology and/or a person with a demonstrated publication record in peer-reviewed paleontological journals; (2) at least 2 years of professional experience related to paleontology; (3) proficiency in recognizing fossils in the field and determining their significance; (4) expertise in local geology, stratigraphy, and biostratigraphy; and (5) experience collecting vertebrate fossils in the field. If the paleontological resources are found to be significant and project activities cannot avoid them, measures shall be implemented to ensure that the project does not cause a substantial adverse change in the significance of the paleontological resource. Measures may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Upon completion of the assessment, a report documenting methods, findings, and recommendations					

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	shall be prepared and submitted to the City of Vallejo for review. If paleontological materials are recovered, this report also shall be submitted to a paleontological repository, such as the University of California Museum of Paleontology, along with significant paleontological materials. Public educational outreach may also be appropriate. The project sponsor shall inform its contractor(s) of the sensitivity of the project site for paleontological resources and shall verify that the following directive has been included in the project grading plans: *"The subsurface of the construction site may be sensitive for fossils. If fossils are encountered during project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any*					

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	paleontological materials. Fossils can include plants and animals, and such trace fossil evidence of past life as tracks or plant imprints. Ancient marine sediments may contain invertebrate fossils such as snails, clam and oyster shells, sponges, and protozoa; and vertebrate fossils such as fish, whale, and sea lion bones. Contractor acknowledges and understands that excavation or removal of paleontological material is prohibited by law and constitutes a misdemeanor under California Public Resources Code, Section 5097.5."					
Greenhouse Gas Emissions						
General Plan EIR Mitigation Measure AQ-2b.1	Please refer to **General Plan EIR Mitigation Measure AQ-2b.1** as detailed above in Air Quality.					
Hazards and Hazardous Materials						
Project Specific Mitigation Measure HAZ-1	**Emergency Response and Cleanup Plan.** Prior to commencement of construction activities, the construction contractor shall prepare an Emergency Response and Cleanup Plan. The construction contractor shall implement the plan during construction. The plan shall detail the methods to be used to	Prior to Construction/ During Construction	Construction Contractor	City/Construction Contractor	One-time submittal before work; ongoing implementation.	Preparation and implementation of the Emergency Response and Cleanup Plan and verification of proper spill containment and cleanup during construction.

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	contain and clean up a spill of petroleum products or other hazardous materials in the work area.					
Project Specific Mitigation Measure HAZ-2	**Construction Equipment Maintenance, Refueling, and Washing Activities.** During construction, the construction contractor shall ensure that all equipment maintenance, refueling, and storage are conducted on level ground outside the aquatic features within the project site, away from concentrated flows of stormwater and drainage courses. Drip pans or absorbent pads shall be used during equipment refueling and maintenance activities. Adequate quantities of absorbent spill cleanup material and spill kits shall be kept in the refueling and maintenance area and on fuel trucks. Spill cleanup materials shall be disposed of immediately after use.	During Construction	Construction Contractor	City/Construction Contractor	Daily inspections during construction.	Implementation of BMPs for equipment maintenance and refueling, including use of spill kits and secondary containment to prevent contamination.
Hydrology and Water Quality						
No Mitigation Measures required.						
Land Use and Planning						
No Mitigation Measures required.						

Table 5.A: Updated Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
Mineral Resources						
No Mitigation Measures required.						
Noise						
No Mitigation Measures required.						
Population and Housing						
No Mitigation Measures required.						
Public Services						
No Mitigation Measures required.						
Recreation						
No Mitigation Measures required.						
Transportation						
No Mitigation Measures required.						
Tribal Cultural Resources						
No Mitigation Measures required.						
Utilities and Service Systems						
No Mitigation Measures required.						
Wildfire						
No Mitigation Measures required.						

6.0 LIST OF PREPARERS

LSA Associates, Inc.
157 Park Place
Richmond, CA 94801

Theresa Wallace, AICP, Principal in Charge
Florentina Craciun, Project Manager
Ashley Honer, Environmental Planner
Lynnea Palecki, Environmental Planner
Cara Cunningham, Associate Air Quality Specialist
Jessie Quigley, GIS Specialist/Programmer
Jason Thomas, Graphic Design and GIS Specialist
Jennette Bosseler, Associate Technical Editor
Stephanie Powers, Word Processor

This page intentionally left blank

7.0 REFERENCES

Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission (MTC). 2018. *Plan Bay Area Projections 2040*. Website: http://projections.planbayarea.org/ (accessed January 17, 2022).

Banker's Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego, 139 Cal. App. 4th 249, 279 (2006).

Baseline Environmental Consulting. 2025. *Peer Review of Phase I Environmental Site Assessment, Vista Cove Planned Development Project, Vallejo, California*. March 25.

Baseline Environmental Consulting. 2025. *Peer Review of Preliminary Geotechnical Exploration, Vista Cove Planned Development Project, Vallejo, California*. March 26.

Bay Area Air Quality Management District. 2010. Bay Area 2010 Clean Air Plan. September 15. Website: https://www.baaqmd.gov/~/media/files/planning-and-research/plans/2010-clean-air-plan/cap-volume-i-appendices.pdf (accessed September 2025).

_____. 2014. Identifying Areas with Cumulative Impacts from Air Pollution in the San Francisco Bay Area Version 2. March.

_____.2015. Toxic Air Contaminant Control Program Annual Report, Volume 1. May.

_____.2017. *Clean Air Plan*. April 19.

_____. 2015. *Toxic Air Contaminant Control Program Annual Report, Volume 1.* May.

_____. 2022. California Environmental Quality Act Air Quality Guidelines.

California Air Resources Board (CARB). 2000. *Fact Sheet – California's Plan to Reduce Diesel Particulate Matter Emissions*. October.

_____. 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October. Prepared by the Stationary Source Division and Mobile Source Control Division. Website: https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/rrpfinal.pdf (accessed March 2025).

_____. 2005. *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB Handbook). April.

_____. 2017. *California's 2017 Climate Change Scoping Plan*. November.

_____. 2017. *Second Update to the Climate Change Scoping Plan: Building on the Framework.* Website: www.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2017-scoping-plan-documents (accessed March 2025).

_____. 2017. *Short-Lived Climate Pollutant Reduction Strategy.* March. Website: https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf (accessed March 2025).

_____. 2017. *Climate and Air Quality in Solano County.* April 21. Website: https://www.baaqmd.gov/en/about-the-air-district/in-your-community/solano-county (accessed March 2025).

_____. 2017. *Final 2017 Clean Air Plan*. April 19, 2017. Website: www.baaqmd.gov/~/media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en (accessed March 2025).

_____. 2020. *Inhalable Particulate Matter and Health ($PM_{2.5}$ and PM_{10})*. Website: ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health (accessed March 2025).

_____. 2022. *2022 Scoping Plan*. November 16. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed March 2025).

_____. 2022. *Justification Report: CEQA Thresholds for Evaluating the Significance of Climate* Impacts From Land Use Projects and Plans. April.

_____. 2023. *California Environmental Quality Act, Air Quality Guidelines*. April 20.

_____. 2023. *Air Quality Guidelines Appendix A: Thresholds of Significance Justification.* Website: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-a-thresholds-of-significance-justification_final-pdf (accessed March 2025).

_____. 2024. Assembly Bill 32 Greenhouse Gas Emissions Inventory for 2000-2022 – by Gas.

_____. 2024. *California Greenhouse Gas Emissions for 2000 to 2022, Trends of Emissions and Other Indicators Report*. Website: https://ww2.arb.ca.gov/sites/default/files/2024-09/nc-2000_2022_ghg_inventory_trends.pdf (accessed March 2025).

_____. 2024. Assembly Bill 32 Greenhouse Gas Emissions Inventory for 2000-2022 – by Gas.

California Department of Conservation (DOC). 2018. *Division of Land Use Resource Protection. California Important Farmland Finder*. Website: maps.conservation.ca.gov/dlrp/ciff (accessed February 28, 2025).

_____. 2024. *Solano County Tsunami Hazard Areas.* Website: https://www.conservation.ca.gov/cgs/tsunami/maps/Solano (accessed October 25, 2024).

California Department of Conservation, California Geologic Survey (DOC CGS). 2021. *Earthquake Zones of Required Investigation.* Website: https://maps.conservation.ca.gov/cgs/EQZApp/app/ (accessed March 5, 2025).

California Department of Education. 2025. Data Quest Website: *Enrollment by Grade - Vallejo City Unified*. Website: https://dq.cde.ca.gov/dataquest/ (accessed March 4, 2025).

California Department of Resources Recycling and Recovery (CalRecycle). 2024a. *Solid Waste Information System (SWIS), Potrero Hills Landfill (048-AA-0075).* Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1194?siteID=3591 (accessed October 31, 2024).

_____. 2024b. *Solid Waste Information System (SWIS), Recology Hay Road (48-AA-0025).* Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1184?siteID=3582 (accessed October 31, 2024).

_____. n.d. *Statewide Diversion and Per Capita Disposal Rate Statistics*. https://calrecycle.ca.gov/LGCentral/GoalMeasure/DisposalRate/ (accessed October 31, 2024).

California Department of Transportation. 2020. *Transportation and Construction Vibration Guidance Manual.* April.

_____. 2020. *VMT-Focused Transportation Impact Study Guide*. May 20.

_____. n.d. *California Scenic Highway Mapping System*. Website: https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa (accessed March 5, 2025).

California Energy Commission (CEC). *2015. Medium and Heavy-Duty Truck Prices and Fuel Economy 2013–2026*. Website: efiling.energy.ca.gov/getdocument.aspx?tn=206180 (accessed March 26, 2025).

_____. 2024a. *Energy Consumption Data Management Service. Electricity Consumption by County*. Website: www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed March 26, 2025).

_____. 2024b. *Energy Consumption Data Management Service. Gas Consumption by County.* Website: https://ecdms.energy.ca.gov/gasbycounty.aspx (accessed March 26, 2025).

_____. 2024. *2024 Integrated Energy Policy Report Update.* Docket Number: 24-IEPR-01.

California Environmental Protection Agency (CalEPA). 2024. Cortese List Data Resources. Website: https://calepa.ca.gov/sitecleanup/corteselist/ (accessed March 5, 2025).

California Environmental Protection Agency (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA). 2015. *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. March. Website: https://oehha.ca.gov/air/air-toxics-hot-spots (accessed March 2025).

California Office of Public School Construction. 2019. *School Facility Program Handbook*. January.

California State Mining and Geology Board. 2014. *Surface Mining Reclamation Act Regulations.* California Code of Regulations, Title 14, Division 2, Chapter 8, Subchapter 1.

City of Vallejo. 2016. Propel Vallejo General Plan Update and Sonoma Boulevard Specific Plan EIR for the City of Vallejo. July.

_____. 2017. *Propel Vallejo General Plan 2040, Map NBE-4*. August 29.

_____. 2020. *City of Vallejo CEQA Transportation Impact Analysis Guidelines*. October.

_____. 2021. *City of Vallejo 2020 Urban Water Management Plan*. October 12.

_____. 2024. Addendum to the General Plan EIR 2023-2031 Housing Element Update. State Clearinghouse No. 2014112035. December 6.

City of Vallejo, Municipal Code. n.d.-a. *Vallejo, California – Municipal Code, Title 3 – Revenue and Finance, Chapter 3.06 – Public Facilities Impact Mitigation Fee.* Website: https://library.municode. com/ca/vallejo/codes/municipal_code?nodeId=TIT3REFI_CH3.06PUFAIMMIFE (accessed March 4, 2025).

_____. n.d.-b. *Vallejo, California – Municipal Code, Title 3 – Revenue and Finance, Chapter 3.18 Land Dedication and Fees for Park and Recreational Purposes.* Website: https://library.municode. com/ca/vallejo/codes/municipal_code?nodeId=TIT3REFI_CH3.18LADEFEPAREPU (accessed March 4, 2025).

_____. n.d.-c. *Vallejo, California – Municipal Code, Title 12 – Buildings and Construction, Chapter 12.48.010 – Existing Building Code Adoption*.

_____. n.d.-d. *Vallejo, California – Municipal Code, Title 16 – Zoning, Part II – Districts and Development, Chapter 16.202 – Residential Districts.*

_____. n.d.-e. *Vallejo, California – Municipal Code, Title 16 – Zoning, Part II – Districts and Development Types, Chapter 16.209 – Planned Development District.*

_____. n.d.-f. *Vallejo, California – Municipal Code, Title 16 – Zoning, Part V – Site Development Standards, Chapter 16.506 – Lighting and Glare.*

_____. n.d.-g. *Vallejo, California – Municipal Code, Title 16 – Zoning, Part V – Site Development Standards, Chapter 16.504 – Landscaping, Section 16.504.07 – Tree protection.*

_____. n.d.-h. *Vallejo, California – Municipal Code, Title 16 – Zoning, Part II – Districts and Development, Chapter 16.212 – Hillside Development Standards.*

City of Vallejo Public Works Department. n.d. *Traffic Impact Analysis/Study Guidelines*.

Department of Environment, Food and Rural Affairs (DEFRA). 2004. *Update of Noise Database for Prediction of Noise on Construction and Open Sites*.

DK Engineering. 2023. *Drainage Study for Vista Cove in Vallejo, California.* May 3.

ENGEO. 2022a. *Vallejo Properties – Vista Cove, Vallejo, California, Preliminary Geotechnical Exploration.* September 12.

_____. 2022b. *Vallejo Properties – Glen Cove, Vallejo, California Phase I Environmental Site Assessment*. April 26.

Federal Emergency Management Agency (FEMA). 2016. Flood Insurance Rate Map No. 06095C0629G. Map revised August 3, 2016. Website: https://msc.fema.gov/portal/search (accessed July 5, 2024).

Federal Highway Administration (FHWA). 2006. *FHWA Roadway Construction Noise Model User's Guide.* January. Washington, D.C. Website: www.fhwa.dot.gov/environment/noise/construction_noise/rcnm/ rcnm.pdf (accessed August 2024).

Google Earth. 2024. Aerial Imagery 1985-2002 (most recently accessed February 2024).

Governor's Office of Planning and Research (OPR). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR Technical Advisory).

Institute of Transportation Engineers (ITE). 2021. *Trip Generation Manual,* 11th Edition.

Greater Vallejo Recreation District (GVRD). 2025. About the District. Website: https://www.gvrd.org/about-the-district (accessed March 4, 2025).

LSA Associates, Inc. (LSA). 2025. *Third-Party Review of Biological Resources Report for the Vista Cove Project in Vallejo, California*. March 17.

_____. 2025. *Third-Party Review of Arborist Report for the Vista Cove Project in Vallejo, California*. March 17.

_____. 2025. *Cultural Resources Assessment, Vista Cove Development Project, Vallejo, Solano County, California.* March.

_____. 2025. *Transportation Analysis for the Vista Cove Project (LSA Project No. 20241845)*. January 9.

Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG). 2021. *Plan Bay Area 2050*. October. Website: https://www.planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_October_2021.pdf (accessed March 2025).

Pacific Gas and Electric Company (PG&E). 2023. *Exploring Clean Energy Solutions*. Website: https://www.pge.com/en/about/corporate-responsibility-and-sustainability/taking-responsibility/clean-energy-solutions.html (accessed March 5, 2025).

Propper, Ralph, Patrick Wong, Son Bui, Jeff Austin, William Vance, Alvaro Alvarado, Bart Croes, and Dongmin Luo. 2015. *Ambient and Emission Trends of Toxic Air Contaminants in California. American Chemical Society: Environmental Science & Technology*. Website: pubs.acs.org/doi/full/10.1021/acs.est.5b02766 (accessed March 2025).

Sancerra Vista Cove, LLC. 2023. *Preliminary Stormwater Control Plan for Vista Cove.* November.

_____. 2024a. *Vista Cove Planned Development, Vallejo, California*. May.

_____. 2024b. *Vista Cove Vallejo, CA Overall Landscape Plan.* May 14.

_____. 2024c. *Vista Cove Planned Development, Tentative Map.* May 9.

Shuford, W.D., and T. Gardali, eds. 2008. *California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.*

Solano County Office of Emergency Services. 2022. *Solano County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP)*. March. Website: https://www.solanocounty.com/depts/oes/emergency_plans.asp. (accessed October 3, 2025).

_____. 2023. *Community Wildfire Protection Plan (CWPP)*. November. Website: https://www.solanocounty.com/depts/oes/emergency_plans.asp. (accessed October 3, 2025).

_____. n.d. "*Alert Solano Emergency Notification System*." Website: https://www.solanocounty.com/depts/oes/alertsolano/emergency.asp.(accessed May 10, 2025)

Solano Transportation Authority. 2023. *2023 Solano County Congestion Management Program*.

State CEQA Guidelines. 2023. Section 15126.2(d).

State of California Department of Water Resources (DWR). DWR Mapping Tool. Website: https://sgma.water.ca.gov/webgis/index.jsp?appid=gasmaster&rz=true (accessed September 19, 2024).

State Water Resources Control Board (SWRCB). 2024. *2024 California Integrated Report*. Website: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2024-integrated-report.html (accessed March 5, 2025).

Stebbins, R.C. 2003. *A Field Guide to Western Reptiles and Amphibians, Third edition*. Houghton Mifflin Company, Boston, MA and New York, NY.

Thomson, R.C., A.N. Wright, and H.B. Shaffer. 2016. *California amphibian and reptile species of special concern*. Co-published by the California Department of Fish and Wildlife and University of California Press, Oakland, California.

Transportation Research Board. Special Report 209, *Highway Capacity Manual (HCM).*

United Nations Framework Convention on Climate Change (UNFCCC). 2023. *GHG Data from UNFCCC*. Website: unfccc.int/process-and-meetings/transparency-and-reporting/greenhouse-gas-data/ghg-data-unfccc/ghg-data-from-unfccc (accessed March 2025).

United States Census Bureau. 2021 Census. *5-year ACS Data Table B08134: Means of Transportation to Work by Travel Time to Work.* Website: https://data.census.gov/table?q=B08134:+MEANS+OF++ TRANSPORTATION+TO+WORK+BY+TRAVEL+TIME+TO+WORK&g=160000+0US0681554_1600000US0681666&tid=ACSDT5Y2021.B08134 (accessed February 9, 2023).

_____. 2022. *2020 Census Urban Areas FAQs*. December 2022. Website: https://www2.census.gov/geo/pdfs/reference/ua/Census_UA_2020FAQs.pdf (accessed March 5, 2025).

_____2024. *QuickFacts, Vallejo city, California; United States*. 2024. Website: https://www.census.gov/quickfacts/fact/table/vallejocitycalifornia,US/PST045224 (accessed February 28, 2025).

United States Department of Transportation (USDOT). 2023. "Table 4-23: Average Fuel Efficiency of U.S. Light Duty Vehicles." https://www.bts.gov/content/average-fuel-efficiency-us-light-duty-vehicles (accessed March 26, 2025).

United States Environmental Protection Agency (USEPA). 2015. *Black Carbon, Basic Information*. February 14, 2017. Website: 19january2017snapshot.epa.gov/www3/airquality/blackcarbon/basic.html (accessed March 2025).

_____. 2023. *Criteria Air Pollutants*. October. Website: https://www.epa.gov/criteria-air-pollutants (accessed August 2024).

_____. 2024. *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2022*. Website: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2022 (accessed March 2025).

University of California Museum of Paleontology. *Databases.* Website: https://ucmp.berkeley.edu/collections/databases/ (accessed March 5, 2025).

Urban Crossroads. 2025. *Vista Cove Noise Impact Analysis, City of Vallejo.* April.

Vallejo Flood and Wastewater District (VFWD). *Treatment.* Website: https://www.vallejowastewater.org/193/Treatment (accessed October 31, 2024).

WRA, Inc. 2023. *Sancerra Vista Cove Development Project – Arborist Tree Survey and Report*. February 22.

_____. 2024. *Biological Resources Technical Report Vista Cove Project, Vallejo, Solano County, California.* February.

This page intentionally left blank

APPENDIX A

CALEEMOD OUTPUTS

Vista Cove Planned Development Project Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

1.2. Land Use Types

1.3. User-Selected Emission Reduction Measures by Emissions Sector

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

2.2. Construction Emissions by Year, Unmitigated

2.3. Construction Emissions by Year, Mitigated

2.4. Operations Emissions Compared Against Thresholds

2.5. Operations Emissions by Sector, Unmitigated

2.6. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

3.2. Site Preparation (2026) - Mitigated

3.3. Grading (2026) - Unmitigated

3.4. Grading (2026) - Mitigated

3.5. Building Construction (2026) - Unmitigated

3.6. Building Construction (2026) - Mitigated

3.7. Building Construction (2027) - Unmitigated

3.8. Building Construction (2027) - Mitigated

3.9. Paving (2027) - Unmitigated

3.10. Paving (2027) - Mitigated

3.11. Architectural Coating (2027) - Unmitigated

3.12. Architectural Coating (2027) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Vista Cove Planned Development Project
Construction Start Date	6/1/2026
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.60
Precipitation (days)	34.8
Location	38.08284299702481, -122.20120688622941
County	Solano-San Francisco
City	Vallejo
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	822
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Single Family Housing	51.0	Dwelling Unit	10.0	99,450	154,638	—	144	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	93.4	93.4	39.9	29.0	0.05	1.12	7.81	8.93	1.02	3.97	4.99	—	5,452	5,452	0.22	0.06	5,472
Mit.	93.4	93.4	2.63	29.0	0.05	0.10	7.81	7.91	0.10	3.97	4.07	—	5,452	5,452	0.22	0.06	5,472
% Reduced	< 0.5%	< 0.5%	93%	—	—	91%	—	11%	90%	—	18%	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.70	0.69	19.1	15.0	0.02	0.69	0.19	0.88	0.64	0.05	0.69	—	2,690	2,690	0.11	0.05	2,706
Mit.	0.31	0.30	2.28	15.0	0.02	0.05	0.19	0.24	0.05	0.05	0.09	—	2,690	2,690	0.11	0.05	2,706
% Reduced	56%	57%	88%	—	—	93%	—	73%	93%	—	87%	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.01	4.00	8.59	6.69	0.01	0.30	0.38	0.68	0.28	0.17	0.44	—	1,206	1,206	0.05	0.02	1,213
Mit.	3.91	3.91	0.96	6.69	0.01	0.02	0.38	0.40	0.02	0.17	0.19	—	1,206	1,206	0.05	0.02	1,213
% Reduced	2%	2%	89%	—	—	93%	—	41%	93%	—	58%	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.73	0.73	1.57	1.22	< 0.005	0.05	0.07	0.12	0.05	0.03	0.08	—	200	200	0.01	< 0.005	201
Mit.	0.71	0.71	0.18	1.22	< 0.005	< 0.005	0.07	0.07	< 0.005	0.03	0.03	—	200	200	0.01	< 0.005	201
% Reduced	2%	2%	89%	—	—	93%	—	41%	93%	—	58%	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.14	1.14	39.9	29.0	0.05	1.12	7.81	8.93	1.02	3.97	4.99	—	5,452	5,452	0.22	0.06	5,472
2027	93.4	93.4	19.1	15.0	0.02	0.69	0.19	0.88	0.64	0.05	0.69	—	2,696	2,696	0.10	0.05	2,713
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.70	0.69	19.1	15.0	0.02	0.69	0.19	0.88	0.64	0.05	0.69	—	2,690	2,690	0.11	0.05	2,706
2027	0.69	0.68	19.1	15.0	0.02	0.69	0.19	0.88	0.64	0.05	0.69	—	2,684	2,684	0.11	0.05	2,700
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.30	0.30	8.59	6.69	0.01	0.30	0.38	0.68	0.28	0.17	0.44	—	1,206	1,206	0.05	0.02	1,213
2027	4.01	4.00	4.55	3.60	0.01	0.17	0.04	0.21	0.16	0.01	0.17	—	631	631	0.02	0.01	635
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.06	0.05	1.57	1.22	< 0.005	0.05	0.07	0.12	0.05	0.03	0.08	—	200	200	0.01	< 0.005	201
2027	0.73	0.73	0.83	0.66	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	104	104	< 0.005	< 0.005	105

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.57	0.56	2.63	29.0	0.05	0.10	7.81	7.91	0.10	3.97	4.07	—	5,452	5,452	0.22	0.06	5,472
2027	93.4	93.4	2.24	15.0	0.02	0.05	0.19	0.24	0.05	0.05	0.09	—	2,696	2,696	0.10	0.05	2,713
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.31	0.30	2.28	15.0	0.02	0.05	0.19	0.24	0.05	0.05	0.09	—	2,690	2,690	0.11	0.05	2,706
2027	0.30	0.29	2.27	15.0	0.02	0.05	0.19	0.24	0.05	0.05	0.09	—	2,684	2,684	0.11	0.05	2,700
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.14	0.13	0.96	6.69	0.01	0.02	0.38	0.40	0.02	0.17	0.19	—	1,206	1,206	0.05	0.02	1,213
2027	3.91	3.91	0.58	3.60	0.01	0.01	0.04	0.06	0.01	0.01	0.02	—	631	631	0.02	0.01	635
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02	0.02	0.18	1.22	< 0.005	< 0.005	0.07	0.07	< 0.005	0.03	0.03	—	200	200	0.01	< 0.005	201
2027	0.71	0.71	0.11	0.66	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	104	104	< 0.005	< 0.005	105

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.17	4.94	2.66	19.5	0.05	0.09	3.66	3.75	0.09	0.93	1.02	22.1	5,233	5,255	2.48	0.19	5,390
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.81	4.59	2.93	16.0	0.04	0.09	3.66	3.75	0.09	0.93	1.02	22.1	4,979	5,001	2.50	0.21	5,128

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.90	4.68	2.64	16.6	0.04	0.08	3.58	3.66	0.08	0.91	0.98	22.1	4,808	4,831	2.49	0.20	4,960
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.89	0.85	0.48	3.03	0.01	0.01	0.65	0.67	0.01	0.17	0.18	3.67	796	800	0.41	0.03	821

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.20	2.03	1.77	16.1	0.04	0.03	3.66	3.69	0.03	0.93	0.95	—	4,220	4,220	0.17	0.18	4,292
Area	2.80	2.78	0.20	2.97	< 0.005	0.02	—	0.02	0.01	—	0.01	0.00	223	223	< 0.005	< 0.005	223
Energy	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	718	718	0.08	0.01	722
Water	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Waste	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Stationary	0.13	0.11	0.32	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	58.8	58.8	< 0.005	< 0.005	59.0
Total	5.17	4.94	2.66	19.5	0.05	0.09	3.66	3.75	0.09	0.93	1.02	22.1	5,233	5,255	2.48	0.19	5,390
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.11	1.93	2.06	15.4	0.04	0.03	3.66	3.69	0.03	0.93	0.95	—	3,974	3,974	0.19	0.20	4,038
Area	2.53	2.52	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	215	215	< 0.005	< 0.005	215
Energy	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	718	718	0.08	0.01	722
Water	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Waste	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Stationary	0.13	0.11	0.32	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	58.8	58.8	< 0.005	< 0.005	59.0
Total	4.81	4.59	2.93	16.0	0.04	0.09	3.66	3.75	0.09	0.93	1.02	22.1	4,979	5,001	2.50	0.21	5,128
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.08	1.91	1.93	14.7	0.04	0.03	3.58	3.61	0.03	0.91	0.93	—	4,010	4,010	0.18	0.19	4,077
Area	2.64	2.64	0.02	1.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	9.11	9.11	< 0.005	< 0.005	9.13
Energy	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	718	718	0.08	0.01	722
Water	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Waste	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Stationary	0.12	0.11	0.31	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.5	57.5	< 0.005	< 0.005	57.7
Total	4.90	4.68	2.64	16.6	0.04	0.08	3.58	3.66	0.08	0.91	0.98	22.1	4,808	4,831	2.49	0.20	4,960
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.38	0.35	0.35	2.69	0.01	0.01	0.65	0.66	0.01	0.17	0.17	—	664	664	0.03	0.03	675
Area	0.48	0.48	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.51	1.51	< 0.005	< 0.005	1.51
Energy	0.01	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	119	119	0.01	< 0.005	120
Water	—	—	—	—	—	—	—	—	—	—	—	0.57	2.14	2.71	0.06	< 0.005	4.63
Waste	—	—	—	—	—	—	—	—	—	—	—	3.09	0.00	3.09	0.31	0.00	10.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12
Stationary	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	9.55
Total	0.89	0.85	0.48	3.03	0.01	0.01	0.65	0.67	0.01	0.17	0.18	3.67	796	800	0.41	0.03	821

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.20	2.03	1.77	16.1	0.04	0.03	3.66	3.69	0.03	0.93	0.95	—	4,220	4,220	0.17	0.18	4,292
Area	2.80	2.78	0.20	2.97	< 0.005	0.02	—	0.02	0.01	—	0.01	0.00	223	223	< 0.005	< 0.005	223
Energy	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	718	718	0.08	0.01	722
Water	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Waste	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Stationary	0.13	0.11	0.32	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	58.8	58.8	< 0.005	< 0.005	59.0
Total	5.17	4.94	2.66	19.5	0.05	0.09	3.66	3.75	0.09	0.93	1.02	22.1	5,233	5,255	2.48	0.19	5,390
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.11	1.93	2.06	15.4	0.04	0.03	3.66	3.69	0.03	0.93	0.95	—	3,974	3,974	0.19	0.20	4,038
Area	2.53	2.52	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	215	215	< 0.005	< 0.005	215
Energy	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	718	718	0.08	0.01	722
Water	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Waste	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Stationary	0.13	0.11	0.32	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	58.8	58.8	< 0.005	< 0.005	59.0
Total	4.81	4.59	2.93	16.0	0.04	0.09	3.66	3.75	0.09	0.93	1.02	22.1	4,979	5,001	2.50	0.21	5,128
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.08	1.91	1.93	14.7	0.04	0.03	3.58	3.61	0.03	0.91	0.93	—	4,010	4,010	0.18	0.19	4,077
Area	2.64	2.64	0.02	1.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	9.11	9.11	< 0.005	< 0.005	9.13
Energy	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	718	718	0.08	0.01	722
Water	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Waste	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Stationary	0.12	0.11	0.31	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	57.5	57.5	< 0.005	< 0.005	57.7
Total	4.90	4.68	2.64	16.6	0.04	0.08	3.58	3.66	0.08	0.91	0.98	22.1	4,808	4,831	2.49	0.20	4,960
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.38	0.35	0.35	2.69	0.01	0.01	0.65	0.66	0.01	0.17	0.17	—	664	664	0.03	0.03	675
Area	0.48	0.48	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.51	1.51	< 0.005	< 0.005	1.51
Energy	0.01	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	119	119	0.01	< 0.005	120
Water	—	—	—	—	—	—	—	—	—	—	—	0.57	2.14	2.71	0.06	< 0.005	4.63
Waste	—	—	—	—	—	—	—	—	—	—	—	3.09	0.00	3.09	0.31	0.00	10.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12
Stationary	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	9.55
Total	0.89	0.85	0.48	3.03	0.01	0.01	0.65	0.67	0.01	0.17	0.18	3.67	796	800	0.41	0.03	821

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	1.07	39.9	28.3	0.05	1.12	—	1.12	1.02	—	1.02	—	5,298	5,298	0.21	0.04	5,316
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.55	0.39	< 0.005	0.02	—	0.02	0.01	—	0.01	—	72.6	72.6	< 0.005	< 0.005	72.8
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.10	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	12.1
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.66	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	154	154	< 0.005	0.01	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.97	1.97	< 0.005	< 0.005	2.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	0.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,298	5,298	0.21	0.04	5,316
Dust From Material Movement	—	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	72.6	72.6	< 0.005	< 0.005	72.8

Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.0	12.0	< 0.005	< 0.005	12.1
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.04	0.66	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	154	154	< 0.005	0.01	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.97	1.97	< 0.005	< 0.005	2.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.33	0.33	< 0.005	< 0.005	0.33
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.73	0.73	23.2	17.8	0.03	0.75	—	0.75	0.69	—	0.69	—	2,960	2,960	0.12	0.02	2,970
Dust From Material Movement	—	—	—	—	—	—	2.92	2.92	—	1.36	1.36	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.59	1.22	< 0.005	0.05	—	0.05	0.05	—	0.05	—	203	203	0.01	< 0.005	203
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.09	0.09	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.29	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	33.6	33.6	< 0.005	< 0.005	33.7
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.57	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	132	132	< 0.005	< 0.005	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.25	0.09	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	207	207	0.01	0.03	218
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.44	8.44	< 0.005	< 0.005	8.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.2	14.2	< 0.005	< 0.005	14.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.40	1.40	< 0.005	< 0.005	1.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.35	2.35	< 0.005	< 0.005	2.47

3.4. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.29	2.04	17.8	0.03	0.06	—	0.06	0.06	—	0.06	—	2,960	2,960	0.12	0.02	2,970

Dust From Material Movement	—	—	—	—	—	—	2.92	2.92	—	1.36	1.36	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	1.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	203	203	0.01	< 0.005	203
Dust From Material Movement	—	—	—	—	—	—	0.20	0.20	—	0.09	0.09	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	33.6	33.6	< 0.005	< 0.005	33.7
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	0.02	0.02	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.57	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	132	132	< 0.005	< 0.005	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.25	0.09	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	207	207	0.01	0.03	218

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.44	8.44	< 0.005	< 0.005	8.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	14.2	14.2	< 0.005	< 0.005	14.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.40	1.40	< 0.005	< 0.005	1.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.35	2.35	< 0.005	< 0.005	2.47

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	6.35	4.81	0.01	0.23	—	0.23	0.22	—	0.22	—	807	807	0.03	0.01	810
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.16	0.88	< 0.005	0.04	—	0.04	0.04	—	0.04	—	134	134	0.01	< 0.005	134
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	0.69	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	161	161	< 0.005	0.01	164
Vendor	0.01	< 0.005	0.18	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	143	143	< 0.005	0.02	150
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.62	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	149	149	< 0.005	0.01	151
Vendor	0.01	< 0.005	0.19	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	143	143	< 0.005	0.02	150
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	50.8	50.8	< 0.005	< 0.005	51.5
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.2	48.2	< 0.005	0.01	50.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.41	8.41	< 0.005	< 0.005	8.53
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.99	7.99	< 0.005	< 0.005	8.35

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	—	0.04	0.04	—	0.04	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	—	0.04	0.04	—	0.04	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.68	4.81	0.01	0.01	—	0.01	0.01	—	0.01	—	807	807	0.03	0.01	810
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	134
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	0.69	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	161	161	< 0.005	0.01	164
Vendor	0.01	< 0.005	0.18	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	143	143	< 0.005	0.02	150
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.62	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	149	149	< 0.005	0.01	151
Vendor	0.01	< 0.005	0.19	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	143	143	< 0.005	0.02	150
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	50.8	50.8	< 0.005	< 0.005	51.5
Vendor	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	48.2	48.2	< 0.005	0.01	50.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.41	8.41	< 0.005	< 0.005	8.53
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.99	7.99	< 0.005	< 0.005	8.35
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.62	0.62	18.9	14.3	0.02	0.69	—	0.69	0.64	—	0.64	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	3.91	2.97	< 0.005	0.14	—	0.14	0.13	—	0.13	—	497	497	0.02	< 0.005	499
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.71	0.54	< 0.005	0.03	—	0.03	0.02	—	0.02	—	82.3	82.3	< 0.005	< 0.005	82.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.65	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	158	158	< 0.005	0.01	161
Vendor	0.01	< 0.005	0.17	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	140	140	< 0.005	0.02	147
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.58	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	146	146	< 0.005	0.01	148
Vendor	0.01	< 0.005	0.18	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	141	141	< 0.005	0.02	147
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.7	30.7	< 0.005	< 0.005	31.2
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.1	29.1	< 0.005	< 0.005	30.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.08	5.08	< 0.005	< 0.005	5.16
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.82	4.82	< 0.005	< 0.005	5.05
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	—	0.04	0.04	—	0.04	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	2.03	14.3	0.02	0.04	—	0.04	0.04	—	0.04	—	2,397	2,397	0.10	0.02	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.42	2.97	< 0.005	0.01	—	0.01	0.01	—	0.01	—	497	497	0.02	< 0.005	499

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.54	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	82.3	82.3	< 0.005	< 0.005	82.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.65	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	158	158	< 0.005	0.01	161
Vendor	0.01	< 0.005	0.17	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	140	140	< 0.005	0.02	147
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.05	0.58	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	146	146	< 0.005	0.01	148
Vendor	0.01	< 0.005	0.18	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	141	141	< 0.005	0.02	147
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.7	30.7	< 0.005	< 0.005	31.2
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	29.1	29.1	< 0.005	< 0.005	30.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.08	5.08	< 0.005	< 0.005	5.16
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.82	4.82	< 0.005	< 0.005	5.05
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.9. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	13.3	10.6	0.01	0.58	—	0.58	0.54	—	0.54	—	1,511	1,511	0.06	0.01	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.55	0.44	< 0.005	0.02	—	0.02	0.02	—	0.02	—	62.1	62.1	< 0.005	< 0.005	62.3
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.10	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.3	10.3	< 0.005	< 0.005	10.3
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.03	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	129	129	< 0.005	< 0.005	131
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.97	4.97	< 0.005	< 0.005	5.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	0.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.10. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,511	1,511	0.06	0.01	1,516
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.08	0.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	62.1	62.1	< 0.005	< 0.005	62.3
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.3	10.3	< 0.005	< 0.005	10.3
Paving	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.03	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	129	129	< 0.005	< 0.005	131
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.97	4.97	< 0.005	< 0.005	5.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.82	0.82	< 0.005	< 0.005	0.84
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.11. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.09	0.96	< 0.005	0.07	—	0.07	0.06	—	0.06	—	134	134	0.01	< 0.005	134
Architectural Coatings	93.4	93.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.49	5.49	< 0.005	< 0.005	5.51
Architectural Coatings	3.84	3.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.91	0.91	< 0.005	< 0.005	0.91
Architectural Coatings	0.70	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.6	31.6	< 0.005	< 0.005	32.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.22	1.22	< 0.005	< 0.005	1.23
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	0.20
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.12. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.65	0.96	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	134
Architectural Coatings	93.4	93.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.49	5.49	< 0.005	< 0.005	5.51
Architectural Coatings	3.84	3.84	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.91	0.91	< 0.005	< 0.005	0.91
Architectural Coatings	0.70	0.70	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.6	31.6	< 0.005	< 0.005	32.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.22	1.22	< 0.005	< 0.005	1.23

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.20	0.20	< 0.005	< 0.005	0.20
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	2.20	2.03	1.77	16.1	0.04	0.03	3.66	3.69	0.03	0.93	0.95	—	4,220	4,220	0.17	0.18	4,292
Total	2.20	2.03	1.77	16.1	0.04	0.03	3.66	3.69	0.03	0.93	0.95	—	4,220	4,220	0.17	0.18	4,292
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	2.11	1.93	2.06	15.4	0.04	0.03	3.66	3.69	0.03	0.93	0.95	—	3,974	3,974	0.19	0.20	4,038
Total	2.11	1.93	2.06	15.4	0.04	0.03	3.66	3.69	0.03	0.93	0.95	—	3,974	3,974	0.19	0.20	4,038
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.38	0.35	0.35	2.69	0.01	0.01	0.65	0.66	0.01	0.17	0.17	—	664	664	0.03	0.03	675
Total	0.38	0.35	0.35	2.69	0.01	0.01	0.65	0.66	0.01	0.17	0.17	—	664	664	0.03	0.03	675

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	2.20	2.03	1.77	16.1	0.04	0.03	3.66	3.69	0.03	0.93	0.95	—	4,220	4,220	0.17	0.18	4,292
Total	2.20	2.03	1.77	16.1	0.04	0.03	3.66	3.69	0.03	0.93	0.95	—	4,220	4,220	0.17	0.18	4,292
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	2.11	1.93	2.06	15.4	0.04	0.03	3.66	3.69	0.03	0.93	0.95	—	3,974	3,974	0.19	0.20	4,038
Total	2.11	1.93	2.06	15.4	0.04	0.03	3.66	3.69	0.03	0.93	0.95	—	3,974	3,974	0.19	0.20	4,038
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.38	0.35	0.35	2.69	0.01	0.01	0.65	0.66	0.01	0.17	0.17	—	664	664	0.03	0.03	675
Total	0.38	0.35	0.35	2.69	0.01	0.01	0.65	0.66	0.01	0.17	0.17	—	664	664	0.03	0.03	675

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	243	243	0.04	< 0.005	245
Total	—	—	—	—	—	—	—	—	—	—	—	—	243	243	0.04	< 0.005	245
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	243	243	0.04	< 0.005	245
Total	—	—	—	—	—	—	—	—	—	—	—	—	243	243	0.04	< 0.005	245
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	40.2	40.2	0.01	< 0.005	40.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	40.2	40.2	0.01	< 0.005	40.6

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	243	243	0.04	< 0.005	245
Total	—	—	—	—	—	—	—	—	—	—	—	—	243	243	0.04	< 0.005	245

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	243	243	0.04	< 0.005	245
Total	—	—	—	—	—	—	—	—	—	—	—	—	243	243	0.04	< 0.005	245
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	40.2	40.2	0.01	< 0.005	40.6
Total	—	—	—	—	—	—	—	—	—	—	—	—	40.2	40.2	0.01	< 0.005	40.6

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	477
Total	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	477
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	477
Total	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	477
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.01	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.7	78.7	0.01	< 0.005	78.9
Total	0.01	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.7	78.7	0.01	< 0.005	78.9

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	477
Total	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	477
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	477
Total	0.04	0.02	0.37	0.16	< 0.005	0.03	—	0.03	0.03	—	0.03	—	475	475	0.04	< 0.005	477
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.01	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.7	78.7	0.01	< 0.005	78.9
Total	0.01	< 0.005	0.07	0.03	< 0.005	0.01	—	0.01	0.01	—	0.01	—	78.7	78.7	0.01	< 0.005	78.9

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.02	0.01	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	215	215	< 0.005	< 0.005	215
Consumer Products	2.13	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.27	0.25	0.03	2.90	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.74	7.74	< 0.005	< 0.005	7.76
Total	2.80	2.78	0.20	2.97	< 0.005	0.02	—	0.02	0.01	—	0.01	0.00	223	223	< 0.005	< 0.005	223
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.02	0.01	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	215	215	< 0.005	< 0.005	215
Consumer Products	2.13	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.53	2.52	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	215	215	< 0.005	< 0.005	215
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.88	0.88	< 0.005	< 0.005	0.88
Consumer Products	0.39	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	0.02	0.02	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.63	0.63	< 0.005	< 0.005	0.63
Total	0.48	0.48	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.51	1.51	< 0.005	< 0.005	1.51

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.02	0.01	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	215	215	< 0.005	< 0.005	215
Consumer Products	2.13	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.27	0.25	0.03	2.90	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.74	7.74	< 0.005	< 0.005	7.76
Total	2.80	2.78	0.20	2.97	< 0.005	0.02	—	0.02	0.01	—	0.01	0.00	223	223	< 0.005	< 0.005	223
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.02	0.01	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	215	215	< 0.005	< 0.005	215
Consumer Products	2.13	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	2.53	2.52	0.17	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	0.00	215	215	< 0.005	< 0.005	215
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	0.88	0.88	< 0.005	< 0.005	0.88
Consumer Products	0.39	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.07	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.02	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.63	0.63	< 0.005	< 0.005	0.63
Total	0.48	0.48	< 0.005	0.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	1.51	1.51	< 0.005	< 0.005	1.51

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Total	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Total	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.57	2.14	2.71	0.06	< 0.005	4.63
Total	—	—	—	—	—	—	—	—	—	—	—	0.57	2.14	2.71	0.06	< 0.005	4.63

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Total	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Total	—	—	—	—	—	—	—	—	—	—	—	3.47	12.9	16.4	0.36	0.01	27.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	0.57	2.14	2.71	0.06	< 0.005	4.63
Total	—	—	—	—	—	—	—	—	—	—	—	0.57	2.14	2.71	0.06	< 0.005	4.63

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4
Total	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4
Total	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	3.09	0.00	3.09	0.31	0.00	10.8
Total	—	—	—	—	—	—	—	—	—	—	—	3.09	0.00	3.09	0.31	0.00	10.8

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4
Total	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4
Total	—	—	—	—	—	—	—	—	—	—	—	18.7	0.00	18.7	1.87	0.00	65.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	3.09	0.00	3.09	0.31	0.00	10.8
Total	—	—	—	—	—	—	—	—	—	—	—	3.09	0.00	3.09	0.31	0.00	10.8

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.71
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.12

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.13	0.11	0.32	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	58.8	58.8	< 0.005	< 0.005	59.0
Total	0.13	0.11	0.32	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	58.8	58.8	< 0.005	< 0.005	59.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.13	0.11	0.32	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	58.8	58.8	< 0.005	< 0.005	59.0
Total	0.13	0.11	0.32	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	58.8	58.8	< 0.005	< 0.005	59.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	9.55
Total	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	9.55

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Emergen Generator	0.13	0.11	0.32	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	58.8	58.8	< 0.005	< 0.005	59.0
Total	0.13	0.11	0.32	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	58.8	58.8	< 0.005	< 0.005	59.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.13	0.11	0.32	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	58.8	58.8	< 0.005	< 0.005	59.0
Total	0.13	0.11	0.32	0.29	< 0.005	0.02	0.00	0.02	0.02	0.00	0.02	0.00	58.8	58.8	< 0.005	< 0.005	59.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	9.55
Total	0.02	0.02	0.06	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	9.52	9.52	< 0.005	< 0.005	9.55

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	6/1/2026	6/5/2026	5.00	5.00	—
Grading	Grading	6/8/2026	7/10/2026	5.00	25.0	—
Building Construction	Building Construction	7/13/2026	4/16/2027	5.00	200	—
Paving	Paving	4/19/2027	5/7/2027	5.00	15.0	—
Architectural Coating	Architectural Coating	5/10/2027	5/28/2027	5.00	15.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 2	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 2	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 2	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 2	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 2	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 2	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 2	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Tier 2	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 2	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	3.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	18.4	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	5.45	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	3.67	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	3.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	18.4	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	5.45	8.40	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	3.67	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	201,386	67,129	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	7.50	0.00	—
Grading	59,300	58,700	25.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.56

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

Single Family Housing	0.56	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	481	481	481	175,539	5,200	5,200	5,200	1,897,969

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Single Family Housing	481	481	481	175,539	5,200	5,200	5,200	1,897,969

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0

Gas Fireplaces	10
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	41
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	10
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	41
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
201386.25	67,129	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	434,811	204	0.0330	0.0040	1,483,591

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Single Family Housing	434,811	204	0.0330	0.0040	1,483,591

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,811,053	2,311,155

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	1,811,053	2,311,155

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	34.7	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	34.7	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	0.14	50.0	500	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification

Land Use	The proposed project would result in the subdivision of the 20.13-acre site, of which approximately 10 acres would be developed, while the remaining acreage would be retained as open space. The residential portion of the proposed project would include 51 residential lots, passive park use, and related infrastructure improvements. The proposed project would also include 3.55 acres of common open space.
Construction: Construction Phases	Construction of the proposed project is anticipated to begin in June 2026 and would occur over an approximately 1-year period.
Construction: Off-Road Equipment	Assuming the use of Tier 2 construction equipment.
Construction: Trips and VMT	It is anticipated that 58,700 cubic yards of soil would be cut and 59,300 cubic yards would be used for fill, resulting in a total soil import of 600 cubic yards.
Operations: Vehicle Data	The proposed project would generate approximately 481 average daily trips.

This page intentionally left blank

APPENDIX B

HRA MODEL OUTPUTS

Construction MEI (Sensitive) - Cancer Risk (in a Million) HARP Rec #: 1585 X: 569973.51 Y: 4215199.79			
T2	T2L3	T4f	0
67.66	10.32	4.52	0.00

Construction MEI (Sensitive) - Chronic Hazard Index HARP Rec #: 1585 X: 569973.51 Y: 4215199.79			
T2	T2L3	T4f	0
5.88E-02	8.97E-03	4.05E-03	0.00E+00

Construction MEI (Sensitive) - Acute Hazard Index HARP Rec #: NA X: NA Y: NA			
T2	T2L3	T4f	0
0.00E+00	0.00E+00	0.00E+00	0.00E+00

Construction MEI (Sensitive) - PM 2.5 HARP Rec #: 1585 X: 569973.51 Y: 4215199.79			
T2	T2L3	T4f	0
0.294	0.045	0.020	0.000

Construction MEI (Worker) - Cancer Risk (in a Million) HARP Rec #: 314 X: 570355.74 Y: 4215398.93			
T2	T2L3	T4f	0
0.46	0.07	0.03	0.00

Construction MEI (Worker) - Chronic Hazard Index HARP Rec #: 314 X: 570355.74 Y: 4215398.93			
T2	T2L3	T4f	0
2.26E-02	3.45E-03	1.56E-03	0.00E+00

Construction MEI (Worker) - Acute Hazard Index HARP Rec #: NA X: NA Y: NA			
T2	T2L3	T4f	0
0.00E+00	0.00E+00	0.00E+00	0.00E+00

Construction MEI (Worker) - PM 2.5 HARP Rec #: 314 X: 570355.74 Y: 4215398.93			
T2	T2L3	T4f	0
0.113	0.017	0.008	0.000

Construction MEI (School) - Cancer Risk (in a Million) HARP Rec #: 285 X: 570282.22 Y: 4215444.01			
T2	T2L3	T4f	0
2.90	0.44	0.19	0.00

Construction MEI (School) - Chronic Hazard Index HARP Rec #: 285 X: 570282.22 Y: 4215444.01			
T2	T2L3	T4f	0
2.81E-02	4.29E-03	1.94E-03	0.00E+00

Construction MEI (School) - Acute Hazard Index HARP Rec #: NA X: NA Y: NA			
T2	T2L3	T4f	0
0.00E+00	0.00E+00	0.00E+00	0.00E+00

Construction MEI (School) - PM 2.5 HARP Rec #: 285 X: 570282.22 Y: 4215444.01			
T2	T2L3	T4f	0
0.1405	0.0215	0.0097	0.0000

Description	Receptor Type	Model Type	UTM X	UTM Y	Latitude	Longitude
Construction	Sensitive	Cancer Risk	569973.51	4215199.79	38.08187492	-122.2021293
Construction	Sensitive	Chronic HI	569973.51	4215199.79	38.08187492	-122.2021293
Construction	Sensitive	Acute HI	0	0		
Construction	Sensitive	PM 2.5	569973.51	4215199.79	38.08187492	-122.2021293
Construction	School	Cancer Risk	570282.22	4215444.01	38.08405186	-122.1985855
Construction	School	Chronic HI	570282.22	4215444.01	38.08405186	-122.1985855
Construction	School	Acute HI	0	0		
Construction	School	PM 2.5	570282.22	4215444.01	38.08405186	-122.1985855
Construction	Worker	Cancer Risk	570355.74	4215398.93	38.08363988	-122.1977517
Construction	Worker	Chronic HI	570355.74	4215398.93	38.08363988	-122.1977517
Construction	Worker	Acute HI	0	0		
Construction	Worker	PM 2.5	570355.74	4215398.93	38.08363988	-122.1977517

General AERMOD Input Parameters			
Project Boundary			
	Based on site plan		
Project Elevation Data			
	Source	**Lakes Environmental**	
	Link	http://www.webgis.com/terraindata.html	
	Evel Data Descr.	**7.5 min DEM**	
Project Receptor Grid			
	Telescoping Grid	Spacing (m)	Distance (m)
	Grid 1	**10**	**310**
	Grid 2		
	Grid 3		
	Grid 4		
	Comments	**Receptors on roads or paring lot areas have been removed.**	
Meteorological Dataset			
	Location	**Vallejo**	
	Provided By	**Bay Area AQMD**	
	Years	**2013 - 2017**	
	Elevation (m)	**6**	
	Link		
Construction Modeling Specific Inputs			
AERMOD Input Options			
	Regulatory Options	**Default**	
	Pollutant Type	**Other**	
	Averaging Period	**Period & Hourly**	
	Dispersion Coefficient	**Urban**	
	County	**Solano**	
	Urban Grouping / Pop	**Y**	**120,749**
	# of Worker Receptors	**2,766**	
	# of Sensitive Receptors		
	# of School Receptors		
Construction Area Parameters			
	Source Type	**Polygon Area**	
	Project Area (m^2)	**26536.4**	
	Ht. of Source (m)	**3.048**	

General HARP Input Parameters		
Construction		
School Receptors		
School Scenario Parameters		
	Class Grade	**9 - 12**
	Starting Age	**14**
	Age Range	**14 Year Old - 15 Years Old**
	Receptor Type	**Individual Resident**
	Assessment Type	**Cancer / Chronic / Acute**
	Exposure Duration	**1**
	Intake Rate	**RMP using the Derived Merthod**
	Comments	**Each year of construction is modeled seperately and the impact to each recepetor is summed to estimate the total exposure from construction emissions. Additionally, the starting age is increased for each year of construction.**
School Pathway Parameters		
	Pathways	**OEEHA Manadatory minimum Pathways**
	Deposition Rate	**0.02**
	TAH < 16 yrs	**N**
	TAH ≥ 16 yrs	**N**
Sensitive Receptors		
Sensitive Scenario Parameters		
	Starting Age	**3rd Trimester**
	Age Range	**3rd Trimester - 2 Year**
	Receptor Type	**Individual Resident**
	Assessment Type	**Cancer / Chronic / Acute**
	Exposure Duration	**1**
	Intake Rate	**RMP using the Derived Merthod**
	Comments	**Each year of construction is modeled separately and the impact to each receptor is summed to estimate the total exposure from construction emissions. Additionally, the starting age is increased for each year of construction.**
Sensitive Pathway Parameters		
	Pathways	**OEEHA Manadatory minimum Pathways**
	Deposition Rate	**0.02**
	TAH < 16 yrs	**Y**
	TAH ≥ 16 yrs	**Y**
Worker Receptors		
Worker Scenario Parameters		
	Starting Age	**16**
	Age Range	**16 - 17**
	Receptor Type	**Worker**
	Assessment Type	**Cancer / Chronic / Acute**
	Exposure Duration	**1**
	Intake Rate	**OEHHA Derived Merthod**

	Comments	**Each year of construction is modeled separately and the impact to each receptor is summed to estimate the total exposure from construction emissions. Additionally, the starting age is increased for each year of construction.**
Worker Pathway Parameters		
	Pathways	**OEHHA minimum Pathways**
	Deposition Rate	**0.02**
	TAH < 16 yrs	**N**
	TAH ≥ 16 yrs	**N**

			T2		1589	T2L3			T4f		
					6.77E-05			1.03E-05			4.52E-06
					4215199.79						
			Yr 1	Yr 2	Total	Yr 1	Yr 2	Total	Yr 1	Yr 2	Total
1	570176.21	4215488.81	1.17E-05	6.12E-06	1.78E-05	1.79E-06	9.31E-07	2.72E-06	8.06E-07	3.83E-07	1.19E-06
2	570192.16	4215484.24	1.32E-05	6.92E-06	2.02E-05	2.02E-06	1.05E-06	3.07E-06	9.12E-07	4.34E-07	1.35E-06
3	570208.67	4215476.96	1.54E-05	8.06E-06	2.35E-05	2.35E-06	1.23E-06	3.58E-06	1.06E-06	5.05E-07	1.57E-06
4	570225.19	4215469.68	1.77E-05	9.28E-06	2.70E-05	2.71E-06	1.41E-06	4.12E-06	1.22E-06	5.81E-07	1.80E-06
5	570241.7	4215462.41	1.96E-05	1.03E-05	2.99E-05	3.00E-06	1.56E-06	4.56E-06	1.35E-06	6.44E-07	2.00E-06
6	570258.22	4215455.13	2.08E-05	1.09E-05	3.18E-05	3.18E-06	1.66E-06	4.84E-06	1.44E-06	6.83E-07	2.12E-06
7	570179.28	4215498.07	1.03E-05	5.41E-06	1.57E-05	1.58E-06	8.23E-07	2.40E-06	7.12E-07	3.39E-07	1.05E-06
8	570161.96	4215500.16	9.33E-06	4.88E-06	1.42E-05	1.43E-06	7.43E-07	2.17E-06	6.43E-07	3.06E-07	9.49E-07
9	570196.19	4215493.39	1.18E-05	6.15E-06	1.79E-05	1.79E-06	9.35E-07	2.73E-06	8.10E-07	3.85E-07	1.20E-06
10	570212.71	4215486.11	1.38E-05	7.21E-06	2.10E-05	2.11E-06	1.10E-06	3.20E-06	9.50E-07	4.52E-07	1.40E-06
11	570229.22	4215478.83	1.59E-05	8.32E-06	2.42E-05	2.43E-06	1.27E-06	3.70E-06	1.10E-06	5.21E-07	1.62E-06
12	570237.48	4215475.19	1.69E-05	8.82E-06	2.57E-05	2.57E-06	1.34E-06	3.91E-06	1.16E-06	5.52E-07	1.71E-06
13	570253.99	4215467.92	1.84E-05	9.63E-06	2.80E-05	2.81E-06	1.46E-06	4.28E-06	1.27E-06	6.03E-07	1.87E-06
14	570183.72	4215507.17	9.34E-06	4.89E-06	1.42E-05	1.43E-06	7.44E-07	2.17E-06	6.44E-07	3.06E-07	9.50E-07
15	570167.23	4215509.17	8.45E-06	4.42E-06	1.29E-05	1.29E-06	6.73E-07	1.96E-06	5.82E-07	2.77E-07	8.59E-07
16	570150.74	4215511.16	7.69E-06	4.02E-06	1.17E-05	1.17E-06	6.12E-07	1.79E-06	5.30E-07	2.52E-07	7.82E-07
17	570200.22	4215502.54	1.06E-05	5.55E-06	1.62E-05	1.62E-06	8.44E-07	2.46E-06	7.31E-07	3.48E-07	1.08E-06
18	570216.74	4215495.26	1.24E-05	6.50E-06	1.89E-05	1.90E-06	9.89E-07	2.89E-06	8.57E-07	4.07E-07	1.26E-06
19	570225	4215491.62	1.34E-05	7.02E-06	2.04E-05	2.05E-06	1.07E-06	3.12E-06	9.25E-07	4.40E-07	1.36E-06
20	570241.51	4215484.35	1.52E-05	7.96E-06	2.32E-05	2.32E-06	1.21E-06	3.53E-06	1.05E-06	4.99E-07	1.55E-06
21	570249.77	4215480.71	1.60E-05	8.37E-06	2.44E-05	2.44E-06	1.27E-06	3.71E-06	1.10E-06	5.24E-07	1.63E-06
22	570266.28	4215473.43	1.72E-05	9.02E-06	2.63E-05	2.63E-06	1.37E-06	4.01E-06	1.19E-06	5.65E-07	1.75E-06
23	570188.06	4215516.29	8.52E-06	4.46E-06	1.30E-05	1.30E-06	6.78E-07	1.98E-06	5.87E-07	2.79E-07	8.67E-07
24	570172.19	4215518.2	7.69E-06	4.02E-06	1.17E-05	1.17E-06	6.12E-07	1.79E-06	5.30E-07	2.52E-07	7.82E-07
25	570156.32	4215520.12	7.04E-06	3.69E-06	1.07E-05	1.08E-06	5.61E-07	1.64E-06	4.85E-07	2.31E-07	7.16E-07
26	570140.45	4215522.04	6.48E-06	3.39E-06	9.87E-06	9.90E-07	5.16E-07	1.51E-06	4.47E-07	2.12E-07	6.59E-07
27	570204.25	4215511.69	9.69E-06	5.07E-06	1.48E-05	1.48E-06	7.71E-07	2.25E-06	6.68E-07	3.18E-07	9.86E-07
28	570220.77	4215504.41	1.13E-05	5.93E-06	1.73E-05	1.73E-06	9.02E-07	2.63E-06	7.81E-07	3.71E-07	1.15E-06
29	570237.29	4215497.14	1.30E-05	6.82E-06	1.99E-05	1.99E-06	1.04E-06	3.03E-06	8.99E-07	4.27E-07	1.33E-06
30	570253.8	4215489.86	1.45E-05	7.60E-06	2.21E-05	2.22E-06	1.16E-06	3.37E-06	1.00E-06	4.76E-07	1.48E-06
31	570262.06	4215486.22	1.52E-05	7.94E-06	2.31E-05	2.32E-06	1.21E-06	3.52E-06	1.05E-06	4.97E-07	1.54E-06
32	570191.37	4215525.53	7.79E-06	4.08E-06	1.19E-05	1.19E-06	6.20E-07	1.81E-06	5.37E-07	2.55E-07	7.92E-07
33	570174.06	4215527.62	6.94E-06	3.63E-06	1.06E-05	1.06E-06	5.52E-07	1.61E-06	4.78E-07	2.27E-07	7.05E-07
34	570156.75	4215529.71	6.33E-06	3.31E-06	9.64E-06	9.67E-07	5.04E-07	1.47E-06	4.36E-07	2.07E-07	6.44E-07
35	570139.43	4215531.8	5.81E-06	3.04E-06	8.86E-06	8.88E-07	4.63E-07	1.35E-06	4.01E-07	1.90E-07	5.91E-07
36	570208.29	4215520.84	8.93E-06	4.67E-06	1.36E-05	1.36E-06	7.10E-07	2.07E-06	6.15E-07	2.92E-07	9.08E-07
37	570216.55	4215517.2	9.64E-06	5.04E-06	1.47E-05	1.47E-06	7.67E-07	2.24E-06	6.64E-07	3.16E-07	9.80E-07
38	570233.06	4215509.93	1.12E-05	5.84E-06	1.70E-05	1.70E-06	8.88E-07	2.59E-06	7.69E-07	3.65E-07	1.13E-06
39	570249.58	4215502.65	1.26E-05	6.60E-06	1.92E-05	1.93E-06	1.00E-06	2.93E-06	8.69E-07	4.13E-07	1.28E-06
40	570266.09	4215495.37	1.39E-05	7.25E-06	2.11E-05	2.12E-06	1.10E-06	3.22E-06	9.55E-07	4.54E-07	1.41E-06
41	570274.35	4215491.73	1.44E-05	7.53E-06	2.19E-05	2.20E-06	1.14E-06	3.34E-06	9.91E-07	4.71E-07	1.46E-06
42	570195.73	4215534.64	7.23E-06	3.78E-06	1.10E-05	1.10E-06	5.75E-07	1.68E-06	4.98E-07	2.37E-07	7.35E-07
43	570179.05	4215536.65	6.49E-06	3.39E-06	9.88E-06	9.90E-07	5.16E-07	1.51E-06	4.47E-07	2.12E-07	6.59E-07
44	570162.38	4215538.66	5.91E-06	3.09E-06	9.00E-06	9.02E-07	4.70E-07	1.37E-06	4.07E-07	1.94E-07	6.01E-07
45	570145.71	4215540.68	5.45E-06	2.85E-06	8.30E-06	8.32E-07	4.34E-07	1.27E-06	3.76E-07	1.79E-07	5.54E-07
46	570212.32	4215529.99	8.24E-06	4.31E-06	1.26E-05	1.26E-06	6.56E-07	1.91E-06	5.68E-07	2.70E-07	8.38E-07
47	570228.84	4215522.72	9.54E-06	4.99E-06	1.45E-05	1.46E-06	7.59E-07	2.22E-06	6.57E-07	3.13E-07	9.70E-07
48	570245.35	4215515.44	1.09E-05	5.71E-06	1.66E-05	1.67E-06	8.69E-07	2.54E-06	7.53E-07	3.58E-07	1.11E-06
49	570261.87	4215508.16	1.22E-05	6.39E-06	1.86E-05	1.86E-06	9.72E-07	2.84E-06	8.41E-07	4.00E-07	1.24E-06
50	570278.38	4215500.88	1.32E-05	6.93E-06	2.02E-05	2.02E-06	1.05E-06	3.08E-06	9.13E-07	4.34E-07	1.35E-06
51	570200.02	4215543.76	6.73E-06	3.52E-06	1.02E-05	1.03E-06	5.35E-07	1.56E-06	4.64E-07	2.20E-07	6.84E-07
52	570183.86	4215545.71	6.08E-06	3.18E-06	9.26E-06	9.28E-07	4.84E-07	1.41E-06	4.19E-07	1.99E-07	6.18E-07
53	570167.7	4215547.66	5.53E-06	2.89E-06	8.42E-06	8.45E-07	4.40E-07	1.28E-06	3.81E-07	1.81E-07	5.62E-07
54	570151.54	4215549.61	5.11E-06	2.68E-06	7.79E-06	7.81E-07	4.07E-07	1.19E-06	3.52E-07	1.67E-07	5.20E-07
55	570135.38	4215551.56	4.75E-06	2.49E-06	7.24E-06	7.26E-07	3.78E-07	1.10E-06	3.27E-07	1.56E-07	4.83E-07
56	570216.35	4215539.14	7.65E-06	4.00E-06	1.17E-05	1.17E-06	6.09E-07	1.78E-06	5.27E-07	2.51E-07	7.78E-07
57	570232.87	4215531.87	8.83E-06	4.62E-06	1.35E-05	1.35E-06	7.03E-07	2.05E-06	6.09E-07	2.89E-07	8.98E-07

58	570241.13	4215528.23	9.44E-06	4.94E-06	1.44E-05	1.44E-06	7.52E-07	2.19E-06	6.51E-07	3.09E-07	9.60E-07
59	570257.64	4215520.95	1.07E-05	5.59E-06	1.63E-05	1.63E-06	8.51E-07	2.48E-06	7.37E-07	3.50E-07	1.09E-06
60	570274.16	4215513.67	1.18E-05	6.17E-06	1.80E-05	1.80E-06	9.38E-07	2.74E-06	8.12E-07	3.86E-07	1.20E-06
61	570203.47	4215552.98	6.25E-06	3.27E-06	9.52E-06	9.54E-07	4.97E-07	1.45E-06	4.31E-07	2.05E-07	6.35E-07
62	570186.16	4215555.07	5.62E-06	2.94E-06	8.56E-06	8.59E-07	4.47E-07	1.31E-06	3.87E-07	1.84E-07	5.72E-07
63	570168.84	4215557.16	5.09E-06	2.66E-06	7.75E-06	7.77E-07	4.05E-07	1.18E-06	3.51E-07	1.67E-07	5.18E-07
64	570151.53	4215559.25	4.69E-06	2.45E-06	7.14E-06	7.16E-07	3.73E-07	1.09E-06	3.23E-07	1.54E-07	4.76E-07
65	570134.22	4215561.34	4.34E-06	2.27E-06	6.61E-06	6.63E-07	3.45E-07	1.01E-06	2.99E-07	1.42E-07	4.41E-07
66	570220.38	4215548.29	7.13E-06	3.73E-06	1.09E-05	1.09E-06	5.67E-07	1.66E-06	4.91E-07	2.34E-07	7.25E-07
67	570228.64	4215544.66	7.67E-06	4.02E-06	1.17E-05	1.17E-06	6.11E-07	1.78E-06	5.29E-07	2.51E-07	7.80E-07
68	570245.16	4215537.38	8.79E-06	4.60E-06	1.34E-05	1.34E-06	7.00E-07	2.04E-06	6.06E-07	2.88E-07	8.94E-07
69	570253.42	4215533.74	9.36E-06	4.90E-06	1.43E-05	1.43E-06	7.45E-07	2.17E-06	6.45E-07	3.07E-07	9.52E-07
70	570269.93	4215526.46	1.04E-05	5.45E-06	1.59E-05	1.59E-06	8.29E-07	2.42E-06	7.18E-07	3.41E-07	1.06E-06
71	570286.45	4215519.18	1.14E-05	5.94E-06	1.73E-05	1.73E-06	9.03E-07	2.64E-06	7.82E-07	3.72E-07	1.15E-06
72	570207.77	4215562.1	5.88E-06	3.08E-06	8.95E-06	8.98E-07	4.68E-07	1.37E-06	4.05E-07	1.93E-07	5.98E-07
73	570190.98	4215564.13	5.31E-06	2.78E-06	8.09E-06	8.11E-07	4.23E-07	1.23E-06	3.66E-07	1.74E-07	5.40E-07
74	570174.19	4215566.15	4.80E-06	2.51E-06	7.32E-06	7.34E-07	3.82E-07	1.12E-06	3.31E-07	1.57E-07	4.88E-07
75	570157.4	4215568.18	4.43E-06	2.32E-06	6.74E-06	6.76E-07	3.52E-07	1.03E-06	3.05E-07	1.45E-07	4.50E-07
76	570140.61	4215570.21	4.11E-06	2.15E-06	6.25E-06	6.27E-07	3.27E-07	9.53E-07	2.83E-07	1.34E-07	4.17E-07
77	570224.42	4215557.45	6.67E-06	3.49E-06	1.02E-05	1.02E-06	5.31E-07	1.55E-06	4.60E-07	2.18E-07	6.78E-07
78	570240.93	4215550.17	7.68E-06	4.02E-06	1.17E-05	1.17E-06	6.11E-07	1.78E-06	5.29E-07	2.51E-07	7.80E-07
79	570257.45	4215542.89	8.72E-06	4.56E-06	1.33E-05	1.33E-06	6.94E-07	2.02E-06	6.01E-07	2.86E-07	8.86E-07
80	570273.96	4215535.61	9.70E-06	5.07E-06	1.48E-05	1.48E-06	7.72E-07	2.25E-06	6.68E-07	3.18E-07	9.86E-07
81	570282.22	4215531.97	1.01E-05	5.31E-06	1.54E-05	1.55E-06	8.07E-07	2.36E-06	6.99E-07	3.32E-07	1.03E-06
82	570211.27	4215571.31	5.52E-06	2.89E-06	8.41E-06	8.43E-07	4.39E-07	1.28E-06	3.80E-07	1.81E-07	5.61E-07
83	570193.44	4215573.47	4.96E-06	2.60E-06	7.56E-06	7.58E-07	3.95E-07	1.15E-06	3.42E-07	1.63E-07	5.04E-07
84	570175.6	4215575.62	4.47E-06	2.34E-06	6.80E-06	6.82E-07	3.55E-07	1.04E-06	3.08E-07	1.46E-07	4.54E-07
85	570157.76	4215577.77	4.09E-06	2.14E-06	6.23E-06	6.25E-07	3.25E-07	9.50E-07	2.82E-07	1.34E-07	4.16E-07
86	570139.92	4215579.93	3.78E-06	1.98E-06	5.76E-06	5.77E-07	3.01E-07	8.78E-07	2.60E-07	1.24E-07	3.84E-07
87	570220.19	4215570.24	5.82E-06	3.05E-06	8.87E-06	8.89E-07	4.63E-07	1.35E-06	4.01E-07	1.91E-07	5.92E-07
88	570236.71	4215562.96	6.70E-06	3.51E-06	1.02E-05	1.02E-06	5.33E-07	1.56E-06	4.62E-07	2.19E-07	6.81E-07
89	570253.22	4215555.68	7.63E-06	3.99E-06	1.16E-05	1.17E-06	6.07E-07	1.77E-06	5.26E-07	2.50E-07	7.76E-07
90	570269.74	4215548.4	8.58E-06	4.49E-06	1.31E-05	1.31E-06	6.83E-07	1.99E-06	5.91E-07	2.81E-07	8.72E-07
91	570286.25	4215541.12	9.45E-06	4.95E-06	1.44E-05	1.44E-06	7.52E-07	2.20E-06	6.51E-07	3.10E-07	9.61E-07
92	570215.57	4215580.43	5.21E-06	2.73E-06	7.94E-06	7.96E-07	4.15E-07	1.21E-06	3.59E-07	1.71E-07	5.30E-07
93	570198.25	4215582.52	4.71E-06	2.46E-06	7.17E-06	7.19E-07	3.75E-07	1.09E-06	3.25E-07	1.54E-07	4.79E-07
94	570180.94	4215584.61	4.26E-06	2.23E-06	6.49E-06	6.51E-07	3.39E-07	9.90E-07	2.94E-07	1.40E-07	4.33E-07
95	570163.63	4215586.7	3.89E-06	2.04E-06	5.93E-06	5.94E-07	3.10E-07	9.04E-07	2.68E-07	1.28E-07	3.96E-07
96	570146.32	4215588.79	3.60E-06	1.88E-06	5.48E-06	5.49E-07	2.86E-07	8.36E-07	2.48E-07	1.18E-07	3.66E-07
97	570129	4215590.88	3.37E-06	1.76E-06	5.13E-06	5.14E-07	2.68E-07	7.82E-07	2.32E-07	1.10E-07	3.42E-07
98	570232.48	4215575.75	5.86E-06	3.06E-06	8.92E-06	8.94E-07	4.66E-07	1.36E-06	4.04E-07	1.92E-07	5.95E-07
99	570249	4215568.47	6.67E-06	3.49E-06	1.02E-05	1.02E-06	5.31E-07	1.55E-06	4.60E-07	2.19E-07	6.78E-07
100	570265.51	4215561.19	7.53E-06	3.94E-06	1.15E-05	1.15E-06	5.99E-07	1.75E-06	5.19E-07	2.47E-07	7.65E-07
101	570282.03	4215553.91	8.39E-06	4.39E-06	1.28E-05	1.28E-06	6.68E-07	1.95E-06	5.78E-07	2.75E-07	8.53E-07
102	570290.29	4215550.28	8.80E-06	4.60E-06	1.34E-05	1.34E-06	7.00E-07	2.04E-06	6.07E-07	2.88E-07	8.95E-07
103	570298.54	4215546.64	9.18E-06	4.80E-06	1.40E-05	1.40E-06	7.31E-07	2.13E-06	6.33E-07	3.01E-07	9.33E-07
104	570219.82	4215589.56	4.91E-06	2.57E-06	7.48E-06	7.50E-07	3.91E-07	1.14E-06	3.38E-07	1.61E-07	4.99E-07
105	570202.95	4215591.59	4.47E-06	2.34E-06	6.80E-06	6.82E-07	3.55E-07	1.04E-06	3.08E-07	1.46E-07	4.54E-07
106	570186.08	4215593.63	4.06E-06	2.12E-06	6.18E-06	6.20E-07	3.23E-07	9.43E-07	2.80E-07	1.33E-07	4.13E-07
107	570169.21	4215595.67	3.71E-06	1.94E-06	5.65E-06	5.66E-07	2.95E-07	8.61E-07	2.55E-07	1.21E-07	3.77E-07
108	570152.35	4215597.7	3.44E-06	1.80E-06	5.23E-06	5.25E-07	2.73E-07	7.98E-07	2.37E-07	1.13E-07	3.49E-07
109	570135.48	4215599.74	3.22E-06	1.68E-06	4.90E-06	4.91E-07	2.56E-07	7.47E-07	2.22E-07	1.05E-07	3.27E-07
110	570236.51	4215584.9	5.44E-06	2.85E-06	8.29E-06	8.31E-07	4.33E-07	1.26E-06	3.75E-07	1.78E-07	5.53E-07
111	570253.03	4215577.62	6.15E-06	3.22E-06	9.37E-06	9.40E-07	4.90E-07	1.43E-06	4.24E-07	2.02E-07	6.26E-07
112	570261.29	4215573.98	6.54E-06	3.42E-06	9.96E-06	9.98E-07	5.20E-07	1.52E-06	4.50E-07	2.14E-07	6.64E-07
113	570277.8	4215566.7	7.35E-06	3.84E-06	1.12E-05	1.12E-06	5.85E-07	1.71E-06	5.06E-07	2.41E-07	7.47E-07
114	570294.32	4215559.43	8.16E-06	4.27E-06	1.24E-05	1.25E-06	6.49E-07	1.90E-06	5.62E-07	2.67E-07	8.30E-07
115	570223.41	4215598.76	4.60E-06	2.40E-06	7.00E-06	7.02E-07	3.66E-07	1.07E-06	3.17E-07	1.51E-07	4.67E-07
116	570205.65	4215600.9	4.19E-06	2.19E-06	6.38E-06	6.40E-07	3.33E-07	9.73E-07	2.89E-07	1.37E-07	4.26E-07
117	570187.9	4215603.05	3.80E-06	1.99E-06	5.79E-06	5.80E-07	3.02E-07	8.83E-07	2.62E-07	1.24E-07	3.86E-07
118	570170.14	4215605.19	3.46E-06	1.81E-06	5.27E-06	5.28E-07	2.75E-07	8.04E-07	2.38E-07	1.13E-07	3.52E-07

119	570161.26	4215606.26	3.33E-06	1.74E-06	5.07E-06	5.08E-07	2.65E-07	7.73E-07	2.29E-07	1.09E-07	3.38E-07
120	570143.5	4215608.41	3.09E-06	1.62E-06	4.71E-06	4.72E-07	2.46E-07	7.18E-07	2.13E-07	1.01E-07	3.14E-07
121	570125.75	4215610.55	2.92E-06	1.53E-06	4.44E-06	4.45E-07	2.32E-07	6.77E-07	2.01E-07	9.55E-08	2.97E-07
122	570232.29	4215597.69	4.77E-06	2.50E-06	7.27E-06	7.29E-07	3.80E-07	1.11E-06	3.29E-07	1.56E-07	4.85E-07
123	570248.8	4215590.41	5.38E-06	2.81E-06	8.19E-06	8.21E-07	4.28E-07	1.25E-06	3.71E-07	1.76E-07	5.47E-07
124	570265.32	4215583.13	5.66E-06	2.96E-06	8.62E-06	8.64E-07	4.50E-07	1.31E-06	3.90E-07	1.85E-07	5.75E-07
125	570281.84	4215575.85	6.80E-06	3.56E-06	1.04E-05	1.04E-06	5.41E-07	1.58E-06	4.68E-07	2.23E-07	6.91E-07
126	570290.09	4215572.22	7.17E-06	3.75E-06	1.09E-05	1.10E-06	5.71E-07	1.67E-06	4.94E-07	2.35E-07	7.29E-07
127	570298.35	4215568.58	7.55E-06	3.95E-06	1.15E-05	1.15E-06	6.01E-07	1.75E-06	5.20E-07	2.47E-07	7.68E-07
128	570227.67	4215607.88	4.30E-06	2.25E-06	6.56E-06	6.57E-07	3.43E-07	1.00E-06	2.97E-07	1.41E-07	4.38E-07
129	570210.35	4215609.97	3.98E-06	2.08E-06	6.06E-06	6.07E-07	3.16E-07	9.23E-07	2.74E-07	1.30E-07	4.04E-07
130	570193.04	4215612.07	3.63E-06	1.90E-06	5.53E-06	5.54E-07	2.89E-07	8.43E-07	2.50E-07	1.19E-07	3.69E-07
131	570175.73	4215614.16	3.31E-06	1.73E-06	5.04E-06	5.06E-07	2.64E-07	7.69E-07	2.28E-07	1.08E-07	3.37E-07
132	570158.41	4215616.25	3.07E-06	1.61E-06	4.68E-06	4.69E-07	2.44E-07	7.13E-07	2.12E-07	1.01E-07	3.12E-07
133	570141.1	4215618.34	2.87E-06	1.50E-06	4.37E-06	4.38E-07	2.28E-07	6.67E-07	1.98E-07	9.40E-08	2.92E-07
134	570123.79	4215620.43	2.72E-06	1.42E-06	4.14E-06	4.15E-07	2.16E-07	6.31E-07	1.87E-07	8.91E-08	2.76E-07
135	570244.58	4215603.2	4.74E-06	2.48E-06	7.22E-06	7.24E-07	3.77E-07	1.10E-06	3.27E-07	1.55E-07	4.82E-07
136	570261.1	4215595.92	4.93E-06	2.58E-06	7.50E-06	7.52E-07	3.92E-07	1.14E-06	3.40E-07	1.61E-07	5.01E-07
137	570277.61	4215588.64	5.53E-06	2.89E-06	8.42E-06	8.44E-07	4.40E-07	1.28E-06	3.81E-07	1.81E-07	5.62E-07
138	570294.13	4215581.37	6.26E-06	3.28E-06	9.54E-06	9.57E-07	4.99E-07	1.46E-06	4.32E-07	2.05E-07	6.37E-07
139	570302.38	4215577.73	6.72E-06	3.51E-06	1.02E-05	1.03E-06	5.34E-07	1.56E-06	4.63E-07	2.20E-07	6.83E-07
140	570231.89	4215617.01	4.05E-06	2.12E-06	6.16E-06	6.18E-07	3.22E-07	9.40E-07	2.79E-07	1.33E-07	4.11E-07
141	570214.96	4215619.06	3.77E-06	1.97E-06	5.74E-06	5.76E-07	3.00E-07	8.76E-07	2.60E-07	1.23E-07	3.83E-07
142	570198.03	4215621.1	3.46E-06	1.81E-06	5.27E-06	5.28E-07	2.75E-07	8.03E-07	2.38E-07	1.13E-07	3.52E-07
143	570181.11	4215623.14	3.17E-06	1.66E-06	4.83E-06	4.84E-07	2.52E-07	7.36E-07	2.18E-07	1.04E-07	3.22E-07
144	570164.18	4215625.19	2.93E-06	1.53E-06	4.47E-06	4.48E-07	2.33E-07	6.81E-07	2.02E-07	9.61E-08	2.98E-07
145	570147.25	4215627.23	2.75E-06	1.44E-06	4.18E-06	4.20E-07	2.19E-07	6.38E-07	1.89E-07	9.00E-08	2.79E-07
146	570130.32	4215629.28	2.60E-06	1.36E-06	3.96E-06	3.97E-07	2.07E-07	6.04E-07	1.79E-07	8.52E-08	2.64E-07
147	570248.61	4215612.35	4.15E-06	2.17E-06	6.33E-06	6.34E-07	3.31E-07	9.65E-07	2.86E-07	1.36E-07	4.22E-07
148	570256.87	4215608.71	4.35E-06	2.28E-06	6.63E-06	6.65E-07	3.47E-07	1.01E-06	3.00E-07	1.43E-07	4.43E-07
149	570273.39	4215601.43	4.85E-06	2.54E-06	7.40E-06	7.41E-07	3.86E-07	1.13E-06	3.35E-07	1.59E-07	4.94E-07
150	570289.9	4215594.16	5.45E-06	2.85E-06	8.30E-06	8.32E-07	4.33E-07	1.27E-06	3.75E-07	1.78E-07	5.54E-07
151	570298.16	4215590.52	5.78E-06	3.03E-06	8.81E-06	8.83E-07	4.60E-07	1.34E-06	3.99E-07	1.89E-07	5.88E-07
152	570314.67	4215583.24	6.55E-06	3.43E-06	9.98E-06	1.00E-06	5.22E-07	1.52E-06	4.52E-07	2.15E-07	6.66E-07
153	570235.54	4215626.21	3.81E-06	1.99E-06	5.80E-06	5.82E-07	3.03E-07	8.85E-07	2.63E-07	1.25E-07	3.87E-07
154	570226.69	4215627.28	3.67E-06	1.92E-06	5.60E-06	5.61E-07	2.92E-07	8.53E-07	2.53E-07	1.20E-07	3.74E-07
155	570208.99	4215629.41	3.39E-06	1.77E-06	5.16E-06	5.18E-07	2.70E-07	7.88E-07	2.34E-07	1.11E-07	3.45E-07
156	570191.29	4215631.55	3.10E-06	1.62E-06	4.73E-06	4.74E-07	2.47E-07	7.21E-07	2.14E-07	1.02E-07	3.16E-07
157	570173.6	4215633.69	2.84E-06	1.49E-06	4.33E-06	4.34E-07	2.26E-07	6.61E-07	1.96E-07	9.32E-08	2.89E-07
158	570164.75	4215634.76	2.75E-06	1.44E-06	4.19E-06	4.20E-07	2.19E-07	6.38E-07	1.89E-07	9.00E-08	2.79E-07
159	570147.05	4215636.89	2.58E-06	1.35E-06	3.92E-06	3.93E-07	2.05E-07	5.98E-07	1.77E-07	8.44E-08	2.62E-07
160	570129.35	4215639.03	2.44E-06	1.28E-06	3.71E-06	3.72E-07	1.94E-07	5.66E-07	1.68E-07	7.99E-08	2.48E-07
161	570252.64	4215621.5	3.90E-06	2.04E-06	5.95E-06	5.96E-07	3.11E-07	9.07E-07	2.69E-07	1.28E-07	3.97E-07
162	570269.16	4215614.22	4.28E-06	2.24E-06	6.52E-06	6.53E-07	3.41E-07	9.94E-07	2.95E-07	1.40E-07	4.35E-07
163	570285.68	4215606.95	4.81E-06	2.52E-06	7.33E-06	7.34E-07	3.83E-07	1.12E-06	3.31E-07	1.58E-07	4.89E-07
164	570302.19	4215599.67	5.43E-06	2.84E-06	8.27E-06	8.29E-07	4.32E-07	1.26E-06	3.74E-07	1.78E-07	5.52E-07
165	570318.71	4215592.39	6.10E-06	3.19E-06	9.30E-06	9.32E-07	4.86E-07	1.42E-06	4.21E-07	2.00E-07	6.21E-07
166	570239.76	4215635.34	3.60E-06	1.89E-06	5.49E-06	5.50E-07	2.87E-07	8.37E-07	2.48E-07	1.18E-07	3.67E-07
167	570222.45	4215637.43	3.36E-06	1.76E-06	5.12E-06	5.13E-07	2.67E-07	7.81E-07	2.32E-07	1.10E-07	3.42E-07
168	570205.14	4215639.52	3.09E-06	1.62E-06	4.71E-06	4.72E-07	2.46E-07	7.18E-07	2.13E-07	1.01E-07	3.14E-07
169	570187.82	4215641.61	2.84E-06	1.49E-06	4.33E-06	4.34E-07	2.26E-07	6.61E-07	1.96E-07	9.32E-08	2.89E-07
170	570170.51	4215643.7	2.63E-06	1.38E-06	4.01E-06	4.02E-07	2.09E-07	6.11E-07	1.81E-07	8.62E-08	2.67E-07
171	570153.2	4215645.79	2.47E-06	1.29E-06	3.77E-06	3.78E-07	1.97E-07	5.74E-07	1.70E-07	8.10E-08	2.51E-07
172	570135.88	4215647.88	2.34E-06	1.22E-06	3.56E-06	3.57E-07	1.86E-07	5.44E-07	1.61E-07	7.67E-08	2.38E-07
173	570118.57	4215649.97	2.23E-06	1.17E-06	3.40E-06	3.41E-07	1.77E-07	5.18E-07	1.54E-07	7.31E-08	2.27E-07
174	570256.68	4215630.65	3.94E-06	2.06E-06	6.01E-06	6.02E-07	3.14E-07	9.16E-07	2.72E-07	1.29E-07	4.01E-07
175	570273.19	4215623.38	4.07E-06	2.13E-06	6.20E-06	6.22E-07	3.24E-07	9.46E-07	2.81E-07	1.33E-07	4.14E-07
176	570281.45	4215619.74	4.29E-06	2.24E-06	6.53E-06	6.54E-07	3.41E-07	9.95E-07	2.95E-07	1.40E-07	4.36E-07
177	570297.97	4215612.46	4.79E-06	2.51E-06	7.30E-06	7.32E-07	3.81E-07	1.11E-06	3.30E-07	1.57E-07	4.87E-07
178	570306.22	4215608.82	5.11E-06	2.67E-06	7.78E-06	7.80E-07	4.06E-07	1.19E-06	3.52E-07	1.67E-07	5.19E-07
179	570314.48	4215605.18	5.42E-06	2.84E-06	8.26E-06	8.28E-07	4.32E-07	1.26E-06	3.74E-07	1.78E-07	5.51E-07

180	570243.96	4215644.47	3.42E-06	1.79E-06	5.20E-06	5.22E-07	2.72E-07	7.94E-07	2.35E-07	1.12E-07	3.47E-07
181	570226.99	4215646.52	3.19E-06	1.67E-06	4.87E-06	4.88E-07	2.54E-07	7.42E-07	2.20E-07	1.05E-07	3.25E-07
182	570210.02	4215648.57	2.95E-06	1.54E-06	4.49E-06	4.50E-07	2.35E-07	6.85E-07	2.03E-07	9.66E-08	3.00E-07
183	570193.04	4215650.62	2.72E-06	1.42E-06	4.15E-06	4.16E-07	2.17E-07	6.32E-07	1.88E-07	8.92E-08	2.77E-07
184	570176.07	4215652.67	2.52E-06	1.32E-06	3.84E-06	3.85E-07	2.01E-07	5.86E-07	1.74E-07	8.26E-08	2.56E-07
185	570159.1	4215654.71	2.37E-06	1.24E-06	3.61E-06	3.62E-07	1.89E-07	5.51E-07	1.64E-07	7.77E-08	2.41E-07
186	570142.12	4215656.76	2.25E-06	1.18E-06	3.42E-06	3.43E-07	1.79E-07	5.22E-07	1.55E-07	7.37E-08	2.29E-07
187	570125.15	4215658.81	2.14E-06	1.12E-06	3.27E-06	3.27E-07	1.71E-07	4.98E-07	1.48E-07	7.02E-08	2.18E-07
188	570260.71	4215639.8	3.73E-06	1.95E-06	5.68E-06	5.69E-07	2.97E-07	8.66E-07	2.57E-07	1.22E-07	3.79E-07
189	570268.97	4215636.17	3.93E-06	2.06E-06	5.99E-06	6.00E-07	3.13E-07	9.13E-07	2.71E-07	1.29E-07	4.00E-07
190	570277.22	4215632.53	3.89E-06	2.04E-06	5.93E-06	5.94E-07	3.10E-07	9.04E-07	2.68E-07	1.28E-07	3.96E-07
191	570293.74	4215625.25	4.30E-06	2.25E-06	6.55E-06	6.57E-07	3.42E-07	9.99E-07	2.96E-07	1.41E-07	4.37E-07
192	570310.26	4215617.97	4.83E-06	2.53E-06	7.35E-06	7.37E-07	3.84E-07	1.12E-06	3.33E-07	1.58E-07	4.91E-07
193	570326.77	4215610.69	5.61E-06	2.94E-06	8.55E-06	8.57E-07	4.47E-07	1.30E-06	3.87E-07	1.84E-07	5.71E-07
194	570247.66	4215653.66	3.24E-06	1.70E-06	4.94E-06	4.95E-07	2.58E-07	7.53E-07	2.23E-07	1.06E-07	3.30E-07
195	570230.01	4215655.79	3.01E-06	1.57E-06	4.59E-06	4.60E-07	2.40E-07	6.99E-07	2.07E-07	9.86E-08	3.06E-07
196	570212.35	4215657.92	2.78E-06	1.45E-06	4.23E-06	4.24E-07	2.21E-07	6.45E-07	1.91E-07	9.09E-08	2.82E-07
197	570194.7	4215660.05	2.56E-06	1.34E-06	3.91E-06	3.92E-07	2.04E-07	5.96E-07	1.77E-07	8.40E-08	2.61E-07
198	570177.05	4215662.19	2.38E-06	1.24E-06	3.62E-06	3.63E-07	1.89E-07	5.53E-07	1.64E-07	7.79E-08	2.42E-07
199	570159.4	4215664.32	2.24E-06	1.17E-06	3.41E-06	3.42E-07	1.78E-07	5.20E-07	1.54E-07	7.33E-08	2.28E-07
200	570141.74	4215666.45	2.12E-06	1.11E-06	3.23E-06	3.24E-07	1.69E-07	4.93E-07	1.46E-07	6.95E-08	2.16E-07
201	570124.09	4215668.58	2.02E-06	1.06E-06	3.08E-06	3.09E-07	1.61E-07	4.70E-07	1.39E-07	6.63E-08	2.06E-07
202	570264.74	4215648.95	3.53E-06	1.85E-06	5.38E-06	5.39E-07	2.81E-07	8.20E-07	2.43E-07	1.16E-07	3.59E-07
203	570281.26	4215641.68	3.92E-06	2.05E-06	5.97E-06	5.99E-07	3.12E-07	9.11E-07	2.70E-07	1.28E-07	3.99E-07
204	570297.77	4215634.4	4.35E-06	2.27E-06	6.62E-06	6.64E-07	3.46E-07	1.01E-06	2.99E-07	1.42E-07	4.42E-07
205	570314.29	4215627.12	4.80E-06	2.51E-06	7.32E-06	7.33E-07	3.82E-07	1.12E-06	3.31E-07	1.57E-07	4.88E-07
206	570330.8	4215619.84	5.28E-06	2.76E-06	8.04E-06	8.06E-07	4.20E-07	1.23E-06	3.64E-07	1.73E-07	5.36E-07
207	570251.86	4215662.79	3.08E-06	1.61E-06	4.69E-06	4.70E-07	2.45E-07	7.14E-07	2.12E-07	1.01E-07	3.13E-07
208	570234.55	4215664.88	2.86E-06	1.49E-06	4.35E-06	4.36E-07	2.27E-07	6.63E-07	1.97E-07	9.36E-08	2.90E-07
209	570217.23	4215666.97	2.65E-06	1.38E-06	4.03E-06	4.04E-07	2.11E-07	6.15E-07	1.82E-07	8.67E-08	2.69E-07
210	570199.92	4215669.06	2.46E-06	1.28E-06	3.74E-06	3.75E-07	1.95E-07	5.70E-07	1.69E-07	8.04E-08	2.50E-07
211	570182.61	4215671.15	2.29E-06	1.20E-06	3.49E-06	3.49E-07	1.82E-07	5.31E-07	1.58E-07	7.50E-08	2.33E-07
212	570165.29	4215673.24	2.15E-06	1.13E-06	3.28E-06	3.29E-07	1.71E-07	5.00E-07	1.48E-07	7.05E-08	2.19E-07
213	570147.98	4215675.33	2.04E-06	1.07E-06	3.11E-06	3.12E-07	1.63E-07	4.75E-07	1.41E-07	6.70E-08	2.08E-07
214	570130.67	4215677.42	1.95E-06	1.02E-06	2.97E-06	2.98E-07	1.55E-07	4.53E-07	1.34E-07	6.39E-08	1.98E-07
215	570113.36	4215679.51	1.87E-06	9.78E-07	2.85E-06	2.85E-07	1.49E-07	4.34E-07	1.29E-07	6.12E-08	1.90E-07
216	570268.77	4215658.11	3.36E-06	1.76E-06	5.11E-06	5.12E-07	2.67E-07	7.79E-07	2.31E-07	1.10E-07	3.41E-07
217	570277.03	4215654.47	3.53E-06	1.85E-06	5.38E-06	5.39E-07	2.81E-07	8.20E-07	2.43E-07	1.16E-07	3.59E-07
218	570293.55	4215647.19	3.90E-06	2.04E-06	5.95E-06	5.96E-07	3.11E-07	9.07E-07	2.69E-07	1.28E-07	3.97E-07
219	570310.06	4215639.91	4.32E-06	2.26E-06	6.57E-06	6.59E-07	3.43E-07	1.00E-06	2.97E-07	1.41E-07	4.39E-07
220	570326.58	4215632.63	4.75E-06	2.48E-06	7.23E-06	7.25E-07	3.78E-07	1.10E-06	3.27E-07	1.56E-07	4.83E-07
221	570256.04	4215671.92	2.91E-06	1.52E-06	4.44E-06	4.45E-07	2.32E-07	6.76E-07	2.01E-07	9.54E-08	2.96E-07
222	570239.03	4215673.98	2.71E-06	1.42E-06	4.13E-06	4.14E-07	2.16E-07	6.29E-07	1.87E-07	8.87E-08	2.75E-07
223	570222.03	4215676.03	2.52E-06	1.32E-06	3.84E-06	3.85E-07	2.01E-07	5.85E-07	1.74E-07	8.26E-08	2.56E-07
224	570205.02	4215678.08	2.35E-06	1.23E-06	3.58E-06	3.59E-07	1.87E-07	5.46E-07	1.62E-07	7.69E-08	2.39E-07
225	570188.01	4215680.14	2.20E-06	1.15E-06	3.35E-06	3.36E-07	1.75E-07	5.10E-07	1.51E-07	7.20E-08	2.23E-07
226	570171	4215682.19	2.07E-06	1.08E-06	3.15E-06	3.16E-07	1.65E-07	4.80E-07	1.43E-07	6.78E-08	2.10E-07
227	570153.99	4215684.24	1.97E-06	1.03E-06	3.00E-06	3.01E-07	1.57E-07	4.57E-07	1.36E-07	6.45E-08	2.00E-07
228	570136.98	4215686.3	1.88E-06	9.84E-07	2.86E-06	2.87E-07	1.50E-07	4.37E-07	1.30E-07	6.16E-08	1.91E-07
229	570119.97	4215688.35	1.80E-06	9.44E-07	2.75E-06	2.75E-07	1.44E-07	4.19E-07	1.24E-07	5.91E-08	1.83E-07
230	570272.81	4215667.26	3.18E-06	1.66E-06	4.84E-06	4.86E-07	2.53E-07	7.39E-07	2.19E-07	1.04E-07	3.23E-07
231	570281.06	4215663.62	3.35E-06	1.75E-06	5.11E-06	5.12E-07	2.67E-07	7.78E-07	2.31E-07	1.10E-07	3.41E-07
232	570297.58	4215656.34	3.70E-06	1.94E-06	5.64E-06	5.65E-07	2.95E-07	8.60E-07	2.55E-07	1.21E-07	3.76E-07
233	570305.84	4215652.7	3.89E-06	2.03E-06	5.92E-06	5.94E-07	3.09E-07	9.03E-07	2.68E-07	1.27E-07	3.95E-07
234	570314.1	4215649.06	4.08E-06	2.14E-06	6.22E-06	6.23E-07	3.25E-07	9.48E-07	2.81E-07	1.34E-07	4.15E-07
235	570330.61	4215641.78	4.48E-06	2.35E-06	6.83E-06	6.84E-07	3.57E-07	1.04E-06	3.09E-07	1.47E-07	4.56E-07
236	570338.87	4215638.15	4.69E-06	2.45E-06	7.14E-06	7.16E-07	3.73E-07	1.09E-06	3.23E-07	1.54E-07	4.77E-07
237	570259.77	4215681.11	2.75E-06	1.44E-06	4.19E-06	4.20E-07	2.19E-07	6.38E-07	1.89E-07	9.00E-08	2.79E-07
238	570242.16	4215683.24	2.55E-06	1.33E-06	3.88E-06	3.89E-07	2.03E-07	5.92E-07	1.76E-07	8.35E-08	2.59E-07
239	570224.54	4215685.36	2.37E-06	1.24E-06	3.61E-06	3.62E-07	1.89E-07	5.51E-07	1.63E-07	7.76E-08	2.41E-07
240	570206.92	4215687.49	2.21E-06	1.16E-06	3.37E-06	3.38E-07	1.76E-07	5.14E-07	1.52E-07	7.25E-08	2.25E-07

241	570189.31	4215689.62	2.08E-06	1.09E-06	3.16E-06	3.17E-07	1.65E-07	4.82E-07	1.43E-07	6.80E-08	2.11E-07
242	570171.69	4215691.75	1.96E-06	1.03E-06	2.99E-06	2.99E-07	1.56E-07	4.55E-07	1.35E-07	6.42E-08	1.99E-07
243	570154.07	4215693.87	1.87E-06	9.76E-07	2.84E-06	2.85E-07	1.48E-07	4.33E-07	1.29E-07	6.11E-08	1.90E-07
244	570136.46	4215696	1.78E-06	9.33E-07	2.72E-06	2.72E-07	1.42E-07	4.14E-07	1.23E-07	5.84E-08	1.81E-07
245	570118.84	4215698.13	1.71E-06	8.96E-07	2.61E-06	2.61E-07	1.36E-07	3.98E-07	1.18E-07	5.61E-08	1.74E-07
246	570276.84	4215676.41	3.00E-06	1.57E-06	4.58E-06	4.59E-07	2.39E-07	6.98E-07	2.07E-07	9.84E-08	3.06E-07
247	570285.1	4215672.77	3.17E-06	1.66E-06	4.82E-06	4.83E-07	2.52E-07	7.35E-07	2.18E-07	1.04E-07	3.22E-07
248	570293.35	4215669.13	3.33E-06	1.74E-06	5.08E-06	5.09E-07	2.65E-07	7.74E-07	2.30E-07	1.09E-07	3.39E-07
249	570309.87	4215661.85	3.68E-06	1.93E-06	5.61E-06	5.62E-07	2.93E-07	8.56E-07	2.54E-07	1.21E-07	3.74E-07
250	570318.13	4215658.21	3.86E-06	2.02E-06	5.89E-06	5.90E-07	3.08E-07	8.98E-07	2.66E-07	1.27E-07	3.93E-07
251	570334.64	4215650.94	4.23E-06	2.21E-06	6.45E-06	6.46E-07	3.37E-07	9.83E-07	2.92E-07	1.39E-07	4.30E-07
252	570263.96	4215690.24	2.59E-06	1.36E-06	3.95E-06	3.96E-07	2.06E-07	6.02E-07	1.79E-07	8.49E-08	2.64E-07
253	570246.64	4215692.33	2.41E-06	1.26E-06	3.67E-06	3.68E-07	1.92E-07	5.60E-07	1.66E-07	7.90E-08	2.45E-07
254	570229.33	4215694.42	2.25E-06	1.18E-06	3.42E-06	3.43E-07	1.79E-07	5.22E-07	1.55E-07	7.36E-08	2.29E-07
255	570212.02	4215696.51	2.11E-06	1.10E-06	3.21E-06	3.22E-07	1.68E-07	4.90E-07	1.45E-07	6.91E-08	2.14E-07
256	570194.71	4215698.6	1.99E-06	1.04E-06	3.03E-06	3.04E-07	1.58E-07	4.62E-07	1.37E-07	6.52E-08	2.02E-07
257	570177.39	4215700.69	1.89E-06	9.88E-07	2.88E-06	2.88E-07	1.50E-07	4.39E-07	1.30E-07	6.18E-08	1.92E-07
258	570160.08	4215702.79	1.80E-06	9.41E-07	2.74E-06	2.75E-07	1.43E-07	4.18E-07	1.24E-07	5.89E-08	1.83E-07
259	570142.77	4215704.88	1.72E-06	9.00E-07	2.62E-06	2.63E-07	1.37E-07	3.99E-07	1.19E-07	5.63E-08	1.75E-07
260	570125.45	4215706.97	1.65E-06	8.66E-07	2.52E-06	2.53E-07	1.32E-07	3.84E-07	1.14E-07	5.42E-08	1.68E-07
261	570108.14	4215709.06	1.59E-06	8.34E-07	2.43E-06	2.43E-07	1.27E-07	3.70E-07	1.10E-07	5.22E-08	1.62E-07
262	570280.87	4215685.56	2.83E-06	1.48E-06	4.31E-06	4.32E-07	2.25E-07	6.58E-07	1.95E-07	9.27E-08	2.88E-07
263	570297.39	4215678.28	3.15E-06	1.65E-06	4.79E-06	4.80E-07	2.50E-07	7.31E-07	2.17E-07	1.03E-07	3.20E-07
264	570305.64	4215674.64	3.31E-06	1.73E-06	5.04E-06	5.05E-07	2.63E-07	7.69E-07	2.28E-07	1.08E-07	3.36E-07
265	570322.16	4215667.36	3.65E-06	1.91E-06	5.56E-06	5.57E-07	2.90E-07	8.47E-07	2.51E-07	1.20E-07	3.71E-07
266	570330.42	4215663.73	3.82E-06	2.00E-06	5.82E-06	5.83E-07	3.04E-07	8.87E-07	2.63E-07	1.25E-07	3.88E-07
267	570346.93	4215656.45	4.16E-06	2.18E-06	6.34E-06	6.36E-07	3.31E-07	9.67E-07	2.87E-07	1.36E-07	4.23E-07
268	570267.7	4215699.43	2.44E-06	1.28E-06	3.71E-06	3.72E-07	1.94E-07	5.66E-07	1.68E-07	7.99E-08	2.48E-07
269	570249.81	4215701.59	2.27E-06	1.19E-06	3.45E-06	3.46E-07	1.80E-07	5.27E-07	1.56E-07	7.43E-08	2.31E-07
270	570231.92	4215703.75	2.11E-06	1.11E-06	3.22E-06	3.23E-07	1.68E-07	4.91E-07	1.46E-07	6.92E-08	2.15E-07
271	570222.98	4215704.83	2.05E-06	1.07E-06	3.12E-06	3.13E-07	1.63E-07	4.76E-07	1.41E-07	6.71E-08	2.08E-07
272	570214.03	4215705.91	1.99E-06	1.04E-06	3.03E-06	3.03E-07	1.58E-07	4.62E-07	1.37E-07	6.51E-08	2.02E-07
273	570196.14	4215708.07	1.88E-06	9.86E-07	2.87E-06	2.88E-07	1.50E-07	4.38E-07	1.30E-07	6.17E-08	1.92E-07
274	570178.25	4215710.23	1.80E-06	9.40E-07	2.74E-06	2.74E-07	1.43E-07	4.17E-07	1.24E-07	5.89E-08	1.83E-07
275	570169.31	4215711.31	1.76E-06	9.18E-07	2.67E-06	2.68E-07	1.40E-07	4.08E-07	1.21E-07	5.75E-08	1.78E-07
276	570151.42	4215713.47	1.67E-06	8.76E-07	2.55E-06	2.56E-07	1.33E-07	3.89E-07	1.15E-07	5.49E-08	1.70E-07
277	570133.53	4215715.63	1.61E-06	8.40E-07	2.45E-06	2.45E-07	1.28E-07	3.73E-07	1.11E-07	5.26E-08	1.63E-07
278	570115.63	4215717.79	1.55E-06	8.09E-07	2.36E-06	2.36E-07	1.23E-07	3.59E-07	1.07E-07	5.06E-08	1.57E-07
279	570284.9	4215694.71	2.67E-06	1.40E-06	4.06E-06	4.07E-07	2.12E-07	6.20E-07	1.84E-07	8.74E-08	2.71E-07
280	570293.16	4215691.07	2.81E-06	1.47E-06	4.28E-06	4.29E-07	2.24E-07	6.53E-07	1.94E-07	9.21E-08	2.86E-07
281	570309.68	4215683.79	3.12E-06	1.63E-06	4.75E-06	4.76E-07	2.48E-07	7.25E-07	2.15E-07	1.02E-07	3.17E-07
282	570317.94	4215680.15	3.28E-06	1.72E-06	5.00E-06	5.01E-07	2.61E-07	7.62E-07	2.26E-07	1.08E-07	3.34E-07
283	570334.45	4215672.88	3.60E-06	1.89E-06	5.49E-06	5.50E-07	2.87E-07	8.37E-07	2.48E-07	1.18E-07	3.66E-07
284	570342.71	4215669.24	3.76E-06	1.97E-06	5.73E-06	5.75E-07	3.00E-07	8.74E-07	2.59E-07	1.23E-07	3.83E-07
285	570282.22	4215444.01	2.12E-05	1.11E-05	3.24E-05	3.24E-06	1.69E-06	4.93E-06	1.46E-06	6.96E-07	2.16E-06
286	570275.56	4215450.77	2.07E-05	1.08E-05	3.15E-05	3.16E-06	1.64E-06	4.80E-06	1.42E-06	6.77E-07	2.10E-06
287	570268.91	4215457.52	1.99E-05	1.04E-05	3.03E-05	3.04E-06	1.58E-06	4.62E-06	1.37E-06	6.52E-07	2.02E-06
288	570298.64	4215440.59	2.03E-05	1.06E-05	3.09E-05	3.10E-06	1.61E-06	4.71E-06	1.40E-06	6.64E-07	2.06E-06
289	570292.17	4215447.16	2.00E-05	1.04E-05	3.04E-05	3.05E-06	1.59E-06	4.64E-06	1.38E-06	6.54E-07	2.03E-06
290	570285.7	4215453.73	1.95E-05	1.02E-05	2.97E-05	2.98E-06	1.55E-06	4.54E-06	1.35E-06	6.40E-07	1.99E-06
291	570279.23	4215460.29	1.89E-05	9.91E-06	2.88E-05	2.89E-06	1.51E-06	4.40E-06	1.31E-06	6.20E-07	1.93E-06
292	570272.76	4215466.86	1.82E-05	9.52E-06	2.77E-05	2.78E-06	1.45E-06	4.23E-06	1.25E-06	5.96E-07	1.85E-06
293	570308.28	4215444.05	1.91E-05	1.00E-05	2.91E-05	2.92E-06	1.52E-06	4.44E-06	1.32E-06	6.27E-07	1.94E-06
294	570301.95	4215450.47	1.89E-05	9.87E-06	2.87E-05	2.88E-06	1.50E-06	4.38E-06	1.30E-06	6.18E-07	1.92E-06
295	570295.63	4215456.89	1.85E-05	9.67E-06	2.81E-05	2.82E-06	1.47E-06	4.29E-06	1.27E-06	6.05E-07	1.88E-06
296	570289.3	4215463.31	1.80E-05	9.42E-06	2.74E-05	2.75E-06	1.43E-06	4.18E-06	1.24E-06	5.90E-07	1.83E-06
297	570276.64	4215476.16	1.66E-05	8.68E-06	2.53E-05	2.53E-06	1.32E-06	3.86E-06	1.14E-06	5.44E-07	1.69E-06
298	570322.67	4215442.69	1.82E-05	9.51E-06	2.77E-05	2.77E-06	1.45E-06	4.22E-06	1.25E-06	5.95E-07	1.85E-06
299	570315.77	4215449.7	1.80E-05	9.43E-06	2.75E-05	2.75E-06	1.43E-06	4.19E-06	1.24E-06	5.90E-07	1.83E-06
300	570308.86	4215456.7	1.77E-05	9.29E-06	2.70E-05	2.71E-06	1.41E-06	4.12E-06	1.22E-06	5.81E-07	1.80E-06
301	570301.96	4215463.71	1.73E-05	9.07E-06	2.64E-05	2.65E-06	1.38E-06	4.03E-06	1.19E-06	5.68E-07	1.76E-06

302	570295.06	4215470.71	1.68E-05	8.78E-06	2.56E-05	2.56E-06	1.34E-06	3.90E-06	1.16E-06	5.50E-07	1.71E-06
303	570288.15	4215477.72	1.61E-05	8.42E-06	2.45E-05	2.46E-06	1.28E-06	3.74E-06	1.11E-06	5.27E-07	1.64E-06
304	570281.25	4215484.73	1.53E-05	8.00E-06	2.33E-05	2.33E-06	1.22E-06	3.55E-06	1.05E-06	5.01E-07	1.55E-06
305	570338.95	4215439.41	1.70E-05	8.90E-06	2.59E-05	2.60E-06	1.35E-06	3.95E-06	1.17E-06	5.57E-07	1.73E-06
306	570332.22	4215446.24	1.71E-05	8.96E-06	2.61E-05	2.61E-06	1.36E-06	3.98E-06	1.18E-06	5.61E-07	1.74E-06
307	570325.49	4215453.07	1.71E-05	8.93E-06	2.60E-05	2.61E-06	1.36E-06	3.97E-06	1.18E-06	5.59E-07	1.74E-06
308	570318.76	4215459.9	1.69E-05	8.82E-06	2.57E-05	2.57E-06	1.34E-06	3.92E-06	1.16E-06	5.52E-07	1.71E-06
309	570312.03	4215466.73	1.65E-05	8.65E-06	2.52E-05	2.52E-06	1.32E-06	3.84E-06	1.14E-06	5.41E-07	1.68E-06
310	570305.3	4215473.56	1.61E-05	8.41E-06	2.45E-05	2.46E-06	1.28E-06	3.74E-06	1.11E-06	5.27E-07	1.64E-06
311	570298.57	4215480.39	1.55E-05	8.11E-06	2.36E-05	2.37E-06	1.23E-06	3.60E-06	1.07E-06	5.08E-07	1.58E-06
312	570291.84	4215487.22	1.48E-05	7.75E-06	2.26E-05	2.26E-06	1.18E-06	3.44E-06	1.02E-06	4.85E-07	1.51E-06
313	570285.11	4215494.05	1.41E-05	7.35E-06	2.14E-05	2.15E-06	1.12E-06	3.26E-06	9.68E-07	4.60E-07	1.43E-06
314	570355.74	4215398.93	1.71E-05	8.94E-06	2.60E-05	2.61E-06	1.36E-06	3.97E-06	1.18E-06	5.60E-07	1.74E-06
315	570355.53	4215408.32	1.68E-05	8.77E-06	2.55E-05	2.56E-06	1.33E-06	3.89E-06	1.15E-06	5.49E-07	1.70E-06
316	570355.32	4215417.7	1.65E-05	8.63E-06	2.51E-05	2.52E-06	1.31E-06	3.83E-06	1.14E-06	5.40E-07	1.68E-06
317	570348.3	4215443.16	1.61E-05	8.41E-06	2.45E-05	2.45E-06	1.28E-06	3.73E-06	1.11E-06	5.26E-07	1.63E-06
318	570341.72	4215449.85	1.62E-05	8.47E-06	2.47E-05	2.47E-06	1.29E-06	3.76E-06	1.12E-06	5.30E-07	1.65E-06
319	570335.13	4215456.54	1.62E-05	8.47E-06	2.47E-05	2.47E-06	1.29E-06	3.76E-06	1.12E-06	5.30E-07	1.65E-06
320	570328.54	4215463.22	1.60E-05	8.39E-06	2.44E-05	2.45E-06	1.28E-06	3.73E-06	1.11E-06	5.25E-07	1.63E-06
321	570321.95	4215469.91	1.58E-05	8.25E-06	2.40E-05	2.41E-06	1.25E-06	3.66E-06	1.09E-06	5.17E-07	1.60E-06
322	570315.36	4215476.6	1.54E-05	8.06E-06	2.35E-05	2.35E-06	1.23E-06	3.58E-06	1.06E-06	5.05E-07	1.57E-06
323	570308.77	4215483.28	1.49E-05	7.81E-06	2.28E-05	2.28E-06	1.19E-06	3.47E-06	1.03E-06	4.89E-07	1.52E-06
324	570302.18	4215489.97	1.44E-05	7.51E-06	2.19E-05	2.19E-06	1.14E-06	3.33E-06	9.89E-07	4.70E-07	1.46E-06
325	570295.59	4215496.66	1.37E-05	7.16E-06	2.08E-05	2.09E-06	1.09E-06	3.18E-06	9.43E-07	4.48E-07	1.39E-06
326	570289	4215503.35	1.30E-05	6.79E-06	1.98E-05	1.98E-06	1.03E-06	3.02E-06	8.95E-07	4.25E-07	1.32E-06
327	570365.14	4215394.28	1.63E-05	8.55E-06	2.49E-05	2.50E-06	1.30E-06	3.80E-06	1.13E-06	5.35E-07	1.66E-06
328	570364.93	4215403.5	1.61E-05	8.41E-06	2.45E-05	2.45E-06	1.28E-06	3.73E-06	1.11E-06	5.27E-07	1.63E-06
329	570364.73	4215412.72	1.58E-05	8.29E-06	2.41E-05	2.42E-06	1.26E-06	3.68E-06	1.09E-06	5.19E-07	1.61E-06
330	570357.63	4215446.94	1.52E-05	7.97E-06	2.32E-05	2.33E-06	1.21E-06	3.54E-06	1.05E-06	4.99E-07	1.55E-06
331	570351.16	4215453.51	1.54E-05	8.05E-06	2.34E-05	2.35E-06	1.22E-06	3.57E-06	1.06E-06	5.04E-07	1.56E-06
332	570344.69	4215460.07	1.54E-05	8.06E-06	2.35E-05	2.35E-06	1.23E-06	3.58E-06	1.06E-06	5.05E-07	1.57E-06
333	570338.22	4215466.64	1.53E-05	8.01E-06	2.33E-05	2.34E-06	1.22E-06	3.56E-06	1.06E-06	5.02E-07	1.56E-06
334	570331.75	4215473.21	1.51E-05	7.90E-06	2.30E-05	2.30E-06	1.20E-06	3.51E-06	1.04E-06	4.94E-07	1.53E-06
335	570325.27	4215479.78	1.48E-05	7.73E-06	2.25E-05	2.26E-06	1.18E-06	3.43E-06	1.02E-06	4.84E-07	1.50E-06
336	570318.8	4215486.35	1.44E-05	7.52E-06	2.19E-05	2.20E-06	1.14E-06	3.34E-06	9.91E-07	4.71E-07	1.46E-06
337	570312.33	4215492.91	1.39E-05	7.27E-06	2.12E-05	2.12E-06	1.11E-06	3.23E-06	9.57E-07	4.55E-07	1.41E-06
338	570305.86	4215499.48	1.33E-05	6.97E-06	2.03E-05	2.03E-06	1.06E-06	3.09E-06	9.18E-07	4.36E-07	1.35E-06
339	570299.39	4215506.05	1.27E-05	6.64E-06	1.93E-05	1.94E-06	1.01E-06	2.95E-06	8.75E-07	4.16E-07	1.29E-06
340	570292.92	4215512.62	1.20E-05	6.30E-06	1.83E-05	1.84E-06	9.58E-07	2.79E-06	8.29E-07	3.94E-07	1.22E-06
341	570374.42	4215395.11	1.55E-05	8.11E-06	2.36E-05	2.37E-06	1.23E-06	3.60E-06	1.07E-06	5.08E-07	1.58E-06
342	570374.2	4215404.94	1.53E-05	7.98E-06	2.32E-05	2.33E-06	1.21E-06	3.54E-06	1.05E-06	5.00E-07	1.55E-06
343	570373.98	4215414.77	1.51E-05	7.88E-06	2.29E-05	2.30E-06	1.20E-06	3.50E-06	1.04E-06	4.93E-07	1.53E-06
344	570366.41	4215451.27	1.45E-05	7.59E-06	2.21E-05	2.21E-06	1.15E-06	3.37E-06	9.99E-07	4.75E-07	1.47E-06
345	570359.51	4215458.28	1.47E-05	7.67E-06	2.23E-05	2.24E-06	1.17E-06	3.40E-06	1.01E-06	4.80E-07	1.49E-06
346	570352.6	4215465.29	1.47E-05	7.70E-06	2.24E-05	2.25E-06	1.17E-06	3.42E-06	1.01E-06	4.82E-07	1.50E-06
347	570345.7	4215472.29	1.46E-05	7.63E-06	2.22E-05	2.23E-06	1.16E-06	3.39E-06	1.01E-06	4.78E-07	1.48E-06
348	570338.8	4215479.3	1.44E-05	7.51E-06	2.19E-05	2.19E-06	1.14E-06	3.34E-06	9.90E-07	4.70E-07	1.46E-06
349	570331.9	4215486.3	1.40E-05	7.34E-06	2.14E-05	2.14E-06	1.12E-06	3.26E-06	9.67E-07	4.60E-07	1.43E-06
350	570324.99	4215493.31	1.36E-05	7.13E-06	2.07E-05	2.08E-06	1.08E-06	3.16E-06	9.39E-07	4.46E-07	1.38E-06
351	570318.09	4215500.31	1.31E-05	6.86E-06	2.00E-05	2.00E-06	1.04E-06	3.04E-06	9.03E-07	4.29E-07	1.33E-06
352	570311.19	4215507.32	1.25E-05	6.55E-06	1.91E-05	1.91E-06	9.96E-07	2.91E-06	8.63E-07	4.10E-07	1.27E-06
353	570304.28	4215514.32	1.19E-05	6.22E-06	1.81E-05	1.82E-06	9.46E-07	2.76E-06	8.19E-07	3.89E-07	1.21E-06
354	570297.38	4215521.33	1.12E-05	5.87E-06	1.71E-05	1.71E-06	8.93E-07	2.61E-06	7.73E-07	3.68E-07	1.14E-06
355	570383.83	4215390.31	1.48E-05	7.75E-06	2.26E-05	2.26E-06	1.18E-06	3.44E-06	1.02E-06	4.85E-07	1.51E-06
356	570383.61	4215399.95	1.46E-05	7.66E-06	2.23E-05	2.24E-06	1.17E-06	3.40E-06	1.01E-06	4.80E-07	1.49E-06
357	570383.39	4215409.59	1.45E-05	7.57E-06	2.20E-05	2.21E-06	1.15E-06	3.36E-06	9.97E-07	4.74E-07	1.47E-06
358	570382.74	4215438.52	1.38E-05	7.24E-06	2.11E-05	2.11E-06	1.10E-06	3.21E-06	9.53E-07	4.53E-07	1.41E-06
359	570375.75	4215455.04	1.38E-05	7.23E-06	2.10E-05	2.11E-06	1.10E-06	3.21E-06	9.52E-07	4.53E-07	1.40E-06
360	570368.98	4215461.91	1.40E-05	7.30E-06	2.13E-05	2.13E-06	1.11E-06	3.24E-06	9.62E-07	4.57E-07	1.42E-06
361	570362.21	4215468.78	1.40E-05	7.34E-06	2.14E-05	2.14E-06	1.12E-06	3.26E-06	9.66E-07	4.59E-07	1.43E-06
362	570355.44	4215475.65	1.40E-05	7.31E-06	2.13E-05	2.13E-06	1.11E-06	3.24E-06	9.62E-07	4.58E-07	1.42E-06

363	570348.67	4215482.52	1.38E-05	7.21E-06	2.10E-05	2.11E-06	1.10E-06	3.20E-06	9.50E-07	4.52E-07	1.40E-06
364	570341.9	4215489.39	1.35E-05	7.07E-06	2.06E-05	2.06E-06	1.08E-06	3.14E-06	9.31E-07	4.43E-07	1.37E-06
365	570335.13	4215496.26	1.32E-05	6.89E-06	2.00E-05	2.01E-06	1.05E-06	3.06E-06	9.07E-07	4.31E-07	1.34E-06
366	570328.36	4215503.13	1.27E-05	6.65E-06	1.94E-05	1.94E-06	1.01E-06	2.95E-06	8.76E-07	4.16E-07	1.29E-06
367	570321.59	4215510	1.22E-05	6.38E-06	1.86E-05	1.86E-06	9.70E-07	2.83E-06	8.40E-07	3.99E-07	1.24E-06
368	570314.82	4215516.87	1.16E-05	6.08E-06	1.77E-05	1.78E-06	9.25E-07	2.70E-06	8.01E-07	3.81E-07	1.18E-06
369	570308.05	4215523.74	1.10E-05	5.77E-06	1.68E-05	1.69E-06	8.78E-07	2.56E-06	7.61E-07	3.62E-07	1.12E-06
370	570301.28	4215530.61	1.04E-05	5.47E-06	1.59E-05	1.60E-06	8.31E-07	2.43E-06	7.20E-07	3.42E-07	1.06E-06
371	570393.01	4215395.17	1.40E-05	7.34E-06	2.14E-05	2.14E-06	1.12E-06	3.26E-06	9.66E-07	4.59E-07	1.43E-06
372	570392.8	4215404.66	1.39E-05	7.26E-06	2.11E-05	2.12E-06	1.10E-06	3.22E-06	9.56E-07	4.54E-07	1.41E-06
373	570392.59	4215414.14	1.37E-05	7.18E-06	2.09E-05	2.10E-06	1.09E-06	3.19E-06	9.46E-07	4.50E-07	1.40E-06
374	570391.95	4215442.58	1.32E-05	6.90E-06	2.01E-05	2.01E-06	1.05E-06	3.06E-06	9.09E-07	4.32E-07	1.34E-06
375	570385.08	4215458.82	1.32E-05	6.90E-06	2.01E-05	2.01E-06	1.05E-06	3.06E-06	9.08E-07	4.32E-07	1.34E-06
376	570378.42	4215465.57	1.33E-05	6.97E-06	2.03E-05	2.03E-06	1.06E-06	3.09E-06	9.18E-07	4.36E-07	1.35E-06
377	570371.76	4215472.33	1.34E-05	6.99E-06	2.04E-05	2.04E-06	1.06E-06	3.11E-06	9.21E-07	4.38E-07	1.36E-06
378	570365.11	4215479.08	1.33E-05	6.98E-06	2.03E-05	2.04E-06	1.06E-06	3.10E-06	9.19E-07	4.37E-07	1.36E-06
379	570358.45	4215485.84	1.32E-05	6.92E-06	2.01E-05	2.02E-06	1.05E-06	3.07E-06	9.11E-07	4.33E-07	1.34E-06
380	570351.79	4215492.59	1.30E-05	6.81E-06	1.98E-05	1.99E-06	1.04E-06	3.02E-06	8.97E-07	4.26E-07	1.32E-06
381	570345.14	4215499.35	1.27E-05	6.65E-06	1.93E-05	1.94E-06	1.01E-06	2.95E-06	8.75E-07	4.16E-07	1.29E-06
382	570338.48	4215506.1	1.23E-05	6.44E-06	1.88E-05	1.88E-06	9.80E-07	2.86E-06	8.49E-07	4.04E-07	1.25E-06
383	570331.83	4215512.86	1.19E-05	6.21E-06	1.81E-05	1.81E-06	9.44E-07	2.76E-06	8.17E-07	3.89E-07	1.21E-06
384	570325.17	4215519.62	1.13E-05	5.94E-06	1.73E-05	1.73E-06	9.03E-07	2.64E-06	7.82E-07	3.72E-07	1.15E-06
385	570318.51	4215526.37	1.08E-05	5.66E-06	1.65E-05	1.65E-06	8.60E-07	2.51E-06	7.45E-07	3.54E-07	1.10E-06
386	570311.86	4215533.13	1.03E-05	5.39E-06	1.57E-05	1.57E-06	8.19E-07	2.39E-06	7.10E-07	3.37E-07	1.05E-06
387	570305.2	4215539.88	9.75E-06	5.10E-06	1.49E-05	1.49E-06	7.76E-07	2.27E-06	6.72E-07	3.19E-07	9.92E-07
388	570402.42	4215390.57	1.34E-05	7.02E-06	2.04E-05	2.05E-06	1.07E-06	3.12E-06	9.24E-07	4.39E-07	1.36E-06
389	570402.21	4215399.91	1.33E-05	6.96E-06	2.03E-05	2.03E-06	1.06E-06	3.09E-06	9.17E-07	4.36E-07	1.35E-06
390	570401.99	4215409.25	1.32E-05	6.90E-06	2.01E-05	2.01E-06	1.05E-06	3.06E-06	9.08E-07	4.32E-07	1.34E-06
391	570401.15	4215446.62	1.26E-05	6.58E-06	1.92E-05	1.92E-06	1.00E-06	2.92E-06	8.67E-07	4.12E-07	1.28E-06
392	570394.38	4215462.61	1.26E-05	6.58E-06	1.91E-05	1.92E-06	1.00E-06	2.92E-06	8.66E-07	4.12E-07	1.28E-06
393	570387.83	4215469.27	1.27E-05	6.65E-06	1.94E-05	1.94E-06	1.01E-06	2.95E-06	8.75E-07	4.16E-07	1.29E-06
394	570381.27	4215475.92	1.28E-05	6.68E-06	1.95E-05	1.95E-06	1.02E-06	2.97E-06	8.80E-07	4.18E-07	1.30E-06
395	570374.71	4215482.58	1.28E-05	6.67E-06	1.94E-05	1.95E-06	1.02E-06	2.96E-06	8.79E-07	4.18E-07	1.30E-06
396	570368.15	4215489.24	1.27E-05	6.63E-06	1.93E-05	1.93E-06	1.01E-06	2.94E-06	8.73E-07	4.15E-07	1.29E-06
397	570361.6	4215495.89	1.25E-05	6.54E-06	1.90E-05	1.91E-06	9.95E-07	2.90E-06	8.61E-07	4.09E-07	1.27E-06
398	570355.04	4215502.55	1.23E-05	6.41E-06	1.87E-05	1.87E-06	9.75E-07	2.85E-06	8.45E-07	4.01E-07	1.25E-06
399	570348.48	4215509.2	1.19E-05	6.24E-06	1.82E-05	1.82E-06	9.49E-07	2.77E-06	8.22E-07	3.91E-07	1.21E-06
400	570341.92	4215515.86	1.15E-05	6.03E-06	1.76E-05	1.76E-06	9.18E-07	2.68E-06	7.95E-07	3.78E-07	1.17E-06
401	570335.36	4215522.51	1.11E-05	5.80E-06	1.69E-05	1.69E-06	8.82E-07	2.57E-06	7.64E-07	3.63E-07	1.13E-06
402	570328.81	4215529.17	1.06E-05	5.54E-06	1.61E-05	1.62E-06	8.43E-07	2.46E-06	7.30E-07	3.47E-07	1.08E-06
403	570322.25	4215535.82	1.01E-05	5.29E-06	1.54E-05	1.54E-06	8.05E-07	2.35E-06	6.97E-07	3.31E-07	1.03E-06
404	570315.69	4215542.48	9.61E-06	5.03E-06	1.46E-05	1.47E-06	7.65E-07	2.23E-06	6.63E-07	3.15E-07	9.77E-07
405	570309.13	4215549.13	9.09E-06	4.76E-06	1.38E-05	1.39E-06	7.23E-07	2.11E-06	6.26E-07	2.98E-07	9.24E-07
406	570411.7	4215391.03	1.28E-05	6.69E-06	1.95E-05	1.95E-06	1.02E-06	2.97E-06	8.82E-07	4.19E-07	1.30E-06
407	570411.48	4215400.86	1.27E-05	6.64E-06	1.93E-05	1.94E-06	1.01E-06	2.95E-06	8.75E-07	4.16E-07	1.29E-06
408	570411.26	4215410.69	1.26E-05	6.58E-06	1.92E-05	1.92E-06	1.00E-06	2.92E-06	8.67E-07	4.12E-07	1.28E-06
409	570410.59	4215440.19	1.22E-05	6.38E-06	1.86E-05	1.86E-06	9.70E-07	2.83E-06	8.40E-07	3.99E-07	1.24E-06
410	570410.37	4215450.02	1.20E-05	6.29E-06	1.83E-05	1.84E-06	9.57E-07	2.79E-06	8.29E-07	3.94E-07	1.22E-06
411	570403.25	4215466.86	1.20E-05	6.28E-06	1.83E-05	1.83E-06	9.55E-07	2.79E-06	8.27E-07	3.93E-07	1.22E-06
412	570396.34	4215473.87	1.21E-05	6.34E-06	1.85E-05	1.85E-06	9.64E-07	2.81E-06	8.35E-07	3.97E-07	1.23E-06
413	570389.44	4215480.87	1.22E-05	6.38E-06	1.86E-05	1.86E-06	9.70E-07	2.83E-06	8.40E-07	3.99E-07	1.24E-06
414	570382.54	4215487.88	1.22E-05	6.39E-06	1.86E-05	1.86E-06	9.71E-07	2.84E-06	8.41E-07	4.00E-07	1.24E-06
415	570375.64	4215494.88	1.21E-05	6.34E-06	1.84E-05	1.85E-06	9.64E-07	2.81E-06	8.35E-07	3.97E-07	1.23E-06
416	570368.73	4215501.89	1.19E-05	6.24E-06	1.82E-05	1.82E-06	9.49E-07	2.77E-06	8.22E-07	3.91E-07	1.21E-06
417	570361.83	4215508.89	1.17E-05	6.11E-06	1.78E-05	1.78E-06	9.29E-07	2.71E-06	8.04E-07	3.82E-07	1.19E-06
418	570354.93	4215515.9	1.14E-05	5.94E-06	1.73E-05	1.73E-06	9.04E-07	2.64E-06	7.83E-07	3.72E-07	1.16E-06
419	570348.03	4215522.91	1.10E-05	5.74E-06	1.67E-05	1.67E-06	8.73E-07	2.55E-06	7.56E-07	3.59E-07	1.11E-06
420	570341.12	4215529.91	1.05E-05	5.50E-06	1.60E-05	1.61E-06	8.37E-07	2.44E-06	7.25E-07	3.45E-07	1.07E-06
421	570334.22	4215536.92	1.00E-05	5.26E-06	1.53E-05	1.53E-06	7.99E-07	2.33E-06	6.92E-07	3.29E-07	1.02E-06
422	570327.32	4215543.92	9.55E-06	5.00E-06	1.45E-05	1.46E-06	7.60E-07	2.22E-06	6.58E-07	3.13E-07	9.71E-07
423	570320.41	4215550.93	9.03E-06	4.73E-06	1.38E-05	1.38E-06	7.19E-07	2.10E-06	6.22E-07	2.96E-07	9.18E-07

424	570313.51	4215557.93	8.50E-06	4.45E-06	1.29E-05	1.30E-06	6.76E-07	1.97E-06	5.86E-07	2.78E-07	8.64E-07
425	570421.11	4215386.32	1.22E-05	6.41E-06	1.86E-05	1.87E-06	9.74E-07	2.84E-06	8.44E-07	4.01E-07	1.24E-06
426	570420.89	4215396	1.22E-05	6.38E-06	1.86E-05	1.86E-06	9.70E-07	2.83E-06	8.40E-07	3.99E-07	1.24E-06
427	570420.67	4215405.68	1.21E-05	6.33E-06	1.84E-05	1.85E-06	9.63E-07	2.81E-06	8.34E-07	3.96E-07	1.23E-06
428	570420.45	4215415.36	1.20E-05	6.28E-06	1.83E-05	1.83E-06	9.56E-07	2.79E-06	8.28E-07	3.94E-07	1.22E-06
429	570419.8	4215444.39	1.16E-05	6.08E-06	1.77E-05	1.78E-06	9.25E-07	2.70E-06	8.01E-07	3.81E-07	1.18E-06
430	570419.58	4215454.07	1.15E-05	6.00E-06	1.75E-05	1.75E-06	9.13E-07	2.67E-06	7.91E-07	3.76E-07	1.17E-06
431	570412.56	4215470.65	1.15E-05	5.99E-06	1.74E-05	1.75E-06	9.11E-07	2.66E-06	7.89E-07	3.75E-07	1.16E-06
432	570405.77	4215477.54	1.16E-05	6.05E-06	1.76E-05	1.76E-06	9.20E-07	2.68E-06	7.96E-07	3.79E-07	1.18E-06
433	570398.98	4215484.44	1.16E-05	6.08E-06	1.77E-05	1.78E-06	9.25E-07	2.70E-06	8.01E-07	3.81E-07	1.18E-06
434	570392.18	4215491.34	1.17E-05	6.10E-06	1.77E-05	1.78E-06	9.27E-07	2.71E-06	8.03E-07	3.82E-07	1.18E-06
435	570385.39	4215498.23	1.16E-05	6.08E-06	1.77E-05	1.77E-06	9.24E-07	2.70E-06	8.00E-07	3.80E-07	1.18E-06
436	570378.59	4215505.13	1.15E-05	5.99E-06	1.75E-05	1.75E-06	9.12E-07	2.66E-06	7.90E-07	3.75E-07	1.16E-06
437	570371.8	4215512.02	1.12E-05	5.88E-06	1.71E-05	1.72E-06	8.94E-07	2.61E-06	7.74E-07	3.68E-07	1.14E-06
438	570365	4215518.92	1.10E-05	5.74E-06	1.67E-05	1.67E-06	8.73E-07	2.55E-06	7.56E-07	3.59E-07	1.12E-06
439	570358.21	4215525.82	1.06E-05	5.57E-06	1.62E-05	1.63E-06	8.47E-07	2.47E-06	7.34E-07	3.49E-07	1.08E-06
440	570351.41	4215532.71	1.03E-05	5.37E-06	1.56E-05	1.57E-06	8.18E-07	2.39E-06	7.08E-07	3.37E-07	1.04E-06
441	570344.62	4215539.61	9.84E-06	5.15E-06	1.50E-05	1.50E-06	7.83E-07	2.29E-06	6.78E-07	3.22E-07	1.00E-06
442	570337.82	4215546.51	9.39E-06	4.91E-06	1.43E-05	1.43E-06	7.47E-07	2.18E-06	6.47E-07	3.07E-07	9.54E-07
443	570331.03	4215553.4	8.91E-06	4.66E-06	1.36E-05	1.36E-06	7.09E-07	2.07E-06	6.14E-07	2.92E-07	9.06E-07
444	570324.23	4215560.3	8.42E-06	4.40E-06	1.28E-05	1.29E-06	6.70E-07	1.95E-06	5.80E-07	2.76E-07	8.56E-07
445	570317.44	4215567.19	7.89E-06	4.13E-06	1.20E-05	1.20E-06	6.28E-07	1.83E-06	5.44E-07	2.58E-07	8.02E-07
446	570430.51	4215381.76	1.17E-05	6.12E-06	1.78E-05	1.79E-06	9.31E-07	2.72E-06	8.07E-07	3.83E-07	1.19E-06
447	570430.29	4215391.3	1.17E-05	6.11E-06	1.78E-05	1.78E-06	9.30E-07	2.71E-06	8.05E-07	3.83E-07	1.19E-06
448	570430.08	4215400.85	1.16E-05	6.09E-06	1.77E-05	1.78E-06	9.26E-07	2.70E-06	8.02E-07	3.81E-07	1.18E-06
449	570429.86	4215410.39	1.16E-05	6.05E-06	1.76E-05	1.77E-06	9.21E-07	2.69E-06	7.97E-07	3.79E-07	1.18E-06
450	570429.22	4215439.02	1.12E-05	5.87E-06	1.71E-05	1.71E-06	8.93E-07	2.61E-06	7.74E-07	3.68E-07	1.14E-06
451	570429	4215448.56	1.11E-05	5.81E-06	1.69E-05	1.69E-06	8.83E-07	2.58E-06	7.65E-07	3.64E-07	1.13E-06
452	570428.78	4215458.11	1.10E-05	5.73E-06	1.67E-05	1.67E-06	8.71E-07	2.54E-06	7.55E-07	3.59E-07	1.11E-06
453	570421.87	4215474.45	1.09E-05	5.71E-06	1.66E-05	1.67E-06	8.68E-07	2.53E-06	7.52E-07	3.57E-07	1.11E-06
454	570415.17	4215481.25	1.10E-05	5.77E-06	1.68E-05	1.68E-06	8.77E-07	2.56E-06	7.60E-07	3.61E-07	1.12E-06
455	570408.47	4215488.05	1.11E-05	5.80E-06	1.69E-05	1.69E-06	8.83E-07	2.58E-06	7.65E-07	3.63E-07	1.13E-06
456	570401.77	4215494.85	1.11E-05	5.82E-06	1.69E-05	1.70E-06	8.85E-07	2.58E-06	7.66E-07	3.64E-07	1.13E-06
457	570395.07	4215501.65	1.11E-05	5.80E-06	1.69E-05	1.69E-06	8.82E-07	2.57E-06	7.64E-07	3.63E-07	1.13E-06
458	570388.37	4215508.45	1.10E-05	5.75E-06	1.67E-05	1.68E-06	8.74E-07	2.55E-06	7.57E-07	3.60E-07	1.12E-06
459	570381.67	4215515.25	1.08E-05	5.66E-06	1.65E-05	1.65E-06	8.61E-07	2.51E-06	7.45E-07	3.54E-07	1.10E-06
460	570374.97	4215522.04	1.06E-05	5.54E-06	1.61E-05	1.62E-06	8.42E-07	2.46E-06	7.29E-07	3.47E-07	1.08E-06
461	570368.27	4215528.84	1.03E-05	5.39E-06	1.57E-05	1.57E-06	8.19E-07	2.39E-06	7.10E-07	3.37E-07	1.05E-06
462	570361.57	4215535.64	9.97E-06	5.22E-06	1.52E-05	1.52E-06	7.93E-07	2.32E-06	6.87E-07	3.27E-07	1.01E-06
463	570354.87	4215542.44	9.61E-06	5.03E-06	1.46E-05	1.47E-06	7.65E-07	2.23E-06	6.62E-07	3.15E-07	9.77E-07
464	570348.17	4215549.24	9.20E-06	4.81E-06	1.40E-05	1.40E-06	7.32E-07	2.14E-06	6.34E-07	3.01E-07	9.35E-07
465	570341.47	4215556.04	8.76E-06	4.59E-06	1.34E-05	1.34E-06	6.97E-07	2.04E-06	6.04E-07	2.87E-07	8.91E-07
466	570334.77	4215562.84	8.31E-06	4.35E-06	1.27E-05	1.27E-06	6.61E-07	1.93E-06	5.72E-07	2.72E-07	8.44E-07
467	570328.07	4215569.64	7.82E-06	4.09E-06	1.19E-05	1.19E-06	6.23E-07	1.82E-06	5.39E-07	2.56E-07	7.96E-07
468	570321.37	4215576.44	7.33E-06	3.84E-06	1.12E-05	1.12E-06	5.83E-07	1.70E-06	5.05E-07	2.40E-07	7.45E-07
469	570439.69	4215386.74	1.12E-05	5.85E-06	1.70E-05	1.71E-06	8.90E-07	2.60E-06	7.71E-07	3.66E-07	1.14E-06
470	570439.48	4215396.16	1.12E-05	5.85E-06	1.70E-05	1.71E-06	8.89E-07	2.60E-06	7.70E-07	3.66E-07	1.14E-06
471	570439.27	4215405.59	1.11E-05	5.83E-06	1.70E-05	1.70E-06	8.87E-07	2.59E-06	7.68E-07	3.65E-07	1.13E-06
472	570439.05	4215415.01	1.11E-05	5.79E-06	1.69E-05	1.69E-06	8.80E-07	2.57E-06	7.62E-07	3.62E-07	1.12E-06
473	570438.42	4215443.28	1.07E-05	5.61E-06	1.63E-05	1.64E-06	8.53E-07	2.49E-06	7.39E-07	3.51E-07	1.09E-06
474	570438.2	4215452.7	1.06E-05	5.55E-06	1.61E-05	1.62E-06	8.44E-07	2.46E-06	7.31E-07	3.47E-07	1.08E-06
475	570437.99	4215462.12	1.05E-05	5.47E-06	1.59E-05	1.60E-06	8.32E-07	2.43E-06	7.21E-07	3.43E-07	1.06E-06
476	570431.16	4215478.26	1.04E-05	5.43E-06	1.58E-05	1.59E-06	8.27E-07	2.41E-06	7.16E-07	3.40E-07	1.06E-06
477	570424.55	4215484.97	1.05E-05	5.49E-06	1.60E-05	1.60E-06	8.35E-07	2.44E-06	7.23E-07	3.44E-07	1.07E-06
478	570417.93	4215491.69	1.06E-05	5.53E-06	1.61E-05	1.62E-06	8.42E-07	2.46E-06	7.29E-07	3.46E-07	1.08E-06
479	570411.32	4215498.4	1.06E-05	5.56E-06	1.62E-05	1.62E-06	8.45E-07	2.47E-06	7.32E-07	3.48E-07	1.08E-06
480	570404.7	4215505.11	1.06E-05	5.54E-06	1.61E-05	1.62E-06	8.42E-07	2.46E-06	7.29E-07	3.47E-07	1.08E-06
481	570398.09	4215511.83	1.05E-05	5.50E-06	1.60E-05	1.60E-06	8.36E-07	2.44E-06	7.24E-07	3.44E-07	1.07E-06
482	570391.47	4215518.54	1.04E-05	5.43E-06	1.58E-05	1.58E-06	8.26E-07	2.41E-06	7.15E-07	3.40E-07	1.06E-06
483	570384.86	4215525.25	1.02E-05	5.34E-06	1.55E-05	1.56E-06	8.12E-07	2.37E-06	7.03E-07	3.34E-07	1.04E-06
484	570378.24	4215531.97	9.95E-06	5.20E-06	1.51E-05	1.52E-06	7.91E-07	2.31E-06	6.85E-07	3.26E-07	1.01E-06

485	570371.63	4215538.68	9.66E-06	5.05E-06	1.47E-05	1.47E-06	7.68E-07	2.24E-06	6.65E-07	3.16E-07	9.82E-07
486	570365.01	4215545.4	9.33E-06	4.88E-06	1.42E-05	1.43E-06	7.43E-07	2.17E-06	6.43E-07	3.06E-07	9.49E-07
487	570358.4	4215552.11	8.98E-06	4.70E-06	1.37E-05	1.37E-06	7.15E-07	2.09E-06	6.19E-07	2.94E-07	9.13E-07
488	570351.78	4215558.82	8.59E-06	4.50E-06	1.31E-05	1.31E-06	6.84E-07	2.00E-06	5.92E-07	2.82E-07	8.74E-07
489	570345.17	4215565.54	8.17E-06	4.28E-06	1.24E-05	1.25E-06	6.50E-07	1.90E-06	5.63E-07	2.68E-07	8.31E-07
490	570338.55	4215572.25	7.73E-06	4.05E-06	1.18E-05	1.18E-06	6.16E-07	1.80E-06	5.33E-07	2.53E-07	7.86E-07
491	570331.94	4215578.96	7.28E-06	3.81E-06	1.11E-05	1.11E-06	5.80E-07	1.69E-06	5.02E-07	2.39E-07	7.41E-07
492	570325.32	4215585.68	6.58E-06	3.44E-06	1.00E-05	1.01E-06	5.24E-07	1.53E-06	4.54E-07	2.16E-07	6.69E-07
493	570449.21	4215377.12	1.07E-05	5.61E-06	1.63E-05	1.64E-06	8.53E-07	2.49E-06	7.38E-07	3.51E-07	1.09E-06
494	570448.98	4215386.95	1.07E-05	5.61E-06	1.63E-05	1.64E-06	8.53E-07	2.49E-06	7.39E-07	3.51E-07	1.09E-06
495	570448.76	4215396.78	1.07E-05	5.60E-06	1.63E-05	1.63E-06	8.51E-07	2.49E-06	7.37E-07	3.51E-07	1.09E-06
496	570448.54	4215406.62	1.07E-05	5.58E-06	1.62E-05	1.63E-06	8.49E-07	2.48E-06	7.35E-07	3.49E-07	1.08E-06
497	570448.32	4215416.45	1.06E-05	5.54E-06	1.61E-05	1.62E-06	8.42E-07	2.46E-06	7.30E-07	3.47E-07	1.08E-06
498	570447.65	4215445.95	1.03E-05	5.37E-06	1.56E-05	1.57E-06	8.17E-07	2.38E-06	7.07E-07	3.36E-07	1.04E-06
499	570447.43	4215455.78	1.01E-05	5.30E-06	1.54E-05	1.55E-06	8.07E-07	2.35E-06	6.98E-07	3.32E-07	1.03E-06
500	570447.21	4215465.61	9.99E-06	5.23E-06	1.52E-05	1.53E-06	7.95E-07	2.32E-06	6.88E-07	3.27E-07	1.02E-06
501	570440.09	4215482.45	9.90E-06	5.18E-06	1.51E-05	1.51E-06	7.88E-07	2.30E-06	6.82E-07	3.24E-07	1.01E-06
502	570433.18	4215489.45	1.00E-05	5.23E-06	1.52E-05	1.53E-06	7.95E-07	2.32E-06	6.89E-07	3.27E-07	1.02E-06
503	570426.28	4215496.46	1.01E-05	5.27E-06	1.53E-05	1.54E-06	8.02E-07	2.34E-06	6.94E-07	3.30E-07	1.02E-06
504	570419.38	4215503.46	1.01E-05	5.29E-06	1.54E-05	1.54E-06	8.05E-07	2.35E-06	6.97E-07	3.31E-07	1.03E-06
505	570412.47	4215510.47	1.01E-05	5.29E-06	1.54E-05	1.54E-06	8.04E-07	2.35E-06	6.97E-07	3.31E-07	1.03E-06
506	570405.57	4215517.48	1.00E-05	5.25E-06	1.53E-05	1.53E-06	7.98E-07	2.33E-06	6.91E-07	3.28E-07	1.02E-06
507	570398.67	4215524.48	9.90E-06	5.18E-06	1.51E-05	1.51E-06	7.88E-07	2.30E-06	6.82E-07	3.24E-07	1.01E-06
508	570391.77	4215531.49	9.71E-06	5.08E-06	1.48E-05	1.48E-06	7.73E-07	2.26E-06	6.69E-07	3.18E-07	9.87E-07
509	570384.86	4215538.49	9.47E-06	4.96E-06	1.44E-05	1.45E-06	7.54E-07	2.20E-06	6.53E-07	3.10E-07	9.63E-07
510	570377.96	4215545.5	9.18E-06	4.80E-06	1.40E-05	1.40E-06	7.31E-07	2.13E-06	6.33E-07	3.01E-07	9.34E-07
511	570371.06	4215552.5	8.86E-06	4.64E-06	1.35E-05	1.35E-06	7.05E-07	2.06E-06	6.11E-07	2.90E-07	9.01E-07
512	570364.16	4215559.51	8.51E-06	4.45E-06	1.30E-05	1.30E-06	6.77E-07	1.98E-06	5.86E-07	2.79E-07	8.65E-07
513	570357.25	4215566.51	8.13E-06	4.25E-06	1.24E-05	1.24E-06	6.47E-07	1.89E-06	5.60E-07	2.66E-07	8.26E-07
514	570350.35	4215573.52	7.71E-06	4.04E-06	1.17E-05	1.18E-06	6.14E-07	1.79E-06	5.32E-07	2.53E-07	7.84E-07
515	570343.45	4215580.53	7.28E-06	3.81E-06	1.11E-05	1.11E-06	5.80E-07	1.69E-06	5.02E-07	2.39E-07	7.40E-07
516	570336.54	4215587.53	6.84E-06	3.58E-06	1.04E-05	1.04E-06	5.44E-07	1.59E-06	4.72E-07	2.24E-07	6.96E-07
517	570329.64	4215594.54	6.41E-06	3.35E-06	9.76E-06	9.78E-07	5.10E-07	1.49E-06	4.41E-07	2.10E-07	6.51E-07
518	570458.61	4215372.61	1.03E-05	5.40E-06	1.57E-05	1.57E-06	8.21E-07	2.40E-06	7.11E-07	3.38E-07	1.05E-06
519	570458.39	4215382.31	1.03E-05	5.38E-06	1.57E-05	1.57E-06	8.19E-07	2.39E-06	7.09E-07	3.37E-07	1.05E-06
520	570458.17	4215392.01	1.03E-05	5.37E-06	1.56E-05	1.57E-06	8.17E-07	2.38E-06	7.07E-07	3.36E-07	1.04E-06
521	570457.95	4215401.72	1.02E-05	5.34E-06	1.56E-05	1.56E-06	8.13E-07	2.37E-06	7.04E-07	3.35E-07	1.04E-06
522	570457.73	4215411.42	1.02E-05	5.31E-06	1.55E-05	1.55E-06	8.08E-07	2.36E-06	7.00E-07	3.33E-07	1.03E-06
523	570457.07	4215440.53	9.90E-06	5.18E-06	1.51E-05	1.51E-06	7.88E-07	2.30E-06	6.82E-07	3.24E-07	1.01E-06
524	570456.85	4215450.23	9.79E-06	5.12E-06	1.49E-05	1.49E-06	7.79E-07	2.27E-06	6.74E-07	3.21E-07	9.95E-07
525	570456.64	4215459.93	9.66E-06	5.05E-06	1.47E-05	1.47E-06	7.68E-07	2.24E-06	6.65E-07	3.16E-07	9.82E-07
526	570456.42	4215469.64	9.50E-06	4.97E-06	1.45E-05	1.45E-06	7.56E-07	2.21E-06	6.54E-07	3.11E-07	9.66E-07
527	570449.39	4215486.25	9.42E-06	4.93E-06	1.43E-05	1.44E-06	7.50E-07	2.19E-06	6.49E-07	3.09E-07	9.58E-07
528	570442.57	4215493.17	9.52E-06	4.98E-06	1.45E-05	1.45E-06	7.57E-07	2.21E-06	6.56E-07	3.12E-07	9.68E-07
529	570435.76	4215500.08	9.58E-06	5.01E-06	1.46E-05	1.46E-06	7.63E-07	2.23E-06	6.60E-07	3.14E-07	9.74E-07
530	570428.95	4215506.99	9.62E-06	5.03E-06	1.47E-05	1.47E-06	7.66E-07	2.24E-06	6.63E-07	3.15E-07	9.78E-07
531	570422.14	4215513.91	9.63E-06	5.04E-06	1.47E-05	1.47E-06	7.67E-07	2.24E-06	6.64E-07	3.16E-07	9.79E-07
532	570415.33	4215520.82	9.61E-06	5.03E-06	1.46E-05	1.47E-06	7.64E-07	2.23E-06	6.62E-07	3.15E-07	9.77E-07
533	570408.51	4215527.73	9.50E-06	4.97E-06	1.45E-05	1.45E-06	7.56E-07	2.21E-06	6.55E-07	3.11E-07	9.66E-07
534	570401.7	4215534.65	9.34E-06	4.89E-06	1.42E-05	1.43E-06	7.43E-07	2.17E-06	6.44E-07	3.06E-07	9.50E-07
535	570394.89	4215541.56	9.14E-06	4.78E-06	1.39E-05	1.39E-06	7.27E-07	2.12E-06	6.30E-07	2.99E-07	9.29E-07
536	570388.08	4215548.47	8.89E-06	4.65E-06	1.35E-05	1.36E-06	7.08E-07	2.07E-06	6.13E-07	2.91E-07	9.04E-07
537	570381.27	4215555.39	8.61E-06	4.50E-06	1.31E-05	1.31E-06	6.85E-07	2.00E-06	5.93E-07	2.82E-07	8.75E-07
538	570374.45	4215562.3	8.29E-06	4.34E-06	1.26E-05	1.27E-06	6.60E-07	1.93E-06	5.71E-07	2.72E-07	8.43E-07
539	570367.64	4215569.21	7.95E-06	4.16E-06	1.21E-05	1.21E-06	6.33E-07	1.85E-06	5.48E-07	2.60E-07	8.08E-07
540	570360.83	4215576.13	7.59E-06	3.97E-06	1.16E-05	1.16E-06	6.04E-07	1.76E-06	5.23E-07	2.49E-07	7.71E-07
541	570354.02	4215583.04	7.20E-06	3.77E-06	1.10E-05	1.10E-06	5.73E-07	1.67E-06	4.96E-07	2.36E-07	7.32E-07
542	570347.21	4215589.95	6.80E-06	3.56E-06	1.04E-05	1.04E-06	5.41E-07	1.58E-06	4.69E-07	2.23E-07	6.91E-07
543	570340.4	4215596.87	6.40E-06	3.35E-06	9.75E-06	9.77E-07	5.09E-07	1.49E-06	4.41E-07	2.10E-07	6.50E-07
544	570333.58	4215603.78	6.00E-06	3.14E-06	9.14E-06	9.16E-07	4.77E-07	1.39E-06	4.13E-07	1.97E-07	6.10E-07
545	570468	4215368.2	9.93E-06	5.20E-06	1.51E-05	1.52E-06	7.90E-07	2.31E-06	6.84E-07	3.25E-07	1.01E-06

546	570467.79	4215377.78	9.91E-06	5.18E-06	1.51E-05	1.51E-06	7.88E-07	2.30E-06	6.83E-07	3.25E-07	1.01E-06
547	570467.57	4215387.37	9.87E-06	5.16E-06	1.50E-05	1.51E-06	7.85E-07	2.29E-06	6.80E-07	3.23E-07	1.00E-06
548	570467.35	4215396.96	9.81E-06	5.13E-06	1.49E-05	1.50E-06	7.81E-07	2.28E-06	6.76E-07	3.21E-07	9.98E-07
549	570467.14	4215406.54	9.74E-06	5.10E-06	1.48E-05	1.49E-06	7.75E-07	2.26E-06	6.71E-07	3.19E-07	9.90E-07
550	570466.92	4215416.13	9.69E-06	5.07E-06	1.48E-05	1.48E-06	7.71E-07	2.25E-06	6.68E-07	3.18E-07	9.86E-07
551	570466.27	4215444.89	9.45E-06	4.95E-06	1.44E-05	1.44E-06	7.52E-07	2.20E-06	6.52E-07	3.10E-07	9.61E-07
552	570466.06	4215454.48	9.34E-06	4.89E-06	1.42E-05	1.43E-06	7.43E-07	2.17E-06	6.43E-07	3.06E-07	9.49E-07
553	570465.84	4215464.06	9.21E-06	4.82E-06	1.40E-05	1.41E-06	7.33E-07	2.14E-06	6.34E-07	3.02E-07	9.36E-07
554	570465.62	4215473.65	9.04E-06	4.73E-06	1.38E-05	1.38E-06	7.19E-07	2.10E-06	6.23E-07	2.96E-07	9.19E-07
555	570458.68	4215490.07	8.96E-06	4.69E-06	1.36E-05	1.37E-06	7.13E-07	2.08E-06	6.17E-07	2.93E-07	9.11E-07
556	570451.95	4215496.9	9.05E-06	4.73E-06	1.38E-05	1.38E-06	7.20E-07	2.10E-06	6.24E-07	2.96E-07	9.20E-07
557	570445.22	4215503.73	9.12E-06	4.77E-06	1.39E-05	1.39E-06	7.26E-07	2.12E-06	6.29E-07	2.99E-07	9.27E-07
558	570438.49	4215510.56	9.16E-06	4.79E-06	1.40E-05	1.40E-06	7.29E-07	2.13E-06	6.31E-07	3.00E-07	9.32E-07
559	570431.76	4215517.39	9.18E-06	4.80E-06	1.40E-05	1.40E-06	7.30E-07	2.13E-06	6.32E-07	3.01E-07	9.33E-07
560	570425.03	4215524.22	9.16E-06	4.79E-06	1.40E-05	1.40E-06	7.29E-07	2.13E-06	6.31E-07	3.00E-07	9.31E-07
561	570418.3	4215531.05	9.10E-06	4.76E-06	1.39E-05	1.39E-06	7.24E-07	2.11E-06	6.27E-07	2.98E-07	9.25E-07
562	570411.57	4215537.88	8.99E-06	4.70E-06	1.37E-05	1.37E-06	7.15E-07	2.09E-06	6.19E-07	2.94E-07	9.14E-07
563	570404.84	4215544.71	8.81E-06	4.61E-06	1.34E-05	1.35E-06	7.01E-07	2.05E-06	6.07E-07	2.89E-07	8.96E-07
564	570398.11	4215551.54	8.60E-06	4.50E-06	1.31E-05	1.31E-06	6.84E-07	2.00E-06	5.93E-07	2.82E-07	8.74E-07
565	570391.38	4215558.37	8.35E-06	4.37E-06	1.27E-05	1.27E-06	6.64E-07	1.94E-06	5.75E-07	2.73E-07	8.49E-07
566	570384.65	4215565.2	8.07E-06	4.22E-06	1.23E-05	1.23E-06	6.42E-07	1.87E-06	5.56E-07	2.64E-07	8.20E-07
567	570377.92	4215572.03	7.76E-06	4.06E-06	1.18E-05	1.18E-06	6.18E-07	1.80E-06	5.35E-07	2.54E-07	7.89E-07
568	570371.18	4215578.86	7.44E-06	3.89E-06	1.13E-05	1.14E-06	5.92E-07	1.73E-06	5.12E-07	2.44E-07	7.56E-07
569	570364.45	4215585.69	7.10E-06	3.71E-06	1.08E-05	1.08E-06	5.65E-07	1.65E-06	4.89E-07	2.32E-07	7.21E-07
570	570357.72	4215592.52	6.73E-06	3.52E-06	1.03E-05	1.03E-06	5.36E-07	1.56E-06	4.64E-07	2.21E-07	6.85E-07
571	570350.99	4215599.35	6.36E-06	3.33E-06	9.69E-06	9.72E-07	5.06E-07	1.48E-06	4.39E-07	2.08E-07	6.47E-07
572	570344.26	4215606.18	5.99E-06	3.14E-06	9.13E-06	9.15E-07	4.77E-07	1.39E-06	4.13E-07	1.96E-07	6.09E-07
573	570337.53	4215613.01	5.63E-06	2.95E-06	8.57E-06	8.60E-07	4.48E-07	1.31E-06	3.88E-07	1.84E-07	5.72E-07
574	570477.4	4215363.88	9.56E-06	5.00E-06	1.46E-05	1.46E-06	7.61E-07	2.22E-06	6.59E-07	3.13E-07	9.72E-07
575	570477.18	4215373.36	9.55E-06	5.00E-06	1.45E-05	1.46E-06	7.60E-07	2.22E-06	6.58E-07	3.13E-07	9.71E-07
576	570476.97	4215382.84	9.51E-06	4.98E-06	1.45E-05	1.45E-06	7.57E-07	2.21E-06	6.56E-07	3.12E-07	9.67E-07
577	570476.76	4215392.32	9.46E-06	4.95E-06	1.44E-05	1.44E-06	7.53E-07	2.20E-06	6.52E-07	3.10E-07	9.61E-07
578	570476.54	4215401.8	9.39E-06	4.91E-06	1.43E-05	1.43E-06	7.47E-07	2.18E-06	6.47E-07	3.07E-07	9.54E-07
579	570476.33	4215411.28	9.33E-06	4.88E-06	1.42E-05	1.42E-06	7.42E-07	2.17E-06	6.43E-07	3.06E-07	9.48E-07
580	570475.69	4215439.73	9.14E-06	4.78E-06	1.39E-05	1.40E-06	7.27E-07	2.12E-06	6.30E-07	2.99E-07	9.29E-07
581	570475.47	4215449.21	9.04E-06	4.73E-06	1.38E-05	1.38E-06	7.19E-07	2.10E-06	6.23E-07	2.96E-07	9.19E-07
582	570475.26	4215458.69	8.92E-06	4.67E-06	1.36E-05	1.36E-06	7.10E-07	2.07E-06	6.14E-07	2.92E-07	9.07E-07
583	570475.04	4215468.17	8.78E-06	4.59E-06	1.34E-05	1.34E-06	6.99E-07	2.04E-06	6.05E-07	2.88E-07	8.93E-07
584	570474.83	4215477.65	8.61E-06	4.51E-06	1.31E-05	1.32E-06	6.86E-07	2.00E-06	5.94E-07	2.82E-07	8.76E-07
585	570467.96	4215493.89	8.53E-06	4.46E-06	1.30E-05	1.30E-06	6.79E-07	1.98E-06	5.88E-07	2.79E-07	8.67E-07
586	570461.3	4215500.64	8.60E-06	4.50E-06	1.31E-05	1.31E-06	6.85E-07	2.00E-06	5.93E-07	2.82E-07	8.75E-07
587	570454.65	4215507.4	8.67E-06	4.53E-06	1.32E-05	1.32E-06	6.90E-07	2.01E-06	5.97E-07	2.84E-07	8.81E-07
588	570447.99	4215514.15	8.72E-06	4.56E-06	1.33E-05	1.33E-06	6.94E-07	2.03E-06	6.01E-07	2.86E-07	8.86E-07
589	570441.34	4215520.91	8.75E-06	4.58E-06	1.33E-05	1.34E-06	6.96E-07	2.03E-06	6.03E-07	2.87E-07	8.89E-07
590	570434.68	4215527.66	8.74E-06	4.57E-06	1.33E-05	1.33E-06	6.95E-07	2.03E-06	6.02E-07	2.86E-07	8.88E-07
591	570428.02	4215534.42	8.69E-06	4.54E-06	1.32E-05	1.33E-06	6.91E-07	2.02E-06	5.99E-07	2.85E-07	8.83E-07
592	570421.37	4215541.18	8.61E-06	4.50E-06	1.31E-05	1.31E-06	6.85E-07	2.00E-06	5.93E-07	2.82E-07	8.75E-07
593	570414.71	4215547.93	8.49E-06	4.44E-06	1.29E-05	1.30E-06	6.76E-07	1.97E-06	5.85E-07	2.78E-07	8.63E-07
594	570408.05	4215554.69	8.31E-06	4.35E-06	1.27E-05	1.27E-06	6.62E-07	1.93E-06	5.73E-07	2.72E-07	8.45E-07
595	570401.4	4215561.44	8.09E-06	4.23E-06	1.23E-05	1.23E-06	6.44E-07	1.88E-06	5.57E-07	2.65E-07	8.22E-07
596	570394.74	4215568.2	7.83E-06	4.10E-06	1.19E-05	1.20E-06	6.23E-07	1.82E-06	5.40E-07	2.57E-07	7.96E-07
597	570388.09	4215574.95	7.56E-06	3.96E-06	1.15E-05	1.15E-06	6.02E-07	1.76E-06	5.21E-07	2.48E-07	7.69E-07
598	570381.43	4215581.71	7.27E-06	3.80E-06	1.11E-05	1.11E-06	5.79E-07	1.69E-06	5.01E-07	2.38E-07	7.39E-07
599	570374.77	4215588.46	6.96E-06	3.64E-06	1.06E-05	1.06E-06	5.54E-07	1.62E-06	4.80E-07	2.28E-07	7.08E-07
600	570368.12	4215595.22	6.64E-06	3.47E-06	1.01E-05	1.01E-06	5.28E-07	1.54E-06	4.57E-07	2.17E-07	6.75E-07
601	570361.46	4215601.97	6.30E-06	3.30E-06	9.60E-06	9.63E-07	5.02E-07	1.46E-06	4.34E-07	2.07E-07	6.41E-07
602	570354.81	4215608.73	5.97E-06	3.12E-06	9.09E-06	9.11E-07	4.75E-07	1.39E-06	4.11E-07	1.95E-07	6.06E-07
603	570348.15	4215615.48	5.63E-06	2.94E-06	8.57E-06	8.59E-07	4.48E-07	1.31E-06	3.88E-07	1.84E-07	5.72E-07
604	570341.49	4215622.24	5.29E-06	2.77E-06	8.06E-06	8.08E-07	4.21E-07	1.23E-06	3.65E-07	1.73E-07	5.38E-07
605	570486.71	4215363.21	9.20E-06	4.81E-06	1.40E-05	1.40E-06	7.32E-07	2.14E-06	6.34E-07	3.01E-07	9.35E-07
606	570486.49	4215373.04	9.19E-06	4.81E-06	1.40E-05	1.40E-06	7.31E-07	2.13E-06	6.33E-07	3.01E-07	9.34E-07

607	570486.27	4215382.87	9.16E-06	4.79E-06	1.40E-05	1.40E-06	7.29E-07	2.13E-06	6.31E-07	3.00E-07	9.32E-07
608	570486.04	4215392.71	9.12E-06	4.77E-06	1.39E-05	1.39E-06	7.25E-07	2.12E-06	6.28E-07	2.99E-07	9.27E-07
609	570485.82	4215402.54	9.05E-06	4.74E-06	1.38E-05	1.38E-06	7.20E-07	2.10E-06	6.24E-07	2.97E-07	9.20E-07
610	570485.6	4215412.37	9.00E-06	4.71E-06	1.37E-05	1.37E-06	7.16E-07	2.09E-06	6.20E-07	2.95E-07	9.15E-07
611	570484.94	4215441.87	8.78E-06	4.60E-06	1.34E-05	1.34E-06	6.99E-07	2.04E-06	6.05E-07	2.88E-07	8.93E-07
612	570484.71	4215451.7	8.68E-06	4.54E-06	1.32E-05	1.33E-06	6.91E-07	2.02E-06	5.98E-07	2.84E-07	8.82E-07
613	570484.49	4215461.53	8.56E-06	4.48E-06	1.30E-05	1.31E-06	6.81E-07	1.99E-06	5.90E-07	2.80E-07	8.70E-07
614	570484.27	4215471.37	8.42E-06	4.40E-06	1.28E-05	1.29E-06	6.70E-07	1.95E-06	5.80E-07	2.76E-07	8.56E-07
615	570484.05	4215481.2	8.25E-06	4.32E-06	1.26E-05	1.26E-06	6.57E-07	1.92E-06	5.69E-07	2.70E-07	8.39E-07
616	570476.92	4215498.04	8.14E-06	4.26E-06	1.24E-05	1.24E-06	6.48E-07	1.89E-06	5.61E-07	2.67E-07	8.27E-07
617	570470.02	4215505.04	8.19E-06	4.29E-06	1.25E-05	1.25E-06	6.52E-07	1.90E-06	5.64E-07	2.68E-07	8.33E-07
618	570463.12	4215512.05	8.25E-06	4.31E-06	1.26E-05	1.26E-06	6.56E-07	1.92E-06	5.68E-07	2.70E-07	8.38E-07
619	570456.22	4215519.05	8.29E-06	4.34E-06	1.26E-05	1.27E-06	6.60E-07	1.93E-06	5.71E-07	2.72E-07	8.43E-07
620	570449.31	4215526.06	8.32E-06	4.36E-06	1.27E-05	1.27E-06	6.62E-07	1.93E-06	5.74E-07	2.73E-07	8.46E-07
621	570442.41	4215533.06	8.32E-06	4.35E-06	1.27E-05	1.27E-06	6.62E-07	1.93E-06	5.73E-07	2.73E-07	8.46E-07
622	570435.51	4215540.07	8.27E-06	4.33E-06	1.26E-05	1.26E-06	6.58E-07	1.92E-06	5.70E-07	2.71E-07	8.41E-07
623	570428.6	4215547.07	8.19E-06	4.29E-06	1.25E-05	1.25E-06	6.52E-07	1.90E-06	5.65E-07	2.68E-07	8.33E-07
624	570421.7	4215554.08	8.09E-06	4.23E-06	1.23E-05	1.23E-06	6.43E-07	1.88E-06	5.57E-07	2.65E-07	8.22E-07
625	570414.8	4215561.08	7.93E-06	4.15E-06	1.21E-05	1.21E-06	6.31E-07	1.84E-06	5.47E-07	2.60E-07	8.06E-07
626	570407.9	4215568.09	7.71E-06	4.03E-06	1.17E-05	1.18E-06	6.14E-07	1.79E-06	5.31E-07	2.53E-07	7.84E-07
627	570400.99	4215575.1	7.46E-06	3.90E-06	1.14E-05	1.14E-06	5.94E-07	1.73E-06	5.14E-07	2.44E-07	7.59E-07
628	570394.09	4215582.1	7.20E-06	3.77E-06	1.10E-05	1.10E-06	5.73E-07	1.67E-06	4.96E-07	2.36E-07	7.32E-07
629	570387.19	4215589.11	6.91E-06	3.62E-06	1.05E-05	1.06E-06	5.50E-07	1.61E-06	4.76E-07	2.26E-07	7.03E-07
630	570380.29	4215596.11	6.61E-06	3.46E-06	1.01E-05	1.01E-06	5.26E-07	1.53E-06	4.55E-07	2.16E-07	6.72E-07
631	570373.38	4215603.12	6.29E-06	3.29E-06	9.58E-06	9.61E-07	5.01E-07	1.46E-06	4.34E-07	2.06E-07	6.40E-07
632	570366.48	4215610.12	5.97E-06	3.12E-06	9.09E-06	9.11E-07	4.75E-07	1.39E-06	4.11E-07	1.96E-07	6.07E-07
633	570359.58	4215617.13	5.64E-06	2.95E-06	8.59E-06	8.62E-07	4.49E-07	1.31E-06	3.89E-07	1.85E-07	5.74E-07
634	570352.67	4215624.13	5.32E-06	2.78E-06	8.10E-06	8.12E-07	4.23E-07	1.23E-06	3.66E-07	1.74E-07	5.41E-07
635	570345.77	4215631.14	5.00E-06	2.62E-06	7.61E-06	7.63E-07	3.98E-07	1.16E-06	3.44E-07	1.64E-07	5.08E-07
636	570496.11	4215358.84	8.85E-06	4.63E-06	1.35E-05	1.35E-06	7.05E-07	2.06E-06	6.10E-07	2.90E-07	9.00E-07
637	570495.89	4215368.56	8.86E-06	4.63E-06	1.35E-05	1.35E-06	7.05E-07	2.06E-06	6.10E-07	2.90E-07	9.00E-07
638	570495.67	4215378.28	8.84E-06	4.63E-06	1.35E-05	1.35E-06	7.04E-07	2.05E-06	6.09E-07	2.90E-07	8.99E-07
639	570495.45	4215388	8.81E-06	4.61E-06	1.34E-05	1.35E-06	7.01E-07	2.05E-06	6.07E-07	2.89E-07	8.96E-07
640	570495.23	4215397.72	8.77E-06	4.59E-06	1.34E-05	1.34E-06	6.98E-07	2.04E-06	6.04E-07	2.87E-07	8.92E-07
641	570495.01	4215407.44	8.72E-06	4.56E-06	1.33E-05	1.33E-06	6.94E-07	2.02E-06	6.01E-07	2.86E-07	8.86E-07
642	570494.79	4215417.16	8.66E-06	4.53E-06	1.32E-05	1.32E-06	6.89E-07	2.01E-06	5.97E-07	2.84E-07	8.81E-07
643	570494.13	4215446.32	8.42E-06	4.41E-06	1.28E-05	1.29E-06	6.70E-07	1.96E-06	5.80E-07	2.76E-07	8.56E-07
644	570493.91	4215456.04	8.32E-06	4.35E-06	1.27E-05	1.27E-06	6.62E-07	1.93E-06	5.73E-07	2.73E-07	8.46E-07
645	570493.69	4215465.76	8.20E-06	4.29E-06	1.25E-05	1.25E-06	6.53E-07	1.91E-06	5.65E-07	2.69E-07	8.34E-07
646	570493.47	4215475.49	8.06E-06	4.22E-06	1.23E-05	1.23E-06	6.41E-07	1.87E-06	5.55E-07	2.64E-07	8.19E-07
647	570493.26	4215485.21	7.90E-06	4.14E-06	1.20E-05	1.21E-06	6.29E-07	1.84E-06	5.45E-07	2.59E-07	8.04E-07
648	570486.21	4215501.85	7.79E-06	4.08E-06	1.19E-05	1.19E-06	6.20E-07	1.81E-06	5.37E-07	2.55E-07	7.92E-07
649	570479.39	4215508.78	7.82E-06	4.09E-06	1.19E-05	1.19E-06	6.23E-07	1.82E-06	5.39E-07	2.56E-07	7.95E-07
650	570472.56	4215515.7	7.85E-06	4.10E-06	1.19E-05	1.20E-06	6.24E-07	1.82E-06	5.41E-07	2.57E-07	7.98E-07
651	570465.74	4215522.63	7.88E-06	4.12E-06	1.20E-05	1.20E-06	6.27E-07	1.83E-06	5.43E-07	2.58E-07	8.01E-07
652	570458.91	4215529.56	7.91E-06	4.14E-06	1.20E-05	1.21E-06	6.29E-07	1.84E-06	5.45E-07	2.59E-07	8.04E-07
653	570452.09	4215536.48	7.91E-06	4.14E-06	1.21E-05	1.21E-06	6.30E-07	1.84E-06	5.45E-07	2.59E-07	8.04E-07
654	570445.27	4215543.41	7.89E-06	4.13E-06	1.20E-05	1.21E-06	6.28E-07	1.83E-06	5.44E-07	2.59E-07	8.03E-07
655	570438.44	4215550.33	7.84E-06	4.10E-06	1.19E-05	1.20E-06	6.24E-07	1.82E-06	5.40E-07	2.57E-07	7.97E-07
656	570431.62	4215557.26	7.75E-06	4.05E-06	1.18E-05	1.18E-06	6.16E-07	1.80E-06	5.34E-07	2.54E-07	7.87E-07
657	570424.79	4215564.19	7.61E-06	3.98E-06	1.16E-05	1.16E-06	6.06E-07	1.77E-06	5.25E-07	2.49E-07	7.74E-07
658	570417.97	4215571.11	7.45E-06	3.90E-06	1.13E-05	1.14E-06	5.93E-07	1.73E-06	5.13E-07	2.44E-07	7.57E-07
659	570411.14	4215578.04	7.25E-06	3.79E-06	1.10E-05	1.11E-06	5.77E-07	1.68E-06	4.99E-07	2.37E-07	7.37E-07
660	570404.32	4215584.96	7.01E-06	3.67E-06	1.07E-05	1.07E-06	5.58E-07	1.63E-06	4.83E-07	2.30E-07	7.13E-07
661	570397.5	4215591.89	6.75E-06	3.53E-06	1.03E-05	1.03E-06	5.37E-07	1.57E-06	4.65E-07	2.21E-07	6.86E-07
662	570390.67	4215598.82	6.48E-06	3.39E-06	9.87E-06	9.89E-07	5.16E-07	1.50E-06	4.46E-07	2.12E-07	6.59E-07
663	570383.85	4215605.74	6.20E-06	3.24E-06	9.44E-06	9.46E-07	4.93E-07	1.44E-06	4.27E-07	2.03E-07	6.30E-07
664	570377.02	4215612.67	5.90E-06	3.09E-06	8.99E-06	9.01E-07	4.70E-07	1.37E-06	4.07E-07	1.93E-07	6.00E-07
665	570370.2	4215619.59	5.60E-06	2.93E-06	8.53E-06	8.55E-07	4.45E-07	1.30E-06	3.86E-07	1.83E-07	5.69E-07
666	570363.37	4215626.52	5.29E-06	2.77E-06	8.06E-06	8.08E-07	4.21E-07	1.23E-06	3.65E-07	1.73E-07	5.38E-07
667	570356.55	4215633.44	4.99E-06	2.61E-06	7.61E-06	7.62E-07	3.97E-07	1.16E-06	3.44E-07	1.64E-07	5.08E-07

668	570349.73	4215640.37	4.70E-06	2.46E-06	7.16E-06	7.18E-07	3.74E-07	1.09E-06	3.24E-07	1.54E-07	4.78E-07
669	570505.5	4215354.54	8.53E-06	4.46E-06	1.30E-05	1.30E-06	6.78E-07	1.98E-06	5.88E-07	2.79E-07	8.67E-07
670	570505.28	4215364.16	8.54E-06	4.47E-06	1.30E-05	1.30E-06	6.79E-07	1.98E-06	5.88E-07	2.80E-07	8.68E-07
671	570505.07	4215373.78	8.53E-06	4.46E-06	1.30E-05	1.30E-06	6.79E-07	1.98E-06	5.88E-07	2.80E-07	8.68E-07
672	570504.85	4215383.4	8.52E-06	4.46E-06	1.30E-05	1.30E-06	6.78E-07	1.98E-06	5.87E-07	2.79E-07	8.66E-07
673	570504.63	4215393.02	8.49E-06	4.44E-06	1.29E-05	1.30E-06	6.76E-07	1.97E-06	5.85E-07	2.78E-07	8.63E-07
674	570504.42	4215402.64	8.45E-06	4.42E-06	1.29E-05	1.29E-06	6.73E-07	1.96E-06	5.82E-07	2.77E-07	8.59E-07
675	570504.2	4215412.26	8.40E-06	4.39E-06	1.28E-05	1.28E-06	6.68E-07	1.95E-06	5.79E-07	2.75E-07	8.54E-07
676	570503.55	4215441.11	8.17E-06	4.27E-06	1.24E-05	1.25E-06	6.50E-07	1.90E-06	5.63E-07	2.68E-07	8.31E-07
677	570503.33	4215450.73	8.08E-06	4.23E-06	1.23E-05	1.23E-06	6.43E-07	1.88E-06	5.57E-07	2.65E-07	8.22E-07
678	570503.11	4215460.35	7.98E-06	4.18E-06	1.22E-05	1.22E-06	6.35E-07	1.85E-06	5.50E-07	2.61E-07	8.11E-07
679	570502.9	4215469.97	7.86E-06	4.11E-06	1.20E-05	1.20E-06	6.26E-07	1.83E-06	5.42E-07	2.58E-07	7.99E-07
680	570502.68	4215479.59	7.72E-06	4.04E-06	1.18E-05	1.18E-06	6.15E-07	1.79E-06	5.32E-07	2.53E-07	7.85E-07
681	570502.46	4215489.2	7.57E-06	3.96E-06	1.15E-05	1.16E-06	6.03E-07	1.76E-06	5.22E-07	2.48E-07	7.70E-07
682	570495.49	4215505.68	7.46E-06	3.91E-06	1.14E-05	1.14E-06	5.94E-07	1.73E-06	5.14E-07	2.45E-07	7.59E-07
683	570488.74	4215512.53	7.50E-06	3.92E-06	1.14E-05	1.14E-06	5.97E-07	1.74E-06	5.17E-07	2.46E-07	7.62E-07
684	570481.99	4215519.38	7.51E-06	3.93E-06	1.14E-05	1.15E-06	5.98E-07	1.74E-06	5.18E-07	2.46E-07	7.64E-07
685	570475.23	4215526.24	7.51E-06	3.93E-06	1.14E-05	1.15E-06	5.97E-07	1.74E-06	5.17E-07	2.46E-07	7.63E-07
686	570468.48	4215533.09	7.52E-06	3.93E-06	1.15E-05	1.15E-06	5.98E-07	1.75E-06	5.18E-07	2.46E-07	7.64E-07
687	570461.73	4215539.94	7.52E-06	3.94E-06	1.15E-05	1.15E-06	5.99E-07	1.75E-06	5.18E-07	2.46E-07	7.65E-07
688	570454.98	4215546.8	7.51E-06	3.93E-06	1.14E-05	1.15E-06	5.98E-07	1.74E-06	5.18E-07	2.46E-07	7.64E-07
689	570448.22	4215553.65	7.48E-06	3.91E-06	1.14E-05	1.14E-06	5.95E-07	1.74E-06	5.15E-07	2.45E-07	7.60E-07
690	570441.47	4215560.5	7.41E-06	3.88E-06	1.13E-05	1.13E-06	5.90E-07	1.72E-06	5.11E-07	2.43E-07	7.54E-07
691	570434.72	4215567.36	7.30E-06	3.82E-06	1.11E-05	1.12E-06	5.81E-07	1.70E-06	5.03E-07	2.39E-07	7.42E-07
692	570427.97	4215574.21	7.17E-06	3.75E-06	1.09E-05	1.09E-06	5.70E-07	1.66E-06	4.94E-07	2.35E-07	7.28E-07
693	570421.21	4215581.06	7.00E-06	3.66E-06	1.07E-05	1.07E-06	5.57E-07	1.63E-06	4.83E-07	2.29E-07	7.12E-07
694	570414.46	4215587.92	6.81E-06	3.56E-06	1.04E-05	1.04E-06	5.42E-07	1.58E-06	4.70E-07	2.23E-07	6.93E-07
695	570407.71	4215594.77	6.58E-06	3.44E-06	1.00E-05	1.00E-06	5.24E-07	1.53E-06	4.53E-07	2.16E-07	6.69E-07
696	570400.96	4215601.62	6.33E-06	3.31E-06	9.65E-06	9.67E-07	5.04E-07	1.47E-06	4.37E-07	2.08E-07	6.44E-07
697	570394.2	4215608.47	6.08E-06	3.18E-06	9.26E-06	9.28E-07	4.84E-07	1.41E-06	4.19E-07	1.99E-07	6.18E-07
698	570387.45	4215615.33	5.82E-06	3.04E-06	8.86E-06	8.88E-07	4.63E-07	1.35E-06	4.01E-07	1.91E-07	5.91E-07
699	570380.7	4215622.18	5.54E-06	2.90E-06	8.43E-06	8.46E-07	4.41E-07	1.29E-06	3.82E-07	1.81E-07	5.63E-07
700	570373.94	4215629.03	5.25E-06	2.75E-06	8.00E-06	8.02E-07	4.18E-07	1.22E-06	3.62E-07	1.72E-07	5.34E-07
701	570367.19	4215635.89	4.97E-06	2.60E-06	7.57E-06	7.59E-07	3.96E-07	1.15E-06	3.43E-07	1.63E-07	5.05E-07
702	570360.44	4215642.74	4.70E-06	2.46E-06	7.15E-06	7.17E-07	3.74E-07	1.09E-06	3.24E-07	1.54E-07	4.77E-07
703	570353.69	4215649.59	4.43E-06	2.32E-06	6.74E-06	6.76E-07	3.52E-07	1.03E-06	3.05E-07	1.45E-07	4.50E-07
704	570514.89	4215350.32	8.21E-06	4.30E-06	1.25E-05	1.25E-06	6.54E-07	1.91E-06	5.66E-07	2.69E-07	8.35E-07
705	570514.68	4215359.84	8.23E-06	4.31E-06	1.25E-05	1.26E-06	6.55E-07	1.91E-06	5.67E-07	2.70E-07	8.37E-07
706	570514.46	4215369.37	8.23E-06	4.31E-06	1.25E-05	1.26E-06	6.55E-07	1.91E-06	5.67E-07	2.70E-07	8.37E-07
707	570514.25	4215378.89	8.23E-06	4.31E-06	1.25E-05	1.26E-06	6.55E-07	1.91E-06	5.67E-07	2.70E-07	8.37E-07
708	570514.03	4215388.42	8.21E-06	4.30E-06	1.25E-05	1.25E-06	6.53E-07	1.91E-06	5.66E-07	2.69E-07	8.35E-07
709	570513.82	4215397.94	8.18E-06	4.28E-06	1.25E-05	1.25E-06	6.51E-07	1.90E-06	5.64E-07	2.68E-07	8.32E-07
710	570513.6	4215407.47	8.14E-06	4.26E-06	1.24E-05	1.24E-06	6.48E-07	1.89E-06	5.61E-07	2.67E-07	8.28E-07
711	570513.39	4215416.99	8.09E-06	4.23E-06	1.23E-05	1.24E-06	6.44E-07	1.88E-06	5.57E-07	2.65E-07	8.23E-07
712	570512.74	4215445.57	7.87E-06	4.12E-06	1.20E-05	1.20E-06	6.27E-07	1.83E-06	5.43E-07	2.58E-07	8.00E-07
713	570512.53	4215455.09	7.78E-06	4.07E-06	1.19E-05	1.19E-06	6.19E-07	1.81E-06	5.36E-07	2.55E-07	7.91E-07
714	570512.31	4215464.62	7.68E-06	4.02E-06	1.17E-05	1.17E-06	6.11E-07	1.78E-06	5.30E-07	2.52E-07	7.81E-07
715	570512.1	4215474.14	7.57E-06	3.96E-06	1.15E-05	1.16E-06	6.02E-07	1.76E-06	5.22E-07	2.48E-07	7.69E-07
716	570511.88	4215483.67	7.44E-06	3.89E-06	1.13E-05	1.14E-06	5.92E-07	1.73E-06	5.13E-07	2.44E-07	7.57E-07
717	570511.67	4215493.2	7.30E-06	3.82E-06	1.11E-05	1.12E-06	5.81E-07	1.70E-06	5.03E-07	2.39E-07	7.43E-07
718	570504.77	4215509.51	7.17E-06	3.75E-06	1.09E-05	1.09E-06	5.70E-07	1.66E-06	4.94E-07	2.35E-07	7.29E-07
719	570498.08	4215516.29	7.19E-06	3.76E-06	1.10E-05	1.10E-06	5.72E-07	1.67E-06	4.96E-07	2.36E-07	7.31E-07
720	570491.39	4215523.08	7.21E-06	3.77E-06	1.10E-05	1.10E-06	5.73E-07	1.67E-06	4.97E-07	2.36E-07	7.33E-07
721	570484.71	4215529.87	7.21E-06	3.77E-06	1.10E-05	1.10E-06	5.73E-07	1.67E-06	4.97E-07	2.36E-07	7.33E-07
722	570478.02	4215536.65	7.19E-06	3.76E-06	1.09E-05	1.10E-06	5.72E-07	1.67E-06	4.95E-07	2.35E-07	7.31E-07
723	570471.33	4215543.44	7.16E-06	3.75E-06	1.09E-05	1.09E-06	5.70E-07	1.66E-06	4.93E-07	2.35E-07	7.28E-07
724	570464.65	4215550.23	7.15E-06	3.74E-06	1.09E-05	1.09E-06	5.69E-07	1.66E-06	4.93E-07	2.34E-07	7.27E-07
725	570457.96	4215557.01	7.13E-06	3.73E-06	1.09E-05	1.09E-06	5.67E-07	1.65E-06	4.91E-07	2.33E-07	7.24E-07
726	570451.27	4215563.8	7.08E-06	3.70E-06	1.08E-05	1.08E-06	5.63E-07	1.64E-06	4.88E-07	2.32E-07	7.19E-07
727	570444.58	4215570.59	7.00E-06	3.66E-06	1.07E-05	1.07E-06	5.57E-07	1.63E-06	4.82E-07	2.29E-07	7.12E-07
728	570437.9	4215577.37	6.89E-06	3.60E-06	1.05E-05	1.05E-06	5.48E-07	1.60E-06	4.75E-07	2.26E-07	7.00E-07

729	570431.21	4215584.16	6.75E-06	3.53E-06	1.03E-05	1.03E-06	5.37E-07	1.57E-06	4.65E-07	2.21E-07	6.86E-07
730	570424.52	4215590.95	6.58E-06	3.44E-06	1.00E-05	1.00E-06	5.24E-07	1.53E-06	4.54E-07	2.16E-07	6.69E-07
731	570417.84	4215597.73	6.39E-06	3.34E-06	9.74E-06	9.76E-07	5.09E-07	1.48E-06	4.41E-07	2.09E-07	6.50E-07
732	570411.15	4215604.52	6.18E-06	3.23E-06	9.42E-06	9.44E-07	4.92E-07	1.44E-06	4.26E-07	2.02E-07	6.28E-07
733	570404.46	4215611.31	5.95E-06	3.11E-06	9.06E-06	9.08E-07	4.73E-07	1.38E-06	4.10E-07	1.95E-07	6.05E-07
734	570397.78	4215618.09	5.71E-06	2.99E-06	8.69E-06	8.72E-07	4.54E-07	1.33E-06	3.93E-07	1.87E-07	5.80E-07
735	570391.09	4215624.88	5.45E-06	2.85E-06	8.31E-06	8.33E-07	4.34E-07	1.27E-06	3.76E-07	1.79E-07	5.55E-07
736	570384.4	4215631.67	5.20E-06	2.72E-06	7.92E-06	7.94E-07	4.14E-07	1.21E-06	3.58E-07	1.70E-07	5.29E-07
737	570377.71	4215638.45	4.94E-06	2.58E-06	7.52E-06	7.54E-07	3.93E-07	1.15E-06	3.40E-07	1.62E-07	5.02E-07
738	570371.03	4215645.24	4.68E-06	2.45E-06	7.12E-06	7.14E-07	3.72E-07	1.09E-06	3.22E-07	1.53E-07	4.75E-07
739	570364.34	4215652.03	4.42E-06	2.31E-06	6.73E-06	6.75E-07	3.52E-07	1.03E-06	3.04E-07	1.45E-07	4.49E-07
740	570357.65	4215658.81	4.17E-06	2.18E-06	6.35E-06	6.36E-07	3.32E-07	9.68E-07	2.87E-07	1.37E-07	4.24E-07
741	569937.09	4214979.91	2.94E-06	1.54E-06	4.48E-06	4.49E-07	2.34E-07	6.83E-07	2.03E-07	9.63E-08	2.99E-07
742	569941.77	4214988.41	3.15E-06	1.65E-06	4.80E-06	4.81E-07	2.51E-07	7.31E-07	2.17E-07	1.03E-07	3.20E-07
743	569895.61	4214925.21	2.12E-06	1.11E-06	3.24E-06	3.24E-07	1.69E-07	4.94E-07	1.46E-07	6.96E-08	2.16E-07
744	569900.28	4214933.71	2.20E-06	1.15E-06	3.35E-06	3.36E-07	1.75E-07	5.11E-07	1.51E-07	7.20E-08	2.23E-07
745	569904.96	4214942.22	2.29E-06	1.20E-06	3.48E-06	3.49E-07	1.82E-07	5.31E-07	1.58E-07	7.49E-08	2.32E-07
746	569909.63	4214950.72	2.39E-06	1.25E-06	3.64E-06	3.65E-07	1.90E-07	5.55E-07	1.65E-07	7.83E-08	2.43E-07
747	569914.31	4214959.22	2.52E-06	1.32E-06	3.83E-06	3.84E-07	2.00E-07	5.84E-07	1.73E-07	8.24E-08	2.56E-07
748	569918.98	4214967.72	2.67E-06	1.40E-06	4.07E-06	4.08E-07	2.12E-07	6.20E-07	1.84E-07	8.75E-08	2.71E-07
749	569923.66	4214976.22	2.84E-06	1.49E-06	4.33E-06	4.34E-07	2.26E-07	6.60E-07	1.96E-07	9.31E-08	2.89E-07
750	569928.33	4214984.73	3.03E-06	1.59E-06	4.62E-06	4.63E-07	2.41E-07	7.05E-07	2.09E-07	9.94E-08	3.09E-07
751	569933.01	4214993.23	3.26E-06	1.71E-06	4.96E-06	4.98E-07	2.59E-07	7.57E-07	2.25E-07	1.07E-07	3.31E-07
752	569877.5	4214913.03	2.04E-06	1.07E-06	3.11E-06	3.12E-07	1.63E-07	4.75E-07	1.41E-07	6.70E-08	2.08E-07
753	569882.17	4214921.53	2.10E-06	1.10E-06	3.20E-06	3.21E-07	1.67E-07	4.88E-07	1.45E-07	6.88E-08	2.14E-07
754	569886.85	4214930.03	2.17E-06	1.13E-06	3.30E-06	3.31E-07	1.73E-07	5.04E-07	1.49E-07	7.10E-08	2.20E-07
755	569891.52	4214938.53	2.25E-06	1.18E-06	3.42E-06	3.43E-07	1.79E-07	5.22E-07	1.55E-07	7.36E-08	2.28E-07
756	569896.19	4214947.03	2.34E-06	1.22E-06	3.56E-06	3.57E-07	1.86E-07	5.44E-07	1.61E-07	7.67E-08	2.38E-07
757	569900.87	4214955.54	2.45E-06	1.28E-06	3.73E-06	3.74E-07	1.95E-07	5.69E-07	1.69E-07	8.03E-08	2.49E-07
758	569905.54	4214964.04	2.59E-06	1.36E-06	3.95E-06	3.96E-07	2.06E-07	6.03E-07	1.79E-07	8.50E-08	2.64E-07
759	569910.22	4214972.54	2.76E-06	1.44E-06	4.20E-06	4.21E-07	2.19E-07	6.40E-07	1.90E-07	9.03E-08	2.80E-07
760	569914.89	4214981.04	2.94E-06	1.54E-06	4.47E-06	4.48E-07	2.34E-07	6.82E-07	2.02E-07	9.62E-08	2.98E-07
761	569919.57	4214989.54	3.14E-06	1.64E-06	4.79E-06	4.80E-07	2.50E-07	7.30E-07	2.17E-07	1.03E-07	3.19E-07
762	569924.24	4214998.05	3.38E-06	1.77E-06	5.15E-06	5.17E-07	2.69E-07	7.86E-07	2.33E-07	1.11E-07	3.44E-07
763	569928.92	4215006.55	3.66E-06	1.91E-06	5.57E-06	5.58E-07	2.91E-07	8.49E-07	2.52E-07	1.20E-07	3.72E-07
764	569868.73	4214917.84	2.08E-06	1.09E-06	3.18E-06	3.18E-07	1.66E-07	4.84E-07	1.44E-07	6.83E-08	2.12E-07
765	569873.41	4214926.35	2.14E-06	1.12E-06	3.27E-06	3.27E-07	1.71E-07	4.98E-07	1.48E-07	7.02E-08	2.18E-07
766	569878.08	4214934.85	2.21E-06	1.16E-06	3.37E-06	3.38E-07	1.76E-07	5.14E-07	1.53E-07	7.25E-08	2.25E-07
767	569882.76	4214943.35	2.30E-06	1.20E-06	3.50E-06	3.51E-07	1.83E-07	5.34E-07	1.58E-07	7.53E-08	2.34E-07
768	569887.43	4214951.85	2.40E-06	1.26E-06	3.65E-06	3.66E-07	1.91E-07	5.57E-07	1.65E-07	7.86E-08	2.44E-07
769	569892.11	4214960.35	2.53E-06	1.32E-06	3.85E-06	3.86E-07	2.01E-07	5.87E-07	1.74E-07	8.28E-08	2.57E-07
770	569896.78	4214968.86	2.68E-06	1.40E-06	4.08E-06	4.09E-07	2.13E-07	6.22E-07	1.85E-07	8.78E-08	2.72E-07
771	569901.46	4214977.36	2.85E-06	1.49E-06	4.34E-06	4.35E-07	2.27E-07	6.62E-07	1.96E-07	9.33E-08	2.90E-07
772	569906.13	4214985.86	3.04E-06	1.59E-06	4.62E-06	4.63E-07	2.42E-07	7.05E-07	2.09E-07	9.94E-08	3.09E-07
773	569910.81	4214994.36	3.26E-06	1.71E-06	4.97E-06	4.98E-07	2.59E-07	7.57E-07	2.25E-07	1.07E-07	3.32E-07
774	569915.48	4215002.86	3.52E-06	1.84E-06	5.36E-06	5.37E-07	2.80E-07	8.17E-07	2.42E-07	1.15E-07	3.57E-07
775	569920.15	4215011.37	3.81E-06	1.99E-06	5.80E-06	5.81E-07	3.03E-07	8.84E-07	2.62E-07	1.25E-07	3.87E-07
776	569859.97	4214922.66	2.13E-06	1.11E-06	3.25E-06	3.25E-07	1.70E-07	4.95E-07	1.47E-07	6.98E-08	2.17E-07
777	569864.65	4214931.16	2.19E-06	1.15E-06	3.34E-06	3.34E-07	1.74E-07	5.09E-07	1.51E-07	7.17E-08	2.23E-07
778	569869.32	4214939.67	2.26E-06	1.18E-06	3.45E-06	3.46E-07	1.80E-07	5.26E-07	1.56E-07	7.41E-08	2.30E-07
779	569873.99	4214948.17	2.35E-06	1.23E-06	3.58E-06	3.59E-07	1.87E-07	5.47E-07	1.62E-07	7.71E-08	2.39E-07
780	569878.67	4214956.67	2.46E-06	1.29E-06	3.75E-06	3.76E-07	1.96E-07	5.72E-07	1.70E-07	8.07E-08	2.51E-07
781	569883.34	4214965.17	2.61E-06	1.36E-06	3.97E-06	3.98E-07	2.08E-07	6.06E-07	1.80E-07	8.54E-08	2.65E-07
782	569888.02	4214973.67	2.77E-06	1.45E-06	4.22E-06	4.23E-07	2.20E-07	6.43E-07	1.91E-07	9.07E-08	2.81E-07
783	569892.69	4214982.18	2.95E-06	1.54E-06	4.49E-06	4.50E-07	2.34E-07	6.84E-07	2.03E-07	9.65E-08	3.00E-07
784	569897.37	4214990.68	3.15E-06	1.65E-06	4.80E-06	4.81E-07	2.51E-07	7.31E-07	2.17E-07	1.03E-07	3.20E-07
785	569902.04	4214999.18	3.39E-06	1.77E-06	5.16E-06	5.17E-07	2.70E-07	7.87E-07	2.33E-07	1.11E-07	3.44E-07
786	569906.72	4215007.68	3.66E-06	1.91E-06	5.57E-06	5.59E-07	2.91E-07	8.50E-07	2.52E-07	1.20E-07	3.72E-07
787	569911.39	4215016.18	3.97E-06	2.08E-06	6.04E-06	6.06E-07	3.16E-07	9.21E-07	2.73E-07	1.30E-07	4.03E-07
788	569851.21	4214927.48	2.18E-06	1.14E-06	3.32E-06	3.32E-07	1.73E-07	5.06E-07	1.50E-07	7.13E-08	2.21E-07
789	569855.88	4214935.98	2.24E-06	1.17E-06	3.41E-06	3.42E-07	1.78E-07	5.20E-07	1.54E-07	7.33E-08	2.28E-07

790	569860.56	4214944.48	2.32E-06	1.21E-06	3.53E-06	3.54E-07	1.84E-07	5.38E-07	1.60E-07	7.59E-08	2.36E-07
791	569865.23	4214952.99	2.42E-06	1.26E-06	3.68E-06	3.69E-07	1.92E-07	5.61E-07	1.67E-07	7.91E-08	2.46E-07
792	569869.91	4214961.49	2.54E-06	1.33E-06	3.87E-06	3.88E-07	2.02E-07	5.91E-07	1.75E-07	8.33E-08	2.59E-07
793	569874.58	4214969.99	2.69E-06	1.41E-06	4.10E-06	4.11E-07	2.14E-07	6.26E-07	1.86E-07	8.82E-08	2.74E-07
794	569879.26	4214978.49	2.86E-06	1.50E-06	4.36E-06	4.37E-07	2.28E-07	6.65E-07	1.97E-07	9.37E-08	2.91E-07
795	569883.93	4214986.99	3.05E-06	1.59E-06	4.64E-06	4.65E-07	2.42E-07	7.07E-07	2.10E-07	9.98E-08	3.10E-07
796	569888.6	4214995.5	3.27E-06	1.71E-06	4.98E-06	4.99E-07	2.60E-07	7.60E-07	2.25E-07	1.07E-07	3.33E-07
797	569893.28	4215004	3.52E-06	1.84E-06	5.37E-06	5.38E-07	2.80E-07	8.18E-07	2.43E-07	1.15E-07	3.58E-07
798	569897.95	4215012.5	3.81E-06	1.99E-06	5.80E-06	5.82E-07	3.03E-07	8.85E-07	2.62E-07	1.25E-07	3.87E-07
799	569902.63	4215021	4.13E-06	2.16E-06	6.30E-06	6.31E-07	3.29E-07	9.60E-07	2.85E-07	1.35E-07	4.20E-07
800	569842.45	4214932.3	2.22E-06	1.16E-06	3.38E-06	3.39E-07	1.77E-07	5.16E-07	1.53E-07	7.27E-08	2.26E-07
801	569847.12	4214940.8	2.29E-06	1.20E-06	3.48E-06	3.49E-07	1.82E-07	5.31E-07	1.58E-07	7.49E-08	2.33E-07
802	569851.79	4214949.3	2.37E-06	1.24E-06	3.62E-06	3.62E-07	1.89E-07	5.51E-07	1.64E-07	7.78E-08	2.41E-07
803	569856.47	4214957.8	2.48E-06	1.30E-06	3.78E-06	3.79E-07	1.98E-07	5.77E-07	1.71E-07	8.14E-08	2.53E-07
804	569861.14	4214966.31	2.63E-06	1.37E-06	4.00E-06	4.01E-07	2.09E-07	6.10E-07	1.81E-07	8.60E-08	2.67E-07
805	569865.82	4214974.81	2.78E-06	1.46E-06	4.24E-06	4.25E-07	2.21E-07	6.46E-07	1.92E-07	9.11E-08	2.83E-07
806	569870.49	4214983.31	2.96E-06	1.55E-06	4.50E-06	4.51E-07	2.35E-07	6.87E-07	2.04E-07	9.68E-08	3.01E-07
807	569875.17	4214991.81	3.16E-06	1.65E-06	4.81E-06	4.82E-07	2.51E-07	7.34E-07	2.18E-07	1.03E-07	3.21E-07
808	569879.84	4215000.31	3.40E-06	1.78E-06	5.17E-06	5.19E-07	2.70E-07	7.89E-07	2.34E-07	1.11E-07	3.45E-07
809	569884.52	4215008.82	3.66E-06	1.92E-06	5.58E-06	5.60E-07	2.92E-07	8.51E-07	2.53E-07	1.20E-07	3.73E-07
810	569889.19	4215017.32	3.97E-06	2.08E-06	6.04E-06	6.06E-07	3.16E-07	9.21E-07	2.73E-07	1.30E-07	4.03E-07
811	569893.87	4215025.82	4.31E-06	2.25E-06	6.56E-06	6.58E-07	3.43E-07	1.00E-06	2.97E-07	1.41E-07	4.38E-07
812	569833.68	4214937.12	2.27E-06	1.19E-06	3.45E-06	3.46E-07	1.80E-07	5.27E-07	1.56E-07	7.43E-08	2.31E-07
813	569838.36	4214945.62	2.34E-06	1.22E-06	3.57E-06	3.57E-07	1.86E-07	5.44E-07	1.61E-07	7.67E-08	2.38E-07
814	569843.03	4214954.12	2.43E-06	1.27E-06	3.71E-06	3.72E-07	1.94E-07	5.65E-07	1.68E-07	7.97E-08	2.47E-07
815	569847.71	4214962.62	2.56E-06	1.34E-06	3.90E-06	3.91E-07	2.04E-07	5.95E-07	1.76E-07	8.39E-08	2.60E-07
816	569852.38	4214971.12	2.71E-06	1.42E-06	4.12E-06	4.13E-07	2.15E-07	6.29E-07	1.87E-07	8.87E-08	2.75E-07
817	569857.06	4214979.63	2.87E-06	1.50E-06	4.37E-06	4.38E-07	2.28E-07	6.67E-07	1.98E-07	9.41E-08	2.92E-07
818	569861.73	4214988.13	3.05E-06	1.60E-06	4.65E-06	4.66E-07	2.43E-07	7.10E-07	2.11E-07	1.00E-07	3.11E-07
819	569866.4	4214996.63	3.28E-06	1.71E-06	4.99E-06	5.00E-07	2.61E-07	7.61E-07	2.26E-07	1.07E-07	3.33E-07
820	569871.08	4215005.13	3.53E-06	1.85E-06	5.37E-06	5.39E-07	2.81E-07	8.19E-07	2.43E-07	1.16E-07	3.59E-07
821	569875.75	4215013.63	3.81E-06	1.99E-06	5.80E-06	5.82E-07	3.03E-07	8.85E-07	2.62E-07	1.25E-07	3.87E-07
822	569880.43	4215022.14	4.13E-06	2.16E-06	6.29E-06	6.30E-07	3.28E-07	9.58E-07	2.84E-07	1.35E-07	4.20E-07
823	569885.1	4215030.64	4.49E-06	2.35E-06	6.83E-06	6.85E-07	3.57E-07	1.04E-06	3.09E-07	1.47E-07	4.56E-07
824	569941.2	4215132.66	2.70E-05	1.41E-05	4.11E-05	4.12E-06	2.15E-06	6.27E-06	1.86E-06	8.84E-07	2.74E-06
825	569945.87	4215141.16	3.01E-05	1.58E-05	4.59E-05	4.60E-06	2.40E-06	6.99E-06	2.07E-06	9.86E-07	3.06E-06
826	569950.55	4215149.66	3.31E-05	1.73E-05	5.05E-05	5.06E-06	2.64E-06	7.70E-06	2.28E-06	1.09E-06	3.37E-06
827	569824.92	4214941.93	2.32E-06	1.21E-06	3.53E-06	3.54E-07	1.84E-07	5.38E-07	1.60E-07	7.59E-08	2.36E-07
828	569829.59	4214950.44	2.40E-06	1.25E-06	3.65E-06	3.66E-07	1.91E-07	5.57E-07	1.65E-07	7.86E-08	2.44E-07
829	569834.27	4214958.94	2.51E-06	1.31E-06	3.82E-06	3.83E-07	1.99E-07	5.82E-07	1.73E-07	8.21E-08	2.55E-07
830	569838.94	4214967.44	2.64E-06	1.38E-06	4.02E-06	4.03E-07	2.10E-07	6.13E-07	1.82E-07	8.65E-08	2.68E-07
831	569843.62	4214975.94	2.79E-06	1.46E-06	4.25E-06	4.26E-07	2.22E-07	6.48E-07	1.92E-07	9.14E-08	2.84E-07
832	569848.29	4214984.44	2.96E-06	1.55E-06	4.51E-06	4.52E-07	2.36E-07	6.87E-07	2.04E-07	9.70E-08	3.01E-07
833	569852.97	4214992.95	3.16E-06	1.65E-06	4.82E-06	4.83E-07	2.52E-07	7.35E-07	2.18E-07	1.04E-07	3.22E-07
834	569857.64	4215001.45	3.40E-06	1.78E-06	5.17E-06	5.19E-07	2.70E-07	7.89E-07	2.34E-07	1.11E-07	3.45E-07
835	569862.32	4215009.95	3.66E-06	1.91E-06	5.57E-06	5.59E-07	2.91E-07	8.50E-07	2.52E-07	1.20E-07	3.72E-07
836	569866.99	4215018.45	3.96E-06	2.07E-06	6.02E-06	6.04E-07	3.15E-07	9.19E-07	2.73E-07	1.30E-07	4.02E-07
837	569871.67	4215026.95	4.29E-06	2.24E-06	6.53E-06	6.54E-07	3.41E-07	9.95E-07	2.95E-07	1.40E-07	4.36E-07
838	569876.34	4215035.46	4.66E-06	2.44E-06	7.10E-06	7.12E-07	3.71E-07	1.08E-06	3.21E-07	1.53E-07	4.74E-07
839	569927.76	4215128.98	2.33E-05	1.22E-05	3.55E-05	3.56E-06	1.86E-06	5.42E-06	1.61E-06	7.64E-07	2.37E-06
840	569932.44	4215137.48	2.60E-05	1.36E-05	3.96E-05	3.97E-06	2.07E-06	6.04E-06	1.79E-06	8.52E-07	2.64E-06
841	569937.11	4215145.98	2.86E-05	1.50E-05	4.36E-05	4.37E-06	2.28E-06	6.65E-06	1.97E-06	9.38E-07	2.91E-06
842	569941.78	4215154.48	3.12E-05	1.63E-05	4.76E-05	4.77E-06	2.48E-06	7.25E-06	2.15E-06	1.02E-06	3.17E-06
843	569816.16	4214946.75	2.37E-06	1.24E-06	3.61E-06	3.62E-07	1.88E-07	5.50E-07	1.63E-07	7.76E-08	2.41E-07
844	569820.83	4214955.25	2.46E-06	1.29E-06	3.74E-06	3.75E-07	1.96E-07	5.71E-07	1.69E-07	8.05E-08	2.50E-07
845	569825.51	4214963.76	2.58E-06	1.35E-06	3.93E-06	3.94E-07	2.05E-07	5.99E-07	1.78E-07	8.45E-08	2.62E-07
846	569830.18	4214972.26	2.72E-06	1.42E-06	4.14E-06	4.15E-07	2.16E-07	6.32E-07	1.87E-07	8.91E-08	2.76E-07
847	569834.86	4214980.76	2.88E-06	1.50E-06	4.38E-06	4.39E-07	2.29E-07	6.68E-07	1.98E-07	9.42E-08	2.92E-07
848	569839.53	4214989.26	3.06E-06	1.60E-06	4.66E-06	4.67E-07	2.43E-07	7.10E-07	2.11E-07	1.00E-07	3.11E-07
849	569844.2	4214997.76	3.27E-06	1.71E-06	4.98E-06	5.00E-07	2.60E-07	7.60E-07	2.26E-07	1.07E-07	3.33E-07
850	569848.88	4215006.27	3.52E-06	1.84E-06	5.36E-06	5.37E-07	2.80E-07	8.17E-07	2.42E-07	1.15E-07	3.58E-07

851	569853.55	4215014.77	3.79E-06	1.99E-06	5.78E-06	5.79E-07	3.02E-07	8.81E-07	2.61E-07	1.24E-07	3.86E-07
852	569858.23	4215023.27	4.10E-06	2.14E-06	6.24E-06	6.26E-07	3.26E-07	9.52E-07	2.82E-07	1.34E-07	4.17E-07
853	569862.9	4215031.77	4.44E-06	2.32E-06	6.77E-06	6.78E-07	3.53E-07	1.03E-06	3.06E-07	1.46E-07	4.52E-07
854	569914.32	4215125.29	1.94E-05	1.01E-05	2.95E-05	2.96E-06	1.54E-06	4.50E-06	1.34E-06	6.35E-07	1.97E-06
855	569919	4215133.79	2.28E-05	1.19E-05	3.48E-05	3.49E-06	1.82E-06	5.30E-06	1.57E-06	7.48E-07	2.32E-06
856	569923.67	4215142.3	2.49E-05	1.30E-05	3.79E-05	3.80E-06	1.98E-06	5.79E-06	1.72E-06	8.16E-07	2.53E-06
857	569928.35	4215150.8	2.72E-05	1.42E-05	4.15E-05	4.16E-06	2.17E-06	6.32E-06	1.88E-06	8.92E-07	2.77E-06
858	569933.02	4215159.3	2.94E-05	1.54E-05	4.48E-05	4.49E-06	2.34E-06	6.83E-06	2.03E-06	9.64E-07	2.99E-06
859	569802.72	4214943.07	2.35E-06	1.23E-06	3.58E-06	3.59E-07	1.87E-07	5.46E-07	1.62E-07	7.70E-08	2.39E-07
860	569807.39	4214951.57	2.43E-06	1.27E-06	3.70E-06	3.70E-07	1.93E-07	5.64E-07	1.67E-07	7.95E-08	2.47E-07
861	569812.07	4214960.07	2.53E-06	1.32E-06	3.85E-06	3.86E-07	2.01E-07	5.87E-07	1.74E-07	8.28E-08	2.57E-07
862	569816.74	4214968.57	2.65E-06	1.39E-06	4.04E-06	4.05E-07	2.11E-07	6.16E-07	1.83E-07	8.69E-08	2.70E-07
863	569821.42	4214977.08	2.80E-06	1.46E-06	4.26E-06	4.27E-07	2.23E-07	6.50E-07	1.93E-07	9.17E-08	2.84E-07
864	569826.09	4214985.58	2.96E-06	1.55E-06	4.51E-06	4.52E-07	2.36E-07	6.87E-07	2.04E-07	9.70E-08	3.01E-07
865	569830.77	4214994.08	3.16E-06	1.65E-06	4.81E-06	4.82E-07	2.51E-07	7.33E-07	2.18E-07	1.03E-07	3.21E-07
866	569835.44	4215002.58	3.38E-06	1.77E-06	5.15E-06	5.17E-07	2.69E-07	7.86E-07	2.33E-07	1.11E-07	3.44E-07
867	569840.12	4215011.08	3.64E-06	1.90E-06	5.54E-06	5.56E-07	2.90E-07	8.45E-07	2.51E-07	1.19E-07	3.70E-07
868	569844.79	4215019.59	3.93E-06	2.05E-06	5.98E-06	5.99E-07	3.12E-07	9.12E-07	2.70E-07	1.29E-07	3.99E-07
869	569849.47	4215028.09	4.24E-06	2.22E-06	6.46E-06	6.47E-07	3.37E-07	9.85E-07	2.92E-07	1.39E-07	4.31E-07
870	569854.14	4215036.59	4.59E-06	2.40E-06	7.00E-06	7.01E-07	3.66E-07	1.07E-06	3.17E-07	1.50E-07	4.67E-07
871	569905.56	4215130.11	1.92E-05	1.00E-05	2.92E-05	2.93E-06	1.53E-06	4.46E-06	1.32E-06	6.29E-07	1.95E-06
872	569910.24	4215138.61	2.22E-05	1.16E-05	3.38E-05	3.39E-06	1.76E-06	5.15E-06	1.53E-06	7.26E-07	2.25E-06
873	569914.91	4215147.11	2.39E-05	1.25E-05	3.63E-05	3.64E-06	1.90E-06	5.54E-06	1.64E-06	7.81E-07	2.43E-06
874	569919.58	4215155.62	2.59E-05	1.35E-05	3.94E-05	3.95E-06	2.06E-06	6.02E-06	1.78E-06	8.48E-07	2.63E-06
875	569924.26	4215164.12	2.78E-05	1.45E-05	4.23E-05	4.24E-06	2.21E-06	6.45E-06	1.91E-06	9.09E-07	2.82E-06
876	569792.9	4214938.94	2.33E-06	1.22E-06	3.55E-06	3.56E-07	1.86E-07	5.42E-07	1.61E-07	7.65E-08	2.37E-07
877	569793.96	4214947.89	2.41E-06	1.26E-06	3.66E-06	3.67E-07	1.91E-07	5.59E-07	1.66E-07	7.88E-08	2.45E-07
878	569798.63	4214956.39	2.49E-06	1.30E-06	3.79E-06	3.80E-07	1.98E-07	5.78E-07	1.71E-07	8.15E-08	2.53E-07
879	569803.31	4214964.89	2.60E-06	1.36E-06	3.96E-06	3.97E-07	2.07E-07	6.04E-07	1.79E-07	8.52E-08	2.64E-07
880	569807.98	4214973.39	2.73E-06	1.43E-06	4.16E-06	4.17E-07	2.17E-07	6.34E-07	1.88E-07	8.94E-08	2.78E-07
881	569812.66	4214981.89	2.88E-06	1.50E-06	4.38E-06	4.39E-07	2.29E-07	6.68E-07	1.98E-07	9.42E-08	2.92E-07
882	569817.33	4214990.4	3.05E-06	1.60E-06	4.65E-06	4.66E-07	2.43E-07	7.09E-07	2.10E-07	9.99E-08	3.10E-07
883	569822	4214998.9	3.26E-06	1.70E-06	4.96E-06	4.98E-07	2.59E-07	7.57E-07	2.25E-07	1.07E-07	3.31E-07
884	569826.68	4215007.4	3.49E-06	1.83E-06	5.32E-06	5.33E-07	2.78E-07	8.11E-07	2.41E-07	1.14E-07	3.55E-07
885	569831.35	4215015.9	3.76E-06	1.97E-06	5.72E-06	5.74E-07	2.99E-07	8.73E-07	2.59E-07	1.23E-07	3.82E-07
886	569836.03	4215024.4	4.05E-06	2.12E-06	6.16E-06	6.18E-07	3.22E-07	9.40E-07	2.79E-07	1.33E-07	4.11E-07
887	569840.7	4215032.91	4.37E-06	2.29E-06	6.66E-06	6.67E-07	3.48E-07	1.02E-06	3.01E-07	1.43E-07	4.44E-07
888	569896.8	4215134.93	1.90E-05	9.94E-06	2.89E-05	2.90E-06	1.51E-06	4.41E-06	1.31E-06	6.23E-07	1.93E-06
889	569901.47	4215143.43	2.14E-05	1.12E-05	3.27E-05	3.27E-06	1.71E-06	4.98E-06	1.48E-06	7.02E-07	2.18E-06
890	569906.15	4215151.93	2.29E-05	1.20E-05	3.48E-05	3.49E-06	1.82E-06	5.31E-06	1.58E-06	7.49E-07	2.32E-06
891	569910.82	4215160.43	2.47E-05	1.29E-05	3.76E-05	3.77E-06	1.96E-06	5.73E-06	1.70E-06	8.08E-07	2.51E-06
892	569915.5	4215168.94	2.62E-05	1.37E-05	3.99E-05	4.00E-06	2.08E-06	6.08E-06	1.81E-06	8.58E-07	2.66E-06
893	569784.15	4214943.89	2.38E-06	1.25E-06	3.63E-06	3.64E-07	1.90E-07	5.54E-07	1.64E-07	7.81E-08	2.42E-07
894	569783.11	4214935.08	2.32E-06	1.22E-06	3.54E-06	3.55E-07	1.85E-07	5.40E-07	1.60E-07	7.62E-08	2.36E-07
895	569789.87	4214961.21	2.56E-06	1.34E-06	3.89E-06	3.90E-07	2.03E-07	5.94E-07	1.76E-07	8.37E-08	2.60E-07
896	569794.54	4214969.71	2.67E-06	1.40E-06	4.07E-06	4.08E-07	2.13E-07	6.21E-07	1.84E-07	8.76E-08	2.72E-07
897	569799.22	4214978.21	2.81E-06	1.47E-06	4.27E-06	4.28E-07	2.23E-07	6.52E-07	1.93E-07	9.19E-08	2.85E-07
898	569803.89	4214986.71	2.96E-06	1.55E-06	4.50E-06	4.52E-07	2.35E-07	6.87E-07	2.04E-07	9.69E-08	3.01E-07
899	569808.57	4214995.21	3.14E-06	1.64E-06	4.79E-06	4.80E-07	2.50E-07	7.30E-07	2.17E-07	1.03E-07	3.20E-07
900	569813.24	4215003.72	3.36E-06	1.76E-06	5.11E-06	5.13E-07	2.67E-07	7.80E-07	2.31E-07	1.10E-07	3.41E-07
901	569817.92	4215012.22	3.60E-06	1.88E-06	5.48E-06	5.49E-07	2.86E-07	8.36E-07	2.48E-07	1.18E-07	3.66E-07
902	569822.59	4215020.72	3.86E-06	2.02E-06	5.89E-06	5.90E-07	3.07E-07	8.98E-07	2.66E-07	1.27E-07	3.93E-07
903	569827.27	4215029.22	4.16E-06	2.18E-06	6.33E-06	6.35E-07	3.31E-07	9.66E-07	2.87E-07	1.36E-07	4.23E-07
904	569831.94	4215037.72	4.49E-06	2.35E-06	6.84E-06	6.85E-07	3.57E-07	1.04E-06	3.09E-07	1.47E-07	4.56E-07
905	569888.04	4215139.75	1.85E-05	9.70E-06	2.82E-05	2.83E-06	1.48E-06	4.31E-06	1.28E-06	6.08E-07	1.89E-06
906	569892.71	4215148.25	2.06E-05	1.08E-05	3.14E-05	3.15E-06	1.64E-06	4.80E-06	1.42E-06	6.76E-07	2.10E-06
907	569897.38	4215156.75	2.18E-05	1.14E-05	3.33E-05	3.34E-06	1.74E-06	5.07E-06	1.51E-06	7.15E-07	2.22E-06
908	569902.06	4215165.25	2.35E-05	1.23E-05	3.58E-05	3.59E-06	1.87E-06	5.46E-06	1.62E-06	7.70E-07	2.39E-06
909	569906.73	4215173.75	2.46E-05	1.29E-05	3.75E-05	3.76E-06	1.96E-06	5.71E-06	1.69E-06	8.06E-07	2.50E-06
910	569775.31	4214948.03	2.43E-06	1.27E-06	3.71E-06	3.72E-07	1.94E-07	5.65E-07	1.68E-07	7.97E-08	2.47E-07
911	569774.18	4214938.54	2.36E-06	1.24E-06	3.60E-06	3.61E-07	1.88E-07	5.49E-07	1.63E-07	7.74E-08	2.40E-07

912	569773.06	4214929.05	2.31E-06	1.21E-06	3.52E-06	3.53E-07	1.84E-07	5.37E-07	1.59E-07	7.58E-08	2.35E-07
913	569776.43	4214957.52	2.52E-06	1.32E-06	3.84E-06	3.85E-07	2.01E-07	5.86E-07	1.74E-07	8.26E-08	2.57E-07
914	569781.11	4214966.02	2.62E-06	1.37E-06	4.00E-06	4.01E-07	2.09E-07	6.10E-07	1.81E-07	8.60E-08	2.67E-07
915	569785.78	4214974.53	2.74E-06	1.43E-06	4.18E-06	4.19E-07	2.18E-07	6.37E-07	1.89E-07	8.98E-08	2.79E-07
916	569790.45	4214983.03	2.88E-06	1.51E-06	4.39E-06	4.40E-07	2.29E-07	6.69E-07	1.98E-07	9.44E-08	2.93E-07
917	569795.13	4214991.53	3.04E-06	1.59E-06	4.63E-06	4.65E-07	2.42E-07	7.07E-07	2.10E-07	9.97E-08	3.09E-07
918	569799.8	4215000.03	3.23E-06	1.69E-06	4.92E-06	4.93E-07	2.57E-07	7.50E-07	2.23E-07	1.06E-07	3.28E-07
919	569804.48	4215008.53	3.45E-06	1.80E-06	5.25E-06	5.26E-07	2.74E-07	8.00E-07	2.37E-07	1.13E-07	3.50E-07
920	569809.15	4215017.04	3.69E-06	1.93E-06	5.62E-06	5.64E-07	2.94E-07	8.57E-07	2.54E-07	1.21E-07	3.75E-07
921	569813.83	4215025.54	3.96E-06	2.07E-06	6.04E-06	6.05E-07	3.15E-07	9.21E-07	2.73E-07	1.30E-07	4.03E-07
922	569818.5	4215034.04	4.26E-06	2.23E-06	6.49E-06	6.51E-07	3.39E-07	9.90E-07	2.94E-07	1.40E-07	4.33E-07
923	569823.18	4215042.54	4.59E-06	2.40E-06	7.00E-06	7.01E-07	3.65E-07	1.07E-06	3.16E-07	1.50E-07	4.67E-07
924	569879.27	4215144.56	1.79E-05	9.36E-06	2.73E-05	2.73E-06	1.42E-06	4.16E-06	1.23E-06	5.86E-07	1.82E-06
925	569883.95	4215153.07	1.98E-05	1.03E-05	3.01E-05	3.02E-06	1.57E-06	4.59E-06	1.36E-06	6.48E-07	2.01E-06
926	569888.62	4215161.57	2.08E-05	1.09E-05	3.17E-05	3.18E-06	1.65E-06	4.83E-06	1.43E-06	6.81E-07	2.11E-06
927	569893.3	4215170.07	2.21E-05	1.16E-05	3.36E-05	3.37E-06	1.76E-06	5.13E-06	1.52E-06	7.24E-07	2.25E-06
928	569897.97	4215178.57	2.30E-05	1.21E-05	3.51E-05	3.52E-06	1.83E-06	5.35E-06	1.59E-06	7.55E-07	2.34E-06
929	569766.56	4214953.02	2.49E-06	1.30E-06	3.79E-06	3.80E-07	1.98E-07	5.79E-07	1.72E-07	8.16E-08	2.53E-07
930	569765.46	4214943.7	2.42E-06	1.26E-06	3.68E-06	3.69E-07	1.92E-07	5.61E-07	1.67E-07	7.92E-08	2.46E-07
931	569764.36	4214934.38	2.36E-06	1.23E-06	3.59E-06	3.60E-07	1.88E-07	5.48E-07	1.63E-07	7.73E-08	2.40E-07
932	569763.25	4214925.06	2.32E-06	1.21E-06	3.53E-06	3.54E-07	1.85E-07	5.39E-07	1.60E-07	7.60E-08	2.36E-07
933	569777.2	4214820.65	1.38E-06	7.20E-07	2.10E-06	2.10E-07	1.10E-07	3.20E-07	9.49E-08	4.51E-08	1.40E-07
934	569782.9	4214813.19	1.32E-06	6.89E-07	2.01E-06	2.01E-07	1.05E-07	3.06E-07	9.07E-08	4.31E-08	1.34E-07
935	569767.67	4214962.34	2.59E-06	1.35E-06	3.94E-06	3.95E-07	2.06E-07	6.01E-07	1.78E-07	8.48E-08	2.63E-07
936	569772.34	4214970.84	2.69E-06	1.41E-06	4.10E-06	4.11E-07	2.14E-07	6.25E-07	1.86E-07	8.82E-08	2.74E-07
937	569777.02	4214979.34	2.81E-06	1.47E-06	4.28E-06	4.30E-07	2.24E-07	6.53E-07	1.94E-07	9.22E-08	2.86E-07
938	569781.69	4214987.85	2.95E-06	1.55E-06	4.50E-06	4.51E-07	2.35E-07	6.86E-07	2.04E-07	9.67E-08	3.00E-07
939	569786.37	4214996.35	3.12E-06	1.63E-06	4.75E-06	4.77E-07	2.48E-07	7.25E-07	2.15E-07	1.02E-07	3.17E-07
940	569791.04	4215004.85	3.31E-06	1.73E-06	5.04E-06	5.05E-07	2.63E-07	7.69E-07	2.28E-07	1.08E-07	3.36E-07
941	569795.72	4215013.35	3.52E-06	1.84E-06	5.36E-06	5.38E-07	2.80E-07	8.18E-07	2.43E-07	1.15E-07	3.58E-07
942	569800.39	4215021.85	3.77E-06	1.97E-06	5.74E-06	5.75E-07	3.00E-07	8.75E-07	2.60E-07	1.23E-07	3.83E-07
943	569805.07	4215030.36	4.04E-06	2.11E-06	6.15E-06	6.17E-07	3.21E-07	9.38E-07	2.78E-07	1.32E-07	4.11E-07
944	569809.74	4215038.86	4.35E-06	2.27E-06	6.62E-06	6.64E-07	3.46E-07	1.01E-06	2.99E-07	1.42E-07	4.42E-07
945	569814.41	4215047.36	4.68E-06	2.45E-06	7.13E-06	7.15E-07	3.73E-07	1.09E-06	3.23E-07	1.53E-07	4.76E-07
946	569819.09	4215055.86	5.04E-06	2.64E-06	7.68E-06	7.70E-07	4.01E-07	1.17E-06	3.48E-07	1.65E-07	5.13E-07
947	569870.51	4215149.38	1.69E-05	8.87E-06	2.58E-05	2.59E-06	1.35E-06	3.94E-06	1.17E-06	5.55E-07	1.72E-06
948	569875.18	4215157.88	1.88E-05	9.85E-06	2.87E-05	2.87E-06	1.50E-06	4.37E-06	1.30E-06	6.16E-07	1.91E-06
949	569879.86	4215166.39	2.03E-05	1.06E-05	3.09E-05	3.10E-06	1.61E-06	4.71E-06	1.40E-06	6.64E-07	2.06E-06
950	569884.53	4215174.89	2.08E-05	1.09E-05	3.16E-05	3.17E-06	1.65E-06	4.82E-06	1.43E-06	6.80E-07	2.11E-06
951	569889.21	4215183.39	2.16E-05	1.13E-05	3.30E-05	3.30E-06	1.72E-06	5.03E-06	1.49E-06	7.09E-07	2.20E-06
952	569757.82	4214957.98	2.55E-06	1.34E-06	3.89E-06	3.90E-07	2.03E-07	5.93E-07	1.76E-07	8.36E-08	2.60E-07
953	569756.73	4214948.8	2.47E-06	1.29E-06	3.77E-06	3.77E-07	1.97E-07	5.74E-07	1.70E-07	8.10E-08	2.51E-07
954	569755.65	4214939.63	2.41E-06	1.26E-06	3.67E-06	3.68E-07	1.92E-07	5.59E-07	1.66E-07	7.89E-08	2.45E-07
955	569754.56	4214930.45	2.36E-06	1.23E-06	3.59E-06	3.60E-07	1.88E-07	5.48E-07	1.63E-07	7.73E-08	2.40E-07
956	569753.47	4214921.27	2.33E-06	1.22E-06	3.55E-06	3.56E-07	1.85E-07	5.41E-07	1.61E-07	7.63E-08	2.37E-07
957	569750.39	4214840.51	1.51E-06	7.90E-07	2.30E-06	2.31E-07	1.20E-07	3.51E-07	1.04E-07	4.95E-08	1.54E-07
958	569755.99	4214833.16	1.45E-06	7.57E-07	2.20E-06	2.21E-07	1.15E-07	3.36E-07	9.97E-08	4.74E-08	1.47E-07
959	569767.21	4214818.47	1.34E-06	7.03E-07	2.05E-06	2.05E-07	1.07E-07	3.12E-07	9.26E-08	4.40E-08	1.37E-07
960	569772.81	4214811.12	1.29E-06	6.75E-07	1.97E-06	1.97E-07	1.03E-07	3.00E-07	8.89E-08	4.23E-08	1.31E-07
961	569784.02	4214796.43	1.21E-06	6.32E-07	1.84E-06	1.84E-07	9.61E-08	2.80E-07	8.32E-08	3.95E-08	1.23E-07
962	569758.91	4214967.16	2.65E-06	1.39E-06	4.04E-06	4.05E-07	2.11E-07	6.16E-07	1.83E-07	8.69E-08	2.70E-07
963	569763.58	4214975.66	2.76E-06	1.44E-06	4.20E-06	4.21E-07	2.20E-07	6.41E-07	1.90E-07	9.04E-08	2.81E-07
964	569768.25	4214984.16	2.88E-06	1.51E-06	4.39E-06	4.40E-07	2.29E-07	6.69E-07	1.99E-07	9.44E-08	2.93E-07
965	569772.93	4214992.66	3.03E-06	1.59E-06	4.62E-06	4.63E-07	2.41E-07	7.04E-07	2.09E-07	9.93E-08	3.08E-07
966	569777.6	4215001.17	3.20E-06	1.67E-06	4.87E-06	4.88E-07	2.54E-07	7.43E-07	2.20E-07	1.05E-07	3.25E-07
967	569782.28	4215009.67	3.38E-06	1.77E-06	5.15E-06	5.16E-07	2.69E-07	7.85E-07	2.33E-07	1.11E-07	3.44E-07
968	569786.95	4215018.17	3.59E-06	1.88E-06	5.47E-06	5.48E-07	2.86E-07	8.34E-07	2.48E-07	1.18E-07	3.65E-07
969	569791.63	4215026.67	3.84E-06	2.01E-06	5.84E-06	5.86E-07	3.05E-07	8.91E-07	2.64E-07	1.26E-07	3.90E-07
970	569796.3	4215035.17	4.11E-06	2.15E-06	6.26E-06	6.27E-07	3.27E-07	9.54E-07	2.83E-07	1.35E-07	4.18E-07
971	569800.98	4215043.68	4.41E-06	2.31E-06	6.71E-06	6.73E-07	3.51E-07	1.02E-06	3.04E-07	1.44E-07	4.48E-07
972	569805.65	4215052.18	4.74E-06	2.48E-06	7.22E-06	7.23E-07	3.77E-07	1.10E-06	3.26E-07	1.55E-07	4.82E-07

973	569810.33	4215060.68	5.10E-06	2.67E-06	7.77E-06	7.79E-07	4.06E-07	1.18E-06	3.51E-07	1.67E-07	5.18E-07
974	569861.75	4215154.2	1.56E-05	8.15E-06	2.37E-05	2.38E-06	1.24E-06	3.62E-06	1.07E-06	5.11E-07	1.58E-06
975	569866.42	4215162.7	1.75E-05	9.17E-06	2.67E-05	2.68E-06	1.39E-06	4.07E-06	1.21E-06	5.74E-07	1.78E-06
976	569871.1	4215171.2	1.91E-05	9.98E-06	2.91E-05	2.91E-06	1.52E-06	4.43E-06	1.31E-06	6.25E-07	1.94E-06
977	569875.77	4215179.71	2.01E-05	1.05E-05	3.07E-05	3.07E-06	1.60E-06	4.68E-06	1.39E-06	6.60E-07	2.05E-06
978	569880.45	4215188.21	2.05E-05	1.07E-05	3.12E-05	3.13E-06	1.63E-06	4.76E-06	1.41E-06	6.71E-07	2.08E-06
979	569749.07	4214962.92	2.62E-06	1.37E-06	3.98E-06	3.99E-07	2.08E-07	6.08E-07	1.80E-07	8.57E-08	2.66E-07
980	569748	4214953.87	2.53E-06	1.32E-06	3.85E-06	3.86E-07	2.01E-07	5.88E-07	1.74E-07	8.29E-08	2.57E-07
981	569746.93	4214944.81	2.46E-06	1.29E-06	3.75E-06	3.76E-07	1.96E-07	5.72E-07	1.70E-07	8.06E-08	2.50E-07
982	569745.85	4214935.76	2.41E-06	1.26E-06	3.66E-06	3.67E-07	1.91E-07	5.59E-07	1.66E-07	7.88E-08	2.45E-07
983	569744.78	4214926.71	2.36E-06	1.24E-06	3.60E-06	3.61E-07	1.88E-07	5.49E-07	1.63E-07	7.74E-08	2.40E-07
984	569743.71	4214917.65	2.33E-06	1.22E-06	3.55E-06	3.56E-07	1.86E-07	5.42E-07	1.61E-07	7.64E-08	2.37E-07
985	569736.21	4214854.27	1.65E-06	8.64E-07	2.51E-06	2.52E-07	1.31E-07	3.83E-07	1.14E-07	5.41E-08	1.68E-07
986	569740.67	4214837.97	1.49E-06	7.77E-07	2.26E-06	2.27E-07	1.18E-07	3.45E-07	1.02E-07	4.87E-08	1.51E-07
987	569746.2	4214830.72	1.42E-06	7.45E-07	2.17E-06	2.17E-07	1.13E-07	3.31E-07	9.81E-08	4.67E-08	1.45E-07
988	569757.26	4214816.22	1.32E-06	6.88E-07	2.00E-06	2.01E-07	1.05E-07	3.06E-07	9.06E-08	4.31E-08	1.34E-07
989	569768.32	4214801.73	1.23E-06	6.43E-07	1.87E-06	1.88E-07	9.78E-08	2.86E-07	8.47E-08	4.03E-08	1.25E-07
990	569779.39	4214787.23	1.16E-06	6.07E-07	1.77E-06	1.77E-07	9.24E-08	2.70E-07	8.00E-08	3.80E-08	1.18E-07
991	569750.14	4214971.98	2.72E-06	1.42E-06	4.14E-06	4.15E-07	2.16E-07	6.31E-07	1.87E-07	8.90E-08	2.76E-07
992	569754.82	4214980.48	2.82E-06	1.48E-06	4.30E-06	4.31E-07	2.25E-07	6.56E-07	1.95E-07	9.25E-08	2.87E-07
993	569759.49	4214988.98	2.95E-06	1.55E-06	4.50E-06	4.51E-07	2.35E-07	6.86E-07	2.04E-07	9.67E-08	3.00E-07
994	569764.17	4214997.48	3.11E-06	1.62E-06	4.73E-06	4.74E-07	2.47E-07	7.21E-07	2.14E-07	1.02E-07	3.16E-07
995	569768.84	4215005.98	3.27E-06	1.71E-06	4.99E-06	5.00E-07	2.60E-07	7.60E-07	2.26E-07	1.07E-07	3.33E-07
996	569773.52	4215014.49	3.46E-06	1.81E-06	5.27E-06	5.28E-07	2.75E-07	8.03E-07	2.38E-07	1.13E-07	3.51E-07
997	569778.19	4215022.99	3.67E-06	1.92E-06	5.59E-06	5.60E-07	2.92E-07	8.52E-07	2.53E-07	1.20E-07	3.73E-07
998	569782.86	4215031.49	3.90E-06	2.04E-06	5.94E-06	5.96E-07	3.10E-07	9.06E-07	2.69E-07	1.28E-07	3.97E-07
999	569787.54	4215039.99	4.16E-06	2.18E-06	6.34E-06	6.36E-07	3.31E-07	9.67E-07	2.87E-07	1.36E-07	4.23E-07
1000	569792.21	4215048.49	4.46E-06	2.33E-06	6.79E-06	6.81E-07	3.55E-07	1.04E-06	3.07E-07	1.46E-07	4.53E-07
1001	569796.89	4215057	4.78E-06	2.50E-06	7.29E-06	7.30E-07	3.81E-07	1.11E-06	3.30E-07	1.57E-07	4.86E-07
1002	569801.56	4215065.5	5.13E-06	2.69E-06	7.82E-06	7.84E-07	4.09E-07	1.19E-06	3.54E-07	1.68E-07	5.22E-07
1003	569806.24	4215074	5.51E-06	2.88E-06	8.40E-06	8.42E-07	4.39E-07	1.28E-06	3.80E-07	1.81E-07	5.60E-07
1004	569852.98	4215159.02	1.43E-05	7.46E-06	2.17E-05	2.18E-06	1.13E-06	3.31E-06	9.82E-07	4.67E-07	1.45E-06
1005	569857.66	4215167.52	1.61E-05	8.45E-06	2.46E-05	2.46E-06	1.28E-06	3.75E-06	1.11E-06	5.29E-07	1.64E-06
1006	569862.33	4215176.02	1.78E-05	9.33E-06	2.72E-05	2.72E-06	1.42E-06	4.14E-06	1.23E-06	5.84E-07	1.81E-06
1007	569867.01	4215184.52	1.90E-05	9.97E-06	2.90E-05	2.91E-06	1.52E-06	4.42E-06	1.31E-06	6.24E-07	1.94E-06
1008	569871.68	4215193.03	1.95E-05	1.02E-05	2.97E-05	2.98E-06	1.55E-06	4.53E-06	1.34E-06	6.39E-07	1.98E-06
1009	569740.24	4214967.21	2.67E-06	1.40E-06	4.07E-06	4.08E-07	2.13E-07	6.20E-07	1.84E-07	8.75E-08	2.72E-07
1010	569739.11	4214957.62	2.58E-06	1.35E-06	3.93E-06	3.94E-07	2.05E-07	5.99E-07	1.78E-07	8.45E-08	2.62E-07
1011	569737.97	4214948.03	2.50E-06	1.31E-06	3.81E-06	3.82E-07	1.99E-07	5.82E-07	1.73E-07	8.20E-08	2.55E-07
1012	569736.84	4214938.45	2.44E-06	1.28E-06	3.72E-06	3.73E-07	1.94E-07	5.67E-07	1.68E-07	8.00E-08	2.48E-07
1013	569735.7	4214928.86	2.39E-06	1.25E-06	3.65E-06	3.66E-07	1.90E-07	5.56E-07	1.65E-07	7.84E-08	2.43E-07
1014	569734.57	4214919.27	2.35E-06	1.23E-06	3.57E-06	3.58E-07	1.87E-07	5.45E-07	1.62E-07	7.69E-08	2.39E-07
1015	569727.76	4214861.75	1.73E-06	9.03E-07	2.63E-06	2.64E-07	1.37E-07	4.01E-07	1.19E-07	5.66E-08	1.76E-07
1016	569726.62	4214852.16	1.62E-06	8.48E-07	2.47E-06	2.48E-07	1.29E-07	3.77E-07	1.12E-07	5.31E-08	1.65E-07
1017	569731.35	4214834.9	1.46E-06	7.64E-07	2.22E-06	2.23E-07	1.16E-07	3.39E-07	1.01E-07	4.78E-08	1.48E-07
1018	569737.2	4214827.23	1.40E-06	7.33E-07	2.13E-06	2.14E-07	1.11E-07	3.25E-07	9.65E-08	4.59E-08	1.42E-07
1019	569743.06	4214819.55	1.34E-06	7.02E-07	2.04E-06	2.05E-07	1.07E-07	3.12E-07	9.24E-08	4.39E-08	1.36E-07
1020	569748.92	4214811.88	1.29E-06	6.72E-07	1.96E-06	1.96E-07	1.02E-07	2.99E-07	8.86E-08	4.21E-08	1.31E-07
1021	569754.77	4214804.21	1.24E-06	6.47E-07	1.88E-06	1.89E-07	9.84E-08	2.87E-07	8.52E-08	4.05E-08	1.26E-07
1022	569760.63	4214796.53	1.20E-06	6.30E-07	1.83E-06	1.84E-07	9.58E-08	2.80E-07	8.30E-08	3.94E-08	1.22E-07
1023	569766.49	4214788.86	1.17E-06	6.12E-07	1.78E-06	1.79E-07	9.31E-08	2.72E-07	8.06E-08	3.83E-08	1.19E-07
1024	569772.34	4214781.18	1.14E-06	5.94E-07	1.73E-06	1.73E-07	9.03E-08	2.64E-07	7.82E-08	3.72E-08	1.15E-07
1025	569741.38	4214976.79	2.78E-06	1.45E-06	4.23E-06	4.24E-07	2.21E-07	6.45E-07	1.91E-07	9.10E-08	2.82E-07
1026	569746.05	4214985.3	2.89E-06	1.51E-06	4.40E-06	4.41E-07	2.30E-07	6.70E-07	1.99E-07	9.45E-08	2.93E-07
1027	569750.73	4214993.8	3.02E-06	1.58E-06	4.60E-06	4.61E-07	2.40E-07	7.02E-07	2.08E-07	9.90E-08	3.07E-07
1028	569755.4	4215002.3	3.17E-06	1.66E-06	4.83E-06	4.85E-07	2.53E-07	7.37E-07	2.19E-07	1.04E-07	3.23E-07
1029	569760.08	4215010.8	3.34E-06	1.75E-06	5.09E-06	5.10E-07	2.66E-07	7.76E-07	2.30E-07	1.09E-07	3.40E-07
1030	569764.75	4215019.3	3.53E-06	1.85E-06	5.38E-06	5.39E-07	2.81E-07	8.20E-07	2.43E-07	1.16E-07	3.59E-07
1031	569769.43	4215027.81	3.74E-06	1.96E-06	5.70E-06	5.71E-07	2.98E-07	8.69E-07	2.58E-07	1.23E-07	3.80E-07
1032	569774.1	4215036.31	3.97E-06	2.08E-06	6.05E-06	6.06E-07	3.16E-07	9.22E-07	2.74E-07	1.30E-07	4.04E-07
1033	569778.78	4215044.81	4.22E-06	2.21E-06	6.43E-06	6.44E-07	3.36E-07	9.80E-07	2.91E-07	1.38E-07	4.29E-07

1034	569783.45	4215053.31	4.50E-06	2.36E-06	6.86E-06	6.88E-07	3.58E-07	1.05E-06	3.10E-07	1.48E-07	4.58E-07
1035	569788.13	4215061.81	4.82E-06	2.52E-06	7.34E-06	7.36E-07	3.83E-07	1.12E-06	3.32E-07	1.58E-07	4.90E-07
1036	569792.8	4215070.32	5.16E-06	2.70E-06	7.86E-06	7.88E-07	4.10E-07	1.20E-06	3.55E-07	1.69E-07	5.24E-07
1037	569797.48	4215078.82	5.52E-06	2.89E-06	8.41E-06	8.43E-07	4.39E-07	1.28E-06	3.81E-07	1.81E-07	5.61E-07
1038	569844.22	4215163.84	1.30E-05	6.80E-06	1.98E-05	1.98E-06	1.03E-06	3.02E-06	8.95E-07	4.26E-07	1.32E-06
1039	569848.9	4215172.34	1.50E-05	7.86E-06	2.29E-05	2.30E-06	1.20E-06	3.49E-06	1.04E-06	4.92E-07	1.53E-06
1040	569853.57	4215180.84	1.68E-05	8.80E-06	2.56E-05	2.57E-06	1.34E-06	3.91E-06	1.16E-06	5.51E-07	1.71E-06
1041	569858.25	4215189.34	1.81E-05	9.47E-06	2.76E-05	2.76E-06	1.44E-06	4.20E-06	1.25E-06	5.93E-07	1.84E-06
1042	569862.92	4215197.84	1.89E-05	9.86E-06	2.87E-05	2.88E-06	1.50E-06	4.38E-06	1.30E-06	6.18E-07	1.92E-06
1043	569731.5	4214972.17	2.73E-06	1.43E-06	4.16E-06	4.17E-07	2.17E-07	6.35E-07	1.88E-07	8.95E-08	2.78E-07
1044	569730.38	4214962.72	2.64E-06	1.38E-06	4.02E-06	4.03E-07	2.10E-07	6.13E-07	1.82E-07	8.65E-08	2.69E-07
1045	569729.26	4214953.28	2.56E-06	1.34E-06	3.90E-06	3.91E-07	2.04E-07	5.95E-07	1.77E-07	8.40E-08	2.61E-07
1046	569728.14	4214943.83	2.50E-06	1.31E-06	3.80E-06	3.81E-07	1.99E-07	5.80E-07	1.72E-07	8.18E-08	2.54E-07
1047	569727.03	4214934.39	2.44E-06	1.28E-06	3.72E-06	3.73E-07	1.94E-07	5.67E-07	1.68E-07	8.00E-08	2.48E-07
1048	569725.91	4214924.94	2.39E-06	1.25E-06	3.65E-06	3.66E-07	1.91E-07	5.56E-07	1.65E-07	7.84E-08	2.43E-07
1049	569724.79	4214915.5	2.33E-06	1.22E-06	3.55E-06	3.55E-07	1.85E-07	5.41E-07	1.60E-07	7.63E-08	2.37E-07
1050	569719.2	4214868.27	1.80E-06	9.41E-07	2.74E-06	2.75E-07	1.43E-07	4.18E-07	1.24E-07	5.89E-08	1.83E-07
1051	569718.08	4214858.83	1.69E-06	8.86E-07	2.58E-06	2.59E-07	1.35E-07	3.93E-07	1.17E-07	5.55E-08	1.72E-07
1052	569716.96	4214849.38	1.60E-06	8.37E-07	2.44E-06	2.44E-07	1.27E-07	3.72E-07	1.10E-07	5.24E-08	1.63E-07
1053	569721.61	4214832.38	1.45E-06	7.56E-07	2.20E-06	2.21E-07	1.15E-07	3.36E-07	9.96E-08	4.74E-08	1.47E-07
1054	569727.38	4214824.82	1.39E-06	7.25E-07	2.11E-06	2.12E-07	1.10E-07	3.22E-07	9.56E-08	4.54E-08	1.41E-07
1055	569733.15	4214817.26	1.33E-06	6.97E-07	2.03E-06	2.03E-07	1.06E-07	3.09E-07	9.18E-08	4.36E-08	1.35E-07
1056	569738.92	4214809.7	1.28E-06	6.69E-07	1.95E-06	1.95E-07	1.02E-07	2.97E-07	8.81E-08	4.19E-08	1.30E-07
1057	569744.69	4214802.14	1.24E-06	6.46E-07	1.88E-06	1.89E-07	9.83E-08	2.87E-07	8.51E-08	4.05E-08	1.26E-07
1058	569750.46	4214794.57	1.20E-06	6.27E-07	1.83E-06	1.83E-07	9.54E-08	2.79E-07	8.26E-08	3.93E-08	1.22E-07
1059	569756.23	4214787.01	1.16E-06	6.09E-07	1.77E-06	1.78E-07	9.27E-08	2.71E-07	8.03E-08	3.82E-08	1.18E-07
1060	569762	4214779.45	1.13E-06	5.92E-07	1.72E-06	1.73E-07	9.01E-08	2.63E-07	7.80E-08	3.71E-08	1.15E-07
1061	569767.77	4214771.89	1.11E-06	5.80E-07	1.69E-06	1.69E-07	8.82E-08	2.57E-07	7.63E-08	3.63E-08	1.13E-07
1062	569732.62	4214981.61	2.84E-06	1.48E-06	4.32E-06	4.33E-07	2.26E-07	6.59E-07	1.96E-07	9.30E-08	2.88E-07
1063	569737.29	4214990.11	2.95E-06	1.54E-06	4.50E-06	4.51E-07	2.35E-07	6.86E-07	2.03E-07	9.67E-08	3.00E-07
1064	569741.97	4214998.62	3.09E-06	1.62E-06	4.70E-06	4.72E-07	2.46E-07	7.17E-07	2.13E-07	1.01E-07	3.14E-07
1065	569746.64	4215007.12	3.24E-06	1.70E-06	4.94E-06	4.95E-07	2.58E-07	7.53E-07	2.23E-07	1.06E-07	3.29E-07
1066	569751.32	4215015.62	3.41E-06	1.78E-06	5.19E-06	5.20E-07	2.71E-07	7.91E-07	2.35E-07	1.12E-07	3.46E-07
1067	569755.99	4215024.12	3.59E-06	1.88E-06	5.47E-06	5.49E-07	2.86E-07	8.35E-07	2.48E-07	1.18E-07	3.65E-07
1068	569760.66	4215032.62	3.80E-06	1.99E-06	5.79E-06	5.80E-07	3.02E-07	8.83E-07	2.62E-07	1.24E-07	3.86E-07
1069	569765.34	4215041.13	4.02E-06	2.11E-06	6.13E-06	6.15E-07	3.20E-07	9.35E-07	2.77E-07	1.32E-07	4.09E-07
1070	569770.01	4215049.63	4.27E-06	2.24E-06	6.51E-06	6.52E-07	3.40E-07	9.93E-07	2.94E-07	1.40E-07	4.34E-07
1071	569774.69	4215058.13	4.55E-06	2.38E-06	6.93E-06	6.95E-07	3.62E-07	1.06E-06	3.14E-07	1.49E-07	4.63E-07
1072	569779.36	4215066.63	4.85E-06	2.54E-06	7.39E-06	7.41E-07	3.86E-07	1.13E-06	3.34E-07	1.59E-07	4.93E-07
1073	569784.04	4215075.13	5.17E-06	2.70E-06	7.87E-06	7.89E-07	4.11E-07	1.20E-06	3.56E-07	1.69E-07	5.26E-07
1074	569788.71	4215083.64	5.52E-06	2.89E-06	8.40E-06	8.43E-07	4.39E-07	1.28E-06	3.80E-07	1.81E-07	5.61E-07
1075	569793.39	4215092.14	5.89E-06	3.08E-06	8.97E-06	8.99E-07	4.69E-07	1.37E-06	4.06E-07	1.93E-07	5.99E-07
1076	569835.46	4215168.66	1.25E-05	6.54E-06	1.90E-05	1.91E-06	9.94E-07	2.90E-06	8.61E-07	4.09E-07	1.27E-06
1077	569840.13	4215177.16	1.43E-05	7.50E-06	2.18E-05	2.19E-06	1.14E-06	3.33E-06	9.88E-07	4.70E-07	1.46E-06
1078	569844.81	4215185.66	1.61E-05	8.42E-06	2.45E-05	2.46E-06	1.28E-06	3.74E-06	1.11E-06	5.27E-07	1.64E-06
1079	569849.48	4215194.16	1.74E-05	9.08E-06	2.64E-05	2.65E-06	1.38E-06	4.03E-06	1.20E-06	5.69E-07	1.76E-06
1080	569854.16	4215202.66	1.77E-05	9.26E-06	2.70E-05	2.70E-06	1.41E-06	4.11E-06	1.22E-06	5.80E-07	1.80E-06
1081	569722.75	4214977.11	2.79E-06	1.46E-06	4.25E-06	4.26E-07	2.22E-07	6.48E-07	1.92E-07	9.14E-08	2.84E-07
1082	569721.65	4214967.79	2.70E-06	1.41E-06	4.11E-06	4.12E-07	2.15E-07	6.27E-07	1.86E-07	8.84E-08	2.74E-07
1083	569720.54	4214958.47	2.62E-06	1.37E-06	3.99E-06	4.00E-07	2.09E-07	6.09E-07	1.81E-07	8.59E-08	2.67E-07
1084	569719.44	4214949.15	2.55E-06	1.34E-06	3.89E-06	3.90E-07	2.03E-07	5.93E-07	1.76E-07	8.36E-08	2.59E-07
1085	569718.34	4214939.83	2.49E-06	1.30E-06	3.79E-06	3.80E-07	1.98E-07	5.78E-07	1.72E-07	8.16E-08	2.53E-07
1086	569717.23	4214930.51	2.44E-06	1.28E-06	3.71E-06	3.72E-07	1.94E-07	5.66E-07	1.68E-07	7.99E-08	2.48E-07
1087	569716.13	4214921.19	2.37E-06	1.24E-06	3.61E-06	3.62E-07	1.89E-07	5.51E-07	1.64E-07	7.77E-08	2.41E-07
1088	569715.03	4214911.87	2.29E-06	1.20E-06	3.50E-06	3.50E-07	1.83E-07	5.33E-07	1.58E-07	7.52E-08	2.33E-07
1089	569711.71	4214883.9	1.99E-06	1.04E-06	3.03E-06	3.04E-07	1.58E-07	4.62E-07	1.37E-07	6.52E-08	2.02E-07
1090	569710.61	4214874.58	1.87E-06	9.81E-07	2.85E-06	2.86E-07	1.49E-07	4.35E-07	1.29E-07	6.14E-08	1.91E-07
1091	569709.51	4214865.26	1.77E-06	9.26E-07	2.70E-06	2.70E-07	1.41E-07	4.11E-07	1.22E-07	5.80E-08	1.80E-07
1092	569708.4	4214855.94	1.67E-06	8.75E-07	2.55E-06	2.55E-07	1.33E-07	3.88E-07	1.15E-07	5.48E-08	1.70E-07
1093	569707.3	4214846.62	1.58E-06	8.29E-07	2.41E-06	2.42E-07	1.26E-07	3.68E-07	1.09E-07	5.19E-08	1.61E-07
1094	569711.89	4214829.84	1.44E-06	7.55E-07	2.20E-06	2.20E-07	1.15E-07	3.35E-07	9.94E-08	4.73E-08	1.47E-07

1095	569717.59	4214822.38	1.38E-06	7.23E-07	2.11E-06	2.11E-07	1.10E-07	3.21E-07	9.52E-08	4.53E-08	1.41E-07
1096	569723.28	4214814.92	1.32E-06	6.92E-07	2.01E-06	2.02E-07	1.05E-07	3.07E-07	9.12E-08	4.33E-08	1.34E-07
1097	569728.97	4214807.46	1.27E-06	6.65E-07	1.94E-06	1.94E-07	1.01E-07	2.95E-07	8.76E-08	4.17E-08	1.29E-07
1098	569734.67	4214799.99	1.24E-06	6.47E-07	1.88E-06	1.89E-07	9.84E-08	2.87E-07	8.52E-08	4.05E-08	1.26E-07
1099	569740.36	4214792.53	1.20E-06	6.30E-07	1.83E-06	1.84E-07	9.58E-08	2.80E-07	8.30E-08	3.94E-08	1.22E-07
1100	569746.06	4214785.07	1.17E-06	6.12E-07	1.78E-06	1.79E-07	9.30E-08	2.72E-07	8.06E-08	3.83E-08	1.19E-07
1101	569751.75	4214777.61	1.13E-06	5.93E-07	1.73E-06	1.73E-07	9.02E-08	2.63E-07	7.81E-08	3.71E-08	1.15E-07
1102	569757.44	4214770.15	1.11E-06	5.82E-07	1.69E-06	1.70E-07	8.85E-08	2.58E-07	7.66E-08	3.64E-08	1.13E-07
1103	569763.14	4214762.69	1.10E-06	5.74E-07	1.67E-06	1.67E-07	8.72E-08	2.55E-07	7.55E-08	3.59E-08	1.11E-07
1104	569723.85	4214986.43	2.90E-06	1.51E-06	4.41E-06	4.42E-07	2.30E-07	6.73E-07	2.00E-07	9.48E-08	2.94E-07
1105	569728.53	4214994.93	3.02E-06	1.58E-06	4.60E-06	4.61E-07	2.40E-07	7.01E-07	2.08E-07	9.88E-08	3.07E-07
1106	569733.2	4215003.43	3.15E-06	1.65E-06	4.80E-06	4.81E-07	2.51E-07	7.32E-07	2.17E-07	1.03E-07	3.20E-07
1107	569737.88	4215011.94	3.30E-06	1.73E-06	5.03E-06	5.04E-07	2.63E-07	7.67E-07	2.28E-07	1.08E-07	3.36E-07
1108	569742.55	4215020.44	3.47E-06	1.82E-06	5.29E-06	5.30E-07	2.76E-07	8.06E-07	2.39E-07	1.14E-07	3.53E-07
1109	569747.23	4215028.94	3.65E-06	1.91E-06	5.57E-06	5.58E-07	2.91E-07	8.49E-07	2.52E-07	1.20E-07	3.72E-07
1110	569751.9	4215037.44	3.85E-06	2.01E-06	5.87E-06	5.88E-07	3.06E-07	8.94E-07	2.65E-07	1.26E-07	3.92E-07
1111	569756.58	4215045.94	4.07E-06	2.13E-06	6.19E-06	6.21E-07	3.24E-07	9.44E-07	2.80E-07	1.33E-07	4.13E-07
1112	569761.25	4215054.45	4.32E-06	2.26E-06	6.57E-06	6.59E-07	3.43E-07	1.00E-06	2.97E-07	1.41E-07	4.39E-07
1113	569765.93	4215062.95	4.59E-06	2.40E-06	6.99E-06	7.00E-07	3.65E-07	1.07E-06	3.16E-07	1.50E-07	4.66E-07
1114	569770.6	4215071.45	4.87E-06	2.55E-06	7.42E-06	7.44E-07	3.88E-07	1.13E-06	3.36E-07	1.60E-07	4.96E-07
1115	569775.28	4215079.95	5.18E-06	2.71E-06	7.89E-06	7.91E-07	4.12E-07	1.20E-06	3.57E-07	1.70E-07	5.27E-07
1116	569779.95	4215088.45	5.51E-06	2.88E-06	8.39E-06	8.41E-07	4.38E-07	1.28E-06	3.79E-07	1.80E-07	5.60E-07
1117	569784.62	4215096.96	5.85E-06	3.06E-06	8.91E-06	8.93E-07	4.65E-07	1.36E-06	4.03E-07	1.92E-07	5.95E-07
1118	569789.3	4215105.46	6.22E-06	3.25E-06	9.47E-06	9.50E-07	4.95E-07	1.44E-06	4.29E-07	2.04E-07	6.32E-07
1119	569826.7	4215173.47	1.22E-05	6.36E-06	1.85E-05	1.86E-06	9.67E-07	2.82E-06	8.37E-07	3.98E-07	1.24E-06
1120	569831.37	4215181.98	1.38E-05	7.25E-06	2.11E-05	2.11E-06	1.10E-06	3.22E-06	9.54E-07	4.54E-07	1.41E-06
1121	569836.05	4215190.48	1.55E-05	8.09E-06	2.35E-05	2.36E-06	1.23E-06	3.59E-06	1.06E-06	5.06E-07	1.57E-06
1122	569840.72	4215198.98	1.65E-05	8.61E-06	2.51E-05	2.51E-06	1.31E-06	3.82E-06	1.13E-06	5.39E-07	1.67E-06
1123	569845.39	4215207.48	1.67E-05	8.72E-06	2.54E-05	2.55E-06	1.33E-06	3.87E-06	1.15E-06	5.46E-07	1.70E-06
1124	569714	4214982.04	2.84E-06	1.49E-06	4.33E-06	4.34E-07	2.26E-07	6.60E-07	1.96E-07	9.31E-08	2.89E-07
1125	569712.91	4214972.83	2.75E-06	1.44E-06	4.19E-06	4.20E-07	2.19E-07	6.39E-07	1.90E-07	9.01E-08	2.80E-07
1126	569711.82	4214963.62	2.67E-06	1.40E-06	4.07E-06	4.08E-07	2.13E-07	6.21E-07	1.84E-07	8.76E-08	2.72E-07
1127	569710.73	4214954.41	2.61E-06	1.36E-06	3.97E-06	3.98E-07	2.07E-07	6.06E-07	1.80E-07	8.54E-08	2.65E-07
1128	569709.64	4214945.19	2.54E-06	1.33E-06	3.87E-06	3.88E-07	2.02E-07	5.90E-07	1.75E-07	8.32E-08	2.58E-07
1129	569708.55	4214935.98	2.48E-06	1.30E-06	3.78E-06	3.79E-07	1.97E-07	5.76E-07	1.71E-07	8.13E-08	2.52E-07
1130	569707.46	4214926.77	2.43E-06	1.27E-06	3.70E-06	3.71E-07	1.93E-07	5.64E-07	1.67E-07	7.96E-08	2.47E-07
1131	569706.37	4214917.56	2.34E-06	1.22E-06	3.57E-06	3.57E-07	1.86E-07	5.44E-07	1.61E-07	7.67E-08	2.38E-07
1132	569705.28	4214908.35	2.25E-06	1.18E-06	3.43E-06	3.44E-07	1.79E-07	5.23E-07	1.55E-07	7.38E-08	2.29E-07
1133	569704.19	4214899.14	2.17E-06	1.13E-06	3.30E-06	3.31E-07	1.72E-07	5.03E-07	1.49E-07	7.09E-08	2.20E-07
1134	569703.09	4214889.93	2.05E-06	1.07E-06	3.13E-06	3.14E-07	1.63E-07	4.77E-07	1.42E-07	6.73E-08	2.09E-07
1135	569702	4214880.72	1.94E-06	1.02E-06	2.96E-06	2.96E-07	1.54E-07	4.51E-07	1.34E-07	6.36E-08	1.97E-07
1136	569700.91	4214871.51	1.84E-06	9.62E-07	2.80E-06	2.81E-07	1.46E-07	4.27E-07	1.27E-07	6.02E-08	1.87E-07
1137	569699.82	4214862.3	1.74E-06	9.12E-07	2.66E-06	2.66E-07	1.39E-07	4.05E-07	1.20E-07	5.71E-08	1.77E-07
1138	569698.73	4214853.08	1.65E-06	8.65E-07	2.52E-06	2.53E-07	1.32E-07	3.84E-07	1.14E-07	5.42E-08	1.68E-07
1139	569697.64	4214843.87	1.57E-06	8.23E-07	2.39E-06	2.40E-07	1.25E-07	3.65E-07	1.08E-07	5.15E-08	1.60E-07
1140	569702.18	4214827.29	1.44E-06	7.55E-07	2.20E-06	2.20E-07	1.15E-07	3.35E-07	9.94E-08	4.73E-08	1.47E-07
1141	569707.81	4214819.92	1.38E-06	7.25E-07	2.11E-06	2.11E-07	1.10E-07	3.22E-07	9.54E-08	4.54E-08	1.41E-07
1142	569713.43	4214812.54	1.33E-06	6.94E-07	2.02E-06	2.03E-07	1.06E-07	3.08E-07	9.15E-08	4.35E-08	1.35E-07
1143	569719.06	4214805.17	1.27E-06	6.67E-07	1.94E-06	1.95E-07	1.01E-07	2.96E-07	8.78E-08	4.17E-08	1.30E-07
1144	569730.31	4214790.42	1.21E-06	6.33E-07	1.84E-06	1.85E-07	9.63E-08	2.81E-07	8.34E-08	3.97E-08	1.23E-07
1145	569735.94	4214783.05	1.18E-06	6.17E-07	1.80E-06	1.80E-07	9.38E-08	2.74E-07	8.12E-08	3.86E-08	1.20E-07
1146	569741.57	4214775.67	1.15E-06	6.00E-07	1.75E-06	1.75E-07	9.12E-08	2.66E-07	7.90E-08	3.76E-08	1.17E-07
1147	569752.82	4214760.93	1.11E-06	5.79E-07	1.69E-06	1.69E-07	8.81E-08	2.57E-07	7.63E-08	3.63E-08	1.13E-07
1148	569715.09	4214991.25	2.95E-06	1.54E-06	4.50E-06	4.51E-07	2.35E-07	6.86E-07	2.03E-07	9.67E-08	3.00E-07
1149	569719.77	4214999.75	3.08E-06	1.61E-06	4.68E-06	4.70E-07	2.45E-07	7.14E-07	2.12E-07	1.01E-07	3.13E-07
1150	569724.44	4215008.25	3.21E-06	1.68E-06	4.89E-06	4.90E-07	2.56E-07	7.46E-07	2.21E-07	1.05E-07	3.26E-07
1151	569729.12	4215016.75	3.36E-06	1.76E-06	5.12E-06	5.13E-07	2.68E-07	7.81E-07	2.32E-07	1.10E-07	3.42E-07
1152	569733.79	4215025.26	3.53E-06	1.85E-06	5.38E-06	5.39E-07	2.81E-07	8.20E-07	2.43E-07	1.16E-07	3.59E-07
1153	569738.46	4215033.76	3.71E-06	1.94E-06	5.65E-06	5.66E-07	2.95E-07	8.61E-07	2.56E-07	1.21E-07	3.77E-07
1154	569743.14	4215042.26	3.90E-06	2.04E-06	5.94E-06	5.96E-07	3.10E-07	9.06E-07	2.69E-07	1.28E-07	3.97E-07
1155	569747.81	4215050.76	4.11E-06	2.15E-06	6.27E-06	6.28E-07	3.27E-07	9.56E-07	2.84E-07	1.35E-07	4.18E-07

1156	569752.49	4215059.26	4.35E-06	2.28E-06	6.63E-06	6.64E-07	3.46E-07	1.01E-06	3.00E-07	1.42E-07	4.42E-07
1157	569757.16	4215067.77	4.61E-06	2.41E-06	7.02E-06	7.04E-07	3.67E-07	1.07E-06	3.18E-07	1.51E-07	4.68E-07
1158	569761.84	4215076.27	4.88E-06	2.56E-06	7.44E-06	7.46E-07	3.89E-07	1.13E-06	3.37E-07	1.60E-07	4.97E-07
1159	569766.51	4215084.77	5.18E-06	2.71E-06	7.89E-06	7.91E-07	4.12E-07	1.20E-06	3.57E-07	1.70E-07	5.27E-07
1160	569771.19	4215093.27	5.49E-06	2.87E-06	8.37E-06	8.39E-07	4.37E-07	1.28E-06	3.79E-07	1.80E-07	5.59E-07
1161	569775.86	4215101.77	5.82E-06	3.04E-06	8.86E-06	8.88E-07	4.63E-07	1.35E-06	4.01E-07	1.91E-07	5.91E-07
1162	569780.54	4215110.28	6.16E-06	3.22E-06	9.38E-06	9.40E-07	4.90E-07	1.43E-06	4.24E-07	2.02E-07	6.26E-07
1163	569817.93	4215178.29	1.18E-05	6.16E-06	1.79E-05	1.80E-06	9.38E-07	2.74E-06	8.12E-07	3.86E-07	1.20E-06
1164	569822.61	4215186.79	1.33E-05	6.98E-06	2.03E-05	2.04E-06	1.06E-06	3.10E-06	9.20E-07	4.37E-07	1.36E-06
1165	569827.28	4215195.3	1.48E-05	7.75E-06	2.26E-05	2.26E-06	1.18E-06	3.44E-06	1.02E-06	4.85E-07	1.51E-06
1166	569831.96	4215203.8	1.53E-05	8.01E-06	2.33E-05	2.34E-06	1.22E-06	3.56E-06	1.05E-06	5.01E-07	1.56E-06
1167	569836.63	4215212.3	1.56E-05	8.14E-06	2.37E-05	2.38E-06	1.24E-06	3.61E-06	1.07E-06	5.10E-07	1.58E-06
1168	569705.25	4214986.95	2.89E-06	1.51E-06	4.40E-06	4.41E-07	2.30E-07	6.72E-07	1.99E-07	9.47E-08	2.94E-07
1169	569704.17	4214977.84	2.80E-06	1.46E-06	4.26E-06	4.27E-07	2.23E-07	6.50E-07	1.93E-07	9.17E-08	2.85E-07
1170	569703.09	4214968.73	2.72E-06	1.42E-06	4.15E-06	4.16E-07	2.17E-07	6.32E-07	1.88E-07	8.92E-08	2.77E-07
1171	569702.01	4214959.61	2.66E-06	1.39E-06	4.05E-06	4.06E-07	2.12E-07	6.17E-07	1.83E-07	8.71E-08	2.70E-07
1172	569700.93	4214950.5	2.59E-06	1.36E-06	3.95E-06	3.96E-07	2.06E-07	6.02E-07	1.79E-07	8.50E-08	2.64E-07
1173	569699.85	4214941.39	2.53E-06	1.32E-06	3.85E-06	3.86E-07	2.01E-07	5.87E-07	1.74E-07	8.28E-08	2.57E-07
1174	569698.78	4214932.27	2.47E-06	1.29E-06	3.76E-06	3.77E-07	1.97E-07	5.74E-07	1.70E-07	8.09E-08	2.51E-07
1175	569697.7	4214923.16	2.40E-06	1.26E-06	3.66E-06	3.67E-07	1.91E-07	5.58E-07	1.65E-07	7.87E-08	2.44E-07
1176	569696.62	4214914.05	2.30E-06	1.20E-06	3.50E-06	3.51E-07	1.83E-07	5.34E-07	1.58E-07	7.53E-08	2.34E-07
1177	569695.54	4214904.93	2.20E-06	1.15E-06	3.35E-06	3.36E-07	1.75E-07	5.11E-07	1.52E-07	7.21E-08	2.24E-07
1178	569694.46	4214895.82	2.11E-06	1.10E-06	3.21E-06	3.22E-07	1.68E-07	4.89E-07	1.45E-07	6.90E-08	2.14E-07
1179	569693.38	4214886.7	2.00E-06	1.05E-06	3.04E-06	3.05E-07	1.59E-07	4.64E-07	1.38E-07	6.54E-08	2.03E-07
1180	569692.3	4214877.59	1.90E-06	9.94E-07	2.89E-06	2.90E-07	1.51E-07	4.41E-07	1.31E-07	6.22E-08	1.93E-07
1181	569691.22	4214868.48	1.81E-06	9.47E-07	2.76E-06	2.76E-07	1.44E-07	4.21E-07	1.25E-07	5.93E-08	1.84E-07
1182	569690.14	4214859.36	1.72E-06	9.02E-07	2.62E-06	2.63E-07	1.37E-07	4.00E-07	1.19E-07	5.65E-08	1.75E-07
1183	569689.06	4214850.25	1.64E-06	8.59E-07	2.50E-06	2.51E-07	1.31E-07	3.81E-07	1.13E-07	5.38E-08	1.67E-07
1184	569687.98	4214841.14	1.57E-06	8.20E-07	2.39E-06	2.39E-07	1.25E-07	3.64E-07	1.08E-07	5.14E-08	1.59E-07
1185	569692.47	4214824.73	1.45E-06	7.57E-07	2.20E-06	2.21E-07	1.15E-07	3.36E-07	9.97E-08	4.74E-08	1.47E-07
1186	569703.61	4214810.14	1.33E-06	6.98E-07	2.03E-06	2.04E-07	1.06E-07	3.10E-07	9.20E-08	4.37E-08	1.36E-07
1187	569714.74	4214795.55	1.26E-06	6.58E-07	1.92E-06	1.92E-07	1.00E-07	2.92E-07	8.67E-08	4.12E-08	1.28E-07
1188	569725.88	4214780.96	1.19E-06	6.24E-07	1.82E-06	1.82E-07	9.49E-08	2.77E-07	8.22E-08	3.91E-08	1.21E-07
1189	569731.45	4214773.66	1.17E-06	6.11E-07	1.78E-06	1.78E-07	9.29E-08	2.71E-07	8.04E-08	3.82E-08	1.19E-07
1190	569742.58	4214759.07	1.13E-06	5.93E-07	1.73E-06	1.73E-07	9.02E-08	2.63E-07	7.81E-08	3.71E-08	1.15E-07
1191	569706.33	4214996.07	3.00E-06	1.57E-06	4.58E-06	4.59E-07	2.39E-07	6.98E-07	2.07E-07	9.84E-08	3.05E-07
1192	569711	4215004.57	3.13E-06	1.64E-06	4.76E-06	4.77E-07	2.49E-07	7.26E-07	2.15E-07	1.02E-07	3.18E-07
1193	569715.68	4215013.07	3.26E-06	1.71E-06	4.97E-06	4.98E-07	2.59E-07	7.57E-07	2.25E-07	1.07E-07	3.32E-07
1194	569720.35	4215021.57	3.42E-06	1.79E-06	5.20E-06	5.21E-07	2.72E-07	7.93E-07	2.35E-07	1.12E-07	3.47E-07
1195	569725.03	4215030.07	3.58E-06	1.87E-06	5.45E-06	5.47E-07	2.85E-07	8.32E-07	2.47E-07	1.17E-07	3.64E-07
1196	569729.7	4215038.58	3.76E-06	1.96E-06	5.72E-06	5.73E-07	2.99E-07	8.72E-07	2.59E-07	1.23E-07	3.82E-07
1197	569734.38	4215047.08	3.94E-06	2.06E-06	6.01E-06	6.02E-07	3.14E-07	9.16E-07	2.72E-07	1.29E-07	4.01E-07
1198	569739.05	4215055.58	4.16E-06	2.18E-06	6.33E-06	6.35E-07	3.31E-07	9.66E-07	2.87E-07	1.36E-07	4.23E-07
1199	569743.73	4215064.08	4.39E-06	2.30E-06	6.68E-06	6.70E-07	3.49E-07	1.02E-06	3.02E-07	1.44E-07	4.46E-07
1200	569748.4	4215072.58	4.63E-06	2.42E-06	7.05E-06	7.07E-07	3.68E-07	1.08E-06	3.19E-07	1.52E-07	4.71E-07
1201	569753.07	4215081.09	4.89E-06	2.56E-06	7.44E-06	7.46E-07	3.89E-07	1.14E-06	3.37E-07	1.60E-07	4.97E-07
1202	569757.75	4215089.59	5.17E-06	2.71E-06	7.88E-06	7.90E-07	4.12E-07	1.20E-06	3.56E-07	1.69E-07	5.26E-07
1203	569762.42	4215098.09	5.47E-06	2.86E-06	8.33E-06	8.35E-07	4.35E-07	1.27E-06	3.77E-07	1.79E-07	5.56E-07
1204	569767.1	4215106.59	5.78E-06	3.03E-06	8.81E-06	8.83E-07	4.60E-07	1.34E-06	3.98E-07	1.89E-07	5.88E-07
1205	569771.77	4215115.09	6.11E-06	3.20E-06	9.31E-06	9.34E-07	4.87E-07	1.42E-06	4.21E-07	2.00E-07	6.22E-07
1206	569809.17	4215183.11	1.15E-05	6.02E-06	1.75E-05	1.76E-06	9.15E-07	2.67E-06	7.93E-07	3.77E-07	1.17E-06
1207	569813.84	4215191.61	1.28E-05	6.71E-06	1.95E-05	1.96E-06	1.02E-06	2.98E-06	8.84E-07	4.20E-07	1.30E-06
1208	569818.52	4215200.11	1.38E-05	7.24E-06	2.11E-05	2.11E-06	1.10E-06	3.21E-06	9.53E-07	4.53E-07	1.41E-06
1209	569823.19	4215208.62	1.43E-05	7.46E-06	2.17E-05	2.18E-06	1.14E-06	3.31E-06	9.83E-07	4.67E-07	1.45E-06
1210	569827.87	4215217.12	1.46E-05	7.61E-06	2.22E-05	2.22E-06	1.16E-06	3.38E-06	1.00E-06	4.77E-07	1.48E-06
1211	569696.44	4214991.36	2.94E-06	1.54E-06	4.47E-06	4.48E-07	2.34E-07	6.82E-07	2.02E-07	9.62E-08	2.99E-07
1212	569695.31	4214981.83	2.84E-06	1.48E-06	4.32E-06	4.33E-07	2.26E-07	6.59E-07	1.96E-07	9.29E-08	2.88E-07
1213	569694.18	4214972.3	2.76E-06	1.44E-06	4.20E-06	4.21E-07	2.19E-07	6.41E-07	1.90E-07	9.03E-08	2.80E-07
1214	569693.05	4214962.77	2.69E-06	1.41E-06	4.10E-06	4.11E-07	2.14E-07	6.25E-07	1.85E-07	8.82E-08	2.74E-07
1215	569691.93	4214953.25	2.63E-06	1.38E-06	4.00E-06	4.01E-07	2.09E-07	6.11E-07	1.81E-07	8.61E-08	2.67E-07
1216	569690.8	4214943.72	2.55E-06	1.34E-06	3.89E-06	3.90E-07	2.03E-07	5.93E-07	1.76E-07	8.36E-08	2.60E-07

1217	569689.67	4214934.19	2.48E-06	1.30E-06	3.78E-06	3.79E-07	1.98E-07	5.77E-07	1.71E-07	8.13E-08	2.52E-07
1218	569688.54	4214924.66	2.41E-06	1.26E-06	3.67E-06	3.68E-07	1.92E-07	5.59E-07	1.66E-07	7.89E-08	2.45E-07
1219	569687.41	4214915.14	2.30E-06	1.20E-06	3.50E-06	3.51E-07	1.83E-07	5.34E-07	1.58E-07	7.53E-08	2.34E-07
1220	569686.28	4214905.61	2.19E-06	1.15E-06	3.34E-06	3.35E-07	1.75E-07	5.10E-07	1.51E-07	7.19E-08	2.23E-07
1221	569685.16	4214896.08	2.10E-06	1.10E-06	3.20E-06	3.20E-07	1.67E-07	4.88E-07	1.45E-07	6.88E-08	2.13E-07
1222	569684.03	4214886.55	1.99E-06	1.04E-06	3.04E-06	3.05E-07	1.59E-07	4.63E-07	1.37E-07	6.53E-08	2.03E-07
1223	569682.9	4214877.02	1.90E-06	9.93E-07	2.89E-06	2.90E-07	1.51E-07	4.41E-07	1.31E-07	6.22E-08	1.93E-07
1224	569681.77	4214867.5	1.81E-06	9.47E-07	2.76E-06	2.76E-07	1.44E-07	4.21E-07	1.25E-07	5.93E-08	1.84E-07
1225	569680.64	4214857.97	1.73E-06	9.03E-07	2.63E-06	2.63E-07	1.37E-07	4.01E-07	1.19E-07	5.65E-08	1.75E-07
1226	569679.52	4214848.44	1.65E-06	8.62E-07	2.51E-06	2.51E-07	1.31E-07	3.83E-07	1.13E-07	5.40E-08	1.67E-07
1227	569678.39	4214838.91	1.57E-06	8.24E-07	2.40E-06	2.40E-07	1.25E-07	3.66E-07	1.09E-07	5.16E-08	1.60E-07
1228	569683.08	4214821.76	1.46E-06	7.62E-07	2.22E-06	2.22E-07	1.16E-07	3.38E-07	1.00E-07	4.77E-08	1.48E-07
1229	569688.9	4214814.13	1.40E-06	7.30E-07	2.13E-06	2.13E-07	1.11E-07	3.24E-07	9.62E-08	4.57E-08	1.42E-07
1230	569694.72	4214806.5	1.34E-06	6.99E-07	2.04E-06	2.04E-07	1.06E-07	3.10E-07	9.21E-08	4.38E-08	1.36E-07
1231	569700.54	4214798.88	1.30E-06	6.83E-07	1.99E-06	1.99E-07	1.04E-07	3.03E-07	8.99E-08	4.27E-08	1.33E-07
1232	569706.36	4214791.25	1.27E-06	6.66E-07	1.94E-06	1.94E-07	1.01E-07	2.96E-07	8.77E-08	4.17E-08	1.29E-07
1233	569712.18	4214783.62	1.24E-06	6.49E-07	1.89E-06	1.89E-07	9.87E-08	2.88E-07	8.54E-08	4.06E-08	1.26E-07
1234	569718	4214776	1.21E-06	6.31E-07	1.84E-06	1.84E-07	9.60E-08	2.80E-07	8.31E-08	3.95E-08	1.23E-07
1235	569723.82	4214768.37	1.19E-06	6.21E-07	1.81E-06	1.81E-07	9.45E-08	2.76E-07	8.18E-08	3.89E-08	1.21E-07
1236	569697.57	4215000.89	3.05E-06	1.60E-06	4.65E-06	4.66E-07	2.43E-07	7.09E-07	2.10E-07	1.00E-07	3.10E-07
1237	569702.24	4215009.39	3.17E-06	1.66E-06	4.83E-06	4.84E-07	2.52E-07	7.37E-07	2.19E-07	1.04E-07	3.22E-07
1238	569706.92	4215017.89	3.31E-06	1.73E-06	5.04E-06	5.05E-07	2.63E-07	7.68E-07	2.28E-07	1.08E-07	3.36E-07
1239	569711.59	4215026.39	3.46E-06	1.81E-06	5.27E-06	5.28E-07	2.75E-07	8.04E-07	2.38E-07	1.13E-07	3.52E-07
1240	569716.26	4215034.89	3.62E-06	1.90E-06	5.52E-06	5.53E-07	2.88E-07	8.41E-07	2.50E-07	1.19E-07	3.68E-07
1241	569720.94	4215043.39	3.79E-06	1.98E-06	5.78E-06	5.79E-07	3.02E-07	8.81E-07	2.61E-07	1.24E-07	3.86E-07
1242	569725.61	4215051.9	3.99E-06	2.09E-06	6.07E-06	6.09E-07	3.17E-07	9.26E-07	2.75E-07	1.31E-07	4.05E-07
1243	569730.29	4215060.4	4.20E-06	2.20E-06	6.39E-06	6.41E-07	3.34E-07	9.74E-07	2.89E-07	1.37E-07	4.27E-07
1244	569734.96	4215068.9	4.42E-06	2.31E-06	6.73E-06	6.75E-07	3.52E-07	1.03E-06	3.04E-07	1.45E-07	4.49E-07
1245	569739.64	4215077.4	4.65E-06	2.43E-06	7.08E-06	7.10E-07	3.70E-07	1.08E-06	3.20E-07	1.52E-07	4.73E-07
1246	569744.31	4215085.9	4.90E-06	2.57E-06	7.47E-06	7.49E-07	3.90E-07	1.14E-06	3.38E-07	1.61E-07	4.99E-07
1247	569748.99	4215094.41	5.17E-06	2.70E-06	7.87E-06	7.89E-07	4.11E-07	1.20E-06	3.56E-07	1.69E-07	5.25E-07
1248	569753.66	4215102.91	5.44E-06	2.85E-06	8.29E-06	8.31E-07	4.33E-07	1.26E-06	3.75E-07	1.78E-07	5.53E-07
1249	569758.34	4215111.41	5.75E-06	3.01E-06	8.75E-06	8.77E-07	4.57E-07	1.33E-06	3.96E-07	1.88E-07	5.84E-07
1250	569763.01	4215119.91	6.07E-06	3.18E-06	9.25E-06	9.27E-07	4.83E-07	1.41E-06	4.18E-07	1.99E-07	6.17E-07
1251	569800.41	4215187.93	1.13E-05	5.90E-06	1.72E-05	1.72E-06	8.97E-07	2.62E-06	7.77E-07	3.69E-07	1.15E-06
1252	569805.08	4215196.43	1.25E-05	6.52E-06	1.90E-05	1.90E-06	9.92E-07	2.90E-06	8.59E-07	4.08E-07	1.27E-06
1253	569809.76	4215204.93	1.30E-05	6.78E-06	1.98E-05	1.98E-06	1.03E-06	3.01E-06	8.94E-07	4.25E-07	1.32E-06
1254	569814.43	4215213.43	1.34E-05	7.01E-06	2.04E-05	2.05E-06	1.07E-06	3.11E-06	9.24E-07	4.39E-07	1.36E-06
1255	569819.11	4215221.94	1.37E-05	7.19E-06	2.09E-05	2.10E-06	1.09E-06	3.19E-06	9.47E-07	4.50E-07	1.40E-06
1256	569687.69	4214996.28	2.99E-06	1.56E-06	4.55E-06	4.56E-07	2.38E-07	6.93E-07	2.06E-07	9.78E-08	3.04E-07
1257	569686.57	4214986.87	2.89E-06	1.51E-06	4.40E-06	4.41E-07	2.30E-07	6.71E-07	1.99E-07	9.46E-08	2.94E-07
1258	569685.46	4214977.45	2.80E-06	1.47E-06	4.27E-06	4.28E-07	2.23E-07	6.51E-07	1.93E-07	9.18E-08	2.85E-07
1259	569684.34	4214968.03	2.73E-06	1.43E-06	4.16E-06	4.17E-07	2.17E-07	6.34E-07	1.88E-07	8.94E-08	2.78E-07
1260	569683.23	4214958.61	2.67E-06	1.40E-06	4.06E-06	4.07E-07	2.12E-07	6.20E-07	1.84E-07	8.74E-08	2.71E-07
1261	569682.11	4214949.19	2.59E-06	1.36E-06	3.95E-06	3.96E-07	2.06E-07	6.02E-07	1.79E-07	8.49E-08	2.63E-07
1262	569681	4214939.77	2.51E-06	1.31E-06	3.82E-06	3.83E-07	2.00E-07	5.83E-07	1.73E-07	8.22E-08	2.55E-07
1263	569679.88	4214930.35	2.43E-06	1.27E-06	3.71E-06	3.72E-07	1.94E-07	5.65E-07	1.68E-07	7.97E-08	2.47E-07
1264	569678.77	4214920.93	2.34E-06	1.22E-06	3.57E-06	3.57E-07	1.86E-07	5.44E-07	1.61E-07	7.67E-08	2.38E-07
1265	569677.65	4214911.52	2.24E-06	1.17E-06	3.41E-06	3.42E-07	1.78E-07	5.20E-07	1.54E-07	7.34E-08	2.28E-07
1266	569676.54	4214902.1	2.15E-06	1.12E-06	3.27E-06	3.28E-07	1.71E-07	4.99E-07	1.48E-07	7.03E-08	2.18E-07
1267	569675.42	4214892.68	2.05E-06	1.07E-06	3.13E-06	3.14E-07	1.63E-07	4.77E-07	1.42E-07	6.73E-08	2.09E-07
1268	569674.31	4214883.26	1.96E-06	1.03E-06	2.99E-06	2.99E-07	1.56E-07	4.55E-07	1.35E-07	6.42E-08	1.99E-07
1269	569673.19	4214873.84	1.87E-06	9.81E-07	2.85E-06	2.86E-07	1.49E-07	4.35E-07	1.29E-07	6.14E-08	1.91E-07
1270	569672.08	4214864.42	1.79E-06	9.38E-07	2.73E-06	2.74E-07	1.43E-07	4.17E-07	1.24E-07	5.87E-08	1.82E-07
1271	569670.96	4214855	1.72E-06	8.98E-07	2.62E-06	2.62E-07	1.37E-07	3.99E-07	1.18E-07	5.63E-08	1.75E-07
1272	569669.84	4214845.58	1.65E-06	8.62E-07	2.51E-06	2.51E-07	1.31E-07	3.83E-07	1.13E-07	5.40E-08	1.67E-07
1273	569668.73	4214836.17	1.58E-06	8.28E-07	2.41E-06	2.42E-07	1.26E-07	3.67E-07	1.09E-07	5.18E-08	1.61E-07
1274	569673.37	4214819.21	1.48E-06	7.72E-07	2.25E-06	2.25E-07	1.17E-07	3.43E-07	1.02E-07	4.83E-08	1.50E-07
1275	569679.12	4214811.67	1.42E-06	7.41E-07	2.16E-06	2.16E-07	1.13E-07	3.29E-07	9.75E-08	4.64E-08	1.44E-07
1276	569684.88	4214804.13	1.36E-06	7.13E-07	2.08E-06	2.08E-07	1.08E-07	3.17E-07	9.39E-08	4.47E-08	1.39E-07
1277	569690.63	4214796.59	1.33E-06	6.97E-07	2.03E-06	2.04E-07	1.06E-07	3.10E-07	9.19E-08	4.37E-08	1.36E-07

1278	569696.38	4214789.05	1.30E-06	6.82E-07	1.99E-06	1.99E-07	1.04E-07	3.03E-07	8.99E-08	4.27E-08	1.33E-07
1279	569688.8	4215005.7	3.09E-06	1.62E-06	4.71E-06	4.73E-07	2.46E-07	7.19E-07	2.13E-07	1.01E-07	3.15E-07
1280	569693.48	4215014.21	3.21E-06	1.68E-06	4.89E-06	4.91E-07	2.56E-07	7.46E-07	2.21E-07	1.05E-07	3.27E-07
1281	569698.15	4215022.71	3.35E-06	1.75E-06	5.10E-06	5.12E-07	2.67E-07	7.78E-07	2.31E-07	1.10E-07	3.41E-07
1282	569702.83	4215031.21	3.50E-06	1.83E-06	5.33E-06	5.34E-07	2.78E-07	8.13E-07	2.41E-07	1.15E-07	3.56E-07
1283	569707.5	4215039.71	3.66E-06	1.91E-06	5.57E-06	5.58E-07	2.91E-07	8.49E-07	2.52E-07	1.20E-07	3.72E-07
1284	569712.18	4215048.21	3.83E-06	2.00E-06	5.83E-06	5.84E-07	3.05E-07	8.89E-07	2.64E-07	1.25E-07	3.89E-07
1285	569716.85	4215056.71	4.02E-06	2.10E-06	6.12E-06	6.14E-07	3.20E-07	9.34E-07	2.77E-07	1.32E-07	4.09E-07
1286	569721.53	4215065.22	4.22E-06	2.21E-06	6.43E-06	6.45E-07	3.36E-07	9.81E-07	2.91E-07	1.38E-07	4.29E-07
1287	569726.2	4215073.72	4.44E-06	2.32E-06	6.76E-06	6.77E-07	3.53E-07	1.03E-06	3.06E-07	1.45E-07	4.51E-07
1288	569730.87	4215082.22	4.67E-06	2.44E-06	7.11E-06	7.13E-07	3.72E-07	1.08E-06	3.22E-07	1.53E-07	4.75E-07
1289	569735.55	4215090.72	4.92E-06	2.57E-06	7.49E-06	7.51E-07	3.91E-07	1.14E-06	3.39E-07	1.61E-07	5.00E-07
1290	569740.22	4215099.22	5.18E-06	2.71E-06	7.88E-06	7.90E-07	4.12E-07	1.20E-06	3.57E-07	1.70E-07	5.26E-07
1291	569744.9	4215107.73	5.44E-06	2.85E-06	8.29E-06	8.31E-07	4.33E-07	1.26E-06	3.75E-07	1.78E-07	5.53E-07
1292	569749.57	4215116.23	5.73E-06	3.00E-06	8.73E-06	8.75E-07	4.56E-07	1.33E-06	3.95E-07	1.88E-07	5.83E-07
1293	569754.25	4215124.73	6.03E-06	3.16E-06	9.19E-06	9.21E-07	4.80E-07	1.40E-06	4.16E-07	1.98E-07	6.13E-07
1294	569786.97	4215184.24	9.92E-06	5.19E-06	1.51E-05	1.51E-06	7.89E-07	2.30E-06	6.83E-07	3.25E-07	1.01E-06
1295	569791.64	4215192.75	1.10E-05	5.76E-06	1.68E-05	1.68E-06	8.76E-07	2.56E-06	7.59E-07	3.61E-07	1.12E-06
1296	569796.32	4215201.25	1.18E-05	6.16E-06	1.79E-05	1.80E-06	9.38E-07	2.74E-06	8.12E-07	3.86E-07	1.20E-06
1297	569800.99	4215209.75	1.23E-05	6.42E-06	1.87E-05	1.87E-06	9.77E-07	2.85E-06	8.46E-07	4.02E-07	1.25E-06
1298	569805.67	4215218.25	1.27E-05	6.65E-06	1.94E-05	1.94E-06	1.01E-06	2.95E-06	8.76E-07	4.16E-07	1.29E-06
1299	569810.34	4215226.75	1.30E-05	6.82E-06	1.99E-05	1.99E-06	1.04E-06	3.03E-06	8.98E-07	4.27E-07	1.33E-06
1300	569678.94	4215001.2	3.03E-06	1.58E-06	4.61E-06	4.62E-07	2.41E-07	7.04E-07	2.09E-07	9.92E-08	3.08E-07
1301	569677.83	4214991.88	2.94E-06	1.54E-06	4.47E-06	4.48E-07	2.34E-07	6.82E-07	2.02E-07	9.62E-08	2.99E-07
1302	569676.73	4214982.56	2.85E-06	1.49E-06	4.35E-06	4.36E-07	2.27E-07	6.63E-07	1.97E-07	9.35E-08	2.90E-07
1303	569675.63	4214973.24	2.78E-06	1.45E-06	4.23E-06	4.24E-07	2.21E-07	6.45E-07	1.91E-07	9.09E-08	2.82E-07
1304	569674.52	4214963.92	2.71E-06	1.42E-06	4.12E-06	4.13E-07	2.15E-07	6.28E-07	1.86E-07	8.86E-08	2.75E-07
1305	569673.42	4214954.6	2.64E-06	1.38E-06	4.02E-06	4.03E-07	2.10E-07	6.12E-07	1.82E-07	8.64E-08	2.68E-07
1306	569672.32	4214945.28	2.55E-06	1.33E-06	3.88E-06	3.89E-07	2.03E-07	5.92E-07	1.76E-07	8.35E-08	2.59E-07
1307	569671.21	4214935.96	2.46E-06	1.29E-06	3.75E-06	3.76E-07	1.96E-07	5.72E-07	1.70E-07	8.06E-08	2.50E-07
1308	569670.11	4214926.64	2.38E-06	1.24E-06	3.62E-06	3.63E-07	1.89E-07	5.52E-07	1.64E-07	7.79E-08	2.42E-07
1309	569669	4214917.31	2.28E-06	1.19E-06	3.48E-06	3.48E-07	1.82E-07	5.30E-07	1.57E-07	7.47E-08	2.32E-07
1310	569667.9	4214907.99	2.19E-06	1.15E-06	3.34E-06	3.34E-07	1.74E-07	5.09E-07	1.51E-07	7.17E-08	2.23E-07
1311	569666.8	4214898.67	2.10E-06	1.10E-06	3.20E-06	3.21E-07	1.67E-07	4.89E-07	1.45E-07	6.89E-08	2.14E-07
1312	569665.69	4214889.35	2.02E-06	1.05E-06	3.07E-06	3.08E-07	1.60E-07	4.68E-07	1.39E-07	6.60E-08	2.05E-07
1313	569664.59	4214880.03	1.93E-06	1.01E-06	2.94E-06	2.95E-07	1.54E-07	4.49E-07	1.33E-07	6.33E-08	1.96E-07
1314	569663.49	4214870.71	1.85E-06	9.70E-07	2.82E-06	2.83E-07	1.48E-07	4.31E-07	1.28E-07	6.07E-08	1.88E-07
1315	569662.38	4214861.39	1.78E-06	9.32E-07	2.71E-06	2.72E-07	1.42E-07	4.14E-07	1.23E-07	5.83E-08	1.81E-07
1316	569661.28	4214852.07	1.71E-06	8.97E-07	2.61E-06	2.62E-07	1.36E-07	3.98E-07	1.18E-07	5.61E-08	1.74E-07
1317	569660.18	4214842.75	1.65E-06	8.64E-07	2.52E-06	2.52E-07	1.31E-07	3.84E-07	1.14E-07	5.41E-08	1.68E-07
1318	569659.07	4214833.43	1.60E-06	8.36E-07	2.43E-06	2.44E-07	1.27E-07	3.71E-07	1.10E-07	5.23E-08	1.62E-07
1319	569680.04	4215010.52	3.13E-06	1.64E-06	4.77E-06	4.78E-07	2.49E-07	7.27E-07	2.16E-07	1.03E-07	3.18E-07
1320	569684.71	4215019.02	3.25E-06	1.70E-06	4.95E-06	4.96E-07	2.59E-07	7.55E-07	2.24E-07	1.06E-07	3.30E-07
1321	569689.39	4215027.52	3.39E-06	1.77E-06	5.16E-06	5.17E-07	2.70E-07	7.87E-07	2.33E-07	1.11E-07	3.44E-07
1322	569694.06	4215036.03	3.53E-06	1.85E-06	5.38E-06	5.39E-07	2.81E-07	8.20E-07	2.43E-07	1.16E-07	3.59E-07
1323	569698.74	4215044.53	3.68E-06	1.93E-06	5.61E-06	5.63E-07	2.93E-07	8.56E-07	2.54E-07	1.21E-07	3.75E-07
1324	569703.41	4215053.03	3.86E-06	2.02E-06	5.88E-06	5.89E-07	3.07E-07	8.97E-07	2.66E-07	1.26E-07	3.92E-07
1325	569708.09	4215061.53	4.05E-06	2.12E-06	6.17E-06	6.18E-07	3.22E-07	9.41E-07	2.79E-07	1.33E-07	4.12E-07
1326	569712.76	4215070.03	4.25E-06	2.22E-06	6.47E-06	6.48E-07	3.38E-07	9.86E-07	2.93E-07	1.39E-07	4.32E-07
1327	569717.44	4215078.54	4.46E-06	2.33E-06	6.79E-06	6.80E-07	3.55E-07	1.03E-06	3.07E-07	1.46E-07	4.53E-07
1328	569722.11	4215087.04	4.69E-06	2.45E-06	7.14E-06	7.16E-07	3.73E-07	1.09E-06	3.23E-07	1.54E-07	4.76E-07
1329	569726.79	4215095.54	4.93E-06	2.58E-06	7.51E-06	7.53E-07	3.92E-07	1.15E-06	3.40E-07	1.61E-07	5.01E-07
1330	569731.46	4215104.04	5.18E-06	2.71E-06	7.90E-06	7.91E-07	4.12E-07	1.20E-06	3.57E-07	1.70E-07	5.27E-07
1331	569736.14	4215112.54	5.46E-06	2.86E-06	8.32E-06	8.34E-07	4.35E-07	1.27E-06	3.76E-07	1.79E-07	5.55E-07
1332	569740.81	4215121.05	5.76E-06	3.01E-06	8.77E-06	8.79E-07	4.58E-07	1.34E-06	3.97E-07	1.89E-07	5.85E-07
1333	569773.53	4215180.56	9.13E-06	4.78E-06	1.39E-05	1.39E-06	7.26E-07	2.12E-06	6.29E-07	2.99E-07	9.28E-07
1334	569778.21	4215189.06	9.90E-06	5.18E-06	1.51E-05	1.51E-06	7.88E-07	2.30E-06	6.82E-07	3.24E-07	1.01E-06
1335	569782.88	4215197.56	1.07E-05	5.59E-06	1.63E-05	1.63E-06	8.50E-07	2.48E-06	7.36E-07	3.50E-07	1.09E-06
1336	569787.56	4215206.07	1.12E-05	5.86E-06	1.70E-05	1.71E-06	8.91E-07	2.60E-06	7.71E-07	3.67E-07	1.14E-06
1337	569792.23	4215214.57	1.17E-05	6.11E-06	1.78E-05	1.78E-06	9.30E-07	2.71E-06	8.05E-07	3.83E-07	1.19E-06
1338	569796.91	4215223.07	1.21E-05	6.34E-06	1.85E-05	1.85E-06	9.64E-07	2.81E-06	8.35E-07	3.97E-07	1.23E-06

1339	569801.58	4215231.57	1.20E-05	6.29E-06	1.83E-05	1.84E-06	9.57E-07	2.79E-06	8.28E-07	3.94E-07	1.22E-06
1340	569670.18	4215006.11	3.06E-06	1.60E-06	4.67E-06	4.68E-07	2.44E-07	7.12E-07	2.11E-07	1.00E-07	3.12E-07
1341	569669.09	4214996.88	2.98E-06	1.56E-06	4.54E-06	4.55E-07	2.37E-07	6.92E-07	2.05E-07	9.76E-08	3.03E-07
1342	569668	4214987.64	2.90E-06	1.52E-06	4.42E-06	4.44E-07	2.31E-07	6.75E-07	2.00E-07	9.51E-08	2.95E-07
1343	569666.91	4214978.41	2.83E-06	1.48E-06	4.30E-06	4.31E-07	2.25E-07	6.56E-07	1.95E-07	9.26E-08	2.87E-07
1344	569665.81	4214969.18	2.75E-06	1.44E-06	4.19E-06	4.20E-07	2.19E-07	6.39E-07	1.89E-07	9.01E-08	2.80E-07
1345	569664.72	4214959.95	2.68E-06	1.40E-06	4.08E-06	4.09E-07	2.13E-07	6.22E-07	1.85E-07	8.77E-08	2.72E-07
1346	569663.63	4214950.72	2.59E-06	1.36E-06	3.95E-06	3.96E-07	2.06E-07	6.02E-07	1.79E-07	8.50E-08	2.64E-07
1347	569662.53	4214941.48	2.50E-06	1.31E-06	3.80E-06	3.81E-07	1.99E-07	5.80E-07	1.72E-07	8.18E-08	2.54E-07
1348	569661.44	4214932.25	2.41E-06	1.26E-06	3.66E-06	3.67E-07	1.91E-07	5.59E-07	1.66E-07	7.88E-08	2.45E-07
1349	569660.35	4214923.02	2.32E-06	1.21E-06	3.53E-06	3.54E-07	1.84E-07	5.38E-07	1.60E-07	7.59E-08	2.36E-07
1350	569659.25	4214913.79	2.23E-06	1.17E-06	3.39E-06	3.40E-07	1.77E-07	5.17E-07	1.54E-07	7.30E-08	2.27E-07
1351	569658.16	4214904.56	2.14E-06	1.12E-06	3.27E-06	3.27E-07	1.71E-07	4.98E-07	1.48E-07	7.02E-08	2.18E-07
1352	569657.07	4214895.32	2.06E-06	1.08E-06	3.14E-06	3.15E-07	1.64E-07	4.79E-07	1.42E-07	6.76E-08	2.10E-07
1353	569655.97	4214886.09	1.98E-06	1.04E-06	3.02E-06	3.03E-07	1.58E-07	4.61E-07	1.37E-07	6.50E-08	2.02E-07
1354	569654.88	4214876.86	1.91E-06	9.98E-07	2.91E-06	2.91E-07	1.52E-07	4.43E-07	1.31E-07	6.25E-08	1.94E-07
1355	569653.79	4214867.63	1.84E-06	9.61E-07	2.80E-06	2.81E-07	1.46E-07	4.27E-07	1.27E-07	6.02E-08	1.87E-07
1356	569652.7	4214858.4	1.77E-06	9.28E-07	2.70E-06	2.71E-07	1.41E-07	4.12E-07	1.22E-07	5.81E-08	1.80E-07
1357	569651.6	4214849.17	1.72E-06	8.98E-07	2.61E-06	2.62E-07	1.37E-07	3.99E-07	1.18E-07	5.62E-08	1.74E-07
1358	569650.51	4214839.93	1.66E-06	8.70E-07	2.53E-06	2.54E-07	1.32E-07	3.86E-07	1.15E-07	5.44E-08	1.69E-07
1359	569671.28	4215015.34	3.16E-06	1.65E-06	4.81E-06	4.83E-07	2.52E-07	7.34E-07	2.18E-07	1.04E-07	3.21E-07
1360	569675.95	4215023.84	3.29E-06	1.72E-06	5.00E-06	5.02E-07	2.61E-07	7.63E-07	2.26E-07	1.08E-07	3.34E-07
1361	569680.63	4215032.34	3.42E-06	1.79E-06	5.21E-06	5.22E-07	2.72E-07	7.94E-07	2.36E-07	1.12E-07	3.48E-07
1362	569685.3	4215040.84	3.56E-06	1.86E-06	5.42E-06	5.43E-07	2.83E-07	8.26E-07	2.45E-07	1.17E-07	3.62E-07
1363	569689.98	4215049.35	3.71E-06	1.94E-06	5.66E-06	5.67E-07	2.95E-07	8.62E-07	2.56E-07	1.22E-07	3.77E-07
1364	569694.65	4215057.85	3.89E-06	2.03E-06	5.92E-06	5.94E-07	3.09E-07	9.03E-07	2.68E-07	1.27E-07	3.95E-07
1365	569699.33	4215066.35	4.07E-06	2.13E-06	6.20E-06	6.22E-07	3.24E-07	9.46E-07	2.81E-07	1.33E-07	4.14E-07
1366	569704	4215074.85	4.26E-06	2.23E-06	6.49E-06	6.51E-07	3.39E-07	9.90E-07	2.94E-07	1.40E-07	4.33E-07
1367	569708.67	4215083.35	4.48E-06	2.34E-06	6.82E-06	6.84E-07	3.56E-07	1.04E-06	3.09E-07	1.47E-07	4.55E-07
1368	569713.35	4215091.86	4.70E-06	2.46E-06	7.17E-06	7.18E-07	3.74E-07	1.09E-06	3.24E-07	1.54E-07	4.78E-07
1369	569718.02	4215100.36	4.94E-06	2.59E-06	7.53E-06	7.55E-07	3.93E-07	1.15E-06	3.41E-07	1.62E-07	5.03E-07
1370	569722.7	4215108.86	5.20E-06	2.72E-06	7.93E-06	7.95E-07	4.14E-07	1.21E-06	3.59E-07	1.70E-07	5.29E-07
1371	569727.37	4215117.36	5.50E-06	2.88E-06	8.38E-06	8.40E-07	4.38E-07	1.28E-06	3.79E-07	1.80E-07	5.59E-07
1372	569764.77	4215185.38	9.22E-06	4.82E-06	1.40E-05	1.41E-06	7.34E-07	2.14E-06	6.35E-07	3.02E-07	9.37E-07
1373	569769.44	4215193.88	9.98E-06	5.22E-06	1.52E-05	1.52E-06	7.94E-07	2.32E-06	6.88E-07	3.27E-07	1.01E-06
1374	569774.12	4215202.38	1.04E-05	5.44E-06	1.58E-05	1.59E-06	8.28E-07	2.42E-06	7.17E-07	3.41E-07	1.06E-06
1375	569778.79	4215210.88	1.08E-05	5.63E-06	1.64E-05	1.64E-06	8.56E-07	2.50E-06	7.41E-07	3.52E-07	1.09E-06
1376	569783.47	4215219.39	1.12E-05	5.85E-06	1.70E-05	1.71E-06	8.90E-07	2.60E-06	7.70E-07	3.66E-07	1.14E-06
1377	569788.14	4215227.89	1.15E-05	5.99E-06	1.74E-05	1.75E-06	9.11E-07	2.66E-06	7.89E-07	3.75E-07	1.16E-06
1378	569792.82	4215236.39	1.11E-05	5.78E-06	1.68E-05	1.69E-06	8.79E-07	2.57E-06	7.61E-07	3.62E-07	1.12E-06
1379	569661.38	4215010.57	3.09E-06	1.61E-06	4.70E-06	4.71E-07	2.46E-07	7.17E-07	2.13E-07	1.01E-07	3.14E-07
1380	569660.24	4215000.98	3.00E-06	1.57E-06	4.57E-06	4.58E-07	2.39E-07	6.97E-07	2.07E-07	9.83E-08	3.05E-07
1381	569659.11	4214991.4	2.92E-06	1.53E-06	4.45E-06	4.46E-07	2.33E-07	6.79E-07	2.01E-07	9.58E-08	2.97E-07
1382	569657.97	4214981.81	2.84E-06	1.49E-06	4.33E-06	4.34E-07	2.26E-07	6.61E-07	1.96E-07	9.32E-08	2.89E-07
1383	569656.84	4214972.22	2.75E-06	1.44E-06	4.19E-06	4.20E-07	2.19E-07	6.40E-07	1.90E-07	9.02E-08	2.80E-07
1384	569655.7	4214962.64	2.67E-06	1.40E-06	4.06E-06	4.07E-07	2.12E-07	6.20E-07	1.84E-07	8.74E-08	2.71E-07
1385	569654.57	4214953.05	2.58E-06	1.35E-06	3.93E-06	3.94E-07	2.05E-07	5.99E-07	1.78E-07	8.45E-08	2.62E-07
1386	569653.43	4214943.46	2.48E-06	1.30E-06	3.78E-06	3.79E-07	1.98E-07	5.77E-07	1.71E-07	8.13E-08	2.52E-07
1387	569652.3	4214933.87	2.39E-06	1.25E-06	3.64E-06	3.65E-07	1.90E-07	5.56E-07	1.65E-07	7.84E-08	2.43E-07
1388	569651.16	4214924.29	2.31E-06	1.21E-06	3.51E-06	3.52E-07	1.83E-07	5.36E-07	1.59E-07	7.55E-08	2.34E-07
1389	569650.03	4214914.7	2.22E-06	1.16E-06	3.38E-06	3.39E-07	1.76E-07	5.15E-07	1.53E-07	7.26E-08	2.25E-07
1390	569648.89	4214905.11	2.13E-06	1.12E-06	3.25E-06	3.26E-07	1.70E-07	4.96E-07	1.47E-07	6.99E-08	2.17E-07
1391	569647.76	4214895.53	2.06E-06	1.08E-06	3.13E-06	3.14E-07	1.64E-07	4.77E-07	1.42E-07	6.73E-08	2.09E-07
1392	569646.62	4214885.94	1.98E-06	1.04E-06	3.01E-06	3.02E-07	1.57E-07	4.59E-07	1.36E-07	6.48E-08	2.01E-07
1393	569645.49	4214876.35	1.91E-06	9.97E-07	2.90E-06	2.91E-07	1.52E-07	4.43E-07	1.31E-07	6.24E-08	1.94E-07
1394	569644.35	4214866.77	1.84E-06	9.62E-07	2.80E-06	2.81E-07	1.46E-07	4.27E-07	1.27E-07	6.03E-08	1.87E-07
1395	569643.22	4214857.18	1.78E-06	9.32E-07	2.71E-06	2.72E-07	1.42E-07	4.14E-07	1.23E-07	5.84E-08	1.81E-07
1396	569662.51	4215020.16	3.19E-06	1.67E-06	4.86E-06	4.87E-07	2.54E-07	7.41E-07	2.20E-07	1.05E-07	3.25E-07
1397	569667.19	4215028.66	3.31E-06	1.73E-06	5.05E-06	5.06E-07	2.64E-07	7.70E-07	2.28E-07	1.09E-07	3.37E-07
1398	569671.86	4215037.16	3.44E-06	1.80E-06	5.24E-06	5.26E-07	2.74E-07	8.00E-07	2.37E-07	1.13E-07	3.50E-07
1399	569676.54	4215045.66	3.58E-06	1.87E-06	5.45E-06	5.46E-07	2.85E-07	8.31E-07	2.47E-07	1.17E-07	3.64E-07

1400	569681.21	4215054.16	3.74E-06	1.96E-06	5.69E-06	5.71E-07	2.97E-07	8.68E-07	2.58E-07	1.22E-07	3.80E-07
1401	569685.89	4215062.67	3.91E-06	2.05E-06	5.95E-06	5.97E-07	3.11E-07	9.08E-07	2.69E-07	1.28E-07	3.97E-07
1402	569690.56	4215071.17	4.09E-06	2.14E-06	6.23E-06	6.24E-07	3.25E-07	9.50E-07	2.82E-07	1.34E-07	4.16E-07
1403	569695.24	4215079.67	4.28E-06	2.24E-06	6.53E-06	6.54E-07	3.41E-07	9.95E-07	2.95E-07	1.40E-07	4.36E-07
1404	569699.91	4215088.17	4.50E-06	2.35E-06	6.85E-06	6.87E-07	3.58E-07	1.04E-06	3.10E-07	1.47E-07	4.57E-07
1405	569704.59	4215096.67	4.72E-06	2.47E-06	7.20E-06	7.21E-07	3.76E-07	1.10E-06	3.26E-07	1.55E-07	4.80E-07
1406	569709.26	4215105.18	4.96E-06	2.60E-06	7.56E-06	7.58E-07	3.95E-07	1.15E-06	3.42E-07	1.63E-07	5.05E-07
1407	569713.94	4215113.68	5.23E-06	2.74E-06	7.96E-06	7.98E-07	4.16E-07	1.21E-06	3.60E-07	1.71E-07	5.31E-07
1408	569718.61	4215122.18	5.54E-06	2.90E-06	8.44E-06	8.46E-07	4.41E-07	1.29E-06	3.82E-07	1.81E-07	5.63E-07
1409	569751.33	4215181.69	8.63E-06	4.52E-06	1.31E-05	1.32E-06	6.87E-07	2.00E-06	5.95E-07	2.83E-07	8.78E-07
1410	569756.01	4215190.2	9.28E-06	4.85E-06	1.41E-05	1.42E-06	7.38E-07	2.16E-06	6.39E-07	3.04E-07	9.43E-07
1411	569760.68	4215198.7	9.84E-06	5.15E-06	1.50E-05	1.50E-06	7.83E-07	2.28E-06	6.78E-07	3.22E-07	1.00E-06
1412	569765.36	4215207.2	1.01E-05	5.26E-06	1.53E-05	1.54E-06	8.01E-07	2.34E-06	6.93E-07	3.30E-07	1.02E-06
1413	569770.03	4215215.7	1.04E-05	5.42E-06	1.58E-05	1.58E-06	8.24E-07	2.40E-06	7.13E-07	3.39E-07	1.05E-06
1414	569774.71	4215224.2	1.07E-05	5.60E-06	1.63E-05	1.63E-06	8.51E-07	2.49E-06	7.37E-07	3.51E-07	1.09E-06
1415	569779.38	4215232.71	1.05E-05	5.51E-06	1.60E-05	1.61E-06	8.37E-07	2.44E-06	7.25E-07	3.45E-07	1.07E-06
1416	569784.05	4215241.21	1.01E-05	5.29E-06	1.54E-05	1.54E-06	8.04E-07	2.35E-06	6.96E-07	3.31E-07	1.03E-06
1417	569652.63	4215015.49	3.11E-06	1.63E-06	4.73E-06	4.75E-07	2.47E-07	7.22E-07	2.14E-07	1.02E-07	3.16E-07
1418	569651.5	4215006	3.02E-06	1.58E-06	4.60E-06	4.61E-07	2.40E-07	7.02E-07	2.08E-07	9.89E-08	3.07E-07
1419	569650.38	4214996.5	2.94E-06	1.54E-06	4.48E-06	4.49E-07	2.34E-07	6.83E-07	2.03E-07	9.63E-08	2.99E-07
1420	569649.26	4214987.01	2.87E-06	1.50E-06	4.37E-06	4.38E-07	2.28E-07	6.66E-07	1.98E-07	9.40E-08	2.92E-07
1421	569648.13	4214977.52	2.78E-06	1.45E-06	4.23E-06	4.24E-07	2.21E-07	6.45E-07	1.91E-07	9.09E-08	2.82E-07
1422	569647.01	4214968.03	2.68E-06	1.40E-06	4.09E-06	4.10E-07	2.13E-07	6.23E-07	1.85E-07	8.79E-08	2.73E-07
1423	569645.89	4214958.54	2.59E-06	1.36E-06	3.95E-06	3.96E-07	2.06E-07	6.02E-07	1.79E-07	8.49E-08	2.64E-07
1424	569644.76	4214949.05	2.50E-06	1.31E-06	3.81E-06	3.82E-07	1.99E-07	5.81E-07	1.72E-07	8.19E-08	2.54E-07
1425	569643.64	4214939.56	2.41E-06	1.26E-06	3.68E-06	3.69E-07	1.92E-07	5.61E-07	1.66E-07	7.91E-08	2.45E-07
1426	569642.52	4214930.07	2.33E-06	1.22E-06	3.55E-06	3.56E-07	1.86E-07	5.42E-07	1.61E-07	7.64E-08	2.37E-07
1427	569641.39	4214920.58	2.25E-06	1.18E-06	3.43E-06	3.43E-07	1.79E-07	5.22E-07	1.55E-07	7.37E-08	2.29E-07
1428	569640.27	4214911.09	2.17E-06	1.13E-06	3.30E-06	3.31E-07	1.72E-07	5.03E-07	1.49E-07	7.10E-08	2.20E-07
1429	569639.14	4214901.6	2.09E-06	1.09E-06	3.19E-06	3.19E-07	1.66E-07	4.86E-07	1.44E-07	6.85E-08	2.13E-07
1430	569638.02	4214892.11	2.02E-06	1.06E-06	3.08E-06	3.08E-07	1.61E-07	4.69E-07	1.39E-07	6.61E-08	2.05E-07
1431	569636.9	4214882.62	1.95E-06	1.02E-06	2.97E-06	2.98E-07	1.55E-07	4.53E-07	1.34E-07	6.39E-08	1.98E-07
1432	569635.77	4214873.13	1.89E-06	9.88E-07	2.88E-06	2.88E-07	1.50E-07	4.38E-07	1.30E-07	6.18E-08	1.92E-07
1433	569634.65	4214863.64	1.83E-06	9.58E-07	2.79E-06	2.80E-07	1.46E-07	4.25E-07	1.26E-07	6.00E-08	1.86E-07
1434	569653.75	4215024.98	3.22E-06	1.68E-06	4.90E-06	4.92E-07	2.56E-07	7.48E-07	2.22E-07	1.05E-07	3.27E-07
1435	569658.43	4215033.48	3.34E-06	1.75E-06	5.08E-06	5.10E-07	2.66E-07	7.75E-07	2.30E-07	1.09E-07	3.39E-07
1436	569663.1	4215041.98	3.46E-06	1.81E-06	5.27E-06	5.29E-07	2.75E-07	8.04E-07	2.39E-07	1.13E-07	3.52E-07
1437	569667.78	4215050.48	3.60E-06	1.88E-06	5.49E-06	5.50E-07	2.87E-07	8.37E-07	2.48E-07	1.18E-07	3.66E-07
1438	569672.45	4215058.98	3.76E-06	1.97E-06	5.72E-06	5.74E-07	2.99E-07	8.72E-07	2.59E-07	1.23E-07	3.82E-07
1439	569677.13	4215067.48	3.92E-06	2.05E-06	5.97E-06	5.99E-07	3.12E-07	9.10E-07	2.70E-07	1.28E-07	3.99E-07
1440	569681.8	4215075.99	4.09E-06	2.14E-06	6.23E-06	6.25E-07	3.26E-07	9.50E-07	2.82E-07	1.34E-07	4.16E-07
1441	569686.47	4215084.49	4.29E-06	2.25E-06	6.54E-06	6.56E-07	3.42E-07	9.98E-07	2.96E-07	1.41E-07	4.37E-07
1442	569691.15	4215092.99	4.52E-06	2.36E-06	6.88E-06	6.89E-07	3.59E-07	1.05E-06	3.11E-07	1.48E-07	4.59E-07
1443	569695.82	4215101.49	4.75E-06	2.48E-06	7.23E-06	7.25E-07	3.78E-07	1.10E-06	3.27E-07	1.56E-07	4.83E-07
1444	569700.5	4215109.99	4.98E-06	2.61E-06	7.59E-06	7.61E-07	3.97E-07	1.16E-06	3.43E-07	1.63E-07	5.07E-07
1445	569737.9	4215178.01	8.12E-06	4.25E-06	1.24E-05	1.24E-06	6.46E-07	1.89E-06	5.59E-07	2.66E-07	8.25E-07
1446	569742.57	4215186.51	8.69E-06	4.54E-06	1.32E-05	1.33E-06	6.91E-07	2.02E-06	5.99E-07	2.85E-07	8.83E-07
1447	569747.24	4215195.01	9.32E-06	4.87E-06	1.42E-05	1.42E-06	7.41E-07	2.16E-06	6.42E-07	3.05E-07	9.47E-07
1448	569751.92	4215203.52	9.51E-06	4.98E-06	1.45E-05	1.45E-06	7.57E-07	2.21E-06	6.56E-07	3.12E-07	9.67E-07
1449	569756.59	4215212.02	9.67E-06	5.06E-06	1.47E-05	1.48E-06	7.70E-07	2.25E-06	6.66E-07	3.17E-07	9.83E-07
1450	569761.27	4215220.52	9.90E-06	5.18E-06	1.51E-05	1.51E-06	7.88E-07	2.30E-06	6.82E-07	3.24E-07	1.01E-06
1451	569765.94	4215229.02	9.98E-06	5.22E-06	1.52E-05	1.52E-06	7.94E-07	2.32E-06	6.88E-07	3.27E-07	1.01E-06
1452	569770.62	4215237.52	9.63E-06	5.04E-06	1.47E-05	1.47E-06	7.67E-07	2.24E-06	6.64E-07	3.16E-07	9.79E-07
1453	569775.29	4215246.03	9.28E-06	4.86E-06	1.41E-05	1.42E-06	7.39E-07	2.16E-06	6.40E-07	3.04E-07	9.44E-07
1454	569643.88	4215020.39	3.13E-06	1.64E-06	4.77E-06	4.78E-07	2.49E-07	7.28E-07	2.16E-07	1.03E-07	3.18E-07
1455	569642.76	4215010.99	3.04E-06	1.59E-06	4.63E-06	4.64E-07	2.42E-07	7.06E-07	2.09E-07	9.96E-08	3.09E-07
1456	569641.65	4215001.59	2.96E-06	1.55E-06	4.51E-06	4.52E-07	2.36E-07	6.87E-07	2.04E-07	9.70E-08	3.01E-07
1457	569640.54	4214992.19	2.89E-06	1.51E-06	4.39E-06	4.41E-07	2.30E-07	6.70E-07	1.99E-07	9.45E-08	2.93E-07
1458	569639.42	4214982.78	2.80E-06	1.47E-06	4.27E-06	4.28E-07	2.23E-07	6.51E-07	1.93E-07	9.19E-08	2.85E-07
1459	569638.31	4214973.38	2.71E-06	1.42E-06	4.12E-06	4.13E-07	2.15E-07	6.28E-07	1.86E-07	8.86E-08	2.75E-07
1460	569637.2	4214963.98	2.61E-06	1.36E-06	3.97E-06	3.98E-07	2.08E-07	6.06E-07	1.80E-07	8.55E-08	2.65E-07

1461	569636.08	4214954.58	2.52E-06	1.32E-06	3.83E-06	3.84E-07	2.00E-07	5.84E-07	1.73E-07	8.24E-08	2.56E-07
1462	569634.97	4214945.18	2.43E-06	1.27E-06	3.70E-06	3.71E-07	1.93E-07	5.65E-07	1.67E-07	7.96E-08	2.47E-07
1463	569633.86	4214935.78	2.35E-06	1.23E-06	3.58E-06	3.59E-07	1.87E-07	5.46E-07	1.62E-07	7.70E-08	2.39E-07
1464	569632.74	4214926.37	2.28E-06	1.19E-06	3.47E-06	3.48E-07	1.81E-07	5.29E-07	1.57E-07	7.46E-08	2.31E-07
1465	569631.63	4214916.97	2.20E-06	1.15E-06	3.35E-06	3.36E-07	1.75E-07	5.11E-07	1.52E-07	7.20E-08	2.24E-07
1466	569630.52	4214907.57	2.13E-06	1.11E-06	3.24E-06	3.25E-07	1.69E-07	4.94E-07	1.46E-07	6.96E-08	2.16E-07
1467	569629.4	4214898.17	2.06E-06	1.08E-06	3.13E-06	3.14E-07	1.64E-07	4.78E-07	1.42E-07	6.74E-08	2.09E-07
1468	569628.29	4214888.77	1.99E-06	1.04E-06	3.04E-06	3.04E-07	1.59E-07	4.63E-07	1.37E-07	6.53E-08	2.03E-07
1469	569627.18	4214879.37	1.93E-06	1.01E-06	2.95E-06	2.95E-07	1.54E-07	4.49E-07	1.33E-07	6.34E-08	1.97E-07
1470	569626.07	4214869.96	1.88E-06	9.84E-07	2.86E-06	2.87E-07	1.50E-07	4.37E-07	1.30E-07	6.16E-08	1.91E-07
1471	569644.99	4215029.79	3.24E-06	1.69E-06	4.93E-06	4.95E-07	2.58E-07	7.52E-07	2.23E-07	1.06E-07	3.29E-07
1472	569649.66	4215038.3	3.35E-06	1.75E-06	5.11E-06	5.12E-07	2.67E-07	7.79E-07	2.31E-07	1.10E-07	3.41E-07
1473	569654.34	4215046.8	3.47E-06	1.82E-06	5.29E-06	5.30E-07	2.76E-07	8.07E-07	2.39E-07	1.14E-07	3.53E-07
1474	569659.01	4215055.3	3.62E-06	1.89E-06	5.51E-06	5.52E-07	2.88E-07	8.40E-07	2.49E-07	1.19E-07	3.68E-07
1475	569663.69	4215063.8	3.77E-06	1.97E-06	5.74E-06	5.75E-07	3.00E-07	8.75E-07	2.60E-07	1.23E-07	3.83E-07
1476	569668.36	4215072.3	3.92E-06	2.05E-06	5.97E-06	5.99E-07	3.12E-07	9.11E-07	2.70E-07	1.28E-07	3.99E-07
1477	569673.04	4215080.8	4.10E-06	2.14E-06	6.24E-06	6.26E-07	3.26E-07	9.52E-07	2.82E-07	1.34E-07	4.17E-07
1478	569677.71	4215089.31	4.30E-06	2.25E-06	6.55E-06	6.56E-07	3.42E-07	9.98E-07	2.96E-07	1.41E-07	4.37E-07
1479	569682.39	4215097.81	4.51E-06	2.36E-06	6.87E-06	6.89E-07	3.59E-07	1.05E-06	3.11E-07	1.48E-07	4.59E-07
1480	569687.06	4215106.31	4.75E-06	2.49E-06	7.24E-06	7.25E-07	3.78E-07	1.10E-06	3.27E-07	1.56E-07	4.83E-07
1481	569691.74	4215114.81	4.99E-06	2.61E-06	7.60E-06	7.62E-07	3.97E-07	1.16E-06	3.44E-07	1.63E-07	5.07E-07
1482	569724.46	4215174.33	7.67E-06	4.01E-06	1.17E-05	1.17E-06	6.11E-07	1.78E-06	5.29E-07	2.51E-07	7.80E-07
1483	569729.13	4215182.83	8.17E-06	4.28E-06	1.24E-05	1.25E-06	6.50E-07	1.90E-06	5.63E-07	2.68E-07	8.31E-07
1484	569733.81	4215191.33	8.71E-06	4.56E-06	1.33E-05	1.33E-06	6.93E-07	2.02E-06	6.00E-07	2.85E-07	8.85E-07
1485	569738.48	4215199.83	9.09E-06	4.75E-06	1.38E-05	1.39E-06	7.23E-07	2.11E-06	6.26E-07	2.98E-07	9.24E-07
1486	569743.16	4215208.33	9.19E-06	4.81E-06	1.40E-05	1.40E-06	7.31E-07	2.13E-06	6.33E-07	3.01E-07	9.34E-07
1487	569747.83	4215216.84	9.30E-06	4.87E-06	1.42E-05	1.42E-06	7.40E-07	2.16E-06	6.41E-07	3.05E-07	9.46E-07
1488	569752.51	4215225.34	9.42E-06	4.93E-06	1.44E-05	1.44E-06	7.50E-07	2.19E-06	6.49E-07	3.09E-07	9.58E-07
1489	569757.18	4215233.84	9.16E-06	4.79E-06	1.40E-05	1.40E-06	7.29E-07	2.13E-06	6.31E-07	3.00E-07	9.32E-07
1490	569761.85	4215242.34	8.87E-06	4.64E-06	1.35E-05	1.35E-06	7.06E-07	2.06E-06	6.11E-07	2.91E-07	9.02E-07
1491	569766.53	4215250.84	8.57E-06	4.49E-06	1.31E-05	1.31E-06	6.82E-07	1.99E-06	5.91E-07	2.81E-07	8.72E-07
1492	569635.12	4215025.29	3.15E-06	1.65E-06	4.80E-06	4.82E-07	2.51E-07	7.32E-07	2.17E-07	1.03E-07	3.21E-07
1493	569634.02	4215015.97	3.06E-06	1.60E-06	4.66E-06	4.67E-07	2.43E-07	7.10E-07	2.11E-07	1.00E-07	3.11E-07
1494	569632.92	4215006.65	2.98E-06	1.56E-06	4.53E-06	4.55E-07	2.37E-07	6.92E-07	2.05E-07	9.75E-08	3.03E-07
1495	569631.81	4214997.33	2.90E-06	1.52E-06	4.41E-06	4.43E-07	2.31E-07	6.73E-07	2.00E-07	9.49E-08	2.95E-07
1496	569630.71	4214988.01	2.82E-06	1.48E-06	4.30E-06	4.31E-07	2.25E-07	6.56E-07	1.95E-07	9.25E-08	2.87E-07
1497	569629.6	4214978.69	2.73E-06	1.43E-06	4.15E-06	4.16E-07	2.17E-07	6.33E-07	1.88E-07	8.93E-08	2.77E-07
1498	569628.5	4214969.37	2.63E-06	1.38E-06	4.00E-06	4.01E-07	2.09E-07	6.11E-07	1.81E-07	8.61E-08	2.67E-07
1499	569627.4	4214960.05	2.54E-06	1.33E-06	3.86E-06	3.87E-07	2.02E-07	5.89E-07	1.75E-07	8.30E-08	2.58E-07
1500	569626.29	4214950.73	2.45E-06	1.28E-06	3.73E-06	3.74E-07	1.95E-07	5.69E-07	1.69E-07	8.03E-08	2.49E-07
1501	569625.19	4214941.4	2.37E-06	1.24E-06	3.62E-06	3.63E-07	1.89E-07	5.51E-07	1.64E-07	7.78E-08	2.41E-07
1502	569624.09	4214932.08	2.30E-06	1.20E-06	3.51E-06	3.52E-07	1.83E-07	5.35E-07	1.59E-07	7.54E-08	2.34E-07
1503	569622.98	4214922.76	2.23E-06	1.17E-06	3.40E-06	3.41E-07	1.78E-07	5.18E-07	1.54E-07	7.31E-08	2.27E-07
1504	569621.88	4214913.44	2.16E-06	1.13E-06	3.29E-06	3.30E-07	1.72E-07	5.02E-07	1.49E-07	7.08E-08	2.20E-07
1505	569620.78	4214904.12	2.09E-06	1.10E-06	3.19E-06	3.20E-07	1.67E-07	4.86E-07	1.44E-07	6.86E-08	2.13E-07
1506	569619.67	4214894.8	2.03E-06	1.06E-06	3.09E-06	3.10E-07	1.62E-07	4.72E-07	1.40E-07	6.65E-08	2.06E-07
1507	569618.57	4214885.48	1.98E-06	1.03E-06	3.01E-06	3.02E-07	1.57E-07	4.59E-07	1.36E-07	6.47E-08	2.01E-07
1508	569636.23	4215034.61	3.25E-06	1.70E-06	4.95E-06	4.97E-07	2.59E-07	7.55E-07	2.24E-07	1.07E-07	3.31E-07
1509	569640.9	4215043.11	3.36E-06	1.76E-06	5.12E-06	5.13E-07	2.67E-07	7.80E-07	2.31E-07	1.10E-07	3.42E-07
1510	569645.58	4215051.62	3.49E-06	1.82E-06	5.31E-06	5.32E-07	2.77E-07	8.10E-07	2.40E-07	1.14E-07	3.54E-07
1511	569650.25	4215060.12	3.63E-06	1.90E-06	5.52E-06	5.54E-07	2.88E-07	8.42E-07	2.50E-07	1.19E-07	3.69E-07
1512	569654.92	4215068.62	3.77E-06	1.97E-06	5.74E-06	5.76E-07	3.00E-07	8.75E-07	2.60E-07	1.23E-07	3.83E-07
1513	569659.6	4215077.12	3.92E-06	2.05E-06	5.97E-06	5.98E-07	3.12E-07	9.10E-07	2.70E-07	1.28E-07	3.98E-07
1514	569664.27	4215085.62	4.10E-06	2.14E-06	6.24E-06	6.26E-07	3.26E-07	9.52E-07	2.82E-07	1.34E-07	4.17E-07
1515	569668.95	4215094.12	4.29E-06	2.25E-06	6.54E-06	6.56E-07	3.42E-07	9.97E-07	2.96E-07	1.41E-07	4.37E-07
1516	569673.62	4215102.63	4.51E-06	2.36E-06	6.86E-06	6.88E-07	3.59E-07	1.05E-06	3.11E-07	1.48E-07	4.58E-07
1517	569678.3	4215111.13	4.73E-06	2.47E-06	7.20E-06	7.22E-07	3.76E-07	1.10E-06	3.26E-07	1.55E-07	4.80E-07
1518	569682.97	4215119.63	4.95E-06	2.59E-06	7.55E-06	7.57E-07	3.94E-07	1.15E-06	3.41E-07	1.62E-07	5.04E-07
1519	569711.02	4215170.64	6.95E-06	3.64E-06	1.06E-05	1.06E-06	5.53E-07	1.62E-06	4.79E-07	2.28E-07	7.07E-07
1520	569715.69	4215179.14	7.52E-06	3.93E-06	1.14E-05	1.15E-06	5.98E-07	1.75E-06	5.18E-07	2.46E-07	7.64E-07
1521	569720.37	4215187.65	8.12E-06	4.25E-06	1.24E-05	1.24E-06	6.46E-07	1.89E-06	5.59E-07	2.66E-07	8.25E-07

1522	569725.04	4215196.15	8.71E-06	4.56E-06	1.33E-05	1.33E-06	6.93E-07	2.02E-06	6.00E-07	2.85E-07	8.86E-07
1523	569729.72	4215204.65	8.78E-06	4.59E-06	1.34E-05	1.34E-06	6.99E-07	2.04E-06	6.05E-07	2.88E-07	8.93E-07
1524	569734.39	4215213.15	8.86E-06	4.64E-06	1.35E-05	1.35E-06	7.05E-07	2.06E-06	6.11E-07	2.90E-07	9.01E-07
1525	569739.07	4215221.65	8.95E-06	4.68E-06	1.36E-05	1.37E-06	7.12E-07	2.08E-06	6.17E-07	2.93E-07	9.10E-07
1526	569743.74	4215230.16	8.83E-06	4.62E-06	1.34E-05	1.35E-06	7.02E-07	2.05E-06	6.08E-07	2.89E-07	8.97E-07
1527	569748.42	4215238.66	8.50E-06	4.45E-06	1.30E-05	1.30E-06	6.77E-07	1.98E-06	5.86E-07	2.79E-07	8.65E-07
1528	569753.09	4215247.16	8.22E-06	4.30E-06	1.25E-05	1.25E-06	6.54E-07	1.91E-06	5.66E-07	2.69E-07	8.35E-07
1529	569757.77	4215255.66	7.97E-06	4.17E-06	1.21E-05	1.22E-06	6.35E-07	1.85E-06	5.50E-07	2.61E-07	8.11E-07
1530	569626.32	4215029.8	3.15E-06	1.65E-06	4.80E-06	4.82E-07	2.51E-07	7.33E-07	2.17E-07	1.03E-07	3.21E-07
1531	569625.18	4215020.17	3.06E-06	1.60E-06	4.66E-06	4.67E-07	2.43E-07	7.10E-07	2.11E-07	1.00E-07	3.11E-07
1532	569624.04	4215010.54	2.97E-06	1.55E-06	4.52E-06	4.53E-07	2.36E-07	6.89E-07	2.05E-07	9.72E-08	3.02E-07
1533	569622.9	4215000.9	2.88E-06	1.51E-06	4.39E-06	4.40E-07	2.29E-07	6.70E-07	1.99E-07	9.45E-08	2.93E-07
1534	569621.76	4214991.27	2.80E-06	1.47E-06	4.27E-06	4.28E-07	2.23E-07	6.51E-07	1.93E-07	9.18E-08	2.85E-07
1535	569620.62	4214981.64	2.71E-06	1.42E-06	4.13E-06	4.14E-07	2.16E-07	6.30E-07	1.87E-07	8.89E-08	2.76E-07
1536	569619.48	4214972.01	2.62E-06	1.37E-06	3.99E-06	4.00E-07	2.08E-07	6.08E-07	1.80E-07	8.57E-08	2.66E-07
1537	569618.34	4214962.38	2.52E-06	1.32E-06	3.85E-06	3.86E-07	2.01E-07	5.86E-07	1.74E-07	8.27E-08	2.57E-07
1538	569617.2	4214952.75	2.44E-06	1.28E-06	3.72E-06	3.72E-07	1.94E-07	5.67E-07	1.68E-07	7.99E-08	2.48E-07
1539	569616.06	4214943.12	2.36E-06	1.24E-06	3.60E-06	3.61E-07	1.88E-07	5.49E-07	1.63E-07	7.74E-08	2.40E-07
1540	569614.92	4214933.48	2.29E-06	1.20E-06	3.49E-06	3.50E-07	1.82E-07	5.33E-07	1.58E-07	7.51E-08	2.33E-07
1541	569613.78	4214923.85	2.23E-06	1.16E-06	3.39E-06	3.40E-07	1.77E-07	5.17E-07	1.53E-07	7.29E-08	2.26E-07
1542	569612.64	4214914.22	2.16E-06	1.13E-06	3.28E-06	3.29E-07	1.71E-07	5.01E-07	1.49E-07	7.06E-08	2.19E-07
1543	569611.5	4214904.59	2.09E-06	1.09E-06	3.18E-06	3.19E-07	1.66E-07	4.85E-07	1.44E-07	6.84E-08	2.12E-07
1544	569610.36	4214894.96	2.03E-06	1.06E-06	3.09E-06	3.10E-07	1.61E-07	4.71E-07	1.40E-07	6.65E-08	2.06E-07
1545	569627.46	4215039.43	3.25E-06	1.70E-06	4.95E-06	4.96E-07	2.59E-07	7.55E-07	2.24E-07	1.06E-07	3.31E-07
1546	569632.14	4215047.93	3.36E-06	1.76E-06	5.12E-06	5.14E-07	2.68E-07	7.81E-07	2.32E-07	1.10E-07	3.42E-07
1547	569636.81	4215056.43	3.49E-06	1.83E-06	5.32E-06	5.33E-07	2.78E-07	8.11E-07	2.41E-07	1.14E-07	3.55E-07
1548	569641.49	4215064.94	3.63E-06	1.90E-06	5.52E-06	5.54E-07	2.89E-07	8.42E-07	2.50E-07	1.19E-07	3.69E-07
1549	569646.16	4215073.44	3.76E-06	1.97E-06	5.73E-06	5.74E-07	2.99E-07	8.74E-07	2.59E-07	1.23E-07	3.82E-07
1550	569650.84	4215081.94	3.92E-06	2.05E-06	5.97E-06	5.98E-07	3.12E-07	9.10E-07	2.70E-07	1.28E-07	3.98E-07
1551	569655.51	4215090.44	4.10E-06	2.14E-06	6.24E-06	6.25E-07	3.26E-07	9.51E-07	2.82E-07	1.34E-07	4.16E-07
1552	569660.19	4215098.94	4.29E-06	2.24E-06	6.53E-06	6.55E-07	3.41E-07	9.96E-07	2.95E-07	1.40E-07	4.36E-07
1553	569664.86	4215107.44	4.49E-06	2.35E-06	6.84E-06	6.86E-07	3.57E-07	1.04E-06	3.09E-07	1.47E-07	4.57E-07
1554	569669.54	4215115.95	4.69E-06	2.46E-06	7.15E-06	7.17E-07	3.74E-07	1.09E-06	3.23E-07	1.54E-07	4.77E-07
1555	569674.21	4215124.45	4.92E-06	2.57E-06	7.49E-06	7.51E-07	3.91E-07	1.14E-06	3.39E-07	1.61E-07	5.00E-07
1556	569688.23	4215149.95	5.68E-06	2.97E-06	8.65E-06	8.67E-07	4.52E-07	1.32E-06	3.91E-07	1.86E-07	5.77E-07
1557	569692.91	4215158.46	5.96E-06	3.12E-06	9.08E-06	9.10E-07	4.74E-07	1.38E-06	4.11E-07	1.95E-07	6.06E-07
1558	569697.58	4215166.96	6.31E-06	3.30E-06	9.61E-06	9.63E-07	5.02E-07	1.47E-06	4.35E-07	2.07E-07	6.41E-07
1559	569702.26	4215175.46	6.81E-06	3.56E-06	1.04E-05	1.04E-06	5.42E-07	1.58E-06	4.69E-07	2.23E-07	6.92E-07
1560	569706.93	4215183.96	7.35E-06	3.85E-06	1.12E-05	1.12E-06	5.85E-07	1.71E-06	5.07E-07	2.41E-07	7.48E-07
1561	569711.61	4215192.46	7.94E-06	4.15E-06	1.21E-05	1.21E-06	6.32E-07	1.84E-06	5.47E-07	2.60E-07	8.07E-07
1562	569716.28	4215200.97	8.31E-06	4.35E-06	1.27E-05	1.27E-06	6.62E-07	1.93E-06	5.73E-07	2.72E-07	8.45E-07
1563	569720.96	4215209.47	8.45E-06	4.42E-06	1.29E-05	1.29E-06	6.72E-07	1.96E-06	5.82E-07	2.77E-07	8.59E-07
1564	569725.63	4215217.97	8.53E-06	4.46E-06	1.30E-05	1.30E-06	6.79E-07	1.98E-06	5.88E-07	2.79E-07	8.67E-07
1565	569730.31	4215226.47	8.58E-06	4.49E-06	1.31E-05	1.31E-06	6.83E-07	1.99E-06	5.91E-07	2.81E-07	8.72E-07
1566	569734.98	4215234.97	8.23E-06	4.31E-06	1.25E-05	1.26E-06	6.55E-07	1.91E-06	5.67E-07	2.70E-07	8.37E-07
1567	569739.65	4215243.48	7.93E-06	4.15E-06	1.21E-05	1.21E-06	6.31E-07	1.84E-06	5.46E-07	2.60E-07	8.06E-07
1568	569744.33	4215251.98	7.67E-06	4.01E-06	1.17E-05	1.17E-06	6.10E-07	1.78E-06	5.28E-07	2.51E-07	7.79E-07
1569	569749	4215260.48	7.45E-06	3.90E-06	1.14E-05	1.14E-06	5.93E-07	1.73E-06	5.14E-07	2.44E-07	7.58E-07
1570	569984.77	4215238.15	4.09E-05	2.14E-05	6.24E-05	6.25E-06	3.26E-06	9.51E-06	2.82E-06	1.34E-06	4.16E-06
1571	569985.08	4215247.82	3.76E-05	1.97E-05	5.73E-05	5.75E-06	3.00E-06	8.74E-06	2.59E-06	1.23E-06	3.83E-06
1572	569985.4	4215257.49	3.43E-05	1.79E-05	5.22E-05	5.23E-06	2.73E-06	7.96E-06	2.36E-06	1.12E-06	3.48E-06
1573	569985.71	4215267.16	3.08E-05	1.61E-05	4.69E-05	4.70E-06	2.45E-06	7.15E-06	2.12E-06	1.01E-06	3.13E-06
1574	569986.03	4215276.84	2.77E-05	1.45E-05	4.22E-05	4.23E-06	2.20E-06	6.44E-06	1.91E-06	9.08E-07	2.82E-06
1575	569986.34	4215286.51	2.52E-05	1.32E-05	3.84E-05	3.85E-06	2.00E-06	5.85E-06	1.74E-06	8.25E-07	2.56E-06
1576	569986.66	4215296.18	2.46E-05	1.29E-05	3.75E-05	3.76E-06	1.96E-06	5.71E-06	1.69E-06	8.06E-07	2.50E-06
1577	569986.97	4215305.85	2.43E-05	1.27E-05	3.70E-05	3.71E-06	1.93E-06	5.64E-06	1.67E-06	7.95E-07	2.47E-06
1578	569987.29	4215315.52	2.43E-05	1.27E-05	3.69E-05	3.70E-06	1.93E-06	5.63E-06	1.67E-06	7.94E-07	2.47E-06
1579	569987.6	4215325.19	2.50E-05	1.31E-05	3.82E-05	3.82E-06	1.99E-06	5.82E-06	1.73E-06	8.21E-07	2.55E-06
1580	569987.92	4215334.86	2.61E-05	1.37E-05	3.98E-05	3.99E-06	2.08E-06	6.06E-06	1.80E-06	8.55E-07	2.65E-06
1581	569988.23	4215344.54	2.78E-05	1.46E-05	4.24E-05	4.25E-06	2.21E-06	6.46E-06	1.92E-06	9.11E-07	2.83E-06
1582	569988.55	4215354.21	2.76E-05	1.45E-05	4.21E-05	4.22E-06	2.20E-06	6.42E-06	1.90E-06	9.05E-07	2.81E-06

1583	569988.86	4215363.88	2.69E-05	1.41E-05	4.10E-05	4.11E-06	2.14E-06	6.25E-06	1.85E-06	8.81E-07	2.73E-06
1584	569989.18	4215373.55	2.69E-05	1.41E-05	4.10E-05	4.11E-06	2.14E-06	6.26E-06	1.86E-06	8.83E-07	2.74E-06
1585	569973.51	4215199.79	4.44E-05	2.32E-05	6.77E-05	6.78E-06	3.53E-06	1.03E-05	3.06E-06	1.46E-06	4.52E-06
1586	569973.83	4215209.46	4.28E-05	2.24E-05	6.52E-05	6.54E-06	3.41E-06	9.95E-06	2.95E-06	1.40E-06	4.35E-06
1587	569974.14	4215219.13	4.04E-05	2.11E-05	6.15E-05	6.17E-06	3.21E-06	9.38E-06	2.78E-06	1.32E-06	4.11E-06
1588	569974.46	4215228.8	3.77E-05	1.97E-05	5.75E-05	5.76E-06	3.00E-06	8.77E-06	2.60E-06	1.24E-06	3.84E-06
1589	569974.77	4215238.48	3.53E-05	1.85E-05	5.38E-05	5.39E-06	2.81E-06	8.20E-06	2.43E-06	1.16E-06	3.59E-06
1590	569975.09	4215248.15	3.28E-05	1.71E-05	4.99E-05	5.00E-06	2.61E-06	7.61E-06	2.26E-06	1.07E-06	3.33E-06
1591	569975.4	4215257.82	3.01E-05	1.58E-05	4.59E-05	4.60E-06	2.40E-06	7.00E-06	2.08E-06	9.88E-07	3.06E-06
1592	569975.72	4215267.49	2.73E-05	1.43E-05	4.16E-05	4.17E-06	2.17E-06	6.35E-06	1.88E-06	8.95E-07	2.78E-06
1593	569976.03	4215277.16	2.48E-05	1.30E-05	3.78E-05	3.79E-06	1.98E-06	5.77E-06	1.71E-06	8.14E-07	2.53E-06
1594	569976.35	4215286.83	2.29E-05	1.20E-05	3.49E-05	3.50E-06	1.82E-06	5.32E-06	1.58E-06	7.50E-07	2.33E-06
1595	569976.66	4215296.5	2.25E-05	1.18E-05	3.43E-05	3.44E-06	1.79E-06	5.23E-06	1.55E-06	7.38E-07	2.29E-06
1596	569976.98	4215306.18	2.23E-05	1.17E-05	3.40E-05	3.41E-06	1.78E-06	5.19E-06	1.54E-06	7.32E-07	2.27E-06
1597	569977.29	4215315.85	2.24E-05	1.17E-05	3.41E-05	3.42E-06	1.78E-06	5.20E-06	1.54E-06	7.33E-07	2.27E-06
1598	569977.61	4215325.52	2.32E-05	1.21E-05	3.53E-05	3.54E-06	1.85E-06	5.39E-06	1.60E-06	7.60E-07	2.36E-06
1599	569977.92	4215335.19	2.42E-05	1.27E-05	3.69E-05	3.70E-06	1.93E-06	5.63E-06	1.67E-06	7.94E-07	2.46E-06
1600	569978.24	4215344.86	2.60E-05	1.36E-05	3.95E-05	3.96E-06	2.07E-06	6.03E-06	1.79E-06	8.50E-07	2.64E-06
1601	569978.55	4215354.53	2.59E-05	1.35E-05	3.94E-05	3.95E-06	2.06E-06	6.01E-06	1.78E-06	8.48E-07	2.63E-06
1602	569978.87	4215364.2	2.55E-05	1.34E-05	3.89E-05	3.90E-06	2.03E-06	5.93E-06	1.76E-06	8.36E-07	2.60E-06
1603	569979.18	4215373.88	2.65E-05	1.39E-05	4.03E-05	4.04E-06	2.11E-06	6.15E-06	1.82E-06	8.68E-07	2.69E-06
1604	569962.57	4215171.1	4.05E-05	2.12E-05	6.17E-05	6.19E-06	3.22E-06	9.41E-06	2.79E-06	1.33E-06	4.12E-06
1605	569962.89	4215180.77	4.09E-05	2.14E-05	6.24E-05	6.25E-06	3.26E-06	9.51E-06	2.82E-06	1.34E-06	4.16E-06
1606	569963.2	4215190.44	4.03E-05	2.11E-05	6.14E-05	6.16E-06	3.21E-06	9.37E-06	2.78E-06	1.32E-06	4.10E-06
1607	569963.52	4215200.12	3.93E-05	2.06E-05	5.98E-05	6.00E-06	3.13E-06	9.13E-06	2.71E-06	1.29E-06	3.99E-06
1608	569963.83	4215209.79	3.73E-05	1.95E-05	5.68E-05	5.70E-06	2.97E-06	8.67E-06	2.57E-06	1.22E-06	3.79E-06
1609	569964.15	4215219.46	3.48E-05	1.82E-05	5.30E-05	5.32E-06	2.77E-06	8.09E-06	2.40E-06	1.14E-06	3.54E-06
1610	569964.46	4215229.13	3.24E-05	1.69E-05	4.93E-05	4.95E-06	2.58E-06	7.52E-06	2.23E-06	1.06E-06	3.29E-06
1611	569964.78	4215238.8	3.06E-05	1.60E-05	4.66E-05	4.67E-06	2.43E-06	7.11E-06	2.11E-06	1.00E-06	3.11E-06
1612	569965.09	4215248.47	2.87E-05	1.50E-05	4.38E-05	4.39E-06	2.29E-06	6.67E-06	1.98E-06	9.41E-07	2.92E-06
1613	569965.41	4215258.14	2.68E-05	1.40E-05	4.08E-05	4.09E-06	2.13E-06	6.22E-06	1.84E-06	8.77E-07	2.72E-06
1614	569965.72	4215267.82	2.44E-05	1.28E-05	3.72E-05	3.73E-06	1.95E-06	5.68E-06	1.68E-06	8.01E-07	2.49E-06
1615	569966.04	4215277.49	2.24E-05	1.17E-05	3.42E-05	3.43E-06	1.79E-06	5.21E-06	1.55E-06	7.35E-07	2.28E-06
1616	569966.35	4215287.16	2.09E-05	1.10E-05	3.19E-05	3.20E-06	1.67E-06	4.86E-06	1.44E-06	6.86E-07	2.13E-06
1617	569966.67	4215296.83	2.07E-05	1.08E-05	3.15E-05	3.16E-06	1.65E-06	4.81E-06	1.43E-06	6.78E-07	2.11E-06
1618	569966.98	4215306.5	2.06E-05	1.08E-05	3.14E-05	3.15E-06	1.64E-06	4.79E-06	1.42E-06	6.76E-07	2.10E-06
1619	569967.3	4215316.17	2.07E-05	1.08E-05	3.15E-05	3.16E-06	1.65E-06	4.80E-06	1.42E-06	6.77E-07	2.10E-06
1620	569967.61	4215325.84	2.16E-05	1.13E-05	3.28E-05	3.29E-06	1.72E-06	5.01E-06	1.49E-06	7.06E-07	2.19E-06
1621	569967.93	4215335.52	2.26E-05	1.18E-05	3.44E-05	3.44E-06	1.79E-06	5.24E-06	1.55E-06	7.39E-07	2.29E-06
1622	569968.24	4215345.19	2.37E-05	1.24E-05	3.61E-05	3.62E-06	1.89E-06	5.51E-06	1.64E-06	7.77E-07	2.41E-06
1623	569968.56	4215354.86	2.38E-05	1.24E-05	3.62E-05	3.63E-06	1.89E-06	5.52E-06	1.64E-06	7.79E-07	2.42E-06
1624	569968.87	4215364.53	2.44E-05	1.27E-05	3.71E-05	3.72E-06	1.94E-06	5.66E-06	1.68E-06	7.98E-07	2.48E-06
1625	569969.19	4215374.2	2.63E-05	1.38E-05	4.01E-05	4.02E-06	2.09E-06	6.11E-06	1.81E-06	8.62E-07	2.68E-06
1626	569952.26	4215161.76	3.53E-05	1.85E-05	5.38E-05	5.40E-06	2.81E-06	8.21E-06	2.44E-06	1.16E-06	3.59E-06
1627	569952.58	4215171.43	3.65E-05	1.91E-05	5.55E-05	5.57E-06	2.90E-06	8.47E-06	2.51E-06	1.19E-06	3.71E-06
1628	569952.89	4215181.1	3.67E-05	1.92E-05	5.59E-05	5.61E-06	2.92E-06	8.53E-06	2.53E-06	1.20E-06	3.73E-06
1629	569953.21	4215190.77	3.62E-05	1.89E-05	5.51E-05	5.52E-06	2.88E-06	8.40E-06	2.49E-06	1.18E-06	3.68E-06
1630	569953.52	4215200.44	3.52E-05	1.84E-05	5.36E-05	5.37E-06	2.80E-06	8.17E-06	2.42E-06	1.15E-06	3.58E-06
1631	569953.84	4215210.11	3.32E-05	1.74E-05	5.06E-05	5.07E-06	2.64E-06	7.71E-06	2.29E-06	1.09E-06	3.38E-06
1632	569954.15	4215219.78	3.08E-05	1.61E-05	4.68E-05	4.70E-06	2.45E-06	7.14E-06	2.12E-06	1.01E-06	3.13E-06
1633	569954.47	4215229.46	2.85E-05	1.49E-05	4.34E-05	4.35E-06	2.27E-06	6.62E-06	1.96E-06	9.33E-07	2.90E-06
1634	569954.78	4215239.13	2.69E-05	1.41E-05	4.10E-05	4.11E-06	2.14E-06	6.25E-06	1.85E-06	8.82E-07	2.74E-06
1635	569955.1	4215248.8	2.53E-05	1.33E-05	3.86E-05	3.87E-06	2.02E-06	5.88E-06	1.75E-06	8.30E-07	2.58E-06
1636	569955.41	4215258.47	2.37E-05	1.24E-05	3.62E-05	3.62E-06	1.89E-06	5.51E-06	1.64E-06	7.78E-07	2.41E-06
1637	569955.73	4215268.14	2.21E-05	1.16E-05	3.36E-05	3.37E-06	1.76E-06	5.13E-06	1.52E-06	7.23E-07	2.24E-06
1638	569956.04	4215277.81	2.06E-05	1.08E-05	3.14E-05	3.15E-06	1.64E-06	4.79E-06	1.42E-06	6.76E-07	2.10E-06
1639	569956.36	4215287.48	1.95E-05	1.02E-05	2.97E-05	2.98E-06	1.55E-06	4.54E-06	1.35E-06	6.40E-07	1.99E-06
1640	569956.67	4215297.16	1.93E-05	1.01E-05	2.94E-05	2.95E-06	1.54E-06	4.49E-06	1.33E-06	6.33E-07	1.96E-06
1641	569956.99	4215306.83	1.92E-05	1.01E-05	2.93E-05	2.94E-06	1.53E-06	4.47E-06	1.33E-06	6.30E-07	1.96E-06
1642	569957.3	4215316.5	1.93E-05	1.01E-05	2.94E-05	2.94E-06	1.53E-06	4.48E-06	1.33E-06	6.32E-07	1.96E-06
1643	569957.62	4215326.17	2.00E-05	1.05E-05	3.05E-05	3.05E-06	1.59E-06	4.65E-06	1.38E-06	6.55E-07	2.03E-06

1644	569957.93	4215335.84	2.08E-05	1.09E-05	3.17E-05	3.18E-06	1.66E-06	4.83E-06	1.43E-06	6.82E-07	2.12E-06
1645	569958.25	4215345.51	2.18E-05	1.14E-05	3.32E-05	3.33E-06	1.73E-06	5.06E-06	1.50E-06	7.14E-07	2.22E-06
1646	569958.56	4215355.18	2.20E-05	1.15E-05	3.36E-05	3.36E-06	1.75E-06	5.12E-06	1.52E-06	7.22E-07	2.24E-06
1647	569958.88	4215364.86	2.31E-05	1.21E-05	3.52E-05	3.53E-06	1.84E-06	5.36E-06	1.59E-06	7.56E-07	2.35E-06
1648	569959.19	4215374.53	2.61E-05	1.36E-05	3.97E-05	3.98E-06	2.07E-06	6.06E-06	1.80E-06	8.54E-07	2.65E-06
1649	569942.58	4215171.75	3.31E-05	1.73E-05	5.04E-05	5.05E-06	2.63E-06	7.69E-06	2.28E-06	1.08E-06	3.37E-06
1650	569942.9	4215181.42	3.32E-05	1.74E-05	5.06E-05	5.08E-06	2.65E-06	7.72E-06	2.29E-06	1.09E-06	3.38E-06
1651	569943.21	4215191.1	3.32E-05	1.74E-05	5.05E-05	5.07E-06	2.64E-06	7.71E-06	2.29E-06	1.09E-06	3.37E-06
1652	569943.53	4215200.77	3.17E-05	1.66E-05	4.82E-05	4.84E-06	2.52E-06	7.36E-06	2.18E-06	1.04E-06	3.22E-06
1653	569943.84	4215210.44	2.97E-05	1.55E-05	4.52E-05	4.53E-06	2.36E-06	6.90E-06	2.05E-06	9.73E-07	3.02E-06
1654	569944.16	4215220.11	2.73E-05	1.43E-05	4.16E-05	4.17E-06	2.17E-06	6.35E-06	1.88E-06	8.95E-07	2.78E-06
1655	569944.47	4215229.78	2.52E-05	1.32E-05	3.85E-05	3.85E-06	2.01E-06	5.86E-06	1.74E-06	8.27E-07	2.57E-06
1656	569944.79	4215239.45	2.38E-05	1.25E-05	3.63E-05	3.64E-06	1.90E-06	5.54E-06	1.64E-06	7.81E-07	2.42E-06
1657	569945.1	4215249.12	2.25E-05	1.18E-05	3.42E-05	3.43E-06	1.79E-06	5.22E-06	1.55E-06	7.36E-07	2.28E-06
1658	569945.42	4215258.8	2.12E-05	1.11E-05	3.23E-05	3.24E-06	1.69E-06	4.92E-06	1.46E-06	6.94E-07	2.15E-06
1659	569945.73	4215268.47	2.01E-05	1.05E-05	3.06E-05	3.07E-06	1.60E-06	4.66E-06	1.38E-06	6.58E-07	2.04E-06
1660	569946.05	4215278.14	1.91E-05	9.99E-06	2.91E-05	2.92E-06	1.52E-06	4.44E-06	1.32E-06	6.26E-07	1.94E-06
1661	569946.36	4215287.81	1.84E-05	9.60E-06	2.80E-05	2.80E-06	1.46E-06	4.26E-06	1.26E-06	6.01E-07	1.87E-06
1662	569946.68	4215297.48	1.81E-05	9.49E-06	2.76E-05	2.77E-06	1.44E-06	4.21E-06	1.25E-06	5.94E-07	1.84E-06
1663	569946.99	4215307.15	1.80E-05	9.43E-06	2.75E-05	2.75E-06	1.43E-06	4.19E-06	1.24E-06	5.90E-07	1.83E-06
1664	569947.31	4215316.82	1.80E-05	9.44E-06	2.75E-05	2.75E-06	1.44E-06	4.19E-06	1.24E-06	5.91E-07	1.83E-06
1665	569947.62	4215326.5	1.86E-05	9.71E-06	2.83E-05	2.83E-06	1.48E-06	4.31E-06	1.28E-06	6.08E-07	1.89E-06
1666	569947.94	4215336.17	1.92E-05	1.00E-05	2.92E-05	2.93E-06	1.53E-06	4.45E-06	1.32E-06	6.28E-07	1.95E-06
1667	569948.25	4215345.84	1.99E-05	1.04E-05	3.03E-05	3.04E-06	1.58E-06	4.63E-06	1.37E-06	6.52E-07	2.02E-06
1668	569948.57	4215355.51	2.04E-05	1.07E-05	3.11E-05	3.12E-06	1.62E-06	4.74E-06	1.41E-06	6.68E-07	2.07E-06
1669	569948.88	4215365.18	2.19E-05	1.15E-05	3.34E-05	3.35E-06	1.74E-06	5.09E-06	1.51E-06	7.18E-07	2.23E-06
1670	569949.2	4215374.85	2.59E-05	1.36E-05	3.95E-05	3.96E-06	2.06E-06	6.02E-06	1.79E-06	8.50E-07	2.64E-06
1671	569932.59	4215172.08	3.03E-05	1.58E-05	4.61E-05	4.62E-06	2.41E-06	7.03E-06	2.09E-06	9.92E-07	3.08E-06
1672	569932.9	4215181.75	3.03E-05	1.59E-05	4.62E-05	4.63E-06	2.41E-06	7.04E-06	2.09E-06	9.93E-07	3.08E-06
1673	569933.22	4215191.42	3.02E-05	1.58E-05	4.60E-05	4.62E-06	2.41E-06	7.02E-06	2.08E-06	9.90E-07	3.07E-06
1674	569933.53	4215201.09	2.87E-05	1.50E-05	4.37E-05	4.38E-06	2.28E-06	6.66E-06	1.98E-06	9.39E-07	2.91E-06
1675	569933.85	4215210.76	2.67E-05	1.40E-05	4.07E-05	4.08E-06	2.12E-06	6.20E-06	1.84E-06	8.74E-07	2.71E-06
1676	569934.16	4215220.44	2.44E-05	1.28E-05	3.72E-05	3.73E-06	1.94E-06	5.67E-06	1.68E-06	8.00E-07	2.48E-06
1677	569934.48	4215230.11	2.25E-05	1.18E-05	3.43E-05	3.44E-06	1.79E-06	5.23E-06	1.55E-06	7.37E-07	2.29E-06
1678	569934.79	4215239.78	2.13E-05	1.11E-05	3.24E-05	3.25E-06	1.69E-06	4.94E-06	1.47E-06	6.97E-07	2.16E-06
1679	569935.11	4215249.45	2.01E-05	1.05E-05	3.06E-05	3.06E-06	1.60E-06	4.66E-06	1.38E-06	6.57E-07	2.04E-06
1680	569935.42	4215259.12	1.91E-05	9.97E-06	2.90E-05	2.91E-06	1.52E-06	4.43E-06	1.31E-06	6.24E-07	1.94E-06
1681	569935.74	4215268.79	1.84E-05	9.62E-06	2.80E-05	2.81E-06	1.46E-06	4.27E-06	1.27E-06	6.02E-07	1.87E-06
1682	569936.05	4215278.46	1.78E-05	9.29E-06	2.71E-05	2.71E-06	1.41E-06	4.13E-06	1.22E-06	5.82E-07	1.81E-06
1683	569936.37	4215288.14	1.73E-05	9.04E-06	2.63E-05	2.64E-06	1.38E-06	4.01E-06	1.19E-06	5.66E-07	1.76E-06
1684	569936.68	4215297.81	1.71E-05	8.93E-06	2.60E-05	2.61E-06	1.36E-06	3.96E-06	1.18E-06	5.59E-07	1.73E-06
1685	569937	4215307.48	1.69E-05	8.85E-06	2.58E-05	2.58E-06	1.35E-06	3.93E-06	1.17E-06	5.54E-07	1.72E-06
1686	569937.31	4215317.15	1.69E-05	8.84E-06	2.57E-05	2.58E-06	1.34E-06	3.93E-06	1.16E-06	5.54E-07	1.72E-06
1687	569937.63	4215326.82	1.73E-05	9.03E-06	2.63E-05	2.64E-06	1.37E-06	4.01E-06	1.19E-06	5.66E-07	1.76E-06
1688	569937.94	4215336.49	1.77E-05	9.28E-06	2.70E-05	2.71E-06	1.41E-06	4.12E-06	1.22E-06	5.81E-07	1.80E-06
1689	569938.26	4215346.16	1.84E-05	9.64E-06	2.81E-05	2.81E-06	1.47E-06	4.28E-06	1.27E-06	6.03E-07	1.87E-06
1690	569938.57	4215355.84	1.92E-05	1.00E-05	2.92E-05	2.93E-06	1.53E-06	4.46E-06	1.32E-06	6.29E-07	1.95E-06
1691	569938.89	4215365.51	2.12E-05	1.11E-05	3.23E-05	3.24E-06	1.69E-06	4.93E-06	1.46E-06	6.95E-07	2.16E-06
1692	569939.2	4215375.18	2.62E-05	1.37E-05	3.99E-05	4.00E-06	2.08E-06	6.09E-06	1.81E-06	8.58E-07	2.66E-06
1693	569922.91	4215182.08	2.79E-05	1.46E-05	4.24E-05	4.25E-06	2.22E-06	6.47E-06	1.92E-06	9.12E-07	2.83E-06
1694	569923.22	4215191.75	2.79E-05	1.46E-05	4.26E-05	4.27E-06	2.22E-06	6.49E-06	1.93E-06	9.15E-07	2.84E-06
1695	569923.54	4215201.42	2.67E-05	1.39E-05	4.06E-05	4.07E-06	2.12E-06	6.19E-06	1.84E-06	8.73E-07	2.71E-06
1696	569923.85	4215211.09	2.47E-05	1.29E-05	3.77E-05	3.78E-06	1.97E-06	5.74E-06	1.70E-06	8.10E-07	2.51E-06
1697	569924.17	4215220.76	2.24E-05	1.17E-05	3.42E-05	3.43E-06	1.79E-06	5.21E-06	1.55E-06	7.35E-07	2.28E-06
1698	569924.48	4215230.43	2.06E-05	1.08E-05	3.14E-05	3.15E-06	1.64E-06	4.79E-06	1.42E-06	6.75E-07	2.09E-06
1699	569924.8	4215240.1	1.94E-05	1.02E-05	2.96E-05	2.96E-06	1.54E-06	4.51E-06	1.34E-06	6.36E-07	1.97E-06
1700	569925.11	4215249.78	1.83E-05	9.56E-06	2.78E-05	2.79E-06	1.45E-06	4.24E-06	1.26E-06	5.98E-07	1.86E-06
1701	569925.43	4215259.45	1.74E-05	9.10E-06	2.65E-05	2.66E-06	1.38E-06	4.04E-06	1.20E-06	5.70E-07	1.77E-06
1702	569925.74	4215269.12	1.69E-05	8.84E-06	2.57E-05	2.58E-06	1.34E-06	3.92E-06	1.16E-06	5.53E-07	1.72E-06
1703	569926.06	4215278.79	1.64E-05	8.60E-06	2.50E-05	2.51E-06	1.31E-06	3.82E-06	1.13E-06	5.39E-07	1.67E-06
1704	569926.37	4215288.46	1.61E-05	8.42E-06	2.45E-05	2.46E-06	1.28E-06	3.74E-06	1.11E-06	5.27E-07	1.64E-06

1705	569926.69	4215298.13	1.59E-05	8.31E-06	2.42E-05	2.42E-06	1.26E-06	3.69E-06	1.09E-06	5.20E-07	1.61E-06
1706	569927	4215307.8	1.57E-05	8.23E-06	2.40E-05	2.40E-06	1.25E-06	3.65E-06	1.08E-06	5.15E-07	1.60E-06
1707	569927.32	4215317.48	1.57E-05	8.22E-06	2.39E-05	2.40E-06	1.25E-06	3.65E-06	1.08E-06	5.15E-07	1.60E-06
1708	569927.63	4215327.15	1.61E-05	8.41E-06	2.45E-05	2.45E-06	1.28E-06	3.73E-06	1.11E-06	5.26E-07	1.63E-06
1709	569927.95	4215336.82	1.66E-05	8.67E-06	2.52E-05	2.53E-06	1.32E-06	3.85E-06	1.14E-06	5.43E-07	1.68E-06
1710	569928.26	4215346.49	1.73E-05	9.06E-06	2.64E-05	2.64E-06	1.38E-06	4.02E-06	1.19E-06	5.67E-07	1.76E-06
1711	569928.58	4215356.16	1.83E-05	9.58E-06	2.79E-05	2.80E-06	1.46E-06	4.25E-06	1.26E-06	6.00E-07	1.86E-06
1712	569928.89	4215365.83	2.07E-05	1.08E-05	3.15E-05	3.16E-06	1.64E-06	4.80E-06	1.42E-06	6.77E-07	2.10E-06
1713	569929.21	4215375.5	2.61E-05	1.37E-05	3.98E-05	3.99E-06	2.08E-06	6.07E-06	1.80E-06	8.56E-07	2.66E-06
1714	569912.91	4215182.4	2.57E-05	1.35E-05	3.92E-05	3.93E-06	2.05E-06	5.98E-06	1.77E-06	8.43E-07	2.62E-06
1715	569913.23	4215192.07	2.59E-05	1.36E-05	3.95E-05	3.96E-06	2.06E-06	6.03E-06	1.79E-06	8.50E-07	2.64E-06
1716	569913.54	4215201.74	2.49E-05	1.30E-05	3.79E-05	3.80E-06	1.98E-06	5.78E-06	1.71E-06	8.15E-07	2.53E-06
1717	569913.86	4215211.42	2.30E-05	1.20E-05	3.50E-05	3.51E-06	1.83E-06	5.34E-06	1.58E-06	7.53E-07	2.34E-06
1718	569914.17	4215221.09	2.07E-05	1.08E-05	3.16E-05	3.17E-06	1.65E-06	4.82E-06	1.43E-06	6.79E-07	2.11E-06
1719	569914.49	4215230.76	1.90E-05	9.92E-06	2.89E-05	2.90E-06	1.51E-06	4.41E-06	1.31E-06	6.21E-07	1.93E-06
1720	569914.8	4215240.43	1.78E-05	9.32E-06	2.71E-05	2.72E-06	1.42E-06	4.14E-06	1.23E-06	5.83E-07	1.81E-06
1721	569915.12	4215250.1	1.68E-05	8.77E-06	2.55E-05	2.56E-06	1.33E-06	3.89E-06	1.15E-06	5.49E-07	1.70E-06
1722	569915.43	4215259.77	1.60E-05	8.35E-06	2.43E-05	2.44E-06	1.27E-06	3.71E-06	1.10E-06	5.23E-07	1.62E-06
1723	569915.75	4215269.44	1.55E-05	8.13E-06	2.37E-05	2.37E-06	1.24E-06	3.61E-06	1.07E-06	5.09E-07	1.58E-06
1724	569916.06	4215279.12	1.52E-05	7.94E-06	2.31E-05	2.32E-06	1.21E-06	3.52E-06	1.05E-06	4.97E-07	1.54E-06
1725	569916.38	4215288.79	1.49E-05	7.78E-06	2.26E-05	2.27E-06	1.18E-06	3.45E-06	1.02E-06	4.87E-07	1.51E-06
1726	569916.69	4215298.46	1.47E-05	7.67E-06	2.23E-05	2.24E-06	1.17E-06	3.40E-06	1.01E-06	4.80E-07	1.49E-06
1727	569917.01	4215308.13	1.46E-05	7.64E-06	2.23E-05	2.23E-06	1.16E-06	3.39E-06	1.01E-06	4.79E-07	1.49E-06
1728	569917.32	4215317.8	1.46E-05	7.64E-06	2.22E-05	2.23E-06	1.16E-06	3.39E-06	1.01E-06	4.78E-07	1.48E-06
1729	569917.64	4215327.47	1.50E-05	7.85E-06	2.29E-05	2.29E-06	1.19E-06	3.49E-06	1.03E-06	4.92E-07	1.53E-06
1730	569917.95	4215337.14	1.56E-05	8.15E-06	2.37E-05	2.38E-06	1.24E-06	3.62E-06	1.07E-06	5.10E-07	1.58E-06
1731	569918.27	4215346.82	1.64E-05	8.59E-06	2.50E-05	2.51E-06	1.31E-06	3.81E-06	1.13E-06	5.38E-07	1.67E-06
1732	569918.58	4215356.49	1.75E-05	9.13E-06	2.66E-05	2.67E-06	1.39E-06	4.05E-06	1.20E-06	5.72E-07	1.77E-06
1733	569918.9	4215366.16	1.97E-05	1.03E-05	3.00E-05	3.01E-06	1.57E-06	4.58E-06	1.36E-06	6.46E-07	2.01E-06
1734	569919.21	4215375.83	2.45E-05	1.28E-05	3.73E-05	3.74E-06	1.95E-06	5.68E-06	1.69E-06	8.02E-07	2.49E-06
1735	569903.23	4215192.4	2.42E-05	1.27E-05	3.69E-05	3.70E-06	1.93E-06	5.62E-06	1.67E-06	7.93E-07	2.46E-06
1736	569903.55	4215202.07	2.33E-05	1.22E-05	3.54E-05	3.55E-06	1.85E-06	5.40E-06	1.60E-06	7.62E-07	2.37E-06
1737	569903.86	4215211.74	2.14E-05	1.12E-05	3.26E-05	3.27E-06	1.70E-06	4.98E-06	1.48E-06	7.02E-07	2.18E-06
1738	569904.18	4215221.41	1.92E-05	1.00E-05	2.92E-05	2.93E-06	1.53E-06	4.46E-06	1.32E-06	6.29E-07	1.95E-06
1739	569904.49	4215231.08	1.75E-05	9.17E-06	2.67E-05	2.68E-06	1.39E-06	4.07E-06	1.21E-06	5.74E-07	1.78E-06
1740	569904.81	4215240.75	1.64E-05	8.59E-06	2.50E-05	2.51E-06	1.31E-06	3.82E-06	1.13E-06	5.38E-07	1.67E-06
1741	569905.12	4215250.43	1.54E-05	8.06E-06	2.35E-05	2.35E-06	1.23E-06	3.58E-06	1.06E-06	5.05E-07	1.57E-06
1742	569905.44	4215260.1	1.47E-05	7.71E-06	2.24E-05	2.25E-06	1.17E-06	3.42E-06	1.02E-06	4.83E-07	1.50E-06
1743	569905.75	4215269.77	1.44E-05	7.53E-06	2.19E-05	2.20E-06	1.15E-06	3.34E-06	9.92E-07	4.72E-07	1.46E-06
1744	569906.07	4215279.44	1.41E-05	7.38E-06	2.15E-05	2.15E-06	1.12E-06	3.27E-06	9.72E-07	4.62E-07	1.43E-06
1745	569906.38	4215289.11	1.38E-05	7.24E-06	2.11E-05	2.11E-06	1.10E-06	3.21E-06	9.54E-07	4.53E-07	1.41E-06
1746	569906.7	4215298.78	1.36E-05	7.13E-06	2.08E-05	2.08E-06	1.08E-06	3.16E-06	9.39E-07	4.46E-07	1.39E-06
1747	569907.01	4215308.45	1.34E-05	7.04E-06	2.05E-05	2.05E-06	1.07E-06	3.12E-06	9.27E-07	4.41E-07	1.37E-06
1748	569907.33	4215318.13	1.34E-05	7.02E-06	2.04E-05	2.05E-06	1.07E-06	3.12E-06	9.25E-07	4.40E-07	1.36E-06
1749	569907.64	4215327.8	1.41E-05	7.36E-06	2.14E-05	2.15E-06	1.12E-06	3.27E-06	9.70E-07	4.61E-07	1.43E-06
1750	569907.96	4215337.47	1.47E-05	7.68E-06	2.24E-05	2.24E-06	1.17E-06	3.41E-06	1.01E-06	4.81E-07	1.49E-06
1751	569908.27	4215347.14	1.55E-05	8.13E-06	2.37E-05	2.37E-06	1.24E-06	3.61E-06	1.07E-06	5.09E-07	1.58E-06
1752	569908.59	4215356.81	1.65E-05	8.62E-06	2.51E-05	2.52E-06	1.31E-06	3.83E-06	1.14E-06	5.40E-07	1.68E-06
1753	569908.9	4215366.48	1.83E-05	9.58E-06	2.79E-05	2.80E-06	1.46E-06	4.25E-06	1.26E-06	6.00E-07	1.86E-06
1754	569909.22	4215376.15	2.15E-05	1.13E-05	3.28E-05	3.29E-06	1.71E-06	5.00E-06	1.48E-06	7.05E-07	2.19E-06
1755	569893.24	4215192.72	2.27E-05	1.19E-05	3.45E-05	3.46E-06	1.80E-06	5.27E-06	1.56E-06	7.43E-07	2.31E-06
1756	569893.55	4215202.39	2.20E-05	1.15E-05	3.35E-05	3.36E-06	1.75E-06	5.11E-06	1.52E-06	7.21E-07	2.24E-06
1757	569893.87	4215212.07	2.04E-05	1.07E-05	3.11E-05	3.11E-06	1.62E-06	4.74E-06	1.41E-06	6.68E-07	2.07E-06
1758	569894.18	4215221.74	1.83E-05	9.60E-06	2.79E-05	2.80E-06	1.46E-06	4.26E-06	1.26E-06	6.01E-07	1.86E-06
1759	569894.5	4215231.41	1.67E-05	8.75E-06	2.55E-05	2.55E-06	1.33E-06	3.89E-06	1.15E-06	5.48E-07	1.70E-06
1760	569894.81	4215241.08	1.56E-05	8.15E-06	2.37E-05	2.38E-06	1.24E-06	3.62E-06	1.07E-06	5.10E-07	1.58E-06
1761	569895.13	4215250.75	1.46E-05	7.63E-06	2.22E-05	2.23E-06	1.16E-06	3.39E-06	1.00E-06	4.78E-07	1.48E-06
1762	569895.44	4215260.42	1.39E-05	7.26E-06	2.11E-05	2.12E-06	1.10E-06	3.22E-06	9.56E-07	4.55E-07	1.41E-06
1763	569895.76	4215270.09	1.35E-05	7.04E-06	2.05E-05	2.05E-06	1.07E-06	3.13E-06	9.27E-07	4.41E-07	1.37E-06
1764	569896.07	4215279.77	1.31E-05	6.84E-06	1.99E-05	2.00E-06	1.04E-06	3.04E-06	9.01E-07	4.28E-07	1.33E-06
1765	569896.39	4215289.44	1.28E-05	6.70E-06	1.95E-05	1.95E-06	1.02E-06	2.97E-06	8.82E-07	4.19E-07	1.30E-06

1766	569896.7	4215299.11	1.27E-05	6.62E-06	1.93E-05	1.93E-06	1.01E-06	2.94E-06	8.72E-07	4.15E-07	1.29E-06
1767	569897.02	4215308.78	1.25E-05	6.56E-06	1.91E-05	1.91E-06	9.97E-07	2.91E-06	8.64E-07	4.11E-07	1.27E-06
1768	569897.33	4215318.45	1.25E-05	6.56E-06	1.91E-05	1.91E-06	9.98E-07	2.91E-06	8.64E-07	4.11E-07	1.27E-06
1769	569897.65	4215328.12	1.30E-05	6.78E-06	1.97E-05	1.98E-06	1.03E-06	3.01E-06	8.93E-07	4.24E-07	1.32E-06
1770	569897.96	4215337.79	1.38E-05	7.21E-06	2.10E-05	2.11E-06	1.10E-06	3.20E-06	9.50E-07	4.52E-07	1.40E-06
1771	569898.28	4215347.47	1.46E-05	7.62E-06	2.22E-05	2.22E-06	1.16E-06	3.38E-06	1.00E-06	4.77E-07	1.48E-06
1772	569898.59	4215357.14	1.53E-05	8.03E-06	2.34E-05	2.34E-06	1.22E-06	3.56E-06	1.06E-06	5.03E-07	1.56E-06
1773	569898.91	4215366.81	1.67E-05	8.72E-06	2.54E-05	2.55E-06	1.33E-06	3.87E-06	1.15E-06	5.46E-07	1.70E-06
1774	569883.56	4215202.72	2.09E-05	1.09E-05	3.18E-05	3.18E-06	1.66E-06	4.84E-06	1.44E-06	6.83E-07	2.12E-06
1775	569883.87	4215212.39	1.95E-05	1.02E-05	2.96E-05	2.97E-06	1.55E-06	4.52E-06	1.34E-06	6.37E-07	1.98E-06
1776	569884.19	4215222.06	1.76E-05	9.19E-06	2.68E-05	2.68E-06	1.40E-06	4.08E-06	1.21E-06	5.75E-07	1.79E-06
1777	569884.5	4215231.73	1.60E-05	8.39E-06	2.44E-05	2.45E-06	1.28E-06	3.72E-06	1.10E-06	5.25E-07	1.63E-06
1778	569884.82	4215241.41	1.49E-05	7.78E-06	2.27E-05	2.27E-06	1.18E-06	3.46E-06	1.03E-06	4.87E-07	1.51E-06
1779	569885.13	4215251.08	1.39E-05	7.26E-06	2.11E-05	2.12E-06	1.10E-06	3.22E-06	9.56E-07	4.54E-07	1.41E-06
1780	569885.45	4215260.75	1.31E-05	6.87E-06	2.00E-05	2.01E-06	1.05E-06	3.05E-06	9.05E-07	4.30E-07	1.34E-06
1781	569885.76	4215270.42	1.26E-05	6.60E-06	1.92E-05	1.93E-06	1.00E-06	2.93E-06	8.69E-07	4.13E-07	1.28E-06
1782	569886.08	4215280.09	1.22E-05	6.36E-06	1.85E-05	1.86E-06	9.68E-07	2.82E-06	8.38E-07	3.98E-07	1.24E-06
1783	569886.39	4215289.76	1.19E-05	6.21E-06	1.81E-05	1.81E-06	9.45E-07	2.76E-06	8.18E-07	3.89E-07	1.21E-06
1784	569886.71	4215299.43	1.18E-05	6.17E-06	1.80E-05	1.80E-06	9.38E-07	2.74E-06	8.13E-07	3.86E-07	1.20E-06
1785	569887.02	4215309.11	1.17E-05	6.14E-06	1.79E-05	1.79E-06	9.33E-07	2.72E-06	8.08E-07	3.84E-07	1.19E-06
1786	569887.34	4215318.78	1.18E-05	6.16E-06	1.79E-05	1.80E-06	9.36E-07	2.73E-06	8.11E-07	3.85E-07	1.20E-06
1787	569887.65	4215328.45	1.21E-05	6.33E-06	1.84E-05	1.85E-06	9.63E-07	2.81E-06	8.34E-07	3.96E-07	1.23E-06
1788	569887.97	4215338.12	1.26E-05	6.60E-06	1.92E-05	1.92E-06	1.00E-06	2.93E-06	8.69E-07	4.13E-07	1.28E-06
1789	569888.28	4215347.79	1.35E-05	7.07E-06	2.06E-05	2.06E-06	1.07E-06	3.14E-06	9.31E-07	4.42E-07	1.37E-06
1790	569888.6	4215357.46	1.41E-05	7.39E-06	2.15E-05	2.16E-06	1.12E-06	3.28E-06	9.74E-07	4.63E-07	1.44E-06
1791	569888.91	4215367.13	1.50E-05	7.87E-06	2.29E-05	2.30E-06	1.20E-06	3.49E-06	1.04E-06	4.93E-07	1.53E-06
1792	569873.56	4215203.05	1.98E-05	1.03E-05	3.01E-05	3.02E-06	1.57E-06	4.59E-06	1.36E-06	6.48E-07	2.01E-06
1793	569873.88	4215212.72	1.86E-05	9.71E-06	2.83E-05	2.83E-06	1.48E-06	4.31E-06	1.28E-06	6.08E-07	1.89E-06
1794	569874.19	4215222.39	1.68E-05	8.81E-06	2.56E-05	2.57E-06	1.34E-06	3.91E-06	1.16E-06	5.52E-07	1.71E-06
1795	569874.51	4215232.06	1.54E-05	8.05E-06	2.34E-05	2.35E-06	1.22E-06	3.57E-06	1.06E-06	5.04E-07	1.56E-06
1796	569874.82	4215241.73	1.42E-05	7.44E-06	2.17E-05	2.17E-06	1.13E-06	3.30E-06	9.80E-07	4.66E-07	1.45E-06
1797	569875.14	4215251.4	1.32E-05	6.91E-06	2.01E-05	2.02E-06	1.05E-06	3.07E-06	9.11E-07	4.33E-07	1.34E-06
1798	569875.45	4215261.07	1.24E-05	6.51E-06	1.89E-05	1.90E-06	9.90E-07	2.89E-06	8.57E-07	4.07E-07	1.26E-06
1799	569875.77	4215270.75	1.18E-05	6.20E-06	1.80E-05	1.81E-06	9.43E-07	2.75E-06	8.16E-07	3.88E-07	1.20E-06
1800	569876.08	4215280.42	1.14E-05	5.94E-06	1.73E-05	1.73E-06	9.03E-07	2.64E-06	7.82E-07	3.72E-07	1.15E-06
1801	569876.4	4215290.09	1.11E-05	5.79E-06	1.69E-05	1.69E-06	8.81E-07	2.57E-06	7.63E-07	3.63E-07	1.13E-06
1802	569876.71	4215299.76	1.10E-05	5.77E-06	1.68E-05	1.68E-06	8.78E-07	2.56E-06	7.60E-07	3.61E-07	1.12E-06
1803	569877.03	4215309.43	1.10E-05	5.76E-06	1.68E-05	1.68E-06	8.76E-07	2.56E-06	7.59E-07	3.61E-07	1.12E-06
1804	569877.34	4215319.1	1.11E-05	5.79E-06	1.69E-05	1.69E-06	8.80E-07	2.57E-06	7.62E-07	3.62E-07	1.12E-06
1805	569877.66	4215328.77	1.13E-05	5.92E-06	1.72E-05	1.73E-06	9.01E-07	2.63E-06	7.80E-07	3.71E-07	1.15E-06
1806	569877.97	4215338.45	1.17E-05	6.13E-06	1.79E-05	1.79E-06	9.33E-07	2.72E-06	8.08E-07	3.84E-07	1.19E-06
1807	569878.29	4215348.12	1.23E-05	6.41E-06	1.87E-05	1.87E-06	9.75E-07	2.85E-06	8.45E-07	4.02E-07	1.25E-06
1808	569878.6	4215357.79	1.28E-05	6.69E-06	1.95E-05	1.95E-06	1.02E-06	2.97E-06	8.82E-07	4.19E-07	1.30E-06
1809	569878.92	4215367.46	1.35E-05	7.06E-06	2.06E-05	2.06E-06	1.07E-06	3.14E-06	9.30E-07	4.42E-07	1.37E-06
1810	569863.88	4215213.04	1.77E-05	9.28E-06	2.70E-05	2.71E-06	1.41E-06	4.12E-06	1.22E-06	5.81E-07	1.80E-06
1811	569864.2	4215222.71	1.65E-05	8.62E-06	2.51E-05	2.51E-06	1.31E-06	3.83E-06	1.13E-06	5.40E-07	1.67E-06
1812	569864.51	4215232.39	1.52E-05	7.94E-06	2.31E-05	2.32E-06	1.21E-06	3.52E-06	1.05E-06	4.97E-07	1.54E-06
1813	569864.83	4215242.06	1.40E-05	7.32E-06	2.13E-05	2.14E-06	1.11E-06	3.25E-06	9.64E-07	4.58E-07	1.42E-06
1814	569865.14	4215251.73	1.29E-05	6.74E-06	1.96E-05	1.97E-06	1.03E-06	2.99E-06	8.88E-07	4.22E-07	1.31E-06
1815	569865.46	4215261.4	1.21E-05	6.32E-06	1.84E-05	1.84E-06	9.61E-07	2.81E-06	8.32E-07	3.96E-07	1.23E-06
1816	569865.77	4215271.07	1.15E-05	6.00E-06	1.75E-05	1.75E-06	9.12E-07	2.66E-06	7.90E-07	3.76E-07	1.17E-06
1817	569866.09	4215280.74	1.10E-05	5.73E-06	1.67E-05	1.67E-06	8.71E-07	2.54E-06	7.55E-07	3.59E-07	1.11E-06
1818	569866.4	4215290.41	1.06E-05	5.57E-06	1.62E-05	1.63E-06	8.47E-07	2.47E-06	7.34E-07	3.49E-07	1.08E-06
1819	569866.72	4215300.09	1.05E-05	5.52E-06	1.61E-05	1.61E-06	8.39E-07	2.45E-06	7.27E-07	3.45E-07	1.07E-06
1820	569867.03	4215309.76	1.05E-05	5.47E-06	1.59E-05	1.60E-06	8.33E-07	2.43E-06	7.21E-07	3.43E-07	1.06E-06
1821	569867.35	4215319.43	1.05E-05	5.47E-06	1.59E-05	1.60E-06	8.32E-07	2.43E-06	7.20E-07	3.42E-07	1.06E-06
1822	569867.66	4215329.1	1.06E-05	5.55E-06	1.62E-05	1.62E-06	8.45E-07	2.46E-06	7.31E-07	3.48E-07	1.08E-06
1823	569867.98	4215338.77	1.09E-05	5.69E-06	1.66E-05	1.66E-06	8.66E-07	2.53E-06	7.50E-07	3.56E-07	1.11E-06
1824	569868.29	4215348.44	1.13E-05	5.89E-06	1.71E-05	1.72E-06	8.96E-07	2.61E-06	7.76E-07	3.69E-07	1.14E-06
1825	569868.61	4215358.11	1.17E-05	6.11E-06	1.78E-05	1.78E-06	9.29E-07	2.71E-06	8.05E-07	3.83E-07	1.19E-06
1826	569868.92	4215367.79	1.22E-05	6.38E-06	1.86E-05	1.86E-06	9.70E-07	2.83E-06	8.40E-07	3.99E-07	1.24E-06

1827	569853.89	4215213.37	1.70E-05	8.88E-06	2.58E-05	2.59E-06	1.35E-06	3.94E-06	1.17E-06	5.56E-07	1.73E-06
1828	569854.21	4215223.04	1.61E-05	8.43E-06	2.45E-05	2.46E-06	1.28E-06	3.74E-06	1.11E-06	5.28E-07	1.64E-06
1829	569854.52	4215232.71	1.50E-05	7.84E-06	2.28E-05	2.29E-06	1.19E-06	3.48E-06	1.03E-06	4.91E-07	1.52E-06
1830	569854.84	4215242.38	1.38E-05	7.21E-06	2.10E-05	2.10E-06	1.10E-06	3.20E-06	9.50E-07	4.51E-07	1.40E-06
1831	569855.15	4215252.05	1.26E-05	6.61E-06	1.93E-05	1.93E-06	1.01E-06	2.94E-06	8.71E-07	4.14E-07	1.29E-06
1832	569855.47	4215261.73	1.18E-05	6.18E-06	1.80E-05	1.80E-06	9.40E-07	2.74E-06	8.14E-07	3.87E-07	1.20E-06
1833	569855.78	4215271.4	1.12E-05	5.86E-06	1.71E-05	1.71E-06	8.91E-07	2.60E-06	7.72E-07	3.67E-07	1.14E-06
1834	569856.1	4215281.07	1.07E-05	5.59E-06	1.63E-05	1.63E-06	8.50E-07	2.48E-06	7.36E-07	3.50E-07	1.09E-06
1835	569856.41	4215290.74	1.04E-05	5.42E-06	1.58E-05	1.58E-06	8.24E-07	2.40E-06	7.13E-07	3.39E-07	1.05E-06
1836	569856.73	4215300.41	1.02E-05	5.32E-06	1.55E-05	1.55E-06	8.09E-07	2.36E-06	7.01E-07	3.33E-07	1.03E-06
1837	569857.04	4215310.08	9.99E-06	5.23E-06	1.52E-05	1.53E-06	7.95E-07	2.32E-06	6.89E-07	3.27E-07	1.02E-06
1838	569857.36	4215319.75	9.90E-06	5.18E-06	1.51E-05	1.51E-06	7.88E-07	2.30E-06	6.82E-07	3.24E-07	1.01E-06
1839	569857.67	4215329.43	9.97E-06	5.21E-06	1.52E-05	1.52E-06	7.93E-07	2.31E-06	6.87E-07	3.26E-07	1.01E-06
1840	569857.99	4215339.1	1.01E-05	5.28E-06	1.54E-05	1.54E-06	8.03E-07	2.35E-06	6.96E-07	3.31E-07	1.03E-06
1841	569858.3	4215348.77	1.03E-05	5.40E-06	1.57E-05	1.57E-06	8.21E-07	2.40E-06	7.11E-07	3.38E-07	1.05E-06
1842	569858.62	4215358.44	1.06E-05	5.56E-06	1.62E-05	1.62E-06	8.45E-07	2.47E-06	7.32E-07	3.48E-07	1.08E-06
1843	569858.93	4215368.11	1.10E-05	5.73E-06	1.67E-05	1.67E-06	8.72E-07	2.55E-06	7.55E-07	3.59E-07	1.11E-06
1844	569844.21	4215223.37	1.57E-05	8.23E-06	2.40E-05	2.40E-06	1.25E-06	3.65E-06	1.08E-06	5.15E-07	1.60E-06
1845	569844.53	4215233.04	1.48E-05	7.72E-06	2.25E-05	2.25E-06	1.17E-06	3.43E-06	1.02E-06	4.84E-07	1.50E-06
1846	569844.84	4215242.71	1.36E-05	7.10E-06	2.07E-05	2.07E-06	1.08E-06	3.15E-06	9.35E-07	4.45E-07	1.38E-06
1847	569845.16	4215252.38	1.24E-05	6.49E-06	1.89E-05	1.89E-06	9.87E-07	2.88E-06	8.54E-07	4.06E-07	1.26E-06
1848	569845.47	4215262.05	1.16E-05	6.05E-06	1.76E-05	1.77E-06	9.21E-07	2.69E-06	7.97E-07	3.79E-07	1.18E-06
1849	569845.79	4215271.72	1.10E-05	5.73E-06	1.67E-05	1.67E-06	8.72E-07	2.55E-06	7.55E-07	3.59E-07	1.11E-06
1850	569846.1	4215281.39	1.04E-05	5.46E-06	1.59E-05	1.59E-06	8.31E-07	2.42E-06	7.19E-07	3.42E-07	1.06E-06
1851	569846.42	4215291.07	1.01E-05	5.27E-06	1.53E-05	1.54E-06	8.01E-07	2.34E-06	6.94E-07	3.30E-07	1.02E-06
1852	569846.73	4215300.74	9.80E-06	5.13E-06	1.49E-05	1.50E-06	7.80E-07	2.28E-06	6.75E-07	3.21E-07	9.96E-07
1853	569847.05	4215310.41	9.55E-06	4.99E-06	1.45E-05	1.46E-06	7.60E-07	2.22E-06	6.58E-07	3.13E-07	9.71E-07
1854	569847.36	4215320.08	9.39E-06	4.91E-06	1.43E-05	1.43E-06	7.47E-07	2.18E-06	6.47E-07	3.08E-07	9.54E-07
1855	569847.68	4215329.75	9.37E-06	4.90E-06	1.43E-05	1.43E-06	7.46E-07	2.18E-06	6.46E-07	3.07E-07	9.53E-07
1856	569847.99	4215339.42	9.39E-06	4.91E-06	1.43E-05	1.43E-06	7.47E-07	2.18E-06	6.47E-07	3.07E-07	9.54E-07
1857	569848.31	4215349.09	9.48E-06	4.96E-06	1.44E-05	1.45E-06	7.55E-07	2.20E-06	6.53E-07	3.11E-07	9.64E-07
1858	569848.62	4215358.77	9.68E-06	5.07E-06	1.48E-05	1.48E-06	7.71E-07	2.25E-06	6.67E-07	3.17E-07	9.85E-07
1859	569848.94	4215368.44	9.90E-06	5.18E-06	1.51E-05	1.51E-06	7.88E-07	2.30E-06	6.82E-07	3.24E-07	1.01E-06
1860	569834.22	4215223.69	1.49E-05	7.79E-06	2.27E-05	2.27E-06	1.18E-06	3.46E-06	1.03E-06	4.88E-07	1.51E-06
1861	569834.53	4215233.36	1.41E-05	7.35E-06	2.14E-05	2.15E-06	1.12E-06	3.26E-06	9.68E-07	4.60E-07	1.43E-06
1862	569834.85	4215243.03	1.30E-05	6.80E-06	1.98E-05	1.98E-06	1.03E-06	3.02E-06	8.96E-07	4.26E-07	1.32E-06
1863	569835.16	4215252.71	1.19E-05	6.24E-06	1.82E-05	1.82E-06	9.50E-07	2.77E-06	8.22E-07	3.91E-07	1.21E-06
1864	569835.48	4215262.38	1.12E-05	5.85E-06	1.70E-05	1.71E-06	8.90E-07	2.60E-06	7.70E-07	3.66E-07	1.14E-06
1865	569835.79	4215272.05	1.06E-05	5.55E-06	1.62E-05	1.62E-06	8.44E-07	2.46E-06	7.31E-07	3.47E-07	1.08E-06
1866	569836.11	4215281.72	1.01E-05	5.29E-06	1.54E-05	1.54E-06	8.04E-07	2.35E-06	6.97E-07	3.31E-07	1.03E-06
1867	569836.42	4215291.39	9.73E-06	5.09E-06	1.48E-05	1.49E-06	7.74E-07	2.26E-06	6.70E-07	3.19E-07	9.89E-07
1868	569836.74	4215301.06	9.42E-06	4.93E-06	1.43E-05	1.44E-06	7.50E-07	2.19E-06	6.49E-07	3.09E-07	9.58E-07
1869	569837.05	4215310.73	9.13E-06	4.78E-06	1.39E-05	1.39E-06	7.26E-07	2.12E-06	6.29E-07	2.99E-07	9.28E-07
1870	569837.37	4215320.41	8.94E-06	4.68E-06	1.36E-05	1.37E-06	7.11E-07	2.08E-06	6.16E-07	2.93E-07	9.09E-07
1871	569837.68	4215330.08	8.87E-06	4.64E-06	1.35E-05	1.36E-06	7.06E-07	2.06E-06	6.11E-07	2.91E-07	9.02E-07
1872	569838	4215339.75	8.83E-06	4.62E-06	1.34E-05	1.35E-06	7.02E-07	2.05E-06	6.08E-07	2.89E-07	8.97E-07
1873	569838.31	4215349.42	8.84E-06	4.62E-06	1.35E-05	1.35E-06	7.03E-07	2.05E-06	6.09E-07	2.89E-07	8.98E-07
1874	569838.63	4215359.09	8.94E-06	4.68E-06	1.36E-05	1.37E-06	7.12E-07	2.08E-06	6.16E-07	2.93E-07	9.09E-07
1875	569838.94	4215368.76	9.04E-06	4.73E-06	1.38E-05	1.38E-06	7.19E-07	2.10E-06	6.23E-07	2.96E-07	9.19E-07
1876	569824.54	4215233.69	1.34E-05	6.99E-06	2.04E-05	2.04E-06	1.06E-06	3.10E-06	9.21E-07	4.38E-07	1.36E-06
1877	569824.85	4215243.36	1.24E-05	6.50E-06	1.89E-05	1.90E-06	9.88E-07	2.88E-06	8.56E-07	4.07E-07	1.26E-06
1878	569825.17	4215253.03	1.15E-05	6.00E-06	1.75E-05	1.75E-06	9.12E-07	2.66E-06	7.90E-07	3.76E-07	1.17E-06
1879	569825.48	4215262.7	1.08E-05	5.64E-06	1.64E-05	1.65E-06	8.57E-07	2.50E-06	7.42E-07	3.53E-07	1.10E-06
1880	569825.8	4215272.37	1.02E-05	5.35E-06	1.56E-05	1.56E-06	8.14E-07	2.38E-06	7.05E-07	3.35E-07	1.04E-06
1881	569826.11	4215282.04	9.76E-06	5.11E-06	1.49E-05	1.49E-06	7.77E-07	2.27E-06	6.73E-07	3.20E-07	9.92E-07
1882	569826.43	4215291.72	9.38E-06	4.91E-06	1.43E-05	1.43E-06	7.46E-07	2.18E-06	6.46E-07	3.07E-07	9.53E-07
1883	569826.74	4215301.39	9.05E-06	4.73E-06	1.38E-05	1.38E-06	7.20E-07	2.10E-06	6.23E-07	2.96E-07	9.20E-07
1884	569827.06	4215311.06	8.74E-06	4.57E-06	1.33E-05	1.33E-06	6.95E-07	2.03E-06	6.02E-07	2.86E-07	8.89E-07
1885	569827.37	4215320.73	8.54E-06	4.47E-06	1.30E-05	1.30E-06	6.80E-07	1.98E-06	5.88E-07	2.80E-07	8.68E-07
1886	569827.69	4215330.4	8.45E-06	4.42E-06	1.29E-05	1.29E-06	6.72E-07	1.96E-06	5.82E-07	2.77E-07	8.59E-07
1887	569828	4215340.07	8.37E-06	4.38E-06	1.27E-05	1.28E-06	6.66E-07	1.94E-06	5.76E-07	2.74E-07	8.50E-07

1888	569828.32	4215349.74	8.32E-06	4.35E-06	1.27E-05	1.27E-06	6.62E-07	1.93E-06	5.74E-07	2.73E-07	8.46E-07
1889	569828.63	4215359.42	8.35E-06	4.37E-06	1.27E-05	1.27E-06	6.64E-07	1.94E-06	5.75E-07	2.73E-07	8.48E-07
1890	569828.95	4215369.09	8.35E-06	4.37E-06	1.27E-05	1.28E-06	6.64E-07	1.94E-06	5.75E-07	2.74E-07	8.49E-07
1891	569814.86	4215243.68	1.19E-05	6.22E-06	1.81E-05	1.81E-06	9.45E-07	2.76E-06	8.19E-07	3.89E-07	1.21E-06
1892	569815.17	4215253.36	1.10E-05	5.77E-06	1.68E-05	1.68E-06	8.77E-07	2.56E-06	7.59E-07	3.61E-07	1.12E-06
1893	569815.49	4215263.03	1.04E-05	5.44E-06	1.58E-05	1.59E-06	8.27E-07	2.41E-06	7.16E-07	3.40E-07	1.06E-06
1894	569815.8	4215272.7	9.88E-06	5.17E-06	1.50E-05	1.51E-06	7.86E-07	2.29E-06	6.81E-07	3.24E-07	1.00E-06
1895	569816.12	4215282.37	9.43E-06	4.93E-06	1.44E-05	1.44E-06	7.50E-07	2.19E-06	6.50E-07	3.09E-07	9.58E-07
1896	569816.43	4215292.04	9.04E-06	4.73E-06	1.38E-05	1.38E-06	7.19E-07	2.10E-06	6.23E-07	2.96E-07	9.19E-07
1897	569816.75	4215301.71	8.69E-06	4.55E-06	1.32E-05	1.33E-06	6.91E-07	2.02E-06	5.99E-07	2.85E-07	8.83E-07
1898	569817.06	4215311.38	8.37E-06	4.38E-06	1.27E-05	1.28E-06	6.66E-07	1.94E-06	5.77E-07	2.74E-07	8.51E-07
1899	569817.38	4215321.06	8.16E-06	4.27E-06	1.24E-05	1.25E-06	6.49E-07	1.89E-06	5.62E-07	2.67E-07	8.29E-07
1900	569817.69	4215330.73	8.05E-06	4.21E-06	1.23E-05	1.23E-06	6.40E-07	1.87E-06	5.54E-07	2.64E-07	8.18E-07
1901	569818.01	4215340.4	7.93E-06	4.15E-06	1.21E-05	1.21E-06	6.31E-07	1.84E-06	5.47E-07	2.60E-07	8.07E-07
1902	569818.32	4215350.07	7.85E-06	4.11E-06	1.20E-05	1.20E-06	6.25E-07	1.82E-06	5.41E-07	2.57E-07	7.98E-07
1903	569818.64	4215359.74	7.81E-06	4.09E-06	1.19E-05	1.19E-06	6.22E-07	1.81E-06	5.38E-07	2.56E-07	7.94E-07
1904	569818.95	4215369.41	7.74E-06	4.05E-06	1.18E-05	1.18E-06	6.16E-07	1.80E-06	5.34E-07	2.54E-07	7.87E-07
1905	569804.86	4215244.01	1.12E-05	5.85E-06	1.70E-05	1.71E-06	8.90E-07	2.60E-06	7.71E-07	3.67E-07	1.14E-06
1906	569805.18	4215253.68	1.04E-05	5.43E-06	1.58E-05	1.59E-06	8.26E-07	2.41E-06	7.16E-07	3.40E-07	1.06E-06
1907	569805.49	4215263.35	9.81E-06	5.13E-06	1.49E-05	1.50E-06	7.80E-07	2.28E-06	6.76E-07	3.21E-07	9.97E-07
1908	569805.81	4215273.02	9.34E-06	4.89E-06	1.42E-05	1.43E-06	7.43E-07	2.17E-06	6.44E-07	3.06E-07	9.50E-07
1909	569806.12	4215282.7	8.93E-06	4.67E-06	1.36E-05	1.36E-06	7.11E-07	2.07E-06	6.15E-07	2.93E-07	9.08E-07
1910	569806.44	4215292.37	8.58E-06	4.49E-06	1.31E-05	1.31E-06	6.83E-07	1.99E-06	5.91E-07	2.81E-07	8.72E-07
1911	569806.75	4215302.04	8.27E-06	4.33E-06	1.26E-05	1.26E-06	6.58E-07	1.92E-06	5.70E-07	2.71E-07	8.41E-07
1912	569807.07	4215311.71	7.97E-06	4.17E-06	1.21E-05	1.22E-06	6.34E-07	1.85E-06	5.49E-07	2.61E-07	8.10E-07
1913	569807.38	4215321.38	7.78E-06	4.07E-06	1.18E-05	1.19E-06	6.19E-07	1.81E-06	5.36E-07	2.55E-07	7.91E-07
1914	569807.7	4215331.05	7.66E-06	4.01E-06	1.17E-05	1.17E-06	6.09E-07	1.78E-06	5.28E-07	2.51E-07	7.78E-07
1915	569808.01	4215340.72	7.53E-06	3.94E-06	1.15E-05	1.15E-06	5.99E-07	1.75E-06	5.19E-07	2.47E-07	7.65E-07
1916	569808.33	4215350.4	7.42E-06	3.88E-06	1.13E-05	1.13E-06	5.91E-07	1.72E-06	5.11E-07	2.43E-07	7.55E-07
1917	569808.64	4215360.07	7.35E-06	3.85E-06	1.12E-05	1.12E-06	5.85E-07	1.71E-06	5.06E-07	2.41E-07	7.47E-07
1918	569808.96	4215369.74	7.25E-06	3.79E-06	1.10E-05	1.11E-06	5.77E-07	1.68E-06	5.00E-07	2.37E-07	7.37E-07
1919	569795.18	4215254.01	9.76E-06	5.11E-06	1.49E-05	1.49E-06	7.77E-07	2.27E-06	6.72E-07	3.20E-07	9.92E-07
1920	569795.5	4215263.68	9.23E-06	4.83E-06	1.41E-05	1.41E-06	7.34E-07	2.14E-06	6.36E-07	3.02E-07	9.38E-07
1921	569795.81	4215273.35	8.80E-06	4.60E-06	1.34E-05	1.34E-06	7.00E-07	2.04E-06	6.06E-07	2.88E-07	8.94E-07
1922	569796.13	4215283.02	8.42E-06	4.41E-06	1.28E-05	1.29E-06	6.70E-07	1.96E-06	5.80E-07	2.76E-07	8.56E-07
1923	569796.44	4215292.69	8.12E-06	4.25E-06	1.24E-05	1.24E-06	6.46E-07	1.89E-06	5.59E-07	2.66E-07	8.25E-07
1924	569796.76	4215302.36	7.85E-06	4.10E-06	1.20E-05	1.20E-06	6.24E-07	1.82E-06	5.41E-07	2.57E-07	7.98E-07
1925	569797.07	4215312.04	7.58E-06	3.97E-06	1.16E-05	1.16E-06	6.03E-07	1.76E-06	5.23E-07	2.48E-07	7.71E-07
1926	569797.39	4215321.71	7.41E-06	3.88E-06	1.13E-05	1.13E-06	5.89E-07	1.72E-06	5.10E-07	2.43E-07	7.53E-07
1927	569797.7	4215331.38	7.28E-06	3.81E-06	1.11E-05	1.11E-06	5.79E-07	1.69E-06	5.02E-07	2.39E-07	7.40E-07
1928	569798.02	4215341.05	7.15E-06	3.74E-06	1.09E-05	1.09E-06	5.69E-07	1.66E-06	4.93E-07	2.34E-07	7.27E-07
1929	569798.33	4215350.72	7.04E-06	3.68E-06	1.07E-05	1.07E-06	5.60E-07	1.63E-06	4.85E-07	2.30E-07	7.15E-07
1930	569798.65	4215360.39	6.95E-06	3.64E-06	1.06E-05	1.06E-06	5.53E-07	1.61E-06	4.79E-07	2.28E-07	7.07E-07
1931	569785.19	4215254.33	9.19E-06	4.81E-06	1.40E-05	1.40E-06	7.31E-07	2.13E-06	6.33E-07	3.01E-07	9.34E-07
1932	569785.5	4215264	8.70E-06	4.55E-06	1.33E-05	1.33E-06	6.92E-07	2.02E-06	6.00E-07	2.85E-07	8.85E-07
1933	569785.82	4215273.68	8.30E-06	4.34E-06	1.26E-05	1.27E-06	6.61E-07	1.93E-06	5.72E-07	2.72E-07	8.44E-07
1934	569786.13	4215283.35	7.95E-06	4.16E-06	1.21E-05	1.21E-06	6.33E-07	1.85E-06	5.48E-07	2.61E-07	8.09E-07
1935	569786.45	4215293.02	7.69E-06	4.02E-06	1.17E-05	1.17E-06	6.12E-07	1.79E-06	5.30E-07	2.52E-07	7.82E-07
1936	569786.76	4215302.69	7.45E-06	3.90E-06	1.14E-05	1.14E-06	5.93E-07	1.73E-06	5.14E-07	2.44E-07	7.58E-07
1937	569787.08	4215312.36	7.22E-06	3.78E-06	1.10E-05	1.10E-06	5.75E-07	1.68E-06	4.98E-07	2.37E-07	7.34E-07
1938	569787.39	4215322.03	7.06E-06	3.69E-06	1.08E-05	1.08E-06	5.62E-07	1.64E-06	4.87E-07	2.31E-07	7.18E-07
1939	569787.71	4215331.7	6.93E-06	3.63E-06	1.06E-05	1.06E-06	5.52E-07	1.61E-06	4.78E-07	2.27E-07	7.05E-07
1940	569788.02	4215341.38	6.79E-06	3.56E-06	1.03E-05	1.04E-06	5.41E-07	1.58E-06	4.68E-07	2.23E-07	6.91E-07
1941	569788.34	4215351.05	6.68E-06	3.49E-06	1.02E-05	1.02E-06	5.32E-07	1.55E-06	4.60E-07	2.19E-07	6.79E-07
1942	569788.65	4215360.72	6.59E-06	3.45E-06	1.00E-05	1.01E-06	5.24E-07	1.53E-06	4.54E-07	2.16E-07	6.70E-07
1943	569775.51	4215264.33	8.26E-06	4.32E-06	1.26E-05	1.26E-06	6.58E-07	1.92E-06	5.69E-07	2.71E-07	8.40E-07
1944	569775.82	4215274	7.89E-06	4.13E-06	1.20E-05	1.20E-06	6.28E-07	1.83E-06	5.43E-07	2.58E-07	8.02E-07
1945	569776.14	4215283.67	7.56E-06	3.95E-06	1.15E-05	1.15E-06	6.01E-07	1.76E-06	5.21E-07	2.48E-07	7.68E-07
1946	569776.45	4215293.34	7.30E-06	3.82E-06	1.11E-05	1.12E-06	5.81E-07	1.70E-06	5.03E-07	2.39E-07	7.43E-07
1947	569776.77	4215303.02	7.08E-06	3.70E-06	1.08E-05	1.08E-06	5.63E-07	1.64E-06	4.88E-07	2.32E-07	7.20E-07
1948	569777.08	4215312.69	6.86E-06	3.59E-06	1.04E-05	1.05E-06	5.46E-07	1.59E-06	4.73E-07	2.25E-07	6.97E-07

1949	569777.4	4215322.36	6.71E-06	3.51E-06	1.02E-05	1.02E-06	5.34E-07	1.56E-06	4.62E-07	2.20E-07	6.82E-07
1950	569777.71	4215332.03	6.58E-06	3.44E-06	1.00E-05	1.00E-06	5.24E-07	1.53E-06	4.53E-07	2.16E-07	6.69E-07
1951	569778.03	4215341.7	6.44E-06	3.37E-06	9.81E-06	9.83E-07	5.12E-07	1.50E-06	4.44E-07	2.11E-07	6.55E-07
1952	569778.34	4215351.37	6.33E-06	3.31E-06	9.63E-06	9.66E-07	5.03E-07	1.47E-06	4.36E-07	2.07E-07	6.43E-07
1953	569778.66	4215361.04	6.24E-06	3.26E-06	9.50E-06	9.53E-07	4.96E-07	1.45E-06	4.30E-07	2.04E-07	6.34E-07
1954	569765.51	4215264.66	7.87E-06	4.12E-06	1.20E-05	1.20E-06	6.26E-07	1.83E-06	5.42E-07	2.58E-07	8.00E-07
1955	569765.83	4215274.33	7.51E-06	3.93E-06	1.14E-05	1.15E-06	5.97E-07	1.74E-06	5.17E-07	2.46E-07	7.63E-07
1956	569766.14	4215284	7.19E-06	3.76E-06	1.10E-05	1.10E-06	5.72E-07	1.67E-06	4.96E-07	2.36E-07	7.31E-07
1957	569766.46	4215293.67	6.95E-06	3.64E-06	1.06E-05	1.06E-06	5.53E-07	1.61E-06	4.79E-07	2.28E-07	7.06E-07
1958	569766.77	4215303.34	6.73E-06	3.52E-06	1.02E-05	1.03E-06	5.35E-07	1.56E-06	4.64E-07	2.20E-07	6.84E-07
1959	569767.09	4215313.01	6.51E-06	3.41E-06	9.92E-06	9.94E-07	5.18E-07	1.51E-06	4.49E-07	2.13E-07	6.62E-07
1960	569767.4	4215322.68	6.36E-06	3.33E-06	9.69E-06	9.72E-07	5.06E-07	1.48E-06	4.39E-07	2.08E-07	6.47E-07
1961	569767.72	4215332.36	6.24E-06	3.26E-06	9.50E-06	9.52E-07	4.96E-07	1.45E-06	4.30E-07	2.04E-07	6.34E-07
1962	569768.03	4215342.03	6.10E-06	3.19E-06	9.28E-06	9.31E-07	4.85E-07	1.42E-06	4.20E-07	2.00E-07	6.20E-07
1963	569768.35	4215351.7	5.98E-06	3.13E-06	9.12E-06	9.14E-07	4.76E-07	1.39E-06	4.12E-07	1.96E-07	6.08E-07
1964	569768.66	4215361.37	5.90E-06	3.09E-06	8.99E-06	9.01E-07	4.69E-07	1.37E-06	4.07E-07	1.93E-07	6.00E-07
1965	569755.83	4215274.65	7.15E-06	3.74E-06	1.09E-05	1.09E-06	5.69E-07	1.66E-06	4.93E-07	2.34E-07	7.27E-07
1966	569756.15	4215284.32	6.86E-06	3.59E-06	1.04E-05	1.05E-06	5.46E-07	1.59E-06	4.73E-07	2.25E-07	6.97E-07
1967	569756.46	4215293.99	6.62E-06	3.46E-06	1.01E-05	1.01E-06	5.27E-07	1.54E-06	4.56E-07	2.17E-07	6.73E-07
1968	569756.78	4215303.67	6.40E-06	3.35E-06	9.75E-06	9.77E-07	5.09E-07	1.49E-06	4.41E-07	2.10E-07	6.51E-07
1969	569757.09	4215313.34	6.19E-06	3.24E-06	9.44E-06	9.46E-07	4.93E-07	1.44E-06	4.27E-07	2.03E-07	6.30E-07
1970	569757.41	4215323.01	6.06E-06	3.17E-06	9.22E-06	9.25E-07	4.82E-07	1.41E-06	4.17E-07	1.98E-07	6.16E-07
1971	569757.72	4215332.68	5.93E-06	3.10E-06	9.03E-06	9.05E-07	4.72E-07	1.38E-06	4.08E-07	1.94E-07	6.03E-07
1972	569758.04	4215342.35	5.79E-06	3.03E-06	8.81E-06	8.84E-07	4.60E-07	1.34E-06	3.99E-07	1.90E-07	5.88E-07
1973	569758.35	4215352.02	5.68E-06	2.97E-06	8.65E-06	8.67E-07	4.52E-07	1.32E-06	3.91E-07	1.86E-07	5.77E-07
1974	569758.67	4215361.69	5.60E-06	2.93E-06	8.52E-06	8.54E-07	4.45E-07	1.30E-06	3.86E-07	1.83E-07	5.69E-07
1975	569745.84	4215274.98	6.82E-06	3.57E-06	1.04E-05	1.04E-06	5.43E-07	1.58E-06	4.70E-07	2.24E-07	6.94E-07
1976	569746.15	4215284.65	6.54E-06	3.42E-06	9.97E-06	9.99E-07	5.21E-07	1.52E-06	4.51E-07	2.14E-07	6.65E-07
1977	569746.47	4215294.32	6.32E-06	3.31E-06	9.63E-06	9.66E-07	5.03E-07	1.47E-06	4.36E-07	2.07E-07	6.43E-07
1978	569746.78	4215303.99	6.12E-06	3.20E-06	9.33E-06	9.35E-07	4.87E-07	1.42E-06	4.22E-07	2.01E-07	6.23E-07
1979	569747.1	4215313.66	5.93E-06	3.10E-06	9.04E-06	9.06E-07	4.72E-07	1.38E-06	4.09E-07	1.94E-07	6.03E-07
1980	569747.41	4215323.33	5.80E-06	3.03E-06	8.83E-06	8.85E-07	4.61E-07	1.35E-06	4.00E-07	1.90E-07	5.89E-07
1981	569747.73	4215333.01	5.67E-06	2.97E-06	8.64E-06	8.66E-07	4.51E-07	1.32E-06	3.91E-07	1.86E-07	5.77E-07
1982	569748.04	4215342.68	5.53E-06	2.89E-06	8.42E-06	8.44E-07	4.40E-07	1.28E-06	3.81E-07	1.81E-07	5.62E-07
1983	569748.36	4215352.35	5.42E-06	2.84E-06	8.25E-06	8.27E-07	4.31E-07	1.26E-06	3.73E-07	1.78E-07	5.51E-07
1984	569735.21	4215255.96	7.19E-06	3.76E-06	1.09E-05	1.10E-06	5.72E-07	1.67E-06	4.95E-07	2.35E-07	7.31E-07
1985	569735.53	4215265.63	6.82E-06	3.57E-06	1.04E-05	1.04E-06	5.43E-07	1.58E-06	4.70E-07	2.23E-07	6.94E-07
1986	569735.84	4215275.3	6.51E-06	3.41E-06	9.92E-06	9.94E-07	5.18E-07	1.51E-06	4.49E-07	2.13E-07	6.62E-07
1987	569736.16	4215284.97	6.25E-06	3.27E-06	9.52E-06	9.54E-07	4.97E-07	1.45E-06	4.31E-07	2.05E-07	6.35E-07
1988	569736.47	4215294.65	6.05E-06	3.17E-06	9.22E-06	9.25E-07	4.82E-07	1.41E-06	4.17E-07	1.98E-07	6.16E-07
1989	569736.79	4215304.32	5.87E-06	3.07E-06	8.95E-06	8.97E-07	4.67E-07	1.36E-06	4.05E-07	1.92E-07	5.97E-07
1990	569737.1	4215313.99	5.70E-06	2.98E-06	8.68E-06	8.70E-07	4.53E-07	1.32E-06	3.93E-07	1.87E-07	5.79E-07
1991	569737.42	4215323.66	5.57E-06	2.91E-06	8.48E-06	8.50E-07	4.43E-07	1.29E-06	3.84E-07	1.82E-07	5.66E-07
1992	569737.73	4215333.33	5.44E-06	2.85E-06	8.29E-06	8.31E-07	4.33E-07	1.26E-06	3.75E-07	1.78E-07	5.53E-07
1993	569738.05	4215343	5.30E-06	2.77E-06	8.07E-06	8.09E-07	4.21E-07	1.23E-06	3.65E-07	1.73E-07	5.38E-07
1994	569738.36	4215352.67	5.19E-06	2.72E-06	7.91E-06	7.93E-07	4.13E-07	1.21E-06	3.58E-07	1.70E-07	5.28E-07
1995	569724.59	4215236.94	7.77E-06	4.07E-06	1.18E-05	1.19E-06	6.18E-07	1.81E-06	5.36E-07	2.55E-07	7.90E-07
1996	569724.9	4215246.61	7.28E-06	3.81E-06	1.11E-05	1.11E-06	5.80E-07	1.69E-06	5.02E-07	2.39E-07	7.41E-07
1997	569725.22	4215256.29	6.87E-06	3.59E-06	1.05E-05	1.05E-06	5.46E-07	1.59E-06	4.73E-07	2.25E-07	6.98E-07
1998	569725.53	4215265.96	6.52E-06	3.41E-06	9.93E-06	9.95E-07	5.19E-07	1.51E-06	4.49E-07	2.13E-07	6.63E-07
1999	569725.85	4215275.63	6.22E-06	3.26E-06	9.48E-06	9.50E-07	4.95E-07	1.45E-06	4.29E-07	2.04E-07	6.33E-07
2000	569726.16	4215285.3	5.97E-06	3.13E-06	9.10E-06	9.12E-07	4.75E-07	1.39E-06	4.12E-07	1.96E-07	6.07E-07
2001	569726.48	4215294.97	5.80E-06	3.04E-06	8.84E-06	8.86E-07	4.62E-07	1.35E-06	4.00E-07	1.90E-07	5.90E-07
2002	569726.79	4215304.64	5.64E-06	2.95E-06	8.59E-06	8.61E-07	4.49E-07	1.31E-06	3.89E-07	1.85E-07	5.73E-07
2003	569727.11	4215314.31	5.48E-06	2.87E-06	8.34E-06	8.36E-07	4.36E-07	1.27E-06	3.77E-07	1.79E-07	5.57E-07
2004	569727.42	4215323.99	5.35E-06	2.80E-06	8.15E-06	8.17E-07	4.26E-07	1.24E-06	3.69E-07	1.75E-07	5.44E-07
2005	569727.74	4215333.66	5.22E-06	2.73E-06	7.96E-06	7.98E-07	4.16E-07	1.21E-06	3.60E-07	1.71E-07	5.31E-07
2006	569728.05	4215343.33	5.08E-06	2.66E-06	7.74E-06	7.76E-07	4.04E-07	1.18E-06	3.50E-07	1.66E-07	5.17E-07
2007	569728.37	4215353	4.98E-06	2.60E-06	7.58E-06	7.60E-07	3.96E-07	1.16E-06	3.43E-07	1.63E-07	5.06E-07
2008	569728.68	4215362.67	4.90E-06	2.56E-06	7.47E-06	7.48E-07	3.90E-07	1.14E-06	3.38E-07	1.61E-07	4.98E-07
2009	569713.96	4215217.93	8.14E-06	4.26E-06	1.24E-05	1.24E-06	6.48E-07	1.89E-06	5.61E-07	2.67E-07	8.28E-07

2010	569714.28	4215227.6	8.03E-06	4.20E-06	1.22E-05	1.23E-06	6.39E-07	1.87E-06	5.53E-07	2.63E-07	8.17E-07
2011	569714.59	4215237.27	7.53E-06	3.94E-06	1.15E-05	1.15E-06	5.99E-07	1.75E-06	5.19E-07	2.47E-07	7.66E-07
2012	569714.91	4215246.94	7.07E-06	3.70E-06	1.08E-05	1.08E-06	5.63E-07	1.64E-06	4.87E-07	2.32E-07	7.19E-07
2013	569715.22	4215256.61	6.67E-06	3.49E-06	1.02E-05	1.02E-06	5.31E-07	1.55E-06	4.60E-07	2.19E-07	6.78E-07
2014	569715.54	4215266.28	6.32E-06	3.31E-06	9.63E-06	9.65E-07	5.03E-07	1.47E-06	4.36E-07	2.07E-07	6.43E-07
2015	569715.85	4215275.95	6.03E-06	3.15E-06	9.18E-06	9.21E-07	4.80E-07	1.40E-06	4.15E-07	1.97E-07	6.13E-07
2016	569716.17	4215285.63	5.78E-06	3.02E-06	8.80E-06	8.82E-07	4.60E-07	1.34E-06	3.98E-07	1.89E-07	5.87E-07
2017	569716.48	4215295.3	5.61E-06	2.93E-06	8.54E-06	8.56E-07	4.46E-07	1.30E-06	3.86E-07	1.84E-07	5.70E-07
2018	569716.8	4215304.97	5.44E-06	2.85E-06	8.29E-06	8.31E-07	4.33E-07	1.26E-06	3.75E-07	1.78E-07	5.53E-07
2019	569717.11	4215314.64	5.29E-06	2.77E-06	8.05E-06	8.07E-07	4.21E-07	1.23E-06	3.64E-07	1.73E-07	5.37E-07
2020	569717.43	4215324.31	5.16E-06	2.70E-06	7.86E-06	7.88E-07	4.11E-07	1.20E-06	3.56E-07	1.69E-07	5.25E-07
2021	569717.74	4215333.98	5.03E-06	2.63E-06	7.66E-06	7.68E-07	4.00E-07	1.17E-06	3.46E-07	1.65E-07	5.11E-07
2022	569718.06	4215343.65	4.88E-06	2.56E-06	7.44E-06	7.46E-07	3.89E-07	1.13E-06	3.37E-07	1.60E-07	4.97E-07
2023	569718.37	4215353.33	4.78E-06	2.50E-06	7.29E-06	7.31E-07	3.81E-07	1.11E-06	3.30E-07	1.57E-07	4.86E-07
2024	569718.69	4215363	4.71E-06	2.46E-06	7.17E-06	7.19E-07	3.74E-07	1.09E-06	3.24E-07	1.54E-07	4.78E-07
2025	569719	4215372.67	4.63E-06	2.42E-06	7.05E-06	7.07E-07	3.68E-07	1.08E-06	3.19E-07	1.52E-07	4.71E-07
2026	569719.32	4215382.34	4.60E-06	2.41E-06	7.01E-06	7.02E-07	3.66E-07	1.07E-06	3.17E-07	1.51E-07	4.68E-07
2027	569709.13	4215384.84	4.40E-06	2.30E-06	6.70E-06	6.72E-07	3.50E-07	1.02E-06	3.03E-07	1.44E-07	4.47E-07
2028	569699.1	4215385.23	4.22E-06	2.21E-06	6.43E-06	6.44E-07	3.36E-07	9.80E-07	2.91E-07	1.38E-07	4.29E-07
2029	569702.37	4215376.72	4.30E-06	2.25E-06	6.54E-06	6.56E-07	3.42E-07	9.98E-07	2.96E-07	1.41E-07	4.37E-07
2030	569705.64	4215368.2	4.42E-06	2.32E-06	6.74E-06	6.76E-07	3.52E-07	1.03E-06	3.05E-07	1.45E-07	4.50E-07
2031	569708.92	4215359.69	4.56E-06	2.39E-06	6.94E-06	6.96E-07	3.63E-07	1.06E-06	3.14E-07	1.49E-07	4.63E-07
2032	569689.27	4215385.11	4.06E-06	2.13E-06	6.19E-06	6.20E-07	3.23E-07	9.44E-07	2.80E-07	1.33E-07	4.13E-07
2033	569692.7	4215376.18	4.14E-06	2.17E-06	6.31E-06	6.32E-07	3.29E-07	9.62E-07	2.85E-07	1.36E-07	4.21E-07
2034	569696.14	4215367.24	4.27E-06	2.24E-06	6.51E-06	6.53E-07	3.40E-07	9.93E-07	2.95E-07	1.40E-07	4.35E-07
2035	569699.58	4215358.3	4.41E-06	2.31E-06	6.72E-06	6.74E-07	3.51E-07	1.03E-06	3.04E-07	1.45E-07	4.49E-07
2036	569703.01	4215349.36	4.55E-06	2.38E-06	6.94E-06	6.95E-07	3.62E-07	1.06E-06	3.14E-07	1.49E-07	4.63E-07
2037	569706.45	4215340.42	4.73E-06	2.48E-06	7.21E-06	7.23E-07	3.77E-07	1.10E-06	3.26E-07	1.55E-07	4.81E-07
2038	569679.24	4215385.52	3.92E-06	2.05E-06	5.97E-06	5.98E-07	3.12E-07	9.10E-07	2.70E-07	1.28E-07	3.98E-07
2039	569682.64	4215376.68	4.01E-06	2.10E-06	6.10E-06	6.12E-07	3.19E-07	9.31E-07	2.76E-07	1.31E-07	4.07E-07
2040	569686.04	4215367.83	4.13E-06	2.16E-06	6.30E-06	6.31E-07	3.29E-07	9.60E-07	2.85E-07	1.35E-07	4.20E-07
2041	569689.44	4215358.99	4.26E-06	2.23E-06	6.49E-06	6.51E-07	3.39E-07	9.90E-07	2.94E-07	1.40E-07	4.33E-07
2042	569692.84	4215350.14	4.38E-06	2.29E-06	6.68E-06	6.70E-07	3.49E-07	1.02E-06	3.02E-07	1.44E-07	4.46E-07
2043	569696.24	4215341.3	4.55E-06	2.38E-06	6.93E-06	6.95E-07	3.62E-07	1.06E-06	3.13E-07	1.49E-07	4.62E-07
2044	569699.64	4215332.45	4.74E-06	2.48E-06	7.22E-06	7.24E-07	3.77E-07	1.10E-06	3.27E-07	1.55E-07	4.82E-07
2045	569703.04	4215323.61	4.92E-06	2.58E-06	7.50E-06	7.52E-07	3.92E-07	1.14E-06	3.39E-07	1.61E-07	5.01E-07
2046	569706.44	4215314.76	5.10E-06	2.67E-06	7.77E-06	7.79E-07	4.06E-07	1.19E-06	3.52E-07	1.67E-07	5.19E-07
2047	569669.21	4215385.91	3.78E-06	1.98E-06	5.76E-06	5.77E-07	3.01E-07	8.78E-07	2.61E-07	1.24E-07	3.84E-07
2048	569672.58	4215377.15	3.88E-06	2.03E-06	5.91E-06	5.92E-07	3.09E-07	9.01E-07	2.67E-07	1.27E-07	3.94E-07
2049	569675.94	4215368.4	4.01E-06	2.10E-06	6.10E-06	6.12E-07	3.19E-07	9.31E-07	2.76E-07	1.31E-07	4.07E-07
2050	569679.31	4215359.64	4.13E-06	2.16E-06	6.30E-06	6.31E-07	3.29E-07	9.60E-07	2.85E-07	1.35E-07	4.20E-07
2051	569682.68	4215350.88	4.26E-06	2.23E-06	6.49E-06	6.50E-07	3.39E-07	9.89E-07	2.93E-07	1.39E-07	4.33E-07
2052	569686.05	4215342.12	4.40E-06	2.30E-06	6.71E-06	6.72E-07	3.50E-07	1.02E-06	3.03E-07	1.44E-07	4.48E-07
2053	569689.41	4215333.36	4.57E-06	2.39E-06	6.97E-06	6.98E-07	3.64E-07	1.06E-06	3.15E-07	1.50E-07	4.65E-07
2054	569692.78	4215324.6	4.75E-06	2.48E-06	7.23E-06	7.25E-07	3.78E-07	1.10E-06	3.27E-07	1.55E-07	4.82E-07
2055	569696.15	4215315.84	4.92E-06	2.57E-06	7.49E-06	7.51E-07	3.91E-07	1.14E-06	3.39E-07	1.61E-07	5.00E-07
2056	569699.52	4215307.08	5.12E-06	2.68E-06	7.81E-06	7.83E-07	4.08E-07	1.19E-06	3.53E-07	1.68E-07	5.21E-07
2057	569702.88	4215298.32	5.33E-06	2.79E-06	8.12E-06	8.14E-07	4.24E-07	1.24E-06	3.68E-07	1.75E-07	5.42E-07
2058	569706.25	4215289.56	5.55E-06	2.90E-06	8.45E-06	8.47E-07	4.41E-07	1.29E-06	3.82E-07	1.82E-07	5.64E-07
2059	569659.18	4215386.3	3.64E-06	1.90E-06	5.55E-06	5.56E-07	2.90E-07	8.46E-07	2.51E-07	1.19E-07	3.70E-07
2060	569662.52	4215377.62	3.75E-06	1.96E-06	5.72E-06	5.73E-07	2.99E-07	8.72E-07	2.59E-07	1.23E-07	3.82E-07
2061	569665.86	4215368.93	3.89E-06	2.03E-06	5.92E-06	5.94E-07	3.09E-07	9.03E-07	2.68E-07	1.27E-07	3.95E-07
2062	569669.2	4215360.25	4.01E-06	2.10E-06	6.11E-06	6.13E-07	3.19E-07	9.32E-07	2.77E-07	1.32E-07	4.08E-07
2063	569672.54	4215351.57	4.14E-06	2.17E-06	6.31E-06	6.32E-07	3.29E-07	9.61E-07	2.85E-07	1.36E-07	4.21E-07
2064	569675.87	4215342.88	4.27E-06	2.24E-06	6.51E-06	6.53E-07	3.40E-07	9.93E-07	2.95E-07	1.40E-07	4.35E-07
2065	569679.21	4215334.2	4.44E-06	2.32E-06	6.76E-06	6.77E-07	3.53E-07	1.03E-06	3.06E-07	1.45E-07	4.51E-07
2066	569682.55	4215325.52	4.60E-06	2.41E-06	7.00E-06	7.02E-07	3.66E-07	1.07E-06	3.17E-07	1.51E-07	4.67E-07
2067	569685.89	4215316.83	4.76E-06	2.49E-06	7.25E-06	7.26E-07	3.79E-07	1.11E-06	3.28E-07	1.56E-07	4.84E-07
2068	569689.23	4215308.15	4.96E-06	2.59E-06	7.55E-06	7.57E-07	3.94E-07	1.15E-06	3.42E-07	1.62E-07	5.04E-07
2069	569692.57	4215299.46	5.16E-06	2.70E-06	7.86E-06	7.88E-07	4.10E-07	1.20E-06	3.55E-07	1.69E-07	5.24E-07
2070	569695.9	4215290.78	5.37E-06	2.81E-06	8.18E-06	8.20E-07	4.27E-07	1.25E-06	3.70E-07	1.76E-07	5.46E-07

2071	569699.24	4215282.1	5.61E-06	2.93E-06	8.54E-06	8.56E-07	4.46E-07	1.30E-06	3.86E-07	1.84E-07	5.70E-07
2072	569702.58	4215273.41	5.90E-06	3.09E-06	8.99E-06	9.01E-07	4.69E-07	1.37E-06	4.07E-07	1.93E-07	6.00E-07
2073	569705.92	4215264.73	6.23E-06	3.26E-06	9.49E-06	9.51E-07	4.96E-07	1.45E-06	4.29E-07	2.04E-07	6.33E-07
2074	569649.16	4215386.68	3.50E-06	1.83E-06	5.33E-06	5.34E-07	2.78E-07	8.13E-07	2.41E-07	1.15E-07	3.56E-07
2075	569652.47	4215378.07	3.62E-06	1.89E-06	5.51E-06	5.52E-07	2.88E-07	8.40E-07	2.49E-07	1.18E-07	3.68E-07
2076	569655.79	4215369.45	3.75E-06	1.96E-06	5.72E-06	5.73E-07	2.99E-07	8.72E-07	2.59E-07	1.23E-07	3.82E-07
2077	569659.1	4215360.84	3.89E-06	2.04E-06	5.93E-06	5.95E-07	3.10E-07	9.05E-07	2.68E-07	1.28E-07	3.96E-07
2078	569662.41	4215352.22	4.02E-06	2.11E-06	6.13E-06	6.15E-07	3.20E-07	9.35E-07	2.77E-07	1.32E-07	4.09E-07
2079	569665.72	4215343.61	4.16E-06	2.17E-06	6.33E-06	6.35E-07	3.31E-07	9.65E-07	2.86E-07	1.36E-07	4.22E-07
2080	569669.03	4215334.99	4.31E-06	2.25E-06	6.56E-06	6.58E-07	3.43E-07	1.00E-06	2.97E-07	1.41E-07	4.38E-07
2081	569672.34	4215326.38	4.46E-06	2.33E-06	6.79E-06	6.81E-07	3.55E-07	1.04E-06	3.07E-07	1.46E-07	4.53E-07
2082	569675.66	4215317.76	4.61E-06	2.41E-06	7.02E-06	7.04E-07	3.67E-07	1.07E-06	3.18E-07	1.51E-07	4.69E-07
2083	569678.97	4215309.15	4.81E-06	2.51E-06	7.32E-06	7.34E-07	3.82E-07	1.12E-06	3.31E-07	1.57E-07	4.89E-07
2084	569682.28	4215300.53	5.01E-06	2.62E-06	7.64E-06	7.66E-07	3.99E-07	1.16E-06	3.46E-07	1.64E-07	5.10E-07
2085	569685.59	4215291.92	5.23E-06	2.73E-06	7.96E-06	7.98E-07	4.16E-07	1.21E-06	3.60E-07	1.71E-07	5.31E-07
2086	569688.9	4215283.3	5.45E-06	2.85E-06	8.30E-06	8.32E-07	4.34E-07	1.27E-06	3.76E-07	1.79E-07	5.54E-07
2087	569692.21	4215274.69	5.72E-06	2.99E-06	8.71E-06	8.73E-07	4.55E-07	1.33E-06	3.94E-07	1.87E-07	5.81E-07
2088	569695.53	4215266.07	6.03E-06	3.15E-06	9.18E-06	9.21E-07	4.80E-07	1.40E-06	4.16E-07	1.98E-07	6.13E-07
2089	569698.84	4215257.46	6.39E-06	3.34E-06	9.73E-06	9.76E-07	5.08E-07	1.48E-06	4.40E-07	2.09E-07	6.50E-07
2090	569702.15	4215248.84	6.77E-06	3.54E-06	1.03E-05	1.03E-06	5.39E-07	1.57E-06	4.67E-07	2.22E-07	6.89E-07
2091	569705.46	4215240.23	7.21E-06	3.77E-06	1.10E-05	1.10E-06	5.74E-07	1.67E-06	4.97E-07	2.36E-07	7.33E-07
2092	569639.3	4215386.65	3.37E-06	1.76E-06	5.14E-06	5.15E-07	2.68E-07	7.84E-07	2.32E-07	1.11E-07	3.43E-07
2093	569642.74	4215377.69	3.50E-06	1.83E-06	5.33E-06	5.34E-07	2.78E-07	8.12E-07	2.41E-07	1.15E-07	3.56E-07
2094	569646.19	4215368.73	3.65E-06	1.91E-06	5.55E-06	5.57E-07	2.90E-07	8.47E-07	2.51E-07	1.19E-07	3.71E-07
2095	569649.63	4215359.77	3.80E-06	1.99E-06	5.78E-06	5.80E-07	3.02E-07	8.82E-07	2.62E-07	1.24E-07	3.86E-07
2096	569653.08	4215350.81	3.94E-06	2.06E-06	5.99E-06	6.01E-07	3.13E-07	9.14E-07	2.71E-07	1.29E-07	4.00E-07
2097	569656.52	4215341.85	4.08E-06	2.14E-06	6.22E-06	6.23E-07	3.25E-07	9.48E-07	2.81E-07	1.34E-07	4.15E-07
2098	569659.96	4215332.89	4.24E-06	2.22E-06	6.46E-06	6.48E-07	3.37E-07	9.85E-07	2.92E-07	1.39E-07	4.31E-07
2099	569663.41	4215323.93	4.39E-06	2.30E-06	6.68E-06	6.70E-07	3.49E-07	1.02E-06	3.02E-07	1.44E-07	4.46E-07
2100	569666.85	4215314.97	4.54E-06	2.38E-06	6.92E-06	6.94E-07	3.62E-07	1.06E-06	3.13E-07	1.49E-07	4.62E-07
2101	569670.3	4215306.01	4.76E-06	2.49E-06	7.26E-06	7.28E-07	3.79E-07	1.11E-06	3.28E-07	1.56E-07	4.84E-07
2102	569673.74	4215297.05	5.00E-06	2.61E-06	7.61E-06	7.63E-07	3.97E-07	1.16E-06	3.44E-07	1.64E-07	5.08E-07
2103	569677.19	4215288.09	5.23E-06	2.74E-06	7.97E-06	7.99E-07	4.16E-07	1.22E-06	3.61E-07	1.71E-07	5.32E-07
2104	569680.63	4215279.13	5.48E-06	2.87E-06	8.35E-06	8.37E-07	4.36E-07	1.27E-06	3.78E-07	1.80E-07	5.57E-07
2105	569684.07	4215270.17	5.77E-06	3.02E-06	8.78E-06	8.81E-07	4.59E-07	1.34E-06	3.97E-07	1.89E-07	5.86E-07
2106	569687.52	4215261.21	6.10E-06	3.19E-06	9.29E-06	9.31E-07	4.85E-07	1.42E-06	4.20E-07	2.00E-07	6.20E-07
2107	569690.96	4215252.26	6.46E-06	3.38E-06	9.85E-06	9.87E-07	5.14E-07	1.50E-06	4.45E-07	2.12E-07	6.57E-07
2108	569694.41	4215243.3	6.87E-06	3.60E-06	1.05E-05	1.05E-06	5.47E-07	1.60E-06	4.74E-07	2.25E-07	6.99E-07
2109	569697.85	4215234.34	7.33E-06	3.83E-06	1.12E-05	1.12E-06	5.83E-07	1.70E-06	5.05E-07	2.40E-07	7.45E-07
2110	569701.29	4215225.38	7.79E-06	4.07E-06	1.19E-05	1.19E-06	6.20E-07	1.81E-06	5.37E-07	2.55E-07	7.92E-07
2111	569704.74	4215216.42	7.86E-06	4.11E-06	1.20E-05	1.20E-06	6.26E-07	1.83E-06	5.42E-07	2.58E-07	7.99E-07
2112	569629.27	4215387.04	3.25E-06	1.70E-06	4.96E-06	4.97E-07	2.59E-07	7.56E-07	2.24E-07	1.07E-07	3.31E-07
2113	569632.69	4215378.16	3.38E-06	1.77E-06	5.14E-06	5.15E-07	2.69E-07	7.84E-07	2.33E-07	1.11E-07	3.43E-07
2114	569636.1	4215369.27	3.52E-06	1.84E-06	5.36E-06	5.38E-07	2.80E-07	8.18E-07	2.43E-07	1.15E-07	3.58E-07
2115	569639.52	4215360.39	3.67E-06	1.92E-06	5.59E-06	5.61E-07	2.92E-07	8.53E-07	2.53E-07	1.20E-07	3.73E-07
2116	569642.93	4215351.51	3.82E-06	2.00E-06	5.81E-06	5.83E-07	3.04E-07	8.87E-07	2.63E-07	1.25E-07	3.88E-07
2117	569646.34	4215342.63	3.97E-06	2.08E-06	6.05E-06	6.06E-07	3.16E-07	9.22E-07	2.73E-07	1.30E-07	4.04E-07
2118	569649.76	4215333.75	4.13E-06	2.16E-06	6.29E-06	6.31E-07	3.29E-07	9.59E-07	2.85E-07	1.35E-07	4.20E-07
2119	569653.17	4215324.87	4.29E-06	2.24E-06	6.53E-06	6.54E-07	3.41E-07	9.95E-07	2.95E-07	1.40E-07	4.36E-07
2120	569656.59	4215315.99	4.43E-06	2.32E-06	6.75E-06	6.76E-07	3.53E-07	1.03E-06	3.05E-07	1.45E-07	4.50E-07
2121	569660	4215307.11	4.64E-06	2.43E-06	7.07E-06	7.08E-07	3.69E-07	1.08E-06	3.20E-07	1.52E-07	4.72E-07
2122	569663.41	4215298.22	4.87E-06	2.55E-06	7.41E-06	7.43E-07	3.87E-07	1.13E-06	3.35E-07	1.59E-07	4.95E-07
2123	569666.83	4215289.34	5.12E-06	2.68E-06	7.79E-06	7.81E-07	4.07E-07	1.19E-06	3.53E-07	1.68E-07	5.20E-07
2124	569670.24	4215280.46	5.36E-06	2.81E-06	8.17E-06	8.19E-07	4.27E-07	1.25E-06	3.69E-07	1.76E-07	5.45E-07
2125	569673.66	4215271.58	5.62E-06	2.94E-06	8.56E-06	8.59E-07	4.47E-07	1.31E-06	3.87E-07	1.84E-07	5.72E-07
2126	569677.07	4215262.7	5.92E-06	3.10E-06	9.02E-06	9.04E-07	4.71E-07	1.38E-06	4.08E-07	1.94E-07	6.02E-07
2127	569680.49	4215253.82	6.25E-06	3.27E-06	9.53E-06	9.55E-07	4.98E-07	1.45E-06	4.31E-07	2.05E-07	6.36E-07
2128	569683.9	4215244.94	6.60E-06	3.45E-06	1.00E-05	1.01E-06	5.25E-07	1.53E-06	4.55E-07	2.16E-07	6.71E-07
2129	569687.31	4215236.06	7.00E-06	3.66E-06	1.07E-05	1.07E-06	5.57E-07	1.63E-06	4.82E-07	2.29E-07	7.12E-07
2130	569690.73	4215227.18	7.47E-06	3.91E-06	1.14E-05	1.14E-06	5.94E-07	1.73E-06	5.14E-07	2.45E-07	7.59E-07
2131	569694.14	4215218.29	7.57E-06	3.96E-06	1.15E-05	1.16E-06	6.02E-07	1.76E-06	5.21E-07	2.48E-07	7.69E-07

2132	569697.56	4215209.41	7.61E-06	3.98E-06	1.16E-05	1.16E-06	6.05E-07	1.77E-06	5.24E-07	2.49E-07	7.74E-07
2133	569625.86	4215395.92	3.13E-06	1.64E-06	4.77E-06	4.78E-07	2.49E-07	7.27E-07	2.16E-07	1.03E-07	3.18E-07
2134	569619.25	4215387.42	3.15E-06	1.65E-06	4.79E-06	4.80E-07	2.50E-07	7.31E-07	2.17E-07	1.03E-07	3.20E-07
2135	569622.64	4215378.61	3.27E-06	1.71E-06	4.98E-06	4.99E-07	2.60E-07	7.59E-07	2.25E-07	1.07E-07	3.32E-07
2136	569626.02	4215369.8	3.41E-06	1.78E-06	5.19E-06	5.20E-07	2.71E-07	7.91E-07	2.35E-07	1.12E-07	3.46E-07
2137	569629.41	4215360.99	3.56E-06	1.86E-06	5.42E-06	5.43E-07	2.83E-07	8.26E-07	2.45E-07	1.16E-07	3.62E-07
2138	569632.8	4215352.18	3.71E-06	1.94E-06	5.64E-06	5.66E-07	2.95E-07	8.61E-07	2.55E-07	1.21E-07	3.77E-07
2139	569636.18	4215343.37	3.86E-06	2.02E-06	5.88E-06	5.89E-07	3.07E-07	8.96E-07	2.66E-07	1.26E-07	3.92E-07
2140	569639.57	4215334.56	4.03E-06	2.11E-06	6.13E-06	6.15E-07	3.20E-07	9.35E-07	2.78E-07	1.32E-07	4.09E-07
2141	569642.96	4215325.75	4.19E-06	2.19E-06	6.38E-06	6.40E-07	3.33E-07	9.73E-07	2.89E-07	1.37E-07	4.26E-07
2142	569646.34	4215316.94	4.35E-06	2.27E-06	6.62E-06	6.64E-07	3.46E-07	1.01E-06	2.99E-07	1.42E-07	4.42E-07
2143	569649.73	4215308.13	4.55E-06	2.38E-06	6.93E-06	6.94E-07	3.62E-07	1.06E-06	3.13E-07	1.49E-07	4.62E-07
2144	569653.12	4215299.32	4.77E-06	2.50E-06	7.27E-06	7.28E-07	3.80E-07	1.11E-06	3.29E-07	1.56E-07	4.85E-07
2145	569656.5	4215290.51	5.01E-06	2.62E-06	7.64E-06	7.65E-07	3.99E-07	1.16E-06	3.45E-07	1.64E-07	5.10E-07
2146	569659.89	4215281.7	5.25E-06	2.75E-06	8.00E-06	8.02E-07	4.18E-07	1.22E-06	3.62E-07	1.72E-07	5.34E-07
2147	569663.28	4215272.89	5.49E-06	2.87E-06	8.37E-06	8.39E-07	4.37E-07	1.28E-06	3.79E-07	1.80E-07	5.59E-07
2148	569666.66	4215264.08	5.77E-06	3.02E-06	8.78E-06	8.80E-07	4.59E-07	1.34E-06	3.97E-07	1.89E-07	5.86E-07
2149	569670.05	4215255.27	6.07E-06	3.17E-06	9.24E-06	9.27E-07	4.83E-07	1.41E-06	4.18E-07	1.99E-07	6.17E-07
2150	569673.44	4215246.46	6.35E-06	3.32E-06	9.68E-06	9.70E-07	5.06E-07	1.48E-06	4.38E-07	2.08E-07	6.46E-07
2151	569676.82	4215237.65	6.68E-06	3.50E-06	1.02E-05	1.02E-06	5.32E-07	1.55E-06	4.61E-07	2.19E-07	6.80E-07
2152	569680.21	4215228.84	7.07E-06	3.70E-06	1.08E-05	1.08E-06	5.62E-07	1.64E-06	4.87E-07	2.32E-07	7.19E-07
2153	569683.6	4215220.03	7.20E-06	3.76E-06	1.10E-05	1.10E-06	5.73E-07	1.67E-06	4.96E-07	2.36E-07	7.32E-07
2154	569686.98	4215211.23	7.22E-06	3.78E-06	1.10E-05	1.10E-06	5.75E-07	1.68E-06	4.98E-07	2.37E-07	7.34E-07
2155	569690.37	4215202.42	7.27E-06	3.80E-06	1.11E-05	1.11E-06	5.78E-07	1.69E-06	5.01E-07	2.38E-07	7.39E-07
2156	569615.87	4215396.23	3.02E-06	1.58E-06	4.61E-06	4.62E-07	2.41E-07	7.03E-07	2.08E-07	9.91E-08	3.07E-07
2157	569616.17	4215405.88	2.93E-06	1.53E-06	4.47E-06	4.48E-07	2.33E-07	6.81E-07	2.02E-07	9.60E-08	2.98E-07
2158	569616.47	4215415.53	2.85E-06	1.49E-06	4.34E-06	4.36E-07	2.27E-07	6.63E-07	1.97E-07	9.34E-08	2.90E-07
2159	569609.23	4215387.79	3.04E-06	1.59E-06	4.64E-06	4.65E-07	2.42E-07	7.07E-07	2.10E-07	9.97E-08	3.10E-07
2160	569612.59	4215379.05	3.16E-06	1.66E-06	4.82E-06	4.83E-07	2.52E-07	7.35E-07	2.18E-07	1.04E-07	3.22E-07
2161	569615.95	4215370.31	3.30E-06	1.73E-06	5.03E-06	5.04E-07	2.63E-07	7.66E-07	2.27E-07	1.08E-07	3.35E-07
2162	569619.32	4215361.56	3.45E-06	1.80E-06	5.25E-06	5.26E-07	2.74E-07	8.00E-07	2.37E-07	1.13E-07	3.50E-07
2163	569622.68	4215352.82	3.59E-06	1.88E-06	5.47E-06	5.48E-07	2.86E-07	8.34E-07	2.48E-07	1.18E-07	3.65E-07
2164	569626.04	4215344.07	3.74E-06	1.96E-06	5.70E-06	5.72E-07	2.98E-07	8.70E-07	2.58E-07	1.23E-07	3.81E-07
2165	569629.4	4215335.33	3.92E-06	2.05E-06	5.97E-06	5.99E-07	3.12E-07	9.11E-07	2.70E-07	1.28E-07	3.99E-07
2166	569632.76	4215326.59	4.10E-06	2.15E-06	6.25E-06	6.26E-07	3.26E-07	9.52E-07	2.83E-07	1.34E-07	4.17E-07
2167	569636.12	4215317.84	4.27E-06	2.23E-06	6.51E-06	6.52E-07	3.40E-07	9.92E-07	2.94E-07	1.40E-07	4.34E-07
2168	569639.48	4215309.1	4.47E-06	2.34E-06	6.80E-06	6.82E-07	3.56E-07	1.04E-06	3.08E-07	1.46E-07	4.54E-07
2169	569642.84	4215300.35	4.69E-06	2.45E-06	7.14E-06	7.16E-07	3.73E-07	1.09E-06	3.23E-07	1.54E-07	4.76E-07
2170	569646.21	4215291.61	4.92E-06	2.58E-06	7.50E-06	7.52E-07	3.92E-07	1.14E-06	3.39E-07	1.61E-07	5.01E-07
2171	569649.57	4215282.87	5.16E-06	2.70E-06	7.86E-06	7.88E-07	4.11E-07	1.20E-06	3.56E-07	1.69E-07	5.25E-07
2172	569652.93	4215274.12	5.38E-06	2.82E-06	8.20E-06	8.22E-07	4.28E-07	1.25E-06	3.71E-07	1.76E-07	5.47E-07
2173	569656.29	4215265.38	5.62E-06	2.94E-06	8.57E-06	8.59E-07	4.48E-07	1.31E-06	3.88E-07	1.84E-07	5.72E-07
2174	569659.65	4215256.63	5.90E-06	3.09E-06	8.99E-06	9.01E-07	4.70E-07	1.37E-06	4.07E-07	1.93E-07	6.00E-07
2175	569663.01	4215247.89	6.14E-06	3.21E-06	9.35E-06	9.37E-07	4.88E-07	1.43E-06	4.23E-07	2.01E-07	6.24E-07
2176	569666.37	4215239.14	6.41E-06	3.35E-06	9.76E-06	9.78E-07	5.10E-07	1.49E-06	4.42E-07	2.10E-07	6.51E-07
2177	569669.74	4215230.4	6.72E-06	3.52E-06	1.02E-05	1.03E-06	5.35E-07	1.56E-06	4.63E-07	2.20E-07	6.83E-07
2178	569673.1	4215221.66	6.86E-06	3.59E-06	1.05E-05	1.05E-06	5.46E-07	1.59E-06	4.73E-07	2.25E-07	6.98E-07
2179	569676.46	4215212.91	6.84E-06	3.58E-06	1.04E-05	1.04E-06	5.44E-07	1.59E-06	4.71E-07	2.24E-07	6.95E-07
2180	569679.82	4215204.17	6.83E-06	3.57E-06	1.04E-05	1.04E-06	5.43E-07	1.59E-06	4.71E-07	2.24E-07	6.94E-07
2181	569683.18	4215195.42	6.83E-06	3.57E-06	1.04E-05	1.04E-06	5.44E-07	1.59E-06	4.71E-07	2.24E-07	6.94E-07
2182	569695.14	4215182.97	6.85E-06	3.58E-06	1.04E-05	1.05E-06	5.45E-07	1.59E-06	4.72E-07	2.24E-07	6.96E-07
2183	569605.87	4215396.54	2.92E-06	1.53E-06	4.45E-06	4.47E-07	2.33E-07	6.79E-07	2.02E-07	9.58E-08	2.97E-07
2184	569606.17	4215406.19	2.83E-06	1.48E-06	4.31E-06	4.32E-07	2.25E-07	6.58E-07	1.95E-07	9.27E-08	2.88E-07
2185	569606.47	4215415.84	2.76E-06	1.44E-06	4.20E-06	4.21E-07	2.20E-07	6.41E-07	1.90E-07	9.04E-08	2.81E-07
2186	569606.77	4215425.5	2.69E-06	1.41E-06	4.10E-06	4.11E-07	2.14E-07	6.25E-07	1.85E-07	8.81E-08	2.73E-07
2187	569599.21	4215388.17	2.95E-06	1.54E-06	4.49E-06	4.50E-07	2.35E-07	6.85E-07	2.03E-07	9.66E-08	3.00E-07
2188	569602.55	4215379.48	3.07E-06	1.60E-06	4.67E-06	4.68E-07	2.44E-07	7.12E-07	2.11E-07	1.00E-07	3.12E-07
2189	569605.89	4215370.8	3.20E-06	1.67E-06	4.87E-06	4.88E-07	2.54E-07	7.43E-07	2.20E-07	1.05E-07	3.25E-07
2190	569609.23	4215362.11	3.34E-06	1.75E-06	5.09E-06	5.10E-07	2.66E-07	7.76E-07	2.30E-07	1.09E-07	3.39E-07
2191	569612.57	4215353.43	3.48E-06	1.82E-06	5.31E-06	5.32E-07	2.77E-07	8.09E-07	2.40E-07	1.14E-07	3.54E-07
2192	569615.9	4215344.75	3.63E-06	1.90E-06	5.53E-06	5.55E-07	2.89E-07	8.44E-07	2.50E-07	1.19E-07	3.69E-07

2193	569619.24	4215336.06	3.81E-06	1.99E-06	5.80E-06	5.82E-07	3.03E-07	8.85E-07	2.63E-07	1.25E-07	3.87E-07
2194	569622.58	4215327.38	3.99E-06	2.09E-06	6.08E-06	6.10E-07	3.18E-07	9.27E-07	2.75E-07	1.31E-07	4.06E-07
2195	569625.92	4215318.7	4.18E-06	2.19E-06	6.36E-06	6.38E-07	3.32E-07	9.70E-07	2.88E-07	1.37E-07	4.25E-07
2196	569629.26	4215310.01	4.38E-06	2.29E-06	6.67E-06	6.69E-07	3.49E-07	1.02E-06	3.02E-07	1.43E-07	4.45E-07
2197	569632.59	4215301.33	4.61E-06	2.41E-06	7.02E-06	7.04E-07	3.67E-07	1.07E-06	3.18E-07	1.51E-07	4.68E-07
2198	569635.93	4215292.64	4.84E-06	2.53E-06	7.38E-06	7.40E-07	3.86E-07	1.13E-06	3.34E-07	1.59E-07	4.93E-07
2199	569639.27	4215283.96	5.08E-06	2.66E-06	7.74E-06	7.76E-07	4.04E-07	1.18E-06	3.50E-07	1.66E-07	5.16E-07
2200	569642.61	4215275.28	5.28E-06	2.76E-06	8.04E-06	8.06E-07	4.20E-07	1.23E-06	3.64E-07	1.73E-07	5.37E-07
2201	569645.95	4215266.59	5.50E-06	2.88E-06	8.37E-06	8.39E-07	4.37E-07	1.28E-06	3.79E-07	1.80E-07	5.59E-07
2202	569649.29	4215257.91	5.74E-06	3.00E-06	8.75E-06	8.77E-07	4.57E-07	1.33E-06	3.96E-07	1.88E-07	5.84E-07
2203	569652.62	4215249.22	5.92E-06	3.10E-06	9.02E-06	9.05E-07	4.71E-07	1.38E-06	4.08E-07	1.94E-07	6.02E-07
2204	569655.96	4215240.54	6.13E-06	3.21E-06	9.33E-06	9.36E-07	4.88E-07	1.42E-06	4.22E-07	2.01E-07	6.23E-07
2205	569659.3	4215231.86	6.38E-06	3.34E-06	9.72E-06	9.74E-07	5.08E-07	1.48E-06	4.40E-07	2.09E-07	6.49E-07
2206	569662.64	4215223.17	6.56E-06	3.43E-06	9.99E-06	1.00E-06	5.22E-07	1.52E-06	4.52E-07	2.15E-07	6.67E-07
2207	569665.98	4215214.49	6.50E-06	3.40E-06	9.89E-06	9.92E-07	5.17E-07	1.51E-06	4.48E-07	2.13E-07	6.60E-07
2208	569669.31	4215205.81	6.44E-06	3.37E-06	9.82E-06	9.84E-07	5.13E-07	1.50E-06	4.44E-07	2.11E-07	6.55E-07
2209	569672.65	4215197.12	6.41E-06	3.36E-06	9.77E-06	9.79E-07	5.10E-07	1.49E-06	4.42E-07	2.10E-07	6.52E-07
2210	569675.99	4215188.44	6.32E-06	3.30E-06	9.62E-06	9.64E-07	5.03E-07	1.47E-06	4.35E-07	2.07E-07	6.42E-07
2211	569687.87	4215176.07	6.33E-06	3.31E-06	9.64E-06	9.67E-07	5.04E-07	1.47E-06	4.36E-07	2.07E-07	6.44E-07
2212	569595.87	4215396.85	2.83E-06	1.48E-06	4.32E-06	4.33E-07	2.25E-07	6.58E-07	1.95E-07	9.28E-08	2.88E-07
2213	569596.17	4215406.5	2.74E-06	1.43E-06	4.18E-06	4.19E-07	2.18E-07	6.37E-07	1.89E-07	8.98E-08	2.79E-07
2214	569596.47	4215416.15	2.68E-06	1.40E-06	4.08E-06	4.09E-07	2.13E-07	6.21E-07	1.84E-07	8.76E-08	2.72E-07
2215	569596.77	4215425.81	2.61E-06	1.37E-06	3.97E-06	3.98E-07	2.08E-07	6.06E-07	1.80E-07	8.55E-08	2.65E-07
2216	569597.07	4215435.46	2.54E-06	1.33E-06	3.88E-06	3.89E-07	2.03E-07	5.91E-07	1.75E-07	8.34E-08	2.59E-07
2217	569589.33	4215388.19	2.86E-06	1.50E-06	4.36E-06	4.37E-07	2.28E-07	6.65E-07	1.97E-07	9.38E-08	2.91E-07
2218	569592.78	4215379.21	2.98E-06	1.56E-06	4.54E-06	4.55E-07	2.37E-07	6.93E-07	2.06E-07	9.77E-08	3.03E-07
2219	569596.23	4215370.24	3.12E-06	1.63E-06	4.75E-06	4.76E-07	2.48E-07	7.24E-07	2.15E-07	1.02E-07	3.17E-07
2220	569599.68	4215361.27	3.26E-06	1.71E-06	4.97E-06	4.98E-07	2.59E-07	7.57E-07	2.25E-07	1.07E-07	3.31E-07
2221	569603.13	4215352.29	3.41E-06	1.78E-06	5.19E-06	5.20E-07	2.71E-07	7.92E-07	2.35E-07	1.12E-07	3.47E-07
2222	569606.58	4215343.32	3.57E-06	1.87E-06	5.43E-06	5.45E-07	2.84E-07	8.29E-07	2.46E-07	1.17E-07	3.63E-07
2223	569610.03	4215334.35	3.75E-06	1.96E-06	5.72E-06	5.73E-07	2.99E-07	8.72E-07	2.59E-07	1.23E-07	3.82E-07
2224	569613.48	4215325.37	3.95E-06	2.07E-06	6.01E-06	6.03E-07	3.14E-07	9.17E-07	2.72E-07	1.29E-07	4.01E-07
2225	569616.92	4215316.4	4.15E-06	2.17E-06	6.32E-06	6.33E-07	3.30E-07	9.63E-07	2.86E-07	1.36E-07	4.22E-07
2226	569620.37	4215307.43	4.36E-06	2.28E-06	6.64E-06	6.66E-07	3.47E-07	1.01E-06	3.01E-07	1.43E-07	4.44E-07
2227	569623.82	4215298.45	4.60E-06	2.40E-06	7.00E-06	7.02E-07	3.66E-07	1.07E-06	3.17E-07	1.51E-07	4.67E-07
2228	569627.27	4215289.48	4.85E-06	2.54E-06	7.39E-06	7.41E-07	3.86E-07	1.13E-06	3.34E-07	1.59E-07	4.93E-07
2229	569630.72	4215280.51	5.07E-06	2.65E-06	7.72E-06	7.74E-07	4.04E-07	1.18E-06	3.49E-07	1.66E-07	5.16E-07
2230	569634.17	4215271.53	5.29E-06	2.77E-06	8.06E-06	8.08E-07	4.21E-07	1.23E-06	3.65E-07	1.73E-07	5.38E-07
2231	569637.62	4215262.56	5.51E-06	2.88E-06	8.39E-06	8.41E-07	4.38E-07	1.28E-06	3.80E-07	1.80E-07	5.60E-07
2232	569641.07	4215253.59	5.70E-06	2.98E-06	8.69E-06	8.71E-07	4.54E-07	1.33E-06	3.93E-07	1.87E-07	5.80E-07
2233	569644.52	4215244.61	5.83E-06	3.05E-06	8.87E-06	8.90E-07	4.64E-07	1.35E-06	4.02E-07	1.91E-07	5.92E-07
2234	569647.97	4215235.64	5.99E-06	3.13E-06	9.12E-06	9.15E-07	4.77E-07	1.39E-06	4.13E-07	1.96E-07	6.09E-07
2235	569651.42	4215226.67	6.20E-06	3.24E-06	9.44E-06	9.47E-07	4.93E-07	1.44E-06	4.27E-07	2.03E-07	6.30E-07
2236	569654.87	4215217.69	6.20E-06	3.24E-06	9.44E-06	9.47E-07	4.93E-07	1.44E-06	4.27E-07	2.03E-07	6.30E-07
2237	569658.32	4215208.72	6.15E-06	3.22E-06	9.37E-06	9.39E-07	4.90E-07	1.43E-06	4.24E-07	2.02E-07	6.25E-07
2238	569661.77	4215199.75	6.07E-06	3.18E-06	9.25E-06	9.27E-07	4.83E-07	1.41E-06	4.18E-07	1.99E-07	6.17E-07
2239	569665.22	4215190.77	5.99E-06	3.13E-06	9.12E-06	9.14E-07	4.76E-07	1.39E-06	4.13E-07	1.96E-07	6.09E-07
2240	569668.67	4215181.8	5.91E-06	3.09E-06	9.00E-06	9.02E-07	4.70E-07	1.37E-06	4.07E-07	1.93E-07	6.00E-07
2241	569680.94	4215169.02	5.92E-06	3.10E-06	9.02E-06	9.04E-07	4.71E-07	1.38E-06	4.08E-07	1.94E-07	6.02E-07
2242	569585.88	4215397.16	2.75E-06	1.44E-06	4.19E-06	4.20E-07	2.19E-07	6.38E-07	1.89E-07	9.00E-08	2.79E-07
2243	569586.18	4215406.81	2.66E-06	1.39E-06	4.05E-06	4.06E-07	2.12E-07	6.18E-07	1.83E-07	8.72E-08	2.71E-07
2244	569586.48	4215416.47	2.60E-06	1.36E-06	3.95E-06	3.96E-07	2.07E-07	6.03E-07	1.79E-07	8.50E-08	2.64E-07
2245	569586.78	4215426.12	2.53E-06	1.33E-06	3.86E-06	3.87E-07	2.02E-07	5.88E-07	1.75E-07	8.30E-08	2.58E-07
2246	569587.08	4215435.77	2.47E-06	1.29E-06	3.76E-06	3.77E-07	1.97E-07	5.74E-07	1.70E-07	8.09E-08	2.51E-07
2247	569918.17	4215544.25	4.19E-06	2.19E-06	6.38E-06	6.40E-07	3.33E-07	9.73E-07	2.89E-07	1.37E-07	4.26E-07
2248	569927.49	4215542.57	4.26E-06	2.23E-06	6.50E-06	6.51E-07	3.39E-07	9.91E-07	2.94E-07	1.40E-07	4.34E-07
2249	569936.8	4215540.89	4.34E-06	2.27E-06	6.62E-06	6.63E-07	3.46E-07	1.01E-06	2.99E-07	1.42E-07	4.42E-07
2250	569946.12	4215539.22	4.43E-06	2.32E-06	6.74E-06	6.76E-07	3.52E-07	1.03E-06	3.05E-07	1.45E-07	4.50E-07
2251	569955.43	4215537.54	4.52E-06	2.37E-06	6.89E-06	6.91E-07	3.60E-07	1.05E-06	3.12E-07	1.48E-07	4.60E-07
2252	569964.75	4215535.87	4.63E-06	2.42E-06	7.05E-06	7.07E-07	3.68E-07	1.07E-06	3.19E-07	1.52E-07	4.70E-07
2253	569974.06	4215534.19	4.75E-06	2.48E-06	7.23E-06	7.25E-07	3.78E-07	1.10E-06	3.27E-07	1.55E-07	4.83E-07

2254	569983.38	4215532.52	4.88E-06	2.55E-06	7.43E-06	7.45E-07	3.88E-07	1.13E-06	3.36E-07	1.60E-07	4.96E-07
2255	569992.69	4215530.84	5.02E-06	2.63E-06	7.65E-06	7.67E-07	4.00E-07	1.17E-06	3.46E-07	1.65E-07	5.11E-07
2256	570002.01	4215529.17	5.18E-06	2.71E-06	7.88E-06	7.90E-07	4.12E-07	1.20E-06	3.57E-07	1.70E-07	5.26E-07
2257	570011.32	4215527.49	5.33E-06	2.79E-06	8.12E-06	8.14E-07	4.24E-07	1.24E-06	3.68E-07	1.75E-07	5.42E-07
2258	570020.64	4215525.82	5.49E-06	2.87E-06	8.36E-06	8.38E-07	4.37E-07	1.28E-06	3.78E-07	1.80E-07	5.58E-07
2259	569911.2	4215551.84	3.92E-06	2.05E-06	5.98E-06	5.99E-07	3.12E-07	9.11E-07	2.70E-07	1.29E-07	3.99E-07
2260	569902.47	4215549.6	3.99E-06	2.09E-06	6.08E-06	6.09E-07	3.18E-07	9.27E-07	2.75E-07	1.31E-07	4.06E-07
2261	569929.26	4215552.41	3.92E-06	2.05E-06	5.97E-06	5.98E-07	3.12E-07	9.10E-07	2.70E-07	1.28E-07	3.98E-07
2262	569938.57	4215550.74	3.98E-06	2.08E-06	6.06E-06	6.08E-07	3.17E-07	9.25E-07	2.74E-07	1.30E-07	4.05E-07
2263	569947.89	4215549.06	4.05E-06	2.12E-06	6.17E-06	6.19E-07	3.22E-07	9.41E-07	2.79E-07	1.33E-07	4.12E-07
2264	569957.2	4215547.39	4.13E-06	2.16E-06	6.29E-06	6.30E-07	3.28E-07	9.59E-07	2.84E-07	1.35E-07	4.20E-07
2265	569966.52	4215545.71	4.21E-06	2.20E-06	6.42E-06	6.43E-07	3.35E-07	9.78E-07	2.90E-07	1.38E-07	4.28E-07
2266	569975.83	4215544.04	4.31E-06	2.25E-06	6.56E-06	6.58E-07	3.43E-07	1.00E-06	2.97E-07	1.41E-07	4.38E-07
2267	569985.15	4215542.36	4.41E-06	2.31E-06	6.72E-06	6.74E-07	3.51E-07	1.03E-06	3.04E-07	1.45E-07	4.49E-07
2268	569994.46	4215540.68	4.53E-06	2.37E-06	6.90E-06	6.92E-07	3.61E-07	1.05E-06	3.12E-07	1.48E-07	4.61E-07
2269	570003.78	4215539.01	4.66E-06	2.44E-06	7.09E-06	7.11E-07	3.70E-07	1.08E-06	3.21E-07	1.53E-07	4.73E-07
2270	570013.09	4215537.33	4.78E-06	2.50E-06	7.28E-06	7.30E-07	3.81E-07	1.11E-06	3.30E-07	1.57E-07	4.86E-07
2271	570022.41	4215535.66	4.91E-06	2.57E-06	7.47E-06	7.49E-07	3.90E-07	1.14E-06	3.38E-07	1.61E-07	4.99E-07
2272	569913.03	4215561.7	3.62E-06	1.89E-06	5.51E-06	5.53E-07	2.88E-07	8.40E-07	2.49E-07	1.19E-07	3.68E-07
2273	569895.65	4215557.24	3.74E-06	1.96E-06	5.70E-06	5.72E-07	2.98E-07	8.70E-07	2.58E-07	1.23E-07	3.81E-07
2274	569878.28	4215552.77	3.87E-06	2.02E-06	5.89E-06	5.90E-07	3.08E-07	8.98E-07	2.66E-07	1.27E-07	3.93E-07
2275	569921.71	4215563.93	3.55E-06	1.86E-06	5.41E-06	5.43E-07	2.83E-07	8.26E-07	2.45E-07	1.16E-07	3.61E-07
2276	569931.03	4215562.25	3.61E-06	1.89E-06	5.49E-06	5.51E-07	2.87E-07	8.38E-07	2.48E-07	1.18E-07	3.67E-07
2277	569940.34	4215560.58	3.66E-06	1.91E-06	5.57E-06	5.59E-07	2.91E-07	8.50E-07	2.52E-07	1.20E-07	3.72E-07
2278	569949.66	4215558.9	3.72E-06	1.94E-06	5.66E-06	5.68E-07	2.96E-07	8.63E-07	2.56E-07	1.22E-07	3.78E-07
2279	569958.97	4215557.23	3.78E-06	1.98E-06	5.76E-06	5.77E-07	3.01E-07	8.78E-07	2.61E-07	1.24E-07	3.84E-07
2280	569968.29	4215555.55	3.85E-06	2.01E-06	5.87E-06	5.88E-07	3.06E-07	8.94E-07	2.65E-07	1.26E-07	3.92E-07
2281	569977.6	4215553.88	3.93E-06	2.06E-06	5.98E-06	6.00E-07	3.13E-07	9.13E-07	2.71E-07	1.29E-07	3.99E-07
2282	569986.92	4215552.2	4.02E-06	2.10E-06	6.12E-06	6.13E-07	3.20E-07	9.33E-07	2.77E-07	1.32E-07	4.08E-07
2283	569996.23	4215550.53	4.11E-06	2.15E-06	6.25E-06	6.27E-07	3.27E-07	9.54E-07	2.83E-07	1.35E-07	4.17E-07
2284	570005.55	4215548.85	4.20E-06	2.20E-06	6.40E-06	6.42E-07	3.34E-07	9.76E-07	2.90E-07	1.38E-07	4.27E-07
2285	570014.86	4215547.18	4.30E-06	2.25E-06	6.55E-06	6.57E-07	3.42E-07	9.99E-07	2.96E-07	1.41E-07	4.37E-07
2286	570024.18	4215545.5	4.41E-06	2.30E-06	6.71E-06	6.73E-07	3.51E-07	1.02E-06	3.04E-07	1.44E-07	4.48E-07
2287	570033.49	4215543.83	4.49E-06	2.35E-06	6.85E-06	6.86E-07	3.58E-07	1.04E-06	3.10E-07	1.47E-07	4.57E-07
2288	569914.84	4215571.55	3.35E-06	1.75E-06	5.10E-06	5.11E-07	2.66E-07	7.77E-07	2.31E-07	1.10E-07	3.40E-07
2289	569897.56	4215567.11	3.46E-06	1.81E-06	5.28E-06	5.29E-07	2.76E-07	8.05E-07	2.39E-07	1.13E-07	3.52E-07
2290	569880.28	4215562.67	3.58E-06	1.87E-06	5.45E-06	5.47E-07	2.85E-07	8.32E-07	2.47E-07	1.17E-07	3.64E-07
2291	569862.99	4215558.23	3.69E-06	1.93E-06	5.62E-06	5.64E-07	2.94E-07	8.57E-07	2.54E-07	1.21E-07	3.75E-07
2292	569923.48	4215573.77	3.29E-06	1.72E-06	5.01E-06	5.02E-07	2.62E-07	7.63E-07	2.26E-07	1.08E-07	3.34E-07
2293	569932.8	4215572.1	3.33E-06	1.74E-06	5.07E-06	5.08E-07	2.65E-07	7.73E-07	2.29E-07	1.09E-07	3.38E-07
2294	569942.11	4215570.42	3.37E-06	1.77E-06	5.14E-06	5.15E-07	2.69E-07	7.84E-07	2.33E-07	1.11E-07	3.43E-07
2295	569951.43	4215568.75	3.42E-06	1.79E-06	5.21E-06	5.23E-07	2.72E-07	7.95E-07	2.36E-07	1.12E-07	3.48E-07
2296	569960.74	4215567.07	3.48E-06	1.82E-06	5.29E-06	5.31E-07	2.77E-07	8.07E-07	2.40E-07	1.14E-07	3.53E-07
2297	569970.06	4215565.4	3.53E-06	1.85E-06	5.38E-06	5.40E-07	2.81E-07	8.21E-07	2.44E-07	1.16E-07	3.59E-07
2298	569979.37	4215563.72	3.60E-06	1.88E-06	5.48E-06	5.49E-07	2.86E-07	8.35E-07	2.48E-07	1.18E-07	3.66E-07
2299	569988.69	4215562.04	3.66E-06	1.92E-06	5.58E-06	5.59E-07	2.91E-07	8.51E-07	2.52E-07	1.20E-07	3.72E-07
2300	569998	4215560.37	3.73E-06	1.95E-06	5.69E-06	5.70E-07	2.97E-07	8.67E-07	2.57E-07	1.22E-07	3.80E-07
2301	570007.32	4215558.69	3.81E-06	1.99E-06	5.81E-06	5.82E-07	3.03E-07	8.85E-07	2.63E-07	1.25E-07	3.88E-07
2302	570016.63	4215557.02	3.89E-06	2.04E-06	5.93E-06	5.95E-07	3.10E-07	9.05E-07	2.68E-07	1.28E-07	3.96E-07
2303	570025.95	4215555.34	3.98E-06	2.08E-06	6.06E-06	6.07E-07	3.17E-07	9.24E-07	2.74E-07	1.30E-07	4.04E-07
2304	569916.65	4215581.4	3.10E-06	1.62E-06	4.72E-06	4.73E-07	2.47E-07	7.20E-07	2.14E-07	1.02E-07	3.15E-07
2305	569899.44	4215576.98	3.21E-06	1.68E-06	4.89E-06	4.90E-07	2.55E-07	7.46E-07	2.21E-07	1.05E-07	3.26E-07
2306	569882.24	4215572.56	3.32E-06	1.74E-06	5.06E-06	5.07E-07	2.64E-07	7.71E-07	2.29E-07	1.09E-07	3.38E-07
2307	569865.03	4215568.14	3.43E-06	1.79E-06	5.22E-06	5.23E-07	2.73E-07	7.96E-07	2.36E-07	1.12E-07	3.48E-07
2308	569847.83	4215563.72	3.53E-06	1.85E-06	5.37E-06	5.39E-07	2.81E-07	8.19E-07	2.43E-07	1.16E-07	3.59E-07
2309	569830.62	4215559.3	3.48E-06	1.82E-06	5.30E-06	5.31E-07	2.77E-07	8.08E-07	2.40E-07	1.14E-07	3.54E-07
2310	569934.57	4215581.94	3.08E-06	1.61E-06	4.69E-06	4.70E-07	2.45E-07	7.15E-07	2.12E-07	1.01E-07	3.13E-07
2311	569943.88	4215580.26	3.12E-06	1.63E-06	4.75E-06	4.76E-07	2.48E-07	7.25E-07	2.15E-07	1.02E-07	3.17E-07
2312	569953.2	4215578.59	3.16E-06	1.65E-06	4.82E-06	4.83E-07	2.52E-07	7.34E-07	2.18E-07	1.04E-07	3.21E-07
2313	569962.51	4215576.91	3.21E-06	1.68E-06	4.88E-06	4.90E-07	2.55E-07	7.45E-07	2.21E-07	1.05E-07	3.26E-07
2314	569971.83	4215575.24	3.25E-06	1.70E-06	4.95E-06	4.97E-07	2.59E-07	7.55E-07	2.24E-07	1.07E-07	3.31E-07

2315	569981.14	4215573.56	3.30E-06	1.73E-06	5.03E-06	5.04E-07	2.63E-07	7.67E-07	2.28E-07	1.08E-07	3.36E-07
2316	569990.46	4215571.89	3.36E-06	1.76E-06	5.11E-06	5.12E-07	2.67E-07	7.79E-07	2.31E-07	1.10E-07	3.41E-07
2317	569999.77	4215570.21	3.42E-06	1.79E-06	5.20E-06	5.21E-07	2.72E-07	7.93E-07	2.35E-07	1.12E-07	3.47E-07
2318	570009.09	4215568.54	3.48E-06	1.82E-06	5.30E-06	5.31E-07	2.77E-07	8.08E-07	2.40E-07	1.14E-07	3.54E-07
2319	570064.98	4215558.48	3.92E-06	2.05E-06	5.98E-06	5.99E-07	3.12E-07	9.11E-07	2.70E-07	1.29E-07	3.99E-07
2320	570074.3	4215556.81	4.03E-06	2.11E-06	6.14E-06	6.15E-07	3.21E-07	9.36E-07	2.78E-07	1.32E-07	4.10E-07
2321	570083.61	4215555.13	4.15E-06	2.17E-06	6.31E-06	6.33E-07	3.30E-07	9.63E-07	2.86E-07	1.36E-07	4.22E-07
2322	569917.88	4215591.11	2.88E-06	1.51E-06	4.38E-06	4.39E-07	2.29E-07	6.68E-07	1.98E-07	9.43E-08	2.93E-07
2323	569908.74	4215588.76	2.93E-06	1.53E-06	4.47E-06	4.48E-07	2.33E-07	6.81E-07	2.02E-07	9.61E-08	2.98E-07
2324	569899.6	4215586.41	2.99E-06	1.56E-06	4.55E-06	4.56E-07	2.38E-07	6.94E-07	2.06E-07	9.79E-08	3.04E-07
2325	569890.46	4215584.06	3.05E-06	1.59E-06	4.64E-06	4.65E-07	2.42E-07	7.08E-07	2.10E-07	9.98E-08	3.10E-07
2326	569881.32	4215581.71	3.10E-06	1.62E-06	4.73E-06	4.74E-07	2.47E-07	7.21E-07	2.14E-07	1.02E-07	3.15E-07
2327	569872.18	4215579.37	3.16E-06	1.65E-06	4.81E-06	4.82E-07	2.51E-07	7.33E-07	2.18E-07	1.03E-07	3.21E-07
2328	569863.04	4215577.02	3.21E-06	1.68E-06	4.89E-06	4.90E-07	2.55E-07	7.46E-07	2.21E-07	1.05E-07	3.26E-07
2329	569853.9	4215574.67	3.26E-06	1.71E-06	4.97E-06	4.98E-07	2.60E-07	7.58E-07	2.25E-07	1.07E-07	3.32E-07
2330	569844.76	4215572.32	3.31E-06	1.73E-06	5.04E-06	5.06E-07	2.64E-07	7.69E-07	2.28E-07	1.08E-07	3.37E-07
2331	569835.62	4215569.97	3.24E-06	1.69E-06	4.93E-06	4.95E-07	2.58E-07	7.52E-07	2.23E-07	1.06E-07	3.29E-07
2332	569826.48	4215567.62	3.27E-06	1.71E-06	4.98E-06	4.99E-07	2.60E-07	7.59E-07	2.25E-07	1.07E-07	3.32E-07
2333	569817.34	4215565.28	3.30E-06	1.73E-06	5.03E-06	5.04E-07	2.63E-07	7.67E-07	2.28E-07	1.08E-07	3.36E-07
2334	569808.2	4215562.93	3.33E-06	1.74E-06	5.08E-06	5.09E-07	2.65E-07	7.74E-07	2.30E-07	1.09E-07	3.39E-07
2335	569927.02	4215593.46	2.82E-06	1.48E-06	4.30E-06	4.31E-07	2.25E-07	6.56E-07	1.95E-07	9.25E-08	2.87E-07
2336	569936.34	4215591.78	2.86E-06	1.49E-06	4.35E-06	4.36E-07	2.27E-07	6.63E-07	1.97E-07	9.35E-08	2.90E-07
2337	569945.65	4215590.11	2.89E-06	1.51E-06	4.40E-06	4.41E-07	2.30E-07	6.71E-07	1.99E-07	9.46E-08	2.94E-07
2338	569954.97	4215588.43	2.93E-06	1.53E-06	4.46E-06	4.47E-07	2.33E-07	6.79E-07	2.02E-07	9.58E-08	2.97E-07
2339	569964.28	4215586.75	2.96E-06	1.55E-06	4.52E-06	4.53E-07	2.36E-07	6.89E-07	2.04E-07	9.71E-08	3.01E-07
2340	569973.6	4215585.08	3.00E-06	1.57E-06	4.57E-06	4.58E-07	2.39E-07	6.97E-07	2.07E-07	9.83E-08	3.05E-07
2341	569982.91	4215583.4	3.04E-06	1.59E-06	4.63E-06	4.65E-07	2.42E-07	7.07E-07	2.10E-07	9.97E-08	3.09E-07
2342	569992.23	4215581.73	3.09E-06	1.62E-06	4.70E-06	4.72E-07	2.46E-07	7.17E-07	2.13E-07	1.01E-07	3.14E-07
2343	570048.12	4215571.68	3.44E-06	1.80E-06	5.24E-06	5.26E-07	2.74E-07	7.99E-07	2.37E-07	1.13E-07	3.50E-07
2344	570057.43	4215570	3.51E-06	1.84E-06	5.35E-06	5.37E-07	2.80E-07	8.16E-07	2.42E-07	1.15E-07	3.57E-07
2345	570066.75	4215568.33	3.60E-06	1.89E-06	5.49E-06	5.50E-07	2.87E-07	8.37E-07	2.48E-07	1.18E-07	3.66E-07
2346	570076.07	4215566.65	3.70E-06	1.94E-06	5.64E-06	5.65E-07	2.95E-07	8.60E-07	2.55E-07	1.21E-07	3.76E-07
2347	570085.38	4215564.98	3.80E-06	1.99E-06	5.80E-06	5.81E-07	3.03E-07	8.84E-07	2.62E-07	1.25E-07	3.87E-07
2348	569919.72	4215600.97	2.68E-06	1.40E-06	4.08E-06	4.09E-07	2.13E-07	6.22E-07	1.85E-07	8.78E-08	2.72E-07
2349	569910.64	4215598.64	2.73E-06	1.43E-06	4.16E-06	4.17E-07	2.17E-07	6.34E-07	1.88E-07	8.94E-08	2.78E-07
2350	569901.57	4215596.3	2.78E-06	1.46E-06	4.24E-06	4.25E-07	2.21E-07	6.46E-07	1.92E-07	9.11E-08	2.83E-07
2351	569892.5	4215593.97	2.84E-06	1.48E-06	4.32E-06	4.33E-07	2.26E-07	6.58E-07	1.95E-07	9.29E-08	2.88E-07
2352	569883.43	4215591.64	2.89E-06	1.51E-06	4.40E-06	4.41E-07	2.30E-07	6.71E-07	1.99E-07	9.46E-08	2.94E-07
2353	569874.35	4215589.31	2.94E-06	1.54E-06	4.48E-06	4.49E-07	2.34E-07	6.82E-07	2.02E-07	9.63E-08	2.99E-07
2354	569865.28	4215586.98	2.99E-06	1.56E-06	4.55E-06	4.56E-07	2.38E-07	6.94E-07	2.06E-07	9.79E-08	3.04E-07
2355	569856.21	4215584.65	3.04E-06	1.59E-06	4.63E-06	4.64E-07	2.42E-07	7.06E-07	2.09E-07	9.95E-08	3.09E-07
2356	569847.13	4215582.32	3.09E-06	1.62E-06	4.70E-06	4.71E-07	2.46E-07	7.17E-07	2.13E-07	1.01E-07	3.14E-07
2357	569838.06	4215579.99	3.13E-06	1.64E-06	4.77E-06	4.79E-07	2.49E-07	7.28E-07	2.16E-07	1.03E-07	3.19E-07
2358	569828.99	4215577.66	3.06E-06	1.60E-06	4.66E-06	4.67E-07	2.43E-07	7.10E-07	2.11E-07	1.00E-07	3.11E-07
2359	569819.91	4215575.33	3.09E-06	1.61E-06	4.70E-06	4.71E-07	2.46E-07	7.17E-07	2.13E-07	1.01E-07	3.14E-07
2360	569810.84	4215572.99	3.11E-06	1.63E-06	4.74E-06	4.76E-07	2.48E-07	7.23E-07	2.15E-07	1.02E-07	3.17E-07
2361	569801.77	4215570.66	3.14E-06	1.64E-06	4.79E-06	4.80E-07	2.50E-07	7.30E-07	2.17E-07	1.03E-07	3.20E-07
2362	569792.7	4215568.33	3.17E-06	1.66E-06	4.83E-06	4.84E-07	2.52E-07	7.36E-07	2.18E-07	1.04E-07	3.22E-07
2363	569928.79	4215603.3	2.63E-06	1.38E-06	4.01E-06	4.02E-07	2.09E-07	6.11E-07	1.81E-07	8.62E-08	2.67E-07
2364	569938.11	4215601.62	2.66E-06	1.39E-06	4.05E-06	4.06E-07	2.11E-07	6.17E-07	1.83E-07	8.71E-08	2.70E-07
2365	569947.42	4215599.95	2.69E-06	1.41E-06	4.09E-06	4.10E-07	2.14E-07	6.24E-07	1.85E-07	8.80E-08	2.73E-07
2366	569956.74	4215598.27	2.72E-06	1.42E-06	4.14E-06	4.15E-07	2.16E-07	6.31E-07	1.87E-07	8.91E-08	2.76E-07
2367	569966.05	4215596.6	2.75E-06	1.44E-06	4.19E-06	4.20E-07	2.19E-07	6.39E-07	1.90E-07	9.01E-08	2.80E-07
2368	569975.37	4215594.92	2.78E-06	1.46E-06	4.24E-06	4.25E-07	2.22E-07	6.47E-07	1.92E-07	9.12E-08	2.83E-07
2369	570031.26	4215584.87	3.05E-06	1.60E-06	4.65E-06	4.66E-07	2.43E-07	7.09E-07	2.10E-07	1.00E-07	3.10E-07
2370	570040.57	4215583.19	3.11E-06	1.63E-06	4.74E-06	4.75E-07	2.48E-07	7.23E-07	2.15E-07	1.02E-07	3.16E-07
2371	570049.89	4215581.52	3.17E-06	1.66E-06	4.84E-06	4.85E-07	2.53E-07	7.37E-07	2.19E-07	1.04E-07	3.23E-07
2372	570059.2	4215579.84	3.25E-06	1.70E-06	4.94E-06	4.96E-07	2.58E-07	7.54E-07	2.24E-07	1.06E-07	3.30E-07
2373	570068.52	4215578.17	3.33E-06	1.74E-06	5.07E-06	5.08E-07	2.65E-07	7.73E-07	2.29E-07	1.09E-07	3.38E-07
2374	570077.84	4215576.49	3.41E-06	1.79E-06	5.20E-06	5.21E-07	2.72E-07	7.93E-07	2.35E-07	1.12E-07	3.47E-07
2375	570087.15	4215574.82	3.51E-06	1.83E-06	5.34E-06	5.36E-07	2.79E-07	8.15E-07	2.42E-07	1.15E-07	3.57E-07

2376	569921.55	4215610.82	2.50E-06	1.31E-06	3.81E-06	3.82E-07	1.99E-07	5.81E-07	1.72E-07	8.20E-08	2.54E-07
2377	569912.53	4215608.51	2.55E-06	1.33E-06	3.88E-06	3.89E-07	2.03E-07	5.92E-07	1.76E-07	8.35E-08	2.59E-07
2378	569903.52	4215606.19	2.60E-06	1.36E-06	3.95E-06	3.96E-07	2.07E-07	6.03E-07	1.79E-07	8.50E-08	2.64E-07
2379	569894.51	4215603.88	2.64E-06	1.38E-06	4.03E-06	4.04E-07	2.10E-07	6.14E-07	1.82E-07	8.66E-08	2.69E-07
2380	569885.49	4215601.56	2.69E-06	1.41E-06	4.10E-06	4.11E-07	2.14E-07	6.25E-07	1.86E-07	8.82E-08	2.74E-07
2381	569876.48	4215599.25	2.74E-06	1.43E-06	4.17E-06	4.18E-07	2.18E-07	6.37E-07	1.89E-07	8.98E-08	2.79E-07
2382	569867.46	4215596.93	2.79E-06	1.46E-06	4.25E-06	4.26E-07	2.22E-07	6.48E-07	1.92E-07	9.13E-08	2.83E-07
2383	569858.45	4215594.61	2.84E-06	1.48E-06	4.32E-06	4.33E-07	2.26E-07	6.59E-07	1.95E-07	9.29E-08	2.88E-07
2384	569849.44	4215592.3	2.88E-06	1.51E-06	4.39E-06	4.40E-07	2.29E-07	6.69E-07	1.99E-07	9.44E-08	2.93E-07
2385	569840.42	4215589.98	2.93E-06	1.53E-06	4.46E-06	4.47E-07	2.33E-07	6.80E-07	2.02E-07	9.59E-08	2.98E-07
2386	569831.41	4215587.67	2.97E-06	1.55E-06	4.53E-06	4.54E-07	2.36E-07	6.90E-07	2.05E-07	9.73E-08	3.02E-07
2387	569822.4	4215585.35	2.89E-06	1.51E-06	4.40E-06	4.41E-07	2.30E-07	6.71E-07	1.99E-07	9.47E-08	2.94E-07
2388	569813.38	4215583.04	2.91E-06	1.52E-06	4.44E-06	4.45E-07	2.32E-07	6.77E-07	2.01E-07	9.55E-08	2.96E-07
2389	569804.37	4215580.72	2.94E-06	1.54E-06	4.48E-06	4.50E-07	2.34E-07	6.84E-07	2.03E-07	9.64E-08	2.99E-07
2390	569795.35	4215578.4	2.97E-06	1.56E-06	4.53E-06	4.54E-07	2.37E-07	6.90E-07	2.05E-07	9.74E-08	3.02E-07
2391	569786.34	4215576.09	3.00E-06	1.57E-06	4.57E-06	4.58E-07	2.39E-07	6.97E-07	2.07E-07	9.83E-08	3.05E-07
2392	569930.56	4215613.14	2.46E-06	1.29E-06	3.74E-06	3.75E-07	1.95E-07	5.71E-07	1.69E-07	8.05E-08	2.50E-07
2393	569939.88	4215611.46	2.48E-06	1.30E-06	3.78E-06	3.79E-07	1.97E-07	5.76E-07	1.71E-07	8.13E-08	2.52E-07
2394	569949.19	4215609.79	2.51E-06	1.31E-06	3.82E-06	3.83E-07	1.99E-07	5.82E-07	1.73E-07	8.21E-08	2.55E-07
2395	570005.08	4215599.74	2.70E-06	1.41E-06	4.11E-06	4.12E-07	2.14E-07	6.26E-07	1.86E-07	8.83E-08	2.74E-07
2396	570014.4	4215598.06	2.73E-06	1.43E-06	4.17E-06	4.18E-07	2.18E-07	6.35E-07	1.88E-07	8.96E-08	2.78E-07
2397	570023.71	4215596.39	2.78E-06	1.45E-06	4.23E-06	4.24E-07	2.21E-07	6.45E-07	1.91E-07	9.10E-08	2.82E-07
2398	570033.03	4215594.71	2.83E-06	1.48E-06	4.31E-06	4.32E-07	2.25E-07	6.58E-07	1.95E-07	9.27E-08	2.88E-07
2399	570042.34	4215593.04	2.89E-06	1.51E-06	4.40E-06	4.41E-07	2.30E-07	6.71E-07	1.99E-07	9.46E-08	2.93E-07
2400	570051.66	4215591.36	2.95E-06	1.54E-06	4.49E-06	4.50E-07	2.34E-07	6.84E-07	2.03E-07	9.65E-08	3.00E-07
2401	570060.97	4215589.69	3.01E-06	1.58E-06	4.59E-06	4.60E-07	2.40E-07	7.00E-07	2.08E-07	9.87E-08	3.06E-07
2402	570070.29	4215588.01	3.08E-06	1.61E-06	4.70E-06	4.71E-07	2.45E-07	7.16E-07	2.13E-07	1.01E-07	3.14E-07
2403	570079.61	4215586.34	3.16E-06	1.65E-06	4.81E-06	4.83E-07	2.52E-07	7.34E-07	2.18E-07	1.04E-07	3.21E-07
2404	570088.92	4215584.66	3.25E-06	1.70E-06	4.95E-06	4.96E-07	2.58E-07	7.54E-07	2.24E-07	1.06E-07	3.30E-07
2405	569923.37	4215620.68	2.34E-06	1.23E-06	3.57E-06	3.58E-07	1.86E-07	5.44E-07	1.61E-07	7.68E-08	2.38E-07
2406	569914.41	4215618.38	2.38E-06	1.25E-06	3.63E-06	3.64E-07	1.90E-07	5.54E-07	1.64E-07	7.81E-08	2.42E-07
2407	569905.45	4215616.08	2.43E-06	1.27E-06	3.70E-06	3.71E-07	1.93E-07	5.64E-07	1.67E-07	7.95E-08	2.47E-07
2408	569896.49	4215613.77	2.47E-06	1.29E-06	3.76E-06	3.77E-07	1.97E-07	5.74E-07	1.70E-07	8.09E-08	2.51E-07
2409	569887.53	4215611.47	2.51E-06	1.32E-06	3.83E-06	3.84E-07	2.00E-07	5.84E-07	1.73E-07	8.24E-08	2.56E-07
2410	569878.56	4215609.17	2.56E-06	1.34E-06	3.90E-06	3.91E-07	2.04E-07	5.94E-07	1.76E-07	8.38E-08	2.60E-07
2411	569869.6	4215606.87	2.61E-06	1.36E-06	3.97E-06	3.98E-07	2.07E-07	6.05E-07	1.80E-07	8.53E-08	2.65E-07
2412	569860.64	4215604.56	2.65E-06	1.39E-06	4.04E-06	4.05E-07	2.11E-07	6.15E-07	1.83E-07	8.68E-08	2.69E-07
2413	569851.68	4215602.26	2.69E-06	1.41E-06	4.10E-06	4.11E-07	2.14E-07	6.26E-07	1.86E-07	8.82E-08	2.74E-07
2414	569842.72	4215599.96	2.74E-06	1.43E-06	4.17E-06	4.18E-07	2.18E-07	6.36E-07	1.89E-07	8.97E-08	2.78E-07
2415	569833.76	4215597.66	2.78E-06	1.45E-06	4.23E-06	4.24E-07	2.21E-07	6.46E-07	1.92E-07	9.11E-08	2.83E-07
2416	569824.8	4215595.36	2.82E-06	1.48E-06	4.30E-06	4.31E-07	2.24E-07	6.55E-07	1.94E-07	9.24E-08	2.87E-07
2417	569815.84	4215593.05	2.74E-06	1.43E-06	4.17E-06	4.18E-07	2.18E-07	6.36E-07	1.89E-07	8.97E-08	2.78E-07
2418	569806.88	4215590.75	2.76E-06	1.45E-06	4.21E-06	4.22E-07	2.20E-07	6.42E-07	1.90E-07	9.05E-08	2.81E-07
2419	569797.92	4215588.45	2.79E-06	1.46E-06	4.25E-06	4.26E-07	2.22E-07	6.48E-07	1.92E-07	9.14E-08	2.84E-07
2420	569788.95	4215586.15	2.82E-06	1.47E-06	4.29E-06	4.30E-07	2.24E-07	6.55E-07	1.94E-07	9.23E-08	2.87E-07
2421	569932.33	4215622.98	2.30E-06	1.21E-06	3.51E-06	3.52E-07	1.83E-07	5.35E-07	1.59E-07	7.54E-08	2.34E-07
2422	569988.22	4215612.93	2.45E-06	1.28E-06	3.74E-06	3.75E-07	1.95E-07	5.70E-07	1.69E-07	8.04E-08	2.49E-07
2423	569997.54	4215611.25	2.48E-06	1.30E-06	3.78E-06	3.79E-07	1.98E-07	5.77E-07	1.71E-07	8.14E-08	2.53E-07
2424	570006.85	4215609.58	2.51E-06	1.32E-06	3.83E-06	3.84E-07	2.00E-07	5.84E-07	1.73E-07	8.23E-08	2.56E-07
2425	570016.17	4215607.9	2.55E-06	1.33E-06	3.88E-06	3.89E-07	2.03E-07	5.92E-07	1.76E-07	8.35E-08	2.59E-07
2426	570025.48	4215606.23	2.59E-06	1.35E-06	3.94E-06	3.95E-07	2.06E-07	6.01E-07	1.78E-07	8.47E-08	2.63E-07
2427	570034.8	4215604.55	2.64E-06	1.38E-06	4.02E-06	4.03E-07	2.10E-07	6.13E-07	1.82E-07	8.64E-08	2.68E-07
2428	570044.11	4215602.88	2.69E-06	1.41E-06	4.10E-06	4.11E-07	2.14E-07	6.25E-07	1.85E-07	8.82E-08	2.74E-07
2429	570053.43	4215601.2	2.75E-06	1.44E-06	4.19E-06	4.20E-07	2.19E-07	6.39E-07	1.89E-07	9.01E-08	2.80E-07
2430	570062.74	4215599.53	2.81E-06	1.47E-06	4.28E-06	4.29E-07	2.24E-07	6.53E-07	1.94E-07	9.21E-08	2.86E-07
2431	570072.06	4215597.85	2.88E-06	1.51E-06	4.38E-06	4.39E-07	2.29E-07	6.68E-07	1.98E-07	9.43E-08	2.93E-07
2432	570081.38	4215596.18	2.95E-06	1.54E-06	4.49E-06	4.50E-07	2.35E-07	6.85E-07	2.03E-07	9.66E-08	3.00E-07
2433	570090.69	4215594.5	3.03E-06	1.58E-06	4.61E-06	4.63E-07	2.41E-07	7.04E-07	2.09E-07	9.92E-08	3.08E-07
2434	569925.19	4215630.53	2.20E-06	1.15E-06	3.35E-06	3.36E-07	1.75E-07	5.12E-07	1.52E-07	7.21E-08	2.24E-07
2435	569916.27	4215628.24	2.24E-06	1.17E-06	3.41E-06	3.42E-07	1.78E-07	5.20E-07	1.54E-07	7.34E-08	2.28E-07
2436	569907.36	4215625.95	2.28E-06	1.19E-06	3.47E-06	3.48E-07	1.81E-07	5.29E-07	1.57E-07	7.46E-08	2.32E-07

2437	569898.45	4215623.66	2.32E-06	1.21E-06	3.53E-06	3.54E-07	1.84E-07	5.38E-07	1.60E-07	7.59E-08	2.36E-07
2438	569889.53	4215621.37	2.36E-06	1.23E-06	3.59E-06	3.60E-07	1.88E-07	5.47E-07	1.62E-07	7.72E-08	2.40E-07
2439	569880.62	4215619.08	2.40E-06	1.25E-06	3.65E-06	3.66E-07	1.91E-07	5.57E-07	1.65E-07	7.85E-08	2.44E-07
2440	569871.7	4215616.79	2.44E-06	1.27E-06	3.71E-06	3.72E-07	1.94E-07	5.66E-07	1.68E-07	7.98E-08	2.48E-07
2441	569862.79	4215614.5	2.48E-06	1.30E-06	3.78E-06	3.79E-07	1.97E-07	5.76E-07	1.71E-07	8.13E-08	2.52E-07
2442	569853.88	4215612.21	2.52E-06	1.32E-06	3.84E-06	3.85E-07	2.01E-07	5.86E-07	1.74E-07	8.26E-08	2.56E-07
2443	569844.96	4215609.92	2.56E-06	1.34E-06	3.90E-06	3.91E-07	2.04E-07	5.95E-07	1.77E-07	8.40E-08	2.61E-07
2444	569836.05	4215607.63	2.60E-06	1.36E-06	3.97E-06	3.98E-07	2.07E-07	6.05E-07	1.79E-07	8.53E-08	2.65E-07
2445	569827.13	4215605.34	2.64E-06	1.38E-06	4.03E-06	4.04E-07	2.10E-07	6.14E-07	1.82E-07	8.66E-08	2.69E-07
2446	569818.22	4215603.05	2.58E-06	1.35E-06	3.93E-06	3.94E-07	2.05E-07	5.99E-07	1.78E-07	8.45E-08	2.62E-07
2447	569809.31	4215600.76	2.60E-06	1.36E-06	3.96E-06	3.97E-07	2.07E-07	6.04E-07	1.79E-07	8.52E-08	2.65E-07
2448	569800.39	4215598.47	2.63E-06	1.37E-06	4.00E-06	4.01E-07	2.09E-07	6.10E-07	1.81E-07	8.61E-08	2.67E-07
2449	569791.48	4215596.18	2.65E-06	1.39E-06	4.04E-06	4.05E-07	2.11E-07	6.16E-07	1.83E-07	8.69E-08	2.70E-07
2450	569971.36	4215626.12	2.25E-06	1.18E-06	3.42E-06	3.43E-07	1.79E-07	5.22E-07	1.55E-07	7.36E-08	2.28E-07
2451	569980.68	4215624.45	2.27E-06	1.19E-06	3.46E-06	3.47E-07	1.81E-07	5.27E-07	1.56E-07	7.44E-08	2.31E-07
2452	569989.99	4215622.77	2.30E-06	1.20E-06	3.50E-06	3.51E-07	1.83E-07	5.34E-07	1.58E-07	7.53E-08	2.34E-07
2453	569999.31	4215621.1	2.33E-06	1.22E-06	3.54E-06	3.55E-07	1.85E-07	5.40E-07	1.60E-07	7.62E-08	2.36E-07
2454	570008.62	4215619.42	2.35E-06	1.23E-06	3.59E-06	3.59E-07	1.87E-07	5.47E-07	1.62E-07	7.71E-08	2.39E-07
2455	570017.94	4215617.75	2.38E-06	1.25E-06	3.63E-06	3.64E-07	1.90E-07	5.53E-07	1.64E-07	7.81E-08	2.42E-07
2456	570027.25	4215616.07	2.42E-06	1.27E-06	3.68E-06	3.69E-07	1.92E-07	5.62E-07	1.67E-07	7.92E-08	2.46E-07
2457	570036.57	4215614.4	2.47E-06	1.29E-06	3.76E-06	3.77E-07	1.96E-07	5.73E-07	1.70E-07	8.08E-08	2.51E-07
2458	570045.88	4215612.72	2.52E-06	1.32E-06	3.84E-06	3.85E-07	2.01E-07	5.85E-07	1.74E-07	8.25E-08	2.56E-07
2459	570055.2	4215611.05	2.58E-06	1.35E-06	3.92E-06	3.93E-07	2.05E-07	5.98E-07	1.77E-07	8.44E-08	2.62E-07
2460	570064.51	4215609.37	2.63E-06	1.38E-06	4.01E-06	4.02E-07	2.10E-07	6.11E-07	1.81E-07	8.62E-08	2.68E-07
2461	570073.83	4215607.69	2.69E-06	1.41E-06	4.10E-06	4.12E-07	2.14E-07	6.26E-07	1.86E-07	8.83E-08	2.74E-07
2462	570083.15	4215606.02	2.76E-06	1.45E-06	4.21E-06	4.22E-07	2.20E-07	6.42E-07	1.90E-07	9.05E-08	2.81E-07
2463	570092.46	4215604.34	2.84E-06	1.48E-06	4.32E-06	4.33E-07	2.26E-07	6.59E-07	1.96E-07	9.30E-08	2.89E-07
2464	569909.26	4215635.83	2.14E-06	1.12E-06	3.26E-06	3.27E-07	1.71E-07	4.98E-07	1.48E-07	7.02E-08	2.18E-07
2465	569900.39	4215633.55	2.18E-06	1.14E-06	3.32E-06	3.33E-07	1.73E-07	5.06E-07	1.50E-07	7.14E-08	2.22E-07
2466	569891.51	4215631.27	2.21E-06	1.16E-06	3.37E-06	3.38E-07	1.76E-07	5.14E-07	1.53E-07	7.26E-08	2.25E-07
2467	569882.64	4215628.99	2.25E-06	1.18E-06	3.43E-06	3.44E-07	1.79E-07	5.23E-07	1.55E-07	7.38E-08	2.29E-07
2468	569873.77	4215626.71	2.29E-06	1.20E-06	3.49E-06	3.49E-07	1.82E-07	5.32E-07	1.58E-07	7.50E-08	2.33E-07
2469	569864.9	4215624.43	2.33E-06	1.22E-06	3.55E-06	3.55E-07	1.85E-07	5.41E-07	1.60E-07	7.63E-08	2.37E-07
2470	569856.03	4215622.15	2.37E-06	1.24E-06	3.60E-06	3.61E-07	1.88E-07	5.50E-07	1.63E-07	7.75E-08	2.41E-07
2471	569847.16	4215619.87	2.40E-06	1.26E-06	3.66E-06	3.67E-07	1.91E-07	5.59E-07	1.66E-07	7.88E-08	2.44E-07
2472	569838.29	4215617.6	2.44E-06	1.28E-06	3.72E-06	3.73E-07	1.94E-07	5.67E-07	1.68E-07	8.00E-08	2.48E-07
2473	569829.41	4215615.32	2.48E-06	1.30E-06	3.78E-06	3.79E-07	1.97E-07	5.76E-07	1.71E-07	8.13E-08	2.52E-07
2474	569820.54	4215613.04	2.52E-06	1.32E-06	3.83E-06	3.84E-07	2.00E-07	5.85E-07	1.73E-07	8.25E-08	2.56E-07
2475	569811.67	4215610.76	2.46E-06	1.29E-06	3.74E-06	3.75E-07	1.95E-07	5.71E-07	1.69E-07	8.05E-08	2.50E-07
2476	569802.8	4215608.48	2.48E-06	1.30E-06	3.77E-06	3.78E-07	1.97E-07	5.76E-07	1.71E-07	8.12E-08	2.52E-07
2477	569945.19	4215640.99	2.06E-06	1.08E-06	3.13E-06	3.14E-07	1.64E-07	4.78E-07	1.42E-07	6.74E-08	2.09E-07
2478	569954.5	4215639.32	2.07E-06	1.08E-06	3.16E-06	3.17E-07	1.65E-07	4.81E-07	1.43E-07	6.79E-08	2.11E-07
2479	569963.82	4215637.64	2.09E-06	1.09E-06	3.18E-06	3.19E-07	1.66E-07	4.86E-07	1.44E-07	6.85E-08	2.13E-07
2480	569973.13	4215635.97	2.11E-06	1.10E-06	3.22E-06	3.22E-07	1.68E-07	4.90E-07	1.45E-07	6.92E-08	2.15E-07
2481	569982.45	4215634.29	2.13E-06	1.12E-06	3.25E-06	3.26E-07	1.70E-07	4.96E-07	1.47E-07	6.99E-08	2.17E-07
2482	569991.76	4215632.61	2.16E-06	1.13E-06	3.29E-06	3.30E-07	1.72E-07	5.01E-07	1.49E-07	7.07E-08	2.19E-07
2483	570001.08	4215630.94	2.19E-06	1.14E-06	3.33E-06	3.34E-07	1.74E-07	5.08E-07	1.51E-07	7.16E-08	2.22E-07
2484	570010.39	4215629.26	2.21E-06	1.16E-06	3.37E-06	3.38E-07	1.76E-07	5.14E-07	1.53E-07	7.25E-08	2.25E-07
2485	570019.71	4215627.59	2.24E-06	1.17E-06	3.42E-06	3.43E-07	1.79E-07	5.21E-07	1.55E-07	7.35E-08	2.28E-07
2486	570029.02	4215625.91	2.28E-06	1.19E-06	3.47E-06	3.48E-07	1.81E-07	5.30E-07	1.57E-07	7.47E-08	2.32E-07
2487	570038.34	4215624.24	2.32E-06	1.21E-06	3.54E-06	3.55E-07	1.85E-07	5.39E-07	1.60E-07	7.61E-08	2.36E-07
2488	570047.65	4215622.56	2.37E-06	1.24E-06	3.61E-06	3.62E-07	1.89E-07	5.50E-07	1.63E-07	7.76E-08	2.41E-07
2489	570056.97	4215620.89	2.42E-06	1.27E-06	3.69E-06	3.70E-07	1.93E-07	5.62E-07	1.67E-07	7.93E-08	2.46E-07
2490	570066.28	4215619.21	2.47E-06	1.29E-06	3.77E-06	3.78E-07	1.97E-07	5.74E-07	1.70E-07	8.10E-08	2.51E-07
2491	570075.6	4215617.54	2.53E-06	1.32E-06	3.86E-06	3.86E-07	2.01E-07	5.88E-07	1.74E-07	8.29E-08	2.57E-07
2492	570084.92	4215615.86	2.59E-06	1.36E-06	3.95E-06	3.96E-07	2.06E-07	6.03E-07	1.79E-07	8.50E-08	2.64E-07
2493	570094.23	4215614.19	2.67E-06	1.40E-06	4.06E-06	4.07E-07	2.12E-07	6.19E-07	1.84E-07	8.74E-08	2.71E-07
2494	569902.31	4215643.43	2.05E-06	1.07E-06	3.13E-06	3.13E-07	1.63E-07	4.77E-07	1.41E-07	6.72E-08	2.09E-07
2495	569893.48	4215641.16	2.09E-06	1.09E-06	3.18E-06	3.18E-07	1.66E-07	4.84E-07	1.44E-07	6.83E-08	2.12E-07
2496	569884.64	4215638.89	2.12E-06	1.11E-06	3.23E-06	3.24E-07	1.69E-07	4.92E-07	1.46E-07	6.94E-08	2.15E-07
2497	569875.81	4215636.62	2.15E-06	1.13E-06	3.28E-06	3.29E-07	1.71E-07	5.00E-07	1.48E-07	7.05E-08	2.19E-07

2498	569866.98	4215634.35	2.19E-06	1.15E-06	3.33E-06	3.34E-07	1.74E-07	5.08E-07	1.51E-07	7.17E-08	2.22E-07
2499	569858.14	4215632.08	2.22E-06	1.16E-06	3.39E-06	3.40E-07	1.77E-07	5.17E-07	1.53E-07	7.29E-08	2.26E-07
2500	569849.31	4215629.82	2.26E-06	1.18E-06	3.44E-06	3.45E-07	1.80E-07	5.25E-07	1.56E-07	7.40E-08	2.30E-07
2501	569840.48	4215627.55	2.30E-06	1.20E-06	3.50E-06	3.51E-07	1.83E-07	5.33E-07	1.58E-07	7.52E-08	2.33E-07
2502	569831.64	4215625.28	2.33E-06	1.22E-06	3.55E-06	3.56E-07	1.86E-07	5.41E-07	1.61E-07	7.64E-08	2.37E-07
2503	569822.81	4215623.01	2.37E-06	1.24E-06	3.60E-06	3.61E-07	1.88E-07	5.50E-07	1.63E-07	7.75E-08	2.41E-07
2504	569813.98	4215620.74	2.40E-06	1.26E-06	3.66E-06	3.67E-07	1.91E-07	5.58E-07	1.65E-07	7.86E-08	2.44E-07
2505	569937.64	4215652.51	1.93E-06	1.01E-06	2.94E-06	2.94E-07	1.53E-07	4.48E-07	1.33E-07	6.32E-08	1.96E-07
2506	569946.96	4215650.83	1.94E-06	1.02E-06	2.96E-06	2.97E-07	1.55E-07	4.51E-07	1.34E-07	6.36E-08	1.97E-07
2507	569956.27	4215649.16	1.96E-06	1.02E-06	2.98E-06	2.99E-07	1.56E-07	4.54E-07	1.35E-07	6.41E-08	1.99E-07
2508	569965.59	4215647.48	1.97E-06	1.03E-06	3.00E-06	3.01E-07	1.57E-07	4.58E-07	1.36E-07	6.46E-08	2.00E-07
2509	569974.9	4215645.81	1.99E-06	1.04E-06	3.03E-06	3.04E-07	1.58E-07	4.62E-07	1.37E-07	6.52E-08	2.02E-07
2510	569984.22	4215644.13	2.01E-06	1.05E-06	3.06E-06	3.07E-07	1.60E-07	4.67E-07	1.39E-07	6.59E-08	2.04E-07
2511	569993.53	4215642.46	2.03E-06	1.06E-06	3.10E-06	3.10E-07	1.62E-07	4.72E-07	1.40E-07	6.66E-08	2.07E-07
2512	570002.85	4215640.78	2.06E-06	1.08E-06	3.14E-06	3.15E-07	1.64E-07	4.79E-07	1.42E-07	6.75E-08	2.09E-07
2513	570012.16	4215639.11	2.09E-06	1.09E-06	3.18E-06	3.19E-07	1.66E-07	4.85E-07	1.44E-07	6.84E-08	2.12E-07
2514	570021.48	4215637.43	2.12E-06	1.11E-06	3.23E-06	3.24E-07	1.69E-07	4.92E-07	1.46E-07	6.94E-08	2.16E-07
2515	570030.79	4215635.76	2.15E-06	1.13E-06	3.28E-06	3.29E-07	1.71E-07	5.00E-07	1.48E-07	7.06E-08	2.19E-07
2516	570040.11	4215634.08	2.19E-06	1.15E-06	3.34E-06	3.35E-07	1.74E-07	5.09E-07	1.51E-07	7.18E-08	2.23E-07
2517	570049.42	4215632.4	2.24E-06	1.17E-06	3.40E-06	3.41E-07	1.78E-07	5.19E-07	1.54E-07	7.32E-08	2.27E-07
2518	570058.74	4215630.73	2.28E-06	1.19E-06	3.47E-06	3.48E-07	1.82E-07	5.30E-07	1.57E-07	7.47E-08	2.32E-07
2519	570068.05	4215629.05	2.33E-06	1.22E-06	3.55E-06	3.56E-07	1.85E-07	5.41E-07	1.61E-07	7.63E-08	2.37E-07
2520	570077.37	4215627.38	2.38E-06	1.25E-06	3.63E-06	3.64E-07	1.90E-07	5.54E-07	1.64E-07	7.81E-08	2.42E-07
2521	570086.69	4215625.7	2.44E-06	1.28E-06	3.72E-06	3.73E-07	1.94E-07	5.68E-07	1.68E-07	8.00E-08	2.48E-07
2522	570096	4215624.03	2.51E-06	1.31E-06	3.82E-06	3.83E-07	2.00E-07	5.83E-07	1.73E-07	8.22E-08	2.55E-07
2523	569930.61	4215660.09	1.85E-06	9.69E-07	2.82E-06	2.83E-07	1.47E-07	4.30E-07	1.28E-07	6.07E-08	1.88E-07
2524	569921.81	4215657.83	1.88E-06	9.83E-07	2.86E-06	2.87E-07	1.50E-07	4.37E-07	1.30E-07	6.16E-08	1.91E-07
2525	569895.42	4215651.05	1.97E-06	1.03E-06	3.00E-06	3.00E-07	1.57E-07	4.57E-07	1.36E-07	6.44E-08	2.00E-07
2526	569886.62	4215648.79	2.00E-06	1.05E-06	3.04E-06	3.05E-07	1.59E-07	4.64E-07	1.38E-07	6.54E-08	2.03E-07
2527	569877.82	4215646.53	2.03E-06	1.06E-06	3.09E-06	3.10E-07	1.61E-07	4.71E-07	1.40E-07	6.65E-08	2.06E-07
2528	569869.03	4215644.27	2.06E-06	1.08E-06	3.14E-06	3.15E-07	1.64E-07	4.79E-07	1.42E-07	6.75E-08	2.10E-07
2529	569860.23	4215642.01	2.09E-06	1.10E-06	3.19E-06	3.20E-07	1.67E-07	4.86E-07	1.44E-07	6.86E-08	2.13E-07
2530	569851.43	4215639.75	2.13E-06	1.11E-06	3.24E-06	3.25E-07	1.69E-07	4.94E-07	1.47E-07	6.97E-08	2.16E-07
2531	569842.63	4215637.49	2.16E-06	1.13E-06	3.29E-06	3.30E-07	1.72E-07	5.02E-07	1.49E-07	7.08E-08	2.20E-07
2532	569833.83	4215635.23	2.19E-06	1.15E-06	3.34E-06	3.35E-07	1.75E-07	5.10E-07	1.51E-07	7.19E-08	2.23E-07
2533	569816.24	4215630.71	2.26E-06	1.18E-06	3.44E-06	3.45E-07	1.80E-07	5.25E-07	1.56E-07	7.40E-08	2.30E-07
2534	569939.41	4215662.35	1.82E-06	9.55E-07	2.78E-06	2.79E-07	1.45E-07	4.24E-07	1.26E-07	5.98E-08	1.86E-07
2535	569948.73	4215660.68	1.84E-06	9.61E-07	2.80E-06	2.81E-07	1.46E-07	4.27E-07	1.27E-07	6.02E-08	1.87E-07
2536	569958.04	4215659	1.85E-06	9.68E-07	2.82E-06	2.82E-07	1.47E-07	4.30E-07	1.27E-07	6.06E-08	1.88E-07
2537	569967.36	4215657.32	1.86E-06	9.76E-07	2.84E-06	2.85E-07	1.48E-07	4.33E-07	1.28E-07	6.11E-08	1.90E-07
2538	569976.67	4215655.65	1.88E-06	9.85E-07	2.87E-06	2.87E-07	1.50E-07	4.37E-07	1.30E-07	6.16E-08	1.91E-07
2539	569985.99	4215653.97	1.90E-06	9.95E-07	2.90E-06	2.90E-07	1.51E-07	4.42E-07	1.31E-07	6.23E-08	1.93E-07
2540	569995.3	4215652.3	1.92E-06	1.01E-06	2.93E-06	2.93E-07	1.53E-07	4.46E-07	1.32E-07	6.30E-08	1.95E-07
2541	570004.62	4215650.62	1.95E-06	1.02E-06	2.97E-06	2.97E-07	1.55E-07	4.52E-07	1.34E-07	6.38E-08	1.98E-07
2542	570013.93	4215648.95	1.98E-06	1.03E-06	3.01E-06	3.02E-07	1.57E-07	4.59E-07	1.36E-07	6.47E-08	2.01E-07
2543	570023.25	4215647.27	2.01E-06	1.05E-06	3.06E-06	3.07E-07	1.60E-07	4.66E-07	1.38E-07	6.58E-08	2.04E-07
2544	570032.56	4215645.6	2.04E-06	1.07E-06	3.11E-06	3.11E-07	1.62E-07	4.74E-07	1.41E-07	6.68E-08	2.07E-07
2545	570041.88	4215643.92	2.07E-06	1.09E-06	3.16E-06	3.17E-07	1.65E-07	4.82E-07	1.43E-07	6.80E-08	2.11E-07
2546	570051.19	4215642.25	2.11E-06	1.11E-06	3.22E-06	3.23E-07	1.68E-07	4.91E-07	1.46E-07	6.92E-08	2.15E-07
2547	570060.51	4215640.57	2.16E-06	1.13E-06	3.28E-06	3.29E-07	1.72E-07	5.01E-07	1.49E-07	7.06E-08	2.19E-07
2548	570069.83	4215638.9	2.20E-06	1.15E-06	3.35E-06	3.36E-07	1.75E-07	5.11E-07	1.52E-07	7.21E-08	2.24E-07
2549	570079.14	4215637.22	2.25E-06	1.18E-06	3.43E-06	3.44E-07	1.79E-07	5.23E-07	1.55E-07	7.37E-08	2.29E-07
2550	570088.46	4215635.55	2.31E-06	1.21E-06	3.51E-06	3.52E-07	1.84E-07	5.36E-07	1.59E-07	7.55E-08	2.34E-07
2551	570097.77	4215633.87	2.37E-06	1.24E-06	3.61E-06	3.61E-07	1.88E-07	5.50E-07	1.63E-07	7.75E-08	2.41E-07
2552	569932.02	4215669.84	1.76E-06	9.19E-07	2.67E-06	2.68E-07	1.40E-07	4.08E-07	1.21E-07	5.75E-08	1.79E-07
2553	569922.85	4215667.48	1.78E-06	9.32E-07	2.71E-06	2.72E-07	1.42E-07	4.14E-07	1.23E-07	5.84E-08	1.81E-07
2554	569913.69	4215665.13	1.81E-06	9.46E-07	2.76E-06	2.76E-07	1.44E-07	4.20E-07	1.25E-07	5.93E-08	1.84E-07
2555	569877.03	4215655.71	1.93E-06	1.01E-06	2.93E-06	2.94E-07	1.53E-07	4.47E-07	1.33E-07	6.31E-08	1.96E-07
2556	569867.86	4215653.36	1.96E-06	1.02E-06	2.98E-06	2.99E-07	1.56E-07	4.55E-07	1.35E-07	6.41E-08	1.99E-07
2557	569858.7	4215651	1.99E-06	1.04E-06	3.03E-06	3.04E-07	1.58E-07	4.62E-07	1.37E-07	6.51E-08	2.02E-07
2558	569849.53	4215648.65	2.02E-06	1.06E-06	3.08E-06	3.09E-07	1.61E-07	4.69E-07	1.39E-07	6.62E-08	2.05E-07

2559	569840.37	4215646.29	2.05E-06	1.07E-06	3.13E-06	3.13E-07	1.63E-07	4.77E-07	1.41E-07	6.72E-08	2.09E-07
2560	569831.2	4215643.94	2.09E-06	1.09E-06	3.18E-06	3.18E-07	1.66E-07	4.84E-07	1.44E-07	6.83E-08	2.12E-07
2561	569941.18	4215672.19	1.73E-06	9.05E-07	2.64E-06	2.64E-07	1.38E-07	4.02E-07	1.19E-07	5.67E-08	1.76E-07
2562	569950.5	4215670.52	1.74E-06	9.11E-07	2.65E-06	2.66E-07	1.39E-07	4.05E-07	1.20E-07	5.71E-08	1.77E-07
2563	569959.81	4215668.84	1.75E-06	9.18E-07	2.67E-06	2.68E-07	1.40E-07	4.07E-07	1.21E-07	5.75E-08	1.78E-07
2564	569969.13	4215667.17	1.77E-06	9.25E-07	2.69E-06	2.70E-07	1.41E-07	4.11E-07	1.22E-07	5.79E-08	1.80E-07
2565	569978.44	4215665.49	1.78E-06	9.33E-07	2.72E-06	2.72E-07	1.42E-07	4.14E-07	1.23E-07	5.84E-08	1.81E-07
2566	569987.76	4215663.82	1.80E-06	9.43E-07	2.74E-06	2.75E-07	1.43E-07	4.18E-07	1.24E-07	5.90E-08	1.83E-07
2567	569997.07	4215662.14	1.82E-06	9.53E-07	2.77E-06	2.78E-07	1.45E-07	4.23E-07	1.26E-07	5.97E-08	1.85E-07
2568	570006.39	4215660.47	1.84E-06	9.65E-07	2.81E-06	2.82E-07	1.47E-07	4.28E-07	1.27E-07	6.04E-08	1.88E-07
2569	570015.7	4215658.79	1.87E-06	9.78E-07	2.85E-06	2.86E-07	1.49E-07	4.34E-07	1.29E-07	6.13E-08	1.90E-07
2570	570025.02	4215657.11	1.90E-06	9.93E-07	2.89E-06	2.90E-07	1.51E-07	4.41E-07	1.31E-07	6.22E-08	1.93E-07
2571	570034.33	4215655.44	1.93E-06	1.01E-06	2.94E-06	2.95E-07	1.54E-07	4.48E-07	1.33E-07	6.32E-08	1.96E-07
2572	570043.65	4215653.76	1.96E-06	1.03E-06	2.99E-06	3.00E-07	1.56E-07	4.56E-07	1.35E-07	6.43E-08	2.00E-07
2573	570052.96	4215652.09	2.00E-06	1.05E-06	3.05E-06	3.05E-07	1.59E-07	4.65E-07	1.38E-07	6.55E-08	2.03E-07
2574	570062.28	4215650.41	2.04E-06	1.07E-06	3.11E-06	3.12E-07	1.62E-07	4.74E-07	1.41E-07	6.68E-08	2.07E-07
2575	570071.6	4215648.74	2.08E-06	1.09E-06	3.17E-06	3.18E-07	1.66E-07	4.84E-07	1.44E-07	6.82E-08	2.12E-07
2576	570080.91	4215647.06	2.13E-06	1.11E-06	3.25E-06	3.25E-07	1.70E-07	4.95E-07	1.47E-07	6.98E-08	2.17E-07
2577	570090.23	4215645.39	2.18E-06	1.14E-06	3.32E-06	3.33E-07	1.74E-07	5.07E-07	1.50E-07	7.15E-08	2.22E-07
2578	570099.54	4215643.71	2.24E-06	1.17E-06	3.41E-06	3.42E-07	1.78E-07	5.20E-07	1.54E-07	7.33E-08	2.27E-07
2579	569933.83	4215679.69	1.67E-06	8.72E-07	2.54E-06	2.55E-07	1.33E-07	3.87E-07	1.15E-07	5.46E-08	1.70E-07
2580	569924.72	4215677.35	1.69E-06	8.85E-07	2.58E-06	2.58E-07	1.35E-07	3.93E-07	1.17E-07	5.54E-08	1.72E-07
2581	569915.6	4215675.01	1.71E-06	8.97E-07	2.61E-06	2.62E-07	1.36E-07	3.98E-07	1.18E-07	5.62E-08	1.74E-07
2582	569906.48	4215672.67	1.74E-06	9.10E-07	2.65E-06	2.66E-07	1.38E-07	4.04E-07	1.20E-07	5.70E-08	1.77E-07
2583	569870.02	4215663.3	1.85E-06	9.68E-07	2.82E-06	2.83E-07	1.47E-07	4.30E-07	1.28E-07	6.06E-08	1.88E-07
2584	569860.9	4215660.95	1.88E-06	9.83E-07	2.86E-06	2.87E-07	1.50E-07	4.37E-07	1.30E-07	6.16E-08	1.91E-07
2585	569851.78	4215658.61	1.91E-06	9.99E-07	2.91E-06	2.92E-07	1.52E-07	4.43E-07	1.32E-07	6.25E-08	1.94E-07
2586	569842.67	4215656.27	1.94E-06	1.01E-06	2.95E-06	2.96E-07	1.54E-07	4.50E-07	1.34E-07	6.35E-08	1.97E-07
2587	569833.55	4215653.93	1.97E-06	1.03E-06	3.00E-06	3.01E-07	1.57E-07	4.57E-07	1.36E-07	6.45E-08	2.00E-07
2588	569942.95	4215682.03	1.64E-06	8.60E-07	2.50E-06	2.51E-07	1.31E-07	3.82E-07	1.13E-07	5.39E-08	1.67E-07
2589	569952.27	4215680.36	1.66E-06	8.66E-07	2.52E-06	2.53E-07	1.32E-07	3.84E-07	1.14E-07	5.42E-08	1.68E-07
2590	569961.58	4215678.68	1.67E-06	8.72E-07	2.54E-06	2.54E-07	1.33E-07	3.87E-07	1.15E-07	5.46E-08	1.69E-07
2591	569970.9	4215677.01	1.68E-06	8.79E-07	2.56E-06	2.57E-07	1.34E-07	3.90E-07	1.16E-07	5.50E-08	1.71E-07
2592	569980.21	4215675.33	1.69E-06	8.87E-07	2.58E-06	2.59E-07	1.35E-07	3.94E-07	1.17E-07	5.55E-08	1.72E-07
2593	569989.53	4215673.66	1.71E-06	8.95E-07	2.61E-06	2.61E-07	1.36E-07	3.98E-07	1.18E-07	5.61E-08	1.74E-07
2594	569998.84	4215671.98	1.73E-06	9.05E-07	2.63E-06	2.64E-07	1.38E-07	4.02E-07	1.19E-07	5.67E-08	1.76E-07
2595	570008.16	4215670.31	1.75E-06	9.16E-07	2.67E-06	2.67E-07	1.39E-07	4.07E-07	1.21E-07	5.73E-08	1.78E-07
2596	570017.47	4215668.63	1.77E-06	9.28E-07	2.70E-06	2.71E-07	1.41E-07	4.12E-07	1.22E-07	5.81E-08	1.80E-07
2597	570026.79	4215666.96	1.80E-06	9.42E-07	2.74E-06	2.75E-07	1.43E-07	4.18E-07	1.24E-07	5.90E-08	1.83E-07
2598	570036.1	4215665.28	1.83E-06	9.57E-07	2.79E-06	2.79E-07	1.46E-07	4.25E-07	1.26E-07	5.99E-08	1.86E-07
2599	570045.42	4215663.61	1.86E-06	9.74E-07	2.84E-06	2.84E-07	1.48E-07	4.32E-07	1.28E-07	6.10E-08	1.89E-07
2600	570054.73	4215661.93	1.90E-06	9.92E-07	2.89E-06	2.90E-07	1.51E-07	4.41E-07	1.31E-07	6.21E-08	1.93E-07
2601	570064.05	4215660.26	1.93E-06	1.01E-06	2.94E-06	2.95E-07	1.54E-07	4.49E-07	1.33E-07	6.33E-08	1.97E-07
2602	570073.37	4215658.58	1.97E-06	1.03E-06	3.01E-06	3.01E-07	1.57E-07	4.58E-07	1.36E-07	6.47E-08	2.01E-07
2603	570082.68	4215656.91	2.02E-06	1.06E-06	3.07E-06	3.08E-07	1.61E-07	4.69E-07	1.39E-07	6.61E-08	2.05E-07
2604	570092	4215655.23	2.07E-06	1.08E-06	3.15E-06	3.15E-07	1.64E-07	4.80E-07	1.42E-07	6.76E-08	2.10E-07
2605	570101.31	4215653.55	2.12E-06	1.11E-06	3.22E-06	3.23E-07	1.68E-07	4.92E-07	1.46E-07	6.93E-08	2.15E-07
2606	569935.65	4215689.55	1.59E-06	8.30E-07	2.42E-06	2.42E-07	1.26E-07	3.68E-07	1.09E-07	5.20E-08	1.61E-07
2607	569926.57	4215687.21	1.61E-06	8.41E-07	2.45E-06	2.45E-07	1.28E-07	3.73E-07	1.11E-07	5.26E-08	1.63E-07
2608	569917.5	4215684.88	1.63E-06	8.52E-07	2.48E-06	2.49E-07	1.30E-07	3.78E-07	1.12E-07	5.34E-08	1.66E-07
2609	569908.43	4215682.55	1.65E-06	8.64E-07	2.52E-06	2.52E-07	1.31E-07	3.84E-07	1.14E-07	5.41E-08	1.68E-07
2610	569899.36	4215680.22	1.68E-06	8.77E-07	2.55E-06	2.56E-07	1.33E-07	3.89E-07	1.15E-07	5.49E-08	1.70E-07
2611	569863.06	4215670.9	1.78E-06	9.31E-07	2.71E-06	2.72E-07	1.42E-07	4.13E-07	1.23E-07	5.83E-08	1.81E-07
2612	569853.99	4215668.57	1.81E-06	9.45E-07	2.75E-06	2.76E-07	1.44E-07	4.20E-07	1.24E-07	5.92E-08	1.84E-07
2613	569844.92	4215666.24	1.83E-06	9.60E-07	2.79E-06	2.80E-07	1.46E-07	4.26E-07	1.26E-07	6.01E-08	1.86E-07
2614	569944.72	4215691.88	1.57E-06	8.19E-07	2.38E-06	2.39E-07	1.25E-07	3.64E-07	1.08E-07	5.13E-08	1.59E-07
2615	569954.04	4215690.2	1.58E-06	8.25E-07	2.40E-06	2.41E-07	1.25E-07	3.66E-07	1.09E-07	5.16E-08	1.60E-07
2616	569963.35	4215688.53	1.59E-06	8.31E-07	2.42E-06	2.42E-07	1.26E-07	3.69E-07	1.09E-07	5.20E-08	1.61E-07
2617	569972.67	4215686.85	1.60E-06	8.38E-07	2.44E-06	2.44E-07	1.27E-07	3.72E-07	1.10E-07	5.24E-08	1.63E-07
2618	569981.98	4215685.18	1.61E-06	8.45E-07	2.46E-06	2.47E-07	1.29E-07	3.75E-07	1.11E-07	5.29E-08	1.64E-07
2619	569991.3	4215683.5	1.63E-06	8.53E-07	2.48E-06	2.49E-07	1.30E-07	3.79E-07	1.12E-07	5.34E-08	1.66E-07

2620	570000.61	4215681.82	1.65E-06	8.62E-07	2.51E-06	2.51E-07	1.31E-07	3.83E-07	1.13E-07	5.39E-08	1.67E-07
2621	570009.93	4215680.15	1.67E-06	8.71E-07	2.54E-06	2.54E-07	1.33E-07	3.87E-07	1.15E-07	5.46E-08	1.69E-07
2622	570019.24	4215678.47	1.69E-06	8.82E-07	2.57E-06	2.57E-07	1.34E-07	3.92E-07	1.16E-07	5.52E-08	1.71E-07
2623	570028.56	4215676.8	1.71E-06	8.95E-07	2.60E-06	2.61E-07	1.36E-07	3.97E-07	1.18E-07	5.60E-08	1.74E-07
2624	570037.87	4215675.12	1.74E-06	9.09E-07	2.65E-06	2.65E-07	1.38E-07	4.04E-07	1.20E-07	5.69E-08	1.77E-07
2625	570047.19	4215673.45	1.77E-06	9.26E-07	2.69E-06	2.70E-07	1.41E-07	4.11E-07	1.22E-07	5.80E-08	1.80E-07
2626	570056.5	4215671.77	1.80E-06	9.43E-07	2.74E-06	2.75E-07	1.43E-07	4.19E-07	1.24E-07	5.90E-08	1.83E-07
2627	570065.82	4215670.1	1.84E-06	9.61E-07	2.80E-06	2.80E-07	1.46E-07	4.27E-07	1.27E-07	6.02E-08	1.87E-07
2628	570075.14	4215668.42	1.87E-06	9.80E-07	2.85E-06	2.86E-07	1.49E-07	4.35E-07	1.29E-07	6.14E-08	1.91E-07
2629	570084.45	4215666.75	1.91E-06	1.00E-06	2.92E-06	2.92E-07	1.52E-07	4.45E-07	1.32E-07	6.27E-08	1.95E-07
2630	570093.77	4215665.07	1.96E-06	1.02E-06	2.98E-06	2.99E-07	1.56E-07	4.55E-07	1.35E-07	6.42E-08	1.99E-07
2631	570103.08	4215663.4	2.01E-06	1.05E-06	3.06E-06	3.06E-07	1.60E-07	4.66E-07	1.38E-07	6.57E-08	2.04E-07
2632	569937.46	4215699.4	1.51E-06	7.91E-07	2.30E-06	2.31E-07	1.20E-07	3.51E-07	1.04E-07	4.95E-08	1.54E-07
2633	569928.43	4215697.08	1.53E-06	8.01E-07	2.33E-06	2.34E-07	1.22E-07	3.55E-07	1.05E-07	5.01E-08	1.56E-07
2634	569919.39	4215694.76	1.55E-06	8.11E-07	2.36E-06	2.37E-07	1.23E-07	3.60E-07	1.07E-07	5.08E-08	1.58E-07
2635	569910.36	4215692.44	1.57E-06	8.22E-07	2.39E-06	2.40E-07	1.25E-07	3.65E-07	1.08E-07	5.15E-08	1.60E-07
2636	569901.33	4215690.12	1.59E-06	8.33E-07	2.43E-06	2.43E-07	1.27E-07	3.70E-07	1.10E-07	5.22E-08	1.62E-07
2637	569892.29	4215687.8	1.62E-06	8.45E-07	2.46E-06	2.47E-07	1.29E-07	3.75E-07	1.11E-07	5.29E-08	1.64E-07
2638	569946.49	4215701.72	1.49E-06	7.81E-07	2.27E-06	2.28E-07	1.19E-07	3.47E-07	1.03E-07	4.89E-08	1.52E-07
2639	569955.81	4215700.04	1.50E-06	7.87E-07	2.29E-06	2.30E-07	1.20E-07	3.49E-07	1.04E-07	4.93E-08	1.53E-07
2640	569965.12	4215698.37	1.52E-06	7.93E-07	2.31E-06	2.31E-07	1.21E-07	3.52E-07	1.04E-07	4.96E-08	1.54E-07
2641	569974.44	4215696.69	1.53E-06	7.99E-07	2.33E-06	2.33E-07	1.22E-07	3.55E-07	1.05E-07	5.01E-08	1.55E-07
2642	569983.75	4215695.02	1.54E-06	8.06E-07	2.35E-06	2.35E-07	1.23E-07	3.58E-07	1.06E-07	5.05E-08	1.57E-07
2643	569993.07	4215693.34	1.56E-06	8.14E-07	2.37E-06	2.38E-07	1.24E-07	3.61E-07	1.07E-07	5.10E-08	1.58E-07
2644	570002.38	4215691.67	1.57E-06	8.22E-07	2.39E-06	2.40E-07	1.25E-07	3.65E-07	1.08E-07	5.15E-08	1.60E-07
2645	570011.7	4215689.99	1.59E-06	8.31E-07	2.42E-06	2.42E-07	1.26E-07	3.69E-07	1.09E-07	5.20E-08	1.61E-07
2646	570021.01	4215688.32	1.61E-06	8.41E-07	2.45E-06	2.45E-07	1.28E-07	3.73E-07	1.11E-07	5.26E-08	1.63E-07
2647	570030.33	4215686.64	1.63E-06	8.52E-07	2.48E-06	2.49E-07	1.30E-07	3.78E-07	1.12E-07	5.34E-08	1.66E-07
2648	570039.64	4215684.97	1.65E-06	8.66E-07	2.52E-06	2.53E-07	1.32E-07	3.84E-07	1.14E-07	5.42E-08	1.68E-07
2649	570048.96	4215683.29	1.68E-06	8.81E-07	2.56E-06	2.57E-07	1.34E-07	3.91E-07	1.16E-07	5.51E-08	1.71E-07
2650	570058.27	4215681.62	1.71E-06	8.97E-07	2.61E-06	2.62E-07	1.36E-07	3.98E-07	1.18E-07	5.61E-08	1.74E-07
2651	570067.59	4215679.94	1.75E-06	9.14E-07	2.66E-06	2.67E-07	1.39E-07	4.06E-07	1.20E-07	5.72E-08	1.78E-07
2652	570076.91	4215678.26	1.78E-06	9.32E-07	2.71E-06	2.72E-07	1.42E-07	4.14E-07	1.23E-07	5.84E-08	1.81E-07
2653	570086.22	4215676.59	1.82E-06	9.52E-07	2.77E-06	2.78E-07	1.45E-07	4.23E-07	1.25E-07	5.96E-08	1.85E-07
2654	570095.54	4215674.91	1.86E-06	9.74E-07	2.84E-06	2.84E-07	1.48E-07	4.32E-07	1.28E-07	6.10E-08	1.89E-07
2655	570104.85	4215673.24	1.91E-06	9.97E-07	2.90E-06	2.91E-07	1.52E-07	4.43E-07	1.31E-07	6.24E-08	1.94E-07
2656	569939.27	4215709.25	1.44E-06	7.55E-07	2.20E-06	2.20E-07	1.15E-07	3.35E-07	9.95E-08	4.73E-08	1.47E-07
2657	569930.27	4215706.94	1.46E-06	7.64E-07	2.22E-06	2.23E-07	1.16E-07	3.39E-07	1.01E-07	4.78E-08	1.48E-07
2658	569921.27	4215704.63	1.48E-06	7.73E-07	2.25E-06	2.26E-07	1.18E-07	3.43E-07	1.02E-07	4.84E-08	1.50E-07
2659	569912.28	4215702.32	1.50E-06	7.83E-07	2.28E-06	2.29E-07	1.19E-07	3.48E-07	1.03E-07	4.90E-08	1.52E-07
2660	569903.28	4215700.01	1.52E-06	7.93E-07	2.31E-06	2.31E-07	1.21E-07	3.52E-07	1.04E-07	4.97E-08	1.54E-07
2661	569894.29	4215697.69	1.54E-06	8.04E-07	2.34E-06	2.35E-07	1.22E-07	3.57E-07	1.06E-07	5.04E-08	1.56E-07
2662	569885.29	4215695.38	1.56E-06	8.16E-07	2.37E-06	2.38E-07	1.24E-07	3.62E-07	1.07E-07	5.11E-08	1.59E-07
2663	569876.3	4215693.07	1.51E-06	7.92E-07	2.31E-06	2.31E-07	1.20E-07	3.52E-07	1.04E-07	4.96E-08	1.54E-07
2664	569948.26	4215711.56	1.43E-06	7.47E-07	2.17E-06	2.18E-07	1.14E-07	3.31E-07	9.83E-08	4.67E-08	1.45E-07
2665	569957.58	4215709.89	1.44E-06	7.52E-07	2.19E-06	2.19E-07	1.14E-07	3.34E-07	9.90E-08	4.71E-08	1.46E-07
2666	569966.89	4215708.21	1.45E-06	7.58E-07	2.21E-06	2.21E-07	1.15E-07	3.36E-07	9.98E-08	4.75E-08	1.47E-07
2667	569976.21	4215706.54	1.46E-06	7.64E-07	2.22E-06	2.23E-07	1.16E-07	3.39E-07	1.01E-07	4.78E-08	1.48E-07
2668	569985.52	4215704.86	1.47E-06	7.71E-07	2.24E-06	2.25E-07	1.17E-07	3.42E-07	1.02E-07	4.83E-08	1.50E-07
2669	569994.84	4215703.18	1.49E-06	7.78E-07	2.27E-06	2.27E-07	1.18E-07	3.45E-07	1.02E-07	4.87E-08	1.51E-07
2670	570004.15	4215701.51	1.50E-06	7.85E-07	2.29E-06	2.29E-07	1.19E-07	3.49E-07	1.03E-07	4.92E-08	1.53E-07
2671	570013.47	4215699.83	1.52E-06	7.93E-07	2.31E-06	2.32E-07	1.21E-07	3.52E-07	1.05E-07	4.97E-08	1.54E-07
2672	570022.78	4215698.16	1.53E-06	8.02E-07	2.34E-06	2.34E-07	1.22E-07	3.56E-07	1.06E-07	5.02E-08	1.56E-07
2673	570032.1	4215696.48	1.55E-06	8.13E-07	2.37E-06	2.37E-07	1.24E-07	3.61E-07	1.07E-07	5.09E-08	1.58E-07
2674	570041.41	4215694.81	1.58E-06	8.26E-07	2.40E-06	2.41E-07	1.26E-07	3.67E-07	1.09E-07	5.17E-08	1.60E-07
2675	570050.73	4215693.13	1.60E-06	8.39E-07	2.44E-06	2.45E-07	1.28E-07	3.73E-07	1.11E-07	5.25E-08	1.63E-07
2676	570060.04	4215691.46	1.63E-06	8.54E-07	2.49E-06	2.49E-07	1.30E-07	3.79E-07	1.12E-07	5.35E-08	1.66E-07
2677	570069.36	4215689.78	1.66E-06	8.70E-07	2.53E-06	2.54E-07	1.32E-07	3.86E-07	1.15E-07	5.45E-08	1.69E-07
2678	570078.68	4215688.11	1.70E-06	8.87E-07	2.58E-06	2.59E-07	1.35E-07	3.94E-07	1.17E-07	5.55E-08	1.72E-07
2679	570087.99	4215686.43	1.73E-06	9.06E-07	2.64E-06	2.64E-07	1.38E-07	4.02E-07	1.19E-07	5.67E-08	1.76E-07
2680	570097.31	4215684.76	1.77E-06	9.27E-07	2.70E-06	2.70E-07	1.41E-07	4.11E-07	1.22E-07	5.80E-08	1.80E-07

2681	569941.07	4215719.1	1.38E-06	7.22E-07	2.10E-06	2.11E-07	1.10E-07	3.21E-07	9.51E-08	4.52E-08	1.40E-07
2682	569932.11	4215716.8	1.40E-06	7.31E-07	2.13E-06	2.13E-07	1.11E-07	3.24E-07	9.62E-08	4.57E-08	1.42E-07
2683	569923.15	4215714.5	1.41E-06	7.39E-07	2.15E-06	2.16E-07	1.12E-07	3.28E-07	9.73E-08	4.63E-08	1.44E-07
2684	569914.19	4215712.19	1.43E-06	7.48E-07	2.18E-06	2.18E-07	1.14E-07	3.32E-07	9.85E-08	4.68E-08	1.45E-07
2685	569905.23	4215709.89	1.45E-06	7.57E-07	2.20E-06	2.21E-07	1.15E-07	3.36E-07	9.97E-08	4.74E-08	1.47E-07
2686	569896.27	4215707.59	1.47E-06	7.67E-07	2.23E-06	2.24E-07	1.17E-07	3.40E-07	1.01E-07	4.80E-08	1.49E-07
2687	569887.3	4215705.29	1.49E-06	7.77E-07	2.26E-06	2.27E-07	1.18E-07	3.45E-07	1.02E-07	4.86E-08	1.51E-07
2688	569878.34	4215702.99	1.51E-06	7.88E-07	2.29E-06	2.30E-07	1.20E-07	3.50E-07	1.04E-07	4.93E-08	1.53E-07
2689	569869.38	4215700.68	1.45E-06	7.60E-07	2.21E-06	2.22E-07	1.16E-07	3.38E-07	1.00E-07	4.76E-08	1.48E-07
2690	569950.03	4215721.4	1.37E-06	7.14E-07	2.08E-06	2.09E-07	1.09E-07	3.17E-07	9.41E-08	4.47E-08	1.39E-07
2691	569959.35	4215719.73	1.38E-06	7.19E-07	2.09E-06	2.10E-07	1.09E-07	3.19E-07	9.48E-08	4.50E-08	1.40E-07
2692	569968.66	4215718.05	1.39E-06	7.25E-07	2.11E-06	2.12E-07	1.10E-07	3.22E-07	9.55E-08	4.54E-08	1.41E-07
2693	569977.98	4215716.38	1.40E-06	7.31E-07	2.13E-06	2.13E-07	1.11E-07	3.24E-07	9.63E-08	4.58E-08	1.42E-07
2694	569987.29	4215714.7	1.41E-06	7.37E-07	2.15E-06	2.15E-07	1.12E-07	3.27E-07	9.71E-08	4.62E-08	1.43E-07
2695	569996.61	4215713.03	1.42E-06	7.44E-07	2.17E-06	2.17E-07	1.13E-07	3.30E-07	9.80E-08	4.66E-08	1.45E-07
2696	570005.92	4215711.35	1.44E-06	7.51E-07	2.19E-06	2.19E-07	1.14E-07	3.34E-07	9.89E-08	4.70E-08	1.46E-07
2697	570015.24	4215709.68	1.45E-06	7.59E-07	2.21E-06	2.21E-07	1.15E-07	3.37E-07	9.99E-08	4.75E-08	1.47E-07
2698	570024.55	4215708	1.47E-06	7.67E-07	2.23E-06	2.24E-07	1.17E-07	3.41E-07	1.01E-07	4.80E-08	1.49E-07
2699	570033.87	4215706.33	1.49E-06	7.77E-07	2.26E-06	2.27E-07	1.18E-07	3.45E-07	1.02E-07	4.87E-08	1.51E-07
2700	570043.18	4215704.65	1.51E-06	7.88E-07	2.30E-06	2.30E-07	1.20E-07	3.50E-07	1.04E-07	4.94E-08	1.53E-07
2701	570052.5	4215702.97	1.53E-06	8.01E-07	2.33E-06	2.34E-07	1.22E-07	3.56E-07	1.05E-07	5.01E-08	1.56E-07
2702	570061.81	4215701.3	1.56E-06	8.14E-07	2.37E-06	2.38E-07	1.24E-07	3.62E-07	1.07E-07	5.10E-08	1.58E-07
2703	570071.13	4215699.62	1.59E-06	8.29E-07	2.41E-06	2.42E-07	1.26E-07	3.68E-07	1.09E-07	5.19E-08	1.61E-07
2704	570080.45	4215697.95	1.62E-06	8.45E-07	2.46E-06	2.47E-07	1.29E-07	3.75E-07	1.11E-07	5.29E-08	1.64E-07
2705	570089.76	4215696.27	1.65E-06	8.63E-07	2.51E-06	2.52E-07	1.31E-07	3.83E-07	1.14E-07	5.41E-08	1.68E-07
2706	570099.08	4215694.6	1.69E-06	8.83E-07	2.57E-06	2.58E-07	1.34E-07	3.92E-07	1.16E-07	5.53E-08	1.72E-07
2707	570108.39	4215692.92	1.73E-06	9.04E-07	2.63E-06	2.64E-07	1.38E-07	4.01E-07	1.19E-07	5.66E-08	1.76E-07
2708	569942.87	4215728.95	1.32E-06	6.92E-07	2.01E-06	2.02E-07	1.05E-07	3.07E-07	9.11E-08	4.33E-08	1.34E-07
2709	569933.94	4215726.66	1.34E-06	6.99E-07	2.04E-06	2.04E-07	1.06E-07	3.11E-07	9.21E-08	4.38E-08	1.36E-07
2710	569925.01	4215724.36	1.35E-06	7.07E-07	2.06E-06	2.06E-07	1.08E-07	3.14E-07	9.31E-08	4.43E-08	1.37E-07
2711	569916.09	4215722.07	1.37E-06	7.15E-07	2.08E-06	2.09E-07	1.09E-07	3.17E-07	9.42E-08	4.48E-08	1.39E-07
2712	569907.16	4215719.78	1.38E-06	7.23E-07	2.11E-06	2.11E-07	1.10E-07	3.21E-07	9.53E-08	4.53E-08	1.41E-07
2713	569898.23	4215717.48	1.40E-06	7.32E-07	2.13E-06	2.14E-07	1.11E-07	3.25E-07	9.64E-08	4.58E-08	1.42E-07
2714	569889.3	4215715.19	1.42E-06	7.41E-07	2.16E-06	2.16E-07	1.13E-07	3.29E-07	9.77E-08	4.64E-08	1.44E-07
2715	569880.37	4215712.89	1.44E-06	7.51E-07	2.19E-06	2.19E-07	1.14E-07	3.33E-07	9.89E-08	4.70E-08	1.46E-07
2716	569871.44	4215710.6	1.39E-06	7.26E-07	2.11E-06	2.12E-07	1.10E-07	3.23E-07	9.57E-08	4.55E-08	1.41E-07
2717	569862.51	4215708.31	1.40E-06	7.32E-07	2.13E-06	2.14E-07	1.11E-07	3.25E-07	9.64E-08	4.58E-08	1.42E-07
2718	569591.18	4215444.03	2.46E-06	1.29E-06	3.74E-06	3.75E-07	1.96E-07	5.71E-07	1.69E-07	8.05E-08	2.50E-07
2719	569951.8	4215731.25	1.31E-06	6.85E-07	1.99E-06	2.00E-07	1.04E-07	3.04E-07	9.02E-08	4.29E-08	1.33E-07
2720	569961.12	4215729.57	1.32E-06	6.89E-07	2.01E-06	2.01E-07	1.05E-07	3.06E-07	9.08E-08	4.31E-08	1.34E-07
2721	569970.43	4215727.89	1.33E-06	6.94E-07	2.02E-06	2.03E-07	1.06E-07	3.08E-07	9.15E-08	4.35E-08	1.35E-07
2722	569979.75	4215726.22	1.34E-06	7.00E-07	2.04E-06	2.04E-07	1.06E-07	3.11E-07	9.22E-08	4.38E-08	1.36E-07
2723	569989.06	4215724.54	1.35E-06	7.06E-07	2.06E-06	2.06E-07	1.07E-07	3.14E-07	9.30E-08	4.42E-08	1.37E-07
2724	569998.38	4215722.87	1.36E-06	7.13E-07	2.07E-06	2.08E-07	1.08E-07	3.16E-07	9.39E-08	4.46E-08	1.38E-07
2725	570007.69	4215721.19	1.37E-06	7.19E-07	2.09E-06	2.10E-07	1.09E-07	3.19E-07	9.47E-08	4.50E-08	1.40E-07
2726	570017.01	4215719.52	1.39E-06	7.26E-07	2.11E-06	2.12E-07	1.10E-07	3.22E-07	9.57E-08	4.55E-08	1.41E-07
2727	570026.32	4215717.84	1.40E-06	7.34E-07	2.14E-06	2.14E-07	1.12E-07	3.26E-07	9.67E-08	4.60E-08	1.43E-07
2728	570035.64	4215716.17	1.42E-06	7.44E-07	2.17E-06	2.17E-07	1.13E-07	3.30E-07	9.80E-08	4.66E-08	1.45E-07
2729	570044.95	4215714.49	1.44E-06	7.54E-07	2.20E-06	2.20E-07	1.15E-07	3.35E-07	9.93E-08	4.72E-08	1.47E-07
2730	570054.27	4215712.82	1.46E-06	7.65E-07	2.23E-06	2.23E-07	1.16E-07	3.40E-07	1.01E-07	4.79E-08	1.49E-07
2731	570063.58	4215711.14	1.49E-06	7.78E-07	2.27E-06	2.27E-07	1.18E-07	3.45E-07	1.02E-07	4.87E-08	1.51E-07
2732	570072.9	4215709.47	1.51E-06	7.92E-07	2.31E-06	2.31E-07	1.20E-07	3.52E-07	1.04E-07	4.96E-08	1.54E-07
2733	570082.22	4215707.79	1.54E-06	8.07E-07	2.35E-06	2.36E-07	1.23E-07	3.58E-07	1.06E-07	5.05E-08	1.57E-07
2734	570091.53	4215706.12	1.58E-06	8.24E-07	2.40E-06	2.41E-07	1.25E-07	3.66E-07	1.09E-07	5.16E-08	1.60E-07
2735	570134.25	4215513.15	7.04E-06	3.68E-06	1.07E-05	1.07E-06	5.60E-07	1.63E-06	4.85E-07	2.31E-07	7.15E-07
2736	570122.88	4215521.29	6.16E-06	3.22E-06	9.38E-06	9.40E-07	4.90E-07	1.43E-06	4.24E-07	2.02E-07	6.26E-07
2737	570111.51	4215529.44	5.48E-06	2.87E-06	8.34E-06	8.36E-07	4.36E-07	1.27E-06	3.77E-07	1.79E-07	5.57E-07
2738	570121.14	4215531.14	5.52E-06	2.89E-06	8.40E-06	8.42E-07	4.39E-07	1.28E-06	3.80E-07	1.81E-07	5.61E-07
2739	570100.13	4215537.59	4.97E-06	2.60E-06	7.56E-06	7.58E-07	3.95E-07	1.15E-06	3.42E-07	1.63E-07	5.05E-07
2740	570109.77	4215539.29	4.96E-06	2.60E-06	7.56E-06	7.57E-07	3.95E-07	1.15E-06	3.42E-07	1.63E-07	5.04E-07
2741	570119.4	4215540.99	4.99E-06	2.61E-06	7.60E-06	7.62E-07	3.97E-07	1.16E-06	3.44E-07	1.63E-07	5.07E-07

2742	570129.04	4215542.69	5.05E-06	2.64E-06	7.69E-06	7.71E-07	4.02E-07	1.17E-06	3.48E-07	1.65E-07	5.13E-07
2743	570098.4	4215547.43	4.52E-06	2.36E-06	6.88E-06	6.90E-07	3.60E-07	1.05E-06	3.11E-07	1.48E-07	4.59E-07
2744	570108.03	4215549.14	4.52E-06	2.36E-06	6.88E-06	6.89E-07	3.59E-07	1.05E-06	3.11E-07	1.48E-07	4.59E-07
2745	570117.67	4215550.84	4.54E-06	2.37E-06	6.91E-06	6.93E-07	3.61E-07	1.05E-06	3.13E-07	1.49E-07	4.61E-07
2746	570096.66	4215557.28	4.13E-06	2.16E-06	6.29E-06	6.31E-07	3.29E-07	9.59E-07	2.85E-07	1.35E-07	4.20E-07
2747	570106.29	4215558.98	4.13E-06	2.16E-06	6.29E-06	6.30E-07	3.28E-07	9.59E-07	2.84E-07	1.35E-07	4.20E-07
2748	570115.93	4215560.68	4.14E-06	2.17E-06	6.31E-06	6.33E-07	3.30E-07	9.63E-07	2.86E-07	1.36E-07	4.21E-07
2749	570094.92	4215567.13	3.78E-06	1.98E-06	5.76E-06	5.77E-07	3.01E-07	8.78E-07	2.61E-07	1.24E-07	3.85E-07
2750	570104.55	4215568.83	3.79E-06	1.98E-06	5.77E-06	5.78E-07	3.01E-07	8.79E-07	2.61E-07	1.24E-07	3.85E-07
2751	570114.19	4215570.53	3.80E-06	1.99E-06	5.79E-06	5.80E-07	3.02E-07	8.83E-07	2.62E-07	1.24E-07	3.86E-07
2752	570123.82	4215572.23	3.84E-06	2.01E-06	5.85E-06	5.86E-07	3.06E-07	8.92E-07	2.65E-07	1.26E-07	3.90E-07
2753	570102.81	4215578.68	3.48E-06	1.82E-06	5.30E-06	5.32E-07	2.77E-07	8.09E-07	2.40E-07	1.14E-07	3.54E-07
2754	570112.45	4215580.38	3.50E-06	1.83E-06	5.33E-06	5.34E-07	2.78E-07	8.13E-07	2.41E-07	1.15E-07	3.56E-07
2755	570122.08	4215582.08	3.53E-06	1.85E-06	5.38E-06	5.40E-07	2.81E-07	8.21E-07	2.43E-07	1.16E-07	3.59E-07
2756	570101.08	4215588.53	3.22E-06	1.68E-06	4.90E-06	4.91E-07	2.56E-07	7.48E-07	2.22E-07	1.05E-07	3.27E-07
2757	570110.71	4215590.23	3.24E-06	1.69E-06	4.93E-06	4.95E-07	2.58E-07	7.52E-07	2.23E-07	1.06E-07	3.29E-07
2758	570099.34	4215598.37	2.99E-06	1.57E-06	4.56E-06	4.57E-07	2.38E-07	6.95E-07	2.06E-07	9.81E-08	3.04E-07
2759	570108.97	4215600.08	3.02E-06	1.58E-06	4.59E-06	4.60E-07	2.40E-07	7.00E-07	2.08E-07	9.88E-08	3.07E-07
2760	570118.61	4215601.78	3.04E-06	1.59E-06	4.64E-06	4.65E-07	2.42E-07	7.07E-07	2.10E-07	9.97E-08	3.09E-07
2761	570107.23	4215609.92	2.81E-06	1.47E-06	4.29E-06	4.30E-07	2.24E-07	6.54E-07	1.94E-07	9.22E-08	2.86E-07
2762	570105.5	4215619.77	2.63E-06	1.38E-06	4.00E-06	4.01E-07	2.09E-07	6.11E-07	1.81E-07	8.61E-08	2.67E-07
2763	570113.39	4215631.32	2.48E-06	1.30E-06	3.77E-06	3.78E-07	1.97E-07	5.76E-07	1.71E-07	8.12E-08	2.52E-07
2764	570111.65	4215641.17	2.32E-06	1.21E-06	3.54E-06	3.54E-07	1.85E-07	5.39E-07	1.60E-07	7.60E-08	2.36E-07
2765	570088.11	4215718.25	1.48E-06	7.74E-07	2.25E-06	2.26E-07	1.18E-07	3.44E-07	1.02E-07	4.84E-08	1.50E-07
2766	570097.74	4215719.95	1.49E-06	7.78E-07	2.27E-06	2.27E-07	1.18E-07	3.46E-07	1.03E-07	4.87E-08	1.51E-07

			T2		T2L3		T4f	
			1585	569973.51				
			5.88E-02	3.33E-02	8.97E-03	5.06E-03	4.05E-03	2.08E-03
			Yr 1	Yr 2	Yr 1	Yr 2	Yr 1	Yr 2
1	570176.21	4215488.81	1.55E-02	8.77E-03	2.36E-03	1.33E-03	1.07E-03	5.49E-04
2	570192.16	4215484.24	1.75E-02	9.92E-03	2.67E-03	1.51E-03	1.21E-03	6.21E-04
3	570208.67	4215476.96	2.04E-02	1.16E-02	3.11E-03	1.76E-03	1.41E-03	7.23E-04
4	570225.19	4215469.68	2.35E-02	1.33E-02	3.58E-03	2.02E-03	1.62E-03	8.33E-04
5	570241.7	4215462.41	2.60E-02	1.47E-02	3.97E-03	2.24E-03	1.79E-03	9.22E-04
6	570258.22	4215455.13	2.76E-02	1.56E-02	4.21E-03	2.38E-03	1.90E-03	9.78E-04
7	570179.28	4215498.07	1.37E-02	7.75E-03	2.09E-03	1.18E-03	9.43E-04	4.85E-04
8	570161.96	4215500.16	1.23E-02	7.00E-03	1.89E-03	1.06E-03	8.51E-04	4.38E-04
9	570196.19	4215493.39	1.56E-02	8.81E-03	2.37E-03	1.34E-03	1.07E-03	5.52E-04
10	570212.71	4215486.11	1.82E-02	1.03E-02	2.79E-03	1.57E-03	1.26E-03	6.47E-04
11	570229.22	4215478.83	2.10E-02	1.19E-02	3.21E-03	1.81E-03	1.45E-03	7.47E-04
12	570237.48	4215475.19	2.23E-02	1.26E-02	3.40E-03	1.92E-03	1.54E-03	7.91E-04
13	570253.99	4215467.92	2.44E-02	1.38E-02	3.72E-03	2.10E-03	1.68E-03	8.64E-04
14	570183.72	4215507.17	1.24E-02	7.00E-03	1.89E-03	1.07E-03	8.52E-04	4.38E-04
15	570167.23	4215509.17	1.12E-02	6.34E-03	1.71E-03	9.64E-04	7.71E-04	3.97E-04
16	570150.74	4215511.16	1.02E-02	5.77E-03	1.55E-03	8.77E-04	7.01E-04	3.61E-04
17	570200.22	4215502.54	1.40E-02	7.95E-03	2.14E-03	1.21E-03	9.67E-04	4.98E-04
18	570216.74	4215495.26	1.64E-02	9.32E-03	2.51E-03	1.42E-03	1.13E-03	5.83E-04
19	570225	4215491.62	1.78E-02	1.01E-02	2.71E-03	1.53E-03	1.22E-03	6.30E-04
20	570241.51	4215484.35	2.01E-02	1.14E-02	3.07E-03	1.73E-03	1.39E-03	7.14E-04
21	570249.77	4215480.71	2.12E-02	1.20E-02	3.23E-03	1.82E-03	1.46E-03	7.50E-04
22	570266.28	4215473.43	2.28E-02	1.29E-02	3.48E-03	1.97E-03	1.57E-03	8.09E-04
23	570188.06	4215516.29	1.13E-02	6.39E-03	1.72E-03	9.72E-04	7.77E-04	4.00E-04
24	570172.19	4215518.2	1.02E-02	5.76E-03	1.55E-03	8.77E-04	7.01E-04	3.61E-04
25	570156.32	4215520.12	9.32E-03	5.28E-03	1.42E-03	8.03E-04	6.42E-04	3.31E-04
26	570140.45	4215522.04	8.58E-03	4.86E-03	1.31E-03	7.39E-04	5.91E-04	3.04E-04
27	570204.25	4215511.69	1.28E-02	7.27E-03	1.96E-03	1.11E-03	8.84E-04	4.55E-04
28	570220.77	4215504.41	1.50E-02	8.50E-03	2.29E-03	1.29E-03	1.03E-03	5.32E-04
29	570237.29	4215497.14	1.73E-02	9.77E-03	2.63E-03	1.49E-03	1.19E-03	6.12E-04
30	570253.8	4215489.86	1.92E-02	1.09E-02	2.93E-03	1.66E-03	1.32E-03	6.82E-04
31	570262.06	4215486.22	2.01E-02	1.14E-02	3.07E-03	1.73E-03	1.38E-03	7.12E-04
32	570191.37	4215525.53	1.03E-02	5.84E-03	1.57E-03	8.88E-04	7.11E-04	3.66E-04
33	570174.06	4215527.62	9.18E-03	5.20E-03	1.40E-03	7.91E-04	6.32E-04	3.25E-04
34	570156.75	4215529.71	8.38E-03	4.75E-03	1.28E-03	7.22E-04	5.77E-04	2.97E-04
35	570139.43	4215531.8	7.69E-03	4.36E-03	1.17E-03	6.63E-04	5.30E-04	2.73E-04
36	570208.29	4215520.84	1.18E-02	6.69E-03	1.80E-03	1.02E-03	8.14E-04	4.19E-04
37	570216.55	4215517.2	1.28E-02	7.22E-03	1.95E-03	1.10E-03	8.79E-04	4.52E-04
38	570233.06	4215509.93	1.48E-02	8.36E-03	2.25E-03	1.27E-03	1.02E-03	5.24E-04
39	570249.58	4215502.65	1.67E-02	9.45E-03	2.55E-03	1.44E-03	1.15E-03	5.92E-04
40	570266.09	4215495.37	1.83E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.50E-04
41	570274.35	4215491.73	1.90E-02	1.08E-02	2.91E-03	1.64E-03	1.31E-03	6.75E-04
42	570195.73	4215534.64	9.57E-03	5.42E-03	1.46E-03	8.24E-04	6.59E-04	3.39E-04
43	570179.05	4215536.65	8.58E-03	4.86E-03	1.31E-03	7.39E-04	5.91E-04	3.04E-04
44	570162.38	4215538.66	7.82E-03	4.43E-03	1.19E-03	6.74E-04	5.39E-04	2.77E-04
45	570145.71	4215540.68	7.21E-03	4.08E-03	1.10E-03	6.21E-04	4.97E-04	2.56E-04
46	570212.32	4215529.99	1.09E-02	6.18E-03	1.67E-03	9.40E-04	7.52E-04	3.87E-04
47	570228.84	4215522.72	1.26E-02	7.15E-03	1.93E-03	1.09E-03	8.70E-04	4.48E-04
48	570245.35	4215515.44	1.45E-02	8.19E-03	2.21E-03	1.25E-03	9.96E-04	5.13E-04

49	570261.87	4215508.16	1.62E-02	9.15E-03	2.47E-03	1.39E-03	1.11E-03	5.73E-04
50	570278.38	4215500.88	1.75E-02	9.93E-03	2.68E-03	1.51E-03	1.21E-03	6.22E-04
51	570200.02	4215543.76	8.90E-03	5.04E-03	1.36E-03	7.67E-04	6.14E-04	3.16E-04
52	570183.86	4215545.71	8.04E-03	4.56E-03	1.23E-03	6.93E-04	5.54E-04	2.85E-04
53	570167.7	4215547.66	7.32E-03	4.15E-03	1.12E-03	6.31E-04	5.04E-04	2.60E-04
54	570151.54	4215549.61	6.76E-03	3.83E-03	1.03E-03	5.83E-04	4.66E-04	2.40E-04
55	570135.38	4215551.56	6.29E-03	3.56E-03	9.60E-04	5.42E-04	4.33E-04	2.23E-04
56	570216.35	4215539.14	1.01E-02	5.73E-03	1.55E-03	8.72E-04	6.97E-04	3.59E-04
57	570232.87	4215531.87	1.17E-02	6.62E-03	1.78E-03	1.01E-03	8.05E-04	4.14E-04
58	570241.13	4215528.23	1.25E-02	7.08E-03	1.91E-03	1.08E-03	8.61E-04	4.43E-04
59	570257.64	4215520.95	1.41E-02	8.01E-03	2.16E-03	1.22E-03	9.75E-04	5.02E-04
60	570274.16	4215513.67	1.56E-02	8.83E-03	2.38E-03	1.34E-03	1.07E-03	5.53E-04
61	570203.47	4215552.98	8.27E-03	4.68E-03	1.26E-03	7.12E-04	5.70E-04	2.93E-04
62	570186.16	4215555.07	7.44E-03	4.21E-03	1.14E-03	6.41E-04	5.13E-04	2.64E-04
63	570168.84	4215557.16	6.73E-03	3.82E-03	1.03E-03	5.80E-04	4.64E-04	2.39E-04
64	570151.53	4215559.25	6.20E-03	3.51E-03	9.47E-04	5.34E-04	4.27E-04	2.20E-04
65	570134.22	4215561.34	5.74E-03	3.25E-03	8.77E-04	4.95E-04	3.96E-04	2.04E-04
66	570220.38	4215548.29	9.43E-03	5.34E-03	1.44E-03	8.13E-04	6.50E-04	3.35E-04
67	570228.64	4215544.66	1.02E-02	5.75E-03	1.55E-03	8.75E-04	7.00E-04	3.60E-04
68	570245.16	4215537.38	1.16E-02	6.59E-03	1.78E-03	1.00E-03	8.02E-04	4.13E-04
69	570253.42	4215533.74	1.24E-02	7.02E-03	1.89E-03	1.07E-03	8.53E-04	4.39E-04
70	570269.93	4215526.46	1.38E-02	7.81E-03	2.11E-03	1.19E-03	9.50E-04	4.89E-04
71	570286.45	4215519.18	1.50E-02	8.51E-03	2.29E-03	1.29E-03	1.03E-03	5.33E-04
72	570207.77	4215562.1	7.78E-03	4.41E-03	1.19E-03	6.70E-04	5.36E-04	2.76E-04
73	570190.98	4215564.13	7.03E-03	3.98E-03	1.07E-03	6.05E-04	4.84E-04	2.49E-04
74	570174.19	4215566.15	6.36E-03	3.60E-03	9.71E-04	5.48E-04	4.38E-04	2.25E-04
75	570157.4	4215568.18	5.86E-03	3.32E-03	8.94E-04	5.05E-04	4.03E-04	2.08E-04
76	570140.61	4215570.21	5.43E-03	3.08E-03	8.29E-04	4.68E-04	3.74E-04	1.93E-04
77	570224.42	4215557.45	8.82E-03	5.00E-03	1.35E-03	7.60E-04	6.08E-04	3.13E-04
78	570240.93	4215550.17	1.02E-02	5.75E-03	1.55E-03	8.75E-04	7.00E-04	3.60E-04
79	570257.45	4215542.89	1.15E-02	6.53E-03	1.76E-03	9.94E-04	7.95E-04	4.09E-04
80	570273.96	4215535.61	1.28E-02	7.27E-03	1.96E-03	1.11E-03	8.84E-04	4.55E-04
81	570282.22	4215531.97	1.34E-02	7.60E-03	2.05E-03	1.16E-03	9.25E-04	4.76E-04
82	570211.27	4215571.31	7.30E-03	4.14E-03	1.12E-03	6.29E-04	5.03E-04	2.59E-04
83	570193.44	4215573.47	6.56E-03	3.72E-03	1.00E-03	5.66E-04	4.52E-04	2.33E-04
84	570175.6	4215575.62	5.91E-03	3.35E-03	9.02E-04	5.09E-04	4.07E-04	2.10E-04
85	570157.76	4215577.77	5.41E-03	3.07E-03	8.26E-04	4.66E-04	3.73E-04	1.92E-04
86	570139.92	4215579.93	5.00E-03	2.83E-03	7.64E-04	4.31E-04	3.45E-04	1.77E-04
87	570220.19	4215570.24	7.70E-03	4.36E-03	1.18E-03	6.64E-04	5.31E-04	2.73E-04
88	570236.71	4215562.96	8.86E-03	5.02E-03	1.35E-03	7.64E-04	6.11E-04	3.14E-04
89	570253.22	4215555.68	1.01E-02	5.72E-03	1.54E-03	8.70E-04	6.96E-04	3.58E-04
90	570269.74	4215548.4	1.13E-02	6.43E-03	1.73E-03	9.78E-04	7.82E-04	4.03E-04
91	570286.25	4215541.12	1.25E-02	7.09E-03	1.91E-03	1.08E-03	8.62E-04	4.44E-04
92	570215.57	4215580.43	6.89E-03	3.91E-03	1.05E-03	5.94E-04	4.75E-04	2.45E-04
93	570198.25	4215582.52	6.23E-03	3.53E-03	9.52E-04	5.37E-04	4.29E-04	2.21E-04
94	570180.94	4215584.61	5.64E-03	3.19E-03	8.61E-04	4.86E-04	3.88E-04	2.00E-04
95	570163.63	4215586.7	5.15E-03	2.92E-03	7.86E-04	4.44E-04	3.55E-04	1.83E-04
96	570146.32	4215588.79	4.76E-03	2.70E-03	7.27E-04	4.10E-04	3.28E-04	1.69E-04
97	570129	4215590.88	4.46E-03	2.52E-03	6.81E-04	3.84E-04	3.07E-04	1.58E-04
98	570232.48	4215575.75	7.75E-03	4.39E-03	1.18E-03	6.68E-04	5.34E-04	2.75E-04
99	570249	4215568.47	8.83E-03	5.00E-03	1.35E-03	7.61E-04	6.08E-04	3.13E-04
100	570265.51	4215561.19	9.96E-03	5.64E-03	1.52E-03	8.58E-04	6.86E-04	3.53E-04

101	570282.03	4215553.91	1.11E-02	6.29E-03	1.70E-03	9.57E-04	7.65E-04	3.94E-04
102	570290.29	4215550.28	1.16E-02	6.60E-03	1.78E-03	1.00E-03	8.02E-04	4.13E-04
103	570298.54	4215546.64	1.21E-02	6.88E-03	1.85E-03	1.05E-03	8.37E-04	4.31E-04
104	570219.82	4215589.56	6.49E-03	3.68E-03	9.92E-04	5.60E-04	4.48E-04	2.30E-04
105	570202.95	4215591.59	5.91E-03	3.35E-03	9.02E-04	5.09E-04	4.07E-04	2.10E-04
106	570186.08	4215593.63	5.37E-03	3.04E-03	8.20E-04	4.63E-04	3.70E-04	1.90E-04
107	570169.21	4215595.67	4.90E-03	2.78E-03	7.49E-04	4.22E-04	3.38E-04	1.74E-04
108	570152.35	4215597.7	4.55E-03	2.58E-03	6.94E-04	3.92E-04	3.13E-04	1.61E-04
109	570135.48	4215599.74	4.26E-03	2.41E-03	6.50E-04	3.67E-04	2.93E-04	1.51E-04
110	570236.51	4215584.9	7.20E-03	4.08E-03	1.10E-03	6.20E-04	4.96E-04	2.55E-04
111	570253.03	4215577.62	8.14E-03	4.61E-03	1.24E-03	7.01E-04	5.61E-04	2.89E-04
112	570261.29	4215573.98	8.65E-03	4.90E-03	1.32E-03	7.45E-04	5.96E-04	3.07E-04
113	570277.8	4215566.7	9.72E-03	5.51E-03	1.48E-03	8.38E-04	6.70E-04	3.45E-04
114	570294.32	4215559.43	1.08E-02	6.12E-03	1.65E-03	9.30E-04	7.44E-04	3.83E-04
115	570223.41	4215598.76	6.08E-03	3.44E-03	9.28E-04	5.24E-04	4.19E-04	2.16E-04
116	570205.65	4215600.9	5.54E-03	3.14E-03	8.46E-04	4.77E-04	3.82E-04	1.97E-04
117	570187.9	4215603.05	5.03E-03	2.85E-03	7.68E-04	4.33E-04	3.46E-04	1.78E-04
118	570170.14	4215605.19	4.58E-03	2.59E-03	6.99E-04	3.94E-04	3.15E-04	1.62E-04
119	570161.26	4215606.26	4.40E-03	2.49E-03	6.72E-04	3.79E-04	3.03E-04	1.56E-04
120	570143.5	4215608.41	4.09E-03	2.32E-03	6.25E-04	3.53E-04	2.82E-04	1.45E-04
121	570125.75	4215610.55	3.86E-03	2.19E-03	5.89E-04	3.32E-04	2.66E-04	1.37E-04
122	570232.29	4215597.69	6.32E-03	3.58E-03	9.64E-04	5.44E-04	4.35E-04	2.24E-04
123	570248.8	4215590.41	7.12E-03	4.03E-03	1.09E-03	6.13E-04	4.90E-04	2.52E-04
124	570265.32	4215583.13	7.49E-03	4.24E-03	1.14E-03	6.45E-04	5.16E-04	2.66E-04
125	570281.84	4215575.85	8.99E-03	5.09E-03	1.37E-03	7.75E-04	6.20E-04	3.19E-04
126	570290.09	4215572.22	9.49E-03	5.38E-03	1.45E-03	8.18E-04	6.54E-04	3.37E-04
127	570298.35	4215568.58	9.99E-03	5.66E-03	1.53E-03	8.61E-04	6.89E-04	3.54E-04
128	570227.67	4215607.88	5.69E-03	3.23E-03	8.70E-04	4.91E-04	3.92E-04	2.02E-04
129	570210.35	4215609.97	5.26E-03	2.98E-03	8.03E-04	4.53E-04	3.62E-04	1.87E-04
130	570193.04	4215612.07	4.80E-03	2.72E-03	7.33E-04	4.14E-04	3.31E-04	1.70E-04
131	570175.73	4215614.16	4.38E-03	2.48E-03	6.69E-04	3.78E-04	3.02E-04	1.55E-04
132	570158.41	4215616.25	4.06E-03	2.30E-03	6.20E-04	3.50E-04	2.80E-04	1.44E-04
133	570141.1	4215618.34	3.80E-03	2.15E-03	5.80E-04	3.27E-04	2.62E-04	1.35E-04
134	570123.79	4215620.43	3.60E-03	2.04E-03	5.49E-04	3.10E-04	2.48E-04	1.28E-04
135	570244.58	4215603.2	6.27E-03	3.55E-03	9.57E-04	5.40E-04	4.32E-04	2.22E-04
136	570261.1	4215595.92	6.52E-03	3.69E-03	9.95E-04	5.62E-04	4.49E-04	2.31E-04
137	570277.61	4215588.64	7.31E-03	4.14E-03	1.12E-03	6.30E-04	5.04E-04	2.59E-04
138	570294.13	4215581.37	8.29E-03	4.70E-03	1.27E-03	7.14E-04	5.71E-04	2.94E-04
139	570302.38	4215577.73	8.89E-03	5.03E-03	1.36E-03	7.66E-04	6.12E-04	3.15E-04
140	570231.89	4215617.01	5.35E-03	3.03E-03	8.17E-04	4.61E-04	3.69E-04	1.90E-04
141	570214.96	4215619.06	4.99E-03	2.83E-03	7.61E-04	4.30E-04	3.44E-04	1.77E-04
142	570198.03	4215621.1	4.58E-03	2.59E-03	6.99E-04	3.94E-04	3.15E-04	1.62E-04
143	570181.11	4215623.14	4.19E-03	2.38E-03	6.40E-04	3.61E-04	2.89E-04	1.49E-04
144	570164.18	4215625.19	3.88E-03	2.20E-03	5.93E-04	3.34E-04	2.67E-04	1.38E-04
145	570147.25	4215627.23	3.63E-03	2.06E-03	5.55E-04	3.13E-04	2.50E-04	1.29E-04
146	570130.32	4215629.28	3.44E-03	1.95E-03	5.25E-04	2.96E-04	2.37E-04	1.22E-04
147	570248.61	4215612.35	5.50E-03	3.11E-03	8.39E-04	4.74E-04	3.79E-04	1.95E-04
148	570256.87	4215608.71	5.76E-03	3.26E-03	8.80E-04	4.96E-04	3.97E-04	2.04E-04
149	570273.39	4215601.43	6.42E-03	3.64E-03	9.81E-04	5.53E-04	4.43E-04	2.28E-04
150	570289.9	4215594.16	7.21E-03	4.08E-03	1.10E-03	6.21E-04	4.97E-04	2.56E-04
151	570298.16	4215590.52	7.65E-03	4.34E-03	1.17E-03	6.59E-04	5.27E-04	2.71E-04
152	570314.67	4215583.24	8.67E-03	4.91E-03	1.32E-03	7.47E-04	5.97E-04	3.08E-04

153	570235.54	4215626.21	5.04E-03	2.86E-03	7.70E-04	4.34E-04	3.47E-04	1.79E-04
154	570226.69	4215627.28	4.86E-03	2.75E-03	7.42E-04	4.19E-04	3.35E-04	1.72E-04
155	570208.99	4215629.41	4.49E-03	2.54E-03	6.85E-04	3.87E-04	3.09E-04	1.59E-04
156	570191.29	4215631.55	4.11E-03	2.33E-03	6.27E-04	3.54E-04	2.83E-04	1.46E-04
157	570173.6	4215633.69	3.76E-03	2.13E-03	5.75E-04	3.24E-04	2.59E-04	1.34E-04
158	570164.75	4215634.76	3.64E-03	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
159	570147.05	4215636.89	3.41E-03	1.93E-03	5.20E-04	2.94E-04	2.35E-04	1.21E-04
160	570129.35	4215639.03	3.23E-03	1.83E-03	4.92E-04	2.78E-04	2.22E-04	1.14E-04
161	570252.64	4215621.5	5.17E-03	2.93E-03	7.89E-04	4.45E-04	3.56E-04	1.83E-04
162	570269.16	4215614.22	5.66E-03	3.21E-03	8.65E-04	4.88E-04	3.90E-04	2.01E-04
163	570285.68	4215606.95	6.36E-03	3.61E-03	9.72E-04	5.48E-04	4.39E-04	2.26E-04
164	570302.19	4215599.67	7.18E-03	4.07E-03	1.10E-03	6.19E-04	4.95E-04	2.55E-04
165	570318.71	4215592.39	8.08E-03	4.58E-03	1.23E-03	6.96E-04	5.57E-04	2.86E-04
166	570239.76	4215635.34	4.77E-03	2.70E-03	7.28E-04	4.11E-04	3.29E-04	1.69E-04
167	570222.45	4215637.43	4.45E-03	2.52E-03	6.79E-04	3.83E-04	3.06E-04	1.58E-04
168	570205.14	4215639.52	4.09E-03	2.32E-03	6.25E-04	3.52E-04	2.82E-04	1.45E-04
169	570187.82	4215641.61	3.76E-03	2.13E-03	5.75E-04	3.24E-04	2.59E-04	1.34E-04
170	570170.51	4215643.7	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
171	570153.2	4215645.79	3.27E-03	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
172	570135.88	4215647.88	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
173	570118.57	4215649.97	2.95E-03	1.67E-03	4.51E-04	2.54E-04	2.03E-04	1.05E-04
174	570256.68	4215630.65	5.22E-03	2.96E-03	7.97E-04	4.50E-04	3.60E-04	1.85E-04
175	570273.19	4215623.38	5.39E-03	3.05E-03	8.22E-04	4.64E-04	3.71E-04	1.91E-04
176	570281.45	4215619.74	5.67E-03	3.21E-03	8.66E-04	4.88E-04	3.91E-04	2.01E-04
177	570297.97	4215612.46	6.34E-03	3.59E-03	9.68E-04	5.46E-04	4.37E-04	2.25E-04
178	570306.22	4215608.82	6.76E-03	3.83E-03	1.03E-03	5.82E-04	4.66E-04	2.40E-04
179	570314.48	4215605.18	7.18E-03	4.06E-03	1.10E-03	6.18E-04	4.94E-04	2.55E-04
180	570243.96	4215644.47	4.52E-03	2.56E-03	6.90E-04	3.89E-04	3.11E-04	1.60E-04
181	570226.99	4215646.52	4.23E-03	2.39E-03	6.45E-04	3.64E-04	2.91E-04	1.50E-04
182	570210.02	4215648.57	3.90E-03	2.21E-03	5.96E-04	3.36E-04	2.69E-04	1.38E-04
183	570193.04	4215650.62	3.60E-03	2.04E-03	5.50E-04	3.10E-04	2.48E-04	1.28E-04
184	570176.07	4215652.67	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.18E-04
185	570159.1	4215654.71	3.14E-03	1.78E-03	4.79E-04	2.71E-04	2.16E-04	1.11E-04
186	570142.12	4215656.76	2.97E-03	1.69E-03	4.54E-04	2.56E-04	2.05E-04	1.06E-04
187	570125.15	4215658.81	2.84E-03	1.61E-03	4.33E-04	2.44E-04	1.95E-04	1.01E-04
188	570260.71	4215639.8	4.93E-03	2.79E-03	7.53E-04	4.25E-04	3.40E-04	1.75E-04
189	570268.97	4215636.17	5.20E-03	2.95E-03	7.94E-04	4.48E-04	3.59E-04	1.85E-04
190	570277.22	4215632.53	5.15E-03	2.92E-03	7.86E-04	4.44E-04	3.55E-04	1.83E-04
191	570293.74	4215625.25	5.69E-03	3.22E-03	8.69E-04	4.90E-04	3.92E-04	2.02E-04
192	570310.26	4215617.97	6.39E-03	3.62E-03	9.75E-04	5.50E-04	4.40E-04	2.27E-04
193	570326.77	4215610.69	7.42E-03	4.21E-03	1.13E-03	6.40E-04	5.12E-04	2.63E-04
194	570247.66	4215653.66	4.29E-03	2.43E-03	6.55E-04	3.70E-04	2.96E-04	1.52E-04
195	570230.01	4215655.79	3.98E-03	2.26E-03	6.08E-04	3.43E-04	2.74E-04	1.41E-04
196	570212.35	4215657.92	3.67E-03	2.08E-03	5.61E-04	3.16E-04	2.53E-04	1.30E-04
197	570194.7	4215660.05	3.39E-03	1.92E-03	5.18E-04	2.92E-04	2.34E-04	1.20E-04
198	570177.05	4215662.19	3.15E-03	1.78E-03	4.81E-04	2.71E-04	2.17E-04	1.12E-04
199	570159.4	4215664.32	2.96E-03	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
200	570141.74	4215666.45	2.81E-03	1.59E-03	4.29E-04	2.42E-04	1.93E-04	9.96E-05
201	570124.09	4215668.58	2.68E-03	1.52E-03	4.09E-04	2.31E-04	1.84E-04	9.50E-05
202	570264.74	4215648.95	4.67E-03	2.65E-03	7.14E-04	4.03E-04	3.22E-04	1.66E-04
203	570281.26	4215641.68	5.19E-03	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
204	570297.77	4215634.4	5.75E-03	3.26E-03	8.78E-04	4.95E-04	3.96E-04	2.04E-04

205	570314.29	4215627.12	6.36E-03	3.60E-03	9.70E-04	5.48E-04	4.38E-04	2.25E-04
206	570330.8	4215619.84	6.98E-03	3.95E-03	1.07E-03	6.01E-04	4.81E-04	2.48E-04
207	570251.86	4215662.79	4.07E-03	2.31E-03	6.21E-04	3.51E-04	2.80E-04	1.44E-04
208	570234.55	4215664.88	3.78E-03	2.14E-03	5.77E-04	3.26E-04	2.60E-04	1.34E-04
209	570217.23	4215666.97	3.50E-03	1.98E-03	5.35E-04	3.02E-04	2.41E-04	1.24E-04
210	570199.92	4215669.06	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
211	570182.61	4215671.15	3.03E-03	1.71E-03	4.62E-04	2.61E-04	2.09E-04	1.07E-04
212	570165.29	4215673.24	2.85E-03	1.61E-03	4.35E-04	2.45E-04	1.96E-04	1.01E-04
213	570147.98	4215675.33	2.71E-03	1.53E-03	4.13E-04	2.33E-04	1.86E-04	9.60E-05
214	570130.67	4215677.42	2.58E-03	1.46E-03	3.94E-04	2.22E-04	1.78E-04	9.16E-05
215	570113.36	4215679.51	2.47E-03	1.40E-03	3.78E-04	2.13E-04	1.70E-04	8.77E-05
216	570268.77	4215658.11	4.44E-03	2.51E-03	6.78E-04	3.83E-04	3.06E-04	1.57E-04
217	570277.03	4215654.47	4.67E-03	2.65E-03	7.13E-04	4.02E-04	3.22E-04	1.66E-04
218	570293.55	4215647.19	5.17E-03	2.93E-03	7.89E-04	4.45E-04	3.56E-04	1.83E-04
219	570310.06	4215639.91	5.71E-03	3.23E-03	8.72E-04	4.92E-04	3.93E-04	2.03E-04
220	570326.58	4215632.63	6.28E-03	3.56E-03	9.59E-04	5.41E-04	4.33E-04	2.23E-04
221	570256.04	4215671.92	3.85E-03	2.18E-03	5.88E-04	3.32E-04	2.65E-04	1.37E-04
222	570239.03	4215673.98	3.58E-03	2.03E-03	5.47E-04	3.09E-04	2.47E-04	1.27E-04
223	570222.03	4215676.03	3.33E-03	1.89E-03	5.09E-04	2.87E-04	2.30E-04	1.18E-04
224	570205.02	4215678.08	3.11E-03	1.76E-03	4.74E-04	2.68E-04	2.14E-04	1.10E-04
225	570188.01	4215680.14	2.91E-03	1.65E-03	4.44E-04	2.50E-04	2.00E-04	1.03E-04
226	570171	4215682.19	2.74E-03	1.55E-03	4.18E-04	2.36E-04	1.89E-04	9.71E-05
227	570153.99	4215684.24	2.60E-03	1.48E-03	3.98E-04	2.24E-04	1.79E-04	9.24E-05
228	570136.98	4215686.3	2.49E-03	1.41E-03	3.80E-04	2.14E-04	1.71E-04	8.82E-05
229	570119.97	4215688.35	2.39E-03	1.35E-03	3.64E-04	2.06E-04	1.64E-04	8.47E-05
230	570272.81	4215667.26	4.21E-03	2.38E-03	6.43E-04	3.63E-04	2.90E-04	1.49E-04
231	570281.06	4215663.62	4.43E-03	2.51E-03	6.77E-04	3.82E-04	3.06E-04	1.57E-04
232	570297.58	4215656.34	4.90E-03	2.77E-03	7.48E-04	4.22E-04	3.38E-04	1.74E-04
233	570305.84	4215652.7	5.14E-03	2.91E-03	7.86E-04	4.43E-04	3.55E-04	1.82E-04
234	570314.1	4215649.06	5.40E-03	3.06E-03	8.24E-04	4.65E-04	3.72E-04	1.92E-04
235	570330.61	4215641.78	5.93E-03	3.36E-03	9.06E-04	5.11E-04	4.09E-04	2.10E-04
236	570338.87	4215638.15	6.20E-03	3.51E-03	9.47E-04	5.34E-04	4.27E-04	2.20E-04
237	570259.77	4215681.11	3.64E-03	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
238	570242.16	4215683.24	3.37E-03	1.91E-03	5.15E-04	2.91E-04	2.32E-04	1.20E-04
239	570224.54	4215685.36	3.14E-03	1.78E-03	4.79E-04	2.70E-04	2.16E-04	1.11E-04
240	570206.92	4215687.49	2.93E-03	1.66E-03	4.47E-04	2.52E-04	2.02E-04	1.04E-04
241	570189.31	4215689.62	2.75E-03	1.56E-03	4.19E-04	2.37E-04	1.89E-04	9.74E-05
242	570171.69	4215691.75	2.59E-03	1.47E-03	3.96E-04	2.23E-04	1.79E-04	9.20E-05
243	570154.07	4215693.87	2.47E-03	1.40E-03	3.77E-04	2.13E-04	1.70E-04	8.75E-05
244	570136.46	4215696	2.36E-03	1.34E-03	3.60E-04	2.03E-04	1.63E-04	8.37E-05
245	570118.84	4215698.13	2.27E-03	1.28E-03	3.46E-04	1.95E-04	1.56E-04	8.04E-05
246	570276.84	4215676.41	3.98E-03	2.25E-03	6.07E-04	3.43E-04	2.74E-04	1.41E-04
247	570285.1	4215672.77	4.19E-03	2.37E-03	6.39E-04	3.61E-04	2.89E-04	1.49E-04
248	570293.35	4215669.13	4.41E-03	2.50E-03	6.73E-04	3.80E-04	3.04E-04	1.56E-04
249	570309.87	4215661.85	4.87E-03	2.76E-03	7.44E-04	4.20E-04	3.36E-04	1.73E-04
250	570318.13	4215658.21	5.11E-03	2.90E-03	7.81E-04	4.41E-04	3.52E-04	1.81E-04
251	570334.64	4215650.94	5.60E-03	3.17E-03	8.55E-04	4.83E-04	3.86E-04	1.99E-04
252	570263.96	4215690.24	3.43E-03	1.94E-03	5.24E-04	2.95E-04	2.36E-04	1.22E-04
253	570246.64	4215692.33	3.19E-03	1.81E-03	4.87E-04	2.75E-04	2.20E-04	1.13E-04
254	570229.33	4215694.42	2.97E-03	1.68E-03	4.54E-04	2.56E-04	2.05E-04	1.05E-04
255	570212.02	4215696.51	2.79E-03	1.58E-03	4.26E-04	2.40E-04	1.92E-04	9.90E-05
256	570194.71	4215698.6	2.63E-03	1.49E-03	4.02E-04	2.27E-04	1.81E-04	9.33E-05

257	570177.39	4215700.69	2.50E-03	1.42E-03	3.81E-04	2.15E-04	1.72E-04	8.86E-05
258	570160.08	4215702.79	2.38E-03	1.35E-03	3.63E-04	2.05E-04	1.64E-04	8.44E-05
259	570142.77	4215704.88	2.28E-03	1.29E-03	3.47E-04	1.96E-04	1.57E-04	8.07E-05
260	570125.45	4215706.97	2.19E-03	1.24E-03	3.34E-04	1.89E-04	1.51E-04	7.77E-05
261	570108.14	4215709.06	2.11E-03	1.19E-03	3.22E-04	1.82E-04	1.45E-04	7.48E-05
262	570280.87	4215685.56	3.75E-03	2.12E-03	5.72E-04	3.23E-04	2.58E-04	1.33E-04
263	570297.39	4215678.28	4.16E-03	2.36E-03	6.35E-04	3.59E-04	2.87E-04	1.48E-04
264	570305.64	4215674.64	4.38E-03	2.48E-03	6.69E-04	3.77E-04	3.02E-04	1.55E-04
265	570322.16	4215667.36	4.83E-03	2.73E-03	7.37E-04	4.16E-04	3.33E-04	1.71E-04
266	570330.42	4215663.73	5.05E-03	2.86E-03	7.71E-04	4.35E-04	3.48E-04	1.79E-04
267	570346.93	4215656.45	5.51E-03	3.12E-03	8.41E-04	4.74E-04	3.79E-04	1.95E-04
268	570267.7	4215699.43	3.23E-03	1.83E-03	4.93E-04	2.78E-04	2.22E-04	1.14E-04
269	570249.81	4215701.59	3.00E-03	1.70E-03	4.58E-04	2.59E-04	2.07E-04	1.06E-04
270	570231.92	4215703.75	2.80E-03	1.58E-03	4.27E-04	2.41E-04	1.93E-04	9.92E-05
271	570222.98	4215704.83	2.71E-03	1.54E-03	4.14E-04	2.33E-04	1.87E-04	9.61E-05
272	570214.03	4215705.91	2.63E-03	1.49E-03	4.01E-04	2.27E-04	1.81E-04	9.33E-05
273	570196.14	4215708.07	2.49E-03	1.41E-03	3.81E-04	2.15E-04	1.72E-04	8.84E-05
274	570178.25	4215710.23	2.38E-03	1.35E-03	3.63E-04	2.05E-04	1.64E-04	8.43E-05
275	570169.31	4215711.31	2.32E-03	1.32E-03	3.55E-04	2.00E-04	1.60E-04	8.24E-05
276	570151.42	4215713.47	2.22E-03	1.26E-03	3.38E-04	1.91E-04	1.53E-04	7.86E-05
277	570133.53	4215715.63	2.12E-03	1.20E-03	3.24E-04	1.83E-04	1.46E-04	7.53E-05
278	570115.63	4215717.79	2.05E-03	1.16E-03	3.12E-04	1.76E-04	1.41E-04	7.26E-05
279	570284.9	4215694.71	3.53E-03	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
280	570293.16	4215691.07	3.72E-03	2.11E-03	5.68E-04	3.21E-04	2.56E-04	1.32E-04
281	570309.68	4215683.79	4.13E-03	2.34E-03	6.30E-04	3.56E-04	2.85E-04	1.46E-04
282	570317.94	4215680.15	4.34E-03	2.46E-03	6.63E-04	3.74E-04	2.99E-04	1.54E-04
283	570334.45	4215672.88	4.77E-03	2.70E-03	7.28E-04	4.11E-04	3.29E-04	1.69E-04
284	570342.71	4215669.24	4.98E-03	2.82E-03	7.60E-04	4.29E-04	3.43E-04	1.77E-04
285	570282.22	4215444.01	2.81E-02	1.59E-02	4.29E-03	2.42E-03	1.94E-03	9.97E-04
286	570275.56	4215450.77	2.73E-02	1.55E-02	4.18E-03	2.36E-03	1.88E-03	9.70E-04
287	570268.91	4215457.52	2.63E-02	1.49E-02	4.02E-03	2.27E-03	1.81E-03	9.34E-04
288	570298.64	4215440.59	2.68E-02	1.52E-02	4.10E-03	2.31E-03	1.85E-03	9.52E-04
289	570292.17	4215447.16	2.64E-02	1.50E-02	4.03E-03	2.28E-03	1.82E-03	9.37E-04
290	570285.7	4215453.73	2.58E-02	1.46E-02	3.95E-03	2.23E-03	1.78E-03	9.16E-04
291	570279.23	4215460.29	2.51E-02	1.42E-02	3.83E-03	2.16E-03	1.73E-03	8.89E-04
292	570272.76	4215466.86	2.41E-02	1.36E-02	3.68E-03	2.07E-03	1.66E-03	8.54E-04
293	570308.28	4215444.05	2.53E-02	1.43E-02	3.86E-03	2.18E-03	1.74E-03	8.98E-04
294	570301.95	4215450.47	2.50E-02	1.41E-02	3.81E-03	2.15E-03	1.72E-03	8.85E-04
295	570295.63	4215456.89	2.44E-02	1.39E-02	3.73E-03	2.11E-03	1.68E-03	8.67E-04
296	570289.3	4215463.31	2.38E-02	1.35E-02	3.64E-03	2.05E-03	1.64E-03	8.45E-04
297	570276.64	4215476.16	2.20E-02	1.24E-02	3.35E-03	1.89E-03	1.51E-03	7.79E-04
298	570322.67	4215442.69	2.40E-02	1.36E-02	3.67E-03	2.07E-03	1.66E-03	8.53E-04
299	570315.77	4215449.7	2.38E-02	1.35E-02	3.64E-03	2.05E-03	1.64E-03	8.46E-04
300	570308.86	4215456.7	2.35E-02	1.33E-02	3.59E-03	2.02E-03	1.62E-03	8.33E-04
301	570301.96	4215463.71	2.29E-02	1.30E-02	3.50E-03	1.98E-03	1.58E-03	8.14E-04
302	570295.06	4215470.71	2.22E-02	1.26E-02	3.39E-03	1.91E-03	1.53E-03	7.88E-04
303	570288.15	4215477.72	2.13E-02	1.21E-02	3.25E-03	1.84E-03	1.47E-03	7.55E-04
304	570281.25	4215484.73	2.02E-02	1.15E-02	3.09E-03	1.74E-03	1.39E-03	7.18E-04
305	570338.95	4215439.41	2.25E-02	1.28E-02	3.44E-03	1.94E-03	1.55E-03	7.98E-04
306	570332.22	4215446.24	2.26E-02	1.28E-02	3.46E-03	1.95E-03	1.56E-03	8.03E-04
307	570325.49	4215453.07	2.26E-02	1.28E-02	3.45E-03	1.95E-03	1.56E-03	8.01E-04
308	570318.76	4215459.9	2.23E-02	1.26E-02	3.41E-03	1.92E-03	1.54E-03	7.91E-04

309	570312.03	4215466.73	2.19E-02	1.24E-02	3.34E-03	1.88E-03	1.51E-03	7.76E-04
310	570305.3	4215473.56	2.13E-02	1.21E-02	3.25E-03	1.83E-03	1.47E-03	7.55E-04
311	570298.57	4215480.39	2.05E-02	1.16E-02	3.13E-03	1.77E-03	1.41E-03	7.27E-04
312	570291.84	4215487.22	1.96E-02	1.11E-02	2.99E-03	1.69E-03	1.35E-03	6.95E-04
313	570285.11	4215494.05	1.86E-02	1.05E-02	2.84E-03	1.60E-03	1.28E-03	6.59E-04
314	570355.74	4215398.93	2.26E-02	1.28E-02	3.45E-03	1.95E-03	1.56E-03	8.02E-04
315	570355.53	4215408.32	2.22E-02	1.26E-02	3.38E-03	1.91E-03	1.53E-03	7.86E-04
316	570355.32	4215417.7	2.18E-02	1.24E-02	3.33E-03	1.88E-03	1.50E-03	7.74E-04
317	570348.3	4215443.16	2.13E-02	1.20E-02	3.25E-03	1.83E-03	1.46E-03	7.54E-04
318	570341.72	4215449.85	2.14E-02	1.21E-02	3.27E-03	1.85E-03	1.48E-03	7.60E-04
319	570335.13	4215456.54	2.14E-02	1.21E-02	3.27E-03	1.85E-03	1.48E-03	7.60E-04
320	570328.54	4215463.22	2.12E-02	1.20E-02	3.24E-03	1.83E-03	1.46E-03	7.53E-04
321	570321.95	4215469.91	2.09E-02	1.18E-02	3.19E-03	1.80E-03	1.44E-03	7.40E-04
322	570315.36	4215476.6	2.04E-02	1.16E-02	3.11E-03	1.76E-03	1.40E-03	7.23E-04
323	570308.77	4215483.28	1.98E-02	1.12E-02	3.02E-03	1.70E-03	1.36E-03	7.01E-04
324	570302.18	4215489.97	1.90E-02	1.08E-02	2.90E-03	1.64E-03	1.31E-03	6.74E-04
325	570295.59	4215496.66	1.81E-02	1.03E-02	2.76E-03	1.56E-03	1.25E-03	6.42E-04
326	570289	4215503.35	1.72E-02	9.73E-03	2.62E-03	1.48E-03	1.18E-03	6.09E-04
327	570365.14	4215394.28	2.16E-02	1.23E-02	3.30E-03	1.86E-03	1.49E-03	7.67E-04
328	570364.93	4215403.5	2.13E-02	1.20E-02	3.25E-03	1.83E-03	1.47E-03	7.54E-04
329	570364.73	4215412.72	2.10E-02	1.19E-02	3.20E-03	1.81E-03	1.44E-03	7.43E-04
330	570357.63	4215446.94	2.02E-02	1.14E-02	3.08E-03	1.74E-03	1.39E-03	7.15E-04
331	570351.16	4215453.51	2.04E-02	1.15E-02	3.11E-03	1.75E-03	1.40E-03	7.22E-04
332	570344.69	4215460.07	2.04E-02	1.16E-02	3.11E-03	1.76E-03	1.41E-03	7.23E-04
333	570338.22	4215466.64	2.03E-02	1.15E-02	3.09E-03	1.75E-03	1.40E-03	7.19E-04
334	570331.75	4215473.21	2.00E-02	1.13E-02	3.05E-03	1.72E-03	1.38E-03	7.08E-04
335	570325.27	4215479.78	1.96E-02	1.11E-02	2.99E-03	1.68E-03	1.35E-03	6.94E-04
336	570318.8	4215486.35	1.90E-02	1.08E-02	2.91E-03	1.64E-03	1.31E-03	6.75E-04
337	570312.33	4215492.91	1.84E-02	1.04E-02	2.81E-03	1.58E-03	1.27E-03	6.52E-04
338	570305.86	4215499.48	1.76E-02	9.98E-03	2.69E-03	1.52E-03	1.21E-03	6.25E-04
339	570299.39	4215506.05	1.68E-02	9.52E-03	2.56E-03	1.45E-03	1.16E-03	5.96E-04
340	570292.92	4215512.62	1.59E-02	9.02E-03	2.43E-03	1.37E-03	1.10E-03	5.65E-04
341	570374.42	4215395.11	2.05E-02	1.16E-02	3.13E-03	1.77E-03	1.41E-03	7.27E-04
342	570374.2	4215404.94	2.02E-02	1.14E-02	3.08E-03	1.74E-03	1.39E-03	7.16E-04
343	570373.98	4215414.77	1.99E-02	1.13E-02	3.04E-03	1.72E-03	1.37E-03	7.07E-04
344	570366.41	4215451.27	1.92E-02	1.09E-02	2.93E-03	1.65E-03	1.32E-03	6.81E-04
345	570359.51	4215458.28	1.94E-02	1.10E-02	2.96E-03	1.67E-03	1.34E-03	6.88E-04
346	570352.6	4215465.29	1.95E-02	1.10E-02	2.97E-03	1.68E-03	1.34E-03	6.91E-04
347	570345.7	4215472.29	1.93E-02	1.09E-02	2.95E-03	1.66E-03	1.33E-03	6.85E-04
348	570338.8	4215479.3	1.90E-02	1.08E-02	2.90E-03	1.64E-03	1.31E-03	6.74E-04
349	570331.9	4215486.3	1.86E-02	1.05E-02	2.84E-03	1.60E-03	1.28E-03	6.59E-04
350	570324.99	4215493.31	1.80E-02	1.02E-02	2.75E-03	1.55E-03	1.24E-03	6.39E-04
351	570318.09	4215500.31	1.73E-02	9.82E-03	2.65E-03	1.49E-03	1.19E-03	6.15E-04
352	570311.19	4215507.32	1.66E-02	9.38E-03	2.53E-03	1.43E-03	1.14E-03	5.88E-04
353	570304.28	4215514.32	1.57E-02	8.91E-03	2.40E-03	1.36E-03	1.08E-03	5.58E-04
354	570297.38	4215521.33	1.48E-02	8.41E-03	2.27E-03	1.28E-03	1.02E-03	5.27E-04
355	570383.83	4215390.31	1.96E-02	1.11E-02	2.99E-03	1.69E-03	1.35E-03	6.95E-04
356	570383.61	4215399.95	1.94E-02	1.10E-02	2.96E-03	1.67E-03	1.34E-03	6.87E-04
357	570383.39	4215409.59	1.91E-02	1.08E-02	2.92E-03	1.65E-03	1.32E-03	6.79E-04
358	570382.74	4215438.52	1.83E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.49E-04
359	570375.75	4215455.04	1.83E-02	1.04E-02	2.79E-03	1.58E-03	1.26E-03	6.48E-04
360	570368.98	4215461.91	1.85E-02	1.05E-02	2.82E-03	1.59E-03	1.27E-03	6.55E-04

361	570362.21	4215468.78	1.86E-02	1.05E-02	2.83E-03	1.60E-03	1.28E-03	6.58E-04
362	570355.44	4215475.65	1.85E-02	1.05E-02	2.82E-03	1.59E-03	1.27E-03	6.55E-04
363	570348.67	4215482.52	1.82E-02	1.03E-02	2.79E-03	1.57E-03	1.26E-03	6.47E-04
364	570341.9	4215489.39	1.79E-02	1.01E-02	2.73E-03	1.54E-03	1.23E-03	6.34E-04
365	570335.13	4215496.26	1.74E-02	9.86E-03	2.66E-03	1.50E-03	1.20E-03	6.18E-04
366	570328.36	4215503.13	1.68E-02	9.53E-03	2.57E-03	1.45E-03	1.16E-03	5.96E-04
367	570321.59	4215510	1.61E-02	9.14E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
368	570314.82	4215516.87	1.54E-02	8.72E-03	2.35E-03	1.33E-03	1.06E-03	5.46E-04
369	570308.05	4215523.74	1.46E-02	8.27E-03	2.23E-03	1.26E-03	1.01E-03	5.18E-04
370	570301.28	4215530.61	1.38E-02	7.83E-03	2.11E-03	1.19E-03	9.53E-04	4.90E-04
371	570393.01	4215395.17	1.86E-02	1.05E-02	2.83E-03	1.60E-03	1.28E-03	6.58E-04
372	570392.8	4215404.66	1.84E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.51E-04
373	570392.59	4215414.14	1.82E-02	1.03E-02	2.77E-03	1.57E-03	1.25E-03	6.44E-04
374	570391.95	4215442.58	1.74E-02	9.88E-03	2.66E-03	1.50E-03	1.20E-03	6.19E-04
375	570385.08	4215458.82	1.74E-02	9.88E-03	2.66E-03	1.50E-03	1.20E-03	6.19E-04
376	570378.42	4215465.57	1.76E-02	9.99E-03	2.69E-03	1.52E-03	1.21E-03	6.25E-04
377	570371.76	4215472.33	1.77E-02	1.00E-02	2.70E-03	1.52E-03	1.22E-03	6.27E-04
378	570365.11	4215479.08	1.76E-02	1.00E-02	2.69E-03	1.52E-03	1.22E-03	6.26E-04
379	570358.45	4215485.84	1.75E-02	9.91E-03	2.67E-03	1.51E-03	1.21E-03	6.20E-04
380	570351.79	4215492.59	1.72E-02	9.75E-03	2.63E-03	1.48E-03	1.19E-03	6.11E-04
381	570345.14	4215499.35	1.68E-02	9.52E-03	2.57E-03	1.45E-03	1.16E-03	5.96E-04
382	570338.48	4215506.1	1.63E-02	9.23E-03	2.49E-03	1.40E-03	1.12E-03	5.78E-04
383	570331.83	4215512.86	1.57E-02	8.89E-03	2.40E-03	1.35E-03	1.08E-03	5.57E-04
384	570325.17	4215519.62	1.50E-02	8.50E-03	2.29E-03	1.29E-03	1.03E-03	5.32E-04
385	570318.51	4215526.37	1.43E-02	8.10E-03	2.18E-03	1.23E-03	9.86E-04	5.07E-04
386	570311.86	4215533.13	1.36E-02	7.72E-03	2.08E-03	1.17E-03	9.39E-04	4.83E-04
387	570305.2	4215539.88	1.29E-02	7.31E-03	1.97E-03	1.11E-03	8.89E-04	4.58E-04
388	570402.42	4215390.57	1.77E-02	1.01E-02	2.71E-03	1.53E-03	1.22E-03	6.30E-04
389	570402.21	4215399.91	1.76E-02	9.97E-03	2.69E-03	1.52E-03	1.21E-03	6.24E-04
390	570401.99	4215409.25	1.74E-02	9.88E-03	2.66E-03	1.50E-03	1.20E-03	6.19E-04
391	570401.15	4215446.62	1.66E-02	9.43E-03	2.54E-03	1.43E-03	1.15E-03	5.90E-04
392	570394.38	4215462.61	1.66E-02	9.42E-03	2.54E-03	1.43E-03	1.15E-03	5.90E-04
393	570387.83	4215469.27	1.68E-02	9.52E-03	2.57E-03	1.45E-03	1.16E-03	5.96E-04
394	570381.27	4215475.92	1.69E-02	9.57E-03	2.58E-03	1.46E-03	1.16E-03	5.99E-04
395	570374.71	4215482.58	1.69E-02	9.56E-03	2.58E-03	1.45E-03	1.16E-03	5.99E-04
396	570368.15	4215489.24	1.68E-02	9.49E-03	2.56E-03	1.44E-03	1.15E-03	5.94E-04
397	570361.6	4215495.89	1.65E-02	9.37E-03	2.53E-03	1.42E-03	1.14E-03	5.87E-04
398	570355.04	4215502.55	1.62E-02	9.19E-03	2.48E-03	1.40E-03	1.12E-03	5.75E-04
399	570348.48	4215509.2	1.58E-02	8.94E-03	2.41E-03	1.36E-03	1.09E-03	5.60E-04
400	570341.92	4215515.86	1.53E-02	8.64E-03	2.33E-03	1.31E-03	1.05E-03	5.41E-04
401	570335.36	4215522.51	1.47E-02	8.30E-03	2.24E-03	1.26E-03	1.01E-03	5.20E-04
402	570328.81	4215529.17	1.40E-02	7.94E-03	2.14E-03	1.21E-03	9.66E-04	4.97E-04
403	570322.25	4215535.82	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.22E-04	4.75E-04
404	570315.69	4215542.48	1.27E-02	7.21E-03	1.94E-03	1.10E-03	8.77E-04	4.51E-04
405	570309.13	4215549.13	1.20E-02	6.81E-03	1.84E-03	1.04E-03	8.29E-04	4.27E-04
406	570411.7	4215391.03	1.69E-02	9.59E-03	2.58E-03	1.46E-03	1.17E-03	6.00E-04
407	570411.48	4215400.86	1.68E-02	9.51E-03	2.56E-03	1.45E-03	1.16E-03	5.96E-04
408	570411.26	4215410.69	1.67E-02	9.43E-03	2.54E-03	1.43E-03	1.15E-03	5.91E-04
409	570410.59	4215440.19	1.61E-02	9.13E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
410	570410.37	4215450.02	1.59E-02	9.01E-03	2.43E-03	1.37E-03	1.10E-03	5.64E-04
411	570403.25	4215466.86	1.59E-02	9.00E-03	2.43E-03	1.37E-03	1.09E-03	5.63E-04
412	570396.34	4215473.87	1.60E-02	9.08E-03	2.45E-03	1.38E-03	1.10E-03	5.69E-04

413	570389.44	4215480.87	1.61E-02	9.14E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
414	570382.54	4215487.88	1.62E-02	9.15E-03	2.47E-03	1.39E-03	1.11E-03	5.73E-04
415	570375.64	4215494.88	1.60E-02	9.08E-03	2.45E-03	1.38E-03	1.10E-03	5.68E-04
416	570368.73	4215501.89	1.58E-02	8.94E-03	2.41E-03	1.36E-03	1.09E-03	5.59E-04
417	570361.83	4215508.89	1.54E-02	8.75E-03	2.36E-03	1.33E-03	1.06E-03	5.48E-04
418	570354.93	4215515.9	1.50E-02	8.52E-03	2.30E-03	1.30E-03	1.04E-03	5.33E-04
419	570348.03	4215522.91	1.45E-02	8.22E-03	2.22E-03	1.25E-03	1.00E-03	5.15E-04
420	570341.12	4215529.91	1.39E-02	7.88E-03	2.12E-03	1.20E-03	9.59E-04	4.94E-04
421	570334.22	4215536.92	1.33E-02	7.53E-03	2.03E-03	1.15E-03	9.16E-04	4.71E-04
422	570327.32	4215543.92	1.26E-02	7.16E-03	1.93E-03	1.09E-03	8.70E-04	4.48E-04
423	570320.41	4215550.93	1.20E-02	6.77E-03	1.82E-03	1.03E-03	8.23E-04	4.24E-04
424	570313.51	4215557.93	1.12E-02	6.37E-03	1.72E-03	9.69E-04	7.75E-04	3.99E-04
425	570421.11	4215386.32	1.62E-02	9.18E-03	2.47E-03	1.40E-03	1.12E-03	5.75E-04
426	570420.89	4215396	1.61E-02	9.13E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
427	570420.67	4215405.68	1.60E-02	9.07E-03	2.44E-03	1.38E-03	1.10E-03	5.68E-04
428	570420.45	4215415.36	1.59E-02	9.00E-03	2.43E-03	1.37E-03	1.10E-03	5.64E-04
429	570419.8	4215444.39	1.54E-02	8.72E-03	2.35E-03	1.33E-03	1.06E-03	5.46E-04
430	570419.58	4215454.07	1.52E-02	8.60E-03	2.32E-03	1.31E-03	1.05E-03	5.39E-04
431	570412.56	4215470.65	1.52E-02	8.58E-03	2.31E-03	1.31E-03	1.04E-03	5.37E-04
432	570405.77	4215477.54	1.53E-02	8.66E-03	2.33E-03	1.32E-03	1.05E-03	5.42E-04
433	570398.98	4215484.44	1.54E-02	8.71E-03	2.35E-03	1.33E-03	1.06E-03	5.46E-04
434	570392.18	4215491.34	1.54E-02	8.73E-03	2.35E-03	1.33E-03	1.06E-03	5.47E-04
435	570385.39	4215498.23	1.54E-02	8.71E-03	2.35E-03	1.32E-03	1.06E-03	5.45E-04
436	570378.59	4215505.13	1.52E-02	8.59E-03	2.31E-03	1.31E-03	1.04E-03	5.38E-04
437	570371.8	4215512.02	1.49E-02	8.42E-03	2.27E-03	1.28E-03	1.02E-03	5.27E-04
438	570365	4215518.92	1.45E-02	8.22E-03	2.22E-03	1.25E-03	1.00E-03	5.15E-04
439	570358.21	4215525.82	1.41E-02	7.98E-03	2.15E-03	1.21E-03	9.71E-04	5.00E-04
440	570351.41	4215532.71	1.36E-02	7.70E-03	2.08E-03	1.17E-03	9.37E-04	4.82E-04
441	570344.62	4215539.61	1.30E-02	7.38E-03	1.99E-03	1.12E-03	8.97E-04	4.62E-04
442	570337.82	4215546.51	1.24E-02	7.04E-03	1.90E-03	1.07E-03	8.56E-04	4.41E-04
443	570331.03	4215553.4	1.18E-02	6.68E-03	1.80E-03	1.02E-03	8.12E-04	4.18E-04
444	570324.23	4215560.3	1.11E-02	6.31E-03	1.70E-03	9.59E-04	7.67E-04	3.95E-04
445	570317.44	4215567.19	1.04E-02	5.91E-03	1.59E-03	8.99E-04	7.19E-04	3.70E-04
446	570430.51	4215381.76	1.55E-02	8.77E-03	2.36E-03	1.33E-03	1.07E-03	5.49E-04
447	570430.29	4215391.3	1.55E-02	8.76E-03	2.36E-03	1.33E-03	1.07E-03	5.48E-04
448	570430.08	4215400.85	1.54E-02	8.72E-03	2.35E-03	1.33E-03	1.06E-03	5.46E-04
449	570429.86	4215410.39	1.53E-02	8.67E-03	2.34E-03	1.32E-03	1.05E-03	5.43E-04
450	570429.22	4215439.02	1.49E-02	8.41E-03	2.27E-03	1.28E-03	1.02E-03	5.27E-04
451	570429	4215448.56	1.47E-02	8.32E-03	2.24E-03	1.27E-03	1.01E-03	5.21E-04
452	570428.78	4215458.11	1.45E-02	8.21E-03	2.21E-03	1.25E-03	9.98E-04	5.14E-04
453	570421.87	4215474.45	1.44E-02	8.17E-03	2.20E-03	1.24E-03	9.94E-04	5.12E-04
454	570415.17	4215481.25	1.46E-02	8.26E-03	2.23E-03	1.26E-03	1.01E-03	5.17E-04
455	570408.47	4215488.05	1.47E-02	8.32E-03	2.24E-03	1.26E-03	1.01E-03	5.21E-04
456	570401.77	4215494.85	1.47E-02	8.34E-03	2.25E-03	1.27E-03	1.01E-03	5.22E-04
457	570395.07	4215501.65	1.47E-02	8.31E-03	2.24E-03	1.26E-03	1.01E-03	5.20E-04
458	570388.37	4215508.45	1.45E-02	8.23E-03	2.22E-03	1.25E-03	1.00E-03	5.15E-04
459	570381.67	4215515.25	1.43E-02	8.11E-03	2.19E-03	1.23E-03	9.86E-04	5.08E-04
460	570374.97	4215522.04	1.40E-02	7.93E-03	2.14E-03	1.21E-03	9.65E-04	4.97E-04
461	570368.27	4215528.84	1.36E-02	7.72E-03	2.08E-03	1.17E-03	9.39E-04	4.83E-04
462	570361.57	4215535.64	1.32E-02	7.47E-03	2.01E-03	1.14E-03	9.09E-04	4.68E-04
463	570354.87	4215542.44	1.27E-02	7.20E-03	1.94E-03	1.10E-03	8.76E-04	4.51E-04
464	570348.17	4215549.24	1.22E-02	6.90E-03	1.86E-03	1.05E-03	8.39E-04	4.32E-04

465	570341.47	4215556.04	1.16E-02	6.57E-03	1.77E-03	9.99E-04	7.99E-04	4.11E-04
466	570334.77	4215562.84	1.10E-02	6.23E-03	1.68E-03	9.47E-04	7.57E-04	3.90E-04
467	570328.07	4215569.64	1.04E-02	5.86E-03	1.58E-03	8.92E-04	7.13E-04	3.67E-04
468	570321.37	4215576.44	9.70E-03	5.50E-03	1.48E-03	8.36E-04	6.68E-04	3.44E-04
469	570439.69	4215386.74	1.48E-02	8.38E-03	2.26E-03	1.28E-03	1.02E-03	5.25E-04
470	570439.48	4215396.16	1.48E-02	8.38E-03	2.26E-03	1.27E-03	1.02E-03	5.24E-04
471	570439.27	4215405.59	1.47E-02	8.35E-03	2.25E-03	1.27E-03	1.02E-03	5.23E-04
472	570439.05	4215415.01	1.46E-02	8.29E-03	2.24E-03	1.26E-03	1.01E-03	5.19E-04
473	570438.42	4215443.28	1.42E-02	8.04E-03	2.17E-03	1.22E-03	9.78E-04	5.03E-04
474	570438.2	4215452.7	1.40E-02	7.95E-03	2.14E-03	1.21E-03	9.67E-04	4.98E-04
475	570437.99	4215462.12	1.38E-02	7.84E-03	2.11E-03	1.19E-03	9.54E-04	4.91E-04
476	570431.16	4215478.26	1.37E-02	7.79E-03	2.10E-03	1.18E-03	9.47E-04	4.87E-04
477	570424.55	4215484.97	1.39E-02	7.86E-03	2.12E-03	1.20E-03	9.56E-04	4.92E-04
478	570417.93	4215491.69	1.40E-02	7.93E-03	2.14E-03	1.21E-03	9.64E-04	4.96E-04
479	570411.32	4215498.4	1.40E-02	7.96E-03	2.15E-03	1.21E-03	9.68E-04	4.98E-04
480	570404.7	4215505.11	1.40E-02	7.93E-03	2.14E-03	1.21E-03	9.65E-04	4.97E-04
481	570398.09	4215511.83	1.39E-02	7.87E-03	2.12E-03	1.20E-03	9.58E-04	4.93E-04
482	570391.47	4215518.54	1.37E-02	7.78E-03	2.10E-03	1.18E-03	9.46E-04	4.87E-04
483	570384.86	4215525.25	1.35E-02	7.64E-03	2.06E-03	1.16E-03	9.30E-04	4.79E-04
484	570378.24	4215531.97	1.32E-02	7.45E-03	2.01E-03	1.13E-03	9.07E-04	4.67E-04
485	570371.63	4215538.68	1.28E-02	7.24E-03	1.95E-03	1.10E-03	8.80E-04	4.53E-04
486	570365.01	4215545.4	1.23E-02	7.00E-03	1.89E-03	1.06E-03	8.51E-04	4.38E-04
487	570358.4	4215552.11	1.19E-02	6.73E-03	1.81E-03	1.02E-03	8.19E-04	4.22E-04
488	570351.78	4215558.82	1.14E-02	6.44E-03	1.74E-03	9.80E-04	7.84E-04	4.03E-04
489	570345.17	4215565.54	1.08E-02	6.13E-03	1.65E-03	9.32E-04	7.45E-04	3.84E-04
490	570338.55	4215572.25	1.02E-02	5.80E-03	1.56E-03	8.82E-04	7.05E-04	3.63E-04
491	570331.94	4215578.96	9.64E-03	5.46E-03	1.47E-03	8.30E-04	6.64E-04	3.42E-04
492	570325.32	4215585.68	8.71E-03	4.93E-03	1.33E-03	7.50E-04	6.00E-04	3.09E-04
493	570449.21	4215377.12	1.42E-02	8.03E-03	2.16E-03	1.22E-03	9.77E-04	5.03E-04
494	570448.98	4215386.95	1.42E-02	8.03E-03	2.17E-03	1.22E-03	9.77E-04	5.03E-04
495	570448.76	4215396.78	1.42E-02	8.02E-03	2.16E-03	1.22E-03	9.76E-04	5.02E-04
496	570448.54	4215406.62	1.41E-02	7.99E-03	2.15E-03	1.22E-03	9.72E-04	5.00E-04
497	570448.32	4215416.45	1.40E-02	7.93E-03	2.14E-03	1.21E-03	9.65E-04	4.97E-04
498	570447.65	4215445.95	1.36E-02	7.69E-03	2.07E-03	1.17E-03	9.36E-04	4.82E-04
499	570447.43	4215455.78	1.34E-02	7.60E-03	2.05E-03	1.16E-03	9.24E-04	4.76E-04
500	570447.21	4215465.61	1.32E-02	7.49E-03	2.02E-03	1.14E-03	9.11E-04	4.69E-04
501	570440.09	4215482.45	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.03E-04	4.65E-04
502	570433.18	4215489.45	1.32E-02	7.49E-03	2.02E-03	1.14E-03	9.11E-04	4.69E-04
503	570426.28	4215496.46	1.33E-02	7.55E-03	2.03E-03	1.15E-03	9.18E-04	4.73E-04
504	570419.38	4215503.46	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.22E-04	4.75E-04
505	570412.47	4215510.47	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.22E-04	4.74E-04
506	570405.57	4215517.48	1.33E-02	7.52E-03	2.03E-03	1.14E-03	9.14E-04	4.71E-04
507	570398.67	4215524.48	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.02E-04	4.65E-04
508	570391.77	4215531.49	1.28E-02	7.28E-03	1.96E-03	1.11E-03	8.85E-04	4.56E-04
509	570384.86	4215538.49	1.25E-02	7.10E-03	1.91E-03	1.08E-03	8.63E-04	4.44E-04
510	570377.96	4215545.5	1.21E-02	6.88E-03	1.86E-03	1.05E-03	8.37E-04	4.31E-04
511	570371.06	4215552.5	1.17E-02	6.64E-03	1.79E-03	1.01E-03	8.08E-04	4.16E-04
512	570364.16	4215559.51	1.13E-02	6.38E-03	1.72E-03	9.70E-04	7.76E-04	3.99E-04
513	570357.25	4215566.51	1.08E-02	6.09E-03	1.64E-03	9.26E-04	7.41E-04	3.81E-04
514	570350.35	4215573.52	1.02E-02	5.78E-03	1.56E-03	8.79E-04	7.03E-04	3.62E-04
515	570343.45	4215580.53	9.64E-03	5.46E-03	1.47E-03	8.30E-04	6.64E-04	3.42E-04
516	570336.54	4215587.53	9.05E-03	5.13E-03	1.38E-03	7.80E-04	6.24E-04	3.21E-04

517	570329.64	4215594.54	8.48E-03	4.80E-03	1.29E-03	7.30E-04	5.84E-04	3.01E-04
518	570458.61	4215372.61	1.36E-02	7.73E-03	2.08E-03	1.18E-03	9.40E-04	4.84E-04
519	570458.39	4215382.31	1.36E-02	7.71E-03	2.08E-03	1.17E-03	9.38E-04	4.83E-04
520	570458.17	4215392.01	1.36E-02	7.69E-03	2.07E-03	1.17E-03	9.36E-04	4.82E-04
521	570457.95	4215401.72	1.35E-02	7.66E-03	2.06E-03	1.16E-03	9.31E-04	4.79E-04
522	570457.73	4215411.42	1.34E-02	7.61E-03	2.05E-03	1.16E-03	9.26E-04	4.77E-04
523	570457.07	4215440.53	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.03E-04	4.65E-04
524	570456.85	4215450.23	1.29E-02	7.34E-03	1.98E-03	1.12E-03	8.92E-04	4.59E-04
525	570456.64	4215459.93	1.28E-02	7.24E-03	1.95E-03	1.10E-03	8.80E-04	4.53E-04
526	570456.42	4215469.64	1.26E-02	7.12E-03	1.92E-03	1.08E-03	8.66E-04	4.46E-04
527	570449.39	4215486.25	1.25E-02	7.06E-03	1.90E-03	1.07E-03	8.59E-04	4.42E-04
528	570442.57	4215493.17	1.26E-02	7.13E-03	1.92E-03	1.09E-03	8.68E-04	4.47E-04
529	570435.76	4215500.08	1.27E-02	7.18E-03	1.94E-03	1.09E-03	8.74E-04	4.50E-04
530	570428.95	4215506.99	1.27E-02	7.21E-03	1.94E-03	1.10E-03	8.77E-04	4.52E-04
531	570422.14	4215513.91	1.27E-02	7.22E-03	1.95E-03	1.10E-03	8.78E-04	4.52E-04
532	570415.33	4215520.82	1.27E-02	7.20E-03	1.94E-03	1.09E-03	8.76E-04	4.51E-04
533	570408.51	4215527.73	1.26E-02	7.12E-03	1.92E-03	1.08E-03	8.66E-04	4.46E-04
534	570401.7	4215534.65	1.24E-02	7.00E-03	1.89E-03	1.06E-03	8.52E-04	4.38E-04
535	570394.89	4215541.56	1.21E-02	6.85E-03	1.85E-03	1.04E-03	8.33E-04	4.29E-04
536	570388.08	4215548.47	1.18E-02	6.66E-03	1.80E-03	1.01E-03	8.11E-04	4.17E-04
537	570381.27	4215555.39	1.14E-02	6.45E-03	1.74E-03	9.81E-04	7.85E-04	4.04E-04
538	570374.45	4215562.3	1.10E-02	6.22E-03	1.68E-03	9.45E-04	7.56E-04	3.89E-04
539	570367.64	4215569.21	1.05E-02	5.96E-03	1.61E-03	9.06E-04	7.25E-04	3.73E-04
540	570360.83	4215576.13	1.00E-02	5.69E-03	1.53E-03	8.65E-04	6.92E-04	3.56E-04
541	570354.02	4215583.04	9.53E-03	5.40E-03	1.45E-03	8.21E-04	6.57E-04	3.38E-04
542	570347.21	4215589.95	9.00E-03	5.10E-03	1.37E-03	7.75E-04	6.20E-04	3.19E-04
543	570340.4	4215596.87	8.46E-03	4.80E-03	1.29E-03	7.29E-04	5.83E-04	3.00E-04
544	570333.58	4215603.78	7.94E-03	4.50E-03	1.21E-03	6.84E-04	5.47E-04	2.82E-04
545	570468	4215368.2	1.31E-02	7.44E-03	2.01E-03	1.13E-03	9.05E-04	4.66E-04
546	570467.79	4215377.78	1.31E-02	7.43E-03	2.00E-03	1.13E-03	9.03E-04	4.65E-04
547	570467.57	4215387.37	1.31E-02	7.40E-03	1.99E-03	1.12E-03	9.00E-04	4.63E-04
548	570467.35	4215396.96	1.30E-02	7.35E-03	1.98E-03	1.12E-03	8.94E-04	4.60E-04
549	570467.14	4215406.54	1.29E-02	7.30E-03	1.97E-03	1.11E-03	8.88E-04	4.57E-04
550	570466.92	4215416.13	1.28E-02	7.27E-03	1.96E-03	1.11E-03	8.84E-04	4.55E-04
551	570466.27	4215444.89	1.25E-02	7.09E-03	1.91E-03	1.08E-03	8.62E-04	4.44E-04
552	570466.06	4215454.48	1.24E-02	7.00E-03	1.89E-03	1.06E-03	8.51E-04	4.38E-04
553	570465.84	4215464.06	1.22E-02	6.90E-03	1.86E-03	1.05E-03	8.39E-04	4.32E-04
554	570465.62	4215473.65	1.20E-02	6.77E-03	1.83E-03	1.03E-03	8.24E-04	4.24E-04
555	570458.68	4215490.07	1.19E-02	6.71E-03	1.81E-03	1.02E-03	8.17E-04	4.20E-04
556	570451.95	4215496.9	1.20E-02	6.78E-03	1.83E-03	1.03E-03	8.25E-04	4.25E-04
557	570445.22	4215503.73	1.21E-02	6.84E-03	1.84E-03	1.04E-03	8.32E-04	4.28E-04
558	570438.49	4215510.56	1.21E-02	6.87E-03	1.85E-03	1.04E-03	8.35E-04	4.30E-04
559	570431.76	4215517.39	1.21E-02	6.88E-03	1.85E-03	1.05E-03	8.37E-04	4.31E-04
560	570425.03	4215524.22	1.21E-02	6.87E-03	1.85E-03	1.04E-03	8.35E-04	4.30E-04
561	570418.3	4215531.05	1.20E-02	6.82E-03	1.84E-03	1.04E-03	8.30E-04	4.27E-04
562	570411.57	4215537.88	1.19E-02	6.74E-03	1.82E-03	1.02E-03	8.19E-04	4.22E-04
563	570404.84	4215544.71	1.17E-02	6.60E-03	1.78E-03	1.00E-03	8.03E-04	4.13E-04
564	570398.11	4215551.54	1.14E-02	6.44E-03	1.74E-03	9.80E-04	7.84E-04	4.04E-04
565	570391.38	4215558.37	1.10E-02	6.26E-03	1.69E-03	9.52E-04	7.61E-04	3.92E-04
566	570384.65	4215565.2	1.07E-02	6.05E-03	1.63E-03	9.19E-04	7.35E-04	3.79E-04
567	570377.92	4215572.03	1.03E-02	5.82E-03	1.57E-03	8.85E-04	7.08E-04	3.64E-04
568	570371.18	4215578.86	9.84E-03	5.57E-03	1.50E-03	8.48E-04	6.78E-04	3.49E-04

569	570364.45	4215585.69	9.39E-03	5.32E-03	1.43E-03	8.09E-04	6.47E-04	3.33E-04
570	570357.72	4215592.52	8.91E-03	5.05E-03	1.36E-03	7.68E-04	6.14E-04	3.16E-04
571	570350.99	4215599.35	8.42E-03	4.77E-03	1.29E-03	7.25E-04	5.80E-04	2.99E-04
572	570344.26	4215606.18	7.93E-03	4.49E-03	1.21E-03	6.83E-04	5.46E-04	2.81E-04
573	570337.53	4215613.01	7.45E-03	4.22E-03	1.14E-03	6.42E-04	5.13E-04	2.64E-04
574	570477.4	4215363.88	1.26E-02	7.16E-03	1.93E-03	1.09E-03	8.72E-04	4.49E-04
575	570477.18	4215373.36	1.26E-02	7.16E-03	1.93E-03	1.09E-03	8.71E-04	4.48E-04
576	570476.97	4215382.84	1.26E-02	7.13E-03	1.92E-03	1.08E-03	8.67E-04	4.46E-04
577	570476.76	4215392.32	1.25E-02	7.09E-03	1.91E-03	1.08E-03	8.62E-04	4.44E-04
578	570476.54	4215401.8	1.24E-02	7.03E-03	1.90E-03	1.07E-03	8.56E-04	4.40E-04
579	570476.33	4215411.28	1.23E-02	6.99E-03	1.88E-03	1.06E-03	8.50E-04	4.38E-04
580	570475.69	4215439.73	1.21E-02	6.85E-03	1.85E-03	1.04E-03	8.33E-04	4.29E-04
581	570475.47	4215449.21	1.20E-02	6.77E-03	1.83E-03	1.03E-03	8.24E-04	4.24E-04
582	570475.26	4215458.69	1.18E-02	6.68E-03	1.80E-03	1.02E-03	8.13E-04	4.18E-04
583	570475.04	4215468.17	1.16E-02	6.58E-03	1.77E-03	1.00E-03	8.00E-04	4.12E-04
584	570474.83	4215477.65	1.14E-02	6.46E-03	1.74E-03	9.82E-04	7.85E-04	4.04E-04
585	570467.96	4215493.89	1.13E-02	6.39E-03	1.72E-03	9.72E-04	7.77E-04	4.00E-04
586	570461.3	4215500.64	1.14E-02	6.45E-03	1.74E-03	9.81E-04	7.84E-04	4.04E-04
587	570454.65	4215507.4	1.15E-02	6.50E-03	1.75E-03	9.88E-04	7.90E-04	4.07E-04
588	570447.99	4215514.15	1.15E-02	6.54E-03	1.76E-03	9.94E-04	7.95E-04	4.09E-04
589	570441.34	4215520.91	1.16E-02	6.56E-03	1.77E-03	9.97E-04	7.98E-04	4.11E-04
590	570434.68	4215527.66	1.16E-02	6.55E-03	1.76E-03	9.96E-04	7.96E-04	4.10E-04
591	570428.02	4215534.42	1.15E-02	6.51E-03	1.75E-03	9.90E-04	7.92E-04	4.08E-04
592	570421.37	4215541.18	1.14E-02	6.45E-03	1.74E-03	9.81E-04	7.85E-04	4.04E-04
593	570414.71	4215547.93	1.12E-02	6.37E-03	1.72E-03	9.68E-04	7.74E-04	3.99E-04
594	570408.05	4215554.69	1.10E-02	6.23E-03	1.68E-03	9.48E-04	7.58E-04	3.90E-04
595	570401.4	4215561.44	1.07E-02	6.06E-03	1.63E-03	9.22E-04	7.37E-04	3.80E-04
596	570394.74	4215568.2	1.04E-02	5.87E-03	1.58E-03	8.93E-04	7.14E-04	3.68E-04
597	570388.09	4215574.95	1.00E-02	5.67E-03	1.53E-03	8.62E-04	6.89E-04	3.55E-04
598	570381.43	4215581.71	9.62E-03	5.45E-03	1.47E-03	8.29E-04	6.63E-04	3.41E-04
599	570374.77	4215588.46	9.21E-03	5.22E-03	1.41E-03	7.94E-04	6.35E-04	3.27E-04
600	570368.12	4215595.22	8.78E-03	4.97E-03	1.34E-03	7.57E-04	6.05E-04	3.11E-04
601	570361.46	4215601.97	8.34E-03	4.72E-03	1.27E-03	7.19E-04	5.75E-04	2.96E-04
602	570354.81	4215608.73	7.89E-03	4.47E-03	1.21E-03	6.80E-04	5.44E-04	2.80E-04
603	570348.15	4215615.48	7.44E-03	4.22E-03	1.14E-03	6.41E-04	5.13E-04	2.64E-04
604	570341.49	4215622.24	7.00E-03	3.97E-03	1.07E-03	6.03E-04	4.82E-04	2.48E-04
605	570486.71	4215363.21	1.22E-02	6.89E-03	1.86E-03	1.05E-03	8.39E-04	4.32E-04
606	570486.49	4215373.04	1.22E-02	6.89E-03	1.86E-03	1.05E-03	8.38E-04	4.31E-04
607	570486.27	4215382.87	1.21E-02	6.87E-03	1.85E-03	1.04E-03	8.35E-04	4.30E-04
608	570486.04	4215392.71	1.21E-02	6.83E-03	1.84E-03	1.04E-03	8.31E-04	4.28E-04
609	570485.82	4215402.54	1.20E-02	6.79E-03	1.83E-03	1.03E-03	8.25E-04	4.25E-04
610	570485.6	4215412.37	1.19E-02	6.74E-03	1.82E-03	1.03E-03	8.20E-04	4.22E-04
611	570484.94	4215441.87	1.16E-02	6.58E-03	1.77E-03	1.00E-03	8.01E-04	4.12E-04
612	570484.71	4215451.7	1.15E-02	6.50E-03	1.75E-03	9.89E-04	7.91E-04	4.07E-04
613	570484.49	4215461.53	1.13E-02	6.42E-03	1.73E-03	9.76E-04	7.80E-04	4.02E-04
614	570484.27	4215471.37	1.11E-02	6.31E-03	1.70E-03	9.59E-04	7.67E-04	3.95E-04
615	570484.05	4215481.2	1.09E-02	6.19E-03	1.67E-03	9.41E-04	7.52E-04	3.87E-04
616	570476.92	4215498.04	1.08E-02	6.10E-03	1.64E-03	9.28E-04	7.42E-04	3.82E-04
617	570470.02	4215505.04	1.08E-02	6.14E-03	1.65E-03	9.34E-04	7.47E-04	3.84E-04
618	570463.12	4215512.05	1.09E-02	6.18E-03	1.67E-03	9.40E-04	7.52E-04	3.87E-04
619	570456.22	4215519.05	1.10E-02	6.22E-03	1.68E-03	9.45E-04	7.56E-04	3.89E-04
620	570449.31	4215526.06	1.10E-02	6.24E-03	1.68E-03	9.49E-04	7.59E-04	3.91E-04

621	570442.41	4215533.06	1.10E-02	6.24E-03	1.68E-03	9.49E-04	7.59E-04	3.91E-04
622	570435.51	4215540.07	1.09E-02	6.20E-03	1.67E-03	9.43E-04	7.54E-04	3.88E-04
623	570428.6	4215547.07	1.08E-02	6.14E-03	1.66E-03	9.34E-04	7.47E-04	3.85E-04
624	570421.7	4215554.08	1.07E-02	6.06E-03	1.63E-03	9.22E-04	7.37E-04	3.79E-04
625	570414.8	4215561.08	1.05E-02	5.94E-03	1.60E-03	9.04E-04	7.23E-04	3.72E-04
626	570407.9	4215568.09	1.02E-02	5.78E-03	1.56E-03	8.79E-04	7.03E-04	3.62E-04
627	570400.99	4215575.1	9.87E-03	5.59E-03	1.51E-03	8.51E-04	6.80E-04	3.50E-04
628	570394.09	4215582.1	9.52E-03	5.39E-03	1.45E-03	8.20E-04	6.56E-04	3.38E-04
629	570387.19	4215589.11	9.14E-03	5.18E-03	1.40E-03	7.88E-04	6.30E-04	3.24E-04
630	570380.29	4215596.11	8.74E-03	4.95E-03	1.33E-03	7.53E-04	6.02E-04	3.10E-04
631	570373.38	4215603.12	8.32E-03	4.72E-03	1.27E-03	7.17E-04	5.74E-04	2.95E-04
632	570366.48	4215610.12	7.90E-03	4.47E-03	1.21E-03	6.80E-04	5.44E-04	2.80E-04
633	570359.58	4215617.13	7.46E-03	4.23E-03	1.14E-03	6.43E-04	5.14E-04	2.65E-04
634	570352.67	4215624.13	7.03E-03	3.98E-03	1.07E-03	6.06E-04	4.85E-04	2.49E-04
635	570345.77	4215631.14	6.61E-03	3.75E-03	1.01E-03	5.70E-04	4.56E-04	2.35E-04
636	570496.11	4215358.84	1.17E-02	6.64E-03	1.79E-03	1.01E-03	8.07E-04	4.15E-04
637	570495.89	4215368.56	1.17E-02	6.64E-03	1.79E-03	1.01E-03	8.07E-04	4.16E-04
638	570495.67	4215378.28	1.17E-02	6.63E-03	1.79E-03	1.01E-03	8.06E-04	4.15E-04
639	570495.45	4215388	1.17E-02	6.61E-03	1.78E-03	1.00E-03	8.04E-04	4.14E-04
640	570495.23	4215397.72	1.16E-02	6.57E-03	1.77E-03	1.00E-03	8.00E-04	4.12E-04
641	570495.01	4215407.44	1.15E-02	6.53E-03	1.76E-03	9.94E-04	7.95E-04	4.09E-04
642	570494.79	4215417.16	1.15E-02	6.49E-03	1.75E-03	9.87E-04	7.90E-04	4.06E-04
643	570494.13	4215446.32	1.11E-02	6.31E-03	1.70E-03	9.60E-04	7.68E-04	3.95E-04
644	570493.91	4215456.04	1.10E-02	6.24E-03	1.68E-03	9.48E-04	7.59E-04	3.90E-04
645	570493.69	4215465.76	1.09E-02	6.15E-03	1.66E-03	9.35E-04	7.48E-04	3.85E-04
646	570493.47	4215475.49	1.07E-02	6.04E-03	1.63E-03	9.19E-04	7.35E-04	3.78E-04
647	570493.26	4215485.21	1.05E-02	5.92E-03	1.60E-03	9.01E-04	7.21E-04	3.71E-04
648	570486.21	4215501.85	1.03E-02	5.84E-03	1.57E-03	8.88E-04	7.10E-04	3.66E-04
649	570479.39	4215508.78	1.04E-02	5.86E-03	1.58E-03	8.92E-04	7.13E-04	3.67E-04
650	570472.56	4215515.7	1.04E-02	5.88E-03	1.58E-03	8.94E-04	7.15E-04	3.68E-04
651	570465.74	4215522.63	1.04E-02	5.91E-03	1.59E-03	8.99E-04	7.19E-04	3.70E-04
652	570458.91	4215529.56	1.05E-02	5.93E-03	1.60E-03	9.01E-04	7.21E-04	3.71E-04
653	570452.09	4215536.48	1.05E-02	5.93E-03	1.60E-03	9.02E-04	7.21E-04	3.71E-04
654	570445.27	4215543.41	1.04E-02	5.92E-03	1.59E-03	9.00E-04	7.20E-04	3.71E-04
655	570438.44	4215550.33	1.04E-02	5.87E-03	1.58E-03	8.93E-04	7.15E-04	3.68E-04
656	570431.62	4215557.26	1.02E-02	5.81E-03	1.56E-03	8.83E-04	7.06E-04	3.63E-04
657	570424.79	4215564.19	1.01E-02	5.71E-03	1.54E-03	8.68E-04	6.94E-04	3.57E-04
658	570417.97	4215571.11	9.86E-03	5.58E-03	1.51E-03	8.49E-04	6.79E-04	3.50E-04
659	570411.14	4215578.04	9.59E-03	5.43E-03	1.46E-03	8.26E-04	6.61E-04	3.40E-04
660	570404.32	4215584.96	9.27E-03	5.25E-03	1.42E-03	7.99E-04	6.39E-04	3.29E-04
661	570397.5	4215591.89	8.93E-03	5.06E-03	1.36E-03	7.70E-04	6.15E-04	3.17E-04
662	570390.67	4215598.82	8.57E-03	4.86E-03	1.31E-03	7.39E-04	5.91E-04	3.04E-04
663	570383.85	4215605.74	8.20E-03	4.64E-03	1.25E-03	7.06E-04	5.65E-04	2.91E-04
664	570377.02	4215612.67	7.81E-03	4.42E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
665	570370.2	4215619.59	7.41E-03	4.20E-03	1.13E-03	6.38E-04	5.10E-04	2.63E-04
666	570363.37	4215626.52	7.00E-03	3.97E-03	1.07E-03	6.03E-04	4.83E-04	2.48E-04
667	570356.55	4215633.44	6.61E-03	3.74E-03	1.01E-03	5.69E-04	4.55E-04	2.34E-04
668	570349.73	4215640.37	6.22E-03	3.52E-03	9.50E-04	5.36E-04	4.29E-04	2.21E-04
669	570505.5	4215354.54	1.13E-02	6.39E-03	1.72E-03	9.72E-04	7.77E-04	4.00E-04
670	570505.28	4215364.16	1.13E-02	6.40E-03	1.72E-03	9.73E-04	7.78E-04	4.01E-04
671	570505.07	4215373.78	1.13E-02	6.40E-03	1.72E-03	9.73E-04	7.78E-04	4.00E-04
672	570504.85	4215383.4	1.13E-02	6.39E-03	1.72E-03	9.71E-04	7.77E-04	4.00E-04

673	570504.63	4215393.02	1.12E-02	6.36E-03	1.72E-03	9.68E-04	7.74E-04	3.99E-04
674	570504.42	4215402.64	1.12E-02	6.33E-03	1.71E-03	9.64E-04	7.71E-04	3.97E-04
675	570504.2	4215412.26	1.11E-02	6.30E-03	1.70E-03	9.57E-04	7.66E-04	3.94E-04
676	570503.55	4215441.11	1.08E-02	6.12E-03	1.65E-03	9.31E-04	7.45E-04	3.83E-04
677	570503.33	4215450.73	1.07E-02	6.06E-03	1.63E-03	9.21E-04	7.37E-04	3.79E-04
678	570503.11	4215460.35	1.06E-02	5.98E-03	1.61E-03	9.10E-04	7.28E-04	3.75E-04
679	570502.9	4215469.97	1.04E-02	5.89E-03	1.59E-03	8.96E-04	7.17E-04	3.69E-04
680	570502.68	4215479.59	1.02E-02	5.79E-03	1.56E-03	8.80E-04	7.04E-04	3.62E-04
681	570502.46	4215489.2	1.00E-02	5.68E-03	1.53E-03	8.63E-04	6.91E-04	3.55E-04
682	570495.49	4215505.68	9.87E-03	5.59E-03	1.51E-03	8.51E-04	6.80E-04	3.50E-04
683	570488.74	4215512.53	9.92E-03	5.62E-03	1.51E-03	8.55E-04	6.83E-04	3.52E-04
684	570481.99	4215519.38	9.94E-03	5.63E-03	1.52E-03	8.56E-04	6.85E-04	3.53E-04
685	570475.23	4215526.24	9.93E-03	5.63E-03	1.52E-03	8.56E-04	6.84E-04	3.52E-04
686	570468.48	4215533.09	9.95E-03	5.63E-03	1.52E-03	8.57E-04	6.85E-04	3.53E-04
687	570461.73	4215539.94	9.95E-03	5.64E-03	1.52E-03	8.58E-04	6.86E-04	3.53E-04
688	570454.98	4215546.8	9.94E-03	5.63E-03	1.52E-03	8.56E-04	6.85E-04	3.52E-04
689	570448.22	4215553.65	9.90E-03	5.61E-03	1.51E-03	8.53E-04	6.82E-04	3.51E-04
690	570441.47	4215560.5	9.81E-03	5.56E-03	1.50E-03	8.45E-04	6.76E-04	3.48E-04
691	570434.72	4215567.36	9.66E-03	5.47E-03	1.48E-03	8.32E-04	6.66E-04	3.43E-04
692	570427.97	4215574.21	9.48E-03	5.37E-03	1.45E-03	8.17E-04	6.53E-04	3.36E-04
693	570421.21	4215581.06	9.27E-03	5.25E-03	1.41E-03	7.98E-04	6.38E-04	3.29E-04
694	570414.46	4215587.92	9.01E-03	5.11E-03	1.38E-03	7.77E-04	6.21E-04	3.20E-04
695	570407.71	4215594.77	8.71E-03	4.93E-03	1.33E-03	7.50E-04	6.00E-04	3.09E-04
696	570400.96	4215601.62	8.38E-03	4.75E-03	1.28E-03	7.22E-04	5.78E-04	2.97E-04
697	570394.2	4215608.47	8.04E-03	4.56E-03	1.23E-03	6.93E-04	5.54E-04	2.85E-04
698	570387.45	4215615.33	7.69E-03	4.36E-03	1.17E-03	6.63E-04	5.30E-04	2.73E-04
699	570380.7	4215622.18	7.33E-03	4.15E-03	1.12E-03	6.31E-04	5.05E-04	2.60E-04
700	570373.94	4215629.03	6.95E-03	3.94E-03	1.06E-03	5.99E-04	4.79E-04	2.47E-04
701	570367.19	4215635.89	6.58E-03	3.73E-03	1.00E-03	5.67E-04	4.53E-04	2.33E-04
702	570360.44	4215642.74	6.21E-03	3.52E-03	9.49E-04	5.35E-04	4.28E-04	2.20E-04
703	570353.69	4215649.59	5.85E-03	3.32E-03	8.94E-04	5.04E-04	4.03E-04	2.08E-04
704	570514.89	4215350.32	1.09E-02	6.16E-03	1.66E-03	9.36E-04	7.49E-04	3.85E-04
705	570514.68	4215359.84	1.09E-02	6.17E-03	1.66E-03	9.38E-04	7.50E-04	3.86E-04
706	570514.46	4215369.37	1.09E-02	6.17E-03	1.66E-03	9.39E-04	7.51E-04	3.86E-04
707	570514.25	4215378.89	1.09E-02	6.17E-03	1.66E-03	9.38E-04	7.50E-04	3.86E-04
708	570514.03	4215388.42	1.09E-02	6.15E-03	1.66E-03	9.36E-04	7.49E-04	3.85E-04
709	570513.82	4215397.94	1.08E-02	6.13E-03	1.65E-03	9.33E-04	7.46E-04	3.84E-04
710	570513.6	4215407.47	1.08E-02	6.10E-03	1.64E-03	9.28E-04	7.42E-04	3.82E-04
711	570513.39	4215416.99	1.07E-02	6.06E-03	1.63E-03	9.22E-04	7.38E-04	3.80E-04
712	570512.74	4215445.57	1.04E-02	5.90E-03	1.59E-03	8.98E-04	7.18E-04	3.69E-04
713	570512.53	4215455.09	1.03E-02	5.83E-03	1.57E-03	8.87E-04	7.10E-04	3.65E-04
714	570512.31	4215464.62	1.02E-02	5.76E-03	1.55E-03	8.76E-04	7.01E-04	3.61E-04
715	570512.1	4215474.14	1.00E-02	5.67E-03	1.53E-03	8.63E-04	6.90E-04	3.55E-04
716	570511.88	4215483.67	9.85E-03	5.58E-03	1.50E-03	8.48E-04	6.78E-04	3.49E-04
717	570511.67	4215493.2	9.66E-03	5.47E-03	1.48E-03	8.33E-04	6.66E-04	3.43E-04
718	570504.77	4215509.51	9.48E-03	5.37E-03	1.45E-03	8.17E-04	6.53E-04	3.36E-04
719	570498.08	4215516.29	9.51E-03	5.39E-03	1.45E-03	8.20E-04	6.56E-04	3.37E-04
720	570491.39	4215523.08	9.53E-03	5.40E-03	1.46E-03	8.21E-04	6.57E-04	3.38E-04
721	570484.71	4215529.87	9.53E-03	5.40E-03	1.46E-03	8.21E-04	6.57E-04	3.38E-04
722	570478.02	4215536.65	9.51E-03	5.39E-03	1.45E-03	8.19E-04	6.55E-04	3.37E-04
723	570471.33	4215543.44	9.47E-03	5.37E-03	1.45E-03	8.16E-04	6.53E-04	3.36E-04
724	570464.65	4215550.23	9.46E-03	5.36E-03	1.44E-03	8.15E-04	6.52E-04	3.36E-04

725	570457.96	4215557.01	9.43E-03	5.34E-03	1.44E-03	8.12E-04	6.50E-04	3.34E-04
726	570451.27	4215563.8	9.36E-03	5.30E-03	1.43E-03	8.07E-04	6.45E-04	3.32E-04
727	570444.58	4215570.59	9.26E-03	5.25E-03	1.41E-03	7.98E-04	6.38E-04	3.29E-04
728	570437.9	4215577.37	9.11E-03	5.16E-03	1.39E-03	7.85E-04	6.28E-04	3.23E-04
729	570431.21	4215584.16	8.93E-03	5.06E-03	1.36E-03	7.69E-04	6.15E-04	3.17E-04
730	570424.52	4215590.95	8.71E-03	4.93E-03	1.33E-03	7.50E-04	6.00E-04	3.09E-04
731	570417.84	4215597.73	8.46E-03	4.79E-03	1.29E-03	7.29E-04	5.83E-04	3.00E-04
732	570411.15	4215604.52	8.18E-03	4.63E-03	1.25E-03	7.05E-04	5.64E-04	2.90E-04
733	570404.46	4215611.31	7.87E-03	4.46E-03	1.20E-03	6.78E-04	5.42E-04	2.79E-04
734	570397.78	4215618.09	7.55E-03	4.28E-03	1.15E-03	6.51E-04	5.20E-04	2.68E-04
735	570391.09	4215624.88	7.22E-03	4.09E-03	1.10E-03	6.22E-04	4.97E-04	2.56E-04
736	570384.4	4215631.67	6.88E-03	3.90E-03	1.05E-03	5.93E-04	4.74E-04	2.44E-04
737	570377.71	4215638.45	6.53E-03	3.70E-03	9.97E-04	5.63E-04	4.50E-04	2.32E-04
738	570371.03	4215645.24	6.19E-03	3.50E-03	9.45E-04	5.33E-04	4.26E-04	2.19E-04
739	570364.34	4215652.03	5.84E-03	3.31E-03	8.92E-04	5.04E-04	4.03E-04	2.07E-04
740	570357.65	4215658.81	5.51E-03	3.12E-03	8.42E-04	4.75E-04	3.80E-04	1.96E-04
741	569937.09	4214979.91	3.89E-03	2.20E-03	5.94E-04	3.35E-04	2.68E-04	1.38E-04
742	569941.77	4214988.41	4.17E-03	2.36E-03	6.36E-04	3.59E-04	2.87E-04	1.48E-04
743	569895.61	4214925.21	2.81E-03	1.59E-03	4.29E-04	2.42E-04	1.94E-04	9.97E-05
744	569900.28	4214933.71	2.91E-03	1.65E-03	4.44E-04	2.51E-04	2.00E-04	1.03E-04
745	569904.96	4214942.22	3.03E-03	1.71E-03	4.62E-04	2.61E-04	2.08E-04	1.07E-04
746	569909.63	4214950.72	3.16E-03	1.79E-03	4.83E-04	2.72E-04	2.18E-04	1.12E-04
747	569914.31	4214959.22	3.33E-03	1.89E-03	5.08E-04	2.87E-04	2.29E-04	1.18E-04
748	569918.98	4214967.72	3.53E-03	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
749	569923.66	4214976.22	3.76E-03	2.13E-03	5.74E-04	3.24E-04	2.59E-04	1.33E-04
750	569928.33	4214984.73	4.01E-03	2.27E-03	6.13E-04	3.46E-04	2.77E-04	1.42E-04
751	569933.01	4214993.23	4.31E-03	2.44E-03	6.58E-04	3.72E-04	2.97E-04	1.53E-04
752	569877.5	4214913.03	2.70E-03	1.53E-03	4.13E-04	2.33E-04	1.86E-04	9.59E-05
753	569882.17	4214921.53	2.78E-03	1.57E-03	4.24E-04	2.39E-04	1.92E-04	9.86E-05
754	569886.85	4214930.03	2.87E-03	1.62E-03	4.38E-04	2.47E-04	1.98E-04	1.02E-04
755	569891.52	4214938.53	2.97E-03	1.68E-03	4.54E-04	2.56E-04	2.05E-04	1.05E-04
756	569896.19	4214947.03	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
757	569900.87	4214955.54	3.24E-03	1.84E-03	4.95E-04	2.79E-04	2.23E-04	1.15E-04
758	569905.54	4214964.04	3.43E-03	1.94E-03	5.24E-04	2.96E-04	2.37E-04	1.22E-04
759	569910.22	4214972.54	3.65E-03	2.07E-03	5.57E-04	3.14E-04	2.51E-04	1.29E-04
760	569914.89	4214981.04	3.88E-03	2.20E-03	5.93E-04	3.35E-04	2.68E-04	1.38E-04
761	569919.57	4214989.54	4.16E-03	2.36E-03	6.35E-04	3.58E-04	2.86E-04	1.47E-04
762	569924.24	4214998.05	4.48E-03	2.54E-03	6.83E-04	3.86E-04	3.08E-04	1.59E-04
763	569928.92	4215006.55	4.84E-03	2.74E-03	7.38E-04	4.17E-04	3.33E-04	1.72E-04
764	569868.73	4214917.84	2.76E-03	1.56E-03	4.21E-04	2.38E-04	1.90E-04	9.78E-05
765	569873.41	4214926.35	2.84E-03	1.61E-03	4.33E-04	2.44E-04	1.96E-04	1.01E-04
766	569878.08	4214934.85	2.93E-03	1.66E-03	4.47E-04	2.52E-04	2.02E-04	1.04E-04
767	569882.76	4214943.35	3.04E-03	1.72E-03	4.64E-04	2.62E-04	2.10E-04	1.08E-04
768	569887.43	4214951.85	3.17E-03	1.80E-03	4.85E-04	2.73E-04	2.19E-04	1.13E-04
769	569892.11	4214960.35	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.19E-04
770	569896.78	4214968.86	3.54E-03	2.01E-03	5.41E-04	3.05E-04	2.44E-04	1.26E-04
771	569901.46	4214977.36	3.77E-03	2.13E-03	5.75E-04	3.25E-04	2.60E-04	1.34E-04
772	569906.13	4214985.86	4.02E-03	2.27E-03	6.13E-04	3.46E-04	2.77E-04	1.42E-04
773	569910.81	4214994.36	4.31E-03	2.44E-03	6.59E-04	3.72E-04	2.97E-04	1.53E-04
774	569915.48	4215002.86	4.65E-03	2.64E-03	7.10E-04	4.01E-04	3.21E-04	1.65E-04
775	569920.15	4215011.37	5.04E-03	2.85E-03	7.69E-04	4.34E-04	3.47E-04	1.79E-04
776	569859.97	4214922.66	2.82E-03	1.60E-03	4.30E-04	2.43E-04	1.94E-04	1.00E-04

777	569864.65	4214931.16	2.90E-03	1.64E-03	4.42E-04	2.50E-04	2.00E-04	1.03E-04
778	569869.32	4214939.67	2.99E-03	1.70E-03	4.57E-04	2.58E-04	2.06E-04	1.06E-04
779	569873.99	4214948.17	3.11E-03	1.76E-03	4.75E-04	2.68E-04	2.15E-04	1.10E-04
780	569878.67	4214956.67	3.26E-03	1.85E-03	4.98E-04	2.81E-04	2.25E-04	1.16E-04
781	569883.34	4214965.17	3.45E-03	1.95E-03	5.27E-04	2.97E-04	2.38E-04	1.22E-04
782	569888.02	4214973.67	3.66E-03	2.07E-03	5.59E-04	3.16E-04	2.52E-04	1.30E-04
783	569892.69	4214982.18	3.90E-03	2.21E-03	5.95E-04	3.36E-04	2.69E-04	1.38E-04
784	569897.37	4214990.68	4.17E-03	2.36E-03	6.36E-04	3.59E-04	2.87E-04	1.48E-04
785	569902.04	4214999.18	4.48E-03	2.54E-03	6.84E-04	3.86E-04	3.09E-04	1.59E-04
786	569906.72	4215007.68	4.84E-03	2.74E-03	7.39E-04	4.17E-04	3.33E-04	1.72E-04
787	569911.39	4215016.18	5.25E-03	2.97E-03	8.01E-04	4.52E-04	3.62E-04	1.86E-04
788	569851.21	4214927.48	2.88E-03	1.63E-03	4.40E-04	2.48E-04	1.98E-04	1.02E-04
789	569855.88	4214935.98	2.96E-03	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
790	569860.56	4214944.48	3.07E-03	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04
791	569865.23	4214952.99	3.20E-03	1.81E-03	4.88E-04	2.75E-04	2.20E-04	1.13E-04
792	569869.91	4214961.49	3.36E-03	1.91E-03	5.14E-04	2.90E-04	2.32E-04	1.19E-04
793	569874.58	4214969.99	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.46E-04	1.26E-04
794	569879.26	4214978.49	3.79E-03	2.14E-03	5.78E-04	3.26E-04	2.61E-04	1.34E-04
795	569883.93	4214986.99	4.03E-03	2.28E-03	6.15E-04	3.47E-04	2.78E-04	1.43E-04
796	569888.6	4214995.5	4.33E-03	2.45E-03	6.61E-04	3.73E-04	2.98E-04	1.53E-04
797	569893.28	4215004	4.66E-03	2.64E-03	7.12E-04	4.02E-04	3.21E-04	1.65E-04
798	569897.95	4215012.5	5.04E-03	2.85E-03	7.69E-04	4.34E-04	3.47E-04	1.79E-04
799	569902.63	4215021	5.47E-03	3.10E-03	8.35E-04	4.71E-04	3.77E-04	1.94E-04
800	569842.45	4214932.3	2.94E-03	1.66E-03	4.49E-04	2.53E-04	2.02E-04	1.04E-04
801	569847.12	4214940.8	3.03E-03	1.71E-03	4.62E-04	2.61E-04	2.09E-04	1.07E-04
802	569851.79	4214949.3	3.14E-03	1.78E-03	4.80E-04	2.71E-04	2.16E-04	1.11E-04
803	569856.47	4214957.8	3.29E-03	1.86E-03	5.02E-04	2.83E-04	2.26E-04	1.17E-04
804	569861.14	4214966.31	3.47E-03	1.97E-03	5.30E-04	2.99E-04	2.39E-04	1.23E-04
805	569865.82	4214974.81	3.68E-03	2.08E-03	5.62E-04	3.17E-04	2.54E-04	1.31E-04
806	569870.49	4214983.31	3.91E-03	2.22E-03	5.97E-04	3.37E-04	2.70E-04	1.39E-04
807	569875.17	4214991.81	4.18E-03	2.37E-03	6.38E-04	3.60E-04	2.88E-04	1.48E-04
808	569879.84	4215000.31	4.49E-03	2.55E-03	6.86E-04	3.87E-04	3.10E-04	1.59E-04
809	569884.52	4215008.82	4.85E-03	2.75E-03	7.40E-04	4.18E-04	3.34E-04	1.72E-04
810	569889.19	4215017.32	5.25E-03	2.97E-03	8.01E-04	4.52E-04	3.62E-04	1.86E-04
811	569893.87	4215025.82	5.70E-03	3.23E-03	8.71E-04	4.91E-04	3.93E-04	2.02E-04
812	569833.68	4214937.12	3.00E-03	1.70E-03	4.58E-04	2.58E-04	2.07E-04	1.06E-04
813	569838.36	4214945.62	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
814	569843.03	4214954.12	3.22E-03	1.82E-03	4.92E-04	2.77E-04	2.22E-04	1.14E-04
815	569847.71	4214962.62	3.39E-03	1.92E-03	5.17E-04	2.92E-04	2.33E-04	1.20E-04
816	569852.38	4214971.12	3.58E-03	2.03E-03	5.47E-04	3.09E-04	2.47E-04	1.27E-04
817	569857.06	4214979.63	3.80E-03	2.15E-03	5.80E-04	3.27E-04	2.62E-04	1.35E-04
818	569861.73	4214988.13	4.04E-03	2.29E-03	6.17E-04	3.48E-04	2.78E-04	1.43E-04
819	569866.4	4214996.63	4.34E-03	2.46E-03	6.62E-04	3.74E-04	2.99E-04	1.54E-04
820	569871.08	4215005.13	4.67E-03	2.64E-03	7.12E-04	4.02E-04	3.22E-04	1.66E-04
821	569875.75	4215013.63	5.04E-03	2.86E-03	7.70E-04	4.34E-04	3.47E-04	1.79E-04
822	569880.43	4215022.14	5.46E-03	3.09E-03	8.34E-04	4.70E-04	3.76E-04	1.94E-04
823	569885.1	4215030.64	5.94E-03	3.36E-03	9.06E-04	5.11E-04	4.09E-04	2.11E-04
824	569941.2	4215132.66	3.57E-02	2.02E-02	5.45E-03	3.08E-03	2.46E-03	1.27E-03
825	569945.87	4215141.16	3.98E-02	2.26E-02	6.08E-03	3.43E-03	2.74E-03	1.41E-03
826	569950.55	4215149.66	4.38E-02	2.48E-02	6.69E-03	3.78E-03	3.02E-03	1.55E-03
827	569824.92	4214941.93	3.07E-03	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04
828	569829.59	4214950.44	3.17E-03	1.80E-03	4.85E-04	2.73E-04	2.19E-04	1.13E-04

829	569834.27	4214958.94	3.32E-03	1.88E-03	5.06E-04	2.86E-04	2.28E-04	1.18E-04
830	569838.94	4214967.44	3.49E-03	1.98E-03	5.33E-04	3.01E-04	2.41E-04	1.24E-04
831	569843.62	4214975.94	3.69E-03	2.09E-03	5.64E-04	3.18E-04	2.54E-04	1.31E-04
832	569848.29	4214984.44	3.92E-03	2.22E-03	5.98E-04	3.37E-04	2.70E-04	1.39E-04
833	569852.97	4214992.95	4.18E-03	2.37E-03	6.39E-04	3.61E-04	2.88E-04	1.48E-04
834	569857.64	4215001.45	4.49E-03	2.55E-03	6.86E-04	3.87E-04	3.10E-04	1.59E-04
835	569862.32	4215009.95	4.84E-03	2.74E-03	7.39E-04	4.17E-04	3.34E-04	1.72E-04
836	569866.99	4215018.45	5.23E-03	2.96E-03	7.99E-04	4.51E-04	3.61E-04	1.86E-04
837	569871.67	4215026.95	5.67E-03	3.21E-03	8.66E-04	4.88E-04	3.91E-04	2.01E-04
838	569876.34	4215035.46	6.17E-03	3.49E-03	9.42E-04	5.31E-04	4.25E-04	2.19E-04
839	569927.76	4215128.98	3.08E-02	1.75E-02	4.71E-03	2.66E-03	2.13E-03	1.09E-03
840	569932.44	4215137.48	3.44E-02	1.95E-02	5.25E-03	2.96E-03	2.37E-03	1.22E-03
841	569937.11	4215145.98	3.79E-02	2.15E-02	5.79E-03	3.26E-03	2.61E-03	1.34E-03
842	569941.78	4215154.48	4.13E-02	2.34E-02	6.31E-03	3.56E-03	2.85E-03	1.47E-03
843	569816.16	4214946.75	3.13E-03	1.78E-03	4.79E-04	2.70E-04	2.16E-04	1.11E-04
844	569820.83	4214955.25	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
845	569825.51	4214963.76	3.41E-03	1.93E-03	5.21E-04	2.94E-04	2.35E-04	1.21E-04
846	569830.18	4214972.26	3.60E-03	2.04E-03	5.49E-04	3.10E-04	2.48E-04	1.28E-04
847	569834.86	4214980.76	3.81E-03	2.16E-03	5.81E-04	3.28E-04	2.62E-04	1.35E-04
848	569839.53	4214989.26	4.04E-03	2.29E-03	6.18E-04	3.49E-04	2.79E-04	1.43E-04
849	569844.2	4214997.76	4.33E-03	2.45E-03	6.61E-04	3.73E-04	2.98E-04	1.54E-04
850	569848.88	4215006.27	4.65E-03	2.64E-03	7.11E-04	4.01E-04	3.21E-04	1.65E-04
851	569853.55	4215014.77	5.02E-03	2.84E-03	7.66E-04	4.33E-04	3.46E-04	1.78E-04
852	569858.23	4215023.27	5.42E-03	3.07E-03	8.28E-04	4.67E-04	3.74E-04	1.92E-04
853	569862.9	4215031.77	5.88E-03	3.33E-03	8.97E-04	5.06E-04	4.05E-04	2.08E-04
854	569914.32	4215125.29	2.57E-02	1.45E-02	3.92E-03	2.21E-03	1.77E-03	9.10E-04
855	569919	4215133.79	3.02E-02	1.71E-02	4.61E-03	2.60E-03	2.08E-03	1.07E-03
856	569923.67	4215142.3	3.30E-02	1.87E-02	5.03E-03	2.84E-03	2.27E-03	1.17E-03
857	569928.35	4215150.8	3.60E-02	2.04E-02	5.50E-03	3.10E-03	2.48E-03	1.28E-03
858	569933.02	4215159.3	3.89E-02	2.21E-02	5.94E-03	3.35E-03	2.68E-03	1.38E-03
859	569802.72	4214943.07	3.11E-03	1.76E-03	4.75E-04	2.68E-04	2.14E-04	1.10E-04
860	569807.39	4214951.57	3.21E-03	1.82E-03	4.90E-04	2.77E-04	2.21E-04	1.14E-04
861	569812.07	4214960.07	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.19E-04
862	569816.74	4214968.57	3.51E-03	1.99E-03	5.36E-04	3.03E-04	2.42E-04	1.25E-04
863	569821.42	4214977.08	3.70E-03	2.10E-03	5.65E-04	3.19E-04	2.55E-04	1.31E-04
864	569826.09	4214985.58	3.92E-03	2.22E-03	5.98E-04	3.37E-04	2.70E-04	1.39E-04
865	569830.77	4214994.08	4.18E-03	2.37E-03	6.38E-04	3.60E-04	2.88E-04	1.48E-04
866	569835.44	4215002.58	4.48E-03	2.54E-03	6.84E-04	3.86E-04	3.09E-04	1.59E-04
867	569840.12	4215011.08	4.81E-03	2.73E-03	7.35E-04	4.15E-04	3.32E-04	1.71E-04
868	569844.79	4215019.59	5.19E-03	2.94E-03	7.93E-04	4.47E-04	3.58E-04	1.84E-04
869	569849.47	4215028.09	5.61E-03	3.18E-03	8.56E-04	4.83E-04	3.86E-04	1.99E-04
870	569854.14	4215036.59	6.08E-03	3.44E-03	9.28E-04	5.24E-04	4.19E-04	2.16E-04
871	569905.56	4215130.11	2.54E-02	1.44E-02	3.88E-03	2.19E-03	1.75E-03	9.01E-04
872	569910.24	4215138.61	2.93E-02	1.66E-02	4.48E-03	2.53E-03	2.02E-03	1.04E-03
873	569914.91	4215147.11	3.16E-02	1.79E-02	4.82E-03	2.72E-03	2.17E-03	1.12E-03
874	569919.58	4215155.62	3.43E-02	1.94E-02	5.23E-03	2.95E-03	2.36E-03	1.22E-03
875	569924.26	4215164.12	3.67E-02	2.08E-02	5.61E-03	3.16E-03	2.53E-03	1.30E-03
876	569792.9	4214938.94	3.09E-03	1.75E-03	4.71E-04	2.66E-04	2.13E-04	1.10E-04
877	569793.96	4214947.89	3.18E-03	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04
878	569798.63	4214956.39	3.29E-03	1.86E-03	5.03E-04	2.84E-04	2.27E-04	1.17E-04
879	569803.31	4214964.89	3.44E-03	1.95E-03	5.25E-04	2.96E-04	2.37E-04	1.22E-04
880	569807.98	4214973.39	3.61E-03	2.05E-03	5.51E-04	3.11E-04	2.49E-04	1.28E-04

881	569812.66	4214981.89	3.80E-03	2.16E-03	5.81E-04	3.28E-04	2.62E-04	1.35E-04
882	569817.33	4214990.4	4.04E-03	2.29E-03	6.16E-04	3.48E-04	2.78E-04	1.43E-04
883	569822	4214998.9	4.31E-03	2.44E-03	6.58E-04	3.71E-04	2.97E-04	1.53E-04
884	569826.68	4215007.4	4.62E-03	2.62E-03	7.06E-04	3.98E-04	3.18E-04	1.64E-04
885	569831.35	4215015.9	4.97E-03	2.82E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
886	569836.03	4215024.4	5.35E-03	3.03E-03	8.17E-04	4.61E-04	3.69E-04	1.90E-04
887	569840.7	4215032.91	5.78E-03	3.28E-03	8.83E-04	4.98E-04	3.99E-04	2.05E-04
888	569896.8	4215134.93	2.51E-02	1.42E-02	3.84E-03	2.17E-03	1.73E-03	8.92E-04
889	569901.47	4215143.43	2.84E-02	1.61E-02	4.33E-03	2.44E-03	1.96E-03	1.01E-03
890	569906.15	4215151.93	3.02E-02	1.71E-02	4.62E-03	2.61E-03	2.08E-03	1.07E-03
891	569910.82	4215160.43	3.26E-02	1.85E-02	4.98E-03	2.81E-03	2.25E-03	1.16E-03
892	569915.5	4215168.94	3.47E-02	1.96E-02	5.29E-03	2.99E-03	2.39E-03	1.23E-03
893	569784.15	4214943.89	3.15E-03	1.79E-03	4.82E-04	2.72E-04	2.17E-04	1.12E-04
894	569783.11	4214935.08	3.08E-03	1.74E-03	4.70E-04	2.65E-04	2.12E-04	1.09E-04
895	569789.87	4214961.21	3.38E-03	1.92E-03	5.16E-04	2.91E-04	2.33E-04	1.20E-04
896	569794.54	4214969.71	3.54E-03	2.00E-03	5.40E-04	3.05E-04	2.44E-04	1.25E-04
897	569799.22	4214978.21	3.71E-03	2.10E-03	5.67E-04	3.20E-04	2.56E-04	1.32E-04
898	569803.89	4214986.71	3.91E-03	2.22E-03	5.97E-04	3.37E-04	2.70E-04	1.39E-04
899	569808.57	4214995.21	4.16E-03	2.36E-03	6.35E-04	3.58E-04	2.87E-04	1.48E-04
900	569813.24	4215003.72	4.44E-03	2.52E-03	6.78E-04	3.83E-04	3.06E-04	1.58E-04
901	569817.92	4215012.22	4.76E-03	2.70E-03	7.27E-04	4.10E-04	3.28E-04	1.69E-04
902	569822.59	4215020.72	5.11E-03	2.90E-03	7.81E-04	4.41E-04	3.52E-04	1.81E-04
903	569827.27	4215029.22	5.50E-03	3.12E-03	8.40E-04	4.74E-04	3.79E-04	1.95E-04
904	569831.94	4215037.72	5.94E-03	3.36E-03	9.07E-04	5.12E-04	4.09E-04	2.11E-04
905	569888.04	4215139.75	2.45E-02	1.39E-02	3.75E-03	2.11E-03	1.69E-03	8.70E-04
906	569892.71	4215148.25	2.73E-02	1.55E-02	4.17E-03	2.35E-03	1.88E-03	9.69E-04
907	569897.38	4215156.75	2.89E-02	1.64E-02	4.41E-03	2.49E-03	1.99E-03	1.02E-03
908	569902.06	4215165.25	3.11E-02	1.76E-02	4.75E-03	2.68E-03	2.14E-03	1.10E-03
909	569906.73	4215173.75	3.25E-02	1.84E-02	4.97E-03	2.80E-03	2.24E-03	1.15E-03
910	569775.31	4214948.03	3.22E-03	1.82E-03	4.92E-04	2.77E-04	2.22E-04	1.14E-04
911	569774.18	4214938.54	3.13E-03	1.77E-03	4.78E-04	2.69E-04	2.16E-04	1.11E-04
912	569773.06	4214929.05	3.06E-03	1.73E-03	4.67E-04	2.64E-04	2.11E-04	1.09E-04
913	569776.43	4214957.52	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.18E-04
914	569781.11	4214966.02	3.47E-03	1.97E-03	5.30E-04	2.99E-04	2.39E-04	1.23E-04
915	569785.78	4214974.53	3.63E-03	2.06E-03	5.54E-04	3.13E-04	2.50E-04	1.29E-04
916	569790.45	4214983.03	3.81E-03	2.16E-03	5.82E-04	3.28E-04	2.63E-04	1.35E-04
917	569795.13	4214991.53	4.03E-03	2.28E-03	6.15E-04	3.47E-04	2.77E-04	1.43E-04
918	569799.8	4215000.03	4.27E-03	2.42E-03	6.53E-04	3.68E-04	2.95E-04	1.52E-04
919	569804.48	4215008.53	4.56E-03	2.58E-03	6.96E-04	3.93E-04	3.14E-04	1.62E-04
920	569809.15	4215017.04	4.88E-03	2.77E-03	7.46E-04	4.21E-04	3.36E-04	1.73E-04
921	569813.83	4215025.54	5.25E-03	2.97E-03	8.01E-04	4.52E-04	3.61E-04	1.86E-04
922	569818.5	4215034.04	5.64E-03	3.19E-03	8.61E-04	4.86E-04	3.89E-04	2.00E-04
923	569823.18	4215042.54	6.08E-03	3.44E-03	9.28E-04	5.24E-04	4.19E-04	2.16E-04
924	569879.27	4215144.56	2.37E-02	1.34E-02	3.62E-03	2.04E-03	1.63E-03	8.40E-04
925	569883.95	4215153.07	2.62E-02	1.48E-02	3.99E-03	2.25E-03	1.80E-03	9.28E-04
926	569888.62	4215161.57	2.75E-02	1.56E-02	4.20E-03	2.37E-03	1.90E-03	9.76E-04
927	569893.3	4215170.07	2.92E-02	1.66E-02	4.46E-03	2.52E-03	2.01E-03	1.04E-03
928	569897.97	4215178.57	3.05E-02	1.73E-02	4.65E-03	2.63E-03	2.10E-03	1.08E-03
929	569766.56	4214953.02	3.30E-03	1.87E-03	5.03E-04	2.84E-04	2.27E-04	1.17E-04
930	569765.46	4214943.7	3.20E-03	1.81E-03	4.88E-04	2.75E-04	2.20E-04	1.13E-04
931	569764.36	4214934.38	3.12E-03	1.77E-03	4.76E-04	2.69E-04	2.15E-04	1.11E-04
932	569763.25	4214925.06	3.07E-03	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04

933	569777.2	4214820.65	1.82E-03	1.03E-03	2.78E-04	1.57E-04	1.26E-04	6.46E-05
934	569782.9	4214813.19	1.74E-03	9.87E-04	2.66E-04	1.50E-04	1.20E-04	6.18E-05
935	569767.67	4214962.34	3.43E-03	1.94E-03	5.23E-04	2.95E-04	2.36E-04	1.22E-04
936	569772.34	4214970.84	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.45E-04	1.26E-04
937	569777.02	4214979.34	3.72E-03	2.11E-03	5.68E-04	3.21E-04	2.56E-04	1.32E-04
938	569781.69	4214987.85	3.91E-03	2.21E-03	5.97E-04	3.37E-04	2.69E-04	1.39E-04
939	569786.37	4214996.35	4.13E-03	2.34E-03	6.30E-04	3.56E-04	2.85E-04	1.46E-04
940	569791.04	4215004.85	4.38E-03	2.48E-03	6.69E-04	3.77E-04	3.02E-04	1.55E-04
941	569795.72	4215013.35	4.66E-03	2.64E-03	7.12E-04	4.02E-04	3.21E-04	1.65E-04
942	569800.39	4215021.85	4.98E-03	2.82E-03	7.61E-04	4.29E-04	3.43E-04	1.77E-04
943	569805.07	4215030.36	5.35E-03	3.03E-03	8.16E-04	4.61E-04	3.68E-04	1.90E-04
944	569809.74	4215038.86	5.75E-03	3.26E-03	8.78E-04	4.95E-04	3.96E-04	2.04E-04
945	569814.41	4215047.36	6.20E-03	3.51E-03	9.46E-04	5.34E-04	4.27E-04	2.20E-04
946	569819.09	4215055.86	6.67E-03	3.78E-03	1.02E-03	5.75E-04	4.60E-04	2.37E-04
947	569870.51	4215149.38	2.24E-02	1.27E-02	3.42E-03	1.93E-03	1.54E-03	7.95E-04
948	569875.18	4215157.88	2.49E-02	1.41E-02	3.80E-03	2.15E-03	1.72E-03	8.83E-04
949	569879.86	4215166.39	2.68E-02	1.52E-02	4.10E-03	2.31E-03	1.85E-03	9.52E-04
950	569884.53	4215174.89	2.75E-02	1.56E-02	4.20E-03	2.37E-03	1.89E-03	9.75E-04
951	569889.21	4215183.39	2.86E-02	1.62E-02	4.37E-03	2.47E-03	1.97E-03	1.02E-03
952	569757.82	4214957.98	3.38E-03	1.91E-03	5.16E-04	2.91E-04	2.33E-04	1.20E-04
953	569756.73	4214948.8	3.27E-03	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
954	569755.65	4214939.63	3.19E-03	1.80E-03	4.86E-04	2.75E-04	2.20E-04	1.13E-04
955	569754.56	4214930.45	3.12E-03	1.77E-03	4.77E-04	2.69E-04	2.15E-04	1.11E-04
956	569753.47	4214921.27	3.08E-03	1.75E-03	4.71E-04	2.66E-04	2.12E-04	1.09E-04
957	569750.39	4214840.51	2.00E-03	1.13E-03	3.05E-04	1.72E-04	1.38E-04	7.09E-05
958	569755.99	4214833.16	1.91E-03	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.79E-05
959	569767.21	4214818.47	1.78E-03	1.01E-03	2.71E-04	1.53E-04	1.22E-04	6.30E-05
960	569772.81	4214811.12	1.71E-03	9.67E-04	2.61E-04	1.47E-04	1.18E-04	6.06E-05
961	569784.02	4214796.43	1.60E-03	9.05E-04	2.44E-04	1.38E-04	1.10E-04	5.66E-05
962	569758.91	4214967.16	3.51E-03	1.99E-03	5.36E-04	3.03E-04	2.42E-04	1.25E-04
963	569763.58	4214975.66	3.65E-03	2.07E-03	5.57E-04	3.15E-04	2.52E-04	1.29E-04
964	569768.25	4214984.16	3.81E-03	2.16E-03	5.82E-04	3.29E-04	2.63E-04	1.35E-04
965	569772.93	4214992.66	4.01E-03	2.27E-03	6.12E-04	3.46E-04	2.76E-04	1.42E-04
966	569777.6	4215001.17	4.23E-03	2.40E-03	6.46E-04	3.65E-04	2.92E-04	1.50E-04
967	569782.28	4215009.67	4.47E-03	2.53E-03	6.83E-04	3.85E-04	3.08E-04	1.59E-04
968	569786.95	4215018.17	4.75E-03	2.69E-03	7.26E-04	4.09E-04	3.27E-04	1.69E-04
969	569791.63	4215026.67	5.07E-03	2.87E-03	7.75E-04	4.37E-04	3.50E-04	1.80E-04
970	569796.3	4215035.17	5.43E-03	3.08E-03	8.30E-04	4.68E-04	3.74E-04	1.93E-04
971	569800.98	4215043.68	5.83E-03	3.30E-03	8.90E-04	5.02E-04	4.02E-04	2.07E-04
972	569805.65	4215052.18	6.27E-03	3.55E-03	9.57E-04	5.40E-04	4.32E-04	2.22E-04
973	569810.33	4215060.68	6.75E-03	3.82E-03	1.03E-03	5.81E-04	4.65E-04	2.39E-04
974	569861.75	4215154.2	2.06E-02	1.17E-02	3.15E-03	1.78E-03	1.42E-03	7.31E-04
975	569866.42	4215162.7	2.32E-02	1.31E-02	3.54E-03	2.00E-03	1.60E-03	8.22E-04
976	569871.1	4215171.2	2.52E-02	1.43E-02	3.85E-03	2.18E-03	1.74E-03	8.95E-04
977	569875.77	4215179.71	2.66E-02	1.51E-02	4.07E-03	2.30E-03	1.84E-03	9.45E-04
978	569880.45	4215188.21	2.71E-02	1.53E-02	4.14E-03	2.33E-03	1.87E-03	9.61E-04
979	569749.07	4214962.92	3.46E-03	1.96E-03	5.28E-04	2.98E-04	2.39E-04	1.23E-04
980	569748	4214953.87	3.35E-03	1.90E-03	5.11E-04	2.88E-04	2.31E-04	1.19E-04
981	569746.93	4214944.81	3.26E-03	1.84E-03	4.97E-04	2.81E-04	2.24E-04	1.16E-04
982	569745.85	4214935.76	3.18E-03	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04
983	569744.78	4214926.71	3.13E-03	1.77E-03	4.78E-04	2.69E-04	2.16E-04	1.11E-04
984	569743.71	4214917.65	3.09E-03	1.75E-03	4.71E-04	2.66E-04	2.13E-04	1.09E-04

985	569736.21	4214854.27	2.18E-03	1.24E-03	3.33E-04	1.88E-04	1.50E-04	7.75E-05
986	569740.67	4214837.97	1.97E-03	1.11E-03	3.00E-04	1.69E-04	1.35E-04	6.97E-05
987	569746.2	4214830.72	1.88E-03	1.07E-03	2.88E-04	1.62E-04	1.30E-04	6.68E-05
988	569757.26	4214816.22	1.74E-03	9.86E-04	2.66E-04	1.50E-04	1.20E-04	6.17E-05
989	569768.32	4214801.73	1.63E-03	9.22E-04	2.48E-04	1.40E-04	1.12E-04	5.77E-05
990	569779.39	4214787.23	1.54E-03	8.70E-04	2.34E-04	1.32E-04	1.06E-04	5.45E-05
991	569750.14	4214971.98	3.59E-03	2.04E-03	5.49E-04	3.10E-04	2.48E-04	1.27E-04
992	569754.82	4214980.48	3.73E-03	2.12E-03	5.70E-04	3.22E-04	2.57E-04	1.32E-04
993	569759.49	4214988.98	3.91E-03	2.21E-03	5.97E-04	3.37E-04	2.69E-04	1.39E-04
994	569764.17	4214997.48	4.11E-03	2.33E-03	6.27E-04	3.54E-04	2.83E-04	1.46E-04
995	569768.84	4215005.98	4.33E-03	2.45E-03	6.61E-04	3.73E-04	2.98E-04	1.54E-04
996	569773.52	4215014.49	4.57E-03	2.59E-03	6.98E-04	3.94E-04	3.15E-04	1.62E-04
997	569778.19	4215022.99	4.85E-03	2.75E-03	7.41E-04	4.18E-04	3.34E-04	1.72E-04
998	569782.86	4215031.49	5.16E-03	2.92E-03	7.88E-04	4.45E-04	3.56E-04	1.83E-04
999	569787.54	4215039.99	5.51E-03	3.12E-03	8.41E-04	4.75E-04	3.80E-04	1.95E-04
1000	569792.21	4215048.49	5.90E-03	3.34E-03	9.01E-04	5.08E-04	4.06E-04	2.09E-04
1001	569796.89	4215057	6.33E-03	3.58E-03	9.66E-04	5.45E-04	4.36E-04	2.24E-04
1002	569801.56	4215065.5	6.79E-03	3.85E-03	1.04E-03	5.85E-04	4.68E-04	2.41E-04
1003	569806.24	4215074	7.29E-03	4.13E-03	1.11E-03	6.28E-04	5.03E-04	2.59E-04
1004	569852.98	4215159.02	1.89E-02	1.07E-02	2.88E-03	1.63E-03	1.30E-03	6.69E-04
1005	569857.66	4215167.52	2.14E-02	1.21E-02	3.26E-03	1.84E-03	1.47E-03	7.57E-04
1006	569862.33	4215176.02	2.36E-02	1.34E-02	3.60E-03	2.03E-03	1.63E-03	8.37E-04
1007	569867.01	4215184.52	2.52E-02	1.43E-02	3.85E-03	2.17E-03	1.74E-03	8.94E-04
1008	569871.68	4215193.03	2.58E-02	1.46E-02	3.94E-03	2.22E-03	1.78E-03	9.15E-04
1009	569740.24	4214967.21	3.53E-03	2.00E-03	5.40E-04	3.05E-04	2.44E-04	1.25E-04
1010	569739.11	4214957.62	3.41E-03	1.93E-03	5.21E-04	2.94E-04	2.35E-04	1.21E-04
1011	569737.97	4214948.03	3.31E-03	1.88E-03	5.06E-04	2.85E-04	2.28E-04	1.17E-04
1012	569736.84	4214938.45	3.23E-03	1.83E-03	4.93E-04	2.78E-04	2.23E-04	1.15E-04
1013	569735.7	4214928.86	3.17E-03	1.79E-03	4.84E-04	2.73E-04	2.18E-04	1.12E-04
1014	569734.57	4214919.27	3.10E-03	1.76E-03	4.74E-04	2.67E-04	2.14E-04	1.10E-04
1015	569727.76	4214861.75	2.28E-03	1.29E-03	3.49E-04	1.97E-04	1.57E-04	8.10E-05
1016	569726.62	4214852.16	2.15E-03	1.22E-03	3.28E-04	1.85E-04	1.48E-04	7.61E-05
1017	569731.35	4214834.9	1.93E-03	1.09E-03	2.95E-04	1.66E-04	1.33E-04	6.85E-05
1018	569737.2	4214827.23	1.85E-03	1.05E-03	2.83E-04	1.60E-04	1.28E-04	6.57E-05
1019	569743.06	4214819.55	1.77E-03	1.01E-03	2.71E-04	1.53E-04	1.22E-04	6.30E-05
1020	569748.92	4214811.88	1.70E-03	9.63E-04	2.60E-04	1.47E-04	1.17E-04	6.03E-05
1021	569754.77	4214804.21	1.64E-03	9.27E-04	2.50E-04	1.41E-04	1.13E-04	5.80E-05
1022	569760.63	4214796.53	1.59E-03	9.02E-04	2.43E-04	1.37E-04	1.10E-04	5.65E-05
1023	569766.49	4214788.86	1.55E-03	8.77E-04	2.36E-04	1.33E-04	1.07E-04	5.49E-05
1024	569772.34	4214781.18	1.50E-03	8.51E-04	2.29E-04	1.29E-04	1.03E-04	5.33E-05
1025	569741.38	4214976.79	3.68E-03	2.08E-03	5.61E-04	3.17E-04	2.53E-04	1.30E-04
1026	569746.05	4214985.3	3.82E-03	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
1027	569750.73	4214993.8	4.00E-03	2.26E-03	6.10E-04	3.44E-04	2.75E-04	1.42E-04
1028	569755.4	4215002.3	4.20E-03	2.38E-03	6.41E-04	3.62E-04	2.89E-04	1.49E-04
1029	569760.08	4215010.8	4.42E-03	2.51E-03	6.75E-04	3.81E-04	3.05E-04	1.57E-04
1030	569764.75	4215019.3	4.67E-03	2.65E-03	7.13E-04	4.02E-04	3.22E-04	1.66E-04
1031	569769.43	4215027.81	4.95E-03	2.80E-03	7.56E-04	4.26E-04	3.41E-04	1.76E-04
1032	569774.1	4215036.31	5.25E-03	2.98E-03	8.02E-04	4.53E-04	3.62E-04	1.86E-04
1033	569778.78	4215044.81	5.58E-03	3.16E-03	8.53E-04	4.81E-04	3.85E-04	1.98E-04
1034	569783.45	4215053.31	5.96E-03	3.38E-03	9.10E-04	5.13E-04	4.11E-04	2.11E-04
1035	569788.13	4215061.81	6.37E-03	3.61E-03	9.73E-04	5.49E-04	4.39E-04	2.26E-04
1036	569792.8	4215070.32	6.82E-03	3.87E-03	1.04E-03	5.88E-04	4.70E-04	2.42E-04

1037	569797.48	4215078.82	7.31E-03	4.14E-03	1.12E-03	6.29E-04	5.03E-04	2.59E-04
1038	569844.22	4215163.84	1.72E-02	9.74E-03	2.62E-03	1.48E-03	1.18E-03	6.10E-04
1039	569848.9	4215172.34	1.99E-02	1.13E-02	3.04E-03	1.71E-03	1.37E-03	7.05E-04
1040	569853.57	4215180.84	2.23E-02	1.26E-02	3.40E-03	1.92E-03	1.53E-03	7.89E-04
1041	569858.25	4215189.34	2.39E-02	1.36E-02	3.66E-03	2.06E-03	1.65E-03	8.49E-04
1042	569862.92	4215197.84	2.49E-02	1.41E-02	3.81E-03	2.15E-03	1.72E-03	8.85E-04
1043	569731.5	4214972.17	3.61E-03	2.05E-03	5.52E-04	3.11E-04	2.49E-04	1.28E-04
1044	569730.38	4214962.72	3.49E-03	1.98E-03	5.34E-04	3.01E-04	2.41E-04	1.24E-04
1045	569729.26	4214953.28	3.39E-03	1.92E-03	5.18E-04	2.92E-04	2.34E-04	1.20E-04
1046	569728.14	4214943.83	3.30E-03	1.87E-03	5.04E-04	2.85E-04	2.28E-04	1.17E-04
1047	569727.03	4214934.39	3.23E-03	1.83E-03	4.93E-04	2.78E-04	2.23E-04	1.15E-04
1048	569725.91	4214924.94	3.17E-03	1.79E-03	4.84E-04	2.73E-04	2.18E-04	1.12E-04
1049	569724.79	4214915.5	3.08E-03	1.74E-03	4.70E-04	2.65E-04	2.12E-04	1.09E-04
1050	569719.2	4214868.27	2.38E-03	1.35E-03	3.64E-04	2.05E-04	1.64E-04	8.44E-05
1051	569718.08	4214858.83	2.24E-03	1.27E-03	3.42E-04	1.93E-04	1.54E-04	7.95E-05
1052	569716.96	4214849.38	2.12E-03	1.20E-03	3.23E-04	1.82E-04	1.46E-04	7.51E-05
1053	569721.61	4214832.38	1.91E-03	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.78E-05
1054	569727.38	4214824.82	1.83E-03	1.04E-03	2.80E-04	1.58E-04	1.26E-04	6.51E-05
1055	569733.15	4214817.26	1.76E-03	9.98E-04	2.69E-04	1.52E-04	1.21E-04	6.25E-05
1056	569738.92	4214809.7	1.69E-03	9.58E-04	2.58E-04	1.46E-04	1.17E-04	6.00E-05
1057	569744.69	4214802.14	1.63E-03	9.26E-04	2.50E-04	1.41E-04	1.13E-04	5.80E-05
1058	569750.46	4214794.57	1.59E-03	8.99E-04	2.42E-04	1.37E-04	1.09E-04	5.63E-05
1059	569756.23	4214787.01	1.54E-03	8.73E-04	2.35E-04	1.33E-04	1.06E-04	5.47E-05
1060	569762	4214779.45	1.50E-03	8.49E-04	2.29E-04	1.29E-04	1.03E-04	5.31E-05
1061	569767.77	4214771.89	1.47E-03	8.30E-04	2.24E-04	1.26E-04	1.01E-04	5.20E-05
1062	569732.62	4214981.61	3.75E-03	2.13E-03	5.73E-04	3.23E-04	2.59E-04	1.33E-04
1063	569737.29	4214990.11	3.91E-03	2.21E-03	5.96E-04	3.37E-04	2.69E-04	1.39E-04
1064	569741.97	4214998.62	4.09E-03	2.31E-03	6.24E-04	3.52E-04	2.82E-04	1.45E-04
1065	569746.64	4215007.12	4.29E-03	2.43E-03	6.55E-04	3.69E-04	2.95E-04	1.52E-04
1066	569751.32	4215015.62	4.51E-03	2.55E-03	6.88E-04	3.88E-04	3.11E-04	1.60E-04
1067	569755.99	4215024.12	4.75E-03	2.69E-03	7.26E-04	4.10E-04	3.28E-04	1.69E-04
1068	569760.66	4215032.62	5.03E-03	2.85E-03	7.68E-04	4.33E-04	3.46E-04	1.78E-04
1069	569765.34	4215041.13	5.32E-03	3.02E-03	8.13E-04	4.59E-04	3.67E-04	1.89E-04
1070	569770.01	4215049.63	5.65E-03	3.20E-03	8.63E-04	4.87E-04	3.90E-04	2.01E-04
1071	569774.69	4215058.13	6.02E-03	3.41E-03	9.19E-04	5.19E-04	4.15E-04	2.14E-04
1072	569779.36	4215066.63	6.42E-03	3.63E-03	9.80E-04	5.53E-04	4.42E-04	2.28E-04
1073	569784.04	4215075.13	6.84E-03	3.87E-03	1.04E-03	5.89E-04	4.71E-04	2.43E-04
1074	569788.71	4215083.64	7.30E-03	4.14E-03	1.11E-03	6.29E-04	5.03E-04	2.59E-04
1075	569793.39	4215092.14	7.79E-03	4.41E-03	1.19E-03	6.71E-04	5.37E-04	2.76E-04
1076	569835.46	4215168.66	1.65E-02	9.37E-03	2.52E-03	1.42E-03	1.14E-03	5.86E-04
1077	569840.13	4215177.16	1.90E-02	1.07E-02	2.90E-03	1.63E-03	1.31E-03	6.73E-04
1078	569844.81	4215185.66	2.13E-02	1.21E-02	3.25E-03	1.83E-03	1.47E-03	7.55E-04
1079	569849.48	4215194.16	2.30E-02	1.30E-02	3.51E-03	1.98E-03	1.58E-03	8.14E-04
1080	569854.16	4215202.66	2.34E-02	1.33E-02	3.58E-03	2.02E-03	1.61E-03	8.31E-04
1081	569722.75	4214977.11	3.69E-03	2.09E-03	5.64E-04	3.18E-04	2.54E-04	1.31E-04
1082	569721.65	4214967.79	3.57E-03	2.02E-03	5.45E-04	3.08E-04	2.46E-04	1.27E-04
1083	569720.54	4214958.47	3.47E-03	1.97E-03	5.30E-04	2.99E-04	2.39E-04	1.23E-04
1084	569719.44	4214949.15	3.38E-03	1.91E-03	5.16E-04	2.91E-04	2.33E-04	1.20E-04
1085	569718.34	4214939.83	3.29E-03	1.87E-03	5.03E-04	2.84E-04	2.27E-04	1.17E-04
1086	569717.23	4214930.51	3.22E-03	1.83E-03	4.92E-04	2.78E-04	2.22E-04	1.14E-04
1087	569716.13	4214921.19	3.14E-03	1.78E-03	4.79E-04	2.71E-04	2.16E-04	1.11E-04
1088	569715.03	4214911.87	3.04E-03	1.72E-03	4.64E-04	2.62E-04	2.09E-04	1.08E-04

1089	569711.71	4214883.9	2.63E-03	1.49E-03	4.02E-04	2.27E-04	1.81E-04	9.34E-05
1090	569710.61	4214874.58	2.48E-03	1.40E-03	3.79E-04	2.14E-04	1.71E-04	8.80E-05
1091	569709.51	4214865.26	2.34E-03	1.33E-03	3.57E-04	2.02E-04	1.61E-04	8.30E-05
1092	569708.4	4214855.94	2.21E-03	1.25E-03	3.38E-04	1.91E-04	1.52E-04	7.85E-05
1093	569707.3	4214846.62	2.10E-03	1.19E-03	3.20E-04	1.81E-04	1.44E-04	7.44E-05
1094	569711.89	4214829.84	1.91E-03	1.08E-03	2.92E-04	1.64E-04	1.32E-04	6.77E-05
1095	569717.59	4214822.38	1.83E-03	1.04E-03	2.79E-04	1.58E-04	1.26E-04	6.49E-05
1096	569723.28	4214814.92	1.75E-03	9.91E-04	2.67E-04	1.51E-04	1.21E-04	6.21E-05
1097	569728.97	4214807.46	1.68E-03	9.53E-04	2.57E-04	1.45E-04	1.16E-04	5.97E-05
1098	569734.67	4214799.99	1.64E-03	9.27E-04	2.50E-04	1.41E-04	1.13E-04	5.80E-05
1099	569740.36	4214792.53	1.59E-03	9.02E-04	2.43E-04	1.37E-04	1.10E-04	5.65E-05
1100	569746.06	4214785.07	1.55E-03	8.76E-04	2.36E-04	1.33E-04	1.07E-04	5.49E-05
1101	569751.75	4214777.61	1.50E-03	8.49E-04	2.29E-04	1.29E-04	1.03E-04	5.32E-05
1102	569757.44	4214770.15	1.47E-03	8.34E-04	2.25E-04	1.27E-04	1.01E-04	5.22E-05
1103	569763.14	4214762.69	1.45E-03	8.22E-04	2.21E-04	1.25E-04	9.99E-05	5.14E-05
1104	569723.85	4214986.43	3.83E-03	2.17E-03	5.85E-04	3.30E-04	2.64E-04	1.36E-04
1105	569728.53	4214994.93	3.99E-03	2.26E-03	6.09E-04	3.44E-04	2.75E-04	1.42E-04
1106	569733.2	4215003.43	4.17E-03	2.36E-03	6.37E-04	3.59E-04	2.87E-04	1.48E-04
1107	569737.88	4215011.94	4.37E-03	2.48E-03	6.67E-04	3.76E-04	3.01E-04	1.55E-04
1108	569742.55	4215020.44	4.59E-03	2.60E-03	7.01E-04	3.96E-04	3.16E-04	1.63E-04
1109	569747.23	4215028.94	4.83E-03	2.74E-03	7.38E-04	4.17E-04	3.33E-04	1.71E-04
1110	569751.9	4215037.44	5.09E-03	2.89E-03	7.78E-04	4.39E-04	3.51E-04	1.81E-04
1111	569756.58	4215045.94	5.38E-03	3.05E-03	8.21E-04	4.64E-04	3.71E-04	1.91E-04
1112	569761.25	4215054.45	5.71E-03	3.24E-03	8.72E-04	4.92E-04	3.94E-04	2.03E-04
1113	569765.93	4215062.95	6.07E-03	3.44E-03	9.26E-04	5.23E-04	4.18E-04	2.15E-04
1114	569770.6	4215071.45	6.45E-03	3.65E-03	9.85E-04	5.56E-04	4.44E-04	2.29E-04
1115	569775.28	4215079.95	6.85E-03	3.88E-03	1.05E-03	5.91E-04	4.72E-04	2.43E-04
1116	569779.95	4215088.45	7.29E-03	4.13E-03	1.11E-03	6.28E-04	5.02E-04	2.58E-04
1117	569784.62	4215096.96	7.74E-03	4.38E-03	1.18E-03	6.67E-04	5.33E-04	2.74E-04
1118	569789.3	4215105.46	8.23E-03	4.66E-03	1.26E-03	7.09E-04	5.67E-04	2.92E-04
1119	569826.7	4215173.47	1.61E-02	9.11E-03	2.46E-03	1.39E-03	1.11E-03	5.70E-04
1120	569831.37	4215181.98	1.83E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.50E-04
1121	569836.05	4215190.48	2.04E-02	1.16E-02	3.12E-03	1.76E-03	1.41E-03	7.25E-04
1122	569840.72	4215198.98	2.18E-02	1.23E-02	3.33E-03	1.88E-03	1.50E-03	7.73E-04
1123	569845.39	4215207.48	2.21E-02	1.25E-02	3.37E-03	1.90E-03	1.52E-03	7.83E-04
1124	569714	4214982.04	3.76E-03	2.13E-03	5.74E-04	3.24E-04	2.59E-04	1.33E-04
1125	569712.91	4214972.83	3.64E-03	2.06E-03	5.56E-04	3.14E-04	2.51E-04	1.29E-04
1126	569711.82	4214963.62	3.54E-03	2.00E-03	5.40E-04	3.05E-04	2.44E-04	1.25E-04
1127	569710.73	4214954.41	3.45E-03	1.95E-03	5.27E-04	2.97E-04	2.38E-04	1.22E-04
1128	569709.64	4214945.19	3.36E-03	1.90E-03	5.13E-04	2.89E-04	2.32E-04	1.19E-04
1129	569708.55	4214935.98	3.28E-03	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
1130	569707.46	4214926.77	3.21E-03	1.82E-03	4.91E-04	2.77E-04	2.21E-04	1.14E-04
1131	569706.37	4214917.56	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
1132	569705.28	4214908.35	2.98E-03	1.69E-03	4.55E-04	2.57E-04	2.05E-04	1.06E-04
1133	569704.19	4214899.14	2.86E-03	1.62E-03	4.37E-04	2.47E-04	1.97E-04	1.02E-04
1134	569703.09	4214889.93	2.72E-03	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.64E-05
1135	569702	4214880.72	2.57E-03	1.45E-03	3.92E-04	2.21E-04	1.77E-04	9.11E-05
1136	569700.91	4214871.51	2.43E-03	1.38E-03	3.71E-04	2.10E-04	1.68E-04	8.63E-05
1137	569699.82	4214862.3	2.31E-03	1.31E-03	3.52E-04	1.99E-04	1.59E-04	8.18E-05
1138	569698.73	4214853.08	2.19E-03	1.24E-03	3.34E-04	1.89E-04	1.51E-04	7.76E-05
1139	569697.64	4214843.87	2.08E-03	1.18E-03	3.18E-04	1.79E-04	1.43E-04	7.38E-05
1140	569702.18	4214827.29	1.91E-03	1.08E-03	2.91E-04	1.64E-04	1.32E-04	6.77E-05

1141	569707.81	4214819.92	1.83E-03	1.04E-03	2.80E-04	1.58E-04	1.26E-04	6.50E-05
1142	569713.43	4214812.54	1.76E-03	9.95E-04	2.68E-04	1.51E-04	1.21E-04	6.23E-05
1143	569719.06	4214805.17	1.69E-03	9.55E-04	2.57E-04	1.45E-04	1.16E-04	5.98E-05
1144	569730.31	4214790.42	1.60E-03	9.07E-04	2.45E-04	1.38E-04	1.10E-04	5.68E-05
1145	569735.94	4214783.05	1.56E-03	8.84E-04	2.38E-04	1.34E-04	1.07E-04	5.53E-05
1146	569741.57	4214775.67	1.52E-03	8.59E-04	2.32E-04	1.31E-04	1.05E-04	5.38E-05
1147	569752.82	4214760.93	1.46E-03	8.30E-04	2.24E-04	1.26E-04	1.01E-04	5.20E-05
1148	569715.09	4214991.25	3.91E-03	2.21E-03	5.96E-04	3.37E-04	2.69E-04	1.39E-04
1149	569719.77	4214999.75	4.07E-03	2.30E-03	6.21E-04	3.51E-04	2.80E-04	1.44E-04
1150	569724.44	4215008.25	4.25E-03	2.41E-03	6.49E-04	3.66E-04	2.93E-04	1.51E-04
1151	569729.12	4215016.75	4.45E-03	2.52E-03	6.79E-04	3.83E-04	3.07E-04	1.58E-04
1152	569733.79	4215025.26	4.67E-03	2.65E-03	7.13E-04	4.02E-04	3.22E-04	1.66E-04
1153	569738.46	4215033.76	4.91E-03	2.78E-03	7.49E-04	4.23E-04	3.38E-04	1.74E-04
1154	569743.14	4215042.26	5.16E-03	2.92E-03	7.88E-04	4.45E-04	3.56E-04	1.83E-04
1155	569747.81	4215050.76	5.44E-03	3.08E-03	8.31E-04	4.69E-04	3.75E-04	1.93E-04
1156	569752.49	4215059.26	5.75E-03	3.26E-03	8.79E-04	4.96E-04	3.97E-04	2.04E-04
1157	569757.16	4215067.77	6.10E-03	3.45E-03	9.31E-04	5.25E-04	4.20E-04	2.16E-04
1158	569761.84	4215076.27	6.46E-03	3.66E-03	9.87E-04	5.57E-04	4.45E-04	2.29E-04
1159	569766.51	4215084.77	6.86E-03	3.88E-03	1.05E-03	5.91E-04	4.72E-04	2.43E-04
1160	569771.19	4215093.27	7.27E-03	4.12E-03	1.11E-03	6.26E-04	5.01E-04	2.58E-04
1161	569775.86	4215101.77	7.70E-03	4.36E-03	1.18E-03	6.63E-04	5.30E-04	2.73E-04
1162	569780.54	4215110.28	8.15E-03	4.62E-03	1.24E-03	7.02E-04	5.61E-04	2.89E-04
1163	569817.93	4215178.29	1.56E-02	8.83E-03	2.38E-03	1.34E-03	1.07E-03	5.53E-04
1164	569822.61	4215186.79	1.77E-02	1.00E-02	2.70E-03	1.52E-03	1.22E-03	6.26E-04
1165	569827.28	4215195.3	1.96E-02	1.11E-02	2.99E-03	1.69E-03	1.35E-03	6.95E-04
1166	569831.96	4215203.8	2.03E-02	1.15E-02	3.09E-03	1.74E-03	1.40E-03	7.18E-04
1167	569836.63	4215212.3	2.06E-02	1.17E-02	3.14E-03	1.77E-03	1.42E-03	7.30E-04
1168	569705.25	4214986.95	3.82E-03	2.17E-03	5.84E-04	3.30E-04	2.64E-04	1.36E-04
1169	569704.17	4214977.84	3.70E-03	2.10E-03	5.66E-04	3.19E-04	2.55E-04	1.31E-04
1170	569703.09	4214968.73	3.60E-03	2.04E-03	5.50E-04	3.10E-04	2.48E-04	1.28E-04
1171	569702.01	4214959.61	3.52E-03	1.99E-03	5.37E-04	3.03E-04	2.42E-04	1.25E-04
1172	569700.93	4214950.5	3.43E-03	1.94E-03	5.24E-04	2.96E-04	2.36E-04	1.22E-04
1173	569699.85	4214941.39	3.35E-03	1.90E-03	5.11E-04	2.88E-04	2.31E-04	1.19E-04
1174	569698.78	4214932.27	3.27E-03	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
1175	569697.7	4214923.16	3.18E-03	1.80E-03	4.85E-04	2.74E-04	2.19E-04	1.13E-04
1176	569696.62	4214914.05	3.04E-03	1.72E-03	4.65E-04	2.62E-04	2.10E-04	1.08E-04
1177	569695.54	4214904.93	2.91E-03	1.65E-03	4.45E-04	2.51E-04	2.01E-04	1.03E-04
1178	569694.46	4214895.82	2.79E-03	1.58E-03	4.25E-04	2.40E-04	1.92E-04	9.88E-05
1179	569693.38	4214886.7	2.64E-03	1.50E-03	4.04E-04	2.28E-04	1.82E-04	9.38E-05
1180	569692.3	4214877.59	2.51E-03	1.42E-03	3.84E-04	2.17E-04	1.73E-04	8.92E-05
1181	569691.22	4214868.48	2.40E-03	1.36E-03	3.66E-04	2.06E-04	1.65E-04	8.50E-05
1182	569690.14	4214859.36	2.28E-03	1.29E-03	3.48E-04	1.96E-04	1.57E-04	8.09E-05
1183	569689.06	4214850.25	2.17E-03	1.23E-03	3.32E-04	1.87E-04	1.50E-04	7.71E-05
1184	569687.98	4214841.14	2.07E-03	1.18E-03	3.17E-04	1.79E-04	1.43E-04	7.36E-05
1185	569692.47	4214824.73	1.91E-03	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.79E-05
1186	569703.61	4214810.14	1.77E-03	1.00E-03	2.70E-04	1.52E-04	1.22E-04	6.26E-05
1187	569714.74	4214795.55	1.66E-03	9.43E-04	2.54E-04	1.43E-04	1.15E-04	5.90E-05
1188	569725.88	4214780.96	1.58E-03	8.94E-04	2.41E-04	1.36E-04	1.09E-04	5.60E-05
1189	569731.45	4214773.66	1.54E-03	8.75E-04	2.36E-04	1.33E-04	1.06E-04	5.48E-05
1190	569742.58	4214759.07	1.50E-03	8.50E-04	2.29E-04	1.29E-04	1.03E-04	5.32E-05
1191	569706.33	4214996.07	3.98E-03	2.25E-03	6.07E-04	3.43E-04	2.74E-04	1.41E-04
1192	569711	4215004.57	4.14E-03	2.34E-03	6.32E-04	3.56E-04	2.85E-04	1.47E-04

1193	569715.68	4215013.07	4.31E-03	2.44E-03	6.59E-04	3.72E-04	2.97E-04	1.53E-04
1194	569720.35	4215021.57	4.52E-03	2.56E-03	6.90E-04	3.89E-04	3.11E-04	1.60E-04
1195	569725.03	4215030.07	4.74E-03	2.68E-03	7.23E-04	4.08E-04	3.26E-04	1.68E-04
1196	569729.7	4215038.58	4.97E-03	2.81E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
1197	569734.38	4215047.08	5.22E-03	2.96E-03	7.97E-04	4.50E-04	3.60E-04	1.85E-04
1198	569739.05	4215055.58	5.50E-03	3.12E-03	8.40E-04	4.74E-04	3.79E-04	1.95E-04
1199	569743.73	4215064.08	5.81E-03	3.29E-03	8.87E-04	5.00E-04	4.00E-04	2.06E-04
1200	569748.4	4215072.58	6.13E-03	3.47E-03	9.35E-04	5.28E-04	4.22E-04	2.17E-04
1201	569753.07	4215081.09	6.47E-03	3.66E-03	9.87E-04	5.57E-04	4.46E-04	2.29E-04
1202	569757.75	4215089.59	6.84E-03	3.88E-03	1.04E-03	5.90E-04	4.72E-04	2.43E-04
1203	569762.42	4215098.09	7.24E-03	4.10E-03	1.11E-03	6.24E-04	4.99E-04	2.57E-04
1204	569767.1	4215106.59	7.65E-03	4.33E-03	1.17E-03	6.59E-04	5.27E-04	2.71E-04
1205	569771.77	4215115.09	8.09E-03	4.58E-03	1.24E-03	6.97E-04	5.57E-04	2.87E-04
1206	569809.17	4215183.11	1.52E-02	8.62E-03	2.32E-03	1.31E-03	1.05E-03	5.40E-04
1207	569813.84	4215191.61	1.70E-02	9.62E-03	2.59E-03	1.46E-03	1.17E-03	6.02E-04
1208	569818.52	4215200.11	1.83E-02	1.04E-02	2.79E-03	1.58E-03	1.26E-03	6.49E-04
1209	569823.19	4215208.62	1.89E-02	1.07E-02	2.88E-03	1.63E-03	1.30E-03	6.69E-04
1210	569827.87	4215217.12	1.93E-02	1.09E-02	2.94E-03	1.66E-03	1.33E-03	6.83E-04
1211	569696.44	4214991.36	3.89E-03	2.20E-03	5.93E-04	3.35E-04	2.68E-04	1.38E-04
1212	569695.31	4214981.83	3.75E-03	2.13E-03	5.73E-04	3.23E-04	2.59E-04	1.33E-04
1213	569694.18	4214972.3	3.65E-03	2.07E-03	5.57E-04	3.14E-04	2.51E-04	1.29E-04
1214	569693.05	4214962.77	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.45E-04	1.26E-04
1215	569691.93	4214953.25	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
1216	569690.8	4214943.72	3.38E-03	1.91E-03	5.16E-04	2.91E-04	2.33E-04	1.20E-04
1217	569689.67	4214934.19	3.28E-03	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
1218	569688.54	4214924.66	3.19E-03	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04
1219	569687.41	4214915.14	3.04E-03	1.72E-03	4.64E-04	2.62E-04	2.09E-04	1.08E-04
1220	569686.28	4214905.61	2.90E-03	1.65E-03	4.43E-04	2.50E-04	2.00E-04	1.03E-04
1221	569685.16	4214896.08	2.78E-03	1.57E-03	4.24E-04	2.39E-04	1.91E-04	9.85E-05
1222	569684.03	4214886.55	2.64E-03	1.49E-03	4.03E-04	2.27E-04	1.82E-04	9.36E-05
1223	569682.9	4214877.02	2.51E-03	1.42E-03	3.84E-04	2.16E-04	1.73E-04	8.91E-05
1224	569681.77	4214867.5	2.40E-03	1.36E-03	3.66E-04	2.06E-04	1.65E-04	8.50E-05
1225	569680.64	4214857.97	2.28E-03	1.29E-03	3.49E-04	1.97E-04	1.57E-04	8.10E-05
1226	569679.52	4214848.44	2.18E-03	1.23E-03	3.33E-04	1.88E-04	1.50E-04	7.73E-05
1227	569678.39	4214838.91	2.08E-03	1.18E-03	3.18E-04	1.80E-04	1.44E-04	7.39E-05
1228	569683.08	4214821.76	1.93E-03	1.09E-03	2.94E-04	1.66E-04	1.33E-04	6.84E-05
1229	569688.9	4214814.13	1.85E-03	1.05E-03	2.82E-04	1.59E-04	1.27E-04	6.55E-05
1230	569694.72	4214806.5	1.77E-03	1.00E-03	2.70E-04	1.52E-04	1.22E-04	6.27E-05
1231	569700.54	4214798.88	1.73E-03	9.78E-04	2.64E-04	1.49E-04	1.19E-04	6.12E-05
1232	569706.36	4214791.25	1.68E-03	9.54E-04	2.57E-04	1.45E-04	1.16E-04	5.97E-05
1233	569712.18	4214783.62	1.64E-03	9.29E-04	2.50E-04	1.41E-04	1.13E-04	5.82E-05
1234	569718	4214776	1.60E-03	9.04E-04	2.44E-04	1.37E-04	1.10E-04	5.66E-05
1235	569723.82	4214768.37	1.57E-03	8.90E-04	2.40E-04	1.35E-04	1.08E-04	5.57E-05
1236	569697.57	4215000.89	4.04E-03	2.29E-03	6.17E-04	3.48E-04	2.78E-04	1.43E-04
1237	569702.24	4215009.39	4.20E-03	2.38E-03	6.41E-04	3.62E-04	2.89E-04	1.49E-04
1238	569706.92	4215017.89	4.38E-03	2.48E-03	6.68E-04	3.77E-04	3.02E-04	1.55E-04
1239	569711.59	4215026.39	4.58E-03	2.59E-03	6.99E-04	3.94E-04	3.15E-04	1.62E-04
1240	569716.26	4215034.89	4.79E-03	2.71E-03	7.32E-04	4.13E-04	3.30E-04	1.70E-04
1241	569720.94	4215043.39	5.02E-03	2.84E-03	7.66E-04	4.32E-04	3.46E-04	1.78E-04
1242	569725.61	4215051.9	5.27E-03	2.99E-03	8.05E-04	4.54E-04	3.63E-04	1.87E-04
1243	569730.29	4215060.4	5.55E-03	3.14E-03	8.48E-04	4.78E-04	3.83E-04	1.97E-04
1244	569734.96	4215068.9	5.84E-03	3.31E-03	8.92E-04	5.04E-04	4.03E-04	2.07E-04

1245	569739.64	4215077.4	6.15E-03	3.49E-03	9.40E-04	5.30E-04	4.24E-04	2.18E-04
1246	569744.31	4215085.9	6.49E-03	3.68E-03	9.91E-04	5.59E-04	4.47E-04	2.30E-04
1247	569748.99	4215094.41	6.84E-03	3.87E-03	1.04E-03	5.89E-04	4.71E-04	2.43E-04
1248	569753.66	4215102.91	7.20E-03	4.08E-03	1.10E-03	6.20E-04	4.96E-04	2.55E-04
1249	569758.34	4215111.41	7.60E-03	4.31E-03	1.16E-03	6.55E-04	5.24E-04	2.70E-04
1250	569763.01	4215119.91	8.03E-03	4.55E-03	1.23E-03	6.92E-04	5.53E-04	2.85E-04
1251	569800.41	4215187.93	1.49E-02	8.45E-03	2.28E-03	1.28E-03	1.03E-03	5.29E-04
1252	569805.08	4215196.43	1.65E-02	9.34E-03	2.52E-03	1.42E-03	1.14E-03	5.85E-04
1253	569809.76	4215204.93	1.72E-02	9.72E-03	2.62E-03	1.48E-03	1.18E-03	6.09E-04
1254	569814.43	4215213.43	1.77E-02	1.00E-02	2.71E-03	1.53E-03	1.22E-03	6.29E-04
1255	569819.11	4215221.94	1.82E-02	1.03E-02	2.78E-03	1.57E-03	1.25E-03	6.45E-04
1256	569687.69	4214996.28	3.95E-03	2.24E-03	6.03E-04	3.40E-04	2.72E-04	1.40E-04
1257	569686.57	4214986.87	3.82E-03	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
1258	569685.46	4214977.45	3.71E-03	2.10E-03	5.66E-04	3.20E-04	2.56E-04	1.32E-04
1259	569684.34	4214968.03	3.61E-03	2.05E-03	5.52E-04	3.11E-04	2.49E-04	1.28E-04
1260	569683.23	4214958.61	3.53E-03	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
1261	569682.11	4214949.19	3.43E-03	1.94E-03	5.23E-04	2.95E-04	2.36E-04	1.22E-04
1262	569681	4214939.77	3.32E-03	1.88E-03	5.07E-04	2.86E-04	2.29E-04	1.18E-04
1263	569679.88	4214930.35	3.22E-03	1.82E-03	4.92E-04	2.77E-04	2.22E-04	1.14E-04
1264	569678.77	4214920.93	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
1265	569677.65	4214911.52	2.96E-03	1.68E-03	4.53E-04	2.55E-04	2.04E-04	1.05E-04
1266	569676.54	4214902.1	2.84E-03	1.61E-03	4.34E-04	2.45E-04	1.96E-04	1.01E-04
1267	569675.42	4214892.68	2.72E-03	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.64E-05
1268	569674.31	4214883.26	2.59E-03	1.47E-03	3.96E-04	2.24E-04	1.79E-04	9.20E-05
1269	569673.19	4214873.84	2.48E-03	1.40E-03	3.79E-04	2.14E-04	1.71E-04	8.80E-05
1270	569672.08	4214864.42	2.37E-03	1.34E-03	3.62E-04	2.04E-04	1.64E-04	8.42E-05
1271	569670.96	4214855	2.27E-03	1.29E-03	3.47E-04	1.96E-04	1.57E-04	8.06E-05
1272	569669.84	4214845.58	2.18E-03	1.23E-03	3.33E-04	1.88E-04	1.50E-04	7.73E-05
1273	569668.73	4214836.17	2.09E-03	1.19E-03	3.20E-04	1.80E-04	1.44E-04	7.42E-05
1274	569673.37	4214819.21	1.95E-03	1.11E-03	2.98E-04	1.68E-04	1.35E-04	6.92E-05
1275	569679.12	4214811.67	1.87E-03	1.06E-03	2.86E-04	1.61E-04	1.29E-04	6.64E-05
1276	569684.88	4214804.13	1.80E-03	1.02E-03	2.75E-04	1.55E-04	1.24E-04	6.40E-05
1277	569690.63	4214796.59	1.76E-03	9.99E-04	2.69E-04	1.52E-04	1.22E-04	6.26E-05
1278	569696.38	4214789.05	1.73E-03	9.77E-04	2.63E-04	1.49E-04	1.19E-04	6.12E-05
1279	569688.8	4215005.7	4.09E-03	2.32E-03	6.25E-04	3.53E-04	2.82E-04	1.45E-04
1280	569693.48	4215014.21	4.25E-03	2.41E-03	6.49E-04	3.66E-04	2.93E-04	1.51E-04
1281	569698.15	4215022.71	4.43E-03	2.51E-03	6.77E-04	3.82E-04	3.06E-04	1.57E-04
1282	569702.83	4215031.21	4.63E-03	2.62E-03	7.07E-04	3.99E-04	3.19E-04	1.64E-04
1283	569707.5	4215039.71	4.84E-03	2.74E-03	7.39E-04	4.17E-04	3.33E-04	1.72E-04
1284	569712.18	4215048.21	5.06E-03	2.87E-03	7.73E-04	4.36E-04	3.49E-04	1.80E-04
1285	569716.85	4215056.71	5.32E-03	3.01E-03	8.12E-04	4.58E-04	3.67E-04	1.89E-04
1286	569721.53	4215065.22	5.59E-03	3.17E-03	8.53E-04	4.82E-04	3.85E-04	1.98E-04
1287	569726.2	4215073.72	5.87E-03	3.33E-03	8.96E-04	5.06E-04	4.04E-04	2.08E-04
1288	569730.87	4215082.22	6.18E-03	3.50E-03	9.43E-04	5.32E-04	4.26E-04	2.19E-04
1289	569735.55	4215090.72	6.51E-03	3.69E-03	9.94E-04	5.61E-04	4.48E-04	2.31E-04
1290	569740.22	4215099.22	6.85E-03	3.88E-03	1.05E-03	5.90E-04	4.72E-04	2.43E-04
1291	569744.9	4215107.73	7.20E-03	4.08E-03	1.10E-03	6.21E-04	4.96E-04	2.55E-04
1292	569749.57	4215116.23	7.58E-03	4.30E-03	1.16E-03	6.53E-04	5.22E-04	2.69E-04
1293	569754.25	4215124.73	7.98E-03	4.52E-03	1.22E-03	6.88E-04	5.50E-04	2.83E-04
1294	569786.97	4215184.24	1.31E-02	7.43E-03	2.00E-03	1.13E-03	9.04E-04	4.65E-04
1295	569791.64	4215192.75	1.46E-02	8.25E-03	2.22E-03	1.26E-03	1.00E-03	5.17E-04
1296	569796.32	4215201.25	1.56E-02	8.83E-03	2.38E-03	1.34E-03	1.07E-03	5.53E-04

1297	569800.99	4215209.75	1.62E-02	9.20E-03	2.48E-03	1.40E-03	1.12E-03	5.76E-04
1298	569805.67	4215218.25	1.68E-02	9.53E-03	2.57E-03	1.45E-03	1.16E-03	5.96E-04
1299	569810.34	4215226.75	1.72E-02	9.77E-03	2.63E-03	1.49E-03	1.19E-03	6.12E-04
1300	569678.94	4215001.2	4.01E-03	2.27E-03	6.12E-04	3.45E-04	2.76E-04	1.42E-04
1301	569677.83	4214991.88	3.89E-03	2.20E-03	5.93E-04	3.35E-04	2.68E-04	1.38E-04
1302	569676.73	4214982.56	3.78E-03	2.14E-03	5.76E-04	3.25E-04	2.60E-04	1.34E-04
1303	569675.63	4214973.24	3.67E-03	2.08E-03	5.61E-04	3.16E-04	2.53E-04	1.30E-04
1304	569674.52	4214963.92	3.58E-03	2.03E-03	5.46E-04	3.08E-04	2.47E-04	1.27E-04
1305	569673.42	4214954.6	3.49E-03	1.98E-03	5.33E-04	3.01E-04	2.40E-04	1.24E-04
1306	569672.32	4214945.28	3.37E-03	1.91E-03	5.15E-04	2.90E-04	2.32E-04	1.20E-04
1307	569671.21	4214935.96	3.26E-03	1.85E-03	4.97E-04	2.81E-04	2.24E-04	1.16E-04
1308	569670.11	4214926.64	3.15E-03	1.78E-03	4.81E-04	2.71E-04	2.17E-04	1.12E-04
1309	569669	4214917.31	3.02E-03	1.71E-03	4.61E-04	2.60E-04	2.08E-04	1.07E-04
1310	569667.9	4214907.99	2.90E-03	1.64E-03	4.42E-04	2.50E-04	2.00E-04	1.03E-04
1311	569666.8	4214898.67	2.78E-03	1.58E-03	4.25E-04	2.40E-04	1.92E-04	9.87E-05
1312	569665.69	4214889.35	2.67E-03	1.51E-03	4.07E-04	2.30E-04	1.84E-04	9.46E-05
1313	569664.59	4214880.03	2.56E-03	1.45E-03	3.90E-04	2.20E-04	1.76E-04	9.07E-05
1314	569663.49	4214870.71	2.45E-03	1.39E-03	3.75E-04	2.11E-04	1.69E-04	8.70E-05
1315	569662.38	4214861.39	2.36E-03	1.33E-03	3.60E-04	2.03E-04	1.62E-04	8.36E-05
1316	569661.28	4214852.07	2.27E-03	1.28E-03	3.46E-04	1.95E-04	1.56E-04	8.04E-05
1317	569660.18	4214842.75	2.19E-03	1.24E-03	3.34E-04	1.88E-04	1.51E-04	7.75E-05
1318	569659.07	4214833.43	2.11E-03	1.20E-03	3.23E-04	1.82E-04	1.46E-04	7.50E-05
1319	569680.04	4215010.52	4.14E-03	2.35E-03	6.32E-04	3.57E-04	2.85E-04	1.47E-04
1320	569684.71	4215019.02	4.30E-03	2.44E-03	6.57E-04	3.71E-04	2.96E-04	1.53E-04
1321	569689.39	4215027.52	4.48E-03	2.54E-03	6.84E-04	3.86E-04	3.09E-04	1.59E-04
1322	569694.06	4215036.03	4.67E-03	2.65E-03	7.14E-04	4.03E-04	3.22E-04	1.66E-04
1323	569698.74	4215044.53	4.87E-03	2.76E-03	7.44E-04	4.20E-04	3.36E-04	1.73E-04
1324	569703.41	4215053.03	5.11E-03	2.89E-03	7.80E-04	4.40E-04	3.52E-04	1.81E-04
1325	569708.09	4215061.53	5.36E-03	3.04E-03	8.18E-04	4.62E-04	3.69E-04	1.90E-04
1326	569712.76	4215070.03	5.62E-03	3.18E-03	8.58E-04	4.84E-04	3.87E-04	1.99E-04
1327	569717.44	4215078.54	5.89E-03	3.34E-03	9.00E-04	5.08E-04	4.06E-04	2.09E-04
1328	569722.11	4215087.04	6.20E-03	3.51E-03	9.47E-04	5.34E-04	4.27E-04	2.20E-04
1329	569726.79	4215095.54	6.52E-03	3.69E-03	9.96E-04	5.62E-04	4.49E-04	2.31E-04
1330	569731.46	4215104.04	6.86E-03	3.88E-03	1.05E-03	5.91E-04	4.73E-04	2.43E-04
1331	569736.14	4215112.54	7.22E-03	4.09E-03	1.10E-03	6.22E-04	4.98E-04	2.56E-04
1332	569740.81	4215121.05	7.62E-03	4.31E-03	1.16E-03	6.56E-04	5.25E-04	2.70E-04
1333	569773.53	4215180.56	1.21E-02	6.84E-03	1.84E-03	1.04E-03	8.32E-04	4.28E-04
1334	569778.21	4215189.06	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.02E-04	4.64E-04
1335	569782.88	4215197.56	1.41E-02	8.00E-03	2.16E-03	1.22E-03	9.74E-04	5.01E-04
1336	569787.56	4215206.07	1.48E-02	8.39E-03	2.26E-03	1.28E-03	1.02E-03	5.25E-04
1337	569792.23	4215214.57	1.55E-02	8.76E-03	2.36E-03	1.33E-03	1.07E-03	5.48E-04
1338	569796.91	4215223.07	1.60E-02	9.08E-03	2.45E-03	1.38E-03	1.10E-03	5.69E-04
1339	569801.58	4215231.57	1.59E-02	9.01E-03	2.43E-03	1.37E-03	1.10E-03	5.64E-04
1340	569670.18	4215006.11	4.05E-03	2.30E-03	6.19E-04	3.49E-04	2.79E-04	1.44E-04
1341	569669.09	4214996.88	3.94E-03	2.23E-03	6.02E-04	3.40E-04	2.72E-04	1.40E-04
1342	569668	4214987.64	3.84E-03	2.18E-03	5.87E-04	3.31E-04	2.65E-04	1.36E-04
1343	569666.91	4214978.41	3.74E-03	2.12E-03	5.71E-04	3.22E-04	2.58E-04	1.33E-04
1344	569665.81	4214969.18	3.64E-03	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
1345	569664.72	4214959.95	3.54E-03	2.01E-03	5.41E-04	3.05E-04	2.44E-04	1.26E-04
1346	569663.63	4214950.72	3.43E-03	1.94E-03	5.24E-04	2.96E-04	2.36E-04	1.22E-04
1347	569662.53	4214941.48	3.30E-03	1.87E-03	5.05E-04	2.85E-04	2.28E-04	1.17E-04
1348	569661.44	4214932.25	3.18E-03	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04

1349	569660.35	4214923.02	3.07E-03	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04
1350	569659.25	4214913.79	2.95E-03	1.67E-03	4.50E-04	2.54E-04	2.03E-04	1.05E-04
1351	569658.16	4214904.56	2.84E-03	1.61E-03	4.33E-04	2.44E-04	1.95E-04	1.01E-04
1352	569657.07	4214895.32	2.73E-03	1.55E-03	4.17E-04	2.35E-04	1.88E-04	9.68E-05
1353	569655.97	4214886.09	2.62E-03	1.49E-03	4.01E-04	2.26E-04	1.81E-04	9.30E-05
1354	569654.88	4214876.86	2.52E-03	1.43E-03	3.85E-04	2.17E-04	1.74E-04	8.95E-05
1355	569653.79	4214867.63	2.43E-03	1.38E-03	3.71E-04	2.09E-04	1.68E-04	8.62E-05
1356	569652.7	4214858.4	2.35E-03	1.33E-03	3.58E-04	2.02E-04	1.62E-04	8.33E-05
1357	569651.6	4214849.17	2.27E-03	1.29E-03	3.47E-04	1.96E-04	1.56E-04	8.05E-05
1358	569650.51	4214839.93	2.20E-03	1.25E-03	3.36E-04	1.89E-04	1.52E-04	7.80E-05
1359	569671.28	4215015.34	4.18E-03	2.37E-03	6.39E-04	3.60E-04	2.88E-04	1.48E-04
1360	569675.95	4215023.84	4.35E-03	2.46E-03	6.64E-04	3.75E-04	3.00E-04	1.54E-04
1361	569680.63	4215032.34	4.52E-03	2.56E-03	6.91E-04	3.90E-04	3.12E-04	1.60E-04
1362	569685.3	4215040.84	4.71E-03	2.67E-03	7.19E-04	4.06E-04	3.24E-04	1.67E-04
1363	569689.98	4215049.35	4.91E-03	2.78E-03	7.50E-04	4.23E-04	3.39E-04	1.74E-04
1364	569694.65	4215057.85	5.15E-03	2.92E-03	7.86E-04	4.43E-04	3.55E-04	1.83E-04
1365	569699.33	4215066.35	5.39E-03	3.05E-03	8.23E-04	4.64E-04	3.71E-04	1.91E-04
1366	569704	4215074.85	5.64E-03	3.20E-03	8.61E-04	4.86E-04	3.89E-04	2.00E-04
1367	569708.67	4215083.35	5.92E-03	3.36E-03	9.04E-04	5.10E-04	4.08E-04	2.10E-04
1368	569713.35	4215091.86	6.22E-03	3.53E-03	9.50E-04	5.36E-04	4.29E-04	2.21E-04
1369	569718.02	4215100.36	6.54E-03	3.71E-03	9.99E-04	5.64E-04	4.51E-04	2.32E-04
1370	569722.7	4215108.86	6.88E-03	3.90E-03	1.05E-03	5.93E-04	4.74E-04	2.44E-04
1371	569727.37	4215117.36	7.27E-03	4.12E-03	1.11E-03	6.27E-04	5.01E-04	2.58E-04
1372	569764.77	4215185.38	1.22E-02	6.91E-03	1.86E-03	1.05E-03	8.41E-04	4.33E-04
1373	569769.44	4215193.88	1.32E-02	7.48E-03	2.02E-03	1.14E-03	9.10E-04	4.68E-04
1374	569774.12	4215202.38	1.38E-02	7.79E-03	2.10E-03	1.19E-03	9.48E-04	4.88E-04
1375	569778.79	4215210.88	1.42E-02	8.06E-03	2.17E-03	1.23E-03	9.81E-04	5.05E-04
1376	569783.47	4215219.39	1.48E-02	8.38E-03	2.26E-03	1.27E-03	1.02E-03	5.25E-04
1377	569788.14	4215227.89	1.52E-02	8.58E-03	2.31E-03	1.31E-03	1.04E-03	5.37E-04
1378	569792.82	4215236.39	1.46E-02	8.28E-03	2.23E-03	1.26E-03	1.01E-03	5.19E-04
1379	569661.38	4215010.57	4.08E-03	2.31E-03	6.23E-04	3.52E-04	2.81E-04	1.45E-04
1380	569660.24	4215000.98	3.97E-03	2.25E-03	6.06E-04	3.42E-04	2.74E-04	1.41E-04
1381	569659.11	4214991.4	3.87E-03	2.19E-03	5.91E-04	3.33E-04	2.67E-04	1.37E-04
1382	569657.97	4214981.81	3.76E-03	2.13E-03	5.75E-04	3.24E-04	2.59E-04	1.33E-04
1383	569656.84	4214972.22	3.64E-03	2.06E-03	5.56E-04	3.14E-04	2.51E-04	1.29E-04
1384	569655.7	4214962.64	3.53E-03	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
1385	569654.57	4214953.05	3.41E-03	1.93E-03	5.21E-04	2.94E-04	2.35E-04	1.21E-04
1386	569653.43	4214943.46	3.28E-03	1.86E-03	5.02E-04	2.83E-04	2.26E-04	1.17E-04
1387	569652.3	4214933.87	3.17E-03	1.79E-03	4.83E-04	2.73E-04	2.18E-04	1.12E-04
1388	569651.16	4214924.29	3.05E-03	1.73E-03	4.66E-04	2.63E-04	2.10E-04	1.08E-04
1389	569650.03	4214914.7	2.93E-03	1.66E-03	4.48E-04	2.53E-04	2.02E-04	1.04E-04
1390	569648.89	4214905.11	2.82E-03	1.60E-03	4.31E-04	2.43E-04	1.95E-04	1.00E-04
1391	569647.76	4214895.53	2.72E-03	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.65E-05
1392	569646.62	4214885.94	2.62E-03	1.48E-03	4.00E-04	2.26E-04	1.80E-04	9.28E-05
1393	569645.49	4214876.35	2.52E-03	1.43E-03	3.85E-04	2.17E-04	1.74E-04	8.95E-05
1394	569644.35	4214866.77	2.43E-03	1.38E-03	3.72E-04	2.10E-04	1.68E-04	8.63E-05
1395	569643.22	4214857.18	2.36E-03	1.34E-03	3.60E-04	2.03E-04	1.62E-04	8.36E-05
1396	569662.51	4215020.16	4.22E-03	2.39E-03	6.45E-04	3.64E-04	2.91E-04	1.50E-04
1397	569667.19	4215028.66	4.39E-03	2.48E-03	6.70E-04	3.78E-04	3.02E-04	1.56E-04
1398	569671.86	4215037.16	4.56E-03	2.58E-03	6.96E-04	3.93E-04	3.14E-04	1.62E-04
1399	569676.54	4215045.66	4.73E-03	2.68E-03	7.23E-04	4.08E-04	3.26E-04	1.68E-04
1400	569681.21	4215054.16	4.95E-03	2.80E-03	7.55E-04	4.26E-04	3.41E-04	1.75E-04

1401	569685.89	4215062.67	5.17E-03	2.93E-03	7.90E-04	4.46E-04	3.56E-04	1.83E-04
1402	569690.56	4215071.17	5.41E-03	3.06E-03	8.26E-04	4.66E-04	3.73E-04	1.92E-04
1403	569695.24	4215079.67	5.67E-03	3.21E-03	8.65E-04	4.88E-04	3.91E-04	2.01E-04
1404	569699.91	4215088.17	5.95E-03	3.37E-03	9.09E-04	5.13E-04	4.10E-04	2.11E-04
1405	569704.59	4215096.67	6.25E-03	3.54E-03	9.54E-04	5.39E-04	4.31E-04	2.22E-04
1406	569709.26	4215105.18	6.57E-03	3.72E-03	1.00E-03	5.66E-04	4.53E-04	2.33E-04
1407	569713.94	4215113.68	6.92E-03	3.92E-03	1.06E-03	5.96E-04	4.77E-04	2.45E-04
1408	569718.61	4215122.18	7.33E-03	4.15E-03	1.12E-03	6.31E-04	5.05E-04	2.60E-04
1409	569751.33	4215181.69	1.14E-02	6.47E-03	1.74E-03	9.84E-04	7.87E-04	4.05E-04
1410	569756.01	4215190.2	1.23E-02	6.95E-03	1.87E-03	1.06E-03	8.46E-04	4.35E-04
1411	569760.68	4215198.7	1.30E-02	7.37E-03	1.99E-03	1.12E-03	8.97E-04	4.62E-04
1412	569765.36	4215207.2	1.33E-02	7.54E-03	2.03E-03	1.15E-03	9.17E-04	4.72E-04
1413	569770.03	4215215.7	1.37E-02	7.76E-03	2.09E-03	1.18E-03	9.44E-04	4.86E-04
1414	569774.71	4215224.2	1.42E-02	8.02E-03	2.16E-03	1.22E-03	9.76E-04	5.02E-04
1415	569779.38	4215232.71	1.39E-02	7.89E-03	2.13E-03	1.20E-03	9.59E-04	4.94E-04
1416	569784.05	4215241.21	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.21E-04	4.74E-04
1417	569652.63	4215015.49	4.11E-03	2.33E-03	6.28E-04	3.54E-04	2.83E-04	1.46E-04
1418	569651.5	4215006	4.00E-03	2.26E-03	6.10E-04	3.44E-04	2.75E-04	1.42E-04
1419	569650.38	4214996.5	3.89E-03	2.20E-03	5.94E-04	3.35E-04	2.68E-04	1.38E-04
1420	569649.26	4214987.01	3.80E-03	2.15E-03	5.80E-04	3.27E-04	2.62E-04	1.35E-04
1421	569648.13	4214977.52	3.67E-03	2.08E-03	5.61E-04	3.16E-04	2.53E-04	1.30E-04
1422	569647.01	4214968.03	3.55E-03	2.01E-03	5.42E-04	3.06E-04	2.45E-04	1.26E-04
1423	569645.89	4214958.54	3.43E-03	1.94E-03	5.24E-04	2.96E-04	2.36E-04	1.22E-04
1424	569644.76	4214949.05	3.31E-03	1.87E-03	5.05E-04	2.85E-04	2.28E-04	1.17E-04
1425	569643.64	4214939.56	3.19E-03	1.81E-03	4.88E-04	2.75E-04	2.20E-04	1.13E-04
1426	569642.52	4214930.07	3.08E-03	1.75E-03	4.71E-04	2.66E-04	2.13E-04	1.09E-04
1427	569641.39	4214920.58	2.98E-03	1.69E-03	4.54E-04	2.56E-04	2.05E-04	1.06E-04
1428	569640.27	4214911.09	2.87E-03	1.62E-03	4.38E-04	2.47E-04	1.98E-04	1.02E-04
1429	569639.14	4214901.6	2.77E-03	1.57E-03	4.22E-04	2.38E-04	1.91E-04	9.81E-05
1430	569638.02	4214892.11	2.67E-03	1.51E-03	4.08E-04	2.30E-04	1.84E-04	9.48E-05
1431	569636.9	4214882.62	2.58E-03	1.46E-03	3.94E-04	2.22E-04	1.78E-04	9.16E-05
1432	569635.77	4214873.13	2.50E-03	1.41E-03	3.81E-04	2.15E-04	1.72E-04	8.86E-05
1433	569634.65	4214863.64	2.42E-03	1.37E-03	3.70E-04	2.09E-04	1.67E-04	8.59E-05
1434	569653.75	4215024.98	4.26E-03	2.41E-03	6.50E-04	3.67E-04	2.93E-04	1.51E-04
1435	569658.43	4215033.48	4.42E-03	2.50E-03	6.74E-04	3.80E-04	3.04E-04	1.57E-04
1436	569663.1	4215041.98	4.58E-03	2.59E-03	6.99E-04	3.95E-04	3.16E-04	1.62E-04
1437	569667.78	4215050.48	4.77E-03	2.70E-03	7.28E-04	4.11E-04	3.28E-04	1.69E-04
1438	569672.45	4215058.98	4.97E-03	2.82E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
1439	569677.13	4215067.48	5.19E-03	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
1440	569681.8	4215075.99	5.41E-03	3.07E-03	8.26E-04	4.66E-04	3.73E-04	1.92E-04
1441	569686.47	4215084.49	5.68E-03	3.22E-03	8.68E-04	4.90E-04	3.92E-04	2.02E-04
1442	569691.15	4215092.99	5.97E-03	3.38E-03	9.12E-04	5.15E-04	4.12E-04	2.12E-04
1443	569695.82	4215101.49	6.28E-03	3.56E-03	9.59E-04	5.41E-04	4.33E-04	2.23E-04
1444	569700.5	4215109.99	6.59E-03	3.74E-03	1.01E-03	5.68E-04	4.54E-04	2.34E-04
1445	569737.9	4215178.01	1.07E-02	6.09E-03	1.64E-03	9.26E-04	7.40E-04	3.81E-04
1446	569742.57	4215186.51	1.15E-02	6.51E-03	1.75E-03	9.90E-04	7.92E-04	4.08E-04
1447	569747.24	4215195.01	1.23E-02	6.98E-03	1.88E-03	1.06E-03	8.49E-04	4.37E-04
1448	569751.92	4215203.52	1.26E-02	7.13E-03	1.92E-03	1.08E-03	8.67E-04	4.46E-04
1449	569756.59	4215212.02	1.28E-02	7.25E-03	1.95E-03	1.10E-03	8.82E-04	4.54E-04
1450	569761.27	4215220.52	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.02E-04	4.64E-04
1451	569765.94	4215229.02	1.32E-02	7.48E-03	2.02E-03	1.14E-03	9.10E-04	4.68E-04
1452	569770.62	4215237.52	1.27E-02	7.22E-03	1.95E-03	1.10E-03	8.78E-04	4.52E-04

1453	569775.29	4215246.03	1.23E-02	6.96E-03	1.87E-03	1.06E-03	8.46E-04	4.36E-04
1454	569643.88	4215020.39	4.14E-03	2.35E-03	6.33E-04	3.57E-04	2.86E-04	1.47E-04
1455	569642.76	4215010.99	4.02E-03	2.28E-03	6.14E-04	3.47E-04	2.77E-04	1.43E-04
1456	569641.65	4215001.59	3.92E-03	2.22E-03	5.98E-04	3.37E-04	2.70E-04	1.39E-04
1457	569640.54	4214992.19	3.82E-03	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
1458	569639.42	4214982.78	3.71E-03	2.10E-03	5.67E-04	3.20E-04	2.56E-04	1.32E-04
1459	569638.31	4214973.38	3.58E-03	2.03E-03	5.47E-04	3.08E-04	2.47E-04	1.27E-04
1460	569637.2	4214963.98	3.45E-03	1.96E-03	5.27E-04	2.97E-04	2.38E-04	1.22E-04
1461	569636.08	4214954.58	3.33E-03	1.89E-03	5.08E-04	2.87E-04	2.29E-04	1.18E-04
1462	569634.97	4214945.18	3.22E-03	1.82E-03	4.91E-04	2.77E-04	2.22E-04	1.14E-04
1463	569633.86	4214935.78	3.11E-03	1.76E-03	4.75E-04	2.68E-04	2.14E-04	1.10E-04
1464	569632.74	4214926.37	3.01E-03	1.71E-03	4.60E-04	2.60E-04	2.08E-04	1.07E-04
1465	569631.63	4214916.97	2.91E-03	1.65E-03	4.44E-04	2.51E-04	2.00E-04	1.03E-04
1466	569630.52	4214907.57	2.81E-03	1.59E-03	4.29E-04	2.42E-04	1.94E-04	9.97E-05
1467	569629.4	4214898.17	2.72E-03	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.65E-05
1468	569628.29	4214888.77	2.64E-03	1.49E-03	4.03E-04	2.27E-04	1.82E-04	9.35E-05
1469	569627.18	4214879.37	2.56E-03	1.45E-03	3.91E-04	2.21E-04	1.76E-04	9.08E-05
1470	569626.07	4214869.96	2.49E-03	1.41E-03	3.80E-04	2.14E-04	1.71E-04	8.82E-05
1471	569644.99	4215029.79	4.28E-03	2.43E-03	6.54E-04	3.69E-04	2.95E-04	1.52E-04
1472	569649.66	4215038.3	4.43E-03	2.51E-03	6.77E-04	3.82E-04	3.06E-04	1.57E-04
1473	569654.34	4215046.8	4.59E-03	2.60E-03	7.01E-04	3.96E-04	3.17E-04	1.63E-04
1474	569659.01	4215055.3	4.79E-03	2.71E-03	7.31E-04	4.12E-04	3.30E-04	1.70E-04
1475	569663.69	4215063.8	4.98E-03	2.82E-03	7.61E-04	4.29E-04	3.43E-04	1.77E-04
1476	569668.36	4215072.3	5.19E-03	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
1477	569673.04	4215080.8	5.42E-03	3.07E-03	8.28E-04	4.67E-04	3.74E-04	1.92E-04
1478	569677.71	4215089.31	5.69E-03	3.22E-03	8.68E-04	4.90E-04	3.92E-04	2.02E-04
1479	569682.39	4215097.81	5.97E-03	3.38E-03	9.12E-04	5.15E-04	4.11E-04	2.12E-04
1480	569687.06	4215106.31	6.28E-03	3.56E-03	9.60E-04	5.42E-04	4.33E-04	2.23E-04
1481	569691.74	4215114.81	6.60E-03	3.74E-03	1.01E-03	5.69E-04	4.55E-04	2.34E-04
1482	569724.46	4215174.33	1.02E-02	5.75E-03	1.55E-03	8.75E-04	7.00E-04	3.60E-04
1483	569729.13	4215182.83	1.08E-02	6.12E-03	1.65E-03	9.32E-04	7.45E-04	3.83E-04
1484	569733.81	4215191.33	1.15E-02	6.53E-03	1.76E-03	9.93E-04	7.94E-04	4.09E-04
1485	569738.48	4215199.83	1.20E-02	6.81E-03	1.84E-03	1.04E-03	8.29E-04	4.26E-04
1486	569743.16	4215208.33	1.22E-02	6.89E-03	1.86E-03	1.05E-03	8.38E-04	4.31E-04
1487	569747.83	4215216.84	1.23E-02	6.97E-03	1.88E-03	1.06E-03	8.48E-04	4.36E-04
1488	569752.51	4215225.34	1.25E-02	7.06E-03	1.90E-03	1.07E-03	8.59E-04	4.42E-04
1489	569757.18	4215233.84	1.21E-02	6.87E-03	1.85E-03	1.04E-03	8.35E-04	4.30E-04
1490	569761.85	4215242.34	1.17E-02	6.65E-03	1.79E-03	1.01E-03	8.09E-04	4.16E-04
1491	569766.53	4215250.84	1.13E-02	6.43E-03	1.73E-03	9.78E-04	7.82E-04	4.02E-04
1492	569635.12	4215025.29	4.17E-03	2.36E-03	6.37E-04	3.59E-04	2.87E-04	1.48E-04
1493	569634.02	4215015.97	4.05E-03	2.29E-03	6.18E-04	3.49E-04	2.79E-04	1.44E-04
1494	569632.92	4215006.65	3.94E-03	2.23E-03	6.01E-04	3.39E-04	2.71E-04	1.40E-04
1495	569631.81	4214997.33	3.83E-03	2.17E-03	5.85E-04	3.30E-04	2.64E-04	1.36E-04
1496	569630.71	4214988.01	3.73E-03	2.12E-03	5.70E-04	3.22E-04	2.57E-04	1.32E-04
1497	569629.6	4214978.69	3.61E-03	2.04E-03	5.51E-04	3.11E-04	2.49E-04	1.28E-04
1498	569628.5	4214969.37	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
1499	569627.4	4214960.05	3.35E-03	1.90E-03	5.12E-04	2.89E-04	2.31E-04	1.19E-04
1500	569626.29	4214950.73	3.24E-03	1.84E-03	4.95E-04	2.79E-04	2.23E-04	1.15E-04
1501	569625.19	4214941.4	3.14E-03	1.78E-03	4.80E-04	2.71E-04	2.16E-04	1.11E-04
1502	569624.09	4214932.08	3.05E-03	1.73E-03	4.65E-04	2.62E-04	2.10E-04	1.08E-04
1503	569622.98	4214922.76	2.95E-03	1.67E-03	4.51E-04	2.54E-04	2.03E-04	1.05E-04
1504	569621.88	4214913.44	2.86E-03	1.62E-03	4.36E-04	2.46E-04	1.97E-04	1.01E-04

1505	569620.78	4214904.12	2.77E-03	1.57E-03	4.23E-04	2.39E-04	1.91E-04	9.82E-05
1506	569619.67	4214894.8	2.69E-03	1.52E-03	4.10E-04	2.32E-04	1.85E-04	9.53E-05
1507	569618.57	4214885.48	2.61E-03	1.48E-03	3.99E-04	2.25E-04	1.80E-04	9.27E-05
1508	569636.23	4215034.61	4.30E-03	2.44E-03	6.57E-04	3.71E-04	2.96E-04	1.53E-04
1509	569640.9	4215043.11	4.44E-03	2.52E-03	6.79E-04	3.83E-04	3.06E-04	1.58E-04
1510	569645.58	4215051.62	4.61E-03	2.61E-03	7.04E-04	3.97E-04	3.18E-04	1.64E-04
1511	569650.25	4215060.12	4.80E-03	2.72E-03	7.32E-04	4.13E-04	3.31E-04	1.70E-04
1512	569654.92	4215068.62	4.99E-03	2.82E-03	7.61E-04	4.30E-04	3.44E-04	1.77E-04
1513	569659.6	4215077.12	5.18E-03	2.94E-03	7.91E-04	4.46E-04	3.57E-04	1.84E-04
1514	569664.27	4215085.62	5.42E-03	3.07E-03	8.28E-04	4.67E-04	3.74E-04	1.92E-04
1515	569668.95	4215094.12	5.68E-03	3.22E-03	8.68E-04	4.90E-04	3.92E-04	2.02E-04
1516	569673.62	4215102.63	5.96E-03	3.38E-03	9.10E-04	5.14E-04	4.11E-04	2.11E-04
1517	569678.3	4215111.13	6.25E-03	3.54E-03	9.55E-04	5.39E-04	4.31E-04	2.22E-04
1518	569682.97	4215119.63	6.56E-03	3.71E-03	1.00E-03	5.65E-04	4.52E-04	2.33E-04
1519	569711.02	4215170.64	9.20E-03	5.21E-03	1.40E-03	7.93E-04	6.34E-04	3.26E-04
1520	569715.69	4215179.14	9.94E-03	5.63E-03	1.52E-03	8.57E-04	6.85E-04	3.53E-04
1521	569720.37	4215187.65	1.07E-02	6.08E-03	1.64E-03	9.25E-04	7.40E-04	3.81E-04
1522	569725.04	4215196.15	1.15E-02	6.53E-03	1.76E-03	9.93E-04	7.94E-04	4.09E-04
1523	569729.72	4215204.65	1.16E-02	6.58E-03	1.77E-03	1.00E-03	8.01E-04	4.12E-04
1524	569734.39	4215213.15	1.17E-02	6.64E-03	1.79E-03	1.01E-03	8.08E-04	4.16E-04
1525	569739.07	4215221.65	1.18E-02	6.71E-03	1.81E-03	1.02E-03	8.16E-04	4.20E-04
1526	569743.74	4215230.16	1.17E-02	6.62E-03	1.78E-03	1.01E-03	8.05E-04	4.14E-04
1527	569748.42	4215238.66	1.13E-02	6.37E-03	1.72E-03	9.70E-04	7.75E-04	3.99E-04
1528	569753.09	4215247.16	1.09E-02	6.16E-03	1.66E-03	9.37E-04	7.49E-04	3.86E-04
1529	569757.77	4215255.66	1.06E-02	5.98E-03	1.61E-03	9.09E-04	7.27E-04	3.74E-04
1530	569626.32	4215029.8	4.17E-03	2.36E-03	6.37E-04	3.60E-04	2.88E-04	1.48E-04
1531	569625.18	4215020.17	4.05E-03	2.29E-03	6.18E-04	3.49E-04	2.79E-04	1.44E-04
1532	569624.04	4215010.54	3.93E-03	2.22E-03	6.00E-04	3.38E-04	2.71E-04	1.39E-04
1533	569622.9	4215000.9	3.82E-03	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
1534	569621.76	4214991.27	3.71E-03	2.10E-03	5.66E-04	3.20E-04	2.56E-04	1.32E-04
1535	569620.62	4214981.64	3.59E-03	2.03E-03	5.48E-04	3.09E-04	2.47E-04	1.27E-04
1536	569619.48	4214972.01	3.46E-03	1.96E-03	5.29E-04	2.98E-04	2.39E-04	1.23E-04
1537	569618.34	4214962.38	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.18E-04
1538	569617.2	4214952.75	3.23E-03	1.83E-03	4.93E-04	2.78E-04	2.22E-04	1.14E-04
1539	569616.06	4214943.12	3.13E-03	1.77E-03	4.78E-04	2.69E-04	2.15E-04	1.11E-04
1540	569614.92	4214933.48	3.03E-03	1.72E-03	4.63E-04	2.61E-04	2.09E-04	1.08E-04
1541	569613.78	4214923.85	2.94E-03	1.67E-03	4.50E-04	2.54E-04	2.03E-04	1.04E-04
1542	569612.64	4214914.22	2.85E-03	1.62E-03	4.35E-04	2.46E-04	1.96E-04	1.01E-04
1543	569611.5	4214904.59	2.76E-03	1.57E-03	4.22E-04	2.38E-04	1.90E-04	9.81E-05
1544	569610.36	4214894.96	2.68E-03	1.52E-03	4.10E-04	2.31E-04	1.85E-04	9.52E-05
1545	569627.46	4215039.43	4.30E-03	2.44E-03	6.57E-04	3.71E-04	2.96E-04	1.53E-04
1546	569632.14	4215047.93	4.45E-03	2.52E-03	6.80E-04	3.83E-04	3.07E-04	1.58E-04
1547	569636.81	4215056.43	4.62E-03	2.62E-03	7.06E-04	3.98E-04	3.18E-04	1.64E-04
1548	569641.49	4215064.94	4.80E-03	2.72E-03	7.33E-04	4.13E-04	3.31E-04	1.70E-04
1549	569646.16	4215073.44	4.98E-03	2.82E-03	7.60E-04	4.29E-04	3.43E-04	1.77E-04
1550	569650.84	4215081.94	5.18E-03	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
1551	569655.51	4215090.44	5.42E-03	3.07E-03	8.27E-04	4.67E-04	3.73E-04	1.92E-04
1552	569660.19	4215098.94	5.67E-03	3.21E-03	8.66E-04	4.89E-04	3.91E-04	2.01E-04
1553	569664.86	4215107.44	5.94E-03	3.37E-03	9.07E-04	5.12E-04	4.09E-04	2.11E-04
1554	569669.54	4215115.95	6.21E-03	3.52E-03	9.48E-04	5.35E-04	4.28E-04	2.20E-04
1555	569674.21	4215124.45	6.50E-03	3.68E-03	9.93E-04	5.60E-04	4.48E-04	2.31E-04
1556	569688.23	4215149.95	7.51E-03	4.25E-03	1.15E-03	6.47E-04	5.18E-04	2.66E-04

1557	569692.91	4215158.46	7.88E-03	4.47E-03	1.20E-03	6.79E-04	5.43E-04	2.80E-04
1558	569697.58	4215166.96	8.35E-03	4.73E-03	1.27E-03	7.19E-04	5.75E-04	2.96E-04
1559	569702.26	4215175.46	9.00E-03	5.10E-03	1.37E-03	7.76E-04	6.20E-04	3.19E-04
1560	569706.93	4215183.96	9.73E-03	5.51E-03	1.49E-03	8.38E-04	6.70E-04	3.45E-04
1561	569711.61	4215192.46	1.05E-02	5.95E-03	1.60E-03	9.05E-04	7.24E-04	3.73E-04
1562	569716.28	4215200.97	1.10E-02	6.23E-03	1.68E-03	9.48E-04	7.58E-04	3.90E-04
1563	569720.96	4215209.47	1.12E-02	6.33E-03	1.71E-03	9.63E-04	7.70E-04	3.97E-04
1564	569725.63	4215217.97	1.13E-02	6.39E-03	1.72E-03	9.72E-04	7.77E-04	4.00E-04
1565	569730.31	4215226.47	1.13E-02	6.43E-03	1.73E-03	9.78E-04	7.82E-04	4.03E-04
1566	569734.98	4215234.97	1.09E-02	6.17E-03	1.66E-03	9.38E-04	7.50E-04	3.86E-04
1567	569739.65	4215243.48	1.05E-02	5.94E-03	1.60E-03	9.04E-04	7.23E-04	3.72E-04
1568	569744.33	4215251.98	1.01E-02	5.75E-03	1.55E-03	8.74E-04	6.99E-04	3.60E-04
1569	569749	4215260.48	9.86E-03	5.59E-03	1.51E-03	8.50E-04	6.79E-04	3.50E-04
1570	569984.77	4215238.15	5.42E-02	3.07E-02	8.27E-03	4.67E-03	3.73E-03	1.92E-03
1571	569985.08	4215247.82	4.98E-02	2.82E-02	7.61E-03	4.29E-03	3.43E-03	1.77E-03
1572	569985.4	4215257.49	4.53E-02	2.57E-02	6.92E-03	3.91E-03	3.12E-03	1.61E-03
1573	569985.71	4215267.16	4.08E-02	2.31E-02	6.22E-03	3.51E-03	2.81E-03	1.45E-03
1574	569986.03	4215276.84	3.67E-02	2.08E-02	5.60E-03	3.16E-03	2.53E-03	1.30E-03
1575	569986.34	4215286.51	3.33E-02	1.89E-02	5.09E-03	2.87E-03	2.30E-03	1.18E-03
1576	569986.66	4215296.18	3.25E-02	1.84E-02	4.97E-03	2.80E-03	2.24E-03	1.15E-03
1577	569986.97	4215305.85	3.21E-02	1.82E-02	4.90E-03	2.77E-03	2.21E-03	1.14E-03
1578	569987.29	4215315.52	3.21E-02	1.82E-02	4.90E-03	2.76E-03	2.21E-03	1.14E-03
1579	569987.6	4215325.19	3.31E-02	1.88E-02	5.06E-03	2.86E-03	2.28E-03	1.18E-03
1580	569987.92	4215334.86	3.45E-02	1.96E-02	5.28E-03	2.98E-03	2.38E-03	1.23E-03
1581	569988.23	4215344.54	3.68E-02	2.09E-02	5.62E-03	3.17E-03	2.54E-03	1.31E-03
1582	569988.55	4215354.21	3.66E-02	2.07E-02	5.58E-03	3.15E-03	2.52E-03	1.30E-03
1583	569988.86	4215363.88	3.56E-02	2.02E-02	5.43E-03	3.07E-03	2.45E-03	1.26E-03
1584	569989.18	4215373.55	3.56E-02	2.02E-02	5.44E-03	3.07E-03	2.46E-03	1.26E-03
1585	569973.51	4215199.79	5.88E-02	3.33E-02	8.97E-03	5.06E-03	4.05E-03	2.08E-03
1586	569973.83	4215209.46	5.67E-02	3.21E-02	8.65E-03	4.88E-03	3.90E-03	2.01E-03
1587	569974.14	4215219.13	5.35E-02	3.03E-02	8.16E-03	4.61E-03	3.68E-03	1.90E-03
1588	569974.46	4215228.8	4.99E-02	2.83E-02	7.63E-03	4.30E-03	3.44E-03	1.77E-03
1589	569974.77	4215238.48	4.67E-02	2.65E-02	7.13E-03	4.02E-03	3.22E-03	1.66E-03
1590	569975.09	4215248.15	4.33E-02	2.45E-02	6.62E-03	3.73E-03	2.99E-03	1.54E-03
1591	569975.4	4215257.82	3.99E-02	2.26E-02	6.09E-03	3.44E-03	2.75E-03	1.41E-03
1592	569975.72	4215267.49	3.62E-02	2.05E-02	5.52E-03	3.12E-03	2.49E-03	1.28E-03
1593	569976.03	4215277.16	3.29E-02	1.86E-02	5.02E-03	2.83E-03	2.27E-03	1.17E-03
1594	569976.35	4215286.83	3.03E-02	1.72E-02	4.63E-03	2.61E-03	2.09E-03	1.08E-03
1595	569976.66	4215296.5	2.98E-02	1.69E-02	4.55E-03	2.57E-03	2.05E-03	1.06E-03
1596	569976.98	4215306.18	2.96E-02	1.68E-02	4.51E-03	2.55E-03	2.04E-03	1.05E-03
1597	569977.29	4215315.85	2.96E-02	1.68E-02	4.52E-03	2.55E-03	2.04E-03	1.05E-03
1598	569977.61	4215325.52	3.07E-02	1.74E-02	4.69E-03	2.65E-03	2.12E-03	1.09E-03
1599	569977.92	4215335.19	3.21E-02	1.82E-02	4.90E-03	2.76E-03	2.21E-03	1.14E-03
1600	569978.24	4215344.86	3.43E-02	1.95E-02	5.24E-03	2.96E-03	2.37E-03	1.22E-03
1601	569978.55	4215354.53	3.42E-02	1.94E-02	5.23E-03	2.95E-03	2.36E-03	1.21E-03
1602	569978.87	4215364.2	3.38E-02	1.91E-02	5.16E-03	2.91E-03	2.33E-03	1.20E-03
1603	569979.18	4215373.88	3.50E-02	1.98E-02	5.35E-03	3.02E-03	2.41E-03	1.24E-03
1604	569962.57	4215171.1	5.36E-02	3.04E-02	8.18E-03	4.62E-03	3.69E-03	1.90E-03
1605	569962.89	4215180.77	5.42E-02	3.07E-02	8.27E-03	4.67E-03	3.73E-03	1.92E-03
1606	569963.2	4215190.44	5.34E-02	3.02E-02	8.15E-03	4.60E-03	3.68E-03	1.89E-03
1607	569963.52	4215200.12	5.20E-02	2.94E-02	7.94E-03	4.48E-03	3.58E-03	1.84E-03
1608	569963.83	4215209.79	4.94E-02	2.80E-02	7.54E-03	4.25E-03	3.40E-03	1.75E-03

1609	569964.15	4215219.46	4.61E-02	2.61E-02	7.03E-03	3.97E-03	3.17E-03	1.63E-03
1610	569964.46	4215229.13	4.29E-02	2.43E-02	6.54E-03	3.69E-03	2.95E-03	1.52E-03
1611	569964.78	4215238.8	4.05E-02	2.29E-02	6.18E-03	3.49E-03	2.79E-03	1.44E-03
1612	569965.09	4215248.47	3.80E-02	2.15E-02	5.80E-03	3.28E-03	2.62E-03	1.35E-03
1613	569965.41	4215258.14	3.54E-02	2.01E-02	5.41E-03	3.05E-03	2.44E-03	1.26E-03
1614	569965.72	4215267.82	3.23E-02	1.83E-02	4.94E-03	2.79E-03	2.23E-03	1.15E-03
1615	569966.04	4215277.49	2.97E-02	1.68E-02	4.53E-03	2.56E-03	2.05E-03	1.05E-03
1616	569966.35	4215287.16	2.77E-02	1.57E-02	4.23E-03	2.39E-03	1.91E-03	9.82E-04
1617	569966.67	4215296.83	2.74E-02	1.55E-02	4.18E-03	2.36E-03	1.89E-03	9.72E-04
1618	569966.98	4215306.5	2.73E-02	1.55E-02	4.17E-03	2.35E-03	1.88E-03	9.68E-04
1619	569967.3	4215316.17	2.74E-02	1.55E-02	4.18E-03	2.36E-03	1.89E-03	9.70E-04
1620	569967.61	4215325.84	2.85E-02	1.62E-02	4.35E-03	2.46E-03	1.97E-03	1.01E-03
1621	569967.93	4215335.52	2.98E-02	1.69E-02	4.56E-03	2.57E-03	2.06E-03	1.06E-03
1622	569968.24	4215345.19	3.14E-02	1.78E-02	4.79E-03	2.71E-03	2.16E-03	1.11E-03
1623	569968.56	4215354.86	3.15E-02	1.78E-02	4.80E-03	2.71E-03	2.17E-03	1.12E-03
1624	569968.87	4215364.53	3.22E-02	1.83E-02	4.92E-03	2.78E-03	2.22E-03	1.14E-03
1625	569969.19	4215374.2	3.48E-02	1.97E-02	5.32E-03	3.00E-03	2.40E-03	1.24E-03
1626	569952.26	4215161.76	4.68E-02	2.65E-02	7.14E-03	4.03E-03	3.22E-03	1.66E-03
1627	569952.58	4215171.43	4.82E-02	2.73E-02	7.37E-03	4.16E-03	3.32E-03	1.71E-03
1628	569952.89	4215181.1	4.86E-02	2.75E-02	7.42E-03	4.19E-03	3.35E-03	1.72E-03
1629	569953.21	4215190.77	4.79E-02	2.71E-02	7.31E-03	4.12E-03	3.30E-03	1.70E-03
1630	569953.52	4215200.44	4.65E-02	2.64E-02	7.11E-03	4.01E-03	3.21E-03	1.65E-03
1631	569953.84	4215210.11	4.39E-02	2.49E-02	6.71E-03	3.78E-03	3.03E-03	1.56E-03
1632	569954.15	4215219.78	4.07E-02	2.30E-02	6.21E-03	3.51E-03	2.80E-03	1.44E-03
1633	569954.47	4215229.46	3.77E-02	2.13E-02	5.75E-03	3.25E-03	2.60E-03	1.34E-03
1634	569954.78	4215239.13	3.56E-02	2.02E-02	5.44E-03	3.07E-03	2.45E-03	1.26E-03
1635	569955.1	4215248.8	3.35E-02	1.90E-02	5.12E-03	2.89E-03	2.31E-03	1.19E-03
1636	569955.41	4215258.47	3.14E-02	1.78E-02	4.80E-03	2.71E-03	2.16E-03	1.11E-03
1637	569955.73	4215268.14	2.92E-02	1.65E-02	4.46E-03	2.52E-03	2.01E-03	1.04E-03
1638	569956.04	4215277.81	2.73E-02	1.55E-02	4.17E-03	2.35E-03	1.88E-03	9.68E-04
1639	569956.36	4215287.48	2.58E-02	1.46E-02	3.94E-03	2.23E-03	1.78E-03	9.16E-04
1640	569956.67	4215297.16	2.56E-02	1.45E-02	3.90E-03	2.20E-03	1.76E-03	9.07E-04
1641	569956.99	4215306.83	2.54E-02	1.44E-02	3.88E-03	2.19E-03	1.75E-03	9.02E-04
1642	569957.3	4215316.5	2.55E-02	1.44E-02	3.89E-03	2.20E-03	1.76E-03	9.05E-04
1643	569957.62	4215326.17	2.65E-02	1.50E-02	4.04E-03	2.28E-03	1.82E-03	9.39E-04
1644	569957.93	4215335.84	2.75E-02	1.56E-02	4.20E-03	2.37E-03	1.90E-03	9.77E-04
1645	569958.25	4215345.51	2.88E-02	1.63E-02	4.40E-03	2.49E-03	1.99E-03	1.02E-03
1646	569958.56	4215355.18	2.92E-02	1.65E-02	4.45E-03	2.51E-03	2.01E-03	1.03E-03
1647	569958.88	4215364.86	3.05E-02	1.73E-02	4.66E-03	2.63E-03	2.10E-03	1.08E-03
1648	569959.19	4215374.53	3.45E-02	1.95E-02	5.27E-03	2.97E-03	2.38E-03	1.22E-03
1649	569942.58	4215171.75	4.38E-02	2.48E-02	6.69E-03	3.77E-03	3.02E-03	1.55E-03
1650	569942.9	4215181.42	4.40E-02	2.49E-02	6.72E-03	3.79E-03	3.03E-03	1.56E-03
1651	569943.21	4215191.1	4.39E-02	2.49E-02	6.70E-03	3.78E-03	3.02E-03	1.56E-03
1652	569943.53	4215200.77	4.19E-02	2.37E-02	6.40E-03	3.61E-03	2.89E-03	1.49E-03
1653	569943.84	4215210.44	3.93E-02	2.23E-02	6.00E-03	3.39E-03	2.71E-03	1.39E-03
1654	569944.16	4215220.11	3.62E-02	2.05E-02	5.52E-03	3.12E-03	2.49E-03	1.28E-03
1655	569944.47	4215229.78	3.34E-02	1.89E-02	5.10E-03	2.88E-03	2.30E-03	1.18E-03
1656	569944.79	4215239.45	3.16E-02	1.79E-02	4.82E-03	2.72E-03	2.17E-03	1.12E-03
1657	569945.1	4215249.12	2.97E-02	1.68E-02	4.54E-03	2.56E-03	2.05E-03	1.05E-03
1658	569945.42	4215258.8	2.80E-02	1.59E-02	4.28E-03	2.42E-03	1.93E-03	9.94E-04
1659	569945.73	4215268.47	2.66E-02	1.51E-02	4.06E-03	2.29E-03	1.83E-03	9.42E-04
1660	569946.05	4215278.14	2.53E-02	1.43E-02	3.86E-03	2.18E-03	1.74E-03	8.96E-04

1661	569946.36	4215287.81	2.43E-02	1.38E-02	3.71E-03	2.09E-03	1.67E-03	8.61E-04
1662	569946.68	4215297.48	2.40E-02	1.36E-02	3.67E-03	2.07E-03	1.65E-03	8.51E-04
1663	569946.99	4215307.15	2.38E-02	1.35E-02	3.64E-03	2.05E-03	1.64E-03	8.46E-04
1664	569947.31	4215316.82	2.39E-02	1.35E-02	3.65E-03	2.06E-03	1.64E-03	8.47E-04
1665	569947.62	4215326.5	2.46E-02	1.39E-02	3.75E-03	2.12E-03	1.69E-03	8.71E-04
1666	569947.94	4215336.17	2.54E-02	1.44E-02	3.87E-03	2.19E-03	1.75E-03	8.99E-04
1667	569948.25	4215345.84	2.63E-02	1.49E-02	4.02E-03	2.27E-03	1.82E-03	9.35E-04
1668	569948.57	4215355.51	2.70E-02	1.53E-02	4.12E-03	2.33E-03	1.86E-03	9.57E-04
1669	569948.88	4215365.18	2.90E-02	1.64E-02	4.43E-03	2.50E-03	2.00E-03	1.03E-03
1670	569949.2	4215374.85	3.43E-02	1.94E-02	5.24E-03	2.96E-03	2.36E-03	1.22E-03
1671	569932.59	4215172.08	4.01E-02	2.27E-02	6.12E-03	3.45E-03	2.76E-03	1.42E-03
1672	569932.9	4215181.75	4.01E-02	2.27E-02	6.12E-03	3.46E-03	2.76E-03	1.42E-03
1673	569933.22	4215191.42	4.00E-02	2.27E-02	6.11E-03	3.45E-03	2.76E-03	1.42E-03
1674	569933.53	4215201.09	3.79E-02	2.15E-02	5.79E-03	3.27E-03	2.61E-03	1.35E-03
1675	569933.85	4215210.76	3.53E-02	2.00E-02	5.39E-03	3.04E-03	2.43E-03	1.25E-03
1676	569934.16	4215220.44	3.23E-02	1.83E-02	4.93E-03	2.78E-03	2.23E-03	1.15E-03
1677	569934.48	4215230.11	2.98E-02	1.69E-02	4.55E-03	2.57E-03	2.05E-03	1.06E-03
1678	569934.79	4215239.78	2.81E-02	1.59E-02	4.30E-03	2.42E-03	1.94E-03	9.98E-04
1679	569935.11	4215249.45	2.65E-02	1.50E-02	4.05E-03	2.29E-03	1.83E-03	9.42E-04
1680	569935.42	4215259.12	2.52E-02	1.43E-02	3.85E-03	2.17E-03	1.74E-03	8.95E-04
1681	569935.74	4215268.79	2.43E-02	1.38E-02	3.71E-03	2.10E-03	1.68E-03	8.63E-04
1682	569936.05	4215278.46	2.35E-02	1.33E-02	3.59E-03	2.03E-03	1.62E-03	8.34E-04
1683	569936.37	4215288.14	2.29E-02	1.30E-02	3.49E-03	1.97E-03	1.58E-03	8.11E-04
1684	569936.68	4215297.81	2.26E-02	1.28E-02	3.45E-03	1.95E-03	1.56E-03	8.01E-04
1685	569937	4215307.48	2.24E-02	1.27E-02	3.42E-03	1.93E-03	1.54E-03	7.94E-04
1686	569937.31	4215317.15	2.24E-02	1.27E-02	3.41E-03	1.93E-03	1.54E-03	7.93E-04
1687	569937.63	4215326.82	2.28E-02	1.29E-02	3.49E-03	1.97E-03	1.57E-03	8.10E-04
1688	569937.94	4215336.49	2.35E-02	1.33E-02	3.58E-03	2.02E-03	1.62E-03	8.33E-04
1689	569938.26	4215346.16	2.44E-02	1.38E-02	3.72E-03	2.10E-03	1.68E-03	8.64E-04
1690	569938.57	4215355.84	2.54E-02	1.44E-02	3.88E-03	2.19E-03	1.75E-03	9.01E-04
1691	569938.89	4215365.51	2.81E-02	1.59E-02	4.29E-03	2.42E-03	1.93E-03	9.96E-04
1692	569939.2	4215375.18	3.47E-02	1.96E-02	5.29E-03	2.99E-03	2.39E-03	1.23E-03
1693	569922.91	4215182.08	3.69E-02	2.09E-02	5.63E-03	3.18E-03	2.54E-03	1.31E-03
1694	569923.22	4215191.75	3.70E-02	2.09E-02	5.64E-03	3.18E-03	2.55E-03	1.31E-03
1695	569923.54	4215201.42	3.53E-02	2.00E-02	5.39E-03	3.04E-03	2.43E-03	1.25E-03
1696	569923.85	4215211.09	3.27E-02	1.85E-02	4.99E-03	2.82E-03	2.25E-03	1.16E-03
1697	569924.17	4215220.76	2.97E-02	1.68E-02	4.53E-03	2.56E-03	2.05E-03	1.05E-03
1698	569924.48	4215230.43	2.73E-02	1.54E-02	4.16E-03	2.35E-03	1.88E-03	9.67E-04
1699	569924.8	4215240.1	2.57E-02	1.45E-02	3.92E-03	2.21E-03	1.77E-03	9.11E-04
1700	569925.11	4215249.78	2.42E-02	1.37E-02	3.69E-03	2.08E-03	1.67E-03	8.57E-04
1701	569925.43	4215259.45	2.30E-02	1.30E-02	3.51E-03	1.98E-03	1.59E-03	8.16E-04
1702	569925.74	4215269.12	2.23E-02	1.27E-02	3.41E-03	1.93E-03	1.54E-03	7.92E-04
1703	569926.06	4215278.79	2.18E-02	1.23E-02	3.32E-03	1.87E-03	1.50E-03	7.72E-04
1704	569926.37	4215288.46	2.13E-02	1.21E-02	3.25E-03	1.83E-03	1.47E-03	7.55E-04
1705	569926.69	4215298.13	2.10E-02	1.19E-02	3.21E-03	1.81E-03	1.45E-03	7.45E-04
1706	569927	4215307.8	2.08E-02	1.18E-02	3.18E-03	1.79E-03	1.43E-03	7.38E-04
1707	569927.32	4215317.48	2.08E-02	1.18E-02	3.18E-03	1.79E-03	1.43E-03	7.38E-04
1708	569927.63	4215327.15	2.13E-02	1.20E-02	3.25E-03	1.83E-03	1.47E-03	7.54E-04
1709	569927.95	4215336.82	2.19E-02	1.24E-02	3.35E-03	1.89E-03	1.51E-03	7.78E-04
1710	569928.26	4215346.49	2.29E-02	1.30E-02	3.50E-03	1.97E-03	1.58E-03	8.12E-04
1711	569928.58	4215356.16	2.42E-02	1.37E-02	3.70E-03	2.09E-03	1.67E-03	8.59E-04
1712	569928.89	4215365.83	2.73E-02	1.55E-02	4.18E-03	2.36E-03	1.88E-03	9.70E-04

1713	569929.21	4215375.5	3.46E-02	1.96E-02	5.28E-03	2.98E-03	2.38E-03	1.23E-03
1714	569912.91	4215182.4	3.41E-02	1.93E-02	5.20E-03	2.93E-03	2.35E-03	1.21E-03
1715	569913.23	4215192.07	3.43E-02	1.94E-02	5.24E-03	2.96E-03	2.37E-03	1.22E-03
1716	569913.54	4215201.74	3.29E-02	1.86E-02	5.02E-03	2.83E-03	2.27E-03	1.17E-03
1717	569913.86	4215211.42	3.04E-02	1.72E-02	4.64E-03	2.62E-03	2.09E-03	1.08E-03
1718	569914.17	4215221.09	2.74E-02	1.55E-02	4.19E-03	2.36E-03	1.89E-03	9.73E-04
1719	569914.49	4215230.76	2.51E-02	1.42E-02	3.83E-03	2.16E-03	1.73E-03	8.90E-04
1720	569914.8	4215240.43	2.36E-02	1.34E-02	3.60E-03	2.03E-03	1.62E-03	8.36E-04
1721	569915.12	4215250.1	2.22E-02	1.26E-02	3.39E-03	1.91E-03	1.53E-03	7.86E-04
1722	569915.43	4215259.77	2.11E-02	1.20E-02	3.22E-03	1.82E-03	1.45E-03	7.49E-04
1723	569915.75	4215269.44	2.06E-02	1.17E-02	3.14E-03	1.77E-03	1.42E-03	7.29E-04
1724	569916.06	4215279.12	2.01E-02	1.14E-02	3.07E-03	1.73E-03	1.38E-03	7.12E-04
1725	569916.38	4215288.79	1.97E-02	1.11E-02	3.00E-03	1.70E-03	1.36E-03	6.98E-04
1726	569916.69	4215298.46	1.94E-02	1.10E-02	2.96E-03	1.67E-03	1.34E-03	6.88E-04
1727	569917.01	4215308.13	1.93E-02	1.10E-02	2.95E-03	1.67E-03	1.33E-03	6.86E-04
1728	569917.32	4215317.8	1.93E-02	1.09E-02	2.95E-03	1.66E-03	1.33E-03	6.85E-04
1729	569917.64	4215327.47	1.99E-02	1.13E-02	3.03E-03	1.71E-03	1.37E-03	7.04E-04
1730	569917.95	4215337.14	2.06E-02	1.17E-02	3.15E-03	1.78E-03	1.42E-03	7.31E-04
1731	569918.27	4215346.82	2.17E-02	1.23E-02	3.32E-03	1.87E-03	1.50E-03	7.71E-04
1732	569918.58	4215356.49	2.31E-02	1.31E-02	3.53E-03	1.99E-03	1.59E-03	8.19E-04
1733	569918.9	4215366.16	2.61E-02	1.48E-02	3.99E-03	2.25E-03	1.80E-03	9.26E-04
1734	569919.21	4215375.83	3.24E-02	1.83E-02	4.94E-03	2.79E-03	2.23E-03	1.15E-03
1735	569903.23	4215192.4	3.20E-02	1.81E-02	4.89E-03	2.76E-03	2.21E-03	1.14E-03
1736	569903.55	4215202.07	3.08E-02	1.74E-02	4.70E-03	2.65E-03	2.12E-03	1.09E-03
1737	569903.86	4215211.74	2.83E-02	1.61E-02	4.33E-03	2.44E-03	1.95E-03	1.01E-03
1738	569904.18	4215221.41	2.54E-02	1.44E-02	3.88E-03	2.19E-03	1.75E-03	9.01E-04
1739	569904.49	4215231.08	2.32E-02	1.31E-02	3.54E-03	2.00E-03	1.60E-03	8.22E-04
1740	569904.81	4215240.75	2.17E-02	1.23E-02	3.32E-03	1.87E-03	1.50E-03	7.71E-04
1741	569905.12	4215250.43	2.04E-02	1.15E-02	3.11E-03	1.76E-03	1.40E-03	7.23E-04
1742	569905.44	4215260.1	1.95E-02	1.10E-02	2.98E-03	1.68E-03	1.34E-03	6.91E-04
1743	569905.75	4215269.77	1.91E-02	1.08E-02	2.91E-03	1.64E-03	1.31E-03	6.76E-04
1744	569906.07	4215279.44	1.87E-02	1.06E-02	2.85E-03	1.61E-03	1.29E-03	6.62E-04
1745	569906.38	4215289.11	1.83E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.49E-04
1746	569906.7	4215298.78	1.80E-02	1.02E-02	2.75E-03	1.55E-03	1.24E-03	6.39E-04
1747	569907.01	4215308.45	1.78E-02	1.01E-02	2.72E-03	1.53E-03	1.23E-03	6.31E-04
1748	569907.33	4215318.13	1.78E-02	1.01E-02	2.71E-03	1.53E-03	1.22E-03	6.30E-04
1749	569907.64	4215327.8	1.86E-02	1.05E-02	2.84E-03	1.60E-03	1.28E-03	6.60E-04
1750	569907.96	4215337.47	1.94E-02	1.10E-02	2.97E-03	1.67E-03	1.34E-03	6.89E-04
1751	569908.27	4215347.14	2.06E-02	1.16E-02	3.14E-03	1.77E-03	1.42E-03	7.29E-04
1752	569908.59	4215356.81	2.18E-02	1.23E-02	3.33E-03	1.88E-03	1.50E-03	7.73E-04
1753	569908.9	4215366.48	2.42E-02	1.37E-02	3.70E-03	2.09E-03	1.67E-03	8.59E-04
1754	569909.22	4215376.15	2.85E-02	1.61E-02	4.35E-03	2.45E-03	1.96E-03	1.01E-03
1755	569893.24	4215192.72	3.00E-02	1.70E-02	4.58E-03	2.59E-03	2.07E-03	1.06E-03
1756	569893.55	4215202.39	2.91E-02	1.65E-02	4.45E-03	2.51E-03	2.01E-03	1.03E-03
1757	569893.87	4215212.07	2.70E-02	1.53E-02	4.12E-03	2.33E-03	1.86E-03	9.57E-04
1758	569894.18	4215221.74	2.43E-02	1.37E-02	3.71E-03	2.09E-03	1.67E-03	8.61E-04
1759	569894.5	4215231.41	2.21E-02	1.25E-02	3.38E-03	1.91E-03	1.53E-03	7.85E-04
1760	569894.81	4215241.08	2.06E-02	1.17E-02	3.15E-03	1.78E-03	1.42E-03	7.31E-04
1761	569895.13	4215250.75	1.93E-02	1.09E-02	2.95E-03	1.66E-03	1.33E-03	6.84E-04
1762	569895.44	4215260.42	1.84E-02	1.04E-02	2.80E-03	1.58E-03	1.27E-03	6.51E-04
1763	569895.76	4215270.09	1.78E-02	1.01E-02	2.72E-03	1.53E-03	1.23E-03	6.31E-04
1764	569896.07	4215279.77	1.73E-02	9.80E-03	2.64E-03	1.49E-03	1.19E-03	6.14E-04

1765	569896.39	4215289.44	1.69E-02	9.60E-03	2.59E-03	1.46E-03	1.17E-03	6.01E-04
1766	569896.7	4215299.11	1.67E-02	9.49E-03	2.56E-03	1.44E-03	1.15E-03	5.94E-04
1767	569897.02	4215308.78	1.66E-02	9.39E-03	2.53E-03	1.43E-03	1.14E-03	5.88E-04
1768	569897.33	4215318.45	1.66E-02	9.40E-03	2.53E-03	1.43E-03	1.14E-03	5.88E-04
1769	569897.65	4215328.12	1.71E-02	9.71E-03	2.62E-03	1.48E-03	1.18E-03	6.08E-04
1770	569897.96	4215337.79	1.82E-02	1.03E-02	2.79E-03	1.57E-03	1.26E-03	6.47E-04
1771	569898.28	4215347.47	1.93E-02	1.09E-02	2.94E-03	1.66E-03	1.33E-03	6.83E-04
1772	569898.59	4215357.14	2.03E-02	1.15E-02	3.10E-03	1.75E-03	1.40E-03	7.20E-04
1773	569898.91	4215366.81	2.21E-02	1.25E-02	3.37E-03	1.90E-03	1.52E-03	7.83E-04
1774	569883.56	4215202.72	2.76E-02	1.56E-02	4.21E-03	2.38E-03	1.90E-03	9.79E-04
1775	569883.87	4215212.39	2.57E-02	1.46E-02	3.93E-03	2.22E-03	1.77E-03	9.13E-04
1776	569884.19	4215222.06	2.32E-02	1.32E-02	3.55E-03	2.00E-03	1.60E-03	8.24E-04
1777	569884.5	4215231.73	2.12E-02	1.20E-02	3.24E-03	1.83E-03	1.46E-03	7.52E-04
1778	569884.82	4215241.41	1.97E-02	1.11E-02	3.01E-03	1.70E-03	1.36E-03	6.98E-04
1779	569885.13	4215251.08	1.84E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.51E-04
1780	569885.45	4215260.75	1.74E-02	9.84E-03	2.65E-03	1.50E-03	1.20E-03	6.16E-04
1781	569885.76	4215270.42	1.67E-02	9.45E-03	2.55E-03	1.44E-03	1.15E-03	5.92E-04
1782	569886.08	4215280.09	1.61E-02	9.11E-03	2.46E-03	1.39E-03	1.11E-03	5.71E-04
1783	569886.39	4215289.76	1.57E-02	8.90E-03	2.40E-03	1.35E-03	1.08E-03	5.57E-04
1784	569886.71	4215299.43	1.56E-02	8.84E-03	2.38E-03	1.34E-03	1.08E-03	5.53E-04
1785	569887.02	4215309.11	1.55E-02	8.79E-03	2.37E-03	1.34E-03	1.07E-03	5.50E-04
1786	569887.34	4215318.78	1.56E-02	8.82E-03	2.38E-03	1.34E-03	1.07E-03	5.52E-04
1787	569887.65	4215328.45	1.60E-02	9.07E-03	2.44E-03	1.38E-03	1.10E-03	5.68E-04
1788	569887.97	4215338.12	1.67E-02	9.45E-03	2.55E-03	1.44E-03	1.15E-03	5.92E-04
1789	569888.28	4215347.79	1.79E-02	1.01E-02	2.73E-03	1.54E-03	1.23E-03	6.34E-04
1790	569888.6	4215357.46	1.87E-02	1.06E-02	2.86E-03	1.61E-03	1.29E-03	6.63E-04
1791	569888.91	4215367.13	1.99E-02	1.13E-02	3.04E-03	1.71E-03	1.37E-03	7.06E-04
1792	569873.56	4215203.05	2.62E-02	1.48E-02	4.00E-03	2.25E-03	1.80E-03	9.28E-04
1793	569873.88	4215212.72	2.46E-02	1.39E-02	3.75E-03	2.12E-03	1.69E-03	8.71E-04
1794	569874.19	4215222.39	2.23E-02	1.26E-02	3.40E-03	1.92E-03	1.54E-03	7.90E-04
1795	569874.51	4215232.06	2.03E-02	1.15E-02	3.11E-03	1.75E-03	1.40E-03	7.22E-04
1796	569874.82	4215241.73	1.88E-02	1.07E-02	2.87E-03	1.62E-03	1.30E-03	6.67E-04
1797	569875.14	4215251.4	1.75E-02	9.90E-03	2.67E-03	1.51E-03	1.20E-03	6.20E-04
1798	569875.45	4215261.07	1.65E-02	9.32E-03	2.51E-03	1.42E-03	1.13E-03	5.84E-04
1799	569875.77	4215270.75	1.57E-02	8.88E-03	2.39E-03	1.35E-03	1.08E-03	5.56E-04
1800	569876.08	4215280.42	1.50E-02	8.51E-03	2.29E-03	1.29E-03	1.03E-03	5.33E-04
1801	569876.4	4215290.09	1.47E-02	8.30E-03	2.24E-03	1.26E-03	1.01E-03	5.20E-04
1802	569876.71	4215299.76	1.46E-02	8.27E-03	2.23E-03	1.26E-03	1.01E-03	5.18E-04
1803	569877.03	4215309.43	1.46E-02	8.25E-03	2.22E-03	1.25E-03	1.00E-03	5.17E-04
1804	569877.34	4215319.1	1.46E-02	8.29E-03	2.23E-03	1.26E-03	1.01E-03	5.19E-04
1805	569877.66	4215328.77	1.50E-02	8.48E-03	2.29E-03	1.29E-03	1.03E-03	5.31E-04
1806	569877.97	4215338.45	1.55E-02	8.78E-03	2.37E-03	1.34E-03	1.07E-03	5.50E-04
1807	569878.29	4215348.12	1.62E-02	9.19E-03	2.48E-03	1.40E-03	1.12E-03	5.75E-04
1808	569878.6	4215357.79	1.69E-02	9.59E-03	2.59E-03	1.46E-03	1.17E-03	6.00E-04
1809	569878.92	4215367.46	1.79E-02	1.01E-02	2.73E-03	1.54E-03	1.23E-03	6.34E-04
1810	569863.88	4215213.04	2.35E-02	1.33E-02	3.58E-03	2.02E-03	1.62E-03	8.32E-04
1811	569864.2	4215222.71	2.18E-02	1.23E-02	3.33E-03	1.88E-03	1.50E-03	7.73E-04
1812	569864.51	4215232.39	2.01E-02	1.14E-02	3.07E-03	1.73E-03	1.38E-03	7.12E-04
1813	569864.83	4215242.06	1.85E-02	1.05E-02	2.83E-03	1.59E-03	1.28E-03	6.57E-04
1814	569865.14	4215251.73	1.71E-02	9.66E-03	2.60E-03	1.47E-03	1.18E-03	6.05E-04
1815	569865.46	4215261.4	1.60E-02	9.05E-03	2.44E-03	1.38E-03	1.10E-03	5.67E-04
1816	569865.77	4215271.07	1.52E-02	8.59E-03	2.32E-03	1.31E-03	1.05E-03	5.38E-04

1817	569866.09	4215280.74	1.45E-02	8.21E-03	2.21E-03	1.25E-03	9.98E-04	5.14E-04
1818	569866.4	4215290.41	1.41E-02	7.98E-03	2.15E-03	1.21E-03	9.71E-04	5.00E-04
1819	569866.72	4215300.09	1.40E-02	7.90E-03	2.13E-03	1.20E-03	9.61E-04	4.95E-04
1820	569867.03	4215309.76	1.38E-02	7.84E-03	2.11E-03	1.19E-03	9.54E-04	4.91E-04
1821	569867.35	4215319.43	1.38E-02	7.84E-03	2.11E-03	1.19E-03	9.53E-04	4.91E-04
1822	569867.66	4215329.1	1.40E-02	7.95E-03	2.14E-03	1.21E-03	9.68E-04	4.98E-04
1823	569867.98	4215338.77	1.44E-02	8.15E-03	2.20E-03	1.24E-03	9.92E-04	5.11E-04
1824	569868.29	4215348.44	1.49E-02	8.44E-03	2.27E-03	1.28E-03	1.03E-03	5.28E-04
1825	569868.61	4215358.11	1.55E-02	8.75E-03	2.36E-03	1.33E-03	1.06E-03	5.48E-04
1826	569868.92	4215367.79	1.61E-02	9.13E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
1827	569853.89	4215213.37	2.24E-02	1.27E-02	3.43E-03	1.93E-03	1.55E-03	7.96E-04
1828	569854.21	4215223.04	2.13E-02	1.21E-02	3.25E-03	1.84E-03	1.47E-03	7.56E-04
1829	569854.52	4215232.71	1.98E-02	1.12E-02	3.03E-03	1.71E-03	1.37E-03	7.03E-04
1830	569854.84	4215242.38	1.82E-02	1.03E-02	2.78E-03	1.57E-03	1.26E-03	6.47E-04
1831	569855.15	4215252.05	1.67E-02	9.47E-03	2.55E-03	1.44E-03	1.15E-03	5.93E-04
1832	569855.47	4215261.73	1.56E-02	8.85E-03	2.39E-03	1.35E-03	1.08E-03	5.54E-04
1833	569855.78	4215271.4	1.48E-02	8.39E-03	2.26E-03	1.28E-03	1.02E-03	5.26E-04
1834	569856.1	4215281.07	1.41E-02	8.01E-03	2.16E-03	1.22E-03	9.74E-04	5.01E-04
1835	569856.41	4215290.74	1.37E-02	7.76E-03	2.09E-03	1.18E-03	9.44E-04	4.86E-04
1836	569856.73	4215300.41	1.35E-02	7.62E-03	2.05E-03	1.16E-03	9.27E-04	4.77E-04
1837	569857.04	4215310.08	1.32E-02	7.49E-03	2.02E-03	1.14E-03	9.11E-04	4.69E-04
1838	569857.36	4215319.75	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.03E-04	4.65E-04
1839	569857.67	4215329.43	1.32E-02	7.47E-03	2.01E-03	1.14E-03	9.09E-04	4.68E-04
1840	569857.99	4215339.1	1.34E-02	7.57E-03	2.04E-03	1.15E-03	9.21E-04	4.74E-04
1841	569858.3	4215348.77	1.36E-02	7.73E-03	2.08E-03	1.18E-03	9.40E-04	4.84E-04
1842	569858.62	4215358.44	1.40E-02	7.96E-03	2.15E-03	1.21E-03	9.68E-04	4.98E-04
1843	569858.93	4215368.11	1.45E-02	8.21E-03	2.21E-03	1.25E-03	9.99E-04	5.14E-04
1844	569844.21	4215223.37	2.08E-02	1.18E-02	3.18E-03	1.79E-03	1.43E-03	7.38E-04
1845	569844.53	4215233.04	1.95E-02	1.11E-02	2.98E-03	1.68E-03	1.35E-03	6.93E-04
1846	569844.84	4215242.71	1.80E-02	1.02E-02	2.74E-03	1.55E-03	1.24E-03	6.37E-04
1847	569845.16	4215252.38	1.64E-02	9.29E-03	2.50E-03	1.41E-03	1.13E-03	5.82E-04
1848	569845.47	4215262.05	1.53E-02	8.67E-03	2.34E-03	1.32E-03	1.05E-03	5.43E-04
1849	569845.79	4215271.72	1.45E-02	8.22E-03	2.21E-03	1.25E-03	9.99E-04	5.14E-04
1850	569846.1	4215281.39	1.38E-02	7.83E-03	2.11E-03	1.19E-03	9.52E-04	4.90E-04
1851	569846.42	4215291.07	1.33E-02	7.55E-03	2.03E-03	1.15E-03	9.18E-04	4.72E-04
1852	569846.73	4215300.74	1.30E-02	7.34E-03	1.98E-03	1.12E-03	8.93E-04	4.60E-04
1853	569847.05	4215310.41	1.26E-02	7.15E-03	1.93E-03	1.09E-03	8.70E-04	4.48E-04
1854	569847.36	4215320.08	1.24E-02	7.04E-03	1.90E-03	1.07E-03	8.56E-04	4.41E-04
1855	569847.68	4215329.75	1.24E-02	7.02E-03	1.89E-03	1.07E-03	8.54E-04	4.40E-04
1856	569847.99	4215339.42	1.24E-02	7.04E-03	1.90E-03	1.07E-03	8.56E-04	4.41E-04
1857	569848.31	4215349.09	1.25E-02	7.11E-03	1.92E-03	1.08E-03	8.65E-04	4.45E-04
1858	569848.62	4215358.77	1.28E-02	7.26E-03	1.96E-03	1.10E-03	8.83E-04	4.54E-04
1859	569848.94	4215368.44	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.02E-04	4.65E-04
1860	569834.22	4215223.69	1.97E-02	1.12E-02	3.01E-03	1.70E-03	1.36E-03	6.99E-04
1861	569834.53	4215233.36	1.86E-02	1.05E-02	2.84E-03	1.60E-03	1.28E-03	6.60E-04
1862	569834.85	4215243.03	1.72E-02	9.74E-03	2.63E-03	1.48E-03	1.19E-03	6.10E-04
1863	569835.16	4215252.71	1.58E-02	8.95E-03	2.41E-03	1.36E-03	1.09E-03	5.60E-04
1864	569835.48	4215262.38	1.48E-02	8.38E-03	2.26E-03	1.27E-03	1.02E-03	5.25E-04
1865	569835.79	4215272.05	1.40E-02	7.95E-03	2.14E-03	1.21E-03	9.67E-04	4.98E-04
1866	569836.11	4215281.72	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.22E-04	4.74E-04
1867	569836.42	4215291.39	1.29E-02	7.29E-03	1.97E-03	1.11E-03	8.87E-04	4.56E-04
1868	569836.74	4215301.06	1.25E-02	7.06E-03	1.90E-03	1.07E-03	8.59E-04	4.42E-04

1869	569837.05	4215310.73	1.21E-02	6.84E-03	1.84E-03	1.04E-03	8.32E-04	4.28E-04
1870	569837.37	4215320.41	1.18E-02	6.70E-03	1.81E-03	1.02E-03	8.15E-04	4.20E-04
1871	569837.68	4215330.08	1.17E-02	6.65E-03	1.79E-03	1.01E-03	8.09E-04	4.16E-04
1872	569838	4215339.75	1.17E-02	6.62E-03	1.78E-03	1.01E-03	8.05E-04	4.14E-04
1873	569838.31	4215349.42	1.17E-02	6.62E-03	1.79E-03	1.01E-03	8.06E-04	4.15E-04
1874	569838.63	4215359.09	1.18E-02	6.70E-03	1.81E-03	1.02E-03	8.15E-04	4.20E-04
1875	569838.94	4215368.76	1.20E-02	6.78E-03	1.83E-03	1.03E-03	8.24E-04	4.24E-04
1876	569824.54	4215233.69	1.77E-02	1.00E-02	2.70E-03	1.52E-03	1.22E-03	6.27E-04
1877	569824.85	4215243.36	1.64E-02	9.31E-03	2.51E-03	1.42E-03	1.13E-03	5.83E-04
1878	569825.17	4215253.03	1.52E-02	8.59E-03	2.32E-03	1.31E-03	1.05E-03	5.38E-04
1879	569825.48	4215262.7	1.43E-02	8.08E-03	2.18E-03	1.23E-03	9.82E-04	5.06E-04
1880	569825.8	4215272.37	1.35E-02	7.67E-03	2.07E-03	1.17E-03	9.33E-04	4.80E-04
1881	569826.11	4215282.04	1.29E-02	7.32E-03	1.97E-03	1.11E-03	8.90E-04	4.58E-04
1882	569826.43	4215291.72	1.24E-02	7.03E-03	1.89E-03	1.07E-03	8.55E-04	4.40E-04
1883	569826.74	4215301.39	1.20E-02	6.78E-03	1.83E-03	1.03E-03	8.25E-04	4.25E-04
1884	569827.06	4215311.06	1.16E-02	6.55E-03	1.77E-03	9.96E-04	7.97E-04	4.10E-04
1885	569827.37	4215320.73	1.13E-02	6.40E-03	1.73E-03	9.73E-04	7.78E-04	4.01E-04
1886	569827.69	4215330.4	1.12E-02	6.33E-03	1.71E-03	9.63E-04	7.70E-04	3.96E-04
1887	569828	4215340.07	1.11E-02	6.27E-03	1.69E-03	9.54E-04	7.63E-04	3.93E-04
1888	569828.32	4215349.74	1.10E-02	6.24E-03	1.68E-03	9.49E-04	7.59E-04	3.91E-04
1889	569828.63	4215359.42	1.10E-02	6.26E-03	1.69E-03	9.51E-04	7.61E-04	3.92E-04
1890	569828.95	4215369.09	1.10E-02	6.26E-03	1.69E-03	9.52E-04	7.61E-04	3.92E-04
1891	569814.86	4215243.68	1.57E-02	8.90E-03	2.40E-03	1.35E-03	1.08E-03	5.58E-04
1892	569815.17	4215253.36	1.46E-02	8.26E-03	2.23E-03	1.26E-03	1.00E-03	5.17E-04
1893	569815.49	4215263.03	1.37E-02	7.79E-03	2.10E-03	1.18E-03	9.47E-04	4.88E-04
1894	569815.8	4215272.7	1.31E-02	7.40E-03	2.00E-03	1.13E-03	9.01E-04	4.64E-04
1895	569816.12	4215282.37	1.25E-02	7.07E-03	1.90E-03	1.07E-03	8.59E-04	4.42E-04
1896	569816.43	4215292.04	1.20E-02	6.77E-03	1.83E-03	1.03E-03	8.24E-04	4.24E-04
1897	569816.75	4215301.71	1.15E-02	6.51E-03	1.76E-03	9.91E-04	7.92E-04	4.08E-04
1898	569817.06	4215311.38	1.11E-02	6.27E-03	1.69E-03	9.54E-04	7.63E-04	3.93E-04
1899	569817.38	4215321.06	1.08E-02	6.11E-03	1.65E-03	9.30E-04	7.44E-04	3.83E-04
1900	569817.69	4215330.73	1.06E-02	6.03E-03	1.63E-03	9.17E-04	7.33E-04	3.78E-04
1901	569818.01	4215340.4	1.05E-02	5.95E-03	1.60E-03	9.04E-04	7.23E-04	3.72E-04
1902	569818.32	4215350.07	1.04E-02	5.88E-03	1.59E-03	8.95E-04	7.16E-04	3.68E-04
1903	569818.64	4215359.74	1.03E-02	5.85E-03	1.58E-03	8.90E-04	7.12E-04	3.67E-04
1904	569818.95	4215369.41	1.02E-02	5.80E-03	1.56E-03	8.83E-04	7.06E-04	3.63E-04
1905	569804.86	4215244.01	1.48E-02	8.39E-03	2.26E-03	1.28E-03	1.02E-03	5.25E-04
1906	569805.18	4215253.68	1.37E-02	7.78E-03	2.10E-03	1.18E-03	9.47E-04	4.87E-04
1907	569805.49	4215263.35	1.30E-02	7.35E-03	1.98E-03	1.12E-03	8.94E-04	4.60E-04
1908	569805.81	4215273.02	1.24E-02	7.00E-03	1.89E-03	1.06E-03	8.52E-04	4.38E-04
1909	569806.12	4215282.7	1.18E-02	6.69E-03	1.80E-03	1.02E-03	8.14E-04	4.19E-04
1910	569806.44	4215292.37	1.14E-02	6.43E-03	1.73E-03	9.78E-04	7.82E-04	4.03E-04
1911	569806.75	4215302.04	1.09E-02	6.20E-03	1.67E-03	9.43E-04	7.54E-04	3.88E-04
1912	569807.07	4215311.71	1.05E-02	5.97E-03	1.61E-03	9.09E-04	7.27E-04	3.74E-04
1913	569807.38	4215321.38	1.03E-02	5.83E-03	1.57E-03	8.86E-04	7.09E-04	3.65E-04
1914	569807.7	4215331.05	1.01E-02	5.74E-03	1.55E-03	8.73E-04	6.98E-04	3.59E-04
1915	569808.01	4215340.72	9.96E-03	5.64E-03	1.52E-03	8.58E-04	6.86E-04	3.53E-04
1916	569808.33	4215350.4	9.82E-03	5.56E-03	1.50E-03	8.46E-04	6.77E-04	3.48E-04
1917	569808.64	4215360.07	9.72E-03	5.51E-03	1.48E-03	8.38E-04	6.70E-04	3.45E-04
1918	569808.96	4215369.74	9.59E-03	5.43E-03	1.46E-03	8.26E-04	6.61E-04	3.40E-04
1919	569795.18	4215254.01	1.29E-02	7.31E-03	1.97E-03	1.11E-03	8.90E-04	4.58E-04
1920	569795.5	4215263.68	1.22E-02	6.92E-03	1.86E-03	1.05E-03	8.41E-04	4.33E-04

1921	569795.81	4215273.35	1.16E-02	6.59E-03	1.78E-03	1.00E-03	8.02E-04	4.13E-04
1922	569796.13	4215283.02	1.11E-02	6.31E-03	1.70E-03	9.60E-04	7.68E-04	3.95E-04
1923	569796.44	4215292.69	1.07E-02	6.08E-03	1.64E-03	9.25E-04	7.40E-04	3.81E-04
1924	569796.76	4215302.36	1.04E-02	5.88E-03	1.59E-03	8.94E-04	7.15E-04	3.68E-04
1925	569797.07	4215312.04	1.00E-02	5.68E-03	1.53E-03	8.65E-04	6.91E-04	3.56E-04
1926	569797.39	4215321.71	9.80E-03	5.55E-03	1.50E-03	8.44E-04	6.75E-04	3.48E-04
1927	569797.7	4215331.38	9.63E-03	5.46E-03	1.47E-03	8.30E-04	6.64E-04	3.42E-04
1928	569798.02	4215341.05	9.46E-03	5.36E-03	1.44E-03	8.15E-04	6.52E-04	3.35E-04
1929	569798.33	4215350.72	9.31E-03	5.27E-03	1.42E-03	8.02E-04	6.41E-04	3.30E-04
1930	569798.65	4215360.39	9.20E-03	5.21E-03	1.40E-03	7.93E-04	6.34E-04	3.26E-04
1931	569785.19	4215254.33	1.22E-02	6.89E-03	1.86E-03	1.05E-03	8.38E-04	4.31E-04
1932	569785.5	4215264	1.15E-02	6.52E-03	1.76E-03	9.92E-04	7.93E-04	4.08E-04
1933	569785.82	4215273.68	1.10E-02	6.22E-03	1.68E-03	9.47E-04	7.57E-04	3.90E-04
1934	569786.13	4215283.35	1.05E-02	5.96E-03	1.61E-03	9.07E-04	7.25E-04	3.73E-04
1935	569786.45	4215293.02	1.02E-02	5.76E-03	1.55E-03	8.77E-04	7.01E-04	3.61E-04
1936	569786.76	4215302.69	9.86E-03	5.59E-03	1.51E-03	8.50E-04	6.80E-04	3.50E-04
1937	569787.08	4215312.36	9.56E-03	5.41E-03	1.46E-03	8.23E-04	6.59E-04	3.39E-04
1938	569787.39	4215322.03	9.34E-03	5.29E-03	1.43E-03	8.05E-04	6.44E-04	3.31E-04
1939	569787.71	4215331.7	9.18E-03	5.20E-03	1.40E-03	7.91E-04	6.32E-04	3.25E-04
1940	569788.02	4215341.38	8.99E-03	5.09E-03	1.37E-03	7.75E-04	6.19E-04	3.19E-04
1941	569788.34	4215351.05	8.84E-03	5.01E-03	1.35E-03	7.62E-04	6.09E-04	3.13E-04
1942	569788.65	4215360.72	8.72E-03	4.94E-03	1.33E-03	7.51E-04	6.01E-04	3.09E-04
1943	569775.51	4215264.33	1.09E-02	6.19E-03	1.67E-03	9.42E-04	7.53E-04	3.88E-04
1944	569775.82	4215274	1.04E-02	5.91E-03	1.59E-03	8.99E-04	7.19E-04	3.70E-04
1945	569776.14	4215283.67	1.00E-02	5.66E-03	1.53E-03	8.61E-04	6.89E-04	3.55E-04
1946	569776.45	4215293.34	9.66E-03	5.47E-03	1.48E-03	8.33E-04	6.66E-04	3.43E-04
1947	569776.77	4215303.02	9.37E-03	5.31E-03	1.43E-03	8.07E-04	6.45E-04	3.32E-04
1948	569777.08	4215312.69	9.07E-03	5.14E-03	1.39E-03	7.82E-04	6.25E-04	3.22E-04
1949	569777.4	4215322.36	8.87E-03	5.03E-03	1.35E-03	7.65E-04	6.11E-04	3.15E-04
1950	569777.71	4215332.03	8.71E-03	4.93E-03	1.33E-03	7.50E-04	6.00E-04	3.09E-04
1951	569778.03	4215341.7	8.52E-03	4.83E-03	1.30E-03	7.34E-04	5.87E-04	3.02E-04
1952	569778.34	4215351.37	8.37E-03	4.74E-03	1.28E-03	7.21E-04	5.77E-04	2.97E-04
1953	569778.66	4215361.04	8.25E-03	4.68E-03	1.26E-03	7.11E-04	5.69E-04	2.93E-04
1954	569765.51	4215264.66	1.04E-02	5.90E-03	1.59E-03	8.97E-04	7.17E-04	3.69E-04
1955	569765.83	4215274.33	9.93E-03	5.63E-03	1.52E-03	8.56E-04	6.84E-04	3.52E-04
1956	569766.14	4215284	9.52E-03	5.39E-03	1.45E-03	8.20E-04	6.56E-04	3.38E-04
1957	569766.46	4215293.67	9.19E-03	5.21E-03	1.40E-03	7.92E-04	6.34E-04	3.26E-04
1958	569766.77	4215303.34	8.90E-03	5.04E-03	1.36E-03	7.67E-04	6.13E-04	3.16E-04
1959	569767.09	4215313.01	8.61E-03	4.88E-03	1.32E-03	7.42E-04	5.94E-04	3.06E-04
1960	569767.4	4215322.68	8.42E-03	4.77E-03	1.29E-03	7.25E-04	5.80E-04	2.99E-04
1961	569767.72	4215332.36	8.25E-03	4.68E-03	1.26E-03	7.11E-04	5.69E-04	2.93E-04
1962	569768.03	4215342.03	8.06E-03	4.57E-03	1.23E-03	6.95E-04	5.56E-04	2.86E-04
1963	569768.35	4215351.7	7.92E-03	4.49E-03	1.21E-03	6.82E-04	5.46E-04	2.81E-04
1964	569768.66	4215361.37	7.81E-03	4.42E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
1965	569755.83	4215274.65	9.46E-03	5.36E-03	1.45E-03	8.15E-04	6.52E-04	3.36E-04
1966	569756.15	4215284.32	9.07E-03	5.14E-03	1.39E-03	7.82E-04	6.25E-04	3.22E-04
1967	569756.46	4215293.99	8.76E-03	4.96E-03	1.34E-03	7.54E-04	6.03E-04	3.11E-04
1968	569756.78	4215303.67	8.47E-03	4.80E-03	1.29E-03	7.30E-04	5.83E-04	3.00E-04
1969	569757.09	4215313.34	8.20E-03	4.64E-03	1.25E-03	7.06E-04	5.65E-04	2.91E-04
1970	569757.41	4215323.01	8.01E-03	4.54E-03	1.22E-03	6.90E-04	5.52E-04	2.84E-04
1971	569757.72	4215332.68	7.84E-03	4.44E-03	1.20E-03	6.76E-04	5.40E-04	2.78E-04
1972	569758.04	4215342.35	7.66E-03	4.34E-03	1.17E-03	6.60E-04	5.28E-04	2.72E-04

1973	569758.35	4215352.02	7.51E-03	4.26E-03	1.15E-03	6.47E-04	5.18E-04	2.66E-04
1974	569758.67	4215361.69	7.40E-03	4.19E-03	1.13E-03	6.38E-04	5.10E-04	2.63E-04
1975	569745.84	4215274.98	9.03E-03	5.11E-03	1.38E-03	7.78E-04	6.22E-04	3.20E-04
1976	569746.15	4215284.65	8.66E-03	4.90E-03	1.32E-03	7.46E-04	5.97E-04	3.07E-04
1977	569746.47	4215294.32	8.37E-03	4.74E-03	1.28E-03	7.21E-04	5.77E-04	2.97E-04
1978	569746.78	4215303.99	8.10E-03	4.59E-03	1.24E-03	6.98E-04	5.58E-04	2.87E-04
1979	569747.1	4215313.66	7.85E-03	4.45E-03	1.20E-03	6.76E-04	5.41E-04	2.78E-04
1980	569747.41	4215323.33	7.67E-03	4.35E-03	1.17E-03	6.61E-04	5.29E-04	2.72E-04
1981	569747.73	4215333.01	7.50E-03	4.25E-03	1.15E-03	6.46E-04	5.17E-04	2.66E-04
1982	569748.04	4215342.68	7.31E-03	4.14E-03	1.12E-03	6.30E-04	5.04E-04	2.59E-04
1983	569748.36	4215352.35	7.17E-03	4.06E-03	1.09E-03	6.18E-04	4.94E-04	2.54E-04
1984	569735.21	4215255.96	9.51E-03	5.39E-03	1.45E-03	8.19E-04	6.55E-04	3.37E-04
1985	569735.53	4215265.63	9.02E-03	5.11E-03	1.38E-03	7.78E-04	6.22E-04	3.20E-04
1986	569735.84	4215275.3	8.62E-03	4.88E-03	1.32E-03	7.42E-04	5.94E-04	3.06E-04
1987	569736.16	4215284.97	8.27E-03	4.68E-03	1.26E-03	7.12E-04	5.70E-04	2.93E-04
1988	569736.47	4215294.65	8.01E-03	4.54E-03	1.22E-03	6.90E-04	5.52E-04	2.84E-04
1989	569736.79	4215304.32	7.77E-03	4.40E-03	1.19E-03	6.70E-04	5.35E-04	2.76E-04
1990	569737.1	4215313.99	7.54E-03	4.27E-03	1.15E-03	6.50E-04	5.20E-04	2.67E-04
1991	569737.42	4215323.66	7.37E-03	4.17E-03	1.13E-03	6.35E-04	5.08E-04	2.61E-04
1992	569737.73	4215333.33	7.20E-03	4.08E-03	1.10E-03	6.20E-04	4.96E-04	2.55E-04
1993	569738.05	4215343	7.01E-03	3.97E-03	1.07E-03	6.04E-04	4.83E-04	2.49E-04
1994	569738.36	4215352.67	6.87E-03	3.89E-03	1.05E-03	5.92E-04	4.73E-04	2.44E-04
1995	569724.59	4215236.94	1.03E-02	5.82E-03	1.57E-03	8.86E-04	7.09E-04	3.65E-04
1996	569724.9	4215246.61	9.64E-03	5.46E-03	1.47E-03	8.30E-04	6.64E-04	3.42E-04
1997	569725.22	4215256.29	9.08E-03	5.15E-03	1.39E-03	7.83E-04	6.26E-04	3.22E-04
1998	569725.53	4215265.96	8.62E-03	4.88E-03	1.32E-03	7.43E-04	5.94E-04	3.06E-04
1999	569725.85	4215275.63	8.23E-03	4.66E-03	1.26E-03	7.09E-04	5.67E-04	2.92E-04
2000	569726.16	4215285.3	7.90E-03	4.48E-03	1.21E-03	6.81E-04	5.45E-04	2.80E-04
2001	569726.48	4215294.97	7.68E-03	4.35E-03	1.17E-03	6.61E-04	5.29E-04	2.72E-04
2002	569726.79	4215304.64	7.46E-03	4.23E-03	1.14E-03	6.43E-04	5.14E-04	2.65E-04
2003	569727.11	4215314.31	7.25E-03	4.11E-03	1.11E-03	6.24E-04	4.99E-04	2.57E-04
2004	569727.42	4215323.99	7.08E-03	4.01E-03	1.08E-03	6.10E-04	4.88E-04	2.51E-04
2005	569727.74	4215333.66	6.91E-03	3.91E-03	1.06E-03	5.95E-04	4.76E-04	2.45E-04
2006	569728.05	4215343.33	6.72E-03	3.81E-03	1.03E-03	5.79E-04	4.63E-04	2.38E-04
2007	569728.37	4215353	6.59E-03	3.73E-03	1.01E-03	5.68E-04	4.54E-04	2.34E-04
2008	569728.68	4215362.67	6.48E-03	3.67E-03	9.90E-04	5.59E-04	4.47E-04	2.30E-04
2009	569713.96	4215217.93	1.08E-02	6.10E-03	1.64E-03	9.28E-04	7.42E-04	3.82E-04
2010	569714.28	4215227.6	1.06E-02	6.02E-03	1.62E-03	9.16E-04	7.32E-04	3.77E-04
2011	569714.59	4215237.27	9.96E-03	5.64E-03	1.52E-03	8.59E-04	6.87E-04	3.53E-04
2012	569714.91	4215246.94	9.36E-03	5.30E-03	1.43E-03	8.06E-04	6.45E-04	3.32E-04
2013	569715.22	4215256.61	8.83E-03	5.00E-03	1.35E-03	7.61E-04	6.08E-04	3.13E-04
2014	569715.54	4215266.28	8.36E-03	4.74E-03	1.28E-03	7.21E-04	5.76E-04	2.97E-04
2015	569715.85	4215275.95	7.98E-03	4.52E-03	1.22E-03	6.87E-04	5.50E-04	2.83E-04
2016	569716.17	4215285.63	7.64E-03	4.33E-03	1.17E-03	6.59E-04	5.27E-04	2.71E-04
2017	569716.48	4215295.3	7.42E-03	4.20E-03	1.13E-03	6.39E-04	5.11E-04	2.63E-04
2018	569716.8	4215304.97	7.20E-03	4.08E-03	1.10E-03	6.21E-04	4.96E-04	2.55E-04
2019	569717.11	4215314.64	6.99E-03	3.96E-03	1.07E-03	6.03E-04	4.82E-04	2.48E-04
2020	569717.43	4215324.31	6.83E-03	3.87E-03	1.04E-03	5.88E-04	4.70E-04	2.42E-04
2021	569717.74	4215333.98	6.65E-03	3.77E-03	1.02E-03	5.73E-04	4.58E-04	2.36E-04
2022	569718.06	4215343.65	6.46E-03	3.66E-03	9.87E-04	5.57E-04	4.45E-04	2.29E-04
2023	569718.37	4215353.33	6.33E-03	3.59E-03	9.67E-04	5.45E-04	4.36E-04	2.25E-04
2024	569718.69	4215363	6.23E-03	3.53E-03	9.51E-04	5.36E-04	4.29E-04	2.21E-04

2025	569719	4215372.67	6.13E-03	3.47E-03	9.35E-04	5.28E-04	4.22E-04	2.17E-04
2026	569719.32	4215382.34	6.09E-03	3.45E-03	9.29E-04	5.24E-04	4.19E-04	2.16E-04
2027	569709.13	4215384.84	5.82E-03	3.30E-03	8.89E-04	5.02E-04	4.01E-04	2.07E-04
2028	569699.1	4215385.23	5.58E-03	3.16E-03	8.53E-04	4.81E-04	3.85E-04	1.98E-04
2029	569702.37	4215376.72	5.68E-03	3.22E-03	8.68E-04	4.90E-04	3.92E-04	2.02E-04
2030	569705.64	4215368.2	5.85E-03	3.32E-03	8.94E-04	5.04E-04	4.03E-04	2.08E-04
2031	569708.92	4215359.69	6.03E-03	3.42E-03	9.21E-04	5.20E-04	4.16E-04	2.14E-04
2032	569689.27	4215385.11	5.38E-03	3.05E-03	8.21E-04	4.63E-04	3.70E-04	1.91E-04
2033	569692.7	4215376.18	5.48E-03	3.10E-03	8.36E-04	4.72E-04	3.77E-04	1.94E-04
2034	569696.14	4215367.24	5.66E-03	3.20E-03	8.64E-04	4.87E-04	3.90E-04	2.01E-04
2035	569699.58	4215358.3	5.84E-03	3.31E-03	8.92E-04	5.03E-04	4.02E-04	2.07E-04
2036	569703.01	4215349.36	6.02E-03	3.41E-03	9.20E-04	5.19E-04	4.15E-04	2.14E-04
2037	569706.45	4215340.42	6.26E-03	3.55E-03	9.56E-04	5.39E-04	4.31E-04	2.22E-04
2038	569679.24	4215385.52	5.18E-03	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
2039	569682.64	4215376.68	5.30E-03	3.00E-03	8.09E-04	4.57E-04	3.65E-04	1.88E-04
2040	569686.04	4215367.83	5.47E-03	3.10E-03	8.35E-04	4.71E-04	3.77E-04	1.94E-04
2041	569689.44	4215358.99	5.64E-03	3.19E-03	8.61E-04	4.86E-04	3.88E-04	2.00E-04
2042	569692.84	4215350.14	5.80E-03	3.29E-03	8.86E-04	5.00E-04	4.00E-04	2.06E-04
2043	569696.24	4215341.3	6.02E-03	3.41E-03	9.19E-04	5.19E-04	4.15E-04	2.13E-04
2044	569699.64	4215332.45	6.27E-03	3.55E-03	9.57E-04	5.40E-04	4.32E-04	2.22E-04
2045	569703.04	4215323.61	6.51E-03	3.69E-03	9.95E-04	5.61E-04	4.49E-04	2.31E-04
2046	569706.44	4215314.76	6.75E-03	3.83E-03	1.03E-03	5.82E-04	4.65E-04	2.40E-04
2047	569669.21	4215385.91	5.00E-03	2.83E-03	7.64E-04	4.31E-04	3.45E-04	1.77E-04
2048	569672.58	4215377.15	5.13E-03	2.91E-03	7.84E-04	4.42E-04	3.54E-04	1.82E-04
2049	569675.94	4215368.4	5.30E-03	3.00E-03	8.09E-04	4.57E-04	3.65E-04	1.88E-04
2050	569679.31	4215359.64	5.47E-03	3.10E-03	8.35E-04	4.71E-04	3.77E-04	1.94E-04
2051	569682.68	4215350.88	5.63E-03	3.19E-03	8.60E-04	4.85E-04	3.88E-04	2.00E-04
2052	569686.05	4215342.12	5.82E-03	3.30E-03	8.89E-04	5.02E-04	4.01E-04	2.07E-04
2053	569689.41	4215333.36	6.05E-03	3.43E-03	9.24E-04	5.21E-04	4.17E-04	2.15E-04
2054	569692.78	4215324.6	6.28E-03	3.56E-03	9.59E-04	5.41E-04	4.33E-04	2.23E-04
2055	569696.15	4215315.84	6.51E-03	3.69E-03	9.94E-04	5.61E-04	4.48E-04	2.31E-04
2056	569699.52	4215307.08	6.78E-03	3.84E-03	1.04E-03	5.84E-04	4.67E-04	2.40E-04
2057	569702.88	4215298.32	7.06E-03	4.00E-03	1.08E-03	6.08E-04	4.86E-04	2.50E-04
2058	569706.25	4215289.56	7.34E-03	4.16E-03	1.12E-03	6.32E-04	5.06E-04	2.60E-04
2059	569659.18	4215386.3	4.82E-03	2.73E-03	7.36E-04	4.15E-04	3.32E-04	1.71E-04
2060	569662.52	4215377.62	4.97E-03	2.81E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
2061	569665.86	4215368.93	5.14E-03	2.91E-03	7.85E-04	4.43E-04	3.54E-04	1.82E-04
2062	569669.2	4215360.25	5.31E-03	3.01E-03	8.11E-04	4.58E-04	3.66E-04	1.88E-04
2063	569672.54	4215351.57	5.48E-03	3.10E-03	8.36E-04	4.72E-04	3.77E-04	1.94E-04
2064	569675.87	4215342.88	5.66E-03	3.20E-03	8.64E-04	4.87E-04	3.90E-04	2.01E-04
2065	569679.21	4215334.2	5.87E-03	3.32E-03	8.96E-04	5.06E-04	4.04E-04	2.08E-04
2066	569682.55	4215325.52	6.08E-03	3.45E-03	9.29E-04	5.24E-04	4.19E-04	2.16E-04
2067	569685.89	4215316.83	6.29E-03	3.57E-03	9.61E-04	5.42E-04	4.34E-04	2.23E-04
2068	569689.23	4215308.15	6.56E-03	3.71E-03	1.00E-03	5.65E-04	4.52E-04	2.33E-04
2069	569692.57	4215299.46	6.82E-03	3.87E-03	1.04E-03	5.88E-04	4.70E-04	2.42E-04
2070	569695.9	4215290.78	7.10E-03	4.02E-03	1.08E-03	6.12E-04	4.89E-04	2.52E-04
2071	569699.24	4215282.1	7.42E-03	4.20E-03	1.13E-03	6.39E-04	5.11E-04	2.63E-04
2072	569702.58	4215273.41	7.81E-03	4.42E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
2073	569705.92	4215264.73	8.24E-03	4.67E-03	1.26E-03	7.10E-04	5.68E-04	2.92E-04
2074	569649.16	4215386.68	4.63E-03	2.62E-03	7.07E-04	3.99E-04	3.19E-04	1.64E-04
2075	569652.47	4215378.07	4.79E-03	2.71E-03	7.31E-04	4.12E-04	3.30E-04	1.70E-04
2076	569655.79	4215369.45	4.97E-03	2.81E-03	7.58E-04	4.28E-04	3.42E-04	1.76E-04

2077	569659.1	4215360.84	5.15E-03	2.92E-03	7.87E-04	4.44E-04	3.55E-04	1.83E-04
2078	569662.41	4215352.22	5.32E-03	3.02E-03	8.13E-04	4.59E-04	3.67E-04	1.89E-04
2079	569665.72	4215343.61	5.50E-03	3.11E-03	8.39E-04	4.74E-04	3.79E-04	1.95E-04
2080	569669.03	4215334.99	5.70E-03	3.23E-03	8.71E-04	4.91E-04	3.93E-04	2.02E-04
2081	569672.34	4215326.38	5.90E-03	3.34E-03	9.01E-04	5.08E-04	4.07E-04	2.09E-04
2082	569675.66	4215317.76	6.10E-03	3.46E-03	9.31E-04	5.26E-04	4.20E-04	2.16E-04
2083	569678.97	4215309.15	6.36E-03	3.60E-03	9.71E-04	5.48E-04	4.38E-04	2.26E-04
2084	569682.28	4215300.53	6.63E-03	3.76E-03	1.01E-03	5.72E-04	4.57E-04	2.35E-04
2085	569685.59	4215291.92	6.92E-03	3.92E-03	1.06E-03	5.96E-04	4.77E-04	2.45E-04
2086	569688.9	4215283.3	7.21E-03	4.09E-03	1.10E-03	6.21E-04	4.97E-04	2.56E-04
2087	569692.21	4215274.69	7.56E-03	4.29E-03	1.16E-03	6.52E-04	5.21E-04	2.68E-04
2088	569695.53	4215266.07	7.98E-03	4.52E-03	1.22E-03	6.87E-04	5.50E-04	2.83E-04
2089	569698.84	4215257.46	8.45E-03	4.79E-03	1.29E-03	7.28E-04	5.83E-04	3.00E-04
2090	569702.15	4215248.84	8.96E-03	5.08E-03	1.37E-03	7.72E-04	6.18E-04	3.18E-04
2091	569705.46	4215240.23	9.54E-03	5.40E-03	1.46E-03	8.22E-04	6.57E-04	3.38E-04
2092	569639.3	4215386.65	4.46E-03	2.53E-03	6.81E-04	3.85E-04	3.08E-04	1.58E-04
2093	569642.74	4215377.69	4.63E-03	2.62E-03	7.07E-04	3.99E-04	3.19E-04	1.64E-04
2094	569646.19	4215368.73	4.82E-03	2.73E-03	7.36E-04	4.16E-04	3.32E-04	1.71E-04
2095	569649.63	4215359.77	5.02E-03	2.84E-03	7.67E-04	4.33E-04	3.46E-04	1.78E-04
2096	569653.08	4215350.81	5.21E-03	2.95E-03	7.95E-04	4.49E-04	3.59E-04	1.85E-04
2097	569656.52	4215341.85	5.40E-03	3.06E-03	8.25E-04	4.65E-04	3.72E-04	1.92E-04
2098	569659.96	4215332.89	5.61E-03	3.18E-03	8.57E-04	4.83E-04	3.87E-04	1.99E-04
2099	569663.41	4215323.93	5.81E-03	3.29E-03	8.87E-04	5.00E-04	4.00E-04	2.06E-04
2100	569666.85	4215314.97	6.01E-03	3.41E-03	9.18E-04	5.18E-04	4.14E-04	2.13E-04
2101	569670.3	4215306.01	6.30E-03	3.57E-03	9.63E-04	5.43E-04	4.34E-04	2.24E-04
2102	569673.74	4215297.05	6.61E-03	3.74E-03	1.01E-03	5.69E-04	4.55E-04	2.34E-04
2103	569677.19	4215288.09	6.92E-03	3.92E-03	1.06E-03	5.97E-04	4.77E-04	2.46E-04
2104	569680.63	4215279.13	7.25E-03	4.11E-03	1.11E-03	6.25E-04	5.00E-04	2.57E-04
2105	569684.07	4215270.17	7.63E-03	4.32E-03	1.17E-03	6.57E-04	5.26E-04	2.71E-04
2106	569687.52	4215261.21	8.07E-03	4.57E-03	1.23E-03	6.95E-04	5.56E-04	2.86E-04
2107	569690.96	4215252.26	8.55E-03	4.85E-03	1.31E-03	7.37E-04	5.89E-04	3.03E-04
2108	569694.41	4215243.3	9.09E-03	5.15E-03	1.39E-03	7.83E-04	6.27E-04	3.23E-04
2109	569697.85	4215234.34	9.70E-03	5.49E-03	1.48E-03	8.36E-04	6.68E-04	3.44E-04
2110	569701.29	4215225.38	1.03E-02	5.84E-03	1.57E-03	8.88E-04	7.10E-04	3.65E-04
2111	569704.74	4215216.42	1.04E-02	5.89E-03	1.59E-03	8.96E-04	7.17E-04	3.69E-04
2112	569629.27	4215387.04	4.31E-03	2.44E-03	6.57E-04	3.71E-04	2.97E-04	1.53E-04
2113	569632.69	4215378.16	4.47E-03	2.53E-03	6.82E-04	3.85E-04	3.08E-04	1.58E-04
2114	569636.1	4215369.27	4.66E-03	2.64E-03	7.12E-04	4.01E-04	3.21E-04	1.65E-04
2115	569639.52	4215360.39	4.86E-03	2.75E-03	7.42E-04	4.19E-04	3.35E-04	1.72E-04
2116	569642.93	4215351.51	5.05E-03	2.86E-03	7.71E-04	4.35E-04	3.48E-04	1.79E-04
2117	569646.34	4215342.63	5.25E-03	2.97E-03	8.02E-04	4.52E-04	3.62E-04	1.86E-04
2118	569649.76	4215333.75	5.46E-03	3.10E-03	8.34E-04	4.71E-04	3.77E-04	1.94E-04
2119	569653.17	4215324.87	5.67E-03	3.21E-03	8.66E-04	4.89E-04	3.91E-04	2.01E-04
2120	569656.59	4215315.99	5.86E-03	3.32E-03	8.95E-04	5.05E-04	4.04E-04	2.08E-04
2121	569660	4215307.11	6.14E-03	3.48E-03	9.37E-04	5.29E-04	4.23E-04	2.18E-04
2122	569663.41	4215298.22	6.44E-03	3.65E-03	9.83E-04	5.55E-04	4.44E-04	2.28E-04
2123	569666.83	4215289.34	6.77E-03	3.83E-03	1.03E-03	5.83E-04	4.66E-04	2.40E-04
2124	569670.24	4215280.46	7.09E-03	4.02E-03	1.08E-03	6.11E-04	4.89E-04	2.52E-04
2125	569673.66	4215271.58	7.44E-03	4.21E-03	1.14E-03	6.41E-04	5.13E-04	2.64E-04
2126	569677.07	4215262.7	7.83E-03	4.44E-03	1.20E-03	6.75E-04	5.40E-04	2.78E-04
2127	569680.49	4215253.82	8.27E-03	4.69E-03	1.26E-03	7.13E-04	5.70E-04	2.93E-04
2128	569683.9	4215244.94	8.73E-03	4.94E-03	1.33E-03	7.52E-04	6.01E-04	3.10E-04

2129	569687.31	4215236.06	9.26E-03	5.25E-03	1.41E-03	7.98E-04	6.38E-04	3.29E-04
2130	569690.73	4215227.18	9.88E-03	5.60E-03	1.51E-03	8.51E-04	6.81E-04	3.50E-04
2131	569694.14	4215218.29	1.00E-02	5.67E-03	1.53E-03	8.63E-04	6.90E-04	3.55E-04
2132	569697.56	4215209.41	1.01E-02	5.70E-03	1.54E-03	8.67E-04	6.94E-04	3.57E-04
2133	569625.86	4215395.92	4.14E-03	2.35E-03	6.32E-04	3.57E-04	2.85E-04	1.47E-04
2134	569619.25	4215387.42	4.16E-03	2.36E-03	6.36E-04	3.59E-04	2.87E-04	1.48E-04
2135	569622.64	4215378.61	4.32E-03	2.45E-03	6.60E-04	3.73E-04	2.98E-04	1.53E-04
2136	569626.02	4215369.8	4.51E-03	2.55E-03	6.88E-04	3.88E-04	3.11E-04	1.60E-04
2137	569629.41	4215360.99	4.71E-03	2.67E-03	7.18E-04	4.05E-04	3.24E-04	1.67E-04
2138	569632.8	4215352.18	4.90E-03	2.78E-03	7.49E-04	4.22E-04	3.38E-04	1.74E-04
2139	569636.18	4215343.37	5.10E-03	2.89E-03	7.79E-04	4.40E-04	3.52E-04	1.81E-04
2140	569639.57	4215334.56	5.33E-03	3.02E-03	8.14E-04	4.59E-04	3.67E-04	1.89E-04
2141	569642.96	4215325.75	5.54E-03	3.14E-03	8.47E-04	4.78E-04	3.82E-04	1.97E-04
2142	569646.34	4215316.94	5.75E-03	3.26E-03	8.78E-04	4.95E-04	3.96E-04	2.04E-04
2143	569649.73	4215308.13	6.02E-03	3.41E-03	9.19E-04	5.18E-04	4.15E-04	2.13E-04
2144	569653.12	4215299.32	6.31E-03	3.58E-03	9.64E-04	5.44E-04	4.35E-04	2.24E-04
2145	569656.5	4215290.51	6.63E-03	3.76E-03	1.01E-03	5.71E-04	4.57E-04	2.35E-04
2146	569659.89	4215281.7	6.95E-03	3.94E-03	1.06E-03	5.99E-04	4.79E-04	2.47E-04
2147	569663.28	4215272.89	7.27E-03	4.12E-03	1.11E-03	6.26E-04	5.01E-04	2.58E-04
2148	569666.66	4215264.08	7.63E-03	4.32E-03	1.16E-03	6.57E-04	5.26E-04	2.71E-04
2149	569670.05	4215255.27	8.03E-03	4.55E-03	1.23E-03	6.92E-04	5.53E-04	2.85E-04
2150	569673.44	4215246.46	8.41E-03	4.76E-03	1.28E-03	7.24E-04	5.79E-04	2.98E-04
2151	569676.82	4215237.65	8.84E-03	5.01E-03	1.35E-03	7.62E-04	6.09E-04	3.14E-04
2152	569680.21	4215228.84	9.35E-03	5.30E-03	1.43E-03	8.06E-04	6.44E-04	3.32E-04
2153	569683.6	4215220.03	9.52E-03	5.39E-03	1.45E-03	8.20E-04	6.56E-04	3.38E-04
2154	569686.98	4215211.23	9.55E-03	5.41E-03	1.46E-03	8.23E-04	6.58E-04	3.39E-04
2155	569690.37	4215202.42	9.62E-03	5.45E-03	1.47E-03	8.29E-04	6.63E-04	3.41E-04
2156	569615.87	4215396.23	4.00E-03	2.27E-03	6.11E-04	3.45E-04	2.76E-04	1.42E-04
2157	569616.17	4215405.88	3.88E-03	2.20E-03	5.92E-04	3.34E-04	2.67E-04	1.38E-04
2158	569616.47	4215415.53	3.77E-03	2.14E-03	5.76E-04	3.25E-04	2.60E-04	1.34E-04
2159	569609.23	4215387.79	4.03E-03	2.28E-03	6.15E-04	3.47E-04	2.78E-04	1.43E-04
2160	569612.59	4215379.05	4.19E-03	2.37E-03	6.39E-04	3.61E-04	2.89E-04	1.49E-04
2161	569615.95	4215370.31	4.37E-03	2.47E-03	6.67E-04	3.76E-04	3.01E-04	1.55E-04
2162	569619.32	4215361.56	4.56E-03	2.58E-03	6.96E-04	3.93E-04	3.14E-04	1.62E-04
2163	569622.68	4215352.82	4.75E-03	2.69E-03	7.26E-04	4.09E-04	3.27E-04	1.69E-04
2164	569626.04	4215344.07	4.95E-03	2.81E-03	7.57E-04	4.27E-04	3.41E-04	1.76E-04
2165	569629.4	4215335.33	5.19E-03	2.94E-03	7.92E-04	4.47E-04	3.58E-04	1.84E-04
2166	569632.76	4215326.59	5.43E-03	3.07E-03	8.28E-04	4.67E-04	3.74E-04	1.92E-04
2167	569636.12	4215317.84	5.65E-03	3.20E-03	8.63E-04	4.87E-04	3.89E-04	2.00E-04
2168	569639.48	4215309.1	5.91E-03	3.35E-03	9.02E-04	5.09E-04	4.07E-04	2.10E-04
2169	569642.84	4215300.35	6.20E-03	3.51E-03	9.47E-04	5.34E-04	4.27E-04	2.20E-04
2170	569646.21	4215291.61	6.51E-03	3.69E-03	9.95E-04	5.61E-04	4.49E-04	2.31E-04
2171	569649.57	4215282.87	6.83E-03	3.87E-03	1.04E-03	5.88E-04	4.71E-04	2.42E-04
2172	569652.93	4215274.12	7.12E-03	4.03E-03	1.09E-03	6.13E-04	4.91E-04	2.53E-04
2173	569656.29	4215265.38	7.44E-03	4.22E-03	1.14E-03	6.41E-04	5.13E-04	2.64E-04
2174	569659.65	4215256.63	7.81E-03	4.42E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
2175	569663.01	4215247.89	8.12E-03	4.60E-03	1.24E-03	6.99E-04	5.59E-04	2.88E-04
2176	569666.37	4215239.14	8.48E-03	4.80E-03	1.29E-03	7.30E-04	5.84E-04	3.01E-04
2177	569669.74	4215230.4	8.89E-03	5.04E-03	1.36E-03	7.66E-04	6.13E-04	3.15E-04
2178	569673.1	4215221.66	9.08E-03	5.14E-03	1.39E-03	7.83E-04	6.26E-04	3.22E-04
2179	569676.46	4215212.91	9.04E-03	5.12E-03	1.38E-03	7.79E-04	6.23E-04	3.21E-04
2180	569679.82	4215204.17	9.03E-03	5.12E-03	1.38E-03	7.78E-04	6.23E-04	3.20E-04

2181	569683.18	4215195.42	9.04E-03	5.12E-03	1.38E-03	7.79E-04	6.23E-04	3.21E-04
2182	569695.14	4215182.97	9.06E-03	5.13E-03	1.38E-03	7.80E-04	6.24E-04	3.21E-04
2183	569605.87	4215396.54	3.87E-03	2.19E-03	5.91E-04	3.33E-04	2.67E-04	1.37E-04
2184	569606.17	4215406.19	3.75E-03	2.12E-03	5.72E-04	3.23E-04	2.58E-04	1.33E-04
2185	569606.47	4215415.84	3.65E-03	2.07E-03	5.58E-04	3.15E-04	2.52E-04	1.30E-04
2186	569606.77	4215425.5	3.56E-03	2.02E-03	5.43E-04	3.07E-04	2.45E-04	1.26E-04
2187	569599.21	4215388.17	3.90E-03	2.21E-03	5.96E-04	3.36E-04	2.69E-04	1.38E-04
2188	569602.55	4215379.48	4.06E-03	2.30E-03	6.19E-04	3.50E-04	2.80E-04	1.44E-04
2189	569605.89	4215370.8	4.23E-03	2.40E-03	6.46E-04	3.64E-04	2.92E-04	1.50E-04
2190	569609.23	4215362.11	4.42E-03	2.50E-03	6.75E-04	3.81E-04	3.04E-04	1.57E-04
2191	569612.57	4215353.43	4.61E-03	2.61E-03	7.04E-04	3.97E-04	3.18E-04	1.63E-04
2192	569615.9	4215344.75	4.81E-03	2.72E-03	7.34E-04	4.14E-04	3.31E-04	1.70E-04
2193	569619.24	4215336.06	5.04E-03	2.86E-03	7.70E-04	4.34E-04	3.47E-04	1.79E-04
2194	569622.58	4215327.38	5.28E-03	2.99E-03	8.07E-04	4.55E-04	3.64E-04	1.87E-04
2195	569625.92	4215318.7	5.53E-03	3.13E-03	8.44E-04	4.76E-04	3.81E-04	1.96E-04
2196	569629.26	4215310.01	5.80E-03	3.28E-03	8.85E-04	4.99E-04	3.99E-04	2.06E-04
2197	569632.59	4215301.33	6.10E-03	3.45E-03	9.31E-04	5.25E-04	4.20E-04	2.16E-04
2198	569635.93	4215292.64	6.41E-03	3.63E-03	9.79E-04	5.52E-04	4.42E-04	2.27E-04
2199	569639.27	4215283.96	6.72E-03	3.81E-03	1.03E-03	5.79E-04	4.63E-04	2.38E-04
2200	569642.61	4215275.28	6.98E-03	3.96E-03	1.07E-03	6.02E-04	4.81E-04	2.48E-04
2201	569645.95	4215266.59	7.27E-03	4.12E-03	1.11E-03	6.27E-04	5.01E-04	2.58E-04
2202	569649.29	4215257.91	7.60E-03	4.30E-03	1.16E-03	6.55E-04	5.24E-04	2.69E-04
2203	569652.62	4215249.22	7.84E-03	4.44E-03	1.20E-03	6.75E-04	5.40E-04	2.78E-04
2204	569655.96	4215240.54	8.11E-03	4.59E-03	1.24E-03	6.98E-04	5.59E-04	2.88E-04
2205	569659.3	4215231.86	8.44E-03	4.78E-03	1.29E-03	7.27E-04	5.82E-04	2.99E-04
2206	569662.64	4215223.17	8.68E-03	4.92E-03	1.33E-03	7.48E-04	5.98E-04	3.08E-04
2207	569665.98	4215214.49	8.59E-03	4.87E-03	1.31E-03	7.40E-04	5.92E-04	3.05E-04
2208	569669.31	4215205.81	8.53E-03	4.83E-03	1.30E-03	7.35E-04	5.88E-04	3.02E-04
2209	569672.65	4215197.12	8.49E-03	4.81E-03	1.30E-03	7.31E-04	5.85E-04	3.01E-04
2210	569675.99	4215188.44	8.36E-03	4.73E-03	1.28E-03	7.20E-04	5.76E-04	2.96E-04
2211	569687.87	4215176.07	8.38E-03	4.74E-03	1.28E-03	7.22E-04	5.77E-04	2.97E-04
2212	569595.87	4215396.85	3.75E-03	2.12E-03	5.72E-04	3.23E-04	2.58E-04	1.33E-04
2213	569596.17	4215406.5	3.63E-03	2.06E-03	5.54E-04	3.13E-04	2.50E-04	1.29E-04
2214	569596.47	4215416.15	3.54E-03	2.01E-03	5.40E-04	3.05E-04	2.44E-04	1.26E-04
2215	569596.77	4215425.81	3.45E-03	1.96E-03	5.27E-04	2.97E-04	2.38E-04	1.22E-04
2216	569597.07	4215435.46	3.37E-03	1.91E-03	5.14E-04	2.90E-04	2.32E-04	1.19E-04
2217	569589.33	4215388.19	3.79E-03	2.15E-03	5.79E-04	3.26E-04	2.61E-04	1.34E-04
2218	569592.78	4215379.21	3.95E-03	2.24E-03	6.03E-04	3.40E-04	2.72E-04	1.40E-04
2219	569596.23	4215370.24	4.12E-03	2.34E-03	6.29E-04	3.55E-04	2.84E-04	1.46E-04
2220	569599.68	4215361.27	4.31E-03	2.44E-03	6.59E-04	3.72E-04	2.97E-04	1.53E-04
2221	569603.13	4215352.29	4.51E-03	2.55E-03	6.89E-04	3.89E-04	3.11E-04	1.60E-04
2222	569606.58	4215343.32	4.72E-03	2.67E-03	7.21E-04	4.07E-04	3.25E-04	1.67E-04
2223	569610.03	4215334.35	4.97E-03	2.81E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
2224	569613.48	4215325.37	5.22E-03	2.96E-03	7.98E-04	4.50E-04	3.60E-04	1.85E-04
2225	569616.92	4215316.4	5.49E-03	3.11E-03	8.38E-04	4.73E-04	3.78E-04	1.95E-04
2226	569620.37	4215307.43	5.77E-03	3.27E-03	8.81E-04	4.97E-04	3.98E-04	2.05E-04
2227	569623.82	4215298.45	6.08E-03	3.45E-03	9.29E-04	5.24E-04	4.19E-04	2.16E-04
2228	569627.27	4215289.48	6.42E-03	3.64E-03	9.80E-04	5.53E-04	4.42E-04	2.28E-04
2229	569630.72	4215280.51	6.71E-03	3.80E-03	1.02E-03	5.78E-04	4.62E-04	2.38E-04
2230	569634.17	4215271.53	7.00E-03	3.97E-03	1.07E-03	6.04E-04	4.83E-04	2.48E-04
2231	569637.62	4215262.56	7.29E-03	4.13E-03	1.11E-03	6.28E-04	5.02E-04	2.59E-04
2232	569641.07	4215253.59	7.55E-03	4.28E-03	1.15E-03	6.50E-04	5.20E-04	2.68E-04

2233	569644.52	4215244.61	7.71E-03	4.37E-03	1.18E-03	6.64E-04	5.31E-04	2.73E-04
2234	569647.97	4215235.64	7.92E-03	4.49E-03	1.21E-03	6.83E-04	5.46E-04	2.81E-04
2235	569651.42	4215226.67	8.20E-03	4.65E-03	1.25E-03	7.07E-04	5.65E-04	2.91E-04
2236	569654.87	4215217.69	8.20E-03	4.65E-03	1.25E-03	7.07E-04	5.65E-04	2.91E-04
2237	569658.32	4215208.72	8.14E-03	4.61E-03	1.24E-03	7.01E-04	5.61E-04	2.89E-04
2238	569661.77	4215199.75	8.03E-03	4.55E-03	1.23E-03	6.92E-04	5.54E-04	2.85E-04
2239	569665.22	4215190.77	7.92E-03	4.49E-03	1.21E-03	6.82E-04	5.46E-04	2.81E-04
2240	569668.67	4215181.8	7.81E-03	4.43E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
2241	569680.94	4215169.02	7.83E-03	4.44E-03	1.20E-03	6.75E-04	5.40E-04	2.78E-04
2242	569585.88	4215397.16	3.64E-03	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
2243	569586.18	4215406.81	3.52E-03	1.99E-03	5.38E-04	3.03E-04	2.43E-04	1.25E-04
2244	569586.48	4215416.47	3.43E-03	1.95E-03	5.24E-04	2.96E-04	2.37E-04	1.22E-04
2245	569586.78	4215426.12	3.35E-03	1.90E-03	5.12E-04	2.89E-04	2.31E-04	1.19E-04
2246	569587.08	4215435.77	3.27E-03	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
2247	569918.17	4215544.25	5.54E-03	3.14E-03	8.47E-04	4.78E-04	3.82E-04	1.97E-04
2248	569927.49	4215542.57	5.64E-03	3.20E-03	8.61E-04	4.86E-04	3.89E-04	2.00E-04
2249	569936.8	4215540.89	5.75E-03	3.26E-03	8.77E-04	4.95E-04	3.96E-04	2.04E-04
2250	569946.12	4215539.22	5.86E-03	3.32E-03	8.95E-04	5.05E-04	4.04E-04	2.08E-04
2251	569955.43	4215537.54	5.98E-03	3.39E-03	9.14E-04	5.16E-04	4.12E-04	2.12E-04
2252	569964.75	4215535.87	6.12E-03	3.47E-03	9.35E-04	5.28E-04	4.22E-04	2.17E-04
2253	569974.06	4215534.19	6.28E-03	3.56E-03	9.59E-04	5.41E-04	4.33E-04	2.23E-04
2254	569983.38	4215532.52	6.45E-03	3.66E-03	9.86E-04	5.56E-04	4.45E-04	2.29E-04
2255	569992.69	4215530.84	6.65E-03	3.77E-03	1.01E-03	5.73E-04	4.58E-04	2.36E-04
2256	570002.01	4215529.17	6.85E-03	3.88E-03	1.05E-03	5.90E-04	4.72E-04	2.43E-04
2257	570011.32	4215527.49	7.06E-03	4.00E-03	1.08E-03	6.08E-04	4.86E-04	2.50E-04
2258	570020.64	4215525.82	7.26E-03	4.12E-03	1.11E-03	6.26E-04	5.01E-04	2.58E-04
2259	569911.2	4215551.84	5.19E-03	2.94E-03	7.93E-04	4.47E-04	3.58E-04	1.84E-04
2260	569902.47	4215549.6	5.28E-03	2.99E-03	8.06E-04	4.55E-04	3.64E-04	1.87E-04
2261	569929.26	4215552.41	5.18E-03	2.94E-03	7.91E-04	4.46E-04	3.57E-04	1.84E-04
2262	569938.57	4215550.74	5.27E-03	2.98E-03	8.04E-04	4.54E-04	3.63E-04	1.87E-04
2263	569947.89	4215549.06	5.36E-03	3.04E-03	8.18E-04	4.62E-04	3.69E-04	1.90E-04
2264	569957.2	4215547.39	5.46E-03	3.09E-03	8.34E-04	4.70E-04	3.76E-04	1.94E-04
2265	569966.52	4215545.71	5.57E-03	3.16E-03	8.51E-04	4.80E-04	3.84E-04	1.98E-04
2266	569975.83	4215544.04	5.70E-03	3.23E-03	8.70E-04	4.91E-04	3.93E-04	2.02E-04
2267	569985.15	4215542.36	5.84E-03	3.31E-03	8.92E-04	5.03E-04	4.02E-04	2.07E-04
2268	569994.46	4215540.68	5.99E-03	3.40E-03	9.15E-04	5.17E-04	4.13E-04	2.13E-04
2269	570003.78	4215539.01	6.16E-03	3.49E-03	9.41E-04	5.31E-04	4.24E-04	2.18E-04
2270	570013.09	4215537.33	6.33E-03	3.58E-03	9.66E-04	5.45E-04	4.36E-04	2.24E-04
2271	570022.41	4215535.66	6.49E-03	3.68E-03	9.91E-04	5.59E-04	4.47E-04	2.30E-04
2272	569913.03	4215561.7	4.79E-03	2.71E-03	7.31E-04	4.13E-04	3.30E-04	1.70E-04
2273	569895.65	4215557.24	4.95E-03	2.81E-03	7.57E-04	4.27E-04	3.41E-04	1.76E-04
2274	569878.28	4215552.77	5.12E-03	2.90E-03	7.81E-04	4.41E-04	3.53E-04	1.81E-04
2275	569921.71	4215563.93	4.70E-03	2.66E-03	7.18E-04	4.05E-04	3.24E-04	1.67E-04
2276	569931.03	4215562.25	4.77E-03	2.70E-03	7.28E-04	4.11E-04	3.29E-04	1.69E-04
2277	569940.34	4215560.58	4.84E-03	2.74E-03	7.39E-04	4.17E-04	3.34E-04	1.72E-04
2278	569949.66	4215558.9	4.92E-03	2.79E-03	7.51E-04	4.24E-04	3.39E-04	1.74E-04
2279	569958.97	4215557.23	5.00E-03	2.83E-03	7.64E-04	4.31E-04	3.45E-04	1.77E-04
2280	569968.29	4215555.55	5.09E-03	2.89E-03	7.78E-04	4.39E-04	3.51E-04	1.81E-04
2281	569977.6	4215553.88	5.20E-03	2.94E-03	7.94E-04	4.48E-04	3.58E-04	1.84E-04
2282	569986.92	4215552.2	5.31E-03	3.01E-03	8.11E-04	4.58E-04	3.66E-04	1.88E-04
2283	569996.23	4215550.53	5.43E-03	3.08E-03	8.30E-04	4.68E-04	3.74E-04	1.93E-04
2284	570005.55	4215548.85	5.56E-03	3.15E-03	8.49E-04	4.79E-04	3.83E-04	1.97E-04

2285	570014.86	4215547.18	5.69E-03	3.22E-03	8.69E-04	4.90E-04	3.92E-04	2.02E-04
2286	570024.18	4215545.5	5.83E-03	3.30E-03	8.90E-04	5.02E-04	4.02E-04	2.07E-04
2287	570033.49	4215543.83	5.95E-03	3.37E-03	9.08E-04	5.12E-04	4.10E-04	2.11E-04
2288	569914.84	4215571.55	4.43E-03	2.51E-03	6.76E-04	3.81E-04	3.05E-04	1.57E-04
2289	569897.56	4215567.11	4.58E-03	2.60E-03	7.00E-04	3.95E-04	3.16E-04	1.63E-04
2290	569880.28	4215562.67	4.74E-03	2.68E-03	7.23E-04	4.08E-04	3.26E-04	1.68E-04
2291	569862.99	4215558.23	4.88E-03	2.77E-03	7.46E-04	4.21E-04	3.36E-04	1.73E-04
2292	569923.48	4215573.77	4.35E-03	2.46E-03	6.64E-04	3.75E-04	3.00E-04	1.54E-04
2293	569932.8	4215572.1	4.40E-03	2.50E-03	6.73E-04	3.80E-04	3.04E-04	1.56E-04
2294	569942.11	4215570.42	4.46E-03	2.53E-03	6.82E-04	3.85E-04	3.08E-04	1.58E-04
2295	569951.43	4215568.75	4.53E-03	2.57E-03	6.92E-04	3.90E-04	3.12E-04	1.61E-04
2296	569960.74	4215567.07	4.60E-03	2.61E-03	7.02E-04	3.96E-04	3.17E-04	1.63E-04
2297	569970.06	4215565.4	4.68E-03	2.65E-03	7.14E-04	4.03E-04	3.22E-04	1.66E-04
2298	569979.37	4215563.72	4.76E-03	2.70E-03	7.27E-04	4.10E-04	3.28E-04	1.69E-04
2299	569988.69	4215562.04	4.85E-03	2.75E-03	7.40E-04	4.18E-04	3.34E-04	1.72E-04
2300	569998	4215560.37	4.94E-03	2.80E-03	7.54E-04	4.26E-04	3.40E-04	1.75E-04
2301	570007.32	4215558.69	5.04E-03	2.86E-03	7.70E-04	4.35E-04	3.48E-04	1.79E-04
2302	570016.63	4215557.02	5.15E-03	2.92E-03	7.87E-04	4.44E-04	3.55E-04	1.83E-04
2303	570025.95	4215555.34	5.26E-03	2.98E-03	8.04E-04	4.54E-04	3.63E-04	1.87E-04
2304	569916.65	4215581.4	4.10E-03	2.32E-03	6.26E-04	3.53E-04	2.83E-04	1.45E-04
2305	569899.44	4215576.98	4.25E-03	2.41E-03	6.49E-04	3.66E-04	2.93E-04	1.51E-04
2306	569882.24	4215572.56	4.39E-03	2.49E-03	6.71E-04	3.79E-04	3.03E-04	1.56E-04
2307	569865.03	4215568.14	4.53E-03	2.57E-03	6.92E-04	3.91E-04	3.12E-04	1.61E-04
2308	569847.83	4215563.72	4.67E-03	2.64E-03	7.13E-04	4.02E-04	3.22E-04	1.66E-04
2309	569830.62	4215559.3	4.60E-03	2.61E-03	7.02E-04	3.96E-04	3.17E-04	1.63E-04
2310	569934.57	4215581.94	4.08E-03	2.31E-03	6.22E-04	3.51E-04	2.81E-04	1.45E-04
2311	569943.88	4215580.26	4.13E-03	2.34E-03	6.30E-04	3.56E-04	2.84E-04	1.46E-04
2312	569953.2	4215578.59	4.18E-03	2.37E-03	6.39E-04	3.60E-04	2.88E-04	1.48E-04
2313	569962.51	4215576.91	4.24E-03	2.40E-03	6.48E-04	3.66E-04	2.92E-04	1.50E-04
2314	569971.83	4215575.24	4.30E-03	2.44E-03	6.57E-04	3.71E-04	2.96E-04	1.53E-04
2315	569981.14	4215573.56	4.37E-03	2.47E-03	6.67E-04	3.76E-04	3.01E-04	1.55E-04
2316	569990.46	4215571.89	4.44E-03	2.52E-03	6.78E-04	3.83E-04	3.06E-04	1.57E-04
2317	569999.77	4215570.21	4.52E-03	2.56E-03	6.90E-04	3.89E-04	3.11E-04	1.60E-04
2318	570009.09	4215568.54	4.60E-03	2.61E-03	7.03E-04	3.97E-04	3.17E-04	1.63E-04
2319	570064.98	4215558.48	5.19E-03	2.94E-03	7.93E-04	4.47E-04	3.58E-04	1.84E-04
2320	570074.3	4215556.81	5.33E-03	3.02E-03	8.14E-04	4.59E-04	3.67E-04	1.89E-04
2321	570083.61	4215555.13	5.49E-03	3.11E-03	8.38E-04	4.73E-04	3.78E-04	1.95E-04
2322	569917.88	4215591.11	3.81E-03	2.16E-03	5.81E-04	3.28E-04	2.62E-04	1.35E-04
2323	569908.74	4215588.76	3.88E-03	2.20E-03	5.92E-04	3.34E-04	2.67E-04	1.38E-04
2324	569899.6	4215586.41	3.95E-03	2.24E-03	6.04E-04	3.41E-04	2.72E-04	1.40E-04
2325	569890.46	4215584.06	4.03E-03	2.28E-03	6.16E-04	3.47E-04	2.78E-04	1.43E-04
2326	569881.32	4215581.71	4.10E-03	2.33E-03	6.27E-04	3.54E-04	2.83E-04	1.46E-04
2327	569872.18	4215579.37	4.18E-03	2.37E-03	6.38E-04	3.60E-04	2.88E-04	1.48E-04
2328	569863.04	4215577.02	4.25E-03	2.41E-03	6.48E-04	3.66E-04	2.93E-04	1.51E-04
2329	569853.9	4215574.67	4.32E-03	2.44E-03	6.59E-04	3.72E-04	2.97E-04	1.53E-04
2330	569844.76	4215572.32	4.38E-03	2.48E-03	6.69E-04	3.78E-04	3.02E-04	1.55E-04
2331	569835.62	4215569.97	4.29E-03	2.43E-03	6.54E-04	3.69E-04	2.95E-04	1.52E-04
2332	569826.48	4215567.62	4.33E-03	2.45E-03	6.61E-04	3.73E-04	2.98E-04	1.53E-04
2333	569817.34	4215565.28	4.37E-03	2.47E-03	6.67E-04	3.76E-04	3.01E-04	1.55E-04
2334	569808.2	4215562.93	4.41E-03	2.50E-03	6.73E-04	3.80E-04	3.04E-04	1.56E-04
2335	569927.02	4215593.46	3.74E-03	2.12E-03	5.71E-04	3.22E-04	2.57E-04	1.33E-04
2336	569936.34	4215591.78	3.78E-03	2.14E-03	5.77E-04	3.26E-04	2.60E-04	1.34E-04

2337	569945.65	4215590.11	3.82E-03	2.17E-03	5.84E-04	3.29E-04	2.63E-04	1.36E-04
2338	569954.97	4215588.43	3.87E-03	2.19E-03	5.91E-04	3.33E-04	2.67E-04	1.37E-04
2339	569964.28	4215586.75	3.92E-03	2.22E-03	5.99E-04	3.38E-04	2.70E-04	1.39E-04
2340	569973.6	4215585.08	3.97E-03	2.25E-03	6.06E-04	3.42E-04	2.74E-04	1.41E-04
2341	569982.91	4215583.4	4.03E-03	2.28E-03	6.15E-04	3.47E-04	2.77E-04	1.43E-04
2342	569992.23	4215581.73	4.09E-03	2.31E-03	6.24E-04	3.52E-04	2.82E-04	1.45E-04
2343	570048.12	4215571.68	4.55E-03	2.58E-03	6.95E-04	3.92E-04	3.14E-04	1.62E-04
2344	570057.43	4215570	4.65E-03	2.63E-03	7.10E-04	4.01E-04	3.20E-04	1.65E-04
2345	570066.75	4215568.33	4.77E-03	2.70E-03	7.28E-04	4.11E-04	3.29E-04	1.69E-04
2346	570076.07	4215566.65	4.90E-03	2.77E-03	7.48E-04	4.22E-04	3.37E-04	1.74E-04
2347	570085.38	4215564.98	5.03E-03	2.85E-03	7.69E-04	4.34E-04	3.47E-04	1.79E-04
2348	569919.72	4215600.97	3.55E-03	2.01E-03	5.41E-04	3.06E-04	2.44E-04	1.26E-04
2349	569910.64	4215598.64	3.61E-03	2.05E-03	5.52E-04	3.11E-04	2.49E-04	1.28E-04
2350	569901.57	4215596.3	3.68E-03	2.08E-03	5.62E-04	3.17E-04	2.54E-04	1.31E-04
2351	569892.5	4215593.97	3.75E-03	2.12E-03	5.73E-04	3.23E-04	2.58E-04	1.33E-04
2352	569883.43	4215591.64	3.82E-03	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.36E-04
2353	569874.35	4215589.31	3.89E-03	2.20E-03	5.94E-04	3.35E-04	2.68E-04	1.38E-04
2354	569865.28	4215586.98	3.95E-03	2.24E-03	6.04E-04	3.41E-04	2.72E-04	1.40E-04
2355	569856.21	4215584.65	4.02E-03	2.28E-03	6.14E-04	3.46E-04	2.77E-04	1.43E-04
2356	569847.13	4215582.32	4.08E-03	2.31E-03	6.24E-04	3.52E-04	2.81E-04	1.45E-04
2357	569838.06	4215579.99	4.15E-03	2.35E-03	6.33E-04	3.57E-04	2.86E-04	1.47E-04
2358	569828.99	4215577.66	4.05E-03	2.29E-03	6.18E-04	3.49E-04	2.79E-04	1.44E-04
2359	569819.91	4215575.33	4.08E-03	2.31E-03	6.23E-04	3.52E-04	2.81E-04	1.45E-04
2360	569810.84	4215572.99	4.12E-03	2.33E-03	6.29E-04	3.55E-04	2.84E-04	1.46E-04
2361	569801.77	4215570.66	4.16E-03	2.36E-03	6.35E-04	3.58E-04	2.87E-04	1.48E-04
2362	569792.7	4215568.33	4.19E-03	2.38E-03	6.40E-04	3.61E-04	2.89E-04	1.49E-04
2363	569928.79	4215603.3	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
2364	569938.11	4215601.62	3.52E-03	1.99E-03	5.37E-04	3.03E-04	2.42E-04	1.25E-04
2365	569947.42	4215599.95	3.55E-03	2.01E-03	5.43E-04	3.06E-04	2.45E-04	1.26E-04
2366	569956.74	4215598.27	3.60E-03	2.04E-03	5.49E-04	3.10E-04	2.48E-04	1.28E-04
2367	569966.05	4215596.6	3.64E-03	2.06E-03	5.56E-04	3.14E-04	2.51E-04	1.29E-04
2368	569975.37	4215594.92	3.68E-03	2.09E-03	5.62E-04	3.17E-04	2.54E-04	1.31E-04
2369	570031.26	4215584.87	4.04E-03	2.29E-03	6.17E-04	3.48E-04	2.78E-04	1.43E-04
2370	570040.57	4215583.19	4.12E-03	2.33E-03	6.29E-04	3.55E-04	2.84E-04	1.46E-04
2371	570049.89	4215581.52	4.20E-03	2.38E-03	6.41E-04	3.62E-04	2.89E-04	1.49E-04
2372	570059.2	4215579.84	4.29E-03	2.43E-03	6.56E-04	3.70E-04	2.96E-04	1.52E-04
2373	570068.52	4215578.17	4.40E-03	2.49E-03	6.72E-04	3.79E-04	3.03E-04	1.56E-04
2374	570077.84	4215576.49	4.52E-03	2.56E-03	6.90E-04	3.89E-04	3.11E-04	1.60E-04
2375	570087.15	4215574.82	4.64E-03	2.63E-03	7.09E-04	4.00E-04	3.20E-04	1.65E-04
2376	569921.55	4215610.82	3.31E-03	1.88E-03	5.05E-04	2.85E-04	2.28E-04	1.17E-04
2377	569912.53	4215608.51	3.37E-03	1.91E-03	5.15E-04	2.90E-04	2.32E-04	1.20E-04
2378	569903.52	4215606.19	3.43E-03	1.95E-03	5.24E-04	2.96E-04	2.37E-04	1.22E-04
2379	569894.51	4215603.88	3.50E-03	1.98E-03	5.34E-04	3.01E-04	2.41E-04	1.24E-04
2380	569885.49	4215601.56	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.45E-04	1.26E-04
2381	569876.48	4215599.25	3.63E-03	2.05E-03	5.54E-04	3.12E-04	2.50E-04	1.29E-04
2382	569867.46	4215596.93	3.69E-03	2.09E-03	5.63E-04	3.18E-04	2.54E-04	1.31E-04
2383	569858.45	4215594.61	3.75E-03	2.13E-03	5.73E-04	3.23E-04	2.58E-04	1.33E-04
2384	569849.44	4215592.3	3.81E-03	2.16E-03	5.82E-04	3.28E-04	2.63E-04	1.35E-04
2385	569840.42	4215589.98	3.87E-03	2.19E-03	5.91E-04	3.34E-04	2.67E-04	1.37E-04
2386	569831.41	4215587.67	3.93E-03	2.23E-03	6.00E-04	3.39E-04	2.71E-04	1.39E-04
2387	569822.4	4215585.35	3.82E-03	2.17E-03	5.84E-04	3.30E-04	2.64E-04	1.36E-04
2388	569813.38	4215583.04	3.86E-03	2.18E-03	5.89E-04	3.32E-04	2.66E-04	1.37E-04

2389	569804.37	4215580.72	3.89E-03	2.21E-03	5.95E-04	3.36E-04	2.68E-04	1.38E-04
2390	569795.35	4215578.4	3.93E-03	2.23E-03	6.01E-04	3.39E-04	2.71E-04	1.39E-04
2391	569786.34	4215576.09	3.97E-03	2.25E-03	6.06E-04	3.42E-04	2.73E-04	1.41E-04
2392	569930.56	4215613.14	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
2393	569939.88	4215611.46	3.28E-03	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
2394	569949.19	4215609.79	3.32E-03	1.88E-03	5.06E-04	2.86E-04	2.29E-04	1.18E-04
2395	570005.08	4215599.74	3.57E-03	2.02E-03	5.44E-04	3.07E-04	2.46E-04	1.26E-04
2396	570014.4	4215598.06	3.62E-03	2.05E-03	5.52E-04	3.12E-04	2.49E-04	1.28E-04
2397	570023.71	4215596.39	3.68E-03	2.08E-03	5.61E-04	3.17E-04	2.53E-04	1.30E-04
2398	570033.03	4215594.71	3.75E-03	2.12E-03	5.72E-04	3.23E-04	2.58E-04	1.33E-04
2399	570042.34	4215593.04	3.82E-03	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
2400	570051.66	4215591.36	3.90E-03	2.21E-03	5.95E-04	3.36E-04	2.69E-04	1.38E-04
2401	570060.97	4215589.69	3.98E-03	2.26E-03	6.08E-04	3.43E-04	2.75E-04	1.41E-04
2402	570070.29	4215588.01	4.08E-03	2.31E-03	6.23E-04	3.52E-04	2.81E-04	1.45E-04
2403	570079.61	4215586.34	4.18E-03	2.37E-03	6.39E-04	3.60E-04	2.88E-04	1.48E-04
2404	570088.92	4215584.66	4.30E-03	2.43E-03	6.56E-04	3.70E-04	2.96E-04	1.52E-04
2405	569923.37	4215620.68	3.10E-03	1.76E-03	4.73E-04	2.67E-04	2.14E-04	1.10E-04
2406	569914.41	4215618.38	3.16E-03	1.79E-03	4.82E-04	2.72E-04	2.17E-04	1.12E-04
2407	569905.45	4215616.08	3.21E-03	1.82E-03	4.90E-04	2.77E-04	2.21E-04	1.14E-04
2408	569896.49	4215613.77	3.27E-03	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
2409	569887.53	4215611.47	3.33E-03	1.88E-03	5.08E-04	2.87E-04	2.29E-04	1.18E-04
2410	569878.56	4215609.17	3.39E-03	1.92E-03	5.17E-04	2.92E-04	2.33E-04	1.20E-04
2411	569869.6	4215606.87	3.45E-03	1.95E-03	5.26E-04	2.97E-04	2.38E-04	1.22E-04
2412	569860.64	4215604.56	3.51E-03	1.99E-03	5.35E-04	3.02E-04	2.42E-04	1.24E-04
2413	569851.68	4215602.26	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.46E-04	1.26E-04
2414	569842.72	4215599.96	3.62E-03	2.05E-03	5.53E-04	3.12E-04	2.50E-04	1.28E-04
2415	569833.76	4215597.66	3.68E-03	2.08E-03	5.62E-04	3.17E-04	2.53E-04	1.30E-04
2416	569824.8	4215595.36	3.73E-03	2.11E-03	5.70E-04	3.22E-04	2.57E-04	1.32E-04
2417	569815.84	4215593.05	3.62E-03	2.05E-03	5.53E-04	3.12E-04	2.50E-04	1.28E-04
2418	569806.88	4215590.75	3.66E-03	2.07E-03	5.58E-04	3.15E-04	2.52E-04	1.30E-04
2419	569797.92	4215588.45	3.69E-03	2.09E-03	5.64E-04	3.18E-04	2.54E-04	1.31E-04
2420	569788.95	4215586.15	3.73E-03	2.11E-03	5.69E-04	3.21E-04	2.57E-04	1.32E-04
2421	569932.33	4215622.98	3.05E-03	1.73E-03	4.65E-04	2.63E-04	2.10E-04	1.08E-04
2422	569988.22	4215612.93	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
2423	569997.54	4215611.25	3.29E-03	1.86E-03	5.02E-04	2.83E-04	2.26E-04	1.17E-04
2424	570006.85	4215609.58	3.33E-03	1.88E-03	5.08E-04	2.87E-04	2.29E-04	1.18E-04
2425	570016.17	4215607.9	3.37E-03	1.91E-03	5.15E-04	2.90E-04	2.32E-04	1.20E-04
2426	570025.48	4215606.23	3.42E-03	1.94E-03	5.23E-04	2.95E-04	2.36E-04	1.21E-04
2427	570034.8	4215604.55	3.49E-03	1.98E-03	5.33E-04	3.01E-04	2.40E-04	1.24E-04
2428	570044.11	4215602.88	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.45E-04	1.26E-04
2429	570053.43	4215601.2	3.64E-03	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
2430	570062.74	4215599.53	3.72E-03	2.11E-03	5.68E-04	3.20E-04	2.56E-04	1.32E-04
2431	570072.06	4215597.85	3.81E-03	2.16E-03	5.81E-04	3.28E-04	2.62E-04	1.35E-04
2432	570081.38	4215596.18	3.90E-03	2.21E-03	5.96E-04	3.36E-04	2.69E-04	1.38E-04
2433	570090.69	4215594.5	4.01E-03	2.27E-03	6.12E-04	3.45E-04	2.76E-04	1.42E-04
2434	569925.19	4215630.53	2.91E-03	1.65E-03	4.45E-04	2.51E-04	2.01E-04	1.03E-04
2435	569916.27	4215628.24	2.96E-03	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
2436	569907.36	4215625.95	3.01E-03	1.71E-03	4.60E-04	2.60E-04	2.08E-04	1.07E-04
2437	569898.45	4215623.66	3.07E-03	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04
2438	569889.53	4215621.37	3.12E-03	1.77E-03	4.76E-04	2.69E-04	2.15E-04	1.11E-04
2439	569880.62	4215619.08	3.17E-03	1.80E-03	4.84E-04	2.73E-04	2.18E-04	1.12E-04
2440	569871.7	4215616.79	3.22E-03	1.83E-03	4.92E-04	2.78E-04	2.22E-04	1.14E-04

2441	569862.79	4215614.5	3.28E-03	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
2442	569853.88	4215612.21	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.18E-04
2443	569844.96	4215609.92	3.39E-03	1.92E-03	5.18E-04	2.92E-04	2.34E-04	1.20E-04
2444	569836.05	4215607.63	3.44E-03	1.95E-03	5.26E-04	2.97E-04	2.37E-04	1.22E-04
2445	569827.13	4215605.34	3.50E-03	1.98E-03	5.34E-04	3.01E-04	2.41E-04	1.24E-04
2446	569818.22	4215603.05	3.41E-03	1.93E-03	5.21E-04	2.94E-04	2.35E-04	1.21E-04
2447	569809.31	4215600.76	3.44E-03	1.95E-03	5.26E-04	2.97E-04	2.37E-04	1.22E-04
2448	569800.39	4215598.47	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
2449	569791.48	4215596.18	3.51E-03	1.99E-03	5.36E-04	3.02E-04	2.42E-04	1.24E-04
2450	569971.36	4215626.12	2.97E-03	1.68E-03	4.54E-04	2.56E-04	2.05E-04	1.05E-04
2451	569980.68	4215624.45	3.00E-03	1.70E-03	4.59E-04	2.59E-04	2.07E-04	1.07E-04
2452	569989.99	4215622.77	3.04E-03	1.72E-03	4.64E-04	2.62E-04	2.10E-04	1.08E-04
2453	569999.31	4215621.1	3.08E-03	1.74E-03	4.70E-04	2.65E-04	2.12E-04	1.09E-04
2454	570008.62	4215619.42	3.11E-03	1.76E-03	4.76E-04	2.68E-04	2.15E-04	1.10E-04
2455	570017.94	4215617.75	3.15E-03	1.79E-03	4.81E-04	2.72E-04	2.17E-04	1.12E-04
2456	570027.25	4215616.07	3.20E-03	1.81E-03	4.89E-04	2.76E-04	2.21E-04	1.14E-04
2457	570036.57	4215614.4	3.26E-03	1.85E-03	4.98E-04	2.81E-04	2.25E-04	1.16E-04
2458	570045.88	4215612.72	3.33E-03	1.89E-03	5.09E-04	2.87E-04	2.30E-04	1.18E-04
2459	570055.2	4215611.05	3.41E-03	1.93E-03	5.20E-04	2.94E-04	2.35E-04	1.21E-04
2460	570064.51	4215609.37	3.48E-03	1.97E-03	5.32E-04	3.00E-04	2.40E-04	1.24E-04
2461	570073.83	4215607.69	3.57E-03	2.02E-03	5.44E-04	3.07E-04	2.46E-04	1.26E-04
2462	570083.15	4215606.02	3.65E-03	2.07E-03	5.58E-04	3.15E-04	2.52E-04	1.30E-04
2463	570092.46	4215604.34	3.75E-03	2.13E-03	5.73E-04	3.24E-04	2.59E-04	1.33E-04
2464	569909.26	4215635.83	2.84E-03	1.61E-03	4.33E-04	2.44E-04	1.95E-04	1.01E-04
2465	569900.39	4215633.55	2.88E-03	1.63E-03	4.40E-04	2.48E-04	1.99E-04	1.02E-04
2466	569891.51	4215631.27	2.93E-03	1.66E-03	4.47E-04	2.53E-04	2.02E-04	1.04E-04
2467	569882.64	4215628.99	2.98E-03	1.69E-03	4.55E-04	2.57E-04	2.05E-04	1.06E-04
2468	569873.77	4215626.71	3.03E-03	1.72E-03	4.62E-04	2.61E-04	2.09E-04	1.07E-04
2469	569864.9	4215624.43	3.08E-03	1.74E-03	4.70E-04	2.65E-04	2.12E-04	1.09E-04
2470	569856.03	4215622.15	3.13E-03	1.77E-03	4.78E-04	2.70E-04	2.16E-04	1.11E-04
2471	569847.16	4215619.87	3.18E-03	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04
2472	569838.29	4215617.6	3.23E-03	1.83E-03	4.93E-04	2.78E-04	2.23E-04	1.15E-04
2473	569829.41	4215615.32	3.28E-03	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
2474	569820.54	4215613.04	3.33E-03	1.89E-03	5.09E-04	2.87E-04	2.30E-04	1.18E-04
2475	569811.67	4215610.76	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
2476	569802.8	4215608.48	3.28E-03	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
2477	569945.19	4215640.99	2.72E-03	1.54E-03	4.16E-04	2.34E-04	1.88E-04	9.65E-05
2478	569954.5	4215639.32	2.74E-03	1.55E-03	4.19E-04	2.36E-04	1.89E-04	9.73E-05
2479	569963.82	4215637.64	2.77E-03	1.57E-03	4.22E-04	2.38E-04	1.91E-04	9.81E-05
2480	569973.13	4215635.97	2.79E-03	1.58E-03	4.26E-04	2.41E-04	1.92E-04	9.91E-05
2481	569982.45	4215634.29	2.82E-03	1.60E-03	4.31E-04	2.43E-04	1.95E-04	1.00E-04
2482	569991.76	4215632.61	2.86E-03	1.62E-03	4.36E-04	2.46E-04	1.97E-04	1.01E-04
2483	570001.08	4215630.94	2.89E-03	1.64E-03	4.41E-04	2.49E-04	1.99E-04	1.03E-04
2484	570010.39	4215629.26	2.93E-03	1.66E-03	4.47E-04	2.52E-04	2.02E-04	1.04E-04
2485	570019.71	4215627.59	2.97E-03	1.68E-03	4.53E-04	2.56E-04	2.05E-04	1.05E-04
2486	570029.02	4215625.91	3.02E-03	1.71E-03	4.61E-04	2.60E-04	2.08E-04	1.07E-04
2487	570038.34	4215624.24	3.07E-03	1.74E-03	4.69E-04	2.65E-04	2.12E-04	1.09E-04
2488	570047.65	4215622.56	3.13E-03	1.78E-03	4.79E-04	2.70E-04	2.16E-04	1.11E-04
2489	570056.97	4215620.89	3.20E-03	1.81E-03	4.89E-04	2.76E-04	2.21E-04	1.14E-04
2490	570066.28	4215619.21	3.27E-03	1.85E-03	5.00E-04	2.82E-04	2.25E-04	1.16E-04
2491	570075.6	4215617.54	3.35E-03	1.90E-03	5.11E-04	2.89E-04	2.31E-04	1.19E-04
2492	570084.92	4215615.86	3.43E-03	1.94E-03	5.24E-04	2.96E-04	2.37E-04	1.22E-04

2493	570094.23	4215614.19	3.53E-03	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
2494	569902.31	4215643.43	2.72E-03	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.63E-05
2495	569893.48	4215641.16	2.76E-03	1.56E-03	4.21E-04	2.38E-04	1.90E-04	9.79E-05
2496	569884.64	4215638.89	2.80E-03	1.59E-03	4.28E-04	2.42E-04	1.93E-04	9.94E-05
2497	569875.81	4215636.62	2.85E-03	1.61E-03	4.35E-04	2.45E-04	1.96E-04	1.01E-04
2498	569866.98	4215634.35	2.90E-03	1.64E-03	4.42E-04	2.49E-04	2.00E-04	1.03E-04
2499	569858.14	4215632.08	2.94E-03	1.67E-03	4.49E-04	2.54E-04	2.03E-04	1.04E-04
2500	569849.31	4215629.82	2.99E-03	1.69E-03	4.57E-04	2.58E-04	2.06E-04	1.06E-04
2501	569840.48	4215627.55	3.04E-03	1.72E-03	4.64E-04	2.62E-04	2.09E-04	1.08E-04
2502	569831.64	4215625.28	3.08E-03	1.75E-03	4.71E-04	2.66E-04	2.13E-04	1.09E-04
2503	569822.81	4215623.01	3.13E-03	1.77E-03	4.78E-04	2.70E-04	2.16E-04	1.11E-04
2504	569813.98	4215620.74	3.18E-03	1.80E-03	4.85E-04	2.74E-04	2.19E-04	1.13E-04
2505	569937.64	4215652.51	2.55E-03	1.45E-03	3.90E-04	2.20E-04	1.76E-04	9.05E-05
2506	569946.96	4215650.83	2.57E-03	1.46E-03	3.92E-04	2.21E-04	1.77E-04	9.11E-05
2507	569956.27	4215649.16	2.59E-03	1.47E-03	3.95E-04	2.23E-04	1.78E-04	9.18E-05
2508	569965.59	4215647.48	2.61E-03	1.48E-03	3.98E-04	2.25E-04	1.80E-04	9.25E-05
2509	569974.9	4215645.81	2.63E-03	1.49E-03	4.02E-04	2.27E-04	1.81E-04	9.34E-05
2510	569984.22	4215644.13	2.66E-03	1.51E-03	4.06E-04	2.29E-04	1.83E-04	9.43E-05
2511	569993.53	4215642.46	2.69E-03	1.52E-03	4.11E-04	2.32E-04	1.85E-04	9.54E-05
2512	570002.85	4215640.78	2.73E-03	1.54E-03	4.16E-04	2.35E-04	1.88E-04	9.67E-05
2513	570012.16	4215639.11	2.76E-03	1.57E-03	4.22E-04	2.38E-04	1.90E-04	9.80E-05
2514	570021.48	4215637.43	2.80E-03	1.59E-03	4.28E-04	2.42E-04	1.93E-04	9.95E-05
2515	570030.79	4215635.76	2.85E-03	1.61E-03	4.35E-04	2.46E-04	1.96E-04	1.01E-04
2516	570040.11	4215634.08	2.90E-03	1.64E-03	4.43E-04	2.50E-04	2.00E-04	1.03E-04
2517	570049.42	4215632.4	2.96E-03	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
2518	570058.74	4215630.73	3.02E-03	1.71E-03	4.61E-04	2.60E-04	2.08E-04	1.07E-04
2519	570068.05	4215629.05	3.08E-03	1.75E-03	4.71E-04	2.66E-04	2.12E-04	1.09E-04
2520	570077.37	4215627.38	3.15E-03	1.79E-03	4.82E-04	2.72E-04	2.17E-04	1.12E-04
2521	570086.69	4215625.7	3.23E-03	1.83E-03	4.94E-04	2.79E-04	2.23E-04	1.15E-04
2522	570096	4215624.03	3.32E-03	1.88E-03	5.07E-04	2.86E-04	2.29E-04	1.18E-04
2523	569930.61	4215660.09	2.45E-03	1.39E-03	3.74E-04	2.11E-04	1.69E-04	8.69E-05
2524	569921.81	4215657.83	2.49E-03	1.41E-03	3.80E-04	2.14E-04	1.71E-04	8.82E-05
2525	569895.42	4215651.05	2.60E-03	1.47E-03	3.97E-04	2.24E-04	1.79E-04	9.23E-05
2526	569886.62	4215648.79	2.64E-03	1.50E-03	4.04E-04	2.28E-04	1.82E-04	9.38E-05
2527	569877.82	4215646.53	2.68E-03	1.52E-03	4.10E-04	2.31E-04	1.85E-04	9.52E-05
2528	569869.03	4215644.27	2.73E-03	1.55E-03	4.16E-04	2.35E-04	1.88E-04	9.67E-05
2529	569860.23	4215642.01	2.77E-03	1.57E-03	4.23E-04	2.39E-04	1.91E-04	9.83E-05
2530	569851.43	4215639.75	2.81E-03	1.59E-03	4.30E-04	2.43E-04	1.94E-04	9.98E-05
2531	569842.63	4215637.49	2.86E-03	1.62E-03	4.37E-04	2.46E-04	1.97E-04	1.01E-04
2532	569833.83	4215635.23	2.90E-03	1.64E-03	4.43E-04	2.50E-04	2.00E-04	1.03E-04
2533	569816.24	4215630.71	2.99E-03	1.69E-03	4.57E-04	2.58E-04	2.06E-04	1.06E-04
2534	569939.41	4215662.35	2.41E-03	1.37E-03	3.69E-04	2.08E-04	1.66E-04	8.56E-05
2535	569948.73	4215660.68	2.43E-03	1.38E-03	3.71E-04	2.09E-04	1.67E-04	8.62E-05
2536	569958.04	4215659	2.45E-03	1.39E-03	3.74E-04	2.11E-04	1.69E-04	8.68E-05
2537	569967.36	4215657.32	2.47E-03	1.40E-03	3.77E-04	2.13E-04	1.70E-04	8.75E-05
2538	569976.67	4215655.65	2.49E-03	1.41E-03	3.80E-04	2.15E-04	1.72E-04	8.83E-05
2539	569985.99	4215653.97	2.51E-03	1.42E-03	3.84E-04	2.17E-04	1.73E-04	8.92E-05
2540	569995.3	4215652.3	2.54E-03	1.44E-03	3.88E-04	2.19E-04	1.75E-04	9.02E-05
2541	570004.62	4215650.62	2.58E-03	1.46E-03	3.93E-04	2.22E-04	1.78E-04	9.14E-05
2542	570013.93	4215648.95	2.61E-03	1.48E-03	3.99E-04	2.25E-04	1.80E-04	9.27E-05
2543	570023.25	4215647.27	2.66E-03	1.50E-03	4.06E-04	2.29E-04	1.83E-04	9.42E-05
2544	570032.56	4215645.6	2.70E-03	1.53E-03	4.12E-04	2.33E-04	1.86E-04	9.57E-05

2545	570041.88	4215643.92	2.74E-03	1.55E-03	4.19E-04	2.36E-04	1.89E-04	9.74E-05
2546	570051.19	4215642.25	2.80E-03	1.58E-03	4.27E-04	2.41E-04	1.93E-04	9.92E-05
2547	570060.51	4215640.57	2.85E-03	1.62E-03	4.35E-04	2.46E-04	1.97E-04	1.01E-04
2548	570069.83	4215638.9	2.91E-03	1.65E-03	4.45E-04	2.51E-04	2.01E-04	1.03E-04
2549	570079.14	4215637.22	2.98E-03	1.69E-03	4.55E-04	2.57E-04	2.05E-04	1.06E-04
2550	570088.46	4215635.55	3.05E-03	1.73E-03	4.66E-04	2.63E-04	2.10E-04	1.08E-04
2551	570097.77	4215633.87	3.13E-03	1.77E-03	4.78E-04	2.70E-04	2.16E-04	1.11E-04
2552	569932.02	4215669.84	2.32E-03	1.32E-03	3.55E-04	2.00E-04	1.60E-04	8.24E-05
2553	569922.85	4215667.48	2.36E-03	1.34E-03	3.60E-04	2.03E-04	1.62E-04	8.36E-05
2554	569913.69	4215665.13	2.39E-03	1.36E-03	3.65E-04	2.06E-04	1.65E-04	8.49E-05
2555	569877.03	4215655.71	2.55E-03	1.44E-03	3.89E-04	2.20E-04	1.76E-04	9.04E-05
2556	569867.86	4215653.36	2.59E-03	1.47E-03	3.95E-04	2.23E-04	1.78E-04	9.19E-05
2557	569858.7	4215651	2.63E-03	1.49E-03	4.02E-04	2.27E-04	1.81E-04	9.33E-05
2558	569849.53	4215648.65	2.67E-03	1.51E-03	4.08E-04	2.30E-04	1.84E-04	9.48E-05
2559	569840.37	4215646.29	2.72E-03	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.63E-05
2560	569831.2	4215643.94	2.76E-03	1.56E-03	4.21E-04	2.38E-04	1.90E-04	9.79E-05
2561	569941.18	4215672.19	2.29E-03	1.30E-03	3.50E-04	1.97E-04	1.58E-04	8.12E-05
2562	569950.5	4215670.52	2.30E-03	1.31E-03	3.52E-04	1.99E-04	1.59E-04	8.17E-05
2563	569959.81	4215668.84	2.32E-03	1.31E-03	3.54E-04	2.00E-04	1.60E-04	8.23E-05
2564	569969.13	4215667.17	2.34E-03	1.33E-03	3.57E-04	2.02E-04	1.61E-04	8.30E-05
2565	569978.44	4215665.49	2.36E-03	1.34E-03	3.60E-04	2.03E-04	1.63E-04	8.37E-05
2566	569987.76	4215663.82	2.38E-03	1.35E-03	3.64E-04	2.05E-04	1.64E-04	8.46E-05
2567	569997.07	4215662.14	2.41E-03	1.37E-03	3.68E-04	2.08E-04	1.66E-04	8.55E-05
2568	570006.39	4215660.47	2.44E-03	1.38E-03	3.73E-04	2.10E-04	1.68E-04	8.66E-05
2569	570015.7	4215658.79	2.47E-03	1.40E-03	3.78E-04	2.13E-04	1.71E-04	8.78E-05
2570	570025.02	4215657.11	2.51E-03	1.42E-03	3.84E-04	2.16E-04	1.73E-04	8.91E-05
2571	570034.33	4215655.44	2.55E-03	1.45E-03	3.90E-04	2.20E-04	1.76E-04	9.06E-05
2572	570043.65	4215653.76	2.60E-03	1.47E-03	3.97E-04	2.24E-04	1.79E-04	9.21E-05
2573	570052.96	4215652.09	2.65E-03	1.50E-03	4.04E-04	2.28E-04	1.82E-04	9.39E-05
2574	570062.28	4215650.41	2.70E-03	1.53E-03	4.12E-04	2.33E-04	1.86E-04	9.57E-05
2575	570071.6	4215648.74	2.76E-03	1.56E-03	4.21E-04	2.37E-04	1.90E-04	9.78E-05
2576	570080.91	4215647.06	2.82E-03	1.60E-03	4.30E-04	2.43E-04	1.94E-04	1.00E-04
2577	570090.23	4215645.39	2.89E-03	1.64E-03	4.41E-04	2.49E-04	1.99E-04	1.02E-04
2578	570099.54	4215643.71	2.96E-03	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
2579	569933.83	4215679.69	2.21E-03	1.25E-03	3.37E-04	1.90E-04	1.52E-04	7.82E-05
2580	569924.72	4215677.35	2.24E-03	1.27E-03	3.42E-04	1.93E-04	1.54E-04	7.93E-05
2581	569915.6	4215675.01	2.27E-03	1.29E-03	3.46E-04	1.95E-04	1.56E-04	8.05E-05
2582	569906.48	4215672.67	2.30E-03	1.30E-03	3.52E-04	1.98E-04	1.59E-04	8.17E-05
2583	569870.02	4215663.3	2.45E-03	1.39E-03	3.74E-04	2.11E-04	1.69E-04	8.69E-05
2584	569860.9	4215660.95	2.49E-03	1.41E-03	3.80E-04	2.14E-04	1.71E-04	8.82E-05
2585	569851.78	4215658.61	2.53E-03	1.43E-03	3.86E-04	2.18E-04	1.74E-04	8.96E-05
2586	569842.67	4215656.27	2.56E-03	1.45E-03	3.92E-04	2.21E-04	1.77E-04	9.10E-05
2587	569833.55	4215653.93	2.60E-03	1.48E-03	3.98E-04	2.24E-04	1.79E-04	9.24E-05
2588	569942.95	4215682.03	2.18E-03	1.23E-03	3.32E-04	1.87E-04	1.50E-04	7.72E-05
2589	569952.27	4215680.36	2.19E-03	1.24E-03	3.34E-04	1.89E-04	1.51E-04	7.77E-05
2590	569961.58	4215678.68	2.20E-03	1.25E-03	3.37E-04	1.90E-04	1.52E-04	7.82E-05
2591	569970.9	4215677.01	2.22E-03	1.26E-03	3.39E-04	1.91E-04	1.53E-04	7.88E-05
2592	569980.21	4215675.33	2.24E-03	1.27E-03	3.42E-04	1.93E-04	1.55E-04	7.95E-05
2593	569989.53	4215673.66	2.26E-03	1.28E-03	3.46E-04	1.95E-04	1.56E-04	8.03E-05
2594	569998.84	4215671.98	2.29E-03	1.30E-03	3.49E-04	1.97E-04	1.58E-04	8.12E-05
2595	570008.16	4215670.31	2.32E-03	1.31E-03	3.54E-04	2.00E-04	1.60E-04	8.21E-05
2596	570017.47	4215668.63	2.35E-03	1.33E-03	3.58E-04	2.02E-04	1.62E-04	8.32E-05

2597	570026.79	4215666.96	2.38E-03	1.35E-03	3.64E-04	2.05E-04	1.64E-04	8.45E-05
2598	570036.1	4215665.28	2.42E-03	1.37E-03	3.70E-04	2.09E-04	1.67E-04	8.58E-05
2599	570045.42	4215663.61	2.46E-03	1.40E-03	3.76E-04	2.12E-04	1.70E-04	8.74E-05
2600	570054.73	4215661.93	2.51E-03	1.42E-03	3.83E-04	2.16E-04	1.73E-04	8.90E-05
2601	570064.05	4215660.26	2.56E-03	1.45E-03	3.91E-04	2.20E-04	1.76E-04	9.07E-05
2602	570073.37	4215658.58	2.61E-03	1.48E-03	3.99E-04	2.25E-04	1.80E-04	9.26E-05
2603	570082.68	4215656.91	2.67E-03	1.51E-03	4.08E-04	2.30E-04	1.84E-04	9.47E-05
2604	570092	4215655.23	2.73E-03	1.55E-03	4.17E-04	2.35E-04	1.88E-04	9.69E-05
2605	570101.31	4215653.55	2.80E-03	1.59E-03	4.28E-04	2.41E-04	1.93E-04	9.93E-05
2606	569935.65	4215689.55	2.10E-03	1.19E-03	3.20E-04	1.81E-04	1.45E-04	7.44E-05
2607	569926.57	4215687.21	2.13E-03	1.20E-03	3.25E-04	1.83E-04	1.47E-04	7.54E-05
2608	569917.5	4215684.88	2.16E-03	1.22E-03	3.29E-04	1.86E-04	1.49E-04	7.65E-05
2609	569908.43	4215682.55	2.19E-03	1.24E-03	3.34E-04	1.88E-04	1.51E-04	7.75E-05
2610	569899.36	4215680.22	2.22E-03	1.26E-03	3.39E-04	1.91E-04	1.53E-04	7.86E-05
2611	569863.06	4215670.9	2.35E-03	1.33E-03	3.60E-04	2.03E-04	1.62E-04	8.35E-05
2612	569853.99	4215668.57	2.39E-03	1.35E-03	3.65E-04	2.06E-04	1.65E-04	8.48E-05
2613	569844.92	4215666.24	2.43E-03	1.37E-03	3.71E-04	2.09E-04	1.67E-04	8.61E-05
2614	569944.72	4215691.88	2.07E-03	1.17E-03	3.16E-04	1.78E-04	1.43E-04	7.35E-05
2615	569954.04	4215690.2	2.09E-03	1.18E-03	3.18E-04	1.80E-04	1.44E-04	7.40E-05
2616	569963.35	4215688.53	2.10E-03	1.19E-03	3.21E-04	1.81E-04	1.45E-04	7.45E-05
2617	569972.67	4215686.85	2.12E-03	1.20E-03	3.23E-04	1.82E-04	1.46E-04	7.51E-05
2618	569981.98	4215685.18	2.14E-03	1.21E-03	3.26E-04	1.84E-04	1.47E-04	7.58E-05
2619	569991.3	4215683.5	2.16E-03	1.22E-03	3.29E-04	1.86E-04	1.49E-04	7.65E-05
2620	570000.61	4215681.82	2.18E-03	1.23E-03	3.33E-04	1.88E-04	1.50E-04	7.73E-05
2621	570009.93	4215680.15	2.20E-03	1.25E-03	3.36E-04	1.90E-04	1.52E-04	7.81E-05
2622	570019.24	4215678.47	2.23E-03	1.26E-03	3.41E-04	1.92E-04	1.54E-04	7.91E-05
2623	570028.56	4215676.8	2.26E-03	1.28E-03	3.45E-04	1.95E-04	1.56E-04	8.03E-05
2624	570037.87	4215675.12	2.30E-03	1.30E-03	3.51E-04	1.98E-04	1.58E-04	8.16E-05
2625	570047.19	4215673.45	2.34E-03	1.33E-03	3.57E-04	2.02E-04	1.61E-04	8.30E-05
2626	570056.5	4215671.77	2.38E-03	1.35E-03	3.64E-04	2.05E-04	1.64E-04	8.46E-05
2627	570065.82	4215670.1	2.43E-03	1.38E-03	3.71E-04	2.09E-04	1.67E-04	8.62E-05
2628	570075.14	4215668.42	2.48E-03	1.40E-03	3.79E-04	2.14E-04	1.71E-04	8.79E-05
2629	570084.45	4215666.75	2.53E-03	1.44E-03	3.87E-04	2.18E-04	1.75E-04	8.98E-05
2630	570093.77	4215665.07	2.59E-03	1.47E-03	3.96E-04	2.23E-04	1.79E-04	9.19E-05
2631	570103.08	4215663.4	2.65E-03	1.50E-03	4.05E-04	2.29E-04	1.83E-04	9.42E-05
2632	569937.46	4215699.4	2.00E-03	1.13E-03	3.05E-04	1.72E-04	1.38E-04	7.09E-05
2633	569928.43	4215697.08	2.02E-03	1.15E-03	3.09E-04	1.74E-04	1.40E-04	7.18E-05
2634	569919.39	4215694.76	2.05E-03	1.16E-03	3.13E-04	1.77E-04	1.41E-04	7.28E-05
2635	569910.36	4215692.44	2.08E-03	1.18E-03	3.17E-04	1.79E-04	1.43E-04	7.37E-05
2636	569901.33	4215690.12	2.11E-03	1.19E-03	3.22E-04	1.82E-04	1.45E-04	7.47E-05
2637	569892.29	4215687.8	2.14E-03	1.21E-03	3.26E-04	1.84E-04	1.47E-04	7.58E-05
2638	569946.49	4215701.72	1.98E-03	1.12E-03	3.02E-04	1.70E-04	1.36E-04	7.01E-05
2639	569955.81	4215700.04	1.99E-03	1.13E-03	3.04E-04	1.71E-04	1.37E-04	7.06E-05
2640	569965.12	4215698.37	2.01E-03	1.14E-03	3.06E-04	1.73E-04	1.38E-04	7.11E-05
2641	569974.44	4215696.69	2.02E-03	1.15E-03	3.09E-04	1.74E-04	1.39E-04	7.17E-05
2642	569983.75	4215695.02	2.04E-03	1.16E-03	3.11E-04	1.76E-04	1.41E-04	7.23E-05
2643	569993.07	4215693.34	2.06E-03	1.17E-03	3.14E-04	1.77E-04	1.42E-04	7.30E-05
2644	570002.38	4215691.67	2.08E-03	1.18E-03	3.17E-04	1.79E-04	1.43E-04	7.37E-05
2645	570011.7	4215689.99	2.10E-03	1.19E-03	3.21E-04	1.81E-04	1.45E-04	7.45E-05
2646	570021.01	4215688.32	2.13E-03	1.20E-03	3.25E-04	1.83E-04	1.46E-04	7.54E-05
2647	570030.33	4215686.64	2.16E-03	1.22E-03	3.29E-04	1.86E-04	1.49E-04	7.65E-05
2648	570039.64	4215684.97	2.19E-03	1.24E-03	3.34E-04	1.89E-04	1.51E-04	7.77E-05

2649	570048.96	4215683.29	2.23E-03	1.26E-03	3.40E-04	1.92E-04	1.53E-04	7.90E-05
2650	570058.27	4215681.62	2.27E-03	1.28E-03	3.46E-04	1.95E-04	1.56E-04	8.04E-05
2651	570067.59	4215679.94	2.31E-03	1.31E-03	3.53E-04	1.99E-04	1.59E-04	8.20E-05
2652	570076.91	4215678.26	2.36E-03	1.34E-03	3.60E-04	2.03E-04	1.62E-04	8.36E-05
2653	570086.22	4215676.59	2.41E-03	1.36E-03	3.68E-04	2.08E-04	1.66E-04	8.54E-05
2654	570095.54	4215674.91	2.46E-03	1.40E-03	3.76E-04	2.12E-04	1.70E-04	8.74E-05
2655	570104.85	4215673.24	2.52E-03	1.43E-03	3.85E-04	2.17E-04	1.74E-04	8.95E-05
2656	569939.27	4215709.25	1.91E-03	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.77E-05
2657	569930.27	4215706.94	1.93E-03	1.09E-03	2.95E-04	1.66E-04	1.33E-04	6.85E-05
2658	569921.27	4215704.63	1.96E-03	1.11E-03	2.99E-04	1.68E-04	1.35E-04	6.94E-05
2659	569912.28	4215702.32	1.98E-03	1.12E-03	3.02E-04	1.71E-04	1.36E-04	7.02E-05
2660	569903.28	4215700.01	2.01E-03	1.14E-03	3.06E-04	1.73E-04	1.38E-04	7.11E-05
2661	569894.29	4215697.69	2.03E-03	1.15E-03	3.11E-04	1.75E-04	1.40E-04	7.21E-05
2662	569885.29	4215695.38	2.06E-03	1.17E-03	3.15E-04	1.78E-04	1.42E-04	7.32E-05
2663	569876.3	4215693.07	2.00E-03	1.13E-03	3.06E-04	1.73E-04	1.38E-04	7.10E-05
2664	569948.26	4215711.56	1.89E-03	1.07E-03	2.88E-04	1.63E-04	1.30E-04	6.70E-05
2665	569957.58	4215709.89	1.90E-03	1.08E-03	2.90E-04	1.64E-04	1.31E-04	6.75E-05
2666	569966.89	4215708.21	1.92E-03	1.09E-03	2.93E-04	1.65E-04	1.32E-04	6.80E-05
2667	569976.21	4215706.54	1.93E-03	1.09E-03	2.95E-04	1.67E-04	1.33E-04	6.85E-05
2668	569985.52	4215704.86	1.95E-03	1.10E-03	2.98E-04	1.68E-04	1.34E-04	6.91E-05
2669	569994.84	4215703.18	1.97E-03	1.11E-03	3.00E-04	1.70E-04	1.36E-04	6.98E-05
2670	570004.15	4215701.51	1.99E-03	1.13E-03	3.03E-04	1.71E-04	1.37E-04	7.05E-05
2671	570013.47	4215699.83	2.01E-03	1.14E-03	3.06E-04	1.73E-04	1.38E-04	7.12E-05
2672	570022.78	4215698.16	2.03E-03	1.15E-03	3.10E-04	1.75E-04	1.40E-04	7.20E-05
2673	570032.1	4215696.48	2.06E-03	1.17E-03	3.14E-04	1.77E-04	1.42E-04	7.30E-05
2674	570041.41	4215694.81	2.09E-03	1.18E-03	3.19E-04	1.80E-04	1.44E-04	7.41E-05
2675	570050.73	4215693.13	2.12E-03	1.20E-03	3.24E-04	1.83E-04	1.46E-04	7.53E-05
2676	570060.04	4215691.46	2.16E-03	1.22E-03	3.30E-04	1.86E-04	1.49E-04	7.66E-05
2677	570069.36	4215689.78	2.20E-03	1.25E-03	3.36E-04	1.90E-04	1.52E-04	7.80E-05
2678	570078.68	4215688.11	2.24E-03	1.27E-03	3.43E-04	1.93E-04	1.55E-04	7.96E-05
2679	570087.99	4215686.43	2.29E-03	1.30E-03	3.50E-04	1.97E-04	1.58E-04	8.13E-05
2680	570097.31	4215684.76	2.34E-03	1.33E-03	3.58E-04	2.02E-04	1.61E-04	8.31E-05
2681	569941.07	4215719.1	1.83E-03	1.03E-03	2.79E-04	1.57E-04	1.26E-04	6.48E-05
2682	569932.11	4215716.8	1.85E-03	1.05E-03	2.82E-04	1.59E-04	1.27E-04	6.55E-05
2683	569923.15	4215714.5	1.87E-03	1.06E-03	2.85E-04	1.61E-04	1.29E-04	6.63E-05
2684	569914.19	4215712.19	1.89E-03	1.07E-03	2.89E-04	1.63E-04	1.30E-04	6.71E-05
2685	569905.23	4215709.89	1.91E-03	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.79E-05
2686	569896.27	4215707.59	1.94E-03	1.10E-03	2.96E-04	1.67E-04	1.34E-04	6.88E-05
2687	569887.3	4215705.29	1.96E-03	1.11E-03	3.00E-04	1.69E-04	1.35E-04	6.97E-05
2688	569878.34	4215702.99	1.99E-03	1.13E-03	3.04E-04	1.72E-04	1.37E-04	7.06E-05
2689	569869.38	4215700.68	1.92E-03	1.09E-03	2.94E-04	1.66E-04	1.33E-04	6.82E-05
2690	569950.03	4215721.4	1.81E-03	1.02E-03	2.76E-04	1.56E-04	1.25E-04	6.41E-05
2691	569959.35	4215719.73	1.82E-03	1.03E-03	2.78E-04	1.57E-04	1.25E-04	6.45E-05
2692	569968.66	4215718.05	1.83E-03	1.04E-03	2.80E-04	1.58E-04	1.26E-04	6.50E-05
2693	569977.98	4215716.38	1.85E-03	1.05E-03	2.82E-04	1.59E-04	1.27E-04	6.56E-05
2694	569987.29	4215714.7	1.86E-03	1.06E-03	2.85E-04	1.61E-04	1.28E-04	6.61E-05
2695	569996.61	4215713.03	1.88E-03	1.07E-03	2.87E-04	1.62E-04	1.30E-04	6.68E-05
2696	570005.92	4215711.35	1.90E-03	1.08E-03	2.90E-04	1.64E-04	1.31E-04	6.74E-05
2697	570015.24	4215709.68	1.92E-03	1.09E-03	2.93E-04	1.65E-04	1.32E-04	6.81E-05
2698	570024.55	4215708	1.94E-03	1.10E-03	2.96E-04	1.67E-04	1.34E-04	6.88E-05
2699	570033.87	4215706.33	1.97E-03	1.11E-03	3.00E-04	1.69E-04	1.35E-04	6.97E-05
2700	570043.18	4215704.65	1.99E-03	1.13E-03	3.04E-04	1.72E-04	1.37E-04	7.07E-05

2701	570052.5	4215702.97	2.03E-03	1.15E-03	3.09E-04	1.75E-04	1.40E-04	7.18E-05
2702	570061.81	4215701.3	2.06E-03	1.17E-03	3.14E-04	1.77E-04	1.42E-04	7.31E-05
2703	570071.13	4215699.62	2.10E-03	1.19E-03	3.20E-04	1.81E-04	1.45E-04	7.44E-05
2704	570080.45	4215697.95	2.14E-03	1.21E-03	3.26E-04	1.84E-04	1.47E-04	7.58E-05
2705	570089.76	4215696.27	2.18E-03	1.24E-03	3.33E-04	1.88E-04	1.50E-04	7.75E-05
2706	570099.08	4215694.6	2.23E-03	1.27E-03	3.41E-04	1.92E-04	1.54E-04	7.92E-05
2707	570108.39	4215692.92	2.29E-03	1.30E-03	3.49E-04	1.97E-04	1.58E-04	8.11E-05
2708	569942.87	4215728.95	1.75E-03	9.91E-04	2.67E-04	1.51E-04	1.21E-04	6.21E-05
2709	569933.94	4215726.66	1.77E-03	1.00E-03	2.70E-04	1.52E-04	1.22E-04	6.27E-05
2710	569925.01	4215724.36	1.79E-03	1.01E-03	2.73E-04	1.54E-04	1.23E-04	6.34E-05
2711	569916.09	4215722.07	1.81E-03	1.02E-03	2.76E-04	1.56E-04	1.25E-04	6.41E-05
2712	569907.16	4215719.78	1.83E-03	1.04E-03	2.79E-04	1.58E-04	1.26E-04	6.49E-05
2713	569898.23	4215717.48	1.85E-03	1.05E-03	2.83E-04	1.60E-04	1.28E-04	6.57E-05
2714	569889.3	4215715.19	1.88E-03	1.06E-03	2.86E-04	1.62E-04	1.29E-04	6.65E-05
2715	569880.37	4215712.89	1.90E-03	1.08E-03	2.90E-04	1.64E-04	1.31E-04	6.74E-05
2716	569871.44	4215710.6	1.84E-03	1.04E-03	2.81E-04	1.58E-04	1.27E-04	6.52E-05
2717	569862.51	4215708.31	1.85E-03	1.05E-03	2.82E-04	1.59E-04	1.27E-04	6.56E-05
2718	569591.18	4215444.03	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
2719	569951.8	4215731.25	1.73E-03	9.81E-04	2.64E-04	1.49E-04	1.19E-04	6.14E-05
2720	569961.12	4215729.57	1.74E-03	9.87E-04	2.66E-04	1.50E-04	1.20E-04	6.18E-05
2721	569970.43	4215727.89	1.76E-03	9.95E-04	2.68E-04	1.51E-04	1.21E-04	6.23E-05
2722	569979.75	4215726.22	1.77E-03	1.00E-03	2.70E-04	1.53E-04	1.22E-04	6.28E-05
2723	569989.06	4215724.54	1.79E-03	1.01E-03	2.73E-04	1.54E-04	1.23E-04	6.34E-05
2724	569998.38	4215722.87	1.80E-03	1.02E-03	2.75E-04	1.55E-04	1.24E-04	6.39E-05
2725	570007.69	4215721.19	1.82E-03	1.03E-03	2.78E-04	1.57E-04	1.25E-04	6.45E-05
2726	570017.01	4215719.52	1.84E-03	1.04E-03	2.80E-04	1.58E-04	1.27E-04	6.52E-05
2727	570026.32	4215717.84	1.86E-03	1.05E-03	2.84E-04	1.60E-04	1.28E-04	6.59E-05
2728	570035.64	4215716.17	1.88E-03	1.07E-03	2.87E-04	1.62E-04	1.30E-04	6.67E-05
2729	570044.95	4215714.49	1.91E-03	1.08E-03	2.91E-04	1.64E-04	1.31E-04	6.76E-05
2730	570054.27	4215712.82	1.94E-03	1.10E-03	2.96E-04	1.67E-04	1.33E-04	6.87E-05
2731	570063.58	4215711.14	1.97E-03	1.11E-03	3.00E-04	1.70E-04	1.36E-04	6.98E-05
2732	570072.9	4215709.47	2.00E-03	1.13E-03	3.06E-04	1.73E-04	1.38E-04	7.10E-05
2733	570082.22	4215707.79	2.04E-03	1.16E-03	3.12E-04	1.76E-04	1.41E-04	7.24E-05
2734	570091.53	4215706.12	2.08E-03	1.18E-03	3.18E-04	1.80E-04	1.44E-04	7.39E-05
2735	570134.25	4215513.15	9.31E-03	5.27E-03	1.42E-03	8.02E-04	6.42E-04	3.30E-04
2736	570122.88	4215521.29	8.15E-03	4.61E-03	1.24E-03	7.02E-04	5.61E-04	2.89E-04
2737	570111.51	4215529.44	7.25E-03	4.11E-03	1.11E-03	6.24E-04	4.99E-04	2.57E-04
2738	570121.14	4215531.14	7.30E-03	4.13E-03	1.11E-03	6.29E-04	5.03E-04	2.59E-04
2739	570100.13	4215537.59	6.57E-03	3.72E-03	1.00E-03	5.66E-04	4.53E-04	2.33E-04
2740	570109.77	4215539.29	6.56E-03	3.72E-03	1.00E-03	5.66E-04	4.52E-04	2.33E-04
2741	570119.4	4215540.99	6.60E-03	3.74E-03	1.01E-03	5.69E-04	4.55E-04	2.34E-04
2742	570129.04	4215542.69	6.68E-03	3.79E-03	1.02E-03	5.76E-04	4.60E-04	2.37E-04
2743	570098.4	4215547.43	5.98E-03	3.39E-03	9.13E-04	5.15E-04	4.12E-04	2.12E-04
2744	570108.03	4215549.14	5.97E-03	3.38E-03	9.12E-04	5.15E-04	4.12E-04	2.12E-04
2745	570117.67	4215550.84	6.00E-03	3.40E-03	9.17E-04	5.17E-04	4.14E-04	2.13E-04
2746	570096.66	4215557.28	5.46E-03	3.10E-03	8.34E-04	4.71E-04	3.76E-04	1.94E-04
2747	570106.29	4215558.98	5.46E-03	3.09E-03	8.34E-04	4.71E-04	3.76E-04	1.94E-04
2748	570115.93	4215560.68	5.48E-03	3.11E-03	8.37E-04	4.72E-04	3.78E-04	1.94E-04
2749	570094.92	4215567.13	5.00E-03	2.83E-03	7.64E-04	4.31E-04	3.45E-04	1.77E-04
2750	570104.55	4215568.83	5.01E-03	2.84E-03	7.65E-04	4.31E-04	3.45E-04	1.78E-04
2751	570114.19	4215570.53	5.03E-03	2.85E-03	7.68E-04	4.33E-04	3.46E-04	1.78E-04
2752	570123.82	4215572.23	5.08E-03	2.88E-03	7.76E-04	4.38E-04	3.50E-04	1.80E-04

2753	570102.81	4215578.68	4.61E-03	2.61E-03	7.04E-04	3.97E-04	3.18E-04	1.63E-04
2754	570112.45	4215580.38	4.63E-03	2.62E-03	7.07E-04	3.99E-04	3.19E-04	1.64E-04
2755	570122.08	4215582.08	4.67E-03	2.65E-03	7.14E-04	4.03E-04	3.22E-04	1.66E-04
2756	570101.08	4215588.53	4.26E-03	2.41E-03	6.50E-04	3.67E-04	2.93E-04	1.51E-04
2757	570110.71	4215590.23	4.29E-03	2.43E-03	6.54E-04	3.69E-04	2.95E-04	1.52E-04
2758	570099.34	4215598.37	3.96E-03	2.24E-03	6.05E-04	3.41E-04	2.73E-04	1.40E-04
2759	570108.97	4215600.08	3.99E-03	2.26E-03	6.09E-04	3.44E-04	2.75E-04	1.41E-04
2760	570118.61	4215601.78	4.03E-03	2.28E-03	6.15E-04	3.47E-04	2.77E-04	1.43E-04
2761	570107.23	4215609.92	3.72E-03	2.11E-03	5.68E-04	3.21E-04	2.57E-04	1.32E-04
2762	570105.5	4215619.77	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
2763	570113.39	4215631.32	3.28E-03	1.86E-03	5.01E-04	2.82E-04	2.26E-04	1.16E-04
2764	570111.65	4215641.17	3.07E-03	1.74E-03	4.69E-04	2.65E-04	2.12E-04	1.09E-04
2765	570088.11	4215718.25	1.96E-03	1.11E-03	2.99E-04	1.69E-04	1.35E-04	6.94E-05
2766	570097.74	4215719.95	1.97E-03	1.12E-03	3.01E-04	1.70E-04	1.36E-04	6.98E-05

	Row	18	T2	T2L3	T4f
		Col	3	4	5
		Adjustment	100%	15%	7%
			Year 1	Year 1	Year 1
1	570176.2	4215489	7.74E-02	1.18E-02	5.34E-03
2	570192.2	4215484	8.75E-02	1.34E-02	6.03E-03
3	570208.7	4215477	1.02E-01	1.56E-02	7.03E-03
4	570225.2	4215470	1.17E-01	1.79E-02	8.09E-03
5	570241.7	4215462	1.30E-01	1.98E-02	8.96E-03
6	570258.2	4215455	1.38E-01	2.11E-02	9.50E-03
7	570179.3	4215498	6.84E-02	1.04E-02	4.71E-03
8	570162	4215500	6.17E-02	9.43E-03	4.25E-03
9	570196.2	4215493	7.78E-02	1.19E-02	5.36E-03
10	570212.7	4215486	9.12E-02	1.39E-02	6.28E-03
11	570229.2	4215479	1.05E-01	1.61E-02	7.25E-03
12	570237.5	4215475	1.11E-01	1.70E-02	7.68E-03
13	570254	4215468	1.22E-01	1.86E-02	8.39E-03
14	570183.7	4215507	6.18E-02	9.44E-03	4.26E-03
15	570167.2	4215509	5.59E-02	8.54E-03	3.85E-03
16	570150.7	4215511	5.09E-02	7.77E-03	3.51E-03
17	570200.2	4215503	7.02E-02	1.07E-02	4.84E-03
18	570216.7	4215495	8.22E-02	1.26E-02	5.67E-03
19	570225	4215492	8.88E-02	1.36E-02	6.12E-03
20	570241.5	4215484	1.01E-01	1.54E-02	6.94E-03
21	570249.8	4215481	1.06E-01	1.62E-02	7.29E-03
22	570266.3	4215473	1.14E-01	1.74E-02	7.86E-03
23	570188.1	4215516	5.64E-02	8.61E-03	3.89E-03
24	570172.2	4215518	5.09E-02	7.77E-03	3.51E-03
25	570156.3	4215520	4.66E-02	7.11E-03	3.21E-03
26	570140.5	4215522	4.29E-02	6.55E-03	2.95E-03
27	570204.3	4215512	6.41E-02	9.79E-03	4.42E-03
28	570220.8	4215504	7.50E-02	1.15E-02	5.17E-03
29	570237.3	4215497	8.63E-02	1.32E-02	5.95E-03
30	570253.8	4215490	9.61E-02	1.47E-02	6.62E-03
31	570262.1	4215486	1.00E-01	1.53E-02	6.92E-03
32	570191.4	4215526	5.16E-02	7.87E-03	3.55E-03
33	570174.1	4215528	4.59E-02	7.01E-03	3.16E-03
34	570156.8	4215530	4.19E-02	6.40E-03	2.89E-03
35	570139.4	4215532	3.85E-02	5.87E-03	2.65E-03
36	570208.3	4215521	5.90E-02	9.02E-03	4.07E-03
37	570216.6	4215517	6.38E-02	9.74E-03	4.39E-03
38	570233.1	4215510	7.38E-02	1.13E-02	5.09E-03
39	570249.6	4215503	8.34E-02	1.27E-02	5.75E-03
40	570266.1	4215495	9.16E-02	1.40E-02	6.31E-03
41	570274.4	4215492	9.52E-02	1.45E-02	6.56E-03
42	570195.7	4215535	4.78E-02	7.30E-03	3.30E-03
43	570179.1	4215537	4.29E-02	6.55E-03	2.96E-03
44	570162.4	4215539	3.91E-02	5.97E-03	2.69E-03
45	570145.7	4215541	3.60E-02	5.50E-03	2.48E-03
46	570212.3	4215530	5.45E-02	8.33E-03	3.76E-03
47	570228.8	4215523	6.31E-02	9.64E-03	4.35E-03

48	570245.4	4215515	7.22E-02	1.10E-02	4.98E-03
49	570261.9	4215508	8.08E-02	1.23E-02	5.57E-03
50	570278.4	4215501	8.76E-02	1.34E-02	6.04E-03
51	570200	4215544	4.45E-02	6.80E-03	3.07E-03
52	570183.9	4215546	4.02E-02	6.14E-03	2.77E-03
53	570167.7	4215548	3.66E-02	5.59E-03	2.52E-03
54	570151.5	4215550	3.38E-02	5.16E-03	2.33E-03
55	570135.4	4215552	3.14E-02	4.80E-03	2.17E-03
56	570216.4	4215539	5.06E-02	7.73E-03	3.49E-03
57	570232.9	4215532	5.84E-02	8.92E-03	4.03E-03
58	570241.1	4215528	6.25E-02	9.54E-03	4.31E-03
59	570257.6	4215521	7.07E-02	1.08E-02	4.87E-03
60	570274.2	4215514	7.80E-02	1.19E-02	5.37E-03
61	570203.5	4215553	4.13E-02	6.31E-03	2.85E-03
62	570186.2	4215555	3.72E-02	5.68E-03	2.56E-03
63	570168.8	4215557	3.37E-02	5.14E-03	2.32E-03
64	570151.5	4215559	3.10E-02	4.73E-03	2.14E-03
65	570134.2	4215561	2.87E-02	4.38E-03	1.98E-03
66	570220.4	4215548	4.72E-02	7.20E-03	3.25E-03
67	570228.6	4215545	5.08E-02	7.75E-03	3.50E-03
68	570245.2	4215537	5.82E-02	8.88E-03	4.01E-03
69	570253.4	4215534	6.19E-02	9.46E-03	4.27E-03
70	570269.9	4215526	6.89E-02	1.05E-02	4.75E-03
71	570286.5	4215519	7.51E-02	1.15E-02	5.17E-03
72	570207.8	4215562	3.89E-02	5.94E-03	2.68E-03
73	570191	4215564	3.51E-02	5.36E-03	2.42E-03
74	570174.2	4215566	3.18E-02	4.85E-03	2.19E-03
75	570157.4	4215568	2.93E-02	4.47E-03	2.02E-03
76	570140.6	4215570	2.72E-02	4.15E-03	1.87E-03
77	570224.4	4215557	4.41E-02	6.74E-03	3.04E-03
78	570240.9	4215550	5.08E-02	7.75E-03	3.50E-03
79	570257.5	4215543	5.77E-02	8.80E-03	3.97E-03
80	570274	4215536	6.42E-02	9.80E-03	4.42E-03
81	570282.2	4215532	6.71E-02	1.02E-02	4.62E-03
82	570211.3	4215571	3.65E-02	5.58E-03	2.52E-03
83	570193.4	4215573	3.28E-02	5.01E-03	2.26E-03
84	570175.6	4215576	2.95E-02	4.51E-03	2.04E-03
85	570157.8	4215578	2.71E-02	4.13E-03	1.86E-03
86	570139.9	4215580	2.50E-02	3.82E-03	1.72E-03
87	570220.2	4215570	3.85E-02	5.88E-03	2.65E-03
88	570236.7	4215563	4.43E-02	6.77E-03	3.05E-03
89	570253.2	4215556	5.05E-02	7.71E-03	3.48E-03
90	570269.7	4215548	5.67E-02	8.66E-03	3.91E-03
91	570286.3	4215541	6.25E-02	9.55E-03	4.31E-03
92	570215.6	4215580	3.45E-02	5.26E-03	2.38E-03
93	570198.3	4215583	3.12E-02	4.76E-03	2.15E-03
94	570180.9	4215585	2.82E-02	4.30E-03	1.94E-03
95	570163.6	4215587	2.57E-02	3.93E-03	1.77E-03
96	570146.3	4215589	2.38E-02	3.63E-03	1.64E-03
97	570129	4215591	2.23E-02	3.40E-03	1.54E-03
98	570232.5	4215576	3.87E-02	5.92E-03	2.67E-03
99	570249	4215568	4.41E-02	6.74E-03	3.04E-03

100	570265.5	4215561	4.98E-02	7.60E-03	3.43E-03
101	570282	4215554	5.55E-02	8.48E-03	3.83E-03
102	570290.3	4215550	5.82E-02	8.89E-03	4.01E-03
103	570298.5	4215547	6.07E-02	9.27E-03	4.19E-03
104	570219.8	4215590	3.25E-02	4.96E-03	2.24E-03
105	570203	4215592	2.95E-02	4.51E-03	2.04E-03
106	570186.1	4215594	2.69E-02	4.10E-03	1.85E-03
107	570169.2	4215596	2.45E-02	3.74E-03	1.69E-03
108	570152.4	4215598	2.27E-02	3.47E-03	1.57E-03
109	570135.5	4215600	2.13E-02	3.25E-03	1.47E-03
110	570236.5	4215585	3.60E-02	5.50E-03	2.48E-03
111	570253	4215578	4.07E-02	6.22E-03	2.80E-03
112	570261.3	4215574	4.32E-02	6.60E-03	2.98E-03
113	570277.8	4215567	4.86E-02	7.42E-03	3.35E-03
114	570294.3	4215559	5.40E-02	8.24E-03	3.72E-03
115	570223.4	4215599	3.04E-02	4.64E-03	2.10E-03
116	570205.7	4215601	2.77E-02	4.23E-03	1.91E-03
117	570187.9	4215603	2.51E-02	3.84E-03	1.73E-03
118	570170.1	4215605	2.29E-02	3.50E-03	1.58E-03
119	570161.3	4215606	2.20E-02	3.36E-03	1.52E-03
120	570143.5	4215608	2.05E-02	3.12E-03	1.41E-03
121	570125.8	4215611	1.93E-02	2.95E-03	1.33E-03
122	570232.3	4215598	3.16E-02	4.82E-03	2.18E-03
123	570248.8	4215590	3.56E-02	5.43E-03	2.45E-03
124	570265.3	4215583	3.74E-02	5.72E-03	2.58E-03
125	570281.8	4215576	4.50E-02	6.87E-03	3.10E-03
126	570290.1	4215572	4.75E-02	7.25E-03	3.27E-03
127	570298.4	4215569	5.00E-02	7.63E-03	3.44E-03
128	570227.7	4215608	2.85E-02	4.35E-03	1.96E-03
129	570210.4	4215610	2.63E-02	4.02E-03	1.81E-03
130	570193	4215612	2.40E-02	3.67E-03	1.65E-03
131	570175.7	4215614	2.19E-02	3.35E-03	1.51E-03
132	570158.4	4215616	2.03E-02	3.10E-03	1.40E-03
133	570141.1	4215618	1.90E-02	2.90E-03	1.31E-03
134	570123.8	4215620	1.80E-02	2.75E-03	1.24E-03
135	570244.6	4215603	3.13E-02	4.79E-03	2.16E-03
136	570261.1	4215596	3.26E-02	4.98E-03	2.25E-03
137	570277.6	4215589	3.66E-02	5.58E-03	2.52E-03
138	570294.1	4215581	4.14E-02	6.33E-03	2.86E-03
139	570302.4	4215578	4.44E-02	6.78E-03	3.06E-03
140	570231.9	4215617	2.68E-02	4.09E-03	1.84E-03
141	570215	4215619	2.49E-02	3.81E-03	1.72E-03
142	570198	4215621	2.29E-02	3.49E-03	1.58E-03
143	570181.1	4215623	2.10E-02	3.20E-03	1.44E-03
144	570164.2	4215625	1.94E-02	2.96E-03	1.34E-03
145	570147.3	4215627	1.82E-02	2.78E-03	1.25E-03
146	570130.3	4215629	1.72E-02	2.63E-03	1.19E-03
147	570248.6	4215612	2.75E-02	4.20E-03	1.89E-03
148	570256.9	4215609	2.88E-02	4.40E-03	1.99E-03
149	570273.4	4215601	3.21E-02	4.90E-03	2.21E-03
150	570289.9	4215594	3.60E-02	5.50E-03	2.48E-03
151	570298.2	4215591	3.83E-02	5.84E-03	2.64E-03

152	570314.7	4215583	4.34E-02	6.62E-03	2.99E-03
153	570235.5	4215626	2.52E-02	3.85E-03	1.74E-03
154	570226.7	4215627	2.43E-02	3.71E-03	1.67E-03
155	570209	4215629	2.24E-02	3.42E-03	1.55E-03
156	570191.3	4215632	2.05E-02	3.14E-03	1.41E-03
157	570173.6	4215634	1.88E-02	2.87E-03	1.30E-03
158	570164.8	4215635	1.82E-02	2.78E-03	1.25E-03
159	570147.1	4215637	1.70E-02	2.60E-03	1.17E-03
160	570129.4	4215639	1.61E-02	2.46E-03	1.11E-03
161	570252.6	4215622	2.58E-02	3.94E-03	1.78E-03
162	570269.2	4215614	2.83E-02	4.32E-03	1.95E-03
163	570285.7	4215607	3.18E-02	4.86E-03	2.19E-03
164	570302.2	4215600	3.59E-02	5.48E-03	2.47E-03
165	570318.7	4215592	4.04E-02	6.17E-03	2.78E-03
166	570239.8	4215635	2.38E-02	3.64E-03	1.64E-03
167	570222.5	4215637	2.22E-02	3.40E-03	1.53E-03
168	570205.1	4215640	2.05E-02	3.12E-03	1.41E-03
169	570187.8	4215642	1.88E-02	2.87E-03	1.30E-03
170	570170.5	4215644	1.74E-02	2.66E-03	1.20E-03
171	570153.2	4215646	1.64E-02	2.50E-03	1.13E-03
172	570135.9	4215648	1.55E-02	2.36E-03	1.07E-03
173	570118.6	4215650	1.48E-02	2.25E-03	1.02E-03
174	570256.7	4215631	2.61E-02	3.98E-03	1.80E-03
175	570273.2	4215623	2.69E-02	4.11E-03	1.86E-03
176	570281.5	4215620	2.83E-02	4.33E-03	1.95E-03
177	570298	4215612	3.17E-02	4.84E-03	2.19E-03
178	570306.2	4215609	3.38E-02	5.16E-03	2.33E-03
179	570314.5	4215605	3.59E-02	5.48E-03	2.47E-03
180	570244	4215644	2.26E-02	3.45E-03	1.56E-03
181	570227	4215647	2.11E-02	3.23E-03	1.46E-03
182	570210	4215649	1.95E-02	2.98E-03	1.34E-03
183	570193	4215651	1.80E-02	2.75E-03	1.24E-03
184	570176.1	4215653	1.67E-02	2.55E-03	1.15E-03
185	570159.1	4215655	1.57E-02	2.40E-03	1.08E-03
186	570142.1	4215657	1.49E-02	2.27E-03	1.02E-03
187	570125.2	4215659	1.42E-02	2.17E-03	9.77E-04
188	570260.7	4215640	2.47E-02	3.77E-03	1.70E-03
189	570269	4215636	2.60E-02	3.97E-03	1.79E-03
190	570277.2	4215633	2.58E-02	3.93E-03	1.77E-03
191	570293.7	4215625	2.85E-02	4.34E-03	1.96E-03
192	570310.3	4215618	3.19E-02	4.88E-03	2.20E-03
193	570326.8	4215611	3.71E-02	5.67E-03	2.56E-03
194	570247.7	4215654	2.14E-02	3.27E-03	1.48E-03
195	570230	4215656	1.99E-02	3.04E-03	1.37E-03
196	570212.4	4215658	1.84E-02	2.80E-03	1.27E-03
197	570194.7	4215660	1.70E-02	2.59E-03	1.17E-03
198	570177.1	4215662	1.57E-02	2.40E-03	1.08E-03
199	570159.4	4215664	1.48E-02	2.26E-03	1.02E-03
200	570141.7	4215666	1.40E-02	2.14E-03	9.67E-04
201	570124.1	4215669	1.34E-02	2.04E-03	9.22E-04
202	570264.7	4215649	2.34E-02	3.57E-03	1.61E-03
203	570281.3	4215642	2.59E-02	3.96E-03	1.79E-03

204	570297.8	4215634	2.87E-02	4.39E-03	1.98E-03
205	570314.3	4215627	3.18E-02	4.85E-03	2.19E-03
206	570330.8	4215620	3.49E-02	5.33E-03	2.40E-03
207	570251.9	4215663	2.03E-02	3.11E-03	1.40E-03
208	570234.6	4215665	1.89E-02	2.89E-03	1.30E-03
209	570217.2	4215667	1.75E-02	2.67E-03	1.21E-03
210	570199.9	4215669	1.62E-02	2.48E-03	1.12E-03
211	570182.6	4215671	1.51E-02	2.31E-03	1.04E-03
212	570165.3	4215673	1.42E-02	2.17E-03	9.81E-04
213	570148	4215675	1.35E-02	2.07E-03	9.32E-04
214	570130.7	4215677	1.29E-02	1.97E-03	8.89E-04
215	570113.4	4215680	1.24E-02	1.89E-03	8.52E-04
216	570268.8	4215658	2.22E-02	3.39E-03	1.53E-03
217	570277	4215654	2.33E-02	3.56E-03	1.61E-03
218	570293.6	4215647	2.58E-02	3.94E-03	1.78E-03
219	570310.1	4215640	2.85E-02	4.36E-03	1.97E-03
220	570326.6	4215633	3.14E-02	4.80E-03	2.16E-03
221	570256	4215672	1.93E-02	2.94E-03	1.33E-03
222	570239	4215674	1.79E-02	2.74E-03	1.23E-03
223	570222	4215676	1.67E-02	2.55E-03	1.15E-03
224	570205	4215678	1.55E-02	2.37E-03	1.07E-03
225	570188	4215680	1.45E-02	2.22E-03	1.00E-03
226	570171	4215682	1.37E-02	2.09E-03	9.43E-04
227	570154	4215684	1.30E-02	1.99E-03	8.97E-04
228	570137	4215686	1.24E-02	1.90E-03	8.57E-04
229	570120	4215688	1.19E-02	1.82E-03	8.22E-04
230	570272.8	4215667	2.10E-02	3.21E-03	1.45E-03
231	570281.1	4215664	2.22E-02	3.39E-03	1.53E-03
232	570297.6	4215656	2.45E-02	3.74E-03	1.69E-03
233	570305.8	4215653	2.57E-02	3.93E-03	1.77E-03
234	570314.1	4215649	2.70E-02	4.12E-03	1.86E-03
235	570330.6	4215642	2.97E-02	4.53E-03	2.04E-03
236	570338.9	4215638	3.10E-02	4.73E-03	2.14E-03
237	570259.8	4215681	1.82E-02	2.78E-03	1.25E-03
238	570242.2	4215683	1.69E-02	2.58E-03	1.16E-03
239	570224.5	4215685	1.57E-02	2.39E-03	1.08E-03
240	570206.9	4215687	1.46E-02	2.23E-03	1.01E-03
241	570189.3	4215690	1.37E-02	2.10E-03	9.46E-04
242	570171.7	4215692	1.30E-02	1.98E-03	8.94E-04
243	570154.1	4215694	1.23E-02	1.88E-03	8.50E-04
244	570136.5	4215696	1.18E-02	1.80E-03	8.13E-04
245	570118.8	4215698	1.13E-02	1.73E-03	7.81E-04
246	570276.8	4215676	1.99E-02	3.04E-03	1.37E-03
247	570285.1	4215673	2.09E-02	3.20E-03	1.44E-03
248	570293.4	4215669	2.20E-02	3.37E-03	1.52E-03
249	570309.9	4215662	2.44E-02	3.72E-03	1.68E-03
250	570318.1	4215658	2.56E-02	3.90E-03	1.76E-03
251	570334.6	4215651	2.80E-02	4.28E-03	1.93E-03
252	570264	4215690	1.71E-02	2.62E-03	1.18E-03
253	570246.6	4215692	1.59E-02	2.44E-03	1.10E-03
254	570229.3	4215694	1.49E-02	2.27E-03	1.02E-03
255	570212	4215697	1.39E-02	2.13E-03	9.61E-04

256	570194.7	4215699	1.32E-02	2.01E-03	9.07E-04
257	570177.4	4215701	1.25E-02	1.91E-03	8.61E-04
258	570160.1	4215703	1.19E-02	1.82E-03	8.20E-04
259	570142.8	4215705	1.14E-02	1.74E-03	7.84E-04
260	570125.5	4215707	1.09E-02	1.67E-03	7.54E-04
261	570108.1	4215709	1.05E-02	1.61E-03	7.27E-04
262	570280.9	4215686	1.87E-02	2.86E-03	1.29E-03
263	570297.4	4215678	2.08E-02	3.18E-03	1.43E-03
264	570305.6	4215675	2.19E-02	3.34E-03	1.51E-03
265	570322.2	4215667	2.41E-02	3.68E-03	1.66E-03
266	570330.4	4215664	2.53E-02	3.86E-03	1.74E-03
267	570346.9	4215656	2.75E-02	4.20E-03	1.90E-03
268	570267.7	4215699	1.61E-02	2.46E-03	1.11E-03
269	570249.8	4215702	1.50E-02	2.29E-03	1.03E-03
270	570231.9	4215704	1.40E-02	2.13E-03	9.63E-04
271	570223	4215705	1.35E-02	2.07E-03	9.34E-04
272	570214	4215706	1.31E-02	2.01E-03	9.06E-04
273	570196.1	4215708	1.25E-02	1.90E-03	8.59E-04
274	570178.3	4215710	1.19E-02	1.82E-03	8.19E-04
275	570169.3	4215711	1.16E-02	1.77E-03	8.00E-04
276	570151.4	4215713	1.11E-02	1.69E-03	7.63E-04
277	570133.5	4215716	1.06E-02	1.62E-03	7.32E-04
278	570115.6	4215718	1.02E-02	1.56E-03	7.05E-04
279	570284.9	4215695	1.76E-02	2.69E-03	1.22E-03
280	570293.2	4215691	1.86E-02	2.84E-03	1.28E-03
281	570309.7	4215684	2.06E-02	3.15E-03	1.42E-03
282	570317.9	4215680	2.17E-02	3.32E-03	1.50E-03
283	570334.5	4215673	2.38E-02	3.64E-03	1.64E-03
284	570342.7	4215669	2.49E-02	3.80E-03	1.72E-03
285	570282.2	4215444	1.41E-01	2.15E-02	9.68E-03
286	570275.6	4215451	1.37E-01	2.09E-02	9.42E-03
287	570268.9	4215458	1.32E-01	2.01E-02	9.07E-03
288	570298.6	4215441	1.34E-01	2.05E-02	9.24E-03
289	570292.2	4215447	1.32E-01	2.02E-02	9.10E-03
290	570285.7	4215454	1.29E-01	1.97E-02	8.90E-03
291	570279.2	4215460	1.25E-01	1.91E-02	8.63E-03
292	570272.8	4215467	1.20E-01	1.84E-02	8.29E-03
293	570308.3	4215444	1.27E-01	1.93E-02	8.72E-03
294	570302	4215450	1.25E-01	1.91E-02	8.60E-03
295	570295.6	4215457	1.22E-01	1.87E-02	8.42E-03
296	570289.3	4215463	1.19E-01	1.82E-02	8.21E-03
297	570276.6	4215476	1.10E-01	1.68E-02	7.57E-03
298	570322.7	4215443	1.20E-01	1.84E-02	8.28E-03
299	570315.8	4215450	1.19E-01	1.82E-02	8.22E-03
300	570308.9	4215457	1.17E-01	1.79E-02	8.09E-03
301	570302	4215464	1.15E-01	1.75E-02	7.90E-03
302	570295.1	4215471	1.11E-01	1.70E-02	7.65E-03
303	570288.2	4215478	1.06E-01	1.63E-02	7.34E-03
304	570281.3	4215485	1.01E-01	1.54E-02	6.97E-03
305	570339	4215439	1.13E-01	1.72E-02	7.75E-03
306	570332.2	4215446	1.13E-01	1.73E-02	7.80E-03
307	570325.5	4215453	1.13E-01	1.72E-02	7.78E-03

308	570318.8	4215460	1.12E-01	1.70E-02	7.68E-03
309	570312	4215467	1.09E-01	1.67E-02	7.53E-03
310	570305.3	4215474	1.06E-01	1.62E-02	7.33E-03
311	570298.6	4215480	1.03E-01	1.57E-02	7.07E-03
312	570291.8	4215487	9.80E-02	1.50E-02	6.75E-03
313	570285.1	4215494	9.30E-02	1.42E-02	6.41E-03
314	570355.7	4215399	1.13E-01	1.73E-02	7.79E-03
315	570355.5	4215408	1.11E-01	1.69E-02	7.64E-03
316	570355.3	4215418	1.09E-01	1.67E-02	7.52E-03
317	570348.3	4215443	1.06E-01	1.62E-02	7.32E-03
318	570341.7	4215450	1.07E-01	1.64E-02	7.38E-03
319	570335.1	4215457	1.07E-01	1.64E-02	7.38E-03
320	570328.5	4215463	1.06E-01	1.62E-02	7.31E-03
321	570322	4215470	1.04E-01	1.59E-02	7.19E-03
322	570315.4	4215477	1.02E-01	1.56E-02	7.02E-03
323	570308.8	4215483	9.88E-02	1.51E-02	6.81E-03
324	570302.2	4215490	9.50E-02	1.45E-02	6.54E-03
325	570295.6	4215497	9.05E-02	1.38E-02	6.24E-03
326	570289	4215503	8.59E-02	1.31E-02	5.92E-03
327	570365.1	4215394	1.08E-01	1.65E-02	7.45E-03
328	570364.9	4215404	1.06E-01	1.62E-02	7.33E-03
329	570364.7	4215413	1.05E-01	1.60E-02	7.22E-03
330	570357.6	4215447	1.01E-01	1.54E-02	6.95E-03
331	570351.2	4215454	1.02E-01	1.55E-02	7.01E-03
332	570344.7	4215460	1.02E-01	1.56E-02	7.03E-03
333	570338.2	4215467	1.01E-01	1.55E-02	6.98E-03
334	570331.8	4215473	9.98E-02	1.52E-02	6.88E-03
335	570325.3	4215480	9.78E-02	1.49E-02	6.74E-03
336	570318.8	4215486	9.51E-02	1.45E-02	6.56E-03
337	570312.3	4215493	9.19E-02	1.40E-02	6.33E-03
338	570305.9	4215499	8.81E-02	1.35E-02	6.07E-03
339	570299.4	4215506	8.40E-02	1.28E-02	5.79E-03
340	570292.9	4215513	7.96E-02	1.22E-02	5.49E-03
341	570374.4	4215395	1.03E-01	1.57E-02	7.06E-03
342	570374.2	4215405	1.01E-01	1.54E-02	6.96E-03
343	570374	4215415	9.96E-02	1.52E-02	6.86E-03
344	570366.4	4215451	9.59E-02	1.47E-02	6.61E-03
345	570359.5	4215458	9.69E-02	1.48E-02	6.68E-03
346	570352.6	4215465	9.74E-02	1.49E-02	6.71E-03
347	570345.7	4215472	9.65E-02	1.47E-02	6.65E-03
348	570338.8	4215479	9.50E-02	1.45E-02	6.55E-03
349	570331.9	4215486	9.29E-02	1.42E-02	6.40E-03
350	570325	4215493	9.01E-02	1.38E-02	6.21E-03
351	570318.1	4215500	8.67E-02	1.32E-02	5.97E-03
352	570311.2	4215507	8.28E-02	1.26E-02	5.71E-03
353	570304.3	4215514	7.86E-02	1.20E-02	5.42E-03
354	570297.4	4215521	7.42E-02	1.13E-02	5.11E-03
355	570383.8	4215390	9.80E-02	1.50E-02	6.75E-03
356	570383.6	4215400	9.69E-02	1.48E-02	6.68E-03
357	570383.4	4215410	9.57E-02	1.46E-02	6.60E-03
358	570382.7	4215439	9.15E-02	1.40E-02	6.31E-03
359	570375.8	4215455	9.14E-02	1.40E-02	6.30E-03

360	570369	4215462	9.24E-02	1.41E-02	6.36E-03
361	570362.2	4215469	9.28E-02	1.42E-02	6.39E-03
362	570355.4	4215476	9.24E-02	1.41E-02	6.37E-03
363	570348.7	4215483	9.12E-02	1.39E-02	6.29E-03
364	570341.9	4215489	8.94E-02	1.37E-02	6.16E-03
365	570335.1	4215496	8.71E-02	1.33E-02	6.00E-03
366	570328.4	4215503	8.41E-02	1.28E-02	5.79E-03
367	570321.6	4215510	8.06E-02	1.23E-02	5.56E-03
368	570314.8	4215517	7.69E-02	1.17E-02	5.30E-03
369	570308.1	4215524	7.30E-02	1.11E-02	5.03E-03
370	570301.3	4215531	6.91E-02	1.06E-02	4.76E-03
371	570393	4215395	9.28E-02	1.42E-02	6.39E-03
372	570392.8	4215405	9.18E-02	1.40E-02	6.32E-03
373	570392.6	4215414	9.08E-02	1.39E-02	6.26E-03
374	570392	4215443	8.72E-02	1.33E-02	6.01E-03
375	570385.1	4215459	8.72E-02	1.33E-02	6.01E-03
376	570378.4	4215466	8.81E-02	1.35E-02	6.07E-03
377	570371.8	4215472	8.84E-02	1.35E-02	6.09E-03
378	570365.1	4215479	8.82E-02	1.35E-02	6.08E-03
379	570358.5	4215486	8.75E-02	1.34E-02	6.03E-03
380	570351.8	4215493	8.61E-02	1.31E-02	5.93E-03
381	570345.1	4215499	8.40E-02	1.28E-02	5.79E-03
382	570338.5	4215506	8.15E-02	1.24E-02	5.62E-03
383	570331.8	4215513	7.85E-02	1.20E-02	5.41E-03
384	570325.2	4215520	7.51E-02	1.15E-02	5.17E-03
385	570318.5	4215526	7.15E-02	1.09E-02	4.93E-03
386	570311.9	4215533	6.81E-02	1.04E-02	4.69E-03
387	570305.2	4215540	6.45E-02	9.85E-03	4.45E-03
388	570402.4	4215391	8.87E-02	1.36E-02	6.12E-03
389	570402.2	4215400	8.80E-02	1.34E-02	6.07E-03
390	570402	4215409	8.72E-02	1.33E-02	6.01E-03
391	570401.2	4215447	8.32E-02	1.27E-02	5.73E-03
392	570394.4	4215463	8.31E-02	1.27E-02	5.73E-03
393	570387.8	4215469	8.40E-02	1.28E-02	5.79E-03
394	570381.3	4215476	8.45E-02	1.29E-02	5.82E-03
395	570374.7	4215483	8.44E-02	1.29E-02	5.81E-03
396	570368.2	4215489	8.38E-02	1.28E-02	5.77E-03
397	570361.6	4215496	8.27E-02	1.26E-02	5.70E-03
398	570355	4215503	8.11E-02	1.24E-02	5.59E-03
399	570348.5	4215509	7.89E-02	1.20E-02	5.44E-03
400	570341.9	4215516	7.63E-02	1.16E-02	5.26E-03
401	570335.4	4215523	7.33E-02	1.12E-02	5.05E-03
402	570328.8	4215529	7.01E-02	1.07E-02	4.83E-03
403	570322.3	4215536	6.69E-02	1.02E-02	4.61E-03
404	570315.7	4215542	6.36E-02	9.71E-03	4.38E-03
405	570309.1	4215549	6.01E-02	9.18E-03	4.14E-03
406	570411.7	4215391	8.46E-02	1.29E-02	5.83E-03
407	570411.5	4215401	8.40E-02	1.28E-02	5.79E-03
408	570411.3	4215411	8.33E-02	1.27E-02	5.74E-03
409	570410.6	4215440	8.06E-02	1.23E-02	5.56E-03
410	570410.4	4215450	7.95E-02	1.21E-02	5.48E-03
411	570403.3	4215467	7.94E-02	1.21E-02	5.47E-03

412	570396.3	4215474	8.02E-02	1.22E-02	5.52E-03
413	570389.4	4215481	8.07E-02	1.23E-02	5.56E-03
414	570382.5	4215488	8.08E-02	1.23E-02	5.57E-03
415	570375.6	4215495	8.01E-02	1.22E-02	5.52E-03
416	570368.7	4215502	7.89E-02	1.20E-02	5.43E-03
417	570361.8	4215509	7.72E-02	1.18E-02	5.32E-03
418	570354.9	4215516	7.52E-02	1.15E-02	5.18E-03
419	570348	4215523	7.25E-02	1.11E-02	5.00E-03
420	570341.1	4215530	6.96E-02	1.06E-02	4.79E-03
421	570334.2	4215537	6.64E-02	1.01E-02	4.58E-03
422	570327.3	4215544	6.32E-02	9.64E-03	4.35E-03
423	570320.4	4215551	5.98E-02	9.12E-03	4.12E-03
424	570313.5	4215558	5.62E-02	8.59E-03	3.87E-03
425	570421.1	4215386	8.10E-02	1.24E-02	5.58E-03
426	570420.9	4215396	8.06E-02	1.23E-02	5.55E-03
427	570420.7	4215406	8.00E-02	1.22E-02	5.52E-03
428	570420.5	4215415	7.95E-02	1.21E-02	5.48E-03
429	570419.8	4215444	7.69E-02	1.17E-02	5.30E-03
430	570419.6	4215454	7.59E-02	1.16E-02	5.23E-03
431	570412.6	4215471	7.58E-02	1.16E-02	5.22E-03
432	570405.8	4215478	7.65E-02	1.17E-02	5.27E-03
433	570399	4215484	7.69E-02	1.17E-02	5.30E-03
434	570392.2	4215491	7.71E-02	1.18E-02	5.31E-03
435	570385.4	4215498	7.68E-02	1.17E-02	5.29E-03
436	570378.6	4215505	7.58E-02	1.16E-02	5.22E-03
437	570371.8	4215512	7.43E-02	1.14E-02	5.12E-03
438	570365	4215519	7.26E-02	1.11E-02	5.00E-03
439	570358.2	4215526	7.04E-02	1.08E-02	4.85E-03
440	570351.4	4215533	6.80E-02	1.04E-02	4.68E-03
441	570344.6	4215540	6.51E-02	9.94E-03	4.49E-03
442	570337.8	4215547	6.21E-02	9.48E-03	4.28E-03
443	570331	4215553	5.89E-02	9.00E-03	4.06E-03
444	570324.2	4215560	5.57E-02	8.50E-03	3.84E-03
445	570317.4	4215567	5.22E-02	7.97E-03	3.60E-03
446	570430.5	4215382	7.74E-02	1.18E-02	5.34E-03
447	570430.3	4215391	7.73E-02	1.18E-02	5.33E-03
448	570430.1	4215401	7.70E-02	1.18E-02	5.30E-03
449	570429.9	4215410	7.65E-02	1.17E-02	5.27E-03
450	570429.2	4215439	7.43E-02	1.13E-02	5.12E-03
451	570429	4215449	7.34E-02	1.12E-02	5.06E-03
452	570428.8	4215458	7.24E-02	1.11E-02	4.99E-03
453	570421.9	4215474	7.21E-02	1.10E-02	4.97E-03
454	570415.2	4215481	7.29E-02	1.11E-02	5.03E-03
455	570408.5	4215488	7.34E-02	1.12E-02	5.06E-03
456	570401.8	4215495	7.36E-02	1.12E-02	5.07E-03
457	570395.1	4215502	7.33E-02	1.12E-02	5.05E-03
458	570388.4	4215508	7.27E-02	1.11E-02	5.01E-03
459	570381.7	4215515	7.16E-02	1.09E-02	4.93E-03
460	570375	4215522	7.00E-02	1.07E-02	4.82E-03
461	570368.3	4215529	6.81E-02	1.04E-02	4.69E-03
462	570361.6	4215536	6.60E-02	1.01E-02	4.55E-03
463	570354.9	4215542	6.36E-02	9.71E-03	4.38E-03

464	570348.2	4215549	6.09E-02	9.29E-03	4.19E-03
465	570341.5	4215556	5.80E-02	8.85E-03	4.00E-03
466	570334.8	4215563	5.49E-02	8.39E-03	3.79E-03
467	570328.1	4215570	5.18E-02	7.90E-03	3.57E-03
468	570321.4	4215576	4.85E-02	7.41E-03	3.34E-03
469	570439.7	4215387	7.40E-02	1.13E-02	5.10E-03
470	570439.5	4215396	7.39E-02	1.13E-02	5.09E-03
471	570439.3	4215406	7.37E-02	1.13E-02	5.08E-03
472	570439.1	4215415	7.32E-02	1.12E-02	5.04E-03
473	570438.4	4215443	7.09E-02	1.08E-02	4.89E-03
474	570438.2	4215453	7.01E-02	1.07E-02	4.83E-03
475	570438	4215462	6.92E-02	1.06E-02	4.77E-03
476	570431.2	4215478	6.87E-02	1.05E-02	4.74E-03
477	570424.6	4215485	6.94E-02	1.06E-02	4.78E-03
478	570417.9	4215492	7.00E-02	1.07E-02	4.82E-03
479	570411.3	4215498	7.02E-02	1.07E-02	4.84E-03
480	570404.7	4215505	7.00E-02	1.07E-02	4.83E-03
481	570398.1	4215512	6.95E-02	1.06E-02	4.79E-03
482	570391.5	4215519	6.87E-02	1.05E-02	4.73E-03
483	570384.9	4215525	6.75E-02	1.03E-02	4.65E-03
484	570378.2	4215532	6.58E-02	1.00E-02	4.53E-03
485	570371.6	4215539	6.39E-02	9.75E-03	4.40E-03
486	570365	4215545	6.17E-02	9.43E-03	4.25E-03
487	570358.4	4215552	5.94E-02	9.07E-03	4.09E-03
488	570351.8	4215559	5.69E-02	8.68E-03	3.92E-03
489	570345.2	4215566	5.41E-02	8.26E-03	3.73E-03
490	570338.6	4215572	5.12E-02	7.81E-03	3.53E-03
491	570331.9	4215579	4.82E-02	7.36E-03	3.32E-03
492	570325.3	4215586	4.35E-02	6.65E-03	3.00E-03
493	570449.2	4215377	7.09E-02	1.08E-02	4.88E-03
494	570449	4215387	7.09E-02	1.08E-02	4.89E-03
495	570448.8	4215397	7.08E-02	1.08E-02	4.88E-03
496	570448.5	4215407	7.05E-02	1.08E-02	4.86E-03
497	570448.3	4215416	7.00E-02	1.07E-02	4.83E-03
498	570447.7	4215446	6.79E-02	1.04E-02	4.68E-03
499	570447.4	4215456	6.70E-02	1.02E-02	4.62E-03
500	570447.2	4215466	6.61E-02	1.01E-02	4.55E-03
501	570440.1	4215482	6.55E-02	1.00E-02	4.51E-03
502	570433.2	4215489	6.61E-02	1.01E-02	4.56E-03
503	570426.3	4215496	6.66E-02	1.02E-02	4.59E-03
504	570419.4	4215503	6.69E-02	1.02E-02	4.61E-03
505	570412.5	4215510	6.69E-02	1.02E-02	4.61E-03
506	570405.6	4215517	6.63E-02	1.01E-02	4.57E-03
507	570398.7	4215524	6.55E-02	1.00E-02	4.51E-03
508	570391.8	4215531	6.42E-02	9.81E-03	4.43E-03
509	570384.9	4215538	6.27E-02	9.57E-03	4.32E-03
510	570378	4215546	6.07E-02	9.28E-03	4.19E-03
511	570371.1	4215553	5.86E-02	8.95E-03	4.04E-03
512	570364.2	4215560	5.63E-02	8.60E-03	3.88E-03
513	570357.3	4215567	5.38E-02	8.21E-03	3.70E-03
514	570350.4	4215574	5.10E-02	7.79E-03	3.52E-03
515	570343.5	4215581	4.82E-02	7.36E-03	3.32E-03

516	570336.5	4215588	4.53E-02	6.91E-03	3.12E-03
517	570329.6	4215595	4.24E-02	6.47E-03	2.92E-03
518	570458.6	4215373	6.82E-02	1.04E-02	4.70E-03
519	570458.4	4215382	6.81E-02	1.04E-02	4.69E-03
520	570458.2	4215392	6.79E-02	1.04E-02	4.68E-03
521	570458	4215402	6.76E-02	1.03E-02	4.66E-03
522	570457.7	4215411	6.72E-02	1.03E-02	4.63E-03
523	570457.1	4215441	6.55E-02	1.00E-02	4.51E-03
524	570456.9	4215450	6.47E-02	9.89E-03	4.46E-03
525	570456.6	4215460	6.39E-02	9.75E-03	4.40E-03
526	570456.4	4215470	6.28E-02	9.59E-03	4.33E-03
527	570449.4	4215486	6.23E-02	9.51E-03	4.29E-03
528	570442.6	4215493	6.30E-02	9.61E-03	4.34E-03
529	570435.8	4215500	6.34E-02	9.68E-03	4.37E-03
530	570429	4215507	6.37E-02	9.72E-03	4.39E-03
531	570422.1	4215514	6.37E-02	9.73E-03	4.39E-03
532	570415.3	4215521	6.35E-02	9.70E-03	4.38E-03
533	570408.5	4215528	6.29E-02	9.60E-03	4.33E-03
534	570401.7	4215535	6.18E-02	9.43E-03	4.26E-03
535	570394.9	4215542	6.04E-02	9.23E-03	4.16E-03
536	570388.1	4215548	5.88E-02	8.98E-03	4.05E-03
537	570381.3	4215555	5.70E-02	8.70E-03	3.92E-03
538	570374.5	4215562	5.49E-02	8.38E-03	3.78E-03
539	570367.6	4215569	5.26E-02	8.03E-03	3.62E-03
540	570360.8	4215576	5.02E-02	7.66E-03	3.46E-03
541	570354	4215583	4.76E-02	7.27E-03	3.28E-03
542	570347.2	4215590	4.50E-02	6.87E-03	3.10E-03
543	570340.4	4215597	4.23E-02	6.46E-03	2.92E-03
544	570333.6	4215604	3.97E-02	6.06E-03	2.73E-03
545	570468	4215368	6.57E-02	1.00E-02	4.53E-03
546	570467.8	4215378	6.55E-02	1.00E-02	4.52E-03
547	570467.6	4215387	6.53E-02	9.97E-03	4.50E-03
548	570467.4	4215397	6.49E-02	9.91E-03	4.47E-03
549	570467.1	4215407	6.44E-02	9.84E-03	4.44E-03
550	570466.9	4215416	6.41E-02	9.79E-03	4.42E-03
551	570466.3	4215445	6.25E-02	9.55E-03	4.31E-03
552	570466.1	4215454	6.18E-02	9.43E-03	4.26E-03
553	570465.8	4215464	6.09E-02	9.30E-03	4.20E-03
554	570465.6	4215474	5.98E-02	9.13E-03	4.12E-03
555	570458.7	4215490	5.93E-02	9.05E-03	4.08E-03
556	570452	4215497	5.99E-02	9.14E-03	4.12E-03
557	570445.2	4215504	6.03E-02	9.21E-03	4.16E-03
558	570438.5	4215511	6.06E-02	9.26E-03	4.18E-03
559	570431.8	4215517	6.07E-02	9.27E-03	4.18E-03
560	570425	4215524	6.06E-02	9.25E-03	4.18E-03
561	570418.3	4215531	6.02E-02	9.19E-03	4.15E-03
562	570411.6	4215538	5.95E-02	9.08E-03	4.10E-03
563	570404.8	4215545	5.83E-02	8.90E-03	4.02E-03
564	570398.1	4215552	5.69E-02	8.69E-03	3.92E-03
565	570391.4	4215558	5.52E-02	8.43E-03	3.81E-03
566	570384.7	4215565	5.34E-02	8.15E-03	3.68E-03
567	570377.9	4215572	5.13E-02	7.84E-03	3.54E-03

568	570371.2	4215579	4.92E-02	7.51E-03	3.39E-03
569	570364.5	4215586	4.69E-02	7.17E-03	3.23E-03
570	570357.7	4215593	4.45E-02	6.80E-03	3.07E-03
571	570351	4215599	4.21E-02	6.43E-03	2.90E-03
572	570344.3	4215606	3.96E-02	6.05E-03	2.73E-03
573	570337.5	4215613	3.72E-02	5.69E-03	2.57E-03
574	570477.4	4215364	6.32E-02	9.66E-03	4.36E-03
575	570477.2	4215373	6.32E-02	9.65E-03	4.35E-03
576	570477	4215383	6.29E-02	9.61E-03	4.34E-03
577	570476.8	4215392	6.26E-02	9.55E-03	4.31E-03
578	570476.5	4215402	6.21E-02	9.48E-03	4.28E-03
579	570476.3	4215411	6.17E-02	9.42E-03	4.25E-03
580	570475.7	4215440	6.05E-02	9.23E-03	4.17E-03
581	570475.5	4215449	5.98E-02	9.13E-03	4.12E-03
582	570475.3	4215459	5.90E-02	9.01E-03	4.06E-03
583	570475	4215468	5.81E-02	8.87E-03	4.00E-03
584	570474.8	4215478	5.70E-02	8.70E-03	3.93E-03
585	570468	4215494	5.64E-02	8.61E-03	3.89E-03
586	570461.3	4215501	5.69E-02	8.69E-03	3.92E-03
587	570454.7	4215507	5.73E-02	8.75E-03	3.95E-03
588	570448	4215514	5.77E-02	8.81E-03	3.97E-03
589	570441.3	4215521	5.79E-02	8.84E-03	3.99E-03
590	570434.7	4215528	5.78E-02	8.82E-03	3.98E-03
591	570428	4215534	5.75E-02	8.77E-03	3.96E-03
592	570421.4	4215541	5.69E-02	8.69E-03	3.92E-03
593	570414.7	4215548	5.62E-02	8.58E-03	3.87E-03
594	570408.1	4215555	5.50E-02	8.40E-03	3.79E-03
595	570401.4	4215561	5.35E-02	8.17E-03	3.69E-03
596	570394.7	4215568	5.18E-02	7.91E-03	3.57E-03
597	570388.1	4215575	5.00E-02	7.64E-03	3.45E-03
598	570381.4	4215582	4.81E-02	7.34E-03	3.31E-03
599	570374.8	4215588	4.61E-02	7.03E-03	3.17E-03
600	570368.1	4215595	4.39E-02	6.70E-03	3.03E-03
601	570361.5	4215602	4.17E-02	6.37E-03	2.87E-03
602	570354.8	4215609	3.95E-02	6.03E-03	2.72E-03
603	570348.2	4215615	3.72E-02	5.68E-03	2.56E-03
604	570341.5	4215622	3.50E-02	5.35E-03	2.41E-03
605	570486.7	4215363	6.08E-02	9.29E-03	4.19E-03
606	570486.5	4215373	6.08E-02	9.28E-03	4.19E-03
607	570486.3	4215383	6.06E-02	9.25E-03	4.18E-03
608	570486	4215393	6.03E-02	9.21E-03	4.16E-03
609	570485.8	4215403	5.99E-02	9.14E-03	4.13E-03
610	570485.6	4215412	5.95E-02	9.09E-03	4.10E-03
611	570484.9	4215442	5.81E-02	8.87E-03	4.00E-03
612	570484.7	4215452	5.74E-02	8.77E-03	3.96E-03
613	570484.5	4215462	5.66E-02	8.65E-03	3.90E-03
614	570484.3	4215471	5.57E-02	8.50E-03	3.84E-03
615	570484.1	4215481	5.46E-02	8.34E-03	3.76E-03
616	570476.9	4215498	5.38E-02	8.22E-03	3.71E-03
617	570470	4215505	5.42E-02	8.27E-03	3.73E-03
618	570463.1	4215512	5.46E-02	8.33E-03	3.76E-03
619	570456.2	4215519	5.49E-02	8.38E-03	3.78E-03

620	570449.3	4215526	5.51E-02	8.41E-03	3.79E-03
621	570442.4	4215533	5.50E-02	8.41E-03	3.79E-03
622	570435.5	4215540	5.47E-02	8.36E-03	3.77E-03
623	570428.6	4215547	5.42E-02	8.28E-03	3.74E-03
624	570421.7	4215554	5.35E-02	8.17E-03	3.69E-03
625	570414.8	4215561	5.25E-02	8.01E-03	3.62E-03
626	570407.9	4215568	5.10E-02	7.79E-03	3.51E-03
627	570401	4215575	4.94E-02	7.54E-03	3.40E-03
628	570394.1	4215582	4.76E-02	7.27E-03	3.28E-03
629	570387.2	4215589	4.57E-02	6.98E-03	3.15E-03
630	570380.3	4215596	4.37E-02	6.67E-03	3.01E-03
631	570373.4	4215603	4.16E-02	6.35E-03	2.87E-03
632	570366.5	4215610	3.95E-02	6.03E-03	2.72E-03
633	570359.6	4215617	3.73E-02	5.70E-03	2.57E-03
634	570352.7	4215624	3.52E-02	5.37E-03	2.42E-03
635	570345.8	4215631	3.31E-02	5.05E-03	2.28E-03
636	570496.1	4215359	5.86E-02	8.94E-03	4.04E-03
637	570495.9	4215369	5.86E-02	8.95E-03	4.04E-03
638	570495.7	4215378	5.85E-02	8.93E-03	4.03E-03
639	570495.5	4215388	5.83E-02	8.90E-03	4.02E-03
640	570495.2	4215398	5.80E-02	8.86E-03	4.00E-03
641	570495	4215407	5.77E-02	8.80E-03	3.97E-03
642	570494.8	4215417	5.73E-02	8.75E-03	3.95E-03
643	570494.1	4215446	5.57E-02	8.51E-03	3.84E-03
644	570493.9	4215456	5.50E-02	8.40E-03	3.79E-03
645	570493.7	4215466	5.43E-02	8.29E-03	3.74E-03
646	570493.5	4215475	5.33E-02	8.14E-03	3.67E-03
647	570493.3	4215485	5.23E-02	7.98E-03	3.60E-03
648	570486.2	4215502	5.15E-02	7.87E-03	3.55E-03
649	570479.4	4215509	5.18E-02	7.90E-03	3.57E-03
650	570472.6	4215516	5.19E-02	7.92E-03	3.58E-03
651	570465.7	4215523	5.21E-02	7.96E-03	3.59E-03
652	570458.9	4215530	5.23E-02	7.99E-03	3.60E-03
653	570452.1	4215536	5.23E-02	7.99E-03	3.61E-03
654	570445.3	4215543	5.22E-02	7.97E-03	3.60E-03
655	570438.4	4215550	5.18E-02	7.92E-03	3.57E-03
656	570431.6	4215557	5.12E-02	7.82E-03	3.53E-03
657	570424.8	4215564	5.04E-02	7.69E-03	3.47E-03
658	570418	4215571	4.93E-02	7.53E-03	3.40E-03
659	570411.1	4215578	4.79E-02	7.32E-03	3.30E-03
660	570404.3	4215585	4.64E-02	7.08E-03	3.20E-03
661	570397.5	4215592	4.47E-02	6.82E-03	3.08E-03
662	570390.7	4215599	4.29E-02	6.54E-03	2.95E-03
663	570383.9	4215606	4.10E-02	6.26E-03	2.82E-03
664	570377	4215613	3.90E-02	5.96E-03	2.69E-03
665	570370.2	4215620	3.70E-02	5.65E-03	2.55E-03
666	570363.4	4215627	3.50E-02	5.35E-03	2.41E-03
667	570356.6	4215633	3.30E-02	5.04E-03	2.28E-03
668	570349.7	4215640	3.11E-02	4.75E-03	2.14E-03
669	570505.5	4215355	5.64E-02	8.61E-03	3.89E-03
670	570505.3	4215364	5.65E-02	8.62E-03	3.89E-03
671	570505.1	4215374	5.65E-02	8.62E-03	3.89E-03

672	570504.9	4215383	5.64E-02	8.61E-03	3.88E-03
673	570504.6	4215393	5.62E-02	8.58E-03	3.87E-03
674	570504.4	4215403	5.59E-02	8.54E-03	3.85E-03
675	570504.2	4215412	5.56E-02	8.48E-03	3.83E-03
676	570503.6	4215441	5.41E-02	8.25E-03	3.72E-03
677	570503.3	4215451	5.35E-02	8.16E-03	3.68E-03
678	570503.1	4215460	5.28E-02	8.06E-03	3.64E-03
679	570502.9	4215470	5.20E-02	7.94E-03	3.58E-03
680	570502.7	4215480	5.11E-02	7.80E-03	3.52E-03
681	570502.5	4215489	5.01E-02	7.65E-03	3.45E-03
682	570495.5	4215506	4.94E-02	7.54E-03	3.40E-03
683	570488.7	4215513	4.96E-02	7.57E-03	3.42E-03
684	570482	4215519	4.97E-02	7.59E-03	3.42E-03
685	570475.2	4215526	4.97E-02	7.58E-03	3.42E-03
686	570468.5	4215533	4.97E-02	7.59E-03	3.43E-03
687	570461.7	4215540	4.98E-02	7.60E-03	3.43E-03
688	570455	4215547	4.97E-02	7.59E-03	3.42E-03
689	570448.2	4215554	4.95E-02	7.56E-03	3.41E-03
690	570441.5	4215561	4.90E-02	7.49E-03	3.38E-03
691	570434.7	4215567	4.83E-02	7.38E-03	3.33E-03
692	570428	4215574	4.74E-02	7.24E-03	3.27E-03
693	570421.2	4215581	4.63E-02	7.07E-03	3.19E-03
694	570414.5	4215588	4.51E-02	6.88E-03	3.11E-03
695	570407.7	4215595	4.35E-02	6.65E-03	3.00E-03
696	570401	4215602	4.19E-02	6.40E-03	2.89E-03
697	570394.2	4215608	4.02E-02	6.14E-03	2.77E-03
698	570387.5	4215615	3.85E-02	5.87E-03	2.65E-03
699	570380.7	4215622	3.66E-02	5.59E-03	2.52E-03
700	570373.9	4215629	3.47E-02	5.31E-03	2.39E-03
701	570367.2	4215636	3.29E-02	5.02E-03	2.27E-03
702	570360.4	4215643	3.11E-02	4.74E-03	2.14E-03
703	570353.7	4215650	2.93E-02	4.47E-03	2.02E-03
704	570514.9	4215350	5.43E-02	8.30E-03	3.74E-03
705	570514.7	4215360	5.44E-02	8.31E-03	3.75E-03
706	570514.5	4215369	5.45E-02	8.32E-03	3.75E-03
707	570514.3	4215379	5.44E-02	8.31E-03	3.75E-03
708	570514	4215388	5.43E-02	8.29E-03	3.74E-03
709	570513.8	4215398	5.41E-02	8.27E-03	3.73E-03
710	570513.6	4215407	5.39E-02	8.22E-03	3.71E-03
711	570513.4	4215417	5.35E-02	8.17E-03	3.69E-03
712	570512.7	4215446	5.21E-02	7.95E-03	3.59E-03
713	570512.5	4215455	5.15E-02	7.86E-03	3.55E-03
714	570512.3	4215465	5.08E-02	7.76E-03	3.50E-03
715	570512.1	4215474	5.01E-02	7.64E-03	3.45E-03
716	570511.9	4215484	4.92E-02	7.52E-03	3.39E-03
717	570511.7	4215493	4.83E-02	7.38E-03	3.33E-03
718	570504.8	4215510	4.74E-02	7.24E-03	3.27E-03
719	570498.1	4215516	4.76E-02	7.26E-03	3.28E-03
720	570491.4	4215523	4.77E-02	7.28E-03	3.28E-03
721	570484.7	4215530	4.77E-02	7.28E-03	3.28E-03
722	570478	4215537	4.75E-02	7.26E-03	3.28E-03
723	570471.3	4215543	4.74E-02	7.23E-03	3.26E-03

724	570464.7	4215550	4.73E-02	7.22E-03	3.26E-03
725	570458	4215557	4.71E-02	7.20E-03	3.25E-03
726	570451.3	4215564	4.68E-02	7.15E-03	3.23E-03
727	570444.6	4215571	4.63E-02	7.07E-03	3.19E-03
728	570437.9	4215577	4.56E-02	6.96E-03	3.14E-03
729	570431.2	4215584	4.46E-02	6.82E-03	3.08E-03
730	570424.5	4215591	4.35E-02	6.65E-03	3.00E-03
731	570417.8	4215598	4.23E-02	6.46E-03	2.91E-03
732	570411.2	4215605	4.09E-02	6.24E-03	2.82E-03
733	570404.5	4215611	3.94E-02	6.01E-03	2.71E-03
734	570397.8	4215618	3.78E-02	5.77E-03	2.60E-03
735	570391.1	4215625	3.61E-02	5.51E-03	2.49E-03
736	570384.4	4215632	3.44E-02	5.25E-03	2.37E-03
737	570377.7	4215638	3.27E-02	4.99E-03	2.25E-03
738	570371	4215645	3.09E-02	4.72E-03	2.13E-03
739	570364.3	4215652	2.92E-02	4.46E-03	2.01E-03
740	570357.7	4215659	2.76E-02	4.21E-03	1.90E-03
741	569937.1	4214980	1.94E-02	2.97E-03	1.34E-03
742	569941.8	4214988	2.08E-02	3.18E-03	1.44E-03
743	569895.6	4214925	1.41E-02	2.15E-03	9.69E-04
744	569900.3	4214934	1.45E-02	2.22E-03	1.00E-03
745	569905	4214942	1.51E-02	2.31E-03	1.04E-03
746	569909.6	4214951	1.58E-02	2.41E-03	1.09E-03
747	569914.3	4214959	1.66E-02	2.54E-03	1.15E-03
748	569919	4214968	1.77E-02	2.70E-03	1.22E-03
749	569923.7	4214976	1.88E-02	2.87E-03	1.30E-03
750	569928.3	4214985	2.01E-02	3.07E-03	1.38E-03
751	569933	4214993	2.16E-02	3.29E-03	1.49E-03
752	569877.5	4214913	1.35E-02	2.06E-03	9.32E-04
753	569882.2	4214922	1.39E-02	2.12E-03	9.58E-04
754	569886.9	4214930	1.43E-02	2.19E-03	9.88E-04
755	569891.5	4214939	1.49E-02	2.27E-03	1.02E-03
756	569896.2	4214947	1.55E-02	2.36E-03	1.07E-03
757	569900.9	4214956	1.62E-02	2.48E-03	1.12E-03
758	569905.5	4214964	1.72E-02	2.62E-03	1.18E-03
759	569910.2	4214973	1.82E-02	2.78E-03	1.26E-03
760	569914.9	4214981	1.94E-02	2.96E-03	1.34E-03
761	569919.6	4214990	2.08E-02	3.17E-03	1.43E-03
762	569924.2	4214998	2.24E-02	3.42E-03	1.54E-03
763	569928.9	4215007	2.42E-02	3.69E-03	1.67E-03
764	569868.7	4214918	1.38E-02	2.11E-03	9.50E-04
765	569873.4	4214926	1.42E-02	2.17E-03	9.78E-04
766	569878.1	4214935	1.46E-02	2.24E-03	1.01E-03
767	569882.8	4214943	1.52E-02	2.32E-03	1.05E-03
768	569887.4	4214952	1.59E-02	2.42E-03	1.09E-03
769	569892.1	4214960	1.67E-02	2.55E-03	1.15E-03
770	569896.8	4214969	1.77E-02	2.71E-03	1.22E-03
771	569901.5	4214977	1.88E-02	2.88E-03	1.30E-03
772	569906.1	4214986	2.01E-02	3.07E-03	1.38E-03
773	569910.8	4214994	2.16E-02	3.29E-03	1.49E-03
774	569915.5	4215003	2.33E-02	3.55E-03	1.60E-03
775	569920.2	4215011	2.52E-02	3.85E-03	1.74E-03

776	569860	4214923	1.41E-02	2.15E-03	9.71E-04
777	569864.7	4214931	1.45E-02	2.21E-03	9.98E-04
778	569869.3	4214940	1.50E-02	2.29E-03	1.03E-03
779	569874	4214948	1.56E-02	2.38E-03	1.07E-03
780	569878.7	4214957	1.63E-02	2.49E-03	1.12E-03
781	569883.3	4214965	1.73E-02	2.63E-03	1.19E-03
782	569888	4214974	1.83E-02	2.80E-03	1.26E-03
783	569892.7	4214982	1.95E-02	2.98E-03	1.34E-03
784	569897.4	4214991	2.08E-02	3.18E-03	1.44E-03
785	569902	4214999	2.24E-02	3.42E-03	1.54E-03
786	569906.7	4215008	2.42E-02	3.69E-03	1.67E-03
787	569911.4	4215016	2.62E-02	4.01E-03	1.81E-03
788	569851.2	4214927	1.44E-02	2.20E-03	9.93E-04
789	569855.9	4214936	1.48E-02	2.26E-03	1.02E-03
790	569860.6	4214944	1.53E-02	2.34E-03	1.06E-03
791	569865.2	4214953	1.60E-02	2.44E-03	1.10E-03
792	569869.9	4214961	1.68E-02	2.57E-03	1.16E-03
793	569874.6	4214970	1.78E-02	2.72E-03	1.23E-03
794	569879.3	4214978	1.89E-02	2.89E-03	1.30E-03
795	569883.9	4214987	2.01E-02	3.08E-03	1.39E-03
796	569888.6	4214996	2.16E-02	3.30E-03	1.49E-03
797	569893.3	4215004	2.33E-02	3.56E-03	1.61E-03
798	569898	4215013	2.52E-02	3.85E-03	1.74E-03
799	569902.6	4215021	2.73E-02	4.18E-03	1.88E-03
800	569842.5	4214932	1.47E-02	2.24E-03	1.01E-03
801	569847.1	4214941	1.51E-02	2.31E-03	1.04E-03
802	569851.8	4214949	1.57E-02	2.40E-03	1.08E-03
803	569856.5	4214958	1.64E-02	2.51E-03	1.13E-03
804	569861.1	4214966	1.74E-02	2.65E-03	1.20E-03
805	569865.8	4214975	1.84E-02	2.81E-03	1.27E-03
806	569870.5	4214983	1.96E-02	2.99E-03	1.35E-03
807	569875.2	4214992	2.09E-02	3.19E-03	1.44E-03
808	569879.8	4215000	2.25E-02	3.43E-03	1.55E-03
809	569884.5	4215009	2.42E-02	3.70E-03	1.67E-03
810	569889.2	4215017	2.62E-02	4.01E-03	1.81E-03
811	569893.9	4215026	2.85E-02	4.35E-03	1.96E-03
812	569833.7	4214937	1.50E-02	2.29E-03	1.03E-03
813	569838.4	4214946	1.55E-02	2.36E-03	1.07E-03
814	569843	4214954	1.61E-02	2.46E-03	1.11E-03
815	569847.7	4214963	1.69E-02	2.59E-03	1.17E-03
816	569852.4	4214971	1.79E-02	2.74E-03	1.23E-03
817	569857.1	4214980	1.90E-02	2.90E-03	1.31E-03
818	569861.7	4214988	2.02E-02	3.09E-03	1.39E-03
819	569866.4	4214997	2.17E-02	3.31E-03	1.49E-03
820	569871.1	4215005	2.33E-02	3.56E-03	1.61E-03
821	569875.8	4215014	2.52E-02	3.85E-03	1.74E-03
822	569880.4	4215022	2.73E-02	4.17E-03	1.88E-03
823	569885.1	4215031	2.97E-02	4.53E-03	2.05E-03
824	569941.2	4215133	1.79E-01	2.73E-02	1.23E-02
825	569945.9	4215141	1.99E-01	3.04E-02	1.37E-02
826	569950.6	4215150	2.19E-01	3.35E-02	1.51E-02
827	569824.9	4214942	1.53E-02	2.34E-03	1.06E-03

828	569829.6	4214950	1.59E-02	2.42E-03	1.09E-03
829	569834.3	4214959	1.66E-02	2.53E-03	1.14E-03
830	569838.9	4214967	1.75E-02	2.67E-03	1.20E-03
831	569843.6	4214976	1.85E-02	2.82E-03	1.27E-03
832	569848.3	4214984	1.96E-02	2.99E-03	1.35E-03
833	569853	4214993	2.09E-02	3.19E-03	1.44E-03
834	569857.6	4215001	2.25E-02	3.43E-03	1.55E-03
835	569862.3	4215010	2.42E-02	3.70E-03	1.67E-03
836	569867	4215018	2.62E-02	4.00E-03	1.80E-03
837	569871.7	4215027	2.83E-02	4.33E-03	1.95E-03
838	569876.3	4215035	3.08E-02	4.71E-03	2.12E-03
839	569927.8	4215129	1.54E-01	2.36E-02	1.06E-02
840	569932.4	4215137	1.72E-01	2.63E-02	1.19E-02
841	569937.1	4215146	1.89E-01	2.89E-02	1.31E-02
842	569941.8	4215154	2.07E-01	3.15E-02	1.42E-02
843	569816.2	4214947	1.57E-02	2.39E-03	1.08E-03
844	569820.8	4214955	1.63E-02	2.48E-03	1.12E-03
845	569825.5	4214964	1.71E-02	2.61E-03	1.18E-03
846	569830.2	4214972	1.80E-02	2.75E-03	1.24E-03
847	569834.9	4214981	1.90E-02	2.91E-03	1.31E-03
848	569839.5	4214989	2.02E-02	3.09E-03	1.39E-03
849	569844.2	4214998	2.16E-02	3.31E-03	1.49E-03
850	569848.9	4215006	2.33E-02	3.55E-03	1.60E-03
851	569853.6	4215015	2.51E-02	3.83E-03	1.73E-03
852	569858.2	4215023	2.71E-02	4.14E-03	1.87E-03
853	569862.9	4215032	2.94E-02	4.49E-03	2.02E-03
854	569914.3	4215125	1.28E-01	1.96E-02	8.84E-03
855	569919	4215134	1.51E-01	2.31E-02	1.04E-02
856	569923.7	4215142	1.65E-01	2.52E-02	1.14E-02
857	569928.4	4215151	1.80E-01	2.75E-02	1.24E-02
858	569933	4215159	1.95E-01	2.97E-02	1.34E-02
859	569802.7	4214943	1.56E-02	2.38E-03	1.07E-03
860	569807.4	4214952	1.61E-02	2.45E-03	1.11E-03
861	569812.1	4214960	1.67E-02	2.55E-03	1.15E-03
862	569816.7	4214969	1.76E-02	2.68E-03	1.21E-03
863	569821.4	4214977	1.85E-02	2.83E-03	1.28E-03
864	569826.1	4214986	1.96E-02	2.99E-03	1.35E-03
865	569830.8	4214994	2.09E-02	3.19E-03	1.44E-03
866	569835.4	4215003	2.24E-02	3.42E-03	1.54E-03
867	569840.1	4215011	2.41E-02	3.68E-03	1.66E-03
868	569844.8	4215020	2.60E-02	3.96E-03	1.79E-03
869	569849.5	4215028	2.80E-02	4.28E-03	1.93E-03
870	569854.1	4215037	3.04E-02	4.64E-03	2.09E-03
871	569905.6	4215130	1.27E-01	1.94E-02	8.75E-03
872	569910.2	4215139	1.47E-01	2.24E-02	1.01E-02
873	569914.9	4215147	1.58E-01	2.41E-02	1.09E-02
874	569919.6	4215156	1.71E-01	2.62E-02	1.18E-02
875	569924.3	4215164	1.84E-01	2.80E-02	1.27E-02
876	569792.9	4214939	1.54E-02	2.36E-03	1.06E-03
877	569794	4214948	1.59E-02	2.43E-03	1.10E-03
878	569798.6	4214956	1.65E-02	2.51E-03	1.13E-03
879	569803.3	4214965	1.72E-02	2.63E-03	1.19E-03

880	569808	4214973	1.81E-02	2.76E-03	1.24E-03
881	569812.7	4214982	1.90E-02	2.90E-03	1.31E-03
882	569817.3	4214990	2.02E-02	3.08E-03	1.39E-03
883	569822	4214999	2.16E-02	3.29E-03	1.49E-03
884	569826.7	4215007	2.31E-02	3.53E-03	1.59E-03
885	569831.4	4215016	2.48E-02	3.79E-03	1.71E-03
886	569836	4215024	2.68E-02	4.09E-03	1.84E-03
887	569840.7	4215033	2.89E-02	4.42E-03	1.99E-03
888	569896.8	4215135	1.26E-01	1.92E-02	8.66E-03
889	569901.5	4215143	1.42E-01	2.17E-02	9.78E-03
890	569906.2	4215152	1.51E-01	2.31E-02	1.04E-02
891	569910.8	4215160	1.63E-01	2.49E-02	1.12E-02
892	569915.5	4215169	1.73E-01	2.65E-02	1.19E-02
893	569784.2	4214944	1.58E-02	2.41E-03	1.09E-03
894	569783.1	4214935	1.54E-02	2.35E-03	1.06E-03
895	569789.9	4214961	1.69E-02	2.58E-03	1.17E-03
896	569794.5	4214970	1.77E-02	2.70E-03	1.22E-03
897	569799.2	4214978	1.86E-02	2.83E-03	1.28E-03
898	569803.9	4214987	1.96E-02	2.99E-03	1.35E-03
899	569808.6	4214995	2.08E-02	3.18E-03	1.43E-03
900	569813.2	4215004	2.22E-02	3.39E-03	1.53E-03
901	569817.9	4215012	2.38E-02	3.63E-03	1.64E-03
902	569822.6	4215021	2.56E-02	3.90E-03	1.76E-03
903	569827.3	4215029	2.75E-02	4.20E-03	1.90E-03
904	569831.9	4215038	2.97E-02	4.53E-03	2.05E-03
905	569888	4215140	1.23E-01	1.87E-02	8.45E-03
906	569892.7	4215148	1.37E-01	2.09E-02	9.41E-03
907	569897.4	4215157	1.44E-01	2.21E-02	9.96E-03
908	569902.1	4215165	1.55E-01	2.37E-02	1.07E-02
909	569906.7	4215174	1.63E-01	2.48E-02	1.12E-02
910	569775.3	4214948	1.61E-02	2.46E-03	1.11E-03
911	569774.2	4214939	1.56E-02	2.39E-03	1.08E-03
912	569773.1	4214929	1.53E-02	2.34E-03	1.05E-03
913	569776.4	4214958	1.67E-02	2.55E-03	1.15E-03
914	569781.1	4214966	1.74E-02	2.65E-03	1.20E-03
915	569785.8	4214975	1.81E-02	2.77E-03	1.25E-03
916	569790.5	4214983	1.91E-02	2.91E-03	1.31E-03
917	569795.1	4214992	2.01E-02	3.07E-03	1.39E-03
918	569799.8	4215000	2.14E-02	3.26E-03	1.47E-03
919	569804.5	4215009	2.28E-02	3.48E-03	1.57E-03
920	569809.2	4215017	2.44E-02	3.73E-03	1.68E-03
921	569813.8	4215026	2.62E-02	4.00E-03	1.81E-03
922	569818.5	4215034	2.82E-02	4.30E-03	1.94E-03
923	569823.2	4215043	3.04E-02	4.64E-03	2.09E-03
924	569879.3	4215145	1.18E-01	1.81E-02	8.16E-03
925	569884	4215153	1.31E-01	2.00E-02	9.01E-03
926	569888.6	4215162	1.38E-01	2.10E-02	9.48E-03
927	569893.3	4215170	1.46E-01	2.23E-02	1.01E-02
928	569898	4215179	1.52E-01	2.33E-02	1.05E-02
929	569766.6	4214953	1.65E-02	2.52E-03	1.14E-03
930	569765.5	4214944	1.60E-02	2.44E-03	1.10E-03
931	569764.4	4214934	1.56E-02	2.38E-03	1.08E-03

932	569763.3	4214925	1.53E-02	2.34E-03	1.06E-03
933	569777.2	4214821	9.11E-03	1.39E-03	6.28E-04
934	569782.9	4214813	8.71E-03	1.33E-03	6.00E-04
935	569767.7	4214962	1.71E-02	2.62E-03	1.18E-03
936	569772.3	4214971	1.78E-02	2.72E-03	1.23E-03
937	569777	4214979	1.86E-02	2.84E-03	1.28E-03
938	569781.7	4214988	1.95E-02	2.98E-03	1.35E-03
939	569786.4	4214996	2.06E-02	3.15E-03	1.42E-03
940	569791	4215005	2.19E-02	3.34E-03	1.51E-03
941	569795.7	4215013	2.33E-02	3.56E-03	1.61E-03
942	569800.4	4215022	2.49E-02	3.80E-03	1.72E-03
943	569805.1	4215030	2.67E-02	4.08E-03	1.84E-03
944	569809.7	4215039	2.87E-02	4.39E-03	1.98E-03
945	569814.4	4215047	3.10E-02	4.73E-03	2.13E-03
946	569819.1	4215056	3.34E-02	5.10E-03	2.30E-03
947	569870.5	4215149	1.12E-01	1.71E-02	7.72E-03
948	569875.2	4215158	1.24E-01	1.90E-02	8.58E-03
949	569879.9	4215166	1.34E-01	2.05E-02	9.24E-03
950	569884.5	4215175	1.37E-01	2.10E-02	9.47E-03
951	569889.2	4215183	1.43E-01	2.19E-02	9.86E-03
952	569757.8	4214958	1.69E-02	2.58E-03	1.16E-03
953	569756.7	4214949	1.64E-02	2.50E-03	1.13E-03
954	569755.7	4214940	1.59E-02	2.43E-03	1.10E-03
955	569754.6	4214930	1.56E-02	2.38E-03	1.08E-03
956	569753.5	4214921	1.54E-02	2.35E-03	1.06E-03
957	569750.4	4214841	9.99E-03	1.53E-03	6.89E-04
958	569756	4214833	9.57E-03	1.46E-03	6.60E-04
959	569767.2	4214818	8.89E-03	1.36E-03	6.12E-04
960	569772.8	4214811	8.54E-03	1.30E-03	5.88E-04
961	569784	4214796	7.98E-03	1.22E-03	5.50E-04
962	569758.9	4214967	1.76E-02	2.68E-03	1.21E-03
963	569763.6	4214976	1.83E-02	2.79E-03	1.26E-03
964	569768.3	4214984	1.91E-02	2.91E-03	1.31E-03
965	569772.9	4214993	2.01E-02	3.06E-03	1.38E-03
966	569777.6	4215001	2.12E-02	3.23E-03	1.46E-03
967	569782.3	4215010	2.24E-02	3.42E-03	1.54E-03
968	569787	4215018	2.38E-02	3.63E-03	1.64E-03
969	569791.6	4215027	2.54E-02	3.87E-03	1.75E-03
970	569796.3	4215035	2.72E-02	4.15E-03	1.87E-03
971	569801	4215044	2.92E-02	4.45E-03	2.01E-03
972	569805.7	4215052	3.13E-02	4.79E-03	2.16E-03
973	569810.3	4215061	3.37E-02	5.15E-03	2.32E-03
974	569861.8	4215154	1.03E-01	1.57E-02	7.11E-03
975	569866.4	4215163	1.16E-01	1.77E-02	7.99E-03
976	569871.1	4215171	1.26E-01	1.93E-02	8.70E-03
977	569875.8	4215180	1.33E-01	2.03E-02	9.18E-03
978	569880.5	4215188	1.35E-01	2.07E-02	9.34E-03
979	569749.1	4214963	1.73E-02	2.64E-03	1.19E-03
980	569748	4214954	1.67E-02	2.56E-03	1.15E-03
981	569746.9	4214945	1.63E-02	2.49E-03	1.12E-03
982	569745.9	4214936	1.59E-02	2.43E-03	1.10E-03
983	569744.8	4214927	1.56E-02	2.39E-03	1.08E-03

984	569743.7	4214918	1.54E-02	2.36E-03	1.06E-03
985	569736.2	4214854	1.09E-02	1.67E-03	7.52E-04
986	569740.7	4214838	9.83E-03	1.50E-03	6.77E-04
987	569746.2	4214831	9.42E-03	1.44E-03	6.49E-04
988	569757.3	4214816	8.70E-03	1.33E-03	6.00E-04
989	569768.3	4214802	8.13E-03	1.24E-03	5.60E-04
990	569779.4	4214787	7.68E-03	1.17E-03	5.29E-04
991	569750.1	4214972	1.80E-02	2.74E-03	1.24E-03
992	569754.8	4214980	1.87E-02	2.85E-03	1.29E-03
993	569759.5	4214989	1.95E-02	2.98E-03	1.35E-03
994	569764.2	4214997	2.05E-02	3.14E-03	1.42E-03
995	569768.8	4215006	2.16E-02	3.31E-03	1.49E-03
996	569773.5	4215014	2.29E-02	3.49E-03	1.58E-03
997	569778.2	4215023	2.43E-02	3.70E-03	1.67E-03
998	569782.9	4215031	2.58E-02	3.94E-03	1.78E-03
999	569787.5	4215040	2.75E-02	4.21E-03	1.90E-03
1000	569792.2	4215048	2.95E-02	4.50E-03	2.03E-03
1001	569796.9	4215057	3.16E-02	4.83E-03	2.18E-03
1002	569801.6	4215066	3.40E-02	5.19E-03	2.34E-03
1003	569806.2	4215074	3.65E-02	5.57E-03	2.51E-03
1004	569853	4215159	9.43E-02	1.44E-02	6.50E-03
1005	569857.7	4215168	1.07E-01	1.63E-02	7.36E-03
1006	569862.3	4215176	1.18E-01	1.80E-02	8.13E-03
1007	569867	4215185	1.26E-01	1.92E-02	8.68E-03
1008	569871.7	4215193	1.29E-01	1.97E-02	8.89E-03
1009	569740.2	4214967	1.77E-02	2.70E-03	1.22E-03
1010	569739.1	4214958	1.71E-02	2.61E-03	1.18E-03
1011	569738	4214948	1.66E-02	2.53E-03	1.14E-03
1012	569736.8	4214938	1.62E-02	2.47E-03	1.11E-03
1013	569735.7	4214929	1.58E-02	2.42E-03	1.09E-03
1014	569734.6	4214919	1.55E-02	2.37E-03	1.07E-03
1015	569727.8	4214862	1.14E-02	1.74E-03	7.87E-04
1016	569726.6	4214852	1.07E-02	1.64E-03	7.39E-04
1017	569731.4	4214835	9.66E-03	1.48E-03	6.66E-04
1018	569737.2	4214827	9.26E-03	1.41E-03	6.38E-04
1019	569743.1	4214820	8.87E-03	1.36E-03	6.12E-04
1020	569748.9	4214812	8.50E-03	1.30E-03	5.86E-04
1021	569754.8	4214804	8.18E-03	1.25E-03	5.64E-04
1022	569760.6	4214797	7.96E-03	1.22E-03	5.49E-04
1023	569766.5	4214789	7.74E-03	1.18E-03	5.33E-04
1024	569772.3	4214781	7.51E-03	1.15E-03	5.17E-04
1025	569741.4	4214977	1.84E-02	2.81E-03	1.27E-03
1026	569746.1	4214985	1.91E-02	2.91E-03	1.32E-03
1027	569750.7	4214994	2.00E-02	3.05E-03	1.38E-03
1028	569755.4	4215002	2.10E-02	3.21E-03	1.45E-03
1029	569760.1	4215011	2.21E-02	3.38E-03	1.52E-03
1030	569764.8	4215019	2.33E-02	3.57E-03	1.61E-03
1031	569769.4	4215028	2.47E-02	3.78E-03	1.70E-03
1032	569774.1	4215036	2.63E-02	4.01E-03	1.81E-03
1033	569778.8	4215045	2.79E-02	4.26E-03	1.92E-03
1034	569783.5	4215053	2.98E-02	4.55E-03	2.05E-03
1035	569788.1	4215062	3.19E-02	4.87E-03	2.20E-03

1036	569792.8	4215070	3.41E-02	5.21E-03	2.35E-03
1037	569797.5	4215079	3.65E-02	5.58E-03	2.52E-03
1038	569844.2	4215164	8.60E-02	1.31E-02	5.92E-03
1039	569848.9	4215172	9.94E-02	1.52E-02	6.85E-03
1040	569853.6	4215181	1.11E-01	1.70E-02	7.67E-03
1041	569858.3	4215189	1.20E-01	1.83E-02	8.25E-03
1042	569862.9	4215198	1.25E-01	1.90E-02	8.60E-03
1043	569731.5	4214972	1.81E-02	2.76E-03	1.25E-03
1044	569730.4	4214963	1.75E-02	2.67E-03	1.20E-03
1045	569729.3	4214953	1.70E-02	2.59E-03	1.17E-03
1046	569728.1	4214944	1.65E-02	2.52E-03	1.14E-03
1047	569727	4214934	1.62E-02	2.47E-03	1.11E-03
1048	569725.9	4214925	1.58E-02	2.42E-03	1.09E-03
1049	569724.8	4214916	1.54E-02	2.35E-03	1.06E-03
1050	569719.2	4214868	1.19E-02	1.82E-03	8.20E-04
1051	569718.1	4214859	1.12E-02	1.71E-03	7.72E-04
1052	569717	4214849	1.06E-02	1.62E-03	7.29E-04
1053	569721.6	4214832	9.56E-03	1.46E-03	6.59E-04
1054	569727.4	4214825	9.17E-03	1.40E-03	6.32E-04
1055	569733.2	4214817	8.81E-03	1.34E-03	6.07E-04
1056	569738.9	4214810	8.46E-03	1.29E-03	5.83E-04
1057	569744.7	4214802	8.17E-03	1.25E-03	5.63E-04
1058	569750.5	4214795	7.93E-03	1.21E-03	5.47E-04
1059	569756.2	4214787	7.70E-03	1.18E-03	5.31E-04
1060	569762	4214779	7.49E-03	1.14E-03	5.16E-04
1061	569767.8	4214772	7.33E-03	1.12E-03	5.05E-04
1062	569732.6	4214982	1.88E-02	2.87E-03	1.29E-03
1063	569737.3	4214990	1.95E-02	2.98E-03	1.35E-03
1064	569742	4214999	2.04E-02	3.12E-03	1.41E-03
1065	569746.6	4215007	2.14E-02	3.27E-03	1.48E-03
1066	569751.3	4215016	2.25E-02	3.44E-03	1.55E-03
1067	569756	4215024	2.38E-02	3.63E-03	1.64E-03
1068	569760.7	4215033	2.51E-02	3.84E-03	1.73E-03
1069	569765.3	4215041	2.66E-02	4.07E-03	1.83E-03
1070	569770	4215050	2.83E-02	4.32E-03	1.95E-03
1071	569774.7	4215058	3.01E-02	4.60E-03	2.07E-03
1072	569779.4	4215067	3.21E-02	4.90E-03	2.21E-03
1073	569784	4215075	3.42E-02	5.22E-03	2.36E-03
1074	569788.7	4215084	3.65E-02	5.57E-03	2.52E-03
1075	569793.4	4215092	3.90E-02	5.95E-03	2.68E-03
1076	569835.5	4215169	8.27E-02	1.26E-02	5.70E-03
1077	569840.1	4215177	9.49E-02	1.45E-02	6.54E-03
1078	569844.8	4215186	1.06E-01	1.63E-02	7.34E-03
1079	569849.5	4215194	1.15E-01	1.75E-02	7.91E-03
1080	569854.2	4215203	1.17E-01	1.79E-02	8.07E-03
1081	569722.8	4214977	1.85E-02	2.82E-03	1.27E-03
1082	569721.7	4214968	1.79E-02	2.73E-03	1.23E-03
1083	569720.5	4214958	1.73E-02	2.65E-03	1.20E-03
1084	569719.4	4214949	1.69E-02	2.58E-03	1.16E-03
1085	569718.3	4214940	1.65E-02	2.52E-03	1.13E-03
1086	569717.2	4214931	1.61E-02	2.46E-03	1.11E-03
1087	569716.1	4214921	1.57E-02	2.40E-03	1.08E-03

1088	569715	4214912	1.52E-02	2.32E-03	1.05E-03
1089	569711.7	4214884	1.32E-02	2.01E-03	9.07E-04
1090	569710.6	4214875	1.24E-02	1.89E-03	8.54E-04
1091	569709.5	4214865	1.17E-02	1.79E-03	8.07E-04
1092	569708.4	4214856	1.11E-02	1.69E-03	7.62E-04
1093	569707.3	4214847	1.05E-02	1.60E-03	7.22E-04
1094	569711.9	4214830	9.55E-03	1.46E-03	6.58E-04
1095	569717.6	4214822	9.14E-03	1.40E-03	6.30E-04
1096	569723.3	4214815	8.75E-03	1.34E-03	6.03E-04
1097	569729	4214807	8.41E-03	1.28E-03	5.80E-04
1098	569734.7	4214800	8.18E-03	1.25E-03	5.64E-04
1099	569740.4	4214793	7.96E-03	1.22E-03	5.49E-04
1100	569746.1	4214785	7.73E-03	1.18E-03	5.33E-04
1101	569751.8	4214778	7.50E-03	1.14E-03	5.17E-04
1102	569757.4	4214770	7.36E-03	1.12E-03	5.07E-04
1103	569763.1	4214763	7.25E-03	1.11E-03	5.00E-04
1104	569723.9	4214986	1.92E-02	2.92E-03	1.32E-03
1105	569728.5	4214995	2.00E-02	3.05E-03	1.38E-03
1106	569733.2	4215003	2.09E-02	3.18E-03	1.44E-03
1107	569737.9	4215012	2.18E-02	3.34E-03	1.51E-03
1108	569742.6	4215020	2.30E-02	3.51E-03	1.58E-03
1109	569747.2	4215029	2.42E-02	3.69E-03	1.67E-03
1110	569751.9	4215037	2.55E-02	3.89E-03	1.76E-03
1111	569756.6	4215046	2.69E-02	4.11E-03	1.85E-03
1112	569761.3	4215054	2.86E-02	4.36E-03	1.97E-03
1113	569765.9	4215063	3.03E-02	4.63E-03	2.09E-03
1114	569770.6	4215071	3.22E-02	4.92E-03	2.22E-03
1115	569775.3	4215080	3.43E-02	5.23E-03	2.36E-03
1116	569780	4215088	3.64E-02	5.56E-03	2.51E-03
1117	569784.6	4215097	3.87E-02	5.91E-03	2.67E-03
1118	569789.3	4215105	4.11E-02	6.28E-03	2.83E-03
1119	569826.7	4215173	8.04E-02	1.23E-02	5.54E-03
1120	569831.4	4215182	9.16E-02	1.40E-02	6.31E-03
1121	569836.1	4215190	1.02E-01	1.56E-02	7.04E-03
1122	569840.7	4215199	1.09E-01	1.66E-02	7.50E-03
1123	569845.4	4215207	1.10E-01	1.68E-02	7.60E-03
1124	569714	4214982	1.88E-02	2.87E-03	1.30E-03
1125	569712.9	4214973	1.82E-02	2.78E-03	1.25E-03
1126	569711.8	4214964	1.77E-02	2.70E-03	1.22E-03
1127	569710.7	4214954	1.72E-02	2.63E-03	1.19E-03
1128	569709.6	4214945	1.68E-02	2.57E-03	1.16E-03
1129	569708.6	4214936	1.64E-02	2.51E-03	1.13E-03
1130	569707.5	4214927	1.61E-02	2.45E-03	1.11E-03
1131	569706.4	4214918	1.55E-02	2.36E-03	1.07E-03
1132	569705.3	4214908	1.49E-02	2.27E-03	1.03E-03
1133	569704.2	4214899	1.43E-02	2.19E-03	9.87E-04
1134	569703.1	4214890	1.36E-02	2.07E-03	9.36E-04
1135	569702	4214881	1.28E-02	1.96E-03	8.85E-04
1136	569700.9	4214872	1.22E-02	1.86E-03	8.38E-04
1137	569699.8	4214862	1.15E-02	1.76E-03	7.95E-04
1138	569698.7	4214853	1.09E-02	1.67E-03	7.54E-04
1139	569697.6	4214844	1.04E-02	1.59E-03	7.17E-04

1140	569702.2	4214827	9.54E-03	1.46E-03	6.58E-04
1141	569707.8	4214820	9.16E-03	1.40E-03	6.31E-04
1142	569713.4	4214813	8.78E-03	1.34E-03	6.05E-04
1143	569719.1	4214805	8.43E-03	1.29E-03	5.81E-04
1144	569730.3	4214790	8.01E-03	1.22E-03	5.52E-04
1145	569735.9	4214783	7.80E-03	1.19E-03	5.37E-04
1146	569741.6	4214776	7.58E-03	1.16E-03	5.23E-04
1147	569752.8	4214761	7.32E-03	1.12E-03	5.05E-04
1148	569715.1	4214991	1.95E-02	2.98E-03	1.35E-03
1149	569719.8	4215000	2.03E-02	3.11E-03	1.40E-03
1150	569724.4	4215008	2.12E-02	3.24E-03	1.46E-03
1151	569729.1	4215017	2.22E-02	3.40E-03	1.53E-03
1152	569733.8	4215025	2.33E-02	3.56E-03	1.61E-03
1153	569738.5	4215034	2.45E-02	3.75E-03	1.69E-03
1154	569743.1	4215042	2.58E-02	3.94E-03	1.78E-03
1155	569747.8	4215051	2.72E-02	4.16E-03	1.88E-03
1156	569752.5	4215059	2.88E-02	4.39E-03	1.98E-03
1157	569757.2	4215068	3.05E-02	4.65E-03	2.10E-03
1158	569761.8	4215076	3.23E-02	4.93E-03	2.23E-03
1159	569766.5	4215085	3.43E-02	5.23E-03	2.36E-03
1160	569771.2	4215093	3.63E-02	5.55E-03	2.50E-03
1161	569775.9	4215102	3.85E-02	5.88E-03	2.65E-03
1162	569780.5	4215110	4.07E-02	6.22E-03	2.81E-03
1163	569817.9	4215178	7.79E-02	1.19E-02	5.37E-03
1164	569822.6	4215187	8.83E-02	1.35E-02	6.08E-03
1165	569827.3	4215195	9.80E-02	1.50E-02	6.75E-03
1166	569832	4215204	1.01E-01	1.55E-02	6.98E-03
1167	569836.6	4215212	1.03E-01	1.57E-02	7.09E-03
1168	569705.3	4214987	1.91E-02	2.92E-03	1.32E-03
1169	569704.2	4214978	1.85E-02	2.83E-03	1.28E-03
1170	569703.1	4214969	1.80E-02	2.75E-03	1.24E-03
1171	569702	4214960	1.76E-02	2.69E-03	1.21E-03
1172	569700.9	4214951	1.72E-02	2.62E-03	1.18E-03
1173	569699.9	4214941	1.67E-02	2.55E-03	1.15E-03
1174	569698.8	4214932	1.63E-02	2.50E-03	1.13E-03
1175	569697.7	4214923	1.59E-02	2.43E-03	1.09E-03
1176	569696.6	4214914	1.52E-02	2.32E-03	1.05E-03
1177	569695.5	4214905	1.46E-02	2.22E-03	1.00E-03
1178	569694.5	4214896	1.39E-02	2.13E-03	9.60E-04
1179	569693.4	4214887	1.32E-02	2.02E-03	9.11E-04
1180	569692.3	4214878	1.26E-02	1.92E-03	8.66E-04
1181	569691.2	4214868	1.20E-02	1.83E-03	8.25E-04
1182	569690.1	4214859	1.14E-02	1.74E-03	7.86E-04
1183	569689.1	4214850	1.09E-02	1.66E-03	7.49E-04
1184	569688	4214841	1.04E-02	1.58E-03	7.15E-04
1185	569692.5	4214825	9.57E-03	1.46E-03	6.59E-04
1186	569703.6	4214810	8.83E-03	1.35E-03	6.08E-04
1187	569714.7	4214796	8.32E-03	1.27E-03	5.73E-04
1188	569725.9	4214781	7.89E-03	1.20E-03	5.44E-04
1189	569731.5	4214774	7.72E-03	1.18E-03	5.32E-04
1190	569742.6	4214759	7.50E-03	1.15E-03	5.17E-04
1191	569706.3	4214996	1.99E-02	3.04E-03	1.37E-03

1192	569711	4215005	2.07E-02	3.16E-03	1.43E-03
1193	569715.7	4215013	2.16E-02	3.29E-03	1.49E-03
1194	569720.4	4215022	2.26E-02	3.45E-03	1.56E-03
1195	569725	4215030	2.37E-02	3.62E-03	1.63E-03
1196	569729.7	4215039	2.48E-02	3.79E-03	1.71E-03
1197	569734.4	4215047	2.61E-02	3.98E-03	1.80E-03
1198	569739.1	4215056	2.75E-02	4.20E-03	1.90E-03
1199	569743.7	4215064	2.90E-02	4.43E-03	2.00E-03
1200	569748.4	4215073	3.06E-02	4.68E-03	2.11E-03
1201	569753.1	4215081	3.23E-02	4.94E-03	2.23E-03
1202	569757.8	4215090	3.42E-02	5.22E-03	2.36E-03
1203	569762.4	4215098	3.62E-02	5.53E-03	2.49E-03
1204	569767.1	4215107	3.82E-02	5.84E-03	2.64E-03
1205	569771.8	4215115	4.04E-02	6.18E-03	2.79E-03
1206	569809.2	4215183	7.61E-02	1.16E-02	5.24E-03
1207	569813.8	4215192	8.49E-02	1.30E-02	5.85E-03
1208	569818.5	4215200	9.15E-02	1.40E-02	6.31E-03
1209	569823.2	4215209	9.44E-02	1.44E-02	6.50E-03
1210	569827.9	4215217	9.63E-02	1.47E-02	6.63E-03
1211	569696.4	4214991	1.94E-02	2.97E-03	1.34E-03
1212	569695.3	4214982	1.88E-02	2.87E-03	1.29E-03
1213	569694.2	4214972	1.82E-02	2.79E-03	1.26E-03
1214	569693.1	4214963	1.78E-02	2.72E-03	1.23E-03
1215	569691.9	4214953	1.74E-02	2.66E-03	1.20E-03
1216	569690.8	4214944	1.69E-02	2.58E-03	1.16E-03
1217	569689.7	4214934	1.64E-02	2.51E-03	1.13E-03
1218	569688.5	4214925	1.59E-02	2.43E-03	1.10E-03
1219	569687.4	4214915	1.52E-02	2.32E-03	1.05E-03
1220	569686.3	4214906	1.45E-02	2.22E-03	1.00E-03
1221	569685.2	4214896	1.39E-02	2.12E-03	9.57E-04
1222	569684	4214887	1.32E-02	2.01E-03	9.09E-04
1223	569682.9	4214877	1.26E-02	1.92E-03	8.66E-04
1224	569681.8	4214868	1.20E-02	1.83E-03	8.25E-04
1225	569680.6	4214858	1.14E-02	1.74E-03	7.87E-04
1226	569679.5	4214848	1.09E-02	1.66E-03	7.51E-04
1227	569678.4	4214839	1.04E-02	1.59E-03	7.18E-04
1228	569683.1	4214822	9.64E-03	1.47E-03	6.64E-04
1229	569688.9	4214814	9.23E-03	1.41E-03	6.36E-04
1230	569694.7	4214807	8.84E-03	1.35E-03	6.09E-04
1231	569700.5	4214799	8.63E-03	1.32E-03	5.95E-04
1232	569706.4	4214791	8.42E-03	1.29E-03	5.80E-04
1233	569712.2	4214784	8.20E-03	1.25E-03	5.65E-04
1234	569718	4214776	7.98E-03	1.22E-03	5.50E-04
1235	569723.8	4214768	7.86E-03	1.20E-03	5.41E-04
1236	569697.6	4215001	2.02E-02	3.08E-03	1.39E-03
1237	569702.2	4215009	2.10E-02	3.20E-03	1.45E-03
1238	569706.9	4215018	2.19E-02	3.34E-03	1.51E-03
1239	569711.6	4215026	2.29E-02	3.50E-03	1.58E-03
1240	569716.3	4215035	2.40E-02	3.66E-03	1.65E-03
1241	569720.9	4215043	2.51E-02	3.83E-03	1.73E-03
1242	569725.6	4215052	2.64E-02	4.03E-03	1.82E-03
1243	569730.3	4215060	2.78E-02	4.24E-03	1.91E-03

1244	569735	4215069	2.92E-02	4.46E-03	2.01E-03
1245	569739.6	4215077	3.08E-02	4.70E-03	2.12E-03
1246	569744.3	4215086	3.24E-02	4.95E-03	2.24E-03
1247	569749	4215094	3.42E-02	5.22E-03	2.36E-03
1248	569753.7	4215103	3.60E-02	5.50E-03	2.48E-03
1249	569758.3	4215111	3.80E-02	5.80E-03	2.62E-03
1250	569763	4215120	4.02E-02	6.13E-03	2.77E-03
1251	569800.4	4215188	7.46E-02	1.14E-02	5.14E-03
1252	569805.1	4215196	8.25E-02	1.26E-02	5.68E-03
1253	569809.8	4215205	8.58E-02	1.31E-02	5.91E-03
1254	569814.4	4215213	8.87E-02	1.35E-02	6.11E-03
1255	569819.1	4215222	9.09E-02	1.39E-02	6.26E-03
1256	569687.7	4214996	1.98E-02	3.02E-03	1.36E-03
1257	569686.6	4214987	1.91E-02	2.92E-03	1.32E-03
1258	569685.5	4214977	1.85E-02	2.83E-03	1.28E-03
1259	569684.3	4214968	1.81E-02	2.76E-03	1.24E-03
1260	569683.2	4214959	1.76E-02	2.69E-03	1.22E-03
1261	569682.1	4214949	1.71E-02	2.62E-03	1.18E-03
1262	569681	4214940	1.66E-02	2.54E-03	1.14E-03
1263	569679.9	4214930	1.61E-02	2.46E-03	1.11E-03
1264	569678.8	4214921	1.55E-02	2.36E-03	1.07E-03
1265	569677.7	4214912	1.48E-02	2.26E-03	1.02E-03
1266	569676.5	4214902	1.42E-02	2.17E-03	9.79E-04
1267	569675.4	4214893	1.36E-02	2.07E-03	9.36E-04
1268	569674.3	4214883	1.30E-02	1.98E-03	8.94E-04
1269	569673.2	4214874	1.24E-02	1.89E-03	8.54E-04
1270	569672.1	4214864	1.19E-02	1.81E-03	8.18E-04
1271	569671	4214855	1.14E-02	1.73E-03	7.83E-04
1272	569669.8	4214846	1.09E-02	1.66E-03	7.51E-04
1273	569668.7	4214836	1.05E-02	1.60E-03	7.21E-04
1274	569673.4	4214819	9.76E-03	1.49E-03	6.73E-04
1275	569679.1	4214812	9.36E-03	1.43E-03	6.45E-04
1276	569684.9	4214804	9.02E-03	1.38E-03	6.21E-04
1277	569690.6	4214797	8.82E-03	1.35E-03	6.08E-04
1278	569696.4	4214789	8.63E-03	1.32E-03	5.94E-04
1279	569688.8	4215006	2.05E-02	3.13E-03	1.41E-03
1280	569693.5	4215014	2.13E-02	3.25E-03	1.46E-03
1281	569698.2	4215023	2.22E-02	3.38E-03	1.53E-03
1282	569702.8	4215031	2.32E-02	3.54E-03	1.60E-03
1283	569707.5	4215040	2.42E-02	3.69E-03	1.67E-03
1284	569712.2	4215048	2.53E-02	3.87E-03	1.74E-03
1285	569716.9	4215057	2.66E-02	4.06E-03	1.83E-03
1286	569721.5	4215065	2.79E-02	4.27E-03	1.93E-03
1287	569726.2	4215074	2.93E-02	4.48E-03	2.02E-03
1288	569730.9	4215082	3.09E-02	4.72E-03	2.13E-03
1289	569735.6	4215091	3.25E-02	4.97E-03	2.24E-03
1290	569740.2	4215099	3.42E-02	5.23E-03	2.36E-03
1291	569744.9	4215108	3.60E-02	5.50E-03	2.48E-03
1292	569749.6	4215116	3.79E-02	5.79E-03	2.61E-03
1293	569754.3	4215125	3.99E-02	6.09E-03	2.75E-03
1294	569787	4215184	6.56E-02	1.00E-02	4.52E-03
1295	569791.6	4215193	7.28E-02	1.11E-02	5.02E-03

1296	569796.3	4215201	7.79E-02	1.19E-02	5.37E-03
1297	569801	4215210	8.12E-02	1.24E-02	5.60E-03
1298	569805.7	4215218	8.41E-02	1.28E-02	5.79E-03
1299	569810.3	4215227	8.62E-02	1.32E-02	5.94E-03
1300	569678.9	4215001	2.00E-02	3.06E-03	1.38E-03
1301	569677.8	4214992	1.94E-02	2.97E-03	1.34E-03
1302	569676.7	4214983	1.89E-02	2.88E-03	1.30E-03
1303	569675.6	4214973	1.84E-02	2.80E-03	1.27E-03
1304	569674.5	4214964	1.79E-02	2.73E-03	1.23E-03
1305	569673.4	4214955	1.74E-02	2.66E-03	1.20E-03
1306	569672.3	4214945	1.69E-02	2.57E-03	1.16E-03
1307	569671.2	4214936	1.63E-02	2.49E-03	1.12E-03
1308	569670.1	4214927	1.57E-02	2.40E-03	1.08E-03
1309	569669	4214917	1.51E-02	2.30E-03	1.04E-03
1310	569667.9	4214908	1.45E-02	2.21E-03	9.98E-04
1311	569666.8	4214899	1.39E-02	2.12E-03	9.59E-04
1312	569665.7	4214889	1.33E-02	2.04E-03	9.19E-04
1313	569664.6	4214880	1.28E-02	1.95E-03	8.81E-04
1314	569663.5	4214871	1.23E-02	1.87E-03	8.45E-04
1315	569662.4	4214861	1.18E-02	1.80E-03	8.12E-04
1316	569661.3	4214852	1.13E-02	1.73E-03	7.81E-04
1317	569660.2	4214843	1.09E-02	1.67E-03	7.53E-04
1318	569659.1	4214833	1.06E-02	1.61E-03	7.28E-04
1319	569680	4215011	2.07E-02	3.16E-03	1.43E-03
1320	569684.7	4215019	2.15E-02	3.28E-03	1.48E-03
1321	569689.4	4215028	2.24E-02	3.42E-03	1.54E-03
1322	569694.1	4215036	2.34E-02	3.57E-03	1.61E-03
1323	569698.7	4215045	2.44E-02	3.72E-03	1.68E-03
1324	569703.4	4215053	2.55E-02	3.90E-03	1.76E-03
1325	569708.1	4215062	2.68E-02	4.09E-03	1.85E-03
1326	569712.8	4215070	2.81E-02	4.29E-03	1.94E-03
1327	569717.4	4215079	2.95E-02	4.50E-03	2.03E-03
1328	569722.1	4215087	3.10E-02	4.73E-03	2.14E-03
1329	569726.8	4215096	3.26E-02	4.98E-03	2.25E-03
1330	569731.5	4215104	3.43E-02	5.24E-03	2.36E-03
1331	569736.1	4215113	3.61E-02	5.52E-03	2.49E-03
1332	569740.8	4215121	3.81E-02	5.81E-03	2.62E-03
1333	569773.5	4215181	6.04E-02	9.22E-03	4.16E-03
1334	569778.2	4215189	6.55E-02	1.00E-02	4.51E-03
1335	569782.9	4215198	7.06E-02	1.08E-02	4.87E-03
1336	569787.6	4215206	7.40E-02	1.13E-02	5.10E-03
1337	569792.2	4215215	7.73E-02	1.18E-02	5.33E-03
1338	569796.9	4215223	8.02E-02	1.22E-02	5.52E-03
1339	569801.6	4215232	7.95E-02	1.21E-02	5.48E-03
1340	569670.2	4215006	2.03E-02	3.10E-03	1.40E-03
1341	569669.1	4214997	1.97E-02	3.01E-03	1.36E-03
1342	569668	4214988	1.92E-02	2.93E-03	1.32E-03
1343	569666.9	4214978	1.87E-02	2.85E-03	1.29E-03
1344	569665.8	4214969	1.82E-02	2.78E-03	1.25E-03
1345	569664.7	4214960	1.77E-02	2.71E-03	1.22E-03
1346	569663.6	4214951	1.72E-02	2.62E-03	1.18E-03
1347	569662.5	4214941	1.65E-02	2.52E-03	1.14E-03

1348	569661.4	4214932	1.59E-02	2.43E-03	1.10E-03
1349	569660.4	4214923	1.53E-02	2.34E-03	1.06E-03
1350	569659.3	4214914	1.47E-02	2.25E-03	1.02E-03
1351	569658.2	4214905	1.42E-02	2.17E-03	9.77E-04
1352	569657.1	4214895	1.36E-02	2.08E-03	9.41E-04
1353	569656	4214886	1.31E-02	2.00E-03	9.04E-04
1354	569654.9	4214877	1.26E-02	1.93E-03	8.70E-04
1355	569653.8	4214868	1.22E-02	1.86E-03	8.38E-04
1356	569652.7	4214858	1.17E-02	1.79E-03	8.09E-04
1357	569651.6	4214849	1.14E-02	1.73E-03	7.82E-04
1358	569650.5	4214840	1.10E-02	1.68E-03	7.58E-04
1359	569671.3	4215015	2.09E-02	3.19E-03	1.44E-03
1360	569676	4215024	2.17E-02	3.32E-03	1.50E-03
1361	569680.6	4215032	2.26E-02	3.45E-03	1.56E-03
1362	569685.3	4215041	2.35E-02	3.59E-03	1.62E-03
1363	569690	4215049	2.46E-02	3.75E-03	1.69E-03
1364	569694.7	4215058	2.57E-02	3.93E-03	1.77E-03
1365	569699.3	4215066	2.69E-02	4.11E-03	1.86E-03
1366	569704	4215075	2.82E-02	4.31E-03	1.94E-03
1367	569708.7	4215083	2.96E-02	4.52E-03	2.04E-03
1368	569713.4	4215092	3.11E-02	4.75E-03	2.14E-03
1369	569718	4215100	3.27E-02	4.99E-03	2.25E-03
1370	569722.7	4215109	3.44E-02	5.26E-03	2.37E-03
1371	569727.4	4215117	3.64E-02	5.55E-03	2.51E-03
1372	569764.8	4215185	6.10E-02	9.31E-03	4.20E-03
1373	569769.4	4215194	6.60E-02	1.01E-02	4.55E-03
1374	569774.1	4215202	6.88E-02	1.05E-02	4.74E-03
1375	569778.8	4215211	7.11E-02	1.09E-02	4.90E-03
1376	569783.5	4215219	7.39E-02	1.13E-02	5.10E-03
1377	569788.1	4215228	7.58E-02	1.16E-02	5.22E-03
1378	569792.8	4215236	7.31E-02	1.12E-02	5.04E-03
1379	569661.4	4215011	2.04E-02	3.12E-03	1.41E-03
1380	569660.2	4215001	1.98E-02	3.03E-03	1.37E-03
1381	569659.1	4214991	1.93E-02	2.95E-03	1.33E-03
1382	569658	4214982	1.88E-02	2.87E-03	1.30E-03
1383	569656.8	4214972	1.82E-02	2.78E-03	1.26E-03
1384	569655.7	4214963	1.76E-02	2.69E-03	1.22E-03
1385	569654.6	4214953	1.71E-02	2.60E-03	1.18E-03
1386	569653.4	4214943	1.64E-02	2.51E-03	1.13E-03
1387	569652.3	4214934	1.58E-02	2.42E-03	1.09E-03
1388	569651.2	4214924	1.53E-02	2.33E-03	1.05E-03
1389	569650	4214915	1.47E-02	2.24E-03	1.01E-03
1390	569648.9	4214905	1.41E-02	2.16E-03	9.73E-04
1391	569647.8	4214896	1.36E-02	2.08E-03	9.37E-04
1392	569646.6	4214886	1.31E-02	2.00E-03	9.02E-04
1393	569645.5	4214876	1.26E-02	1.93E-03	8.69E-04
1394	569644.4	4214867	1.22E-02	1.86E-03	8.39E-04
1395	569643.2	4214857	1.18E-02	1.80E-03	8.12E-04
1396	569662.5	4215020	2.11E-02	3.22E-03	1.46E-03
1397	569667.2	4215029	2.19E-02	3.35E-03	1.51E-03
1398	569671.9	4215037	2.28E-02	3.48E-03	1.57E-03
1399	569676.5	4215046	2.37E-02	3.61E-03	1.63E-03

1400	569681.2	4215054	2.47E-02	3.78E-03	1.70E-03
1401	569685.9	4215063	2.59E-02	3.95E-03	1.78E-03
1402	569690.6	4215071	2.70E-02	4.13E-03	1.86E-03
1403	569695.2	4215080	2.83E-02	4.33E-03	1.95E-03
1404	569699.9	4215088	2.98E-02	4.54E-03	2.05E-03
1405	569704.6	4215097	3.13E-02	4.77E-03	2.15E-03
1406	569709.3	4215105	3.28E-02	5.01E-03	2.26E-03
1407	569713.9	4215114	3.46E-02	5.28E-03	2.38E-03
1408	569718.6	4215122	3.66E-02	5.59E-03	2.52E-03
1409	569751.3	4215182	5.71E-02	8.72E-03	3.93E-03
1410	569756	4215190	6.14E-02	9.37E-03	4.23E-03
1411	569760.7	4215199	6.51E-02	9.94E-03	4.48E-03
1412	569765.4	4215207	6.66E-02	1.02E-02	4.59E-03
1413	569770	4215216	6.85E-02	1.05E-02	4.72E-03
1414	569774.7	4215224	7.08E-02	1.08E-02	4.88E-03
1415	569779.4	4215233	6.96E-02	1.06E-02	4.80E-03
1416	569784.1	4215241	6.69E-02	1.02E-02	4.61E-03
1417	569652.6	4215015	2.06E-02	3.14E-03	1.42E-03
1418	569651.5	4215006	2.00E-02	3.05E-03	1.38E-03
1419	569650.4	4214997	1.95E-02	2.97E-03	1.34E-03
1420	569649.3	4214987	1.90E-02	2.90E-03	1.31E-03
1421	569648.1	4214978	1.84E-02	2.80E-03	1.27E-03
1422	569647	4214968	1.77E-02	2.71E-03	1.22E-03
1423	569645.9	4214959	1.71E-02	2.62E-03	1.18E-03
1424	569644.8	4214949	1.65E-02	2.53E-03	1.14E-03
1425	569643.6	4214940	1.60E-02	2.44E-03	1.10E-03
1426	569642.5	4214930	1.54E-02	2.35E-03	1.06E-03
1427	569641.4	4214921	1.49E-02	2.27E-03	1.03E-03
1428	569640.3	4214911	1.43E-02	2.19E-03	9.88E-04
1429	569639.1	4214902	1.38E-02	2.11E-03	9.53E-04
1430	569638	4214892	1.34E-02	2.04E-03	9.20E-04
1431	569636.9	4214883	1.29E-02	1.97E-03	8.89E-04
1432	569635.8	4214873	1.25E-02	1.91E-03	8.60E-04
1433	569634.7	4214864	1.21E-02	1.85E-03	8.35E-04
1434	569653.8	4215025	2.13E-02	3.25E-03	1.47E-03
1435	569658.4	4215033	2.21E-02	3.37E-03	1.52E-03
1436	569663.1	4215042	2.29E-02	3.50E-03	1.58E-03
1437	569667.8	4215050	2.38E-02	3.64E-03	1.64E-03
1438	569672.5	4215059	2.48E-02	3.79E-03	1.71E-03
1439	569677.1	4215067	2.59E-02	3.96E-03	1.79E-03
1440	569681.8	4215076	2.71E-02	4.13E-03	1.86E-03
1441	569686.5	4215084	2.84E-02	4.34E-03	1.96E-03
1442	569691.2	4215093	2.99E-02	4.56E-03	2.06E-03
1443	569695.8	4215101	3.14E-02	4.80E-03	2.16E-03
1444	569700.5	4215110	3.30E-02	5.03E-03	2.27E-03
1445	569737.9	4215178	5.37E-02	8.20E-03	3.70E-03
1446	569742.6	4215187	5.75E-02	8.77E-03	3.96E-03
1447	569747.2	4215195	6.16E-02	9.41E-03	4.25E-03
1448	569751.9	4215204	6.29E-02	9.61E-03	4.34E-03
1449	569756.6	4215212	6.40E-02	9.77E-03	4.41E-03
1450	569761.3	4215221	6.55E-02	1.00E-02	4.51E-03
1451	569765.9	4215229	6.60E-02	1.01E-02	4.55E-03

1452	569770.6	4215238	6.37E-02	9.73E-03	4.39E-03
1453	569775.3	4215246	6.14E-02	9.37E-03	4.23E-03
1454	569643.9	4215020	2.07E-02	3.16E-03	1.43E-03
1455	569642.8	4215011	2.01E-02	3.07E-03	1.39E-03
1456	569641.7	4215002	1.96E-02	2.99E-03	1.35E-03
1457	569640.5	4214992	1.91E-02	2.91E-03	1.32E-03
1458	569639.4	4214983	1.86E-02	2.83E-03	1.28E-03
1459	569638.3	4214973	1.79E-02	2.73E-03	1.23E-03
1460	569637.2	4214964	1.73E-02	2.64E-03	1.19E-03
1461	569636.1	4214955	1.66E-02	2.54E-03	1.15E-03
1462	569635	4214945	1.61E-02	2.46E-03	1.11E-03
1463	569633.9	4214936	1.56E-02	2.37E-03	1.07E-03
1464	569632.7	4214926	1.51E-02	2.30E-03	1.04E-03
1465	569631.6	4214917	1.45E-02	2.22E-03	1.00E-03
1466	569630.5	4214908	1.41E-02	2.15E-03	9.69E-04
1467	569629.4	4214898	1.36E-02	2.08E-03	9.37E-04
1468	569628.3	4214889	1.32E-02	2.01E-03	9.09E-04
1469	569627.2	4214879	1.28E-02	1.95E-03	8.82E-04
1470	569626.1	4214870	1.24E-02	1.90E-03	8.57E-04
1471	569645	4215030	2.14E-02	3.27E-03	1.48E-03
1472	569649.7	4215038	2.22E-02	3.39E-03	1.53E-03
1473	569654.3	4215047	2.30E-02	3.51E-03	1.58E-03
1474	569659	4215055	2.39E-02	3.65E-03	1.65E-03
1475	569663.7	4215064	2.49E-02	3.80E-03	1.72E-03
1476	569668.4	4215072	2.59E-02	3.96E-03	1.79E-03
1477	569673	4215081	2.71E-02	4.14E-03	1.87E-03
1478	569677.7	4215089	2.84E-02	4.34E-03	1.96E-03
1479	569682.4	4215098	2.99E-02	4.56E-03	2.06E-03
1480	569687.1	4215106	3.14E-02	4.80E-03	2.17E-03
1481	569691.7	4215115	3.30E-02	5.04E-03	2.27E-03
1482	569724.5	4215174	5.08E-02	7.75E-03	3.50E-03
1483	569729.1	4215183	5.41E-02	8.25E-03	3.72E-03
1484	569733.8	4215191	5.76E-02	8.80E-03	3.97E-03
1485	569738.5	4215200	6.01E-02	9.18E-03	4.14E-03
1486	569743.2	4215208	6.08E-02	9.28E-03	4.19E-03
1487	569747.8	4215217	6.15E-02	9.40E-03	4.24E-03
1488	569752.5	4215225	6.23E-02	9.52E-03	4.30E-03
1489	569757.2	4215234	6.06E-02	9.26E-03	4.18E-03
1490	569761.9	4215242	5.87E-02	8.96E-03	4.04E-03
1491	569766.5	4215251	5.67E-02	8.66E-03	3.91E-03
1492	569635.1	4215025	2.09E-02	3.19E-03	1.44E-03
1493	569634	4215016	2.02E-02	3.09E-03	1.39E-03
1494	569632.9	4215007	1.97E-02	3.01E-03	1.36E-03
1495	569631.8	4214997	1.92E-02	2.93E-03	1.32E-03
1496	569630.7	4214988	1.87E-02	2.85E-03	1.29E-03
1497	569629.6	4214979	1.80E-02	2.75E-03	1.24E-03
1498	569628.5	4214969	1.74E-02	2.66E-03	1.20E-03
1499	569627.4	4214960	1.68E-02	2.56E-03	1.16E-03
1500	569626.3	4214951	1.62E-02	2.48E-03	1.12E-03
1501	569625.2	4214941	1.57E-02	2.40E-03	1.08E-03
1502	569624.1	4214932	1.52E-02	2.33E-03	1.05E-03
1503	569623	4214923	1.48E-02	2.25E-03	1.02E-03

1504	569621.9	4214913	1.43E-02	2.18E-03	9.85E-04
1505	569620.8	4214904	1.38E-02	2.11E-03	9.54E-04
1506	569619.7	4214895	1.34E-02	2.05E-03	9.26E-04
1507	569618.6	4214885	1.31E-02	2.00E-03	9.01E-04
1508	569636.2	4215035	2.15E-02	3.28E-03	1.48E-03
1509	569640.9	4215043	2.22E-02	3.39E-03	1.53E-03
1510	569645.6	4215052	2.31E-02	3.52E-03	1.59E-03
1511	569650.3	4215060	2.40E-02	3.66E-03	1.65E-03
1512	569654.9	4215069	2.49E-02	3.81E-03	1.72E-03
1513	569659.6	4215077	2.59E-02	3.96E-03	1.79E-03
1514	569664.3	4215086	2.71E-02	4.14E-03	1.87E-03
1515	569669	4215094	2.84E-02	4.34E-03	1.96E-03
1516	569673.6	4215103	2.98E-02	4.55E-03	2.05E-03
1517	569678.3	4215111	3.13E-02	4.77E-03	2.15E-03
1518	569683	4215120	3.28E-02	5.00E-03	2.26E-03
1519	569711	4215171	4.60E-02	7.02E-03	3.17E-03
1520	569715.7	4215179	4.97E-02	7.59E-03	3.43E-03
1521	569720.4	4215188	5.37E-02	8.20E-03	3.70E-03
1522	569725	4215196	5.76E-02	8.80E-03	3.97E-03
1523	569729.7	4215205	5.81E-02	8.87E-03	4.00E-03
1524	569734.4	4215213	5.86E-02	8.95E-03	4.04E-03
1525	569739.1	4215222	5.92E-02	9.04E-03	4.08E-03
1526	569743.7	4215230	5.84E-02	8.92E-03	4.02E-03
1527	569748.4	4215239	5.63E-02	8.59E-03	3.88E-03
1528	569753.1	4215247	5.43E-02	8.30E-03	3.75E-03
1529	569757.8	4215256	5.28E-02	8.06E-03	3.64E-03
1530	569626.3	4215030	2.09E-02	3.19E-03	1.44E-03
1531	569625.2	4215020	2.02E-02	3.09E-03	1.39E-03
1532	569624	4215011	1.96E-02	3.00E-03	1.35E-03
1533	569622.9	4215001	1.91E-02	2.91E-03	1.31E-03
1534	569621.8	4214991	1.85E-02	2.83E-03	1.28E-03
1535	569620.6	4214982	1.80E-02	2.74E-03	1.24E-03
1536	569619.5	4214972	1.73E-02	2.64E-03	1.19E-03
1537	569618.3	4214962	1.67E-02	2.55E-03	1.15E-03
1538	569617.2	4214953	1.61E-02	2.46E-03	1.11E-03
1539	569616.1	4214943	1.56E-02	2.39E-03	1.08E-03
1540	569614.9	4214933	1.52E-02	2.32E-03	1.05E-03
1541	569613.8	4214924	1.47E-02	2.25E-03	1.01E-03
1542	569612.6	4214914	1.43E-02	2.18E-03	9.82E-04
1543	569611.5	4214905	1.38E-02	2.11E-03	9.52E-04
1544	569610.4	4214895	1.34E-02	2.05E-03	9.25E-04
1545	569627.5	4215039	2.15E-02	3.28E-03	1.48E-03
1546	569632.1	4215048	2.23E-02	3.40E-03	1.53E-03
1547	569636.8	4215056	2.31E-02	3.53E-03	1.59E-03
1548	569641.5	4215065	2.40E-02	3.66E-03	1.65E-03
1549	569646.2	4215073	2.49E-02	3.80E-03	1.71E-03
1550	569650.8	4215082	2.59E-02	3.96E-03	1.79E-03
1551	569655.5	4215090	2.71E-02	4.14E-03	1.87E-03
1552	569660.2	4215099	2.84E-02	4.33E-03	1.95E-03
1553	569664.9	4215107	2.97E-02	4.54E-03	2.05E-03
1554	569669.5	4215116	3.11E-02	4.74E-03	2.14E-03
1555	569674.2	4215124	3.25E-02	4.96E-03	2.24E-03

1556	569688.2	4215150	3.75E-02	5.73E-03	2.59E-03
1557	569692.9	4215158	3.94E-02	6.02E-03	2.72E-03
1558	569697.6	4215167	4.17E-02	6.37E-03	2.88E-03
1559	569702.3	4215175	4.50E-02	6.87E-03	3.10E-03
1560	569706.9	4215184	4.86E-02	7.43E-03	3.35E-03
1561	569711.6	4215192	5.25E-02	8.02E-03	3.62E-03
1562	569716.3	4215201	5.50E-02	8.40E-03	3.79E-03
1563	569721	4215209	5.59E-02	8.54E-03	3.85E-03
1564	569725.6	4215218	5.64E-02	8.61E-03	3.89E-03
1565	569730.3	4215226	5.67E-02	8.67E-03	3.91E-03
1566	569735	4215235	5.44E-02	8.31E-03	3.75E-03
1567	569739.7	4215243	5.24E-02	8.01E-03	3.61E-03
1568	569744.3	4215252	5.07E-02	7.74E-03	3.49E-03
1569	569749	4215260	4.93E-02	7.53E-03	3.40E-03
1570	569984.8	4215238	2.71E-01	4.13E-02	1.87E-02
1571	569985.1	4215248	2.49E-01	3.80E-02	1.72E-02
1572	569985.4	4215257	2.27E-01	3.46E-02	1.56E-02
1573	569985.7	4215267	2.04E-01	3.11E-02	1.40E-02
1574	569986	4215277	1.83E-01	2.80E-02	1.26E-02
1575	569986.3	4215287	1.67E-01	2.54E-02	1.15E-02
1576	569986.7	4215296	1.63E-01	2.48E-02	1.12E-02
1577	569987	4215306	1.61E-01	2.45E-02	1.11E-02
1578	569987.3	4215316	1.60E-01	2.45E-02	1.11E-02
1579	569987.6	4215325	1.66E-01	2.53E-02	1.14E-02
1580	569987.9	4215335	1.73E-01	2.64E-02	1.19E-02
1581	569988.2	4215345	1.84E-01	2.81E-02	1.27E-02
1582	569988.6	4215354	1.83E-01	2.79E-02	1.26E-02
1583	569988.9	4215364	1.78E-01	2.72E-02	1.23E-02
1584	569989.2	4215374	1.78E-01	2.72E-02	1.23E-02
1585	569973.5	4215200	2.94E-01	4.49E-02	2.02E-02
1586	569973.8	4215209	2.83E-01	4.33E-02	1.95E-02
1587	569974.1	4215219	2.67E-01	4.08E-02	1.84E-02
1588	569974.5	4215229	2.50E-01	3.81E-02	1.72E-02
1589	569974.8	4215238	2.34E-01	3.57E-02	1.61E-02
1590	569975.1	4215248	2.17E-01	3.31E-02	1.49E-02
1591	569975.4	4215258	1.99E-01	3.04E-02	1.37E-02
1592	569975.7	4215267	1.81E-01	2.76E-02	1.25E-02
1593	569976	4215277	1.64E-01	2.51E-02	1.13E-02
1594	569976.4	4215287	1.52E-01	2.31E-02	1.04E-02
1595	569976.7	4215297	1.49E-01	2.28E-02	1.03E-02
1596	569977	4215306	1.48E-01	2.26E-02	1.02E-02
1597	569977.3	4215316	1.48E-01	2.26E-02	1.02E-02
1598	569977.6	4215326	1.54E-01	2.34E-02	1.06E-02
1599	569977.9	4215335	1.60E-01	2.45E-02	1.10E-02
1600	569978.2	4215345	1.72E-01	2.62E-02	1.18E-02
1601	569978.6	4215355	1.71E-01	2.61E-02	1.18E-02
1602	569978.9	4215364	1.69E-01	2.58E-02	1.16E-02
1603	569979.2	4215374	1.75E-01	2.68E-02	1.21E-02
1604	569962.6	4215171	2.68E-01	4.09E-02	1.85E-02
1605	569962.9	4215181	2.71E-01	4.13E-02	1.87E-02
1606	569963.2	4215190	2.67E-01	4.08E-02	1.84E-02
1607	569963.5	4215200	2.60E-01	3.97E-02	1.79E-02

1608	569963.8	4215210	2.47E-01	3.77E-02	1.70E-02
1609	569964.2	4215219	2.30E-01	3.52E-02	1.59E-02
1610	569964.5	4215229	2.14E-01	3.27E-02	1.48E-02
1611	569964.8	4215239	2.02E-01	3.09E-02	1.39E-02
1612	569965.1	4215248	1.90E-01	2.90E-02	1.31E-02
1613	569965.4	4215258	1.77E-01	2.70E-02	1.22E-02
1614	569965.7	4215268	1.62E-01	2.47E-02	1.11E-02
1615	569966	4215277	1.48E-01	2.27E-02	1.02E-02
1616	569966.4	4215287	1.38E-01	2.11E-02	9.54E-03
1617	569966.7	4215297	1.37E-01	2.09E-02	9.44E-03
1618	569967	4215307	1.36E-01	2.08E-02	9.40E-03
1619	569967.3	4215316	1.37E-01	2.09E-02	9.43E-03
1620	569967.6	4215326	1.43E-01	2.18E-02	9.83E-03
1621	569967.9	4215336	1.49E-01	2.28E-02	1.03E-02
1622	569968.2	4215345	1.57E-01	2.40E-02	1.08E-02
1623	569968.6	4215355	1.57E-01	2.40E-02	1.08E-02
1624	569968.9	4215365	1.61E-01	2.46E-02	1.11E-02
1625	569969.2	4215374	1.74E-01	2.66E-02	1.20E-02
1626	569952.3	4215162	2.34E-01	3.57E-02	1.61E-02
1627	569952.6	4215171	2.41E-01	3.68E-02	1.66E-02
1628	569952.9	4215181	2.43E-01	3.71E-02	1.67E-02
1629	569953.2	4215191	2.39E-01	3.65E-02	1.65E-02
1630	569953.5	4215200	2.33E-01	3.55E-02	1.60E-02
1631	569953.8	4215210	2.20E-01	3.35E-02	1.51E-02
1632	569954.2	4215220	2.03E-01	3.11E-02	1.40E-02
1633	569954.5	4215229	1.88E-01	2.88E-02	1.30E-02
1634	569954.8	4215239	1.78E-01	2.72E-02	1.23E-02
1635	569955.1	4215249	1.68E-01	2.56E-02	1.15E-02
1636	569955.4	4215258	1.57E-01	2.40E-02	1.08E-02
1637	569955.7	4215268	1.46E-01	2.23E-02	1.01E-02
1638	569956	4215278	1.36E-01	2.08E-02	9.40E-03
1639	569956.4	4215287	1.29E-01	1.97E-02	8.90E-03
1640	569956.7	4215297	1.28E-01	1.95E-02	8.81E-03
1641	569957	4215307	1.27E-01	1.94E-02	8.77E-03
1642	569957.3	4215317	1.28E-01	1.95E-02	8.79E-03
1643	569957.6	4215326	1.32E-01	2.02E-02	9.12E-03
1644	569957.9	4215336	1.38E-01	2.10E-02	9.49E-03
1645	569958.3	4215346	1.44E-01	2.20E-02	9.94E-03
1646	569958.6	4215355	1.46E-01	2.23E-02	1.00E-02
1647	569958.9	4215365	1.53E-01	2.33E-02	1.05E-02
1648	569959.2	4215375	1.72E-01	2.63E-02	1.19E-02
1649	569942.6	4215172	2.19E-01	3.34E-02	1.51E-02
1650	569942.9	4215181	2.20E-01	3.36E-02	1.52E-02
1651	569943.2	4215191	2.19E-01	3.35E-02	1.51E-02
1652	569943.5	4215201	2.10E-01	3.20E-02	1.44E-02
1653	569943.8	4215210	1.96E-01	3.00E-02	1.35E-02
1654	569944.2	4215220	1.81E-01	2.76E-02	1.25E-02
1655	569944.5	4215230	1.67E-01	2.55E-02	1.15E-02
1656	569944.8	4215239	1.58E-01	2.41E-02	1.09E-02
1657	569945.1	4215249	1.49E-01	2.27E-02	1.02E-02
1658	569945.4	4215259	1.40E-01	2.14E-02	9.66E-03
1659	569945.7	4215268	1.33E-01	2.03E-02	9.15E-03

1660	569946.1	4215278	1.26E-01	1.93E-02	8.71E-03
1661	569946.4	4215288	1.21E-01	1.85E-02	8.37E-03
1662	569946.7	4215297	1.20E-01	1.83E-02	8.27E-03
1663	569947	4215307	1.19E-01	1.82E-02	8.22E-03
1664	569947.3	4215317	1.19E-01	1.82E-02	8.22E-03
1665	569947.6	4215327	1.23E-01	1.88E-02	8.46E-03
1666	569947.9	4215336	1.27E-01	1.94E-02	8.74E-03
1667	569948.3	4215346	1.32E-01	2.01E-02	9.08E-03
1668	569948.6	4215356	1.35E-01	2.06E-02	9.30E-03
1669	569948.9	4215365	1.45E-01	2.21E-02	1.00E-02
1670	569949.2	4215375	1.72E-01	2.62E-02	1.18E-02
1671	569932.6	4215172	2.00E-01	3.06E-02	1.38E-02
1672	569932.9	4215182	2.01E-01	3.06E-02	1.38E-02
1673	569933.2	4215191	2.00E-01	3.05E-02	1.38E-02
1674	569933.5	4215201	1.90E-01	2.90E-02	1.31E-02
1675	569933.9	4215211	1.77E-01	2.70E-02	1.22E-02
1676	569934.2	4215220	1.61E-01	2.47E-02	1.11E-02
1677	569934.5	4215230	1.49E-01	2.27E-02	1.03E-02
1678	569934.8	4215240	1.41E-01	2.15E-02	9.69E-03
1679	569935.1	4215249	1.33E-01	2.03E-02	9.15E-03
1680	569935.4	4215259	1.26E-01	1.93E-02	8.69E-03
1681	569935.7	4215269	1.22E-01	1.86E-02	8.38E-03
1682	569936.1	4215278	1.18E-01	1.79E-02	8.10E-03
1683	569936.4	4215288	1.14E-01	1.75E-02	7.88E-03
1684	569936.7	4215298	1.13E-01	1.72E-02	7.78E-03
1685	569937	4215307	1.12E-01	1.71E-02	7.71E-03
1686	569937.3	4215317	1.12E-01	1.71E-02	7.70E-03
1687	569937.6	4215327	1.14E-01	1.74E-02	7.87E-03
1688	569937.9	4215336	1.17E-01	1.79E-02	8.09E-03
1689	569938.3	4215346	1.22E-01	1.86E-02	8.40E-03
1690	569938.6	4215356	1.27E-01	1.94E-02	8.75E-03
1691	569938.9	4215366	1.40E-01	2.14E-02	9.67E-03
1692	569939.2	4215375	1.73E-01	2.65E-02	1.19E-02
1693	569922.9	4215182	1.84E-01	2.81E-02	1.27E-02
1694	569923.2	4215192	1.85E-01	2.82E-02	1.27E-02
1695	569923.5	4215201	1.76E-01	2.69E-02	1.22E-02
1696	569923.9	4215211	1.64E-01	2.50E-02	1.13E-02
1697	569924.2	4215221	1.48E-01	2.27E-02	1.02E-02
1698	569924.5	4215230	1.36E-01	2.08E-02	9.39E-03
1699	569924.8	4215240	1.28E-01	1.96E-02	8.84E-03
1700	569925.1	4215250	1.21E-01	1.85E-02	8.33E-03
1701	569925.4	4215259	1.15E-01	1.76E-02	7.93E-03
1702	569925.7	4215269	1.12E-01	1.71E-02	7.70E-03
1703	569926.1	4215279	1.09E-01	1.66E-02	7.49E-03
1704	569926.4	4215288	1.06E-01	1.62E-02	7.33E-03
1705	569926.7	4215298	1.05E-01	1.60E-02	7.24E-03
1706	569927	4215308	1.04E-01	1.59E-02	7.17E-03
1707	569927.3	4215317	1.04E-01	1.59E-02	7.16E-03
1708	569927.6	4215327	1.06E-01	1.62E-02	7.33E-03
1709	569928	4215337	1.10E-01	1.67E-02	7.55E-03
1710	569928.3	4215346	1.15E-01	1.75E-02	7.89E-03
1711	569928.6	4215356	1.21E-01	1.85E-02	8.35E-03

1712	569928.9	4215366	1.37E-01	2.09E-02	9.42E-03
1713	569929.2	4215376	1.73E-01	2.64E-02	1.19E-02
1714	569912.9	4215182	1.70E-01	2.60E-02	1.17E-02
1715	569913.2	4215192	1.72E-01	2.62E-02	1.18E-02
1716	569913.5	4215202	1.64E-01	2.51E-02	1.13E-02
1717	569913.9	4215211	1.52E-01	2.32E-02	1.05E-02
1718	569914.2	4215221	1.37E-01	2.09E-02	9.45E-03
1719	569914.5	4215231	1.25E-01	1.92E-02	8.65E-03
1720	569914.8	4215240	1.18E-01	1.80E-02	8.12E-03
1721	569915.1	4215250	1.11E-01	1.69E-02	7.64E-03
1722	569915.4	4215260	1.06E-01	1.61E-02	7.27E-03
1723	569915.8	4215269	1.03E-01	1.57E-02	7.09E-03
1724	569916.1	4215279	1.00E-01	1.53E-02	6.92E-03
1725	569916.4	4215289	9.84E-02	1.50E-02	6.78E-03
1726	569916.7	4215298	9.69E-02	1.48E-02	6.68E-03
1727	569917	4215308	9.67E-02	1.48E-02	6.66E-03
1728	569917.3	4215318	9.66E-02	1.48E-02	6.66E-03
1729	569917.6	4215327	9.93E-02	1.52E-02	6.84E-03
1730	569918	4215337	1.03E-01	1.57E-02	7.10E-03
1731	569918.3	4215347	1.09E-01	1.66E-02	7.49E-03
1732	569918.6	4215356	1.15E-01	1.76E-02	7.96E-03
1733	569918.9	4215366	1.30E-01	1.99E-02	8.99E-03
1734	569919.2	4215376	1.62E-01	2.47E-02	1.12E-02
1735	569903.2	4215192	1.60E-01	2.44E-02	1.10E-02
1736	569903.6	4215202	1.54E-01	2.35E-02	1.06E-02
1737	569903.9	4215212	1.42E-01	2.16E-02	9.77E-03
1738	569904.2	4215221	1.27E-01	1.94E-02	8.75E-03
1739	569904.5	4215231	1.16E-01	1.77E-02	7.99E-03
1740	569904.8	4215241	1.09E-01	1.66E-02	7.49E-03
1741	569905.1	4215250	1.02E-01	1.56E-02	7.02E-03
1742	569905.4	4215260	9.75E-02	1.49E-02	6.72E-03
1743	569905.8	4215270	9.53E-02	1.45E-02	6.56E-03
1744	569906.1	4215279	9.33E-02	1.42E-02	6.43E-03
1745	569906.4	4215289	9.15E-02	1.40E-02	6.31E-03
1746	569906.7	4215299	9.01E-02	1.38E-02	6.21E-03
1747	569907	4215308	8.90E-02	1.36E-02	6.13E-03
1748	569907.3	4215318	8.88E-02	1.36E-02	6.12E-03
1749	569907.6	4215328	9.31E-02	1.42E-02	6.42E-03
1750	569908	4215337	9.71E-02	1.48E-02	6.69E-03
1751	569908.3	4215347	1.03E-01	1.57E-02	7.08E-03
1752	569908.6	4215357	1.09E-01	1.66E-02	7.51E-03
1753	569908.9	4215366	1.21E-01	1.85E-02	8.35E-03
1754	569909.2	4215376	1.42E-01	2.17E-02	9.81E-03
1755	569893.2	4215193	1.50E-01	2.29E-02	1.03E-02
1756	569893.6	4215202	1.46E-01	2.22E-02	1.00E-02
1757	569893.9	4215212	1.35E-01	2.06E-02	9.30E-03
1758	569894.2	4215222	1.21E-01	1.85E-02	8.36E-03
1759	569894.5	4215231	1.11E-01	1.69E-02	7.63E-03
1760	569894.8	4215241	1.03E-01	1.57E-02	7.10E-03
1761	569895.1	4215251	9.64E-02	1.47E-02	6.65E-03
1762	569895.4	4215260	9.18E-02	1.40E-02	6.33E-03
1763	569895.8	4215270	8.90E-02	1.36E-02	6.13E-03

1764	569896.1	4215280	8.65E-02	1.32E-02	5.96E-03
1765	569896.4	4215289	8.47E-02	1.29E-02	5.84E-03
1766	569896.7	4215299	8.37E-02	1.28E-02	5.77E-03
1767	569897	4215309	8.29E-02	1.27E-02	5.71E-03
1768	569897.3	4215318	8.29E-02	1.27E-02	5.72E-03
1769	569897.7	4215328	8.57E-02	1.31E-02	5.91E-03
1770	569898	4215338	9.12E-02	1.39E-02	6.28E-03
1771	569898.3	4215347	9.63E-02	1.47E-02	6.64E-03
1772	569898.6	4215357	1.02E-01	1.55E-02	6.99E-03
1773	569898.9	4215367	1.10E-01	1.68E-02	7.60E-03
1774	569883.6	4215203	1.38E-01	2.11E-02	9.51E-03
1775	569883.9	4215212	1.29E-01	1.96E-02	8.87E-03
1776	569884.2	4215222	1.16E-01	1.77E-02	8.01E-03
1777	569884.5	4215232	1.06E-01	1.62E-02	7.31E-03
1778	569884.8	4215241	9.84E-02	1.50E-02	6.78E-03
1779	569885.1	4215251	9.18E-02	1.40E-02	6.32E-03
1780	569885.5	4215261	8.69E-02	1.33E-02	5.99E-03
1781	569885.8	4215270	8.34E-02	1.27E-02	5.75E-03
1782	569886.1	4215280	8.04E-02	1.23E-02	5.54E-03
1783	569886.4	4215290	7.85E-02	1.20E-02	5.41E-03
1784	569886.7	4215299	7.80E-02	1.19E-02	5.38E-03
1785	569887	4215309	7.76E-02	1.18E-02	5.35E-03
1786	569887.3	4215319	7.78E-02	1.19E-02	5.36E-03
1787	569887.7	4215328	8.00E-02	1.22E-02	5.52E-03
1788	569888	4215338	8.34E-02	1.27E-02	5.75E-03
1789	569888.3	4215348	8.94E-02	1.36E-02	6.16E-03
1790	569888.6	4215357	9.35E-02	1.43E-02	6.44E-03
1791	569888.9	4215367	9.95E-02	1.52E-02	6.86E-03
1792	569873.6	4215203	1.31E-01	2.00E-02	9.02E-03
1793	569873.9	4215213	1.23E-01	1.87E-02	8.46E-03
1794	569874.2	4215222	1.11E-01	1.70E-02	7.68E-03
1795	569874.5	4215232	1.02E-01	1.55E-02	7.01E-03
1796	569874.8	4215242	9.40E-02	1.44E-02	6.48E-03
1797	569875.1	4215251	8.74E-02	1.33E-02	6.02E-03
1798	569875.5	4215261	8.23E-02	1.26E-02	5.67E-03
1799	569875.8	4215271	7.84E-02	1.20E-02	5.40E-03
1800	569876.1	4215280	7.51E-02	1.15E-02	5.17E-03
1801	569876.4	4215290	7.33E-02	1.12E-02	5.05E-03
1802	569876.7	4215300	7.30E-02	1.11E-02	5.03E-03
1803	569877	4215309	7.28E-02	1.11E-02	5.02E-03
1804	569877.3	4215319	7.32E-02	1.12E-02	5.04E-03
1805	569877.7	4215329	7.49E-02	1.14E-02	5.16E-03
1806	569878	4215338	7.75E-02	1.18E-02	5.34E-03
1807	569878.3	4215348	8.11E-02	1.24E-02	5.59E-03
1808	569878.6	4215358	8.46E-02	1.29E-02	5.83E-03
1809	569878.9	4215367	8.93E-02	1.36E-02	6.15E-03
1810	569863.9	4215213	1.17E-01	1.79E-02	8.08E-03
1811	569864.2	4215223	1.09E-01	1.66E-02	7.51E-03
1812	569864.5	4215232	1.00E-01	1.53E-02	6.92E-03
1813	569864.8	4215242	9.25E-02	1.41E-02	6.38E-03
1814	569865.1	4215252	8.53E-02	1.30E-02	5.88E-03
1815	569865.5	4215261	7.99E-02	1.22E-02	5.51E-03

1816	569865.8	4215271	7.58E-02	1.16E-02	5.23E-03
1817	569866.1	4215281	7.24E-02	1.11E-02	4.99E-03
1818	569866.4	4215290	7.04E-02	1.08E-02	4.85E-03
1819	569866.7	4215300	6.98E-02	1.07E-02	4.81E-03
1820	569867	4215310	6.92E-02	1.06E-02	4.77E-03
1821	569867.4	4215319	6.92E-02	1.06E-02	4.77E-03
1822	569867.7	4215329	7.02E-02	1.07E-02	4.84E-03
1823	569868	4215339	7.20E-02	1.10E-02	4.96E-03
1824	569868.3	4215348	7.45E-02	1.14E-02	5.13E-03
1825	569868.6	4215358	7.73E-02	1.18E-02	5.32E-03
1826	569868.9	4215368	8.06E-02	1.23E-02	5.55E-03
1827	569853.9	4215213	1.12E-01	1.71E-02	7.73E-03
1828	569854.2	4215223	1.07E-01	1.63E-02	7.34E-03
1829	569854.5	4215233	9.91E-02	1.51E-02	6.83E-03
1830	569854.8	4215242	9.12E-02	1.39E-02	6.28E-03
1831	569855.2	4215252	8.36E-02	1.28E-02	5.76E-03
1832	569855.5	4215262	7.82E-02	1.19E-02	5.39E-03
1833	569855.8	4215271	7.41E-02	1.13E-02	5.11E-03
1834	569856.1	4215281	7.07E-02	1.08E-02	4.87E-03
1835	569856.4	4215291	6.85E-02	1.05E-02	4.72E-03
1836	569856.7	4215300	6.72E-02	1.03E-02	4.63E-03
1837	569857	4215310	6.61E-02	1.01E-02	4.56E-03
1838	569857.4	4215320	6.55E-02	1.00E-02	4.51E-03
1839	569857.7	4215329	6.59E-02	1.01E-02	4.54E-03
1840	569858	4215339	6.68E-02	1.02E-02	4.60E-03
1841	569858.3	4215349	6.82E-02	1.04E-02	4.70E-03
1842	569858.6	4215358	7.02E-02	1.07E-02	4.84E-03
1843	569858.9	4215368	7.25E-02	1.11E-02	5.00E-03
1844	569844.2	4215223	1.04E-01	1.59E-02	7.17E-03
1845	569844.5	4215233	9.77E-02	1.49E-02	6.73E-03
1846	569844.8	4215243	8.98E-02	1.37E-02	6.19E-03
1847	569845.2	4215252	8.20E-02	1.25E-02	5.65E-03
1848	569845.5	4215262	7.65E-02	1.17E-02	5.27E-03
1849	569845.8	4215272	7.25E-02	1.11E-02	5.00E-03
1850	569846.1	4215281	6.91E-02	1.05E-02	4.76E-03
1851	569846.4	4215291	6.66E-02	1.02E-02	4.59E-03
1852	569846.7	4215301	6.48E-02	9.90E-03	4.47E-03
1853	569847.1	4215310	6.31E-02	9.64E-03	4.35E-03
1854	569847.4	4215320	6.21E-02	9.48E-03	4.28E-03
1855	569847.7	4215330	6.20E-02	9.46E-03	4.27E-03
1856	569848	4215339	6.21E-02	9.48E-03	4.28E-03
1857	569848.3	4215349	6.27E-02	9.58E-03	4.32E-03
1858	569848.6	4215359	6.41E-02	9.78E-03	4.41E-03
1859	569848.9	4215368	6.55E-02	1.00E-02	4.51E-03
1860	569834.2	4215224	9.85E-02	1.50E-02	6.79E-03
1861	569834.5	4215233	9.30E-02	1.42E-02	6.41E-03
1862	569834.9	4215243	8.60E-02	1.31E-02	5.93E-03
1863	569835.2	4215253	7.89E-02	1.21E-02	5.44E-03
1864	569835.5	4215262	7.40E-02	1.13E-02	5.10E-03
1865	569835.8	4215272	7.01E-02	1.07E-02	4.83E-03
1866	569836.1	4215282	6.69E-02	1.02E-02	4.61E-03
1867	569836.4	4215291	6.43E-02	9.83E-03	4.43E-03

1868	569836.7	4215301	6.23E-02	9.51E-03	4.29E-03
1869	569837.1	4215311	6.04E-02	9.22E-03	4.16E-03
1870	569837.4	4215320	5.91E-02	9.03E-03	4.08E-03
1871	569837.7	4215330	5.87E-02	8.96E-03	4.05E-03
1872	569838	4215340	5.84E-02	8.92E-03	4.02E-03
1873	569838.3	4215349	5.85E-02	8.93E-03	4.03E-03
1874	569838.6	4215359	5.92E-02	9.03E-03	4.08E-03
1875	569838.9	4215369	5.98E-02	9.13E-03	4.12E-03
1876	569824.5	4215234	8.84E-02	1.35E-02	6.09E-03
1877	569824.9	4215243	8.21E-02	1.25E-02	5.66E-03
1878	569825.2	4215253	7.58E-02	1.16E-02	5.23E-03
1879	569825.5	4215263	7.13E-02	1.09E-02	4.91E-03
1880	569825.8	4215272	6.77E-02	1.03E-02	4.66E-03
1881	569826.1	4215282	6.46E-02	9.86E-03	4.45E-03
1882	569826.4	4215292	6.20E-02	9.47E-03	4.27E-03
1883	569826.7	4215301	5.98E-02	9.14E-03	4.12E-03
1884	569827.1	4215311	5.78E-02	8.83E-03	3.98E-03
1885	569827.4	4215321	5.65E-02	8.63E-03	3.89E-03
1886	569827.7	4215330	5.59E-02	8.53E-03	3.85E-03
1887	569828	4215340	5.53E-02	8.45E-03	3.81E-03
1888	569828.3	4215350	5.51E-02	8.41E-03	3.79E-03
1889	569828.6	4215359	5.52E-02	8.43E-03	3.80E-03
1890	569829	4215369	5.52E-02	8.43E-03	3.81E-03
1891	569814.9	4215244	7.86E-02	1.20E-02	5.42E-03
1892	569815.2	4215253	7.29E-02	1.11E-02	5.02E-03
1893	569815.5	4215263	6.87E-02	1.05E-02	4.74E-03
1894	569815.8	4215273	6.53E-02	9.98E-03	4.50E-03
1895	569816.1	4215282	6.24E-02	9.52E-03	4.30E-03
1896	569816.4	4215292	5.98E-02	9.13E-03	4.12E-03
1897	569816.8	4215302	5.75E-02	8.78E-03	3.96E-03
1898	569817.1	4215311	5.53E-02	8.45E-03	3.81E-03
1899	569817.4	4215321	5.40E-02	8.24E-03	3.72E-03
1900	569817.7	4215331	5.32E-02	8.13E-03	3.67E-03
1901	569818	4215340	5.25E-02	8.01E-03	3.62E-03
1902	569818.3	4215350	5.19E-02	7.93E-03	3.58E-03
1903	569818.6	4215360	5.17E-02	7.89E-03	3.56E-03
1904	569819	4215369	5.12E-02	7.82E-03	3.53E-03
1905	569804.9	4215244	7.40E-02	1.13E-02	5.10E-03
1906	569805.2	4215254	6.87E-02	1.05E-02	4.73E-03
1907	569805.5	4215263	6.49E-02	9.91E-03	4.47E-03
1908	569805.8	4215273	6.18E-02	9.43E-03	4.26E-03
1909	569806.1	4215283	5.91E-02	9.02E-03	4.07E-03
1910	569806.4	4215292	5.68E-02	8.67E-03	3.91E-03
1911	569806.8	4215302	5.47E-02	8.35E-03	3.77E-03
1912	569807.1	4215312	5.27E-02	8.05E-03	3.63E-03
1913	569807.4	4215321	5.14E-02	7.85E-03	3.54E-03
1914	569807.7	4215331	5.06E-02	7.73E-03	3.49E-03
1915	569808	4215341	4.98E-02	7.60E-03	3.43E-03
1916	569808.3	4215350	4.91E-02	7.50E-03	3.38E-03
1917	569808.6	4215360	4.86E-02	7.42E-03	3.35E-03
1918	569809	4215370	4.80E-02	7.32E-03	3.30E-03
1919	569795.2	4215254	6.46E-02	9.86E-03	4.45E-03

1920	569795.5	4215264	6.10E-02	9.32E-03	4.21E-03
1921	569795.8	4215273	5.82E-02	8.89E-03	4.01E-03
1922	569796.1	4215283	5.57E-02	8.51E-03	3.84E-03
1923	569796.4	4215293	5.37E-02	8.20E-03	3.70E-03
1924	569796.8	4215302	5.19E-02	7.92E-03	3.58E-03
1925	569797.1	4215312	5.02E-02	7.66E-03	3.46E-03
1926	569797.4	4215322	4.90E-02	7.48E-03	3.38E-03
1927	569797.7	4215331	4.82E-02	7.36E-03	3.32E-03
1928	569798	4215341	4.73E-02	7.22E-03	3.26E-03
1929	569798.3	4215351	4.65E-02	7.11E-03	3.21E-03
1930	569798.7	4215360	4.60E-02	7.02E-03	3.17E-03
1931	569785.2	4215254	6.08E-02	9.28E-03	4.19E-03
1932	569785.5	4215264	5.76E-02	8.79E-03	3.97E-03
1933	569785.8	4215274	5.49E-02	8.39E-03	3.78E-03
1934	569786.1	4215283	5.26E-02	8.03E-03	3.63E-03
1935	569786.5	4215293	5.09E-02	7.77E-03	3.51E-03
1936	569786.8	4215303	4.93E-02	7.53E-03	3.40E-03
1937	569787.1	4215312	4.78E-02	7.30E-03	3.29E-03
1938	569787.4	4215322	4.67E-02	7.13E-03	3.22E-03
1939	569787.7	4215332	4.59E-02	7.01E-03	3.16E-03
1940	569788	4215341	4.49E-02	6.86E-03	3.10E-03
1941	569788.3	4215351	4.42E-02	6.75E-03	3.05E-03
1942	569788.7	4215361	4.36E-02	6.66E-03	3.00E-03
1943	569775.5	4215264	5.47E-02	8.35E-03	3.77E-03
1944	569775.8	4215274	5.22E-02	7.97E-03	3.59E-03
1945	569776.1	4215284	5.00E-02	7.63E-03	3.44E-03
1946	569776.5	4215293	4.83E-02	7.38E-03	3.33E-03
1947	569776.8	4215303	4.68E-02	7.15E-03	3.23E-03
1948	569777.1	4215313	4.54E-02	6.93E-03	3.13E-03
1949	569777.4	4215322	4.44E-02	6.77E-03	3.06E-03
1950	569777.7	4215332	4.35E-02	6.65E-03	3.00E-03
1951	569778	4215342	4.26E-02	6.50E-03	2.94E-03
1952	569778.3	4215351	4.18E-02	6.39E-03	2.88E-03
1953	569778.7	4215361	4.13E-02	6.30E-03	2.84E-03
1954	569765.5	4215265	5.20E-02	7.95E-03	3.59E-03
1955	569765.8	4215274	4.97E-02	7.58E-03	3.42E-03
1956	569766.1	4215284	4.76E-02	7.27E-03	3.28E-03
1957	569766.5	4215294	4.60E-02	7.02E-03	3.17E-03
1958	569766.8	4215303	4.45E-02	6.79E-03	3.07E-03
1959	569767.1	4215313	4.31E-02	6.58E-03	2.97E-03
1960	569767.4	4215323	4.21E-02	6.43E-03	2.90E-03
1961	569767.7	4215332	4.13E-02	6.30E-03	2.84E-03
1962	569768	4215342	4.03E-02	6.16E-03	2.78E-03
1963	569768.4	4215352	3.96E-02	6.05E-03	2.73E-03
1964	569768.7	4215361	3.90E-02	5.96E-03	2.69E-03
1965	569755.8	4215275	4.73E-02	7.23E-03	3.26E-03
1966	569756.2	4215284	4.54E-02	6.93E-03	3.13E-03
1967	569756.5	4215294	4.38E-02	6.69E-03	3.02E-03
1968	569756.8	4215304	4.23E-02	6.46E-03	2.92E-03
1969	569757.1	4215313	4.10E-02	6.26E-03	2.82E-03
1970	569757.4	4215323	4.01E-02	6.12E-03	2.76E-03
1971	569757.7	4215333	3.92E-02	5.99E-03	2.70E-03

1972	569758	4215342	3.83E-02	5.85E-03	2.64E-03
1973	569758.4	4215352	3.76E-02	5.74E-03	2.59E-03
1974	569758.7	4215362	3.70E-02	5.65E-03	2.55E-03
1975	569745.8	4215275	4.51E-02	6.89E-03	3.11E-03
1976	569746.2	4215285	4.33E-02	6.61E-03	2.98E-03
1977	569746.5	4215294	4.18E-02	6.39E-03	2.88E-03
1978	569746.8	4215304	4.05E-02	6.18E-03	2.79E-03
1979	569747.1	4215314	3.92E-02	5.99E-03	2.70E-03
1980	569747.4	4215323	3.84E-02	5.86E-03	2.64E-03
1981	569747.7	4215333	3.75E-02	5.73E-03	2.58E-03
1982	569748	4215343	3.66E-02	5.58E-03	2.52E-03
1983	569748.4	4215352	3.58E-02	5.47E-03	2.47E-03
1984	569735.2	4215256	4.75E-02	7.26E-03	3.28E-03
1985	569735.5	4215266	4.51E-02	6.89E-03	3.11E-03
1986	569735.8	4215275	4.31E-02	6.58E-03	2.97E-03
1987	569736.2	4215285	4.13E-02	6.31E-03	2.85E-03
1988	569736.5	4215295	4.01E-02	6.12E-03	2.76E-03
1989	569736.8	4215304	3.89E-02	5.93E-03	2.68E-03
1990	569737.1	4215314	3.77E-02	5.76E-03	2.60E-03
1991	569737.4	4215324	3.68E-02	5.63E-03	2.54E-03
1992	569737.7	4215333	3.60E-02	5.50E-03	2.48E-03
1993	569738.1	4215343	3.50E-02	5.35E-03	2.41E-03
1994	569738.4	4215353	3.43E-02	5.24E-03	2.37E-03
1995	569724.6	4215237	5.14E-02	7.85E-03	3.54E-03
1996	569724.9	4215247	4.82E-02	7.36E-03	3.32E-03
1997	569725.2	4215256	4.54E-02	6.94E-03	3.13E-03
1998	569725.5	4215266	4.31E-02	6.58E-03	2.97E-03
1999	569725.9	4215276	4.12E-02	6.29E-03	2.84E-03
2000	569726.2	4215285	3.95E-02	6.03E-03	2.72E-03
2001	569726.5	4215295	3.84E-02	5.86E-03	2.64E-03
2002	569726.8	4215305	3.73E-02	5.70E-03	2.57E-03
2003	569727.1	4215314	3.62E-02	5.53E-03	2.50E-03
2004	569727.4	4215324	3.54E-02	5.41E-03	2.44E-03
2005	569727.7	4215334	3.46E-02	5.28E-03	2.38E-03
2006	569728.1	4215343	3.36E-02	5.13E-03	2.32E-03
2007	569728.4	4215353	3.29E-02	5.03E-03	2.27E-03
2008	569728.7	4215363	3.24E-02	4.95E-03	2.23E-03
2009	569714	4215218	5.39E-02	8.22E-03	3.71E-03
2010	569714.3	4215228	5.31E-02	8.11E-03	3.66E-03
2011	569714.6	4215237	4.98E-02	7.61E-03	3.43E-03
2012	569714.9	4215247	4.68E-02	7.14E-03	3.22E-03
2013	569715.2	4215257	4.41E-02	6.74E-03	3.04E-03
2014	569715.5	4215266	4.18E-02	6.39E-03	2.88E-03
2015	569715.9	4215276	3.99E-02	6.09E-03	2.75E-03
2016	569716.2	4215286	3.82E-02	5.84E-03	2.63E-03
2017	569716.5	4215295	3.71E-02	5.66E-03	2.56E-03
2018	569716.8	4215305	3.60E-02	5.50E-03	2.48E-03
2019	569717.1	4215315	3.50E-02	5.34E-03	2.41E-03
2020	569717.4	4215324	3.41E-02	5.21E-03	2.35E-03
2021	569717.7	4215334	3.33E-02	5.08E-03	2.29E-03
2022	569718.1	4215344	3.23E-02	4.93E-03	2.23E-03
2023	569718.4	4215353	3.16E-02	4.83E-03	2.18E-03

2024	569718.7	4215363	3.11E-02	4.75E-03	2.15E-03
2025	569719	4215373	3.06E-02	4.68E-03	2.11E-03
2026	569719.3	4215382	3.04E-02	4.65E-03	2.10E-03
2027	569709.1	4215385	2.91E-02	4.45E-03	2.01E-03
2028	569699.1	4215385	2.79E-02	4.26E-03	1.92E-03
2029	569702.4	4215377	2.84E-02	4.34E-03	1.96E-03
2030	569705.6	4215368	2.93E-02	4.47E-03	2.02E-03
2031	569708.9	4215360	3.02E-02	4.60E-03	2.08E-03
2032	569689.3	4215385	2.69E-02	4.10E-03	1.85E-03
2033	569692.7	4215376	2.74E-02	4.18E-03	1.89E-03
2034	569696.1	4215367	2.83E-02	4.32E-03	1.95E-03
2035	569699.6	4215358	2.92E-02	4.46E-03	2.01E-03
2036	569703	4215349	3.01E-02	4.60E-03	2.08E-03
2037	569706.5	4215340	3.13E-02	4.78E-03	2.16E-03
2038	569679.2	4215386	2.59E-02	3.96E-03	1.79E-03
2039	569682.6	4215377	2.65E-02	4.05E-03	1.83E-03
2040	569686	4215368	2.73E-02	4.18E-03	1.88E-03
2041	569689.4	4215359	2.82E-02	4.30E-03	1.94E-03
2042	569692.8	4215350	2.90E-02	4.43E-03	2.00E-03
2043	569696.2	4215341	3.01E-02	4.59E-03	2.07E-03
2044	569699.6	4215332	3.13E-02	4.79E-03	2.16E-03
2045	569703	4215324	3.26E-02	4.97E-03	2.24E-03
2046	569706.4	4215315	3.38E-02	5.16E-03	2.33E-03
2047	569669.2	4215386	2.50E-02	3.82E-03	1.72E-03
2048	569672.6	4215377	2.57E-02	3.92E-03	1.77E-03
2049	569675.9	4215368	2.65E-02	4.05E-03	1.83E-03
2050	569679.3	4215360	2.74E-02	4.18E-03	1.88E-03
2051	569682.7	4215351	2.82E-02	4.30E-03	1.94E-03
2052	569686.1	4215342	2.91E-02	4.45E-03	2.01E-03
2053	569689.4	4215333	3.03E-02	4.62E-03	2.09E-03
2054	569692.8	4215325	3.14E-02	4.79E-03	2.16E-03
2055	569696.2	4215316	3.25E-02	4.97E-03	2.24E-03
2056	569699.5	4215307	3.39E-02	5.18E-03	2.34E-03
2057	569702.9	4215298	3.53E-02	5.39E-03	2.43E-03
2058	569706.3	4215290	3.67E-02	5.60E-03	2.53E-03
2059	569659.2	4215386	2.41E-02	3.68E-03	1.66E-03
2060	569662.5	4215378	2.48E-02	3.79E-03	1.71E-03
2061	569665.9	4215369	2.57E-02	3.93E-03	1.77E-03
2062	569669.2	4215360	2.66E-02	4.06E-03	1.83E-03
2063	569672.5	4215352	2.74E-02	4.18E-03	1.89E-03
2064	569675.9	4215343	2.83E-02	4.32E-03	1.95E-03
2065	569679.2	4215334	2.93E-02	4.48E-03	2.02E-03
2066	569682.6	4215326	3.04E-02	4.64E-03	2.10E-03
2067	569685.9	4215317	3.15E-02	4.81E-03	2.17E-03
2068	569689.2	4215308	3.28E-02	5.01E-03	2.26E-03
2069	569692.6	4215299	3.41E-02	5.21E-03	2.35E-03
2070	569695.9	4215291	3.55E-02	5.42E-03	2.45E-03
2071	569699.2	4215282	3.71E-02	5.66E-03	2.56E-03
2072	569702.6	4215273	3.90E-02	5.96E-03	2.69E-03
2073	569705.9	4215265	4.12E-02	6.29E-03	2.84E-03
2074	569649.2	4215387	2.31E-02	3.53E-03	1.60E-03
2075	569652.5	4215378	2.39E-02	3.65E-03	1.65E-03

2076	569655.8	4215369	2.48E-02	3.79E-03	1.71E-03
2077	569659.1	4215361	2.58E-02	3.93E-03	1.78E-03
2078	569662.4	4215352	2.66E-02	4.07E-03	1.83E-03
2079	569665.7	4215344	2.75E-02	4.20E-03	1.89E-03
2080	569669	4215335	2.85E-02	4.35E-03	1.96E-03
2081	569672.3	4215326	2.95E-02	4.50E-03	2.03E-03
2082	569675.7	4215318	3.05E-02	4.66E-03	2.10E-03
2083	569679	4215309	3.18E-02	4.85E-03	2.19E-03
2084	569682.3	4215301	3.32E-02	5.07E-03	2.29E-03
2085	569685.6	4215292	3.46E-02	5.28E-03	2.38E-03
2086	569688.9	4215283	3.61E-02	5.51E-03	2.48E-03
2087	569692.2	4215275	3.78E-02	5.78E-03	2.61E-03
2088	569695.5	4215266	3.99E-02	6.09E-03	2.75E-03
2089	569698.8	4215257	4.23E-02	6.45E-03	2.91E-03
2090	569702.2	4215249	4.48E-02	6.84E-03	3.09E-03
2091	569705.5	4215240	4.77E-02	7.28E-03	3.29E-03
2092	569639.3	4215387	2.23E-02	3.41E-03	1.54E-03
2093	569642.7	4215378	2.31E-02	3.53E-03	1.59E-03
2094	569646.2	4215369	2.41E-02	3.68E-03	1.66E-03
2095	569649.6	4215360	2.51E-02	3.83E-03	1.73E-03
2096	569653.1	4215351	2.60E-02	3.98E-03	1.79E-03
2097	569656.5	4215342	2.70E-02	4.12E-03	1.86E-03
2098	569660	4215333	2.81E-02	4.28E-03	1.93E-03
2099	569663.4	4215324	2.90E-02	4.43E-03	2.00E-03
2100	569666.9	4215315	3.01E-02	4.59E-03	2.07E-03
2101	569670.3	4215306	3.15E-02	4.81E-03	2.17E-03
2102	569673.7	4215297	3.30E-02	5.05E-03	2.28E-03
2103	569677.2	4215288	3.46E-02	5.29E-03	2.39E-03
2104	569680.6	4215279	3.63E-02	5.54E-03	2.50E-03
2105	569684.1	4215270	3.82E-02	5.83E-03	2.63E-03
2106	569687.5	4215261	4.03E-02	6.16E-03	2.78E-03
2107	569691	4215252	4.28E-02	6.53E-03	2.95E-03
2108	569694.4	4215243	4.55E-02	6.94E-03	3.13E-03
2109	569697.9	4215234	4.85E-02	7.40E-03	3.34E-03
2110	569701.3	4215225	5.15E-02	7.87E-03	3.55E-03
2111	569704.7	4215216	5.20E-02	7.94E-03	3.58E-03
2112	569629.3	4215387	2.15E-02	3.29E-03	1.48E-03
2113	569632.7	4215378	2.23E-02	3.41E-03	1.54E-03
2114	569636.1	4215369	2.33E-02	3.56E-03	1.61E-03
2115	569639.5	4215360	2.43E-02	3.71E-03	1.67E-03
2116	569642.9	4215352	2.53E-02	3.86E-03	1.74E-03
2117	569646.3	4215343	2.63E-02	4.01E-03	1.81E-03
2118	569649.8	4215334	2.73E-02	4.17E-03	1.88E-03
2119	569653.2	4215325	2.83E-02	4.33E-03	1.95E-03
2120	569656.6	4215316	2.93E-02	4.47E-03	2.02E-03
2121	569660	4215307	3.07E-02	4.69E-03	2.11E-03
2122	569663.4	4215298	3.22E-02	4.91E-03	2.22E-03
2123	569666.8	4215289	3.38E-02	5.17E-03	2.33E-03
2124	569670.2	4215280	3.55E-02	5.42E-03	2.44E-03
2125	569673.7	4215272	3.72E-02	5.68E-03	2.56E-03
2126	569677.1	4215263	3.92E-02	5.98E-03	2.70E-03
2127	569680.5	4215254	4.14E-02	6.32E-03	2.85E-03

2128	569683.9	4215245	4.36E-02	6.66E-03	3.01E-03
2129	569687.3	4215236	4.63E-02	7.07E-03	3.19E-03
2130	569690.7	4215227	4.94E-02	7.54E-03	3.40E-03
2131	569694.1	4215218	5.01E-02	7.64E-03	3.45E-03
2132	569697.6	4215209	5.03E-02	7.69E-03	3.47E-03
2133	569625.9	4215396	2.07E-02	3.16E-03	1.43E-03
2134	569619.3	4215387	2.08E-02	3.18E-03	1.43E-03
2135	569622.6	4215379	2.16E-02	3.30E-03	1.49E-03
2136	569626	4215370	2.25E-02	3.44E-03	1.55E-03
2137	569629.4	4215361	2.35E-02	3.59E-03	1.62E-03
2138	569632.8	4215352	2.45E-02	3.74E-03	1.69E-03
2139	569636.2	4215343	2.55E-02	3.90E-03	1.76E-03
2140	569639.6	4215335	2.66E-02	4.07E-03	1.84E-03
2141	569643	4215326	2.77E-02	4.23E-03	1.91E-03
2142	569646.3	4215317	2.87E-02	4.39E-03	1.98E-03
2143	569649.7	4215308	3.01E-02	4.59E-03	2.07E-03
2144	569653.1	4215299	3.16E-02	4.82E-03	2.17E-03
2145	569656.5	4215291	3.32E-02	5.06E-03	2.29E-03
2146	569659.9	4215282	3.48E-02	5.31E-03	2.40E-03
2147	569663.3	4215273	3.63E-02	5.55E-03	2.50E-03
2148	569666.7	4215264	3.81E-02	5.82E-03	2.63E-03
2149	569670.1	4215255	4.01E-02	6.13E-03	2.77E-03
2150	569673.4	4215246	4.20E-02	6.42E-03	2.90E-03
2151	569676.8	4215238	4.42E-02	6.75E-03	3.05E-03
2152	569680.2	4215229	4.68E-02	7.14E-03	3.22E-03
2153	569683.6	4215220	4.76E-02	7.27E-03	3.28E-03
2154	569687	4215211	4.78E-02	7.29E-03	3.29E-03
2155	569690.4	4215202	4.81E-02	7.34E-03	3.31E-03
2156	569615.9	4215396	2.00E-02	3.06E-03	1.38E-03
2157	569616.2	4215406	1.94E-02	2.96E-03	1.34E-03
2158	569616.5	4215416	1.89E-02	2.88E-03	1.30E-03
2159	569609.2	4215388	2.01E-02	3.08E-03	1.39E-03
2160	569612.6	4215379	2.09E-02	3.20E-03	1.44E-03
2161	569616	4215370	2.18E-02	3.33E-03	1.50E-03
2162	569619.3	4215362	2.28E-02	3.48E-03	1.57E-03
2163	569622.7	4215353	2.38E-02	3.63E-03	1.64E-03
2164	569626	4215344	2.48E-02	3.78E-03	1.71E-03
2165	569629.4	4215335	2.59E-02	3.96E-03	1.79E-03
2166	569632.8	4215327	2.71E-02	4.14E-03	1.87E-03
2167	569636.1	4215318	2.83E-02	4.31E-03	1.95E-03
2168	569639.5	4215309	2.96E-02	4.51E-03	2.04E-03
2169	569642.8	4215300	3.10E-02	4.73E-03	2.14E-03
2170	569646.2	4215292	3.26E-02	4.97E-03	2.24E-03
2171	569649.6	4215283	3.41E-02	5.21E-03	2.35E-03
2172	569652.9	4215274	3.56E-02	5.43E-03	2.45E-03
2173	569656.3	4215265	3.72E-02	5.68E-03	2.56E-03
2174	569659.7	4215257	3.90E-02	5.96E-03	2.69E-03
2175	569663	4215248	4.06E-02	6.20E-03	2.80E-03
2176	569666.4	4215239	4.24E-02	6.47E-03	2.92E-03
2177	569669.7	4215230	4.45E-02	6.79E-03	3.06E-03
2178	569673.1	4215222	4.54E-02	6.93E-03	3.13E-03
2179	569676.5	4215213	4.52E-02	6.90E-03	3.12E-03

2180	569679.8	4215204	4.52E-02	6.90E-03	3.11E-03
2181	569683.2	4215195	4.52E-02	6.90E-03	3.11E-03
2182	569695.1	4215183	4.53E-02	6.92E-03	3.12E-03
2183	569605.9	4215397	1.93E-02	2.95E-03	1.33E-03
2184	569606.2	4215406	1.87E-02	2.86E-03	1.29E-03
2185	569606.5	4215416	1.83E-02	2.79E-03	1.26E-03
2186	569606.8	4215426	1.78E-02	2.72E-03	1.23E-03
2187	569599.2	4215388	1.95E-02	2.98E-03	1.34E-03
2188	569602.6	4215379	2.03E-02	3.10E-03	1.40E-03
2189	569605.9	4215371	2.12E-02	3.23E-03	1.46E-03
2190	569609.2	4215362	2.21E-02	3.37E-03	1.52E-03
2191	569612.6	4215353	2.30E-02	3.52E-03	1.59E-03
2192	569615.9	4215345	2.40E-02	3.67E-03	1.66E-03
2193	569619.2	4215336	2.52E-02	3.85E-03	1.74E-03
2194	569622.6	4215327	2.64E-02	4.03E-03	1.82E-03
2195	569625.9	4215319	2.76E-02	4.22E-03	1.90E-03
2196	569629.3	4215310	2.90E-02	4.42E-03	2.00E-03
2197	569632.6	4215301	3.05E-02	4.65E-03	2.10E-03
2198	569635.9	4215293	3.20E-02	4.89E-03	2.21E-03
2199	569639.3	4215284	3.36E-02	5.13E-03	2.32E-03
2200	569642.6	4215275	3.49E-02	5.33E-03	2.41E-03
2201	569646	4215267	3.64E-02	5.55E-03	2.51E-03
2202	569649.3	4215258	3.80E-02	5.80E-03	2.62E-03
2203	569652.6	4215249	3.92E-02	5.98E-03	2.70E-03
2204	569656	4215241	4.05E-02	6.19E-03	2.79E-03
2205	569659.3	4215232	4.22E-02	6.44E-03	2.91E-03
2206	569662.6	4215223	4.34E-02	6.63E-03	2.99E-03
2207	569666	4215214	4.30E-02	6.56E-03	2.96E-03
2208	569669.3	4215206	4.26E-02	6.51E-03	2.94E-03
2209	569672.7	4215197	4.24E-02	6.48E-03	2.92E-03
2210	569676	4215188	4.18E-02	6.38E-03	2.88E-03
2211	569687.9	4215176	4.19E-02	6.39E-03	2.89E-03
2212	569595.9	4215397	1.87E-02	2.86E-03	1.29E-03
2213	569596.2	4215407	1.81E-02	2.77E-03	1.25E-03
2214	569596.5	4215416	1.77E-02	2.70E-03	1.22E-03
2215	569596.8	4215426	1.73E-02	2.64E-03	1.19E-03
2216	569597.1	4215435	1.68E-02	2.57E-03	1.16E-03
2217	569589.3	4215388	1.89E-02	2.89E-03	1.31E-03
2218	569592.8	4215379	1.97E-02	3.01E-03	1.36E-03
2219	569596.2	4215370	2.06E-02	3.15E-03	1.42E-03
2220	569599.7	4215361	2.16E-02	3.29E-03	1.49E-03
2221	569603.1	4215352	2.25E-02	3.44E-03	1.55E-03
2222	569606.6	4215343	2.36E-02	3.60E-03	1.63E-03
2223	569610	4215334	2.48E-02	3.79E-03	1.71E-03
2224	569613.5	4215325	2.61E-02	3.99E-03	1.80E-03
2225	569616.9	4215316	2.74E-02	4.19E-03	1.89E-03
2226	569620.4	4215307	2.89E-02	4.41E-03	1.99E-03
2227	569623.8	4215298	3.04E-02	4.64E-03	2.10E-03
2228	569627.3	4215289	3.21E-02	4.90E-03	2.21E-03
2229	569630.7	4215281	3.35E-02	5.12E-03	2.31E-03
2230	569634.2	4215272	3.50E-02	5.35E-03	2.41E-03
2231	569637.6	4215263	3.64E-02	5.56E-03	2.51E-03

2232	569641.1	4215254	3.77E-02	5.76E-03	2.60E-03
2233	569644.5	4215245	3.85E-02	5.89E-03	2.66E-03
2234	569648	4215236	3.96E-02	6.05E-03	2.73E-03
2235	569651.4	4215227	4.10E-02	6.26E-03	2.83E-03
2236	569654.9	4215218	4.10E-02	6.26E-03	2.83E-03
2237	569658.3	4215209	4.07E-02	6.21E-03	2.80E-03
2238	569661.8	4215200	4.02E-02	6.13E-03	2.77E-03
2239	569665.2	4215191	3.96E-02	6.05E-03	2.73E-03
2240	569668.7	4215182	3.91E-02	5.97E-03	2.69E-03
2241	569680.9	4215169	3.92E-02	5.98E-03	2.70E-03
2242	569585.9	4215397	1.82E-02	2.78E-03	1.25E-03
2243	569586.2	4215407	1.76E-02	2.69E-03	1.21E-03
2244	569586.5	4215416	1.72E-02	2.62E-03	1.18E-03
2245	569586.8	4215426	1.68E-02	2.56E-03	1.15E-03
2246	569587.1	4215436	1.63E-02	2.50E-03	1.13E-03
2247	569918.2	4215544	2.77E-02	4.23E-03	1.91E-03
2248	569927.5	4215543	2.82E-02	4.31E-03	1.94E-03
2249	569936.8	4215541	2.87E-02	4.39E-03	1.98E-03
2250	569946.1	4215539	2.93E-02	4.47E-03	2.02E-03
2251	569955.4	4215538	2.99E-02	4.57E-03	2.06E-03
2252	569964.8	4215536	3.06E-02	4.67E-03	2.11E-03
2253	569974.1	4215534	3.14E-02	4.79E-03	2.16E-03
2254	569983.4	4215533	3.23E-02	4.93E-03	2.22E-03
2255	569992.7	4215531	3.32E-02	5.07E-03	2.29E-03
2256	570002	4215529	3.42E-02	5.23E-03	2.36E-03
2257	570011.3	4215527	3.53E-02	5.39E-03	2.43E-03
2258	570020.6	4215526	3.63E-02	5.55E-03	2.50E-03
2259	569911.2	4215552	2.60E-02	3.96E-03	1.79E-03
2260	569902.5	4215550	2.64E-02	4.03E-03	1.82E-03
2261	569929.3	4215552	2.59E-02	3.96E-03	1.79E-03
2262	569938.6	4215551	2.63E-02	4.02E-03	1.81E-03
2263	569947.9	4215549	2.68E-02	4.09E-03	1.85E-03
2264	569957.2	4215547	2.73E-02	4.17E-03	1.88E-03
2265	569966.5	4215546	2.79E-02	4.26E-03	1.92E-03
2266	569975.8	4215544	2.85E-02	4.35E-03	1.96E-03
2267	569985.2	4215542	2.92E-02	4.46E-03	2.01E-03
2268	569994.5	4215541	3.00E-02	4.58E-03	2.07E-03
2269	570003.8	4215539	3.08E-02	4.70E-03	2.12E-03
2270	570013.1	4215537	3.16E-02	4.83E-03	2.18E-03
2271	570022.4	4215536	3.25E-02	4.96E-03	2.24E-03
2272	569913	4215562	2.39E-02	3.66E-03	1.65E-03
2273	569895.7	4215557	2.48E-02	3.78E-03	1.71E-03
2274	569878.3	4215553	2.56E-02	3.91E-03	1.76E-03
2275	569921.7	4215564	2.35E-02	3.59E-03	1.62E-03
2276	569931	4215562	2.39E-02	3.64E-03	1.64E-03
2277	569940.3	4215561	2.42E-02	3.70E-03	1.67E-03
2278	569949.7	4215559	2.46E-02	3.75E-03	1.69E-03
2279	569959	4215557	2.50E-02	3.82E-03	1.72E-03
2280	569968.3	4215556	2.55E-02	3.89E-03	1.76E-03
2281	569977.6	4215554	2.60E-02	3.97E-03	1.79E-03
2282	569986.9	4215552	2.66E-02	4.06E-03	1.83E-03
2283	569996.2	4215551	2.72E-02	4.15E-03	1.87E-03

2284	570005.6	4215549	2.78E-02	4.24E-03	1.92E-03
2285	570014.9	4215547	2.85E-02	4.35E-03	1.96E-03
2286	570024.2	4215546	2.91E-02	4.45E-03	2.01E-03
2287	570033.5	4215544	2.97E-02	4.54E-03	2.05E-03
2288	569914.8	4215572	2.21E-02	3.38E-03	1.52E-03
2289	569897.6	4215567	2.29E-02	3.50E-03	1.58E-03
2290	569880.3	4215563	2.37E-02	3.62E-03	1.63E-03
2291	569863	4215558	2.44E-02	3.73E-03	1.68E-03
2292	569923.5	4215574	2.17E-02	3.32E-03	1.50E-03
2293	569932.8	4215572	2.20E-02	3.36E-03	1.52E-03
2294	569942.1	4215570	2.23E-02	3.41E-03	1.54E-03
2295	569951.4	4215569	2.26E-02	3.46E-03	1.56E-03
2296	569960.7	4215567	2.30E-02	3.51E-03	1.58E-03
2297	569970.1	4215565	2.34E-02	3.57E-03	1.61E-03
2298	569979.4	4215564	2.38E-02	3.63E-03	1.64E-03
2299	569988.7	4215562	2.42E-02	3.70E-03	1.67E-03
2300	569998	4215560	2.47E-02	3.77E-03	1.70E-03
2301	570007.3	4215559	2.52E-02	3.85E-03	1.74E-03
2302	570016.6	4215557	2.58E-02	3.93E-03	1.78E-03
2303	570026	4215555	2.63E-02	4.02E-03	1.81E-03
2304	569916.7	4215581	2.05E-02	3.13E-03	1.41E-03
2305	569899.4	4215577	2.12E-02	3.24E-03	1.46E-03
2306	569882.2	4215573	2.20E-02	3.35E-03	1.51E-03
2307	569865	4215568	2.27E-02	3.46E-03	1.56E-03
2308	569847.8	4215564	2.33E-02	3.56E-03	1.61E-03
2309	569830.6	4215559	2.30E-02	3.51E-03	1.59E-03
2310	569934.6	4215582	2.04E-02	3.11E-03	1.40E-03
2311	569943.9	4215580	2.06E-02	3.15E-03	1.42E-03
2312	569953.2	4215579	2.09E-02	3.19E-03	1.44E-03
2313	569962.5	4215577	2.12E-02	3.24E-03	1.46E-03
2314	569971.8	4215575	2.15E-02	3.29E-03	1.48E-03
2315	569981.1	4215574	2.18E-02	3.33E-03	1.50E-03
2316	569990.5	4215572	2.22E-02	3.39E-03	1.53E-03
2317	569999.8	4215570	2.26E-02	3.45E-03	1.56E-03
2318	570009.1	4215569	2.30E-02	3.52E-03	1.59E-03
2319	570065	4215558	2.60E-02	3.96E-03	1.79E-03
2320	570074.3	4215557	2.67E-02	4.07E-03	1.84E-03
2321	570083.6	4215555	2.74E-02	4.19E-03	1.89E-03
2322	569917.9	4215591	1.90E-02	2.91E-03	1.31E-03
2323	569908.7	4215589	1.94E-02	2.96E-03	1.34E-03
2324	569899.6	4215586	1.98E-02	3.02E-03	1.36E-03
2325	569890.5	4215584	2.02E-02	3.08E-03	1.39E-03
2326	569881.3	4215582	2.05E-02	3.13E-03	1.41E-03
2327	569872.2	4215579	2.09E-02	3.19E-03	1.44E-03
2328	569863	4215577	2.12E-02	3.24E-03	1.46E-03
2329	569853.9	4215575	2.16E-02	3.29E-03	1.49E-03
2330	569844.8	4215572	2.19E-02	3.35E-03	1.51E-03
2331	569835.6	4215570	2.14E-02	3.27E-03	1.48E-03
2332	569826.5	4215568	2.16E-02	3.30E-03	1.49E-03
2333	569817.3	4215565	2.18E-02	3.34E-03	1.51E-03
2334	569808.2	4215563	2.20E-02	3.37E-03	1.52E-03
2335	569927	4215593	1.87E-02	2.85E-03	1.29E-03

2336	569936.3	4215592	1.89E-02	2.88E-03	1.30E-03
2337	569945.7	4215590	1.91E-02	2.92E-03	1.32E-03
2338	569955	4215588	1.94E-02	2.95E-03	1.33E-03
2339	569964.3	4215587	1.96E-02	2.99E-03	1.35E-03
2340	569973.6	4215585	1.99E-02	3.03E-03	1.37E-03
2341	569982.9	4215583	2.01E-02	3.07E-03	1.39E-03
2342	569992.2	4215582	2.04E-02	3.12E-03	1.41E-03
2343	570048.1	4215572	2.28E-02	3.48E-03	1.57E-03
2344	570057.4	4215570	2.32E-02	3.55E-03	1.60E-03
2345	570066.8	4215568	2.38E-02	3.64E-03	1.64E-03
2346	570076.1	4215567	2.45E-02	3.74E-03	1.69E-03
2347	570085.4	4215565	2.52E-02	3.84E-03	1.73E-03
2348	569919.7	4215601	1.77E-02	2.71E-03	1.22E-03
2349	569910.6	4215599	1.81E-02	2.76E-03	1.24E-03
2350	569901.6	4215596	1.84E-02	2.81E-03	1.27E-03
2351	569892.5	4215594	1.88E-02	2.86E-03	1.29E-03
2352	569883.4	4215592	1.91E-02	2.92E-03	1.32E-03
2353	569874.4	4215589	1.94E-02	2.97E-03	1.34E-03
2354	569865.3	4215587	1.98E-02	3.02E-03	1.36E-03
2355	569856.2	4215585	2.01E-02	3.07E-03	1.39E-03
2356	569847.1	4215582	2.04E-02	3.12E-03	1.41E-03
2357	569838.1	4215580	2.07E-02	3.17E-03	1.43E-03
2358	569829	4215578	2.02E-02	3.09E-03	1.39E-03
2359	569819.9	4215575	2.04E-02	3.12E-03	1.41E-03
2360	569810.8	4215573	2.06E-02	3.15E-03	1.42E-03
2361	569801.8	4215571	2.08E-02	3.17E-03	1.43E-03
2362	569792.7	4215568	2.10E-02	3.20E-03	1.45E-03
2363	569928.8	4215603	1.74E-02	2.66E-03	1.20E-03
2364	569938.1	4215602	1.76E-02	2.68E-03	1.21E-03
2365	569947.4	4215600	1.78E-02	2.71E-03	1.22E-03
2366	569956.7	4215598	1.80E-02	2.75E-03	1.24E-03
2367	569966.1	4215597	1.82E-02	2.78E-03	1.25E-03
2368	569975.4	4215595	1.84E-02	2.81E-03	1.27E-03
2369	570031.3	4215585	2.02E-02	3.08E-03	1.39E-03
2370	570040.6	4215583	2.06E-02	3.14E-03	1.42E-03
2371	570049.9	4215582	2.10E-02	3.21E-03	1.45E-03
2372	570059.2	4215580	2.15E-02	3.28E-03	1.48E-03
2373	570068.5	4215578	2.20E-02	3.36E-03	1.52E-03
2374	570077.8	4215576	2.26E-02	3.45E-03	1.56E-03
2375	570087.2	4215575	2.32E-02	3.54E-03	1.60E-03
2376	569921.6	4215611	1.66E-02	2.53E-03	1.14E-03
2377	569912.5	4215609	1.69E-02	2.57E-03	1.16E-03
2378	569903.5	4215606	1.72E-02	2.62E-03	1.18E-03
2379	569894.5	4215604	1.75E-02	2.67E-03	1.20E-03
2380	569885.5	4215602	1.78E-02	2.72E-03	1.23E-03
2381	569876.5	4215599	1.81E-02	2.77E-03	1.25E-03
2382	569867.5	4215597	1.84E-02	2.82E-03	1.27E-03
2383	569858.5	4215595	1.88E-02	2.86E-03	1.29E-03
2384	569849.4	4215592	1.91E-02	2.91E-03	1.31E-03
2385	569840.4	4215590	1.94E-02	2.96E-03	1.33E-03
2386	569831.4	4215588	1.97E-02	3.00E-03	1.35E-03
2387	569822.4	4215585	1.91E-02	2.92E-03	1.32E-03

2388	569813.4	4215583	1.93E-02	2.94E-03	1.33E-03
2389	569804.4	4215581	1.95E-02	2.97E-03	1.34E-03
2390	569795.4	4215578	1.97E-02	3.00E-03	1.35E-03
2391	569786.3	4215576	1.98E-02	3.03E-03	1.37E-03
2392	569930.6	4215613	1.62E-02	2.48E-03	1.12E-03
2393	569939.9	4215611	1.64E-02	2.51E-03	1.13E-03
2394	569949.2	4215610	1.66E-02	2.53E-03	1.14E-03
2395	570005.1	4215600	1.78E-02	2.72E-03	1.23E-03
2396	570014.4	4215598	1.81E-02	2.76E-03	1.25E-03
2397	570023.7	4215596	1.84E-02	2.81E-03	1.27E-03
2398	570033	4215595	1.87E-02	2.86E-03	1.29E-03
2399	570042.3	4215593	1.91E-02	2.92E-03	1.32E-03
2400	570051.7	4215591	1.95E-02	2.98E-03	1.34E-03
2401	570061	4215590	1.99E-02	3.04E-03	1.37E-03
2402	570070.3	4215588	2.04E-02	3.11E-03	1.41E-03
2403	570079.6	4215586	2.09E-02	3.19E-03	1.44E-03
2404	570088.9	4215585	2.15E-02	3.28E-03	1.48E-03
2405	569923.4	4215621	1.55E-02	2.37E-03	1.07E-03
2406	569914.4	4215618	1.58E-02	2.41E-03	1.09E-03
2407	569905.5	4215616	1.61E-02	2.45E-03	1.11E-03
2408	569896.5	4215614	1.63E-02	2.50E-03	1.13E-03
2409	569887.5	4215611	1.66E-02	2.54E-03	1.15E-03
2410	569878.6	4215609	1.69E-02	2.59E-03	1.17E-03
2411	569869.6	4215607	1.72E-02	2.63E-03	1.19E-03
2412	569860.6	4215605	1.75E-02	2.68E-03	1.21E-03
2413	569851.7	4215602	1.78E-02	2.72E-03	1.23E-03
2414	569842.7	4215600	1.81E-02	2.76E-03	1.25E-03
2415	569833.8	4215598	1.84E-02	2.81E-03	1.27E-03
2416	569824.8	4215595	1.87E-02	2.85E-03	1.29E-03
2417	569815.8	4215593	1.81E-02	2.77E-03	1.25E-03
2418	569806.9	4215591	1.83E-02	2.79E-03	1.26E-03
2419	569797.9	4215588	1.85E-02	2.82E-03	1.27E-03
2420	569789	4215586	1.86E-02	2.85E-03	1.28E-03
2421	569932.3	4215623	1.52E-02	2.33E-03	1.05E-03
2422	569988.2	4215613	1.62E-02	2.48E-03	1.12E-03
2423	569997.5	4215611	1.64E-02	2.51E-03	1.13E-03
2424	570006.9	4215610	1.66E-02	2.54E-03	1.15E-03
2425	570016.2	4215608	1.69E-02	2.57E-03	1.16E-03
2426	570025.5	4215606	1.71E-02	2.61E-03	1.18E-03
2427	570034.8	4215605	1.74E-02	2.66E-03	1.20E-03
2428	570044.1	4215603	1.78E-02	2.72E-03	1.23E-03
2429	570053.4	4215601	1.82E-02	2.78E-03	1.25E-03
2430	570062.7	4215600	1.86E-02	2.84E-03	1.28E-03
2431	570072.1	4215598	1.90E-02	2.91E-03	1.31E-03
2432	570081.4	4215596	1.95E-02	2.98E-03	1.34E-03
2433	570090.7	4215595	2.00E-02	3.06E-03	1.38E-03
2434	569925.2	4215631	1.46E-02	2.22E-03	1.00E-03
2435	569916.3	4215628	1.48E-02	2.26E-03	1.02E-03
2436	569907.4	4215626	1.51E-02	2.30E-03	1.04E-03
2437	569898.5	4215624	1.53E-02	2.34E-03	1.06E-03
2438	569889.5	4215621	1.56E-02	2.38E-03	1.07E-03
2439	569880.6	4215619	1.58E-02	2.42E-03	1.09E-03

2440	569871.7	4215617	1.61E-02	2.46E-03	1.11E-03
2441	569862.8	4215615	1.64E-02	2.51E-03	1.13E-03
2442	569853.9	4215612	1.67E-02	2.55E-03	1.15E-03
2443	569845	4215610	1.70E-02	2.59E-03	1.17E-03
2444	569836.1	4215608	1.72E-02	2.63E-03	1.19E-03
2445	569827.1	4215605	1.75E-02	2.67E-03	1.21E-03
2446	569818.2	4215603	1.71E-02	2.61E-03	1.18E-03
2447	569809.3	4215601	1.72E-02	2.63E-03	1.19E-03
2448	569800.4	4215598	1.74E-02	2.65E-03	1.20E-03
2449	569791.5	4215596	1.75E-02	2.68E-03	1.21E-03
2450	569971.4	4215626	1.49E-02	2.27E-03	1.02E-03
2451	569980.7	4215624	1.50E-02	2.29E-03	1.04E-03
2452	569990	4215623	1.52E-02	2.32E-03	1.05E-03
2453	569999.3	4215621	1.54E-02	2.35E-03	1.06E-03
2454	570008.6	4215619	1.56E-02	2.38E-03	1.07E-03
2455	570017.9	4215618	1.58E-02	2.41E-03	1.09E-03
2456	570027.3	4215616	1.60E-02	2.44E-03	1.10E-03
2457	570036.6	4215614	1.63E-02	2.49E-03	1.12E-03
2458	570045.9	4215613	1.67E-02	2.55E-03	1.15E-03
2459	570055.2	4215611	1.70E-02	2.60E-03	1.17E-03
2460	570064.5	4215609	1.74E-02	2.66E-03	1.20E-03
2461	570073.8	4215608	1.78E-02	2.72E-03	1.23E-03
2462	570083.2	4215606	1.83E-02	2.79E-03	1.26E-03
2463	570092.5	4215604	1.88E-02	2.87E-03	1.29E-03
2464	569909.3	4215636	1.42E-02	2.16E-03	9.77E-04
2465	569900.4	4215634	1.44E-02	2.20E-03	9.93E-04
2466	569891.5	4215631	1.47E-02	2.24E-03	1.01E-03
2467	569882.6	4215629	1.49E-02	2.27E-03	1.03E-03
2468	569873.8	4215627	1.51E-02	2.31E-03	1.04E-03
2469	569864.9	4215624	1.54E-02	2.35E-03	1.06E-03
2470	569856	4215622	1.57E-02	2.39E-03	1.08E-03
2471	569847.2	4215620	1.59E-02	2.43E-03	1.10E-03
2472	569838.3	4215618	1.62E-02	2.47E-03	1.11E-03
2473	569829.4	4215615	1.64E-02	2.51E-03	1.13E-03
2474	569820.5	4215613	1.67E-02	2.54E-03	1.15E-03
2475	569811.7	4215611	1.62E-02	2.48E-03	1.12E-03
2476	569802.8	4215608	1.64E-02	2.50E-03	1.13E-03
2477	569945.2	4215641	1.36E-02	2.08E-03	9.38E-04
2478	569954.5	4215639	1.37E-02	2.09E-03	9.45E-04
2479	569963.8	4215638	1.38E-02	2.11E-03	9.53E-04
2480	569973.1	4215636	1.40E-02	2.13E-03	9.62E-04
2481	569982.5	4215634	1.41E-02	2.16E-03	9.73E-04
2482	569991.8	4215633	1.43E-02	2.18E-03	9.84E-04
2483	570001.1	4215631	1.45E-02	2.21E-03	9.96E-04
2484	570010.4	4215629	1.46E-02	2.24E-03	1.01E-03
2485	570019.7	4215628	1.48E-02	2.27E-03	1.02E-03
2486	570029	4215626	1.51E-02	2.30E-03	1.04E-03
2487	570038.3	4215624	1.54E-02	2.35E-03	1.06E-03
2488	570047.7	4215623	1.57E-02	2.39E-03	1.08E-03
2489	570057	4215621	1.60E-02	2.44E-03	1.10E-03
2490	570066.3	4215619	1.64E-02	2.50E-03	1.13E-03
2491	570075.6	4215618	1.67E-02	2.56E-03	1.15E-03

2492	570084.9	4215616	1.72E-02	2.62E-03	1.18E-03
2493	570094.2	4215614	1.76E-02	2.69E-03	1.22E-03
2494	569902.3	4215643	1.36E-02	2.07E-03	9.36E-04
2495	569893.5	4215641	1.38E-02	2.11E-03	9.51E-04
2496	569884.6	4215639	1.40E-02	2.14E-03	9.66E-04
2497	569875.8	4215637	1.42E-02	2.18E-03	9.82E-04
2498	569867	4215634	1.45E-02	2.21E-03	9.98E-04
2499	569858.1	4215632	1.47E-02	2.25E-03	1.01E-03
2500	569849.3	4215630	1.49E-02	2.28E-03	1.03E-03
2501	569840.5	4215628	1.52E-02	2.32E-03	1.05E-03
2502	569831.6	4215625	1.54E-02	2.35E-03	1.06E-03
2503	569822.8	4215623	1.57E-02	2.39E-03	1.08E-03
2504	569814	4215621	1.59E-02	2.43E-03	1.09E-03
2505	569937.6	4215653	1.28E-02	1.95E-03	8.79E-04
2506	569947	4215651	1.28E-02	1.96E-03	8.85E-04
2507	569956.3	4215649	1.29E-02	1.98E-03	8.91E-04
2508	569965.6	4215647	1.30E-02	1.99E-03	8.98E-04
2509	569974.9	4215646	1.32E-02	2.01E-03	9.07E-04
2510	569984.2	4215644	1.33E-02	2.03E-03	9.16E-04
2511	569993.5	4215642	1.35E-02	2.05E-03	9.27E-04
2512	570002.9	4215641	1.36E-02	2.08E-03	9.39E-04
2513	570012.2	4215639	1.38E-02	2.11E-03	9.52E-04
2514	570021.5	4215637	1.40E-02	2.14E-03	9.66E-04
2515	570030.8	4215636	1.42E-02	2.18E-03	9.82E-04
2516	570040.1	4215634	1.45E-02	2.21E-03	9.99E-04
2517	570049.4	4215632	1.48E-02	2.26E-03	1.02E-03
2518	570058.7	4215631	1.51E-02	2.30E-03	1.04E-03
2519	570068.1	4215629	1.54E-02	2.35E-03	1.06E-03
2520	570077.4	4215627	1.58E-02	2.41E-03	1.09E-03
2521	570086.7	4215626	1.62E-02	2.47E-03	1.11E-03
2522	570096	4215624	1.66E-02	2.54E-03	1.14E-03
2523	569930.6	4215660	1.23E-02	1.87E-03	8.44E-04
2524	569921.8	4215658	1.24E-02	1.90E-03	8.57E-04
2525	569895.4	4215651	1.30E-02	1.99E-03	8.97E-04
2526	569886.6	4215649	1.32E-02	2.02E-03	9.11E-04
2527	569877.8	4215647	1.34E-02	2.05E-03	9.25E-04
2528	569869	4215644	1.36E-02	2.08E-03	9.40E-04
2529	569860.2	4215642	1.39E-02	2.12E-03	9.55E-04
2530	569851.4	4215640	1.41E-02	2.15E-03	9.70E-04
2531	569842.6	4215637	1.43E-02	2.18E-03	9.85E-04
2532	569833.8	4215635	1.45E-02	2.22E-03	1.00E-03
2533	569816.2	4215631	1.49E-02	2.28E-03	1.03E-03
2534	569939.4	4215662	1.21E-02	1.84E-03	8.32E-04
2535	569948.7	4215661	1.22E-02	1.86E-03	8.37E-04
2536	569958	4215659	1.22E-02	1.87E-03	8.43E-04
2537	569967.4	4215657	1.23E-02	1.88E-03	8.50E-04
2538	569976.7	4215656	1.24E-02	1.90E-03	8.58E-04
2539	569986	4215654	1.26E-02	1.92E-03	8.67E-04
2540	569995.3	4215652	1.27E-02	1.94E-03	8.76E-04
2541	570004.6	4215651	1.29E-02	1.97E-03	8.88E-04
2542	570013.9	4215649	1.31E-02	2.00E-03	9.01E-04
2543	570023.3	4215647	1.33E-02	2.03E-03	9.15E-04

2544	570032.6	4215646	1.35E-02	2.06E-03	9.30E-04
2545	570041.9	4215644	1.37E-02	2.10E-03	9.46E-04
2546	570051.2	4215642	1.40E-02	2.13E-03	9.63E-04
2547	570060.5	4215641	1.43E-02	2.18E-03	9.83E-04
2548	570069.8	4215639	1.46E-02	2.22E-03	1.00E-03
2549	570079.1	4215637	1.49E-02	2.27E-03	1.03E-03
2550	570088.5	4215636	1.53E-02	2.33E-03	1.05E-03
2551	570097.8	4215634	1.57E-02	2.39E-03	1.08E-03
2552	569932	4215670	1.16E-02	1.77E-03	8.00E-04
2553	569922.9	4215667	1.18E-02	1.80E-03	8.12E-04
2554	569913.7	4215665	1.20E-02	1.83E-03	8.25E-04
2555	569877	4215656	1.27E-02	1.95E-03	8.78E-04
2556	569867.9	4215653	1.29E-02	1.98E-03	8.92E-04
2557	569858.7	4215651	1.32E-02	2.01E-03	9.07E-04
2558	569849.5	4215649	1.34E-02	2.04E-03	9.21E-04
2559	569840.4	4215646	1.36E-02	2.07E-03	9.36E-04
2560	569831.2	4215644	1.38E-02	2.11E-03	9.51E-04
2561	569941.2	4215672	1.14E-02	1.75E-03	7.89E-04
2562	569950.5	4215671	1.15E-02	1.76E-03	7.94E-04
2563	569959.8	4215669	1.16E-02	1.77E-03	8.00E-04
2564	569969.1	4215667	1.17E-02	1.79E-03	8.06E-04
2565	569978.4	4215665	1.18E-02	1.80E-03	8.13E-04
2566	569987.8	4215664	1.19E-02	1.82E-03	8.21E-04
2567	569997.1	4215662	1.21E-02	1.84E-03	8.30E-04
2568	570006.4	4215660	1.22E-02	1.86E-03	8.41E-04
2569	570015.7	4215659	1.24E-02	1.89E-03	8.52E-04
2570	570025	4215657	1.26E-02	1.92E-03	8.66E-04
2571	570034.3	4215655	1.28E-02	1.95E-03	8.80E-04
2572	570043.7	4215654	1.30E-02	1.98E-03	8.95E-04
2573	570053	4215652	1.32E-02	2.02E-03	9.12E-04
2574	570062.3	4215650	1.35E-02	2.06E-03	9.30E-04
2575	570071.6	4215649	1.38E-02	2.10E-03	9.50E-04
2576	570080.9	4215647	1.41E-02	2.15E-03	9.71E-04
2577	570090.2	4215645	1.44E-02	2.20E-03	9.94E-04
2578	570099.5	4215644	1.48E-02	2.26E-03	1.02E-03
2579	569933.8	4215680	1.10E-02	1.68E-03	7.60E-04
2580	569924.7	4215677	1.12E-02	1.71E-03	7.71E-04
2581	569915.6	4215675	1.13E-02	1.73E-03	7.82E-04
2582	569906.5	4215673	1.15E-02	1.76E-03	7.93E-04
2583	569870	4215663	1.22E-02	1.87E-03	8.44E-04
2584	569860.9	4215661	1.24E-02	1.90E-03	8.57E-04
2585	569851.8	4215659	1.26E-02	1.93E-03	8.70E-04
2586	569842.7	4215656	1.28E-02	1.96E-03	8.84E-04
2587	569833.6	4215654	1.30E-02	1.99E-03	8.97E-04
2588	569943	4215682	1.09E-02	1.66E-03	7.50E-04
2589	569952.3	4215680	1.09E-02	1.67E-03	7.54E-04
2590	569961.6	4215679	1.10E-02	1.68E-03	7.60E-04
2591	569970.9	4215677	1.11E-02	1.70E-03	7.66E-04
2592	569980.2	4215675	1.12E-02	1.71E-03	7.73E-04
2593	569989.5	4215674	1.13E-02	1.73E-03	7.80E-04
2594	569998.8	4215672	1.14E-02	1.75E-03	7.89E-04
2595	570008.2	4215670	1.16E-02	1.77E-03	7.98E-04

2596	570017.5	4215669	1.17E-02	1.79E-03	8.09E-04
2597	570026.8	4215667	1.19E-02	1.82E-03	8.20E-04
2598	570036.1	4215665	1.21E-02	1.85E-03	8.34E-04
2599	570045.4	4215664	1.23E-02	1.88E-03	8.49E-04
2600	570054.7	4215662	1.25E-02	1.92E-03	8.65E-04
2601	570064.1	4215660	1.28E-02	1.95E-03	8.81E-04
2602	570073.4	4215659	1.31E-02	1.99E-03	9.00E-04
2603	570082.7	4215657	1.33E-02	2.04E-03	9.20E-04
2604	570092	4215655	1.37E-02	2.09E-03	9.41E-04
2605	570101.3	4215654	1.40E-02	2.14E-03	9.65E-04
2606	569935.7	4215690	1.05E-02	1.60E-03	7.23E-04
2607	569926.6	4215687	1.06E-02	1.62E-03	7.33E-04
2608	569917.5	4215685	1.08E-02	1.65E-03	7.43E-04
2609	569908.4	4215683	1.09E-02	1.67E-03	7.53E-04
2610	569899.4	4215680	1.11E-02	1.69E-03	7.64E-04
2611	569863.1	4215671	1.18E-02	1.80E-03	8.11E-04
2612	569854	4215669	1.20E-02	1.82E-03	8.24E-04
2613	569844.9	4215666	1.21E-02	1.85E-03	8.36E-04
2614	569944.7	4215692	1.04E-02	1.58E-03	7.14E-04
2615	569954	4215690	1.04E-02	1.59E-03	7.19E-04
2616	569963.4	4215689	1.05E-02	1.60E-03	7.24E-04
2617	569972.7	4215687	1.06E-02	1.62E-03	7.30E-04
2618	569982	4215685	1.07E-02	1.63E-03	7.36E-04
2619	569991.3	4215684	1.08E-02	1.65E-03	7.43E-04
2620	570000.6	4215682	1.09E-02	1.66E-03	7.51E-04
2621	570009.9	4215680	1.10E-02	1.68E-03	7.59E-04
2622	570019.2	4215678	1.12E-02	1.70E-03	7.69E-04
2623	570028.6	4215677	1.13E-02	1.73E-03	7.80E-04
2624	570037.9	4215675	1.15E-02	1.76E-03	7.92E-04
2625	570047.2	4215673	1.17E-02	1.79E-03	8.06E-04
2626	570056.5	4215672	1.19E-02	1.82E-03	8.21E-04
2627	570065.8	4215670	1.21E-02	1.85E-03	8.37E-04
2628	570075.1	4215668	1.24E-02	1.89E-03	8.54E-04
2629	570084.5	4215667	1.27E-02	1.93E-03	8.73E-04
2630	570093.8	4215665	1.30E-02	1.98E-03	8.93E-04
2631	570103.1	4215663	1.33E-02	2.03E-03	9.15E-04
2632	569937.5	4215699	1.00E-02	1.53E-03	6.89E-04
2633	569928.4	4215697	1.01E-02	1.55E-03	6.98E-04
2634	569919.4	4215695	1.03E-02	1.57E-03	7.07E-04
2635	569910.4	4215692	1.04E-02	1.59E-03	7.16E-04
2636	569901.3	4215690	1.05E-02	1.61E-03	7.26E-04
2637	569892.3	4215688	1.07E-02	1.63E-03	7.37E-04
2638	569946.5	4215702	9.88E-03	1.51E-03	6.81E-04
2639	569955.8	4215700	9.95E-03	1.52E-03	6.86E-04
2640	569965.1	4215698	1.00E-02	1.53E-03	6.91E-04
2641	569974.4	4215697	1.01E-02	1.54E-03	6.97E-04
2642	569983.8	4215695	1.02E-02	1.56E-03	7.03E-04
2643	569993.1	4215693	1.03E-02	1.57E-03	7.09E-04
2644	570002.4	4215692	1.04E-02	1.59E-03	7.16E-04
2645	570011.7	4215690	1.05E-02	1.60E-03	7.24E-04
2646	570021	4215688	1.06E-02	1.62E-03	7.32E-04
2647	570030.3	4215687	1.08E-02	1.65E-03	7.43E-04

2648	570039.6	4215685	1.09E-02	1.67E-03	7.54E-04
2649	570049	4215683	1.11E-02	1.70E-03	7.67E-04
2650	570058.3	4215682	1.13E-02	1.73E-03	7.81E-04
2651	570067.6	4215680	1.16E-02	1.76E-03	7.96E-04
2652	570076.9	4215678	1.18E-02	1.80E-03	8.12E-04
2653	570086.2	4215677	1.20E-02	1.84E-03	8.30E-04
2654	570095.5	4215675	1.23E-02	1.88E-03	8.49E-04
2655	570104.9	4215673	1.26E-02	1.93E-03	8.69E-04
2656	569939.3	4215709	9.55E-03	1.46E-03	6.58E-04
2657	569930.3	4215707	9.66E-03	1.47E-03	6.66E-04
2658	569921.3	4215705	9.78E-03	1.49E-03	6.74E-04
2659	569912.3	4215702	9.90E-03	1.51E-03	6.82E-04
2660	569903.3	4215700	1.00E-02	1.53E-03	6.91E-04
2661	569894.3	4215698	1.02E-02	1.55E-03	7.01E-04
2662	569885.3	4215695	1.03E-02	1.57E-03	7.11E-04
2663	569876.3	4215693	1.00E-02	1.53E-03	6.90E-04
2664	569948.3	4215712	9.44E-03	1.44E-03	6.51E-04
2665	569957.6	4215710	9.51E-03	1.45E-03	6.55E-04
2666	569966.9	4215708	9.58E-03	1.46E-03	6.60E-04
2667	569976.2	4215707	9.66E-03	1.48E-03	6.66E-04
2668	569985.5	4215705	9.75E-03	1.49E-03	6.72E-04
2669	569994.8	4215703	9.84E-03	1.50E-03	6.78E-04
2670	570004.2	4215702	9.93E-03	1.52E-03	6.84E-04
2671	570013.5	4215700	1.00E-02	1.53E-03	6.91E-04
2672	570022.8	4215698	1.01E-02	1.55E-03	6.99E-04
2673	570032.1	4215696	1.03E-02	1.57E-03	7.09E-04
2674	570041.4	4215695	1.04E-02	1.59E-03	7.19E-04
2675	570050.7	4215693	1.06E-02	1.62E-03	7.31E-04
2676	570060	4215691	1.08E-02	1.65E-03	7.44E-04
2677	570069.4	4215690	1.10E-02	1.68E-03	7.58E-04
2678	570078.7	4215688	1.12E-02	1.71E-03	7.73E-04
2679	570088	4215686	1.15E-02	1.75E-03	7.89E-04
2680	570097.3	4215685	1.17E-02	1.79E-03	8.07E-04
2681	569941.1	4215719	9.13E-03	1.39E-03	6.29E-04
2682	569932.1	4215717	9.24E-03	1.41E-03	6.36E-04
2683	569923.2	4215715	9.34E-03	1.43E-03	6.44E-04
2684	569914.2	4215712	9.45E-03	1.44E-03	6.52E-04
2685	569905.2	4215710	9.57E-03	1.46E-03	6.59E-04
2686	569896.3	4215708	9.69E-03	1.48E-03	6.68E-04
2687	569887.3	4215705	9.82E-03	1.50E-03	6.77E-04
2688	569878.3	4215703	9.96E-03	1.52E-03	6.86E-04
2689	569869.4	4215701	9.62E-03	1.47E-03	6.63E-04
2690	569950	4215721	9.03E-03	1.38E-03	6.23E-04
2691	569959.4	4215720	9.10E-03	1.39E-03	6.27E-04
2692	569968.7	4215718	9.17E-03	1.40E-03	6.32E-04
2693	569978	4215716	9.24E-03	1.41E-03	6.37E-04
2694	569987.3	4215715	9.32E-03	1.42E-03	6.43E-04
2695	569996.6	4215713	9.41E-03	1.44E-03	6.48E-04
2696	570005.9	4215711	9.50E-03	1.45E-03	6.55E-04
2697	570015.2	4215710	9.59E-03	1.46E-03	6.61E-04
2698	570024.6	4215708	9.70E-03	1.48E-03	6.68E-04
2699	570033.9	4215706	9.83E-03	1.50E-03	6.77E-04

2700	570043.2	4215705	9.97E-03	1.52E-03	6.87E-04
2701	570052.5	4215703	1.01E-02	1.55E-03	6.98E-04
2702	570061.8	4215701	1.03E-02	1.57E-03	7.10E-04
2703	570071.1	4215700	1.05E-02	1.60E-03	7.23E-04
2704	570080.5	4215698	1.07E-02	1.63E-03	7.37E-04
2705	570089.8	4215696	1.09E-02	1.67E-03	7.52E-04
2706	570099.1	4215695	1.12E-02	1.71E-03	7.70E-04
2707	570108.4	4215693	1.14E-02	1.75E-03	7.88E-04
2708	569942.9	4215729	8.75E-03	1.34E-03	6.03E-04
2709	569933.9	4215727	8.84E-03	1.35E-03	6.09E-04
2710	569925	4215724	8.94E-03	1.37E-03	6.16E-04
2711	569916.1	4215722	9.04E-03	1.38E-03	6.23E-04
2712	569907.2	4215720	9.15E-03	1.40E-03	6.30E-04
2713	569898.2	4215717	9.26E-03	1.41E-03	6.38E-04
2714	569889.3	4215715	9.38E-03	1.43E-03	6.46E-04
2715	569880.4	4215713	9.50E-03	1.45E-03	6.54E-04
2716	569871.4	4215711	9.19E-03	1.40E-03	6.33E-04
2717	569862.5	4215708	9.25E-03	1.41E-03	6.37E-04
2718	569591.2	4215444	1.63E-02	2.48E-03	1.12E-03
2719	569951.8	4215731	8.66E-03	1.32E-03	5.96E-04
2720	569961.1	4215730	8.71E-03	1.33E-03	6.00E-04
2721	569970.4	4215728	8.78E-03	1.34E-03	6.05E-04
2722	569979.8	4215726	8.85E-03	1.35E-03	6.10E-04
2723	569989.1	4215725	8.93E-03	1.36E-03	6.15E-04
2724	569998.4	4215723	9.01E-03	1.38E-03	6.21E-04
2725	570007.7	4215721	9.09E-03	1.39E-03	6.27E-04
2726	570017	4215720	9.18E-03	1.40E-03	6.33E-04
2727	570026.3	4215718	9.29E-03	1.42E-03	6.40E-04
2728	570035.6	4215716	9.40E-03	1.44E-03	6.48E-04
2729	570045	4215714	9.53E-03	1.46E-03	6.57E-04
2730	570054.3	4215713	9.68E-03	1.48E-03	6.67E-04
2731	570063.6	4215711	9.84E-03	1.50E-03	6.78E-04
2732	570072.9	4215709	1.00E-02	1.53E-03	6.90E-04
2733	570082.2	4215708	1.02E-02	1.56E-03	7.03E-04
2734	570091.5	4215706	1.04E-02	1.59E-03	7.18E-04
2735	570134.3	4215513	4.66E-02	7.11E-03	3.21E-03
2736	570122.9	4215521	4.07E-02	6.22E-03	2.81E-03
2737	570111.5	4215529	3.62E-02	5.53E-03	2.50E-03
2738	570121.1	4215531	3.65E-02	5.57E-03	2.51E-03
2739	570100.1	4215538	3.28E-02	5.02E-03	2.26E-03
2740	570109.8	4215539	3.28E-02	5.01E-03	2.26E-03
2741	570119.4	4215541	3.30E-02	5.04E-03	2.27E-03
2742	570129	4215543	3.34E-02	5.10E-03	2.30E-03
2743	570098.4	4215547	2.99E-02	4.57E-03	2.06E-03
2744	570108	4215549	2.99E-02	4.56E-03	2.06E-03
2745	570117.7	4215551	3.00E-02	4.58E-03	2.07E-03
2746	570096.7	4215557	2.73E-02	4.17E-03	1.88E-03
2747	570106.3	4215559	2.73E-02	4.17E-03	1.88E-03
2748	570115.9	4215561	2.74E-02	4.19E-03	1.89E-03
2749	570094.9	4215567	2.50E-02	3.82E-03	1.72E-03
2750	570104.6	4215569	2.50E-02	3.82E-03	1.73E-03
2751	570114.2	4215571	2.51E-02	3.84E-03	1.73E-03

2752	570123.8	4215572	2.54E-02	3.88E-03	1.75E-03
2753	570102.8	4215579	2.30E-02	3.52E-03	1.59E-03
2754	570112.5	4215580	2.31E-02	3.53E-03	1.59E-03
2755	570122.1	4215582	2.34E-02	3.57E-03	1.61E-03
2756	570101.1	4215589	2.13E-02	3.25E-03	1.47E-03
2757	570110.7	4215590	2.14E-02	3.27E-03	1.48E-03
2758	570099.3	4215598	1.98E-02	3.02E-03	1.36E-03
2759	570109	4215600	1.99E-02	3.05E-03	1.37E-03
2760	570118.6	4215602	2.01E-02	3.07E-03	1.39E-03
2761	570107.2	4215610	1.86E-02	2.84E-03	1.28E-03
2762	570105.5	4215620	1.74E-02	2.66E-03	1.20E-03
2763	570113.4	4215631	1.64E-02	2.50E-03	1.13E-03
2764	570111.7	4215641	1.54E-02	2.34E-03	1.06E-03
2765	570088.1	4215718	9.78E-03	1.49E-03	6.74E-04
2766	570097.7	4215720	9.84E-03	1.50E-03	6.78E-04

			T2			T2L3			T4f		
			314	570355.74							
					4.58E-07			6.98E-08			3.05E-08
			Yr 1	Yr 2	Total	Yr 1	Yr 2	Total	Yr 1	Yr 2	Total
1	570176.2	4215489	2.00E-07	1.13E-07	3.13E-07	3.05E-08	1.72E-08	4.78E-08	1.38E-08	7.09E-09	2.09E-08
2	570192.2	4215484	2.26E-07	1.28E-07	3.54E-07	3.45E-08	1.95E-08	5.40E-08	1.56E-08	8.02E-09	2.36E-08
3	570208.7	4215477	2.63E-07	1.49E-07	4.13E-07	4.02E-08	2.27E-08	6.29E-08	1.82E-08	9.34E-09	2.75E-08
4	570225.2	4215470	3.03E-07	1.72E-07	4.75E-07	4.63E-08	2.61E-08	7.24E-08	2.09E-08	1.08E-08	3.16E-08
5	570241.7	4215462	3.36E-07	1.90E-07	5.26E-07	5.13E-08	2.89E-08	8.02E-08	2.31E-08	1.19E-08	3.50E-08
6	570258.2	4215455	3.56E-07	2.02E-07	5.58E-07	5.44E-08	3.07E-08	8.51E-08	2.45E-08	1.26E-08	3.72E-08
7	570179.3	4215498	1.77E-07	1.00E-07	2.77E-07	2.70E-08	1.52E-08	4.22E-08	1.22E-08	6.27E-09	1.84E-08
8	570162	4215500	1.59E-07	9.04E-08	2.50E-07	2.44E-08	1.37E-08	3.81E-08	1.10E-08	5.66E-09	1.66E-08
9	570196.2	4215493	2.01E-07	1.14E-07	3.15E-07	3.07E-08	1.73E-08	4.80E-08	1.38E-08	7.12E-09	2.10E-08
10	570212.7	4215486	2.36E-07	1.33E-07	3.69E-07	3.60E-08	2.03E-08	5.63E-08	1.62E-08	8.36E-09	2.46E-08
11	570229.2	4215479	2.72E-07	1.54E-07	4.26E-07	4.15E-08	2.34E-08	6.49E-08	1.87E-08	9.64E-09	2.84E-08
12	570237.5	4215475	2.88E-07	1.63E-07	4.51E-07	4.40E-08	2.48E-08	6.88E-08	1.98E-08	1.02E-08	3.01E-08
13	570254	4215468	3.15E-07	1.78E-07	4.93E-07	4.80E-08	2.71E-08	7.51E-08	2.17E-08	1.12E-08	3.28E-08
14	570183.7	4215507	1.60E-07	9.04E-08	2.50E-07	2.44E-08	1.38E-08	3.81E-08	1.10E-08	5.66E-09	1.67E-08
15	570167.2	4215509	1.44E-07	8.18E-08	2.26E-07	2.21E-08	1.24E-08	3.45E-08	9.95E-09	5.12E-09	1.51E-08
16	570150.7	4215511	1.31E-07	7.45E-08	2.06E-07	2.01E-08	1.13E-08	3.14E-08	9.06E-09	4.66E-09	1.37E-08
17	570200.2	4215503	1.81E-07	1.03E-07	2.84E-07	2.77E-08	1.56E-08	4.33E-08	1.25E-08	6.43E-09	1.89E-08
18	570216.7	4215495	2.12E-07	1.20E-07	3.33E-07	3.24E-08	1.83E-08	5.07E-08	1.46E-08	7.54E-09	2.22E-08
19	570225	4215492	2.29E-07	1.30E-07	3.59E-07	3.50E-08	1.98E-08	5.48E-08	1.58E-08	8.13E-09	2.39E-08
20	570241.5	4215484	2.60E-07	1.47E-07	4.07E-07	3.97E-08	2.24E-08	6.21E-08	1.79E-08	9.22E-09	2.71E-08
21	570249.8	4215481	2.73E-07	1.55E-07	4.28E-07	4.17E-08	2.35E-08	6.53E-08	1.88E-08	9.69E-09	2.85E-08
22	570266.3	4215473	2.95E-07	1.67E-07	4.62E-07	4.50E-08	2.54E-08	7.04E-08	2.03E-08	1.05E-08	3.08E-08
23	570188.1	4215516	1.46E-07	8.25E-08	2.28E-07	2.22E-08	1.26E-08	3.48E-08	1.00E-08	5.17E-09	1.52E-08
24	570172.2	4215518	1.31E-07	7.45E-08	2.06E-07	2.01E-08	1.13E-08	3.14E-08	9.06E-09	4.66E-09	1.37E-08
25	570156.3	4215520	1.20E-07	6.82E-08	1.89E-07	1.84E-08	1.04E-08	2.88E-08	8.29E-09	4.27E-09	1.26E-08
26	570140.5	4215522	1.11E-07	6.27E-08	1.74E-07	1.69E-08	9.54E-09	2.65E-08	7.63E-09	3.93E-09	1.16E-08
27	570204.3	4215512	1.66E-07	9.38E-08	2.60E-07	2.53E-08	1.43E-08	3.96E-08	1.14E-08	5.88E-09	1.73E-08
28	570220.8	4215504	1.94E-07	1.10E-07	3.04E-07	2.96E-08	1.67E-08	4.63E-08	1.34E-08	6.87E-09	2.02E-08
29	570237.3	4215497	2.23E-07	1.26E-07	3.49E-07	3.40E-08	1.92E-08	5.32E-08	1.54E-08	7.90E-09	2.33E-08
30	570253.8	4215490	2.48E-07	1.41E-07	3.89E-07	3.79E-08	2.14E-08	5.93E-08	1.71E-08	8.80E-09	2.59E-08
31	570262.1	4215486	2.59E-07	1.47E-07	4.06E-07	3.96E-08	2.23E-08	6.19E-08	1.79E-08	9.20E-09	2.71E-08
32	570191.4	4215526	1.33E-07	7.54E-08	2.09E-07	2.03E-08	1.15E-08	3.18E-08	9.18E-09	4.72E-09	1.39E-08
33	570174.1	4215528	1.19E-07	6.71E-08	1.86E-07	1.81E-08	1.02E-08	2.83E-08	8.17E-09	4.20E-09	1.24E-08
34	570156.8	4215530	1.08E-07	6.13E-08	1.69E-07	1.65E-08	9.32E-09	2.58E-08	7.46E-09	3.84E-09	1.13E-08
35	570139.4	4215532	9.94E-08	5.63E-08	1.56E-07	1.52E-08	8.56E-09	2.37E-08	6.85E-09	3.52E-09	1.04E-08
36	570208.3	4215521	1.53E-07	8.64E-08	2.39E-07	2.33E-08	1.31E-08	3.64E-08	1.05E-08	5.41E-09	1.59E-08
37	570216.6	4215517	1.65E-07	9.33E-08	2.58E-07	2.52E-08	1.42E-08	3.93E-08	1.14E-08	5.84E-09	1.72E-08
38	570233.1	4215510	1.91E-07	1.08E-07	2.99E-07	2.91E-08	1.64E-08	4.55E-08	1.31E-08	6.76E-09	1.99E-08
39	570249.6	4215503	2.16E-07	1.22E-07	3.38E-07	3.29E-08	1.86E-08	5.15E-08	1.49E-08	7.64E-09	2.25E-08
40	570266.1	4215495	2.37E-07	1.34E-07	3.71E-07	3.61E-08	2.04E-08	5.65E-08	1.63E-08	8.40E-09	2.47E-08
41	570274.4	4215492	2.46E-07	1.39E-07	3.85E-07	3.75E-08	2.12E-08	5.87E-08	1.69E-08	8.72E-09	2.57E-08
42	570195.7	4215535	1.24E-07	7.00E-08	1.94E-07	1.89E-08	1.06E-08	2.95E-08	8.52E-09	4.38E-09	1.29E-08
43	570179.1	4215537	1.11E-07	6.28E-08	1.74E-07	1.69E-08	9.55E-09	2.65E-08	7.64E-09	3.93E-09	1.16E-08
44	570162.4	4215539	1.01E-07	5.72E-08	1.58E-07	1.54E-08	8.70E-09	2.41E-08	6.96E-09	3.58E-09	1.05E-08
45	570145.7	4215541	9.31E-08	5.28E-08	1.46E-07	1.42E-08	8.02E-09	2.22E-08	6.42E-09	3.30E-09	9.72E-09
46	570212.3	4215530	1.41E-07	7.98E-08	2.21E-07	2.15E-08	1.21E-08	3.36E-08	9.71E-09	5.00E-09	1.47E-08
47	570228.8	4215523	1.63E-07	9.24E-08	2.55E-07	2.49E-08	1.40E-08	3.89E-08	1.12E-08	5.78E-09	1.70E-08
48	570245.4	4215515	1.87E-07	1.06E-07	2.92E-07	2.85E-08	1.61E-08	4.46E-08	1.29E-08	6.62E-09	1.95E-08
49	570261.9	4215508	2.09E-07	1.18E-07	3.27E-07	3.19E-08	1.80E-08	4.98E-08	1.44E-08	7.40E-09	2.18E-08
50	570278.4	4215501	2.26E-07	1.28E-07	3.55E-07	3.46E-08	1.95E-08	5.41E-08	1.56E-08	8.03E-09	2.36E-08
51	570200	4215544	1.15E-07	6.51E-08	1.80E-07	1.76E-08	9.91E-09	2.75E-08	7.92E-09	4.08E-09	1.20E-08
52	570183.9	4215546	1.04E-07	5.88E-08	1.63E-07	1.59E-08	8.95E-09	2.48E-08	7.16E-09	3.68E-09	1.08E-08
53	570167.7	4215548	9.45E-08	5.35E-08	1.48E-07	1.44E-08	8.14E-09	2.26E-08	6.51E-09	3.35E-09	9.87E-09
54	570151.5	4215550	8.74E-08	4.95E-08	1.37E-07	1.33E-08	7.53E-09	2.09E-08	6.02E-09	3.10E-09	9.12E-09
55	570135.4	4215552	8.12E-08	4.60E-08	1.27E-07	1.24E-08	7.00E-09	1.94E-08	5.60E-09	2.88E-09	8.48E-09
56	570216.4	4215539	1.31E-07	7.41E-08	2.05E-07	2.00E-08	1.13E-08	3.12E-08	9.01E-09	4.64E-09	1.36E-08
57	570232.9	4215532	1.51E-07	8.55E-08	2.36E-07	2.30E-08	1.30E-08	3.61E-08	1.04E-08	5.35E-09	1.58E-08

58	570241.1	4215528	1.61E-07	9.14E-08	2.53E-07	2.46E-08	1.39E-08	3.85E-08	1.11E-08	5.72E-09	1.68E-08
59	570257.6	4215521	1.83E-07	1.03E-07	2.86E-07	2.79E-08	1.57E-08	4.36E-08	1.26E-08	6.48E-09	1.91E-08
60	570274.2	4215514	2.01E-07	1.14E-07	3.15E-07	3.08E-08	1.74E-08	4.81E-08	1.39E-08	7.14E-09	2.10E-08
61	570203.5	4215553	1.07E-07	6.05E-08	1.67E-07	1.63E-08	9.20E-09	2.55E-08	7.36E-09	3.79E-09	1.11E-08
62	570186.2	4215555	9.61E-08	5.44E-08	1.51E-07	1.47E-08	8.28E-09	2.29E-08	6.62E-09	3.41E-09	1.00E-08
63	570168.8	4215557	8.70E-08	4.93E-08	1.36E-07	1.33E-08	7.50E-09	2.08E-08	5.99E-09	3.09E-09	9.08E-09
64	570151.5	4215559	8.01E-08	4.54E-08	1.25E-07	1.22E-08	6.90E-09	1.91E-08	5.52E-09	2.84E-09	8.36E-09
65	570134.2	4215561	7.42E-08	4.20E-08	1.16E-07	1.13E-08	6.39E-09	1.77E-08	5.11E-09	2.63E-09	7.74E-09
66	570220.4	4215548	1.22E-07	6.90E-08	1.91E-07	1.86E-08	1.05E-08	2.91E-08	8.40E-09	4.32E-09	1.27E-08
67	570228.6	4215545	1.31E-07	7.43E-08	2.05E-07	2.00E-08	1.13E-08	3.13E-08	9.04E-09	4.65E-09	1.37E-08
68	570245.2	4215537	1.50E-07	8.51E-08	2.35E-07	2.29E-08	1.29E-08	3.59E-08	1.04E-08	5.33E-09	1.57E-08
69	570253.4	4215534	1.60E-07	9.06E-08	2.51E-07	2.44E-08	1.38E-08	3.82E-08	1.10E-08	5.67E-09	1.67E-08
70	570269.9	4215526	1.78E-07	1.01E-07	2.79E-07	2.72E-08	1.53E-08	4.25E-08	1.23E-08	6.32E-09	1.86E-08
71	570286.5	4215519	1.94E-07	1.10E-07	3.04E-07	2.96E-08	1.67E-08	4.63E-08	1.34E-08	6.88E-09	2.02E-08
72	570207.8	4215562	1.00E-07	5.69E-08	1.57E-07	1.53E-08	8.66E-09	2.40E-08	6.92E-09	3.56E-09	1.05E-08
73	570191	4215564	9.07E-08	5.14E-08	1.42E-07	1.39E-08	7.82E-09	2.17E-08	6.25E-09	3.22E-09	9.47E-09
74	570174.2	4215566	8.21E-08	4.65E-08	1.29E-07	1.25E-08	7.07E-09	1.96E-08	5.66E-09	2.91E-09	8.57E-09
75	570157.4	4215568	7.56E-08	4.28E-08	1.18E-07	1.15E-08	6.52E-09	1.81E-08	5.21E-09	2.68E-09	7.89E-09
76	570140.6	4215570	7.01E-08	3.97E-08	1.10E-07	1.07E-08	6.04E-09	1.68E-08	4.83E-09	2.49E-09	7.32E-09
77	570224.4	4215557	1.14E-07	6.46E-08	1.79E-07	1.74E-08	9.82E-09	2.72E-08	7.85E-09	4.04E-09	1.19E-08
78	570240.9	4215550	1.31E-07	7.43E-08	2.05E-07	2.00E-08	1.13E-08	3.13E-08	9.04E-09	4.65E-09	1.37E-08
79	570257.5	4215543	1.49E-07	8.44E-08	2.33E-07	2.27E-08	1.28E-08	3.56E-08	1.03E-08	5.28E-09	1.55E-08
80	570274	4215536	1.66E-07	9.39E-08	2.60E-07	2.53E-08	1.43E-08	3.96E-08	1.14E-08	5.88E-09	1.73E-08
81	570282.2	4215532	1.73E-07	9.82E-08	2.71E-07	2.65E-08	1.49E-08	4.14E-08	1.19E-08	6.15E-09	1.81E-08
82	570211.3	4215571	9.43E-08	5.34E-08	1.48E-07	1.44E-08	8.13E-09	2.25E-08	6.50E-09	3.35E-09	9.85E-09
83	570193.4	4215573	8.48E-08	4.80E-08	1.33E-07	1.29E-08	7.30E-09	2.02E-08	5.84E-09	3.01E-09	8.85E-09
84	570175.6	4215576	7.63E-08	4.32E-08	1.20E-07	1.17E-08	6.58E-09	1.82E-08	5.26E-09	2.71E-09	7.97E-09
85	570157.8	4215578	6.99E-08	3.96E-08	1.09E-07	1.07E-08	6.02E-09	1.67E-08	4.82E-09	2.48E-09	7.30E-09
86	570139.9	4215580	6.46E-08	3.66E-08	1.01E-07	9.86E-09	5.57E-09	1.54E-08	4.45E-09	2.29E-09	6.74E-09
87	570220.2	4215570	9.95E-08	5.64E-08	1.56E-07	1.52E-08	8.57E-09	2.38E-08	6.85E-09	3.53E-09	1.04E-08
88	570236.7	4215563	1.14E-07	6.49E-08	1.79E-07	1.75E-08	9.86E-09	2.73E-08	7.89E-09	4.06E-09	1.19E-08
89	570253.2	4215556	1.30E-07	7.39E-08	2.04E-07	1.99E-08	1.12E-08	3.12E-08	8.99E-09	4.63E-09	1.36E-08
90	570269.7	4215548	1.47E-07	8.30E-08	2.30E-07	2.24E-08	1.26E-08	3.50E-08	1.01E-08	5.20E-09	1.53E-08
91	570286.3	4215541	1.62E-07	9.15E-08	2.53E-07	2.47E-08	1.39E-08	3.86E-08	1.11E-08	5.73E-09	1.69E-08
92	570215.6	4215580	8.90E-08	5.04E-08	1.39E-07	1.36E-08	7.67E-09	2.13E-08	6.14E-09	3.16E-09	9.29E-09
93	570198.3	4215583	8.05E-08	4.56E-08	1.26E-07	1.23E-08	6.94E-09	1.92E-08	5.55E-09	2.86E-09	8.40E-09
94	570180.9	4215585	7.28E-08	4.12E-08	1.14E-07	1.11E-08	6.27E-09	1.74E-08	5.02E-09	2.58E-09	7.60E-09
95	570163.6	4215587	6.65E-08	3.77E-08	1.04E-07	1.02E-08	5.73E-09	1.59E-08	4.58E-09	2.36E-09	6.94E-09
96	570146.3	4215589	6.15E-08	3.48E-08	9.63E-08	9.39E-09	5.30E-09	1.47E-08	4.24E-09	2.18E-09	6.42E-09
97	570129	4215591	5.76E-08	3.26E-08	9.02E-08	8.79E-09	4.96E-09	1.37E-08	3.97E-09	2.04E-09	6.01E-09
98	570232.5	4215576	1.00E-07	5.67E-08	1.57E-07	1.53E-08	8.62E-09	2.39E-08	6.90E-09	3.55E-09	1.04E-08
99	570249	4215568	1.14E-07	6.46E-08	1.79E-07	1.74E-08	9.82E-09	2.72E-08	7.86E-09	4.04E-09	1.19E-08
100	570265.5	4215561	1.29E-07	7.29E-08	2.01E-07	1.96E-08	1.11E-08	3.07E-08	8.86E-09	4.56E-09	1.34E-08
101	570282	4215554	1.43E-07	8.12E-08	2.25E-07	2.19E-08	1.24E-08	3.43E-08	9.88E-09	5.09E-09	1.50E-08
102	570290.3	4215550	1.50E-07	8.52E-08	2.36E-07	2.30E-08	1.30E-08	3.59E-08	1.04E-08	5.33E-09	1.57E-08
103	570298.5	4215547	1.57E-07	8.89E-08	2.46E-07	2.40E-08	1.35E-08	3.75E-08	1.08E-08	5.57E-09	1.64E-08
104	570219.8	4215590	8.39E-08	4.75E-08	1.31E-07	1.28E-08	7.23E-09	2.00E-08	5.78E-09	2.98E-09	8.76E-09
105	570203	4215592	7.63E-08	4.32E-08	1.20E-07	1.17E-08	6.57E-09	1.82E-08	5.26E-09	2.71E-09	7.96E-09
106	570186.1	4215594	6.94E-08	3.93E-08	1.09E-07	1.06E-08	5.98E-09	1.66E-08	4.78E-09	2.46E-09	7.24E-09
107	570169.2	4215596	6.33E-08	3.59E-08	9.92E-08	9.67E-09	5.46E-09	1.51E-08	4.36E-09	2.25E-09	6.61E-09
108	570152.4	4215598	5.87E-08	3.33E-08	9.20E-08	8.97E-09	5.06E-09	1.40E-08	4.05E-09	2.08E-09	6.13E-09
109	570135.5	4215600	5.50E-08	3.11E-08	8.61E-08	8.39E-09	4.74E-09	1.31E-08	3.79E-09	1.95E-09	5.74E-09
110	570236.5	4215585	9.30E-08	5.27E-08	1.46E-07	1.42E-08	8.01E-09	2.22E-08	6.41E-09	3.30E-09	9.70E-09
111	570253	4215578	1.05E-07	5.96E-08	1.65E-07	1.61E-08	9.06E-09	2.51E-08	7.25E-09	3.73E-09	1.10E-08
112	570261.3	4215574	1.12E-07	6.33E-08	1.75E-07	1.71E-08	9.62E-09	2.67E-08	7.70E-09	3.96E-09	1.17E-08
113	570277.8	4215567	1.26E-07	7.11E-08	1.97E-07	1.92E-08	1.08E-08	3.00E-08	8.65E-09	4.45E-09	1.31E-08
114	570294.3	4215559	1.39E-07	7.90E-08	2.18E-07	2.13E-08	1.20E-08	3.33E-08	9.61E-09	4.95E-09	1.46E-08
115	570223.4	4215599	7.85E-08	4.45E-08	1.23E-07	1.20E-08	6.77E-09	1.88E-08	5.41E-09	2.79E-09	8.20E-09
116	570205.7	4215601	7.16E-08	4.05E-08	1.12E-07	1.09E-08	6.17E-09	1.71E-08	4.93E-09	2.54E-09	7.47E-09
117	570187.9	4215603	6.49E-08	3.68E-08	1.02E-07	9.92E-09	5.60E-09	1.55E-08	4.48E-09	2.30E-09	6.78E-09
118	570170.1	4215605	5.91E-08	3.35E-08	9.26E-08	9.03E-09	5.10E-09	1.41E-08	4.07E-09	2.10E-09	6.17E-09

119	570161.3	4215606	5.69E-08	3.22E-08	8.91E-08	8.68E-09	4.90E-09	1.36E-08	3.92E-09	2.02E-09	5.93E-09
120	570143.5	4215608	5.28E-08	2.99E-08	8.28E-08	8.07E-09	4.55E-09	1.26E-08	3.64E-09	1.87E-09	5.52E-09
121	570125.8	4215611	4.98E-08	2.82E-08	7.81E-08	7.61E-09	4.29E-09	1.19E-08	3.43E-09	1.77E-09	5.20E-09
122	570232.3	4215598	8.16E-08	4.62E-08	1.28E-07	1.25E-08	7.03E-09	1.95E-08	5.62E-09	2.89E-09	8.51E-09
123	570248.8	4215590	9.19E-08	5.21E-08	1.44E-07	1.40E-08	7.92E-09	2.20E-08	6.33E-09	3.26E-09	9.59E-09
124	570265.3	4215583	9.67E-08	5.48E-08	1.51E-07	1.48E-08	8.33E-09	2.31E-08	6.66E-09	3.43E-09	1.01E-08
125	570281.8	4215576	1.16E-07	6.58E-08	1.82E-07	1.77E-08	1.00E-08	2.77E-08	8.00E-09	4.12E-09	1.21E-08
126	570290.1	4215572	1.23E-07	6.95E-08	1.92E-07	1.87E-08	1.06E-08	2.93E-08	8.45E-09	4.35E-09	1.28E-08
127	570298.4	4215569	1.29E-07	7.31E-08	2.02E-07	1.97E-08	1.11E-08	3.08E-08	8.89E-09	4.58E-09	1.35E-08
128	570227.7	4215608	7.35E-08	4.17E-08	1.15E-07	1.12E-08	6.34E-09	1.76E-08	5.07E-09	2.61E-09	7.68E-09
129	570210.4	4215610	6.79E-08	3.85E-08	1.06E-07	1.04E-08	5.85E-09	1.62E-08	4.68E-09	2.41E-09	7.09E-09
130	570193	4215612	6.20E-08	3.51E-08	9.72E-08	9.47E-09	5.34E-09	1.48E-08	4.27E-09	2.20E-09	6.47E-09
131	570175.7	4215614	5.66E-08	3.21E-08	8.86E-08	8.64E-09	4.88E-09	1.35E-08	3.90E-09	2.01E-09	5.91E-09
132	570158.4	4215616	5.25E-08	2.97E-08	8.22E-08	8.01E-09	4.52E-09	1.25E-08	3.62E-09	1.86E-09	5.48E-09
133	570141.1	4215618	4.91E-08	2.78E-08	7.68E-08	7.49E-09	4.23E-09	1.17E-08	3.38E-09	1.74E-09	5.12E-09
134	570123.8	4215620	4.65E-08	2.63E-08	7.28E-08	7.09E-09	4.00E-09	1.11E-08	3.20E-09	1.65E-09	4.85E-09
135	570244.6	4215603	8.10E-08	4.59E-08	1.27E-07	1.24E-08	6.98E-09	1.93E-08	5.58E-09	2.87E-09	8.45E-09
136	570261.1	4215596	8.42E-08	4.77E-08	1.32E-07	1.29E-08	7.25E-09	2.01E-08	5.80E-09	2.99E-09	8.79E-09
137	570277.6	4215589	9.44E-08	5.35E-08	1.48E-07	1.44E-08	8.14E-09	2.26E-08	6.51E-09	3.35E-09	9.86E-09
138	570294.1	4215581	1.07E-07	6.06E-08	1.68E-07	1.63E-08	9.22E-09	2.56E-08	7.38E-09	3.80E-09	1.12E-08
139	570302.4	4215578	1.15E-07	6.50E-08	1.80E-07	1.75E-08	9.89E-09	2.74E-08	7.91E-09	4.07E-09	1.20E-08
140	570231.9	4215617	6.91E-08	3.92E-08	1.08E-07	1.06E-08	5.96E-09	1.65E-08	4.77E-09	2.45E-09	7.22E-09
141	570215	4215619	6.44E-08	3.65E-08	1.01E-07	9.84E-09	5.55E-09	1.54E-08	4.44E-09	2.28E-09	6.72E-09
142	570198	4215621	5.91E-08	3.35E-08	9.26E-08	9.02E-09	5.09E-09	1.41E-08	4.07E-09	2.10E-09	6.17E-09
143	570181.1	4215623	5.41E-08	3.07E-08	8.48E-08	8.27E-09	4.67E-09	1.29E-08	3.73E-09	1.92E-09	5.65E-09
144	570164.2	4215625	5.01E-08	2.84E-08	7.85E-08	7.65E-09	4.32E-09	1.20E-08	3.45E-09	1.78E-09	5.23E-09
145	570147.3	4215627	4.69E-08	2.66E-08	7.35E-08	7.17E-09	4.05E-09	1.12E-08	3.24E-09	1.67E-09	4.90E-09
146	570130.3	4215629	4.44E-08	2.52E-08	6.96E-08	6.79E-09	3.83E-09	1.06E-08	3.06E-09	1.58E-09	4.64E-09
147	570248.6	4215612	7.10E-08	4.02E-08	1.11E-07	1.08E-08	6.12E-09	1.70E-08	4.89E-09	2.52E-09	7.41E-09
148	570256.9	4215609	7.44E-08	4.22E-08	1.17E-07	1.14E-08	6.41E-09	1.78E-08	5.13E-09	2.64E-09	7.77E-09
149	570273.4	4215601	8.30E-08	4.70E-08	1.30E-07	1.27E-08	7.15E-09	1.98E-08	5.72E-09	2.94E-09	8.66E-09
150	570289.9	4215594	9.31E-08	5.27E-08	1.46E-07	1.42E-08	8.02E-09	2.22E-08	6.41E-09	3.30E-09	9.72E-09
151	570298.2	4215591	9.88E-08	5.60E-08	1.55E-07	1.51E-08	8.52E-09	2.36E-08	6.81E-09	3.51E-09	1.03E-08
152	570314.7	4215583	1.12E-07	6.34E-08	1.75E-07	1.71E-08	9.65E-09	2.68E-08	7.72E-09	3.97E-09	1.17E-08
153	570235.5	4215626	6.51E-08	3.69E-08	1.02E-07	9.94E-09	5.61E-09	1.56E-08	4.49E-09	2.31E-09	6.80E-09
154	570226.7	4215627	6.28E-08	3.56E-08	9.83E-08	9.59E-09	5.41E-09	1.50E-08	4.33E-09	2.23E-09	6.55E-09
155	570209	4215629	5.79E-08	3.28E-08	9.08E-08	8.85E-09	4.99E-09	1.38E-08	3.99E-09	2.06E-09	6.05E-09
156	570191.3	4215632	5.30E-08	3.00E-08	8.31E-08	8.10E-09	4.57E-09	1.27E-08	3.65E-09	1.88E-09	5.54E-09
157	570173.6	4215634	4.86E-08	2.75E-08	7.62E-08	7.42E-09	4.19E-09	1.16E-08	3.35E-09	1.72E-09	5.07E-09
158	570164.8	4215635	4.70E-08	2.66E-08	7.36E-08	7.17E-09	4.05E-09	1.12E-08	3.24E-09	1.67E-09	4.90E-09
159	570147.1	4215637	4.40E-08	2.49E-08	6.89E-08	6.72E-09	3.79E-09	1.05E-08	3.03E-09	1.56E-09	4.59E-09
160	570129.4	4215639	4.17E-08	2.36E-08	6.53E-08	6.36E-09	3.59E-09	9.95E-09	2.87E-09	1.48E-09	4.35E-09
161	570252.6	4215622	6.67E-08	3.78E-08	1.05E-07	1.02E-08	5.75E-09	1.59E-08	4.60E-09	2.37E-09	6.96E-09
162	570269.2	4215614	7.31E-08	4.14E-08	1.15E-07	1.12E-08	6.30E-09	1.75E-08	5.04E-09	2.59E-09	7.63E-09
163	570285.7	4215607	8.22E-08	4.66E-08	1.29E-07	1.26E-08	7.08E-09	1.96E-08	5.66E-09	2.92E-09	8.58E-09
164	570302.2	4215600	9.27E-08	5.25E-08	1.45E-07	1.42E-08	7.99E-09	2.22E-08	6.39E-09	3.29E-09	9.68E-09
165	570318.7	4215592	1.04E-07	5.91E-08	1.63E-07	1.59E-08	8.99E-09	2.49E-08	7.19E-09	3.70E-09	1.09E-08
166	570239.8	4215635	6.16E-08	3.49E-08	9.65E-08	9.41E-09	5.31E-09	1.47E-08	4.25E-09	2.19E-09	6.43E-09
167	570222.5	4215637	5.74E-08	3.25E-08	9.00E-08	8.77E-09	4.95E-09	1.37E-08	3.96E-09	2.04E-09	6.00E-09
168	570205.1	4215640	5.28E-08	2.99E-08	8.28E-08	8.07E-09	4.55E-09	1.26E-08	3.64E-09	1.87E-09	5.51E-09
169	570187.8	4215642	4.86E-08	2.75E-08	7.62E-08	7.42E-09	4.19E-09	1.16E-08	3.35E-09	1.72E-09	5.07E-09
170	570170.5	4215644	4.49E-08	2.55E-08	7.04E-08	6.86E-09	3.87E-09	1.07E-08	3.10E-09	1.59E-09	4.69E-09
171	570153.2	4215646	4.22E-08	2.39E-08	6.62E-08	6.45E-09	3.64E-09	1.01E-08	2.91E-09	1.50E-09	4.41E-09
172	570135.9	4215648	4.00E-08	2.27E-08	6.26E-08	6.11E-09	3.45E-09	9.55E-09	2.76E-09	1.42E-09	4.17E-09
173	570118.6	4215650	3.81E-08	2.16E-08	5.97E-08	5.82E-09	3.28E-09	9.10E-09	2.63E-09	1.35E-09	3.98E-09
174	570256.7	4215631	6.74E-08	3.82E-08	1.06E-07	1.03E-08	5.81E-09	1.61E-08	4.64E-09	2.39E-09	7.03E-09
175	570273.2	4215623	6.96E-08	3.94E-08	1.09E-07	1.06E-08	5.99E-09	1.66E-08	4.79E-09	2.47E-09	7.26E-09
176	570281.5	4215620	7.32E-08	4.15E-08	1.15E-07	1.12E-08	6.31E-09	1.75E-08	5.05E-09	2.60E-09	7.64E-09
177	570298	4215612	8.19E-08	4.64E-08	1.28E-07	1.25E-08	7.06E-09	1.96E-08	5.65E-09	2.91E-09	8.55E-09
178	570306.2	4215609	8.73E-08	4.94E-08	1.37E-07	1.33E-08	7.52E-09	2.08E-08	6.01E-09	3.10E-09	9.11E-09
179	570314.5	4215605	9.27E-08	5.25E-08	1.45E-07	1.42E-08	7.99E-09	2.21E-08	6.39E-09	3.29E-09	9.67E-09

180	570244	4215644	5.84E-08	3.31E-08	9.15E-08	8.92E-09	5.03E-09	1.39E-08	4.02E-09	2.07E-09	6.09E-09
181	570227	4215647	5.46E-08	3.09E-08	8.55E-08	8.33E-09	4.70E-09	1.30E-08	3.76E-09	1.94E-09	5.70E-09
182	570210	4215649	5.04E-08	2.85E-08	7.89E-08	7.69E-09	4.34E-09	1.20E-08	3.47E-09	1.79E-09	5.26E-09
183	570193	4215651	4.65E-08	2.64E-08	7.29E-08	7.10E-09	4.01E-09	1.11E-08	3.21E-09	1.65E-09	4.86E-09
184	570176.1	4215653	4.31E-08	2.44E-08	6.75E-08	6.58E-09	3.71E-09	1.03E-08	2.97E-09	1.53E-09	4.50E-09
185	570159.1	4215655	4.06E-08	2.30E-08	6.35E-08	6.19E-09	3.49E-09	9.69E-09	2.79E-09	1.44E-09	4.23E-09
186	570142.1	4215657	3.84E-08	2.18E-08	6.02E-08	5.87E-09	3.31E-09	9.18E-09	2.65E-09	1.36E-09	4.01E-09
187	570125.2	4215659	3.66E-08	2.08E-08	5.74E-08	5.59E-09	3.16E-09	8.75E-09	2.52E-09	1.30E-09	3.82E-09
188	570260.7	4215640	6.37E-08	3.61E-08	9.98E-08	9.73E-09	5.49E-09	1.52E-08	4.39E-09	2.26E-09	6.65E-09
189	570269	4215636	6.72E-08	3.81E-08	1.05E-07	1.03E-08	5.79E-09	1.61E-08	4.63E-09	2.38E-09	7.01E-09
190	570277.2	4215633	6.65E-08	3.77E-08	1.04E-07	1.02E-08	5.73E-09	1.59E-08	4.58E-09	2.36E-09	6.94E-09
191	570293.7	4215625	7.35E-08	4.16E-08	1.15E-07	1.12E-08	6.33E-09	1.76E-08	5.06E-09	2.61E-09	7.67E-09
192	570310.3	4215618	8.25E-08	4.67E-08	1.29E-07	1.26E-08	7.11E-09	1.97E-08	5.68E-09	2.93E-09	8.61E-09
193	570326.8	4215611	9.59E-08	5.43E-08	1.50E-07	1.46E-08	8.26E-09	2.29E-08	6.61E-09	3.40E-09	1.00E-08
194	570247.7	4215654	5.54E-08	3.14E-08	8.68E-08	8.46E-09	4.77E-09	1.32E-08	3.82E-09	1.97E-09	5.78E-09
195	570230	4215656	5.14E-08	2.91E-08	8.06E-08	7.85E-09	4.43E-09	1.23E-08	3.54E-09	1.82E-09	5.37E-09
196	570212.4	4215658	4.74E-08	2.69E-08	7.43E-08	7.24E-09	4.09E-09	1.13E-08	3.27E-09	1.68E-09	4.95E-09
197	570194.7	4215660	4.38E-08	2.48E-08	6.87E-08	6.69E-09	3.78E-09	1.05E-08	3.02E-09	1.55E-09	4.57E-09
198	570177.1	4215662	4.06E-08	2.30E-08	6.37E-08	6.21E-09	3.50E-09	9.71E-09	2.80E-09	1.44E-09	4.24E-09
199	570159.4	4215664	3.83E-08	2.17E-08	5.99E-08	5.84E-09	3.30E-09	9.14E-09	2.64E-09	1.36E-09	3.99E-09
200	570141.7	4215666	3.63E-08	2.05E-08	5.68E-08	5.54E-09	3.12E-09	8.66E-09	2.50E-09	1.29E-09	3.79E-09
201	570124.1	4215669	3.46E-08	1.96E-08	5.42E-08	5.28E-09	2.98E-09	8.26E-09	2.38E-09	1.23E-09	3.61E-09
202	570264.7	4215649	6.04E-08	3.42E-08	9.46E-08	9.22E-09	5.20E-09	1.44E-08	4.16E-09	2.14E-09	6.30E-09
203	570281.3	4215642	6.70E-08	3.80E-08	1.05E-07	1.02E-08	5.77E-09	1.60E-08	4.62E-09	2.38E-09	6.99E-09
204	570297.8	4215634	7.43E-08	4.21E-08	1.16E-07	1.13E-08	6.40E-09	1.77E-08	5.12E-09	2.63E-09	7.75E-09
205	570314.3	4215627	8.21E-08	4.65E-08	1.29E-07	1.25E-08	7.07E-09	1.96E-08	5.66E-09	2.91E-09	8.57E-09
206	570330.8	4215620	9.01E-08	5.11E-08	1.41E-07	1.38E-08	7.77E-09	2.15E-08	6.21E-09	3.20E-09	9.41E-09
207	570251.9	4215663	5.26E-08	2.98E-08	8.23E-08	8.03E-09	4.53E-09	1.26E-08	3.62E-09	1.86E-09	5.49E-09
208	570234.6	4215665	4.88E-08	2.77E-08	7.65E-08	7.45E-09	4.21E-09	1.17E-08	3.36E-09	1.73E-09	5.09E-09
209	570217.2	4215667	4.52E-08	2.56E-08	7.08E-08	6.90E-09	3.90E-09	1.08E-08	3.12E-09	1.60E-09	4.72E-09
210	570199.9	4215669	4.20E-08	2.38E-08	6.57E-08	6.41E-09	3.62E-09	1.00E-08	2.89E-09	1.49E-09	4.38E-09
211	570182.6	4215671	3.91E-08	2.22E-08	6.12E-08	5.97E-09	3.37E-09	9.34E-09	2.69E-09	1.39E-09	4.08E-09
212	570165.3	4215673	3.68E-08	2.08E-08	5.76E-08	5.62E-09	3.17E-09	8.78E-09	2.53E-09	1.30E-09	3.84E-09
213	570148	4215675	3.49E-08	1.98E-08	5.47E-08	5.34E-09	3.01E-09	8.35E-09	2.41E-09	1.24E-09	3.65E-09
214	570130.7	4215677	3.33E-08	1.89E-08	5.22E-08	5.09E-09	2.87E-09	7.96E-09	2.30E-09	1.18E-09	3.48E-09
215	570113.4	4215680	3.19E-08	1.81E-08	5.00E-08	4.88E-09	2.75E-09	7.63E-09	2.20E-09	1.13E-09	3.33E-09
216	570268.8	4215658	5.73E-08	3.25E-08	8.98E-08	8.76E-09	4.94E-09	1.37E-08	3.95E-09	2.03E-09	5.98E-09
217	570277	4215654	6.03E-08	3.42E-08	9.45E-08	9.21E-09	5.20E-09	1.44E-08	4.16E-09	2.14E-09	6.29E-09
218	570293.6	4215647	6.67E-08	3.78E-08	1.05E-07	1.02E-08	5.75E-09	1.59E-08	4.60E-09	2.37E-09	6.96E-09
219	570310.1	4215640	7.37E-08	4.18E-08	1.16E-07	1.13E-08	6.35E-09	1.76E-08	5.08E-09	2.62E-09	7.70E-09
220	570326.6	4215633	8.11E-08	4.60E-08	1.27E-07	1.24E-08	6.99E-09	1.94E-08	5.59E-09	2.88E-09	8.47E-09
221	570256	4215672	4.98E-08	2.82E-08	7.80E-08	7.60E-09	4.29E-09	1.19E-08	3.43E-09	1.77E-09	5.19E-09
222	570239	4215674	4.63E-08	2.62E-08	7.25E-08	7.07E-09	3.99E-09	1.11E-08	3.19E-09	1.64E-09	4.83E-09
223	570222	4215676	4.31E-08	2.44E-08	6.75E-08	6.58E-09	3.71E-09	1.03E-08	2.97E-09	1.53E-09	4.50E-09
224	570205	4215678	4.01E-08	2.27E-08	6.29E-08	6.13E-09	3.46E-09	9.59E-09	2.77E-09	1.42E-09	4.19E-09
225	570188	4215680	3.75E-08	2.13E-08	5.88E-08	5.73E-09	3.24E-09	8.97E-09	2.59E-09	1.33E-09	3.92E-09
226	570171	4215682	3.53E-08	2.00E-08	5.54E-08	5.40E-09	3.05E-09	8.44E-09	2.44E-09	1.25E-09	3.69E-09
227	570154	4215684	3.36E-08	1.91E-08	5.27E-08	5.14E-09	2.90E-09	8.03E-09	2.32E-09	1.19E-09	3.51E-09
228	570137	4215686	3.21E-08	1.82E-08	5.03E-08	4.91E-09	2.77E-09	7.67E-09	2.21E-09	1.14E-09	3.35E-09
229	570120	4215688	3.08E-08	1.75E-08	4.83E-08	4.71E-09	2.66E-09	7.36E-09	2.12E-09	1.09E-09	3.22E-09
230	570272.8	4215667	5.43E-08	3.08E-08	8.51E-08	8.30E-09	4.68E-09	1.30E-08	3.75E-09	1.93E-09	5.67E-09
231	570281.1	4215664	5.73E-08	3.24E-08	8.97E-08	8.75E-09	4.93E-09	1.37E-08	3.95E-09	2.03E-09	5.98E-09
232	570297.6	4215656	6.33E-08	3.58E-08	9.91E-08	9.66E-09	5.45E-09	1.51E-08	4.36E-09	2.24E-09	6.60E-09
233	570305.8	4215653	6.64E-08	3.76E-08	1.04E-07	1.01E-08	5.73E-09	1.59E-08	4.58E-09	2.36E-09	6.94E-09
234	570314.1	4215649	6.97E-08	3.95E-08	1.09E-07	1.06E-08	6.01E-09	1.67E-08	4.81E-09	2.47E-09	7.28E-09
235	570330.6	4215642	7.66E-08	4.34E-08	1.20E-07	1.17E-08	6.60E-09	1.83E-08	5.28E-09	2.72E-09	8.00E-09
236	570338.9	4215638	8.01E-08	4.54E-08	1.25E-07	1.22E-08	6.90E-09	1.91E-08	5.52E-09	2.84E-09	8.36E-09
237	570259.8	4215681	4.70E-08	2.66E-08	7.36E-08	7.17E-09	4.05E-09	1.12E-08	3.24E-09	1.67E-09	4.90E-09
238	570242.2	4215683	4.36E-08	2.47E-08	6.82E-08	6.65E-09	3.75E-09	1.04E-08	3.00E-09	1.55E-09	4.55E-09
239	570224.5	4215685	4.05E-08	2.29E-08	6.34E-08	6.18E-09	3.49E-09	9.67E-09	2.79E-09	1.44E-09	4.23E-09
240	570206.9	4215687	3.78E-08	2.14E-08	5.92E-08	5.77E-09	3.26E-09	9.03E-09	2.60E-09	1.34E-09	3.95E-09

241	570189.3	4215690	3.55E-08	2.01E-08	5.56E-08	5.42E-09	3.06E-09	8.47E-09	2.44E-09	1.26E-09	3.70E-09
242	570171.7	4215692	3.35E-08	1.90E-08	5.25E-08	5.12E-09	2.89E-09	8.00E-09	2.31E-09	1.19E-09	3.50E-09
243	570154.1	4215694	3.19E-08	1.81E-08	4.99E-08	4.87E-09	2.75E-09	7.61E-09	2.20E-09	1.13E-09	3.33E-09
244	570136.5	4215696	3.05E-08	1.73E-08	4.77E-08	4.65E-09	2.62E-09	7.28E-09	2.10E-09	1.08E-09	3.18E-09
245	570118.8	4215698	2.93E-08	1.66E-08	4.58E-08	4.47E-09	2.52E-09	6.99E-09	2.02E-09	1.04E-09	3.05E-09
246	570276.8	4215676	5.13E-08	2.91E-08	8.04E-08	7.84E-09	4.42E-09	1.23E-08	3.54E-09	1.82E-09	5.36E-09
247	570285.1	4215673	5.41E-08	3.06E-08	8.47E-08	8.26E-09	4.66E-09	1.29E-08	3.73E-09	1.92E-09	5.65E-09
248	570293.4	4215669	5.70E-08	3.23E-08	8.92E-08	8.70E-09	4.91E-09	1.36E-08	3.92E-09	2.02E-09	5.94E-09
249	570309.9	4215662	6.29E-08	3.57E-08	9.86E-08	9.61E-09	5.42E-09	1.50E-08	4.34E-09	2.23E-09	6.57E-09
250	570318.1	4215658	6.60E-08	3.74E-08	1.03E-07	1.01E-08	5.69E-09	1.58E-08	4.55E-09	2.34E-09	6.89E-09
251	570334.6	4215651	7.23E-08	4.10E-08	1.13E-07	1.10E-08	6.23E-09	1.73E-08	4.98E-09	2.57E-09	7.55E-09
252	570264	4215690	4.43E-08	2.51E-08	6.94E-08	6.76E-09	3.82E-09	1.06E-08	3.05E-09	1.57E-09	4.62E-09
253	570246.6	4215692	4.12E-08	2.33E-08	6.45E-08	6.29E-09	3.55E-09	9.84E-09	2.84E-09	1.46E-09	4.30E-09
254	570229.3	4215694	3.84E-08	2.18E-08	6.02E-08	5.87E-09	3.31E-09	9.18E-09	2.65E-09	1.36E-09	4.01E-09
255	570212	4215697	3.60E-08	2.04E-08	5.64E-08	5.50E-09	3.10E-09	8.61E-09	2.48E-09	1.28E-09	3.76E-09
256	570194.7	4215699	3.40E-08	1.93E-08	5.32E-08	5.19E-09	2.93E-09	8.12E-09	2.34E-09	1.21E-09	3.55E-09
257	570177.4	4215701	3.23E-08	1.83E-08	5.05E-08	4.93E-09	2.78E-09	7.71E-09	2.22E-09	1.14E-09	3.37E-09
258	570160.1	4215703	3.07E-08	1.74E-08	4.82E-08	4.69E-09	2.65E-09	7.34E-09	2.12E-09	1.09E-09	3.21E-09
259	570142.8	4215705	2.94E-08	1.66E-08	4.60E-08	4.49E-09	2.53E-09	7.02E-09	2.03E-09	1.04E-09	3.07E-09
260	570125.5	4215707	2.83E-08	1.60E-08	4.43E-08	4.32E-09	2.44E-09	6.75E-09	1.95E-09	1.00E-09	2.95E-09
261	570108.1	4215709	2.72E-08	1.54E-08	4.27E-08	4.16E-09	2.35E-09	6.51E-09	1.88E-09	9.66E-10	2.84E-09
262	570280.9	4215686	4.84E-08	2.74E-08	7.58E-08	7.39E-09	4.17E-09	1.16E-08	3.33E-09	1.72E-09	5.05E-09
263	570297.4	4215678	5.37E-08	3.04E-08	8.42E-08	8.21E-09	4.63E-09	1.28E-08	3.70E-09	1.91E-09	5.61E-09
264	570305.6	4215675	5.66E-08	3.20E-08	8.86E-08	8.64E-09	4.87E-09	1.35E-08	3.90E-09	2.01E-09	5.90E-09
265	570322.2	4215667	6.23E-08	3.53E-08	9.77E-08	9.52E-09	5.37E-09	1.49E-08	4.30E-09	2.21E-09	6.51E-09
266	570330.4	4215664	6.52E-08	3.70E-08	1.02E-07	9.96E-09	5.62E-09	1.56E-08	4.50E-09	2.31E-09	6.81E-09
267	570346.9	4215656	7.11E-08	4.03E-08	1.11E-07	1.09E-08	6.13E-09	1.70E-08	4.90E-09	2.52E-09	7.42E-09
268	570267.7	4215699	4.17E-08	2.36E-08	6.53E-08	6.36E-09	3.59E-09	9.95E-09	2.87E-09	1.48E-09	4.35E-09
269	570249.8	4215702	3.88E-08	2.20E-08	6.07E-08	5.92E-09	3.34E-09	9.26E-09	2.67E-09	1.37E-09	4.04E-09
270	570231.9	4215704	3.61E-08	2.05E-08	5.66E-08	5.51E-09	3.11E-09	8.62E-09	2.49E-09	1.28E-09	3.77E-09
271	570223	4215705	3.50E-08	1.98E-08	5.48E-08	5.34E-09	3.02E-09	8.36E-09	2.41E-09	1.24E-09	3.65E-09
272	570214	4215706	3.40E-08	1.92E-08	5.32E-08	5.19E-09	2.93E-09	8.11E-09	2.34E-09	1.20E-09	3.54E-09
273	570196.1	4215708	3.22E-08	1.82E-08	5.04E-08	4.92E-09	2.77E-09	7.69E-09	2.22E-09	1.14E-09	3.36E-09
274	570178.3	4215710	3.07E-08	1.74E-08	4.81E-08	4.69E-09	2.65E-09	7.33E-09	2.12E-09	1.09E-09	3.21E-09
275	570169.3	4215711	3.00E-08	1.70E-08	4.70E-08	4.58E-09	2.58E-09	7.16E-09	2.07E-09	1.06E-09	3.13E-09
276	570151.4	4215713	2.86E-08	1.62E-08	4.48E-08	4.37E-09	2.47E-09	6.84E-09	1.97E-09	1.02E-09	2.99E-09
277	570133.5	4215716	2.74E-08	1.55E-08	4.30E-08	4.19E-09	2.36E-09	6.55E-09	1.89E-09	9.73E-10	2.86E-09
278	570115.6	4215718	2.64E-08	1.50E-08	4.14E-08	4.03E-09	2.28E-09	6.31E-09	1.82E-09	9.37E-10	2.76E-09
279	570284.9	4215695	4.56E-08	2.58E-08	7.14E-08	6.96E-09	3.93E-09	1.09E-08	3.14E-09	1.62E-09	4.76E-09
280	570293.2	4215691	4.81E-08	2.72E-08	7.53E-08	7.34E-09	4.14E-09	1.15E-08	3.31E-09	1.70E-09	5.02E-09
281	570309.7	4215684	5.33E-08	3.02E-08	8.35E-08	8.14E-09	4.59E-09	1.27E-08	3.67E-09	1.89E-09	5.57E-09
282	570317.9	4215680	5.61E-08	3.18E-08	8.79E-08	8.56E-09	4.83E-09	1.34E-08	3.86E-09	1.99E-09	5.85E-09
283	570334.5	4215673	6.16E-08	3.49E-08	9.65E-08	9.40E-09	5.31E-09	1.47E-08	4.24E-09	2.18E-09	6.43E-09
284	570342.7	4215669	6.43E-08	3.64E-08	1.01E-07	9.82E-09	5.54E-09	1.54E-08	4.43E-09	2.28E-09	6.71E-09
285	570282.2	4215444	3.63E-07	2.06E-07	5.69E-07	5.54E-08	3.13E-08	8.67E-08	2.50E-08	1.29E-08	3.79E-08
286	570275.6	4215451	3.53E-07	2.00E-07	5.53E-07	5.39E-08	3.04E-08	8.44E-08	2.43E-08	1.25E-08	3.69E-08
287	570268.9	4215458	3.40E-07	1.93E-07	5.33E-07	5.19E-08	2.93E-08	8.12E-08	2.34E-08	1.21E-08	3.55E-08
288	570298.6	4215441	3.46E-07	1.96E-07	5.43E-07	5.29E-08	2.99E-08	8.28E-08	2.39E-08	1.23E-08	3.62E-08
289	570292.2	4215447	3.41E-07	1.93E-07	5.34E-07	5.21E-08	2.94E-08	8.15E-08	2.35E-08	1.21E-08	3.56E-08
290	570285.7	4215454	3.34E-07	1.89E-07	5.23E-07	5.10E-08	2.88E-08	7.97E-08	2.30E-08	1.18E-08	3.48E-08
291	570279.2	4215460	3.24E-07	1.83E-07	5.07E-07	4.94E-08	2.79E-08	7.73E-08	2.23E-08	1.15E-08	3.38E-08
292	570272.8	4215467	3.11E-07	1.76E-07	4.87E-07	4.75E-08	2.68E-08	7.43E-08	2.14E-08	1.10E-08	3.24E-08
293	570308.3	4215444	3.27E-07	1.85E-07	5.12E-07	4.99E-08	2.82E-08	7.81E-08	2.25E-08	1.16E-08	3.41E-08
294	570302	4215450	3.22E-07	1.83E-07	5.05E-07	4.92E-08	2.78E-08	7.70E-08	2.22E-08	1.14E-08	3.37E-08
295	570295.6	4215457	3.16E-07	1.79E-07	4.95E-07	4.82E-08	2.72E-08	7.54E-08	2.18E-08	1.12E-08	3.30E-08
296	570289.3	4215463	3.08E-07	1.74E-07	4.82E-07	4.70E-08	2.65E-08	7.35E-08	2.12E-08	1.09E-08	3.21E-08
297	570276.6	4215476	2.84E-07	1.61E-07	4.44E-07	4.33E-08	2.44E-08	6.78E-08	1.95E-08	1.01E-08	2.96E-08
298	570322.7	4215443	3.11E-07	1.76E-07	4.86E-07	4.74E-08	2.68E-08	7.42E-08	2.14E-08	1.10E-08	3.24E-08
299	570315.8	4215450	3.08E-07	1.74E-07	4.82E-07	4.70E-08	2.65E-08	7.36E-08	2.12E-08	1.09E-08	3.21E-08
300	570308.9	4215457	3.03E-07	1.72E-07	4.75E-07	4.63E-08	2.61E-08	7.24E-08	2.09E-08	1.08E-08	3.17E-08
301	570302	4215464	2.96E-07	1.68E-07	4.64E-07	4.52E-08	2.55E-08	7.08E-08	2.04E-08	1.05E-08	3.09E-08

302	570295.1	4215471	2.87E-07	1.62E-07	4.49E-07	4.38E-08	2.47E-08	6.85E-08	1.98E-08	1.02E-08	2.99E-08
303	570288.2	4215478	2.75E-07	1.56E-07	4.31E-07	4.20E-08	2.37E-08	6.57E-08	1.90E-08	9.76E-09	2.87E-08
304	570281.3	4215485	2.61E-07	1.48E-07	4.09E-07	3.99E-08	2.25E-08	6.24E-08	1.80E-08	9.27E-09	2.73E-08
305	570339	4215439	2.91E-07	1.65E-07	4.55E-07	4.44E-08	2.50E-08	6.94E-08	2.00E-08	1.03E-08	3.03E-08
306	570332.2	4215446	2.93E-07	1.66E-07	4.58E-07	4.47E-08	2.52E-08	6.99E-08	2.02E-08	1.04E-08	3.05E-08
307	570325.5	4215453	2.92E-07	1.65E-07	4.57E-07	4.45E-08	2.51E-08	6.97E-08	2.01E-08	1.03E-08	3.05E-08
308	570318.8	4215460	2.88E-07	1.63E-07	4.51E-07	4.40E-08	2.48E-08	6.88E-08	1.99E-08	1.02E-08	3.01E-08
309	570312	4215467	2.82E-07	1.60E-07	4.42E-07	4.31E-08	2.43E-08	6.75E-08	1.95E-08	1.00E-08	2.95E-08
310	570305.3	4215474	2.75E-07	1.56E-07	4.30E-07	4.20E-08	2.37E-08	6.56E-08	1.89E-08	9.75E-09	2.87E-08
311	570298.6	4215480	2.65E-07	1.50E-07	4.15E-07	4.04E-08	2.28E-08	6.33E-08	1.83E-08	9.40E-09	2.76E-08
312	570291.8	4215487	2.53E-07	1.43E-07	3.97E-07	3.86E-08	2.18E-08	6.05E-08	1.74E-08	8.98E-09	2.64E-08
313	570285.1	4215494	2.40E-07	1.36E-07	3.76E-07	3.67E-08	2.07E-08	5.74E-08	1.65E-08	8.52E-09	2.51E-08
314	570355.7	4215399	2.92E-07	1.65E-07	4.58E-07	4.46E-08	2.52E-08	6.98E-08	2.01E-08	1.04E-08	3.05E-08
315	570355.5	4215408	2.86E-07	1.62E-07	4.48E-07	4.37E-08	2.47E-08	6.84E-08	1.97E-08	1.02E-08	2.99E-08
316	570355.3	4215418	2.82E-07	1.60E-07	4.41E-07	4.30E-08	2.43E-08	6.73E-08	1.94E-08	9.99E-09	2.94E-08
317	570348.3	4215443	2.75E-07	1.56E-07	4.30E-07	4.19E-08	2.37E-08	6.56E-08	1.89E-08	9.74E-09	2.87E-08
318	570341.7	4215450	2.77E-07	1.57E-07	4.33E-07	4.23E-08	2.38E-08	6.61E-08	1.91E-08	9.81E-09	2.89E-08
319	570335.1	4215457	2.77E-07	1.57E-07	4.33E-07	4.22E-08	2.38E-08	6.61E-08	1.91E-08	9.81E-09	2.89E-08
320	570328.5	4215463	2.74E-07	1.55E-07	4.29E-07	4.19E-08	2.36E-08	6.55E-08	1.89E-08	9.72E-09	2.86E-08
321	570322	4215470	2.69E-07	1.53E-07	4.22E-07	4.11E-08	2.32E-08	6.44E-08	1.86E-08	9.56E-09	2.81E-08
322	570315.4	4215477	2.63E-07	1.49E-07	4.13E-07	4.02E-08	2.27E-08	6.29E-08	1.81E-08	9.34E-09	2.75E-08
323	570308.8	4215483	2.55E-07	1.45E-07	4.00E-07	3.90E-08	2.20E-08	6.10E-08	1.76E-08	9.05E-09	2.66E-08
324	570302.2	4215490	2.45E-07	1.39E-07	3.84E-07	3.75E-08	2.11E-08	5.86E-08	1.69E-08	8.70E-09	2.56E-08
325	570295.6	4215497	2.34E-07	1.32E-07	3.66E-07	3.57E-08	2.01E-08	5.58E-08	1.61E-08	8.29E-09	2.44E-08
326	570289	4215503	2.22E-07	1.26E-07	3.48E-07	3.39E-08	1.91E-08	5.30E-08	1.53E-08	7.87E-09	2.32E-08
327	570365.1	4215394	2.79E-07	1.58E-07	4.38E-07	4.27E-08	2.41E-08	6.67E-08	1.92E-08	9.91E-09	2.92E-08
328	570364.9	4215404	2.75E-07	1.56E-07	4.30E-07	4.19E-08	2.37E-08	6.56E-08	1.89E-08	9.74E-09	2.87E-08
329	570364.7	4215413	2.71E-07	1.53E-07	4.24E-07	4.13E-08	2.33E-08	6.46E-08	1.86E-08	9.60E-09	2.82E-08
330	570357.6	4215447	2.60E-07	1.48E-07	4.08E-07	3.98E-08	2.24E-08	6.22E-08	1.79E-08	9.24E-09	2.72E-08
331	570351.2	4215454	2.63E-07	1.49E-07	4.12E-07	4.01E-08	2.26E-08	6.28E-08	1.81E-08	9.32E-09	2.74E-08
332	570344.7	4215460	2.63E-07	1.49E-07	4.13E-07	4.02E-08	2.27E-08	6.29E-08	1.81E-08	9.34E-09	2.75E-08
333	570338.2	4215467	2.62E-07	1.48E-07	4.10E-07	4.00E-08	2.25E-08	6.25E-08	1.80E-08	9.28E-09	2.73E-08
334	570331.8	4215473	2.58E-07	1.46E-07	4.04E-07	3.94E-08	2.22E-08	6.16E-08	1.78E-08	9.15E-09	2.69E-08
335	570325.3	4215480	2.53E-07	1.43E-07	3.96E-07	3.86E-08	2.18E-08	6.03E-08	1.74E-08	8.96E-09	2.64E-08
336	570318.8	4215486	2.46E-07	1.39E-07	3.85E-07	3.75E-08	2.12E-08	5.87E-08	1.69E-08	8.72E-09	2.57E-08
337	570312.3	4215493	2.37E-07	1.35E-07	3.72E-07	3.63E-08	2.05E-08	5.67E-08	1.64E-08	8.42E-09	2.48E-08
338	570305.9	4215499	2.28E-07	1.29E-07	3.57E-07	3.48E-08	1.96E-08	5.44E-08	1.57E-08	8.07E-09	2.38E-08
339	570299.4	4215506	2.17E-07	1.23E-07	3.40E-07	3.31E-08	1.87E-08	5.18E-08	1.49E-08	7.70E-09	2.26E-08
340	570292.9	4215513	2.06E-07	1.16E-07	3.22E-07	3.14E-08	1.77E-08	4.91E-08	1.42E-08	7.29E-09	2.15E-08
341	570374.4	4215395	2.65E-07	1.50E-07	4.15E-07	4.04E-08	2.28E-08	6.32E-08	1.82E-08	9.39E-09	2.76E-08
342	570374.2	4215405	2.61E-07	1.48E-07	4.08E-07	3.98E-08	2.25E-08	6.23E-08	1.80E-08	9.25E-09	2.72E-08
343	570374	4215415	2.57E-07	1.46E-07	4.03E-07	3.93E-08	2.22E-08	6.15E-08	1.77E-08	9.13E-09	2.69E-08
344	570366.4	4215451	2.48E-07	1.40E-07	3.88E-07	3.78E-08	2.14E-08	5.92E-08	1.71E-08	8.79E-09	2.59E-08
345	570359.5	4215458	2.50E-07	1.42E-07	3.92E-07	3.82E-08	2.16E-08	5.98E-08	1.73E-08	8.88E-09	2.61E-08
346	570352.6	4215465	2.52E-07	1.43E-07	3.94E-07	3.84E-08	2.17E-08	6.01E-08	1.73E-08	8.92E-09	2.63E-08
347	570345.7	4215472	2.49E-07	1.41E-07	3.91E-07	3.81E-08	2.15E-08	5.96E-08	1.72E-08	8.84E-09	2.60E-08
348	570338.8	4215479	2.45E-07	1.39E-07	3.84E-07	3.75E-08	2.11E-08	5.86E-08	1.69E-08	8.71E-09	2.56E-08
349	570331.9	4215486	2.40E-07	1.36E-07	3.76E-07	3.66E-08	2.07E-08	5.73E-08	1.65E-08	8.51E-09	2.50E-08
350	570325	4215493	2.33E-07	1.32E-07	3.65E-07	3.55E-08	2.01E-08	5.56E-08	1.60E-08	8.25E-09	2.43E-08
351	570318.1	4215500	2.24E-07	1.27E-07	3.51E-07	3.42E-08	1.93E-08	5.35E-08	1.54E-08	7.94E-09	2.34E-08
352	570311.2	4215507	2.14E-07	1.21E-07	3.35E-07	3.27E-08	1.84E-08	5.11E-08	1.47E-08	7.59E-09	2.23E-08
353	570304.3	4215514	2.03E-07	1.15E-07	3.18E-07	3.10E-08	1.75E-08	4.85E-08	1.40E-08	7.21E-09	2.12E-08
354	570297.4	4215521	1.92E-07	1.09E-07	3.00E-07	2.93E-08	1.65E-08	4.58E-08	1.32E-08	6.80E-09	2.00E-08
355	570383.8	4215390	2.53E-07	1.43E-07	3.96E-07	3.86E-08	2.18E-08	6.04E-08	1.74E-08	8.98E-09	2.64E-08
356	570383.6	4215400	2.50E-07	1.42E-07	3.92E-07	3.82E-08	2.16E-08	5.98E-08	1.72E-08	8.88E-09	2.61E-08
357	570383.4	4215410	2.47E-07	1.40E-07	3.87E-07	3.78E-08	2.13E-08	5.91E-08	1.70E-08	8.77E-09	2.58E-08
358	570382.7	4215439	2.36E-07	1.34E-07	3.70E-07	3.61E-08	2.04E-08	5.65E-08	1.63E-08	8.39E-09	2.47E-08
359	570375.8	4215455	2.36E-07	1.34E-07	3.70E-07	3.61E-08	2.03E-08	5.64E-08	1.63E-08	8.38E-09	2.46E-08
360	570369	4215462	2.39E-07	1.35E-07	3.74E-07	3.64E-08	2.06E-08	5.70E-08	1.64E-08	8.46E-09	2.49E-08
361	570362.2	4215469	2.40E-07	1.36E-07	3.75E-07	3.66E-08	2.06E-08	5.72E-08	1.65E-08	8.50E-09	2.50E-08
362	570355.4	4215476	2.39E-07	1.35E-07	3.74E-07	3.64E-08	2.06E-08	5.70E-08	1.64E-08	8.47E-09	2.49E-08

363	570348.7	4215483	2.36E-07	1.33E-07	3.69E-07	3.60E-08	2.03E-08	5.63E-08	1.62E-08	8.36E-09	2.46E-08
364	570341.9	4215489	2.31E-07	1.31E-07	3.62E-07	3.53E-08	1.99E-08	5.52E-08	1.59E-08	8.19E-09	2.41E-08
365	570335.1	4215496	2.25E-07	1.27E-07	3.52E-07	3.43E-08	1.94E-08	5.37E-08	1.55E-08	7.98E-09	2.35E-08
366	570328.4	4215503	2.17E-07	1.23E-07	3.40E-07	3.32E-08	1.87E-08	5.19E-08	1.50E-08	7.70E-09	2.27E-08
367	570321.6	4215510	2.08E-07	1.18E-07	3.26E-07	3.18E-08	1.79E-08	4.98E-08	1.44E-08	7.39E-09	2.17E-08
368	570314.8	4215517	1.99E-07	1.13E-07	3.11E-07	3.03E-08	1.71E-08	4.75E-08	1.37E-08	7.05E-09	2.07E-08
369	570308.1	4215524	1.89E-07	1.07E-07	2.95E-07	2.88E-08	1.62E-08	4.50E-08	1.30E-08	6.69E-09	1.97E-08
370	570301.3	4215531	1.79E-07	1.01E-07	2.80E-07	2.73E-08	1.54E-08	4.26E-08	1.23E-08	6.33E-09	1.86E-08
371	570393	4215395	2.40E-07	1.36E-07	3.75E-07	3.66E-08	2.06E-08	5.72E-08	1.65E-08	8.50E-09	2.50E-08
372	570392.8	4215405	2.37E-07	1.34E-07	3.71E-07	3.62E-08	2.04E-08	5.66E-08	1.63E-08	8.41E-09	2.47E-08
373	570392.6	4215414	2.35E-07	1.33E-07	3.68E-07	3.58E-08	2.02E-08	5.61E-08	1.62E-08	8.32E-09	2.45E-08
374	570392	4215443	2.25E-07	1.28E-07	3.53E-07	3.44E-08	1.94E-08	5.38E-08	1.55E-08	7.99E-09	2.35E-08
375	570385.1	4215459	2.25E-07	1.28E-07	3.53E-07	3.44E-08	1.94E-08	5.38E-08	1.55E-08	7.99E-09	2.35E-08
376	570378.4	4215466	2.28E-07	1.29E-07	3.57E-07	3.48E-08	1.96E-08	5.44E-08	1.57E-08	8.08E-09	2.38E-08
377	570371.8	4215472	2.28E-07	1.29E-07	3.58E-07	3.49E-08	1.97E-08	5.46E-08	1.57E-08	8.10E-09	2.38E-08
378	570365.1	4215479	2.28E-07	1.29E-07	3.57E-07	3.48E-08	1.96E-08	5.44E-08	1.57E-08	8.08E-09	2.38E-08
379	570358.5	4215486	2.26E-07	1.28E-07	3.54E-07	3.45E-08	1.95E-08	5.40E-08	1.56E-08	8.01E-09	2.36E-08
380	570351.8	4215493	2.22E-07	1.26E-07	3.48E-07	3.39E-08	1.92E-08	5.31E-08	1.53E-08	7.89E-09	2.32E-08
381	570345.1	4215499	2.17E-07	1.23E-07	3.40E-07	3.31E-08	1.87E-08	5.19E-08	1.50E-08	7.70E-09	2.27E-08
382	570338.5	4215506	2.10E-07	1.19E-07	3.30E-07	3.21E-08	1.81E-08	5.03E-08	1.45E-08	7.47E-09	2.20E-08
383	570331.8	4215513	2.03E-07	1.15E-07	3.18E-07	3.10E-08	1.75E-08	4.84E-08	1.40E-08	7.19E-09	2.12E-08
384	570325.2	4215520	1.94E-07	1.10E-07	3.04E-07	2.96E-08	1.67E-08	4.63E-08	1.34E-08	6.88E-09	2.02E-08
385	570318.5	4215526	1.85E-07	1.05E-07	2.89E-07	2.82E-08	1.59E-08	4.41E-08	1.27E-08	6.55E-09	1.93E-08
386	570311.9	4215533	1.76E-07	9.97E-08	2.76E-07	2.69E-08	1.52E-08	4.20E-08	1.21E-08	6.24E-09	1.84E-08
387	570305.2	4215540	1.67E-07	9.44E-08	2.61E-07	2.54E-08	1.44E-08	3.98E-08	1.15E-08	5.91E-09	1.74E-08
388	570402.4	4215391	2.29E-07	1.30E-07	3.59E-07	3.50E-08	1.98E-08	5.48E-08	1.58E-08	8.13E-09	2.39E-08
389	570402.2	4215400	2.27E-07	1.29E-07	3.56E-07	3.47E-08	1.96E-08	5.43E-08	1.57E-08	8.06E-09	2.37E-08
390	570402	4215409	2.25E-07	1.28E-07	3.53E-07	3.44E-08	1.94E-08	5.38E-08	1.55E-08	7.99E-09	2.35E-08
391	570401.2	4215447	2.15E-07	1.22E-07	3.37E-07	3.28E-08	1.85E-08	5.14E-08	1.48E-08	7.63E-09	2.24E-08
392	570394.4	4215463	2.15E-07	1.22E-07	3.36E-07	3.28E-08	1.85E-08	5.13E-08	1.48E-08	7.62E-09	2.24E-08
393	570387.8	4215469	2.17E-07	1.23E-07	3.40E-07	3.31E-08	1.87E-08	5.19E-08	1.50E-08	7.70E-09	2.27E-08
394	570381.3	4215476	2.18E-07	1.24E-07	3.42E-07	3.33E-08	1.88E-08	5.21E-08	1.50E-08	7.74E-09	2.28E-08
395	570374.7	4215483	2.18E-07	1.23E-07	3.41E-07	3.33E-08	1.88E-08	5.21E-08	1.50E-08	7.73E-09	2.28E-08
396	570368.2	4215489	2.16E-07	1.23E-07	3.39E-07	3.30E-08	1.86E-08	5.17E-08	1.49E-08	7.68E-09	2.26E-08
397	570361.6	4215496	2.14E-07	1.21E-07	3.35E-07	3.26E-08	1.84E-08	5.10E-08	1.47E-08	7.58E-09	2.23E-08
398	570355	4215503	2.09E-07	1.19E-07	3.28E-07	3.20E-08	1.80E-08	5.00E-08	1.44E-08	7.43E-09	2.19E-08
399	570348.5	4215509	2.04E-07	1.15E-07	3.19E-07	3.11E-08	1.76E-08	4.87E-08	1.40E-08	7.23E-09	2.13E-08
400	570341.9	4215516	1.97E-07	1.12E-07	3.09E-07	3.01E-08	1.70E-08	4.71E-08	1.36E-08	6.99E-09	2.06E-08
401	570335.4	4215523	1.89E-07	1.07E-07	2.97E-07	2.89E-08	1.63E-08	4.52E-08	1.30E-08	6.72E-09	1.98E-08
402	570328.8	4215529	1.81E-07	1.03E-07	2.84E-07	2.77E-08	1.56E-08	4.33E-08	1.25E-08	6.42E-09	1.89E-08
403	570322.3	4215536	1.73E-07	9.79E-08	2.71E-07	2.64E-08	1.49E-08	4.13E-08	1.19E-08	6.13E-09	1.80E-08
404	570315.7	4215542	1.64E-07	9.31E-08	2.57E-07	2.51E-08	1.42E-08	3.92E-08	1.13E-08	5.83E-09	1.71E-08
405	570309.1	4215549	1.55E-07	8.80E-08	2.43E-07	2.37E-08	1.34E-08	3.71E-08	1.07E-08	5.51E-09	1.62E-08
406	570411.7	4215391	2.19E-07	1.24E-07	3.42E-07	3.34E-08	1.88E-08	5.22E-08	1.51E-08	7.75E-09	2.28E-08
407	570411.5	4215401	2.17E-07	1.23E-07	3.40E-07	3.31E-08	1.87E-08	5.18E-08	1.49E-08	7.69E-09	2.26E-08
408	570411.3	4215411	2.15E-07	1.22E-07	3.37E-07	3.28E-08	1.85E-08	5.14E-08	1.48E-08	7.63E-09	2.24E-08
409	570410.6	4215440	2.08E-07	1.18E-07	3.26E-07	3.18E-08	1.79E-08	4.97E-08	1.44E-08	7.39E-09	2.17E-08
410	570410.4	4215450	2.05E-07	1.16E-07	3.22E-07	3.14E-08	1.77E-08	4.91E-08	1.42E-08	7.29E-09	2.14E-08
411	570403.3	4215467	2.05E-07	1.16E-07	3.21E-07	3.13E-08	1.77E-08	4.90E-08	1.41E-08	7.28E-09	2.14E-08
412	570396.3	4215474	2.07E-07	1.17E-07	3.24E-07	3.16E-08	1.78E-08	4.95E-08	1.43E-08	7.35E-09	2.16E-08
413	570389.4	4215481	2.08E-07	1.18E-07	3.26E-07	3.18E-08	1.80E-08	4.98E-08	1.44E-08	7.39E-09	2.17E-08
414	570382.5	4215488	2.09E-07	1.18E-07	3.27E-07	3.19E-08	1.80E-08	4.98E-08	1.44E-08	7.40E-09	2.18E-08
415	570375.6	4215495	2.07E-07	1.17E-07	3.24E-07	3.16E-08	1.78E-08	4.94E-08	1.43E-08	7.34E-09	2.16E-08
416	570368.7	4215502	2.04E-07	1.15E-07	3.19E-07	3.11E-08	1.76E-08	4.87E-08	1.40E-08	7.23E-09	2.13E-08
417	570361.8	4215509	1.99E-07	1.13E-07	3.12E-07	3.05E-08	1.72E-08	4.76E-08	1.37E-08	7.07E-09	2.08E-08
418	570354.9	4215516	1.94E-07	1.10E-07	3.04E-07	2.96E-08	1.67E-08	4.64E-08	1.34E-08	6.89E-09	2.03E-08
419	570348	4215523	1.87E-07	1.06E-07	2.94E-07	2.86E-08	1.61E-08	4.48E-08	1.29E-08	6.65E-09	1.96E-08
420	570341.1	4215530	1.80E-07	1.02E-07	2.82E-07	2.74E-08	1.55E-08	4.29E-08	1.24E-08	6.38E-09	1.88E-08
421	570334.2	4215537	1.72E-07	9.72E-08	2.69E-07	2.62E-08	1.48E-08	4.10E-08	1.18E-08	6.09E-09	1.79E-08
422	570327.3	4215544	1.63E-07	9.24E-08	2.56E-07	2.49E-08	1.41E-08	3.90E-08	1.12E-08	5.79E-09	1.70E-08
423	570320.4	4215551	1.54E-07	8.74E-08	2.42E-07	2.36E-08	1.33E-08	3.69E-08	1.06E-08	5.47E-09	1.61E-08

424	570313.5	4215558	1.45E-07	8.23E-08	2.28E-07	2.22E-08	1.25E-08	3.47E-08	1.00E-08	5.15E-09	1.52E-08
425	570421.1	4215386	2.09E-07	1.19E-07	3.28E-07	3.19E-08	1.80E-08	5.00E-08	1.44E-08	7.42E-09	2.18E-08
426	570420.9	4215396	2.08E-07	1.18E-07	3.26E-07	3.18E-08	1.79E-08	4.97E-08	1.43E-08	7.39E-09	2.17E-08
427	570420.7	4215406	2.07E-07	1.17E-07	3.24E-07	3.16E-08	1.78E-08	4.94E-08	1.42E-08	7.33E-09	2.16E-08
428	570420.5	4215415	2.05E-07	1.16E-07	3.22E-07	3.13E-08	1.77E-08	4.90E-08	1.41E-08	7.28E-09	2.14E-08
429	570419.8	4215444	1.99E-07	1.13E-07	3.11E-07	3.03E-08	1.71E-08	4.75E-08	1.37E-08	7.05E-09	2.07E-08
430	570419.6	4215454	1.96E-07	1.11E-07	3.07E-07	2.99E-08	1.69E-08	4.68E-08	1.35E-08	6.96E-09	2.05E-08
431	570412.6	4215471	1.96E-07	1.11E-07	3.07E-07	2.99E-08	1.69E-08	4.67E-08	1.35E-08	6.94E-09	2.04E-08
432	570405.8	4215478	1.97E-07	1.12E-07	3.09E-07	3.02E-08	1.70E-08	4.72E-08	1.36E-08	7.01E-09	2.06E-08
433	570399	4215484	1.99E-07	1.13E-07	3.11E-07	3.03E-08	1.71E-08	4.75E-08	1.37E-08	7.05E-09	2.07E-08
434	570392.2	4215491	1.99E-07	1.13E-07	3.12E-07	3.04E-08	1.72E-08	4.76E-08	1.37E-08	7.06E-09	2.08E-08
435	570385.4	4215498	1.98E-07	1.12E-07	3.11E-07	3.03E-08	1.71E-08	4.74E-08	1.37E-08	7.04E-09	2.07E-08
436	570378.6	4215505	1.96E-07	1.11E-07	3.07E-07	2.99E-08	1.69E-08	4.68E-08	1.35E-08	6.95E-09	2.04E-08
437	570371.8	4215512	1.92E-07	1.09E-07	3.01E-07	2.93E-08	1.65E-08	4.59E-08	1.32E-08	6.81E-09	2.00E-08
438	570365	4215519	1.87E-07	1.06E-07	2.94E-07	2.86E-08	1.61E-08	4.48E-08	1.29E-08	6.65E-09	1.96E-08
439	570358.2	4215526	1.82E-07	1.03E-07	2.85E-07	2.78E-08	1.57E-08	4.35E-08	1.25E-08	6.45E-09	1.90E-08
440	570351.4	4215533	1.76E-07	9.94E-08	2.75E-07	2.68E-08	1.51E-08	4.19E-08	1.21E-08	6.23E-09	1.83E-08
441	570344.6	4215540	1.68E-07	9.53E-08	2.63E-07	2.57E-08	1.45E-08	4.02E-08	1.16E-08	5.97E-09	1.76E-08
442	570337.8	4215547	1.60E-07	9.09E-08	2.51E-07	2.45E-08	1.38E-08	3.83E-08	1.11E-08	5.69E-09	1.67E-08
443	570331	4215553	1.52E-07	8.63E-08	2.39E-07	2.33E-08	1.31E-08	3.64E-08	1.05E-08	5.40E-09	1.59E-08
444	570324.2	4215560	1.44E-07	8.15E-08	2.25E-07	2.20E-08	1.24E-08	3.44E-08	9.91E-09	5.10E-09	1.50E-08
445	570317.4	4215567	1.35E-07	7.64E-08	2.11E-07	2.06E-08	1.16E-08	3.22E-08	9.29E-09	4.78E-09	1.41E-08
446	570430.5	4215382	2.00E-07	1.13E-07	3.13E-07	3.05E-08	1.72E-08	4.78E-08	1.38E-08	7.09E-09	2.09E-08
447	570430.3	4215391	2.00E-07	1.13E-07	3.13E-07	3.05E-08	1.72E-08	4.77E-08	1.38E-08	7.08E-09	2.08E-08
448	570430.1	4215401	1.99E-07	1.13E-07	3.12E-07	3.04E-08	1.71E-08	4.75E-08	1.37E-08	7.05E-09	2.08E-08
449	570429.9	4215410	1.98E-07	1.12E-07	3.10E-07	3.02E-08	1.70E-08	4.72E-08	1.36E-08	7.01E-09	2.06E-08
450	570429.2	4215439	1.92E-07	1.09E-07	3.00E-07	2.93E-08	1.65E-08	4.58E-08	1.32E-08	6.80E-09	2.00E-08
451	570429	4215449	1.90E-07	1.07E-07	2.97E-07	2.90E-08	1.63E-08	4.53E-08	1.31E-08	6.73E-09	1.98E-08
452	570428.8	4215458	1.87E-07	1.06E-07	2.93E-07	2.86E-08	1.61E-08	4.47E-08	1.29E-08	6.64E-09	1.95E-08
453	570421.9	4215474	1.86E-07	1.06E-07	2.92E-07	2.85E-08	1.61E-08	4.45E-08	1.28E-08	6.61E-09	1.95E-08
454	570415.2	4215481	1.88E-07	1.07E-07	2.95E-07	2.88E-08	1.62E-08	4.50E-08	1.30E-08	6.68E-09	1.97E-08
455	570408.5	4215488	1.90E-07	1.07E-07	2.97E-07	2.90E-08	1.63E-08	4.53E-08	1.31E-08	6.73E-09	1.98E-08
456	570401.8	4215495	1.90E-07	1.08E-07	2.98E-07	2.90E-08	1.64E-08	4.54E-08	1.31E-08	6.74E-09	1.98E-08
457	570395.1	4215502	1.89E-07	1.07E-07	2.97E-07	2.89E-08	1.63E-08	4.52E-08	1.30E-08	6.72E-09	1.98E-08
458	570388.4	4215508	1.88E-07	1.06E-07	2.94E-07	2.87E-08	1.62E-08	4.48E-08	1.29E-08	6.66E-09	1.96E-08
459	570381.7	4215515	1.85E-07	1.05E-07	2.90E-07	2.82E-08	1.59E-08	4.42E-08	1.27E-08	6.56E-09	1.93E-08
460	570375	4215522	1.81E-07	1.02E-07	2.83E-07	2.76E-08	1.56E-08	4.32E-08	1.25E-08	6.41E-09	1.89E-08
461	570368.3	4215529	1.76E-07	9.97E-08	2.76E-07	2.69E-08	1.52E-08	4.20E-08	1.21E-08	6.24E-09	1.84E-08
462	570361.6	4215536	1.70E-07	9.65E-08	2.67E-07	2.60E-08	1.47E-08	4.07E-08	1.17E-08	6.04E-09	1.78E-08
463	570354.9	4215542	1.64E-07	9.30E-08	2.57E-07	2.51E-08	1.42E-08	3.92E-08	1.13E-08	5.83E-09	1.71E-08
464	570348.2	4215549	1.57E-07	8.91E-08	2.46E-07	2.40E-08	1.35E-08	3.76E-08	1.08E-08	5.58E-09	1.64E-08
465	570341.5	4215556	1.50E-07	8.48E-08	2.35E-07	2.29E-08	1.29E-08	3.58E-08	1.03E-08	5.31E-09	1.56E-08
466	570334.8	4215563	1.42E-07	8.04E-08	2.22E-07	2.17E-08	1.22E-08	3.39E-08	9.78E-09	5.03E-09	1.48E-08
467	570328.1	4215570	1.34E-07	7.57E-08	2.09E-07	2.04E-08	1.15E-08	3.19E-08	9.21E-09	4.74E-09	1.40E-08
468	570321.4	4215576	1.25E-07	7.10E-08	1.96E-07	1.91E-08	1.08E-08	2.99E-08	8.63E-09	4.44E-09	1.31E-08
469	570439.7	4215387	1.91E-07	1.08E-07	2.99E-07	2.92E-08	1.65E-08	4.57E-08	1.32E-08	6.78E-09	2.00E-08
470	570439.5	4215396	1.91E-07	1.08E-07	2.99E-07	2.92E-08	1.65E-08	4.56E-08	1.32E-08	6.77E-09	1.99E-08
471	570439.3	4215406	1.90E-07	1.08E-07	2.98E-07	2.91E-08	1.64E-08	4.55E-08	1.31E-08	6.75E-09	1.99E-08
472	570439.1	4215415	1.89E-07	1.07E-07	2.96E-07	2.89E-08	1.63E-08	4.52E-08	1.30E-08	6.71E-09	1.97E-08
473	570438.4	4215443	1.83E-07	1.04E-07	2.87E-07	2.80E-08	1.58E-08	4.38E-08	1.26E-08	6.50E-09	1.91E-08
474	570438.2	4215453	1.81E-07	1.03E-07	2.84E-07	2.77E-08	1.56E-08	4.33E-08	1.25E-08	6.43E-09	1.89E-08
475	570438	4215462	1.79E-07	1.01E-07	2.80E-07	2.73E-08	1.54E-08	4.27E-08	1.23E-08	6.34E-09	1.87E-08
476	570431.2	4215478	1.78E-07	1.01E-07	2.78E-07	2.71E-08	1.53E-08	4.24E-08	1.22E-08	6.30E-09	1.85E-08
477	570424.6	4215485	1.79E-07	1.02E-07	2.81E-07	2.74E-08	1.54E-08	4.28E-08	1.24E-08	6.36E-09	1.87E-08
478	570417.9	4215492	1.81E-07	1.02E-07	2.83E-07	2.76E-08	1.56E-08	4.32E-08	1.25E-08	6.41E-09	1.89E-08
479	570411.3	4215498	1.81E-07	1.03E-07	2.84E-07	2.77E-08	1.56E-08	4.33E-08	1.25E-08	6.44E-09	1.89E-08
480	570404.7	4215505	1.81E-07	1.02E-07	2.83E-07	2.76E-08	1.56E-08	4.32E-08	1.25E-08	6.42E-09	1.89E-08
481	570398.1	4215512	1.80E-07	1.02E-07	2.81E-07	2.74E-08	1.55E-08	4.29E-08	1.24E-08	6.37E-09	1.87E-08
482	570391.5	4215519	1.77E-07	1.00E-07	2.78E-07	2.71E-08	1.53E-08	4.24E-08	1.22E-08	6.29E-09	1.85E-08
483	570384.9	4215525	1.74E-07	9.87E-08	2.73E-07	2.66E-08	1.50E-08	4.16E-08	1.20E-08	6.18E-09	1.82E-08
484	570378.2	4215532	1.70E-07	9.63E-08	2.66E-07	2.60E-08	1.46E-08	4.06E-08	1.17E-08	6.03E-09	1.77E-08

485	570371.6	4215539	1.65E-07	9.35E-08	2.58E-07	2.52E-08	1.42E-08	3.94E-08	1.14E-08	5.85E-09	1.72E-08
486	570365	4215545	1.59E-07	9.04E-08	2.50E-07	2.44E-08	1.37E-08	3.81E-08	1.10E-08	5.66E-09	1.66E-08
487	570358.4	4215552	1.53E-07	8.70E-08	2.40E-07	2.34E-08	1.32E-08	3.67E-08	1.06E-08	5.44E-09	1.60E-08
488	570351.8	4215559	1.47E-07	8.32E-08	2.30E-07	2.24E-08	1.27E-08	3.51E-08	1.01E-08	5.21E-09	1.53E-08
489	570345.2	4215566	1.40E-07	7.91E-08	2.19E-07	2.13E-08	1.20E-08	3.34E-08	9.62E-09	4.95E-09	1.46E-08
490	570338.6	4215572	1.32E-07	7.49E-08	2.07E-07	2.02E-08	1.14E-08	3.16E-08	9.11E-09	4.69E-09	1.38E-08
491	570331.9	4215579	1.24E-07	7.05E-08	1.95E-07	1.90E-08	1.07E-08	2.97E-08	8.58E-09	4.42E-09	1.30E-08
492	570325.3	4215586	1.12E-07	6.37E-08	1.76E-07	1.72E-08	9.69E-09	2.69E-08	7.75E-09	3.99E-09	1.17E-08
493	570449.2	4215377	1.83E-07	1.04E-07	2.87E-07	2.80E-08	1.58E-08	4.37E-08	1.26E-08	6.50E-09	1.91E-08
494	570449	4215387	1.83E-07	1.04E-07	2.87E-07	2.80E-08	1.58E-08	4.37E-08	1.26E-08	6.50E-09	1.91E-08
495	570448.8	4215397	1.83E-07	1.04E-07	2.86E-07	2.79E-08	1.58E-08	4.37E-08	1.26E-08	6.49E-09	1.91E-08
496	570448.5	4215407	1.82E-07	1.03E-07	2.85E-07	2.78E-08	1.57E-08	4.35E-08	1.26E-08	6.46E-09	1.90E-08
497	570448.3	4215416	1.81E-07	1.02E-07	2.83E-07	2.76E-08	1.56E-08	4.32E-08	1.25E-08	6.42E-09	1.89E-08
498	570447.7	4215446	1.75E-07	9.93E-08	2.75E-07	2.68E-08	1.51E-08	4.19E-08	1.21E-08	6.22E-09	1.83E-08
499	570447.4	4215456	1.73E-07	9.81E-08	2.71E-07	2.64E-08	1.49E-08	4.14E-08	1.19E-08	6.14E-09	1.81E-08
500	570447.2	4215466	1.71E-07	9.67E-08	2.67E-07	2.61E-08	1.47E-08	4.08E-08	1.18E-08	6.05E-09	1.78E-08
501	570440.1	4215482	1.69E-07	9.58E-08	2.65E-07	2.58E-08	1.46E-08	4.04E-08	1.17E-08	6.00E-09	1.77E-08
502	570433.2	4215489	1.71E-07	9.68E-08	2.68E-07	2.61E-08	1.47E-08	4.08E-08	1.18E-08	6.06E-09	1.78E-08
503	570426.3	4215496	1.72E-07	9.75E-08	2.70E-07	2.63E-08	1.48E-08	4.11E-08	1.19E-08	6.11E-09	1.80E-08
504	570419.4	4215503	1.73E-07	9.79E-08	2.71E-07	2.64E-08	1.49E-08	4.13E-08	1.19E-08	6.13E-09	1.80E-08
505	570412.5	4215510	1.73E-07	9.79E-08	2.71E-07	2.64E-08	1.49E-08	4.13E-08	1.19E-08	6.13E-09	1.80E-08
506	570405.6	4215517	1.71E-07	9.71E-08	2.68E-07	2.62E-08	1.48E-08	4.09E-08	1.18E-08	6.08E-09	1.79E-08
507	570398.7	4215524	1.69E-07	9.58E-08	2.65E-07	2.58E-08	1.46E-08	4.04E-08	1.17E-08	6.00E-09	1.77E-08
508	570391.8	4215531	1.66E-07	9.40E-08	2.60E-07	2.53E-08	1.43E-08	3.96E-08	1.14E-08	5.88E-09	1.73E-08
509	570384.9	4215538	1.62E-07	9.17E-08	2.54E-07	2.47E-08	1.39E-08	3.87E-08	1.12E-08	5.74E-09	1.69E-08
510	570378	4215546	1.57E-07	8.89E-08	2.46E-07	2.40E-08	1.35E-08	3.75E-08	1.08E-08	5.57E-09	1.64E-08
511	570371.1	4215553	1.51E-07	8.58E-08	2.37E-07	2.31E-08	1.31E-08	3.62E-08	1.04E-08	5.37E-09	1.58E-08
512	570364.2	4215560	1.45E-07	8.24E-08	2.28E-07	2.22E-08	1.25E-08	3.47E-08	1.00E-08	5.16E-09	1.52E-08
513	570357.3	4215567	1.39E-07	7.87E-08	2.18E-07	2.12E-08	1.20E-08	3.32E-08	9.57E-09	4.93E-09	1.45E-08
514	570350.4	4215574	1.32E-07	7.47E-08	2.06E-07	2.01E-08	1.14E-08	3.15E-08	9.08E-09	4.68E-09	1.38E-08
515	570343.5	4215581	1.24E-07	7.05E-08	1.95E-07	1.90E-08	1.07E-08	2.97E-08	8.58E-09	4.41E-09	1.30E-08
516	570336.5	4215588	1.17E-07	6.62E-08	1.83E-07	1.79E-08	1.01E-08	2.79E-08	8.06E-09	4.15E-09	1.22E-08
517	570329.6	4215595	1.09E-07	6.20E-08	1.71E-07	1.67E-08	9.43E-09	2.61E-08	7.54E-09	3.88E-09	1.14E-08
518	570458.6	4215373	1.76E-07	9.98E-08	2.76E-07	2.69E-08	1.52E-08	4.21E-08	1.21E-08	6.25E-09	1.84E-08
519	570458.4	4215382	1.76E-07	9.96E-08	2.75E-07	2.69E-08	1.52E-08	4.20E-08	1.21E-08	6.24E-09	1.84E-08
520	570458.2	4215392	1.75E-07	9.93E-08	2.75E-07	2.68E-08	1.51E-08	4.19E-08	1.21E-08	6.22E-09	1.83E-08
521	570458	4215402	1.75E-07	9.89E-08	2.73E-07	2.67E-08	1.50E-08	4.17E-08	1.20E-08	6.19E-09	1.82E-08
522	570457.7	4215411	1.74E-07	9.83E-08	2.72E-07	2.65E-08	1.50E-08	4.15E-08	1.20E-08	6.16E-09	1.81E-08
523	570457.1	4215441	1.69E-07	9.58E-08	2.65E-07	2.58E-08	1.46E-08	4.04E-08	1.17E-08	6.00E-09	1.77E-08
524	570456.9	4215450	1.67E-07	9.48E-08	2.62E-07	2.55E-08	1.44E-08	4.00E-08	1.15E-08	5.93E-09	1.75E-08
525	570456.6	4215460	1.65E-07	9.35E-08	2.59E-07	2.52E-08	1.42E-08	3.94E-08	1.14E-08	5.85E-09	1.72E-08
526	570456.4	4215470	1.62E-07	9.19E-08	2.54E-07	2.48E-08	1.40E-08	3.88E-08	1.12E-08	5.76E-09	1.69E-08
527	570449.4	4215486	1.61E-07	9.12E-08	2.52E-07	2.46E-08	1.39E-08	3.84E-08	1.11E-08	5.71E-09	1.68E-08
528	570442.6	4215493	1.63E-07	9.21E-08	2.55E-07	2.48E-08	1.40E-08	3.88E-08	1.12E-08	5.77E-09	1.70E-08
529	570435.8	4215500	1.64E-07	9.28E-08	2.57E-07	2.50E-08	1.41E-08	3.91E-08	1.13E-08	5.81E-09	1.71E-08
530	570429	4215507	1.64E-07	9.32E-08	2.58E-07	2.51E-08	1.42E-08	3.93E-08	1.13E-08	5.83E-09	1.72E-08
531	570422.1	4215514	1.65E-07	9.32E-08	2.58E-07	2.51E-08	1.42E-08	3.93E-08	1.13E-08	5.84E-09	1.72E-08
532	570415.3	4215521	1.64E-07	9.30E-08	2.57E-07	2.51E-08	1.41E-08	3.92E-08	1.13E-08	5.82E-09	1.71E-08
533	570408.5	4215528	1.62E-07	9.20E-08	2.54E-07	2.48E-08	1.40E-08	3.88E-08	1.12E-08	5.76E-09	1.70E-08
534	570401.7	4215535	1.60E-07	9.04E-08	2.50E-07	2.44E-08	1.38E-08	3.81E-08	1.10E-08	5.66E-09	1.67E-08
535	570394.9	4215542	1.56E-07	8.84E-08	2.45E-07	2.38E-08	1.35E-08	3.73E-08	1.08E-08	5.54E-09	1.63E-08
536	570388.1	4215548	1.52E-07	8.61E-08	2.38E-07	2.32E-08	1.31E-08	3.63E-08	1.05E-08	5.39E-09	1.59E-08
537	570381.3	4215555	1.47E-07	8.33E-08	2.30E-07	2.25E-08	1.27E-08	3.51E-08	1.01E-08	5.22E-09	1.54E-08
538	570374.5	4215562	1.42E-07	8.03E-08	2.22E-07	2.16E-08	1.22E-08	3.38E-08	9.76E-09	5.03E-09	1.48E-08
539	570367.6	4215569	1.36E-07	7.70E-08	2.13E-07	2.07E-08	1.17E-08	3.24E-08	9.36E-09	4.82E-09	1.42E-08
540	570360.8	4215576	1.30E-07	7.34E-08	2.03E-07	1.98E-08	1.12E-08	3.10E-08	8.93E-09	4.60E-09	1.35E-08
541	570354	4215583	1.23E-07	6.97E-08	1.93E-07	1.88E-08	1.06E-08	2.94E-08	8.48E-09	4.37E-09	1.28E-08
542	570347.2	4215590	1.16E-07	6.58E-08	1.82E-07	1.77E-08	1.00E-08	2.78E-08	8.01E-09	4.12E-09	1.21E-08
543	570340.4	4215597	1.09E-07	6.19E-08	1.71E-07	1.67E-08	9.42E-09	2.61E-08	7.53E-09	3.88E-09	1.14E-08
544	570333.6	4215604	1.03E-07	5.81E-08	1.61E-07	1.57E-08	8.83E-09	2.45E-08	7.06E-09	3.64E-09	1.07E-08
545	570468	4215368	1.70E-07	9.61E-08	2.66E-07	2.59E-08	1.46E-08	4.05E-08	1.17E-08	6.02E-09	1.77E-08

546	570467.8	4215378	1.69E-07	9.59E-08	2.65E-07	2.59E-08	1.46E-08	4.04E-08	1.17E-08	6.01E-09	1.77E-08
547	570467.6	4215387	1.69E-07	9.55E-08	2.64E-07	2.57E-08	1.45E-08	4.03E-08	1.16E-08	5.98E-09	1.76E-08
548	570467.4	4215397	1.68E-07	9.50E-08	2.63E-07	2.56E-08	1.44E-08	4.00E-08	1.16E-08	5.95E-09	1.75E-08
549	570467.1	4215407	1.66E-07	9.43E-08	2.61E-07	2.54E-08	1.43E-08	3.98E-08	1.15E-08	5.90E-09	1.74E-08
550	570466.9	4215416	1.66E-07	9.38E-08	2.59E-07	2.53E-08	1.43E-08	3.96E-08	1.14E-08	5.88E-09	1.73E-08
551	570466.3	4215445	1.62E-07	9.15E-08	2.53E-07	2.47E-08	1.39E-08	3.86E-08	1.11E-08	5.73E-09	1.69E-08
552	570466.1	4215454	1.60E-07	9.04E-08	2.50E-07	2.44E-08	1.37E-08	3.81E-08	1.10E-08	5.66E-09	1.67E-08
553	570465.8	4215464	1.57E-07	8.91E-08	2.46E-07	2.40E-08	1.36E-08	3.76E-08	1.08E-08	5.58E-09	1.64E-08
554	570465.6	4215474	1.54E-07	8.75E-08	2.42E-07	2.36E-08	1.33E-08	3.69E-08	1.06E-08	5.48E-09	1.61E-08
555	570458.7	4215490	1.53E-07	8.67E-08	2.40E-07	2.34E-08	1.32E-08	3.66E-08	1.05E-08	5.43E-09	1.60E-08
556	570452	4215497	1.55E-07	8.76E-08	2.42E-07	2.36E-08	1.33E-08	3.69E-08	1.07E-08	5.48E-09	1.61E-08
557	570445.2	4215504	1.56E-07	8.83E-08	2.44E-07	2.38E-08	1.34E-08	3.72E-08	1.07E-08	5.53E-09	1.63E-08
558	570438.5	4215511	1.57E-07	8.87E-08	2.45E-07	2.39E-08	1.35E-08	3.74E-08	1.08E-08	5.55E-09	1.63E-08
559	570431.8	4215517	1.57E-07	8.88E-08	2.46E-07	2.39E-08	1.35E-08	3.75E-08	1.08E-08	5.56E-09	1.64E-08
560	570425	4215524	1.57E-07	8.87E-08	2.45E-07	2.39E-08	1.35E-08	3.74E-08	1.08E-08	5.55E-09	1.63E-08
561	570418.3	4215531	1.56E-07	8.81E-08	2.44E-07	2.37E-08	1.34E-08	3.71E-08	1.07E-08	5.52E-09	1.62E-08
562	570411.6	4215538	1.54E-07	8.70E-08	2.41E-07	2.35E-08	1.32E-08	3.67E-08	1.06E-08	5.45E-09	1.60E-08
563	570404.8	4215545	1.51E-07	8.53E-08	2.36E-07	2.30E-08	1.30E-08	3.60E-08	1.04E-08	5.34E-09	1.57E-08
564	570398.1	4215552	1.47E-07	8.32E-08	2.30E-07	2.24E-08	1.27E-08	3.51E-08	1.01E-08	5.21E-09	1.53E-08
565	570391.4	4215558	1.43E-07	8.08E-08	2.23E-07	2.18E-08	1.23E-08	3.41E-08	9.83E-09	5.06E-09	1.49E-08
566	570384.7	4215565	1.38E-07	7.81E-08	2.16E-07	2.10E-08	1.19E-08	3.29E-08	9.50E-09	4.89E-09	1.44E-08
567	570377.9	4215572	1.33E-07	7.51E-08	2.08E-07	2.02E-08	1.14E-08	3.17E-08	9.14E-09	4.70E-09	1.38E-08
568	570371.2	4215579	1.27E-07	7.20E-08	1.99E-07	1.94E-08	1.09E-08	3.04E-08	8.76E-09	4.51E-09	1.33E-08
569	570364.5	4215586	1.21E-07	6.87E-08	1.90E-07	1.85E-08	1.04E-08	2.90E-08	8.36E-09	4.30E-09	1.27E-08
570	570357.7	4215593	1.15E-07	6.52E-08	1.80E-07	1.76E-08	9.91E-09	2.75E-08	7.93E-09	4.08E-09	1.20E-08
571	570351	4215599	1.09E-07	6.16E-08	1.70E-07	1.66E-08	9.37E-09	2.60E-08	7.49E-09	3.86E-09	1.14E-08
572	570344.3	4215606	1.02E-07	5.80E-08	1.60E-07	1.56E-08	8.83E-09	2.45E-08	7.06E-09	3.63E-09	1.07E-08
573	570337.5	4215613	9.62E-08	5.45E-08	1.51E-07	1.47E-08	8.29E-09	2.30E-08	6.63E-09	3.41E-09	1.00E-08
574	570477.4	4215364	1.63E-07	9.25E-08	2.56E-07	2.49E-08	1.41E-08	3.90E-08	1.13E-08	5.79E-09	1.71E-08
575	570477.2	4215373	1.63E-07	9.24E-08	2.56E-07	2.49E-08	1.41E-08	3.90E-08	1.12E-08	5.79E-09	1.70E-08
576	570477	4215383	1.63E-07	9.21E-08	2.55E-07	2.48E-08	1.40E-08	3.88E-08	1.12E-08	5.77E-09	1.70E-08
577	570476.8	4215392	1.62E-07	9.15E-08	2.53E-07	2.47E-08	1.39E-08	3.86E-08	1.11E-08	5.73E-09	1.69E-08
578	570476.5	4215402	1.60E-07	9.09E-08	2.51E-07	2.45E-08	1.38E-08	3.83E-08	1.11E-08	5.69E-09	1.67E-08
579	570476.3	4215411	1.59E-07	9.03E-08	2.50E-07	2.43E-08	1.37E-08	3.81E-08	1.10E-08	5.65E-09	1.66E-08
580	570475.7	4215440	1.56E-07	8.85E-08	2.45E-07	2.38E-08	1.35E-08	3.73E-08	1.08E-08	5.54E-09	1.63E-08
581	570475.5	4215449	1.54E-07	8.75E-08	2.42E-07	2.36E-08	1.33E-08	3.69E-08	1.06E-08	5.48E-09	1.61E-08
582	570475.3	4215459	1.52E-07	8.63E-08	2.39E-07	2.33E-08	1.31E-08	3.64E-08	1.05E-08	5.40E-09	1.59E-08
583	570475	4215468	1.50E-07	8.50E-08	2.35E-07	2.29E-08	1.29E-08	3.58E-08	1.03E-08	5.32E-09	1.57E-08
584	570474.8	4215478	1.47E-07	8.34E-08	2.31E-07	2.25E-08	1.27E-08	3.52E-08	1.01E-08	5.22E-09	1.54E-08
585	570468	4215494	1.46E-07	8.26E-08	2.28E-07	2.23E-08	1.26E-08	3.48E-08	1.00E-08	5.17E-09	1.52E-08
586	570461.3	4215501	1.47E-07	8.33E-08	2.30E-07	2.25E-08	1.27E-08	3.51E-08	1.01E-08	5.22E-09	1.53E-08
587	570454.7	4215507	1.48E-07	8.39E-08	2.32E-07	2.26E-08	1.28E-08	3.54E-08	1.02E-08	5.25E-09	1.55E-08
588	570448	4215514	1.49E-07	8.44E-08	2.33E-07	2.28E-08	1.28E-08	3.56E-08	1.03E-08	5.29E-09	1.56E-08
589	570441.3	4215521	1.49E-07	8.47E-08	2.34E-07	2.28E-08	1.29E-08	3.57E-08	1.03E-08	5.30E-09	1.56E-08
590	570434.7	4215528	1.49E-07	8.46E-08	2.34E-07	2.28E-08	1.29E-08	3.57E-08	1.03E-08	5.29E-09	1.56E-08
591	570428	4215534	1.48E-07	8.41E-08	2.33E-07	2.27E-08	1.28E-08	3.55E-08	1.02E-08	5.26E-09	1.55E-08
592	570421.4	4215541	1.47E-07	8.33E-08	2.30E-07	2.25E-08	1.27E-08	3.51E-08	1.01E-08	5.22E-09	1.53E-08
593	570414.7	4215548	1.45E-07	8.22E-08	2.27E-07	2.22E-08	1.25E-08	3.47E-08	1.00E-08	5.15E-09	1.51E-08
594	570408.1	4215555	1.42E-07	8.05E-08	2.23E-07	2.17E-08	1.22E-08	3.39E-08	9.79E-09	5.04E-09	1.48E-08
595	570401.4	4215561	1.38E-07	7.83E-08	2.16E-07	2.11E-08	1.19E-08	3.30E-08	9.52E-09	4.90E-09	1.44E-08
596	570394.7	4215568	1.34E-07	7.58E-08	2.10E-07	2.04E-08	1.15E-08	3.20E-08	9.23E-09	4.75E-09	1.40E-08
597	570388.1	4215575	1.29E-07	7.32E-08	2.02E-07	1.97E-08	1.11E-08	3.09E-08	8.90E-09	4.58E-09	1.35E-08
598	570381.4	4215582	1.24E-07	7.04E-08	1.95E-07	1.90E-08	1.07E-08	2.97E-08	8.56E-09	4.41E-09	1.30E-08
599	570374.8	4215588	1.19E-07	6.74E-08	1.86E-07	1.82E-08	1.03E-08	2.84E-08	8.20E-09	4.22E-09	1.24E-08
600	570368.1	4215595	1.13E-07	6.43E-08	1.78E-07	1.73E-08	9.77E-09	2.71E-08	7.82E-09	4.02E-09	1.18E-08
601	570361.5	4215602	1.08E-07	6.10E-08	1.69E-07	1.64E-08	9.28E-09	2.57E-08	7.42E-09	3.82E-09	1.12E-08
602	570354.8	4215609	1.02E-07	5.77E-08	1.60E-07	1.56E-08	8.78E-09	2.43E-08	7.02E-09	3.62E-09	1.06E-08
603	570348.2	4215615	9.61E-08	5.45E-08	1.51E-07	1.47E-08	8.28E-09	2.30E-08	6.62E-09	3.41E-09	1.00E-08
604	570341.5	4215622	9.04E-08	5.12E-08	1.42E-07	1.38E-08	7.79E-09	2.16E-08	6.23E-09	3.21E-09	9.44E-09
605	570486.7	4215363	1.57E-07	8.90E-08	2.46E-07	2.40E-08	1.35E-08	3.75E-08	1.08E-08	5.57E-09	1.64E-08
606	570486.5	4215373	1.57E-07	8.90E-08	2.46E-07	2.40E-08	1.35E-08	3.75E-08	1.08E-08	5.57E-09	1.64E-08

607	570486.3	4215383	1.57E-07	8.87E-08	2.45E-07	2.39E-08	1.35E-08	3.74E-08	1.08E-08	5.55E-09	1.63E-08
608	570486	4215393	1.56E-07	8.82E-08	2.44E-07	2.38E-08	1.34E-08	3.72E-08	1.07E-08	5.53E-09	1.63E-08
609	570485.8	4215403	1.55E-07	8.76E-08	2.42E-07	2.36E-08	1.33E-08	3.70E-08	1.07E-08	5.49E-09	1.61E-08
610	570485.6	4215412	1.54E-07	8.71E-08	2.41E-07	2.35E-08	1.32E-08	3.67E-08	1.06E-08	5.45E-09	1.60E-08
611	570484.9	4215442	1.50E-07	8.50E-08	2.35E-07	2.29E-08	1.29E-08	3.58E-08	1.03E-08	5.32E-09	1.57E-08
612	570484.7	4215452	1.48E-07	8.40E-08	2.32E-07	2.26E-08	1.28E-08	3.54E-08	1.02E-08	5.26E-09	1.55E-08
613	570484.5	4215462	1.46E-07	8.29E-08	2.29E-07	2.23E-08	1.26E-08	3.49E-08	1.01E-08	5.19E-09	1.53E-08
614	570484.3	4215471	1.44E-07	8.15E-08	2.25E-07	2.20E-08	1.24E-08	3.44E-08	9.91E-09	5.10E-09	1.50E-08
615	570484.1	4215481	1.41E-07	7.99E-08	2.21E-07	2.15E-08	1.22E-08	3.37E-08	9.72E-09	5.00E-09	1.47E-08
616	570476.9	4215498	1.39E-07	7.88E-08	2.18E-07	2.12E-08	1.20E-08	3.32E-08	9.58E-09	4.93E-09	1.45E-08
617	570470	4215505	1.40E-07	7.93E-08	2.19E-07	2.14E-08	1.21E-08	3.34E-08	9.65E-09	4.97E-09	1.46E-08
618	570463.1	4215512	1.41E-07	7.98E-08	2.21E-07	2.15E-08	1.21E-08	3.37E-08	9.71E-09	5.00E-09	1.47E-08
619	570456.2	4215519	1.42E-07	8.03E-08	2.22E-07	2.16E-08	1.22E-08	3.38E-08	9.76E-09	5.03E-09	1.48E-08
620	570449.3	4215526	1.42E-07	8.06E-08	2.23E-07	2.17E-08	1.23E-08	3.40E-08	9.80E-09	5.05E-09	1.48E-08
621	570442.4	4215533	1.42E-07	8.06E-08	2.23E-07	2.17E-08	1.23E-08	3.40E-08	9.80E-09	5.04E-09	1.48E-08
622	570435.5	4215540	1.41E-07	8.01E-08	2.21E-07	2.16E-08	1.22E-08	3.38E-08	9.74E-09	5.01E-09	1.48E-08
623	570428.6	4215547	1.40E-07	7.93E-08	2.19E-07	2.14E-08	1.21E-08	3.34E-08	9.65E-09	4.97E-09	1.46E-08
624	570421.7	4215554	1.38E-07	7.83E-08	2.16E-07	2.11E-08	1.19E-08	3.30E-08	9.52E-09	4.90E-09	1.44E-08
625	570414.8	4215561	1.36E-07	7.68E-08	2.12E-07	2.07E-08	1.17E-08	3.24E-08	9.34E-09	4.81E-09	1.41E-08
626	570407.9	4215568	1.32E-07	7.46E-08	2.06E-07	2.01E-08	1.14E-08	3.15E-08	9.08E-09	4.67E-09	1.38E-08
627	570401	4215575	1.28E-07	7.22E-08	2.00E-07	1.95E-08	1.10E-08	3.05E-08	8.79E-09	4.52E-09	1.33E-08
628	570394.1	4215582	1.23E-07	6.97E-08	1.93E-07	1.88E-08	1.06E-08	2.94E-08	8.47E-09	4.36E-09	1.28E-08
629	570387.2	4215589	1.18E-07	6.69E-08	1.85E-07	1.80E-08	1.02E-08	2.82E-08	8.14E-09	4.19E-09	1.23E-08
630	570380.3	4215596	1.13E-07	6.40E-08	1.77E-07	1.72E-08	9.73E-09	2.70E-08	7.78E-09	4.01E-09	1.18E-08
631	570373.4	4215603	1.08E-07	6.09E-08	1.68E-07	1.64E-08	9.26E-09	2.57E-08	7.41E-09	3.81E-09	1.12E-08
632	570366.5	4215610	1.02E-07	5.78E-08	1.60E-07	1.56E-08	8.79E-09	2.44E-08	7.03E-09	3.62E-09	1.06E-08
633	570359.6	4215617	9.64E-08	5.46E-08	1.51E-07	1.47E-08	8.31E-09	2.30E-08	6.64E-09	3.42E-09	1.01E-08
634	570352.7	4215624	9.08E-08	5.15E-08	1.42E-07	1.39E-08	7.83E-09	2.17E-08	6.26E-09	3.22E-09	9.48E-09
635	570345.8	4215631	8.54E-08	4.84E-08	1.34E-07	1.30E-08	7.36E-09	2.04E-08	5.89E-09	3.03E-09	8.92E-09
636	570496.1	4215359	1.51E-07	8.57E-08	2.37E-07	2.31E-08	1.30E-08	3.61E-08	1.04E-08	5.37E-09	1.58E-08
637	570495.9	4215369	1.51E-07	8.57E-08	2.37E-07	2.31E-08	1.30E-08	3.61E-08	1.04E-08	5.37E-09	1.58E-08
638	570495.7	4215378	1.51E-07	8.56E-08	2.37E-07	2.31E-08	1.30E-08	3.61E-08	1.04E-08	5.36E-09	1.58E-08
639	570495.5	4215388	1.51E-07	8.53E-08	2.36E-07	2.30E-08	1.30E-08	3.60E-08	1.04E-08	5.34E-09	1.57E-08
640	570495.2	4215398	1.50E-07	8.49E-08	2.35E-07	2.29E-08	1.29E-08	3.58E-08	1.03E-08	5.32E-09	1.56E-08
641	570495	4215407	1.49E-07	8.44E-08	2.33E-07	2.27E-08	1.28E-08	3.56E-08	1.03E-08	5.28E-09	1.55E-08
642	570494.8	4215417	1.48E-07	8.38E-08	2.32E-07	2.26E-08	1.28E-08	3.54E-08	1.02E-08	5.25E-09	1.54E-08
643	570494.1	4215446	1.44E-07	8.15E-08	2.25E-07	2.20E-08	1.24E-08	3.44E-08	9.92E-09	5.11E-09	1.50E-08
644	570493.9	4215456	1.42E-07	8.05E-08	2.23E-07	2.17E-08	1.23E-08	3.40E-08	9.80E-09	5.04E-09	1.48E-08
645	570493.7	4215466	1.40E-07	7.94E-08	2.20E-07	2.14E-08	1.21E-08	3.35E-08	9.66E-09	4.97E-09	1.46E-08
646	570493.5	4215475	1.38E-07	7.80E-08	2.16E-07	2.10E-08	1.19E-08	3.29E-08	9.49E-09	4.89E-09	1.44E-08
647	570493.3	4215485	1.35E-07	7.65E-08	2.12E-07	2.06E-08	1.16E-08	3.23E-08	9.31E-09	4.79E-09	1.41E-08
648	570486.2	4215502	1.33E-07	7.54E-08	2.09E-07	2.03E-08	1.15E-08	3.18E-08	9.17E-09	4.72E-09	1.39E-08
649	570479.4	4215509	1.34E-07	7.57E-08	2.09E-07	2.04E-08	1.15E-08	3.19E-08	9.21E-09	4.74E-09	1.40E-08
650	570472.6	4215516	1.34E-07	7.59E-08	2.10E-07	2.05E-08	1.16E-08	3.20E-08	9.24E-09	4.76E-09	1.40E-08
651	570465.7	4215523	1.35E-07	7.63E-08	2.11E-07	2.06E-08	1.16E-08	3.22E-08	9.28E-09	4.78E-09	1.41E-08
652	570458.9	4215530	1.35E-07	7.65E-08	2.12E-07	2.06E-08	1.16E-08	3.23E-08	9.31E-09	4.79E-09	1.41E-08
653	570452.1	4215536	1.35E-07	7.66E-08	2.12E-07	2.06E-08	1.16E-08	3.23E-08	9.32E-09	4.80E-09	1.41E-08
654	570445.3	4215543	1.35E-07	7.64E-08	2.11E-07	2.06E-08	1.16E-08	3.22E-08	9.30E-09	4.79E-09	1.41E-08
655	570438.4	4215550	1.34E-07	7.59E-08	2.10E-07	2.04E-08	1.15E-08	3.20E-08	9.23E-09	4.75E-09	1.40E-08
656	570431.6	4215557	1.32E-07	7.50E-08	2.07E-07	2.02E-08	1.14E-08	3.16E-08	9.12E-09	4.69E-09	1.38E-08
657	570424.8	4215564	1.30E-07	7.37E-08	2.04E-07	1.99E-08	1.12E-08	3.11E-08	8.96E-09	4.61E-09	1.36E-08
658	570418	4215571	1.27E-07	7.21E-08	1.99E-07	1.94E-08	1.10E-08	3.04E-08	8.77E-09	4.52E-09	1.33E-08
659	570411.1	4215578	1.24E-07	7.02E-08	1.94E-07	1.89E-08	1.07E-08	2.96E-08	8.54E-09	4.39E-09	1.29E-08
660	570404.3	4215585	1.20E-07	6.79E-08	1.88E-07	1.83E-08	1.03E-08	2.86E-08	8.25E-09	4.25E-09	1.25E-08
661	570397.5	4215592	1.15E-07	6.54E-08	1.81E-07	1.76E-08	9.94E-09	2.76E-08	7.95E-09	4.09E-09	1.20E-08
662	570390.7	4215599	1.11E-07	6.27E-08	1.73E-07	1.69E-08	9.54E-09	2.64E-08	7.63E-09	3.93E-09	1.16E-08
663	570383.9	4215606	1.06E-07	6.00E-08	1.66E-07	1.62E-08	9.12E-09	2.53E-08	7.30E-09	3.76E-09	1.11E-08
664	570377	4215613	1.01E-07	5.71E-08	1.58E-07	1.54E-08	8.69E-09	2.41E-08	6.95E-09	3.58E-09	1.05E-08
665	570370.2	4215620	9.57E-08	5.42E-08	1.50E-07	1.46E-08	8.24E-09	2.28E-08	6.59E-09	3.39E-09	9.98E-09
666	570363.4	4215627	9.04E-08	5.12E-08	1.42E-07	1.38E-08	7.79E-09	2.16E-08	6.23E-09	3.21E-09	9.44E-09
667	570356.6	4215633	8.53E-08	4.83E-08	1.34E-07	1.30E-08	7.35E-09	2.04E-08	5.88E-09	3.03E-09	8.91E-09

668	570349.7	4215640	8.03E-08	4.55E-08	1.26E-07	1.23E-08	6.92E-09	1.92E-08	5.54E-09	2.85E-09	8.39E-09
669	570505.5	4215355	1.46E-07	8.25E-08	2.28E-07	2.22E-08	1.26E-08	3.48E-08	1.00E-08	5.17E-09	1.52E-08
670	570505.3	4215364	1.46E-07	8.26E-08	2.28E-07	2.23E-08	1.26E-08	3.48E-08	1.01E-08	5.17E-09	1.52E-08
671	570505.1	4215374	1.46E-07	8.26E-08	2.28E-07	2.23E-08	1.26E-08	3.48E-08	1.00E-08	5.17E-09	1.52E-08
672	570504.9	4215383	1.46E-07	8.25E-08	2.28E-07	2.22E-08	1.25E-08	3.48E-08	1.00E-08	5.16E-09	1.52E-08
673	570504.6	4215393	1.45E-07	8.22E-08	2.27E-07	2.22E-08	1.25E-08	3.47E-08	1.00E-08	5.15E-09	1.51E-08
674	570504.4	4215403	1.44E-07	8.18E-08	2.26E-07	2.21E-08	1.24E-08	3.45E-08	9.95E-09	5.12E-09	1.51E-08
675	570504.2	4215412	1.44E-07	8.13E-08	2.25E-07	2.19E-08	1.24E-08	3.43E-08	9.89E-09	5.09E-09	1.50E-08
676	570503.6	4215441	1.40E-07	7.91E-08	2.19E-07	2.13E-08	1.20E-08	3.34E-08	9.62E-09	4.95E-09	1.46E-08
677	570503.3	4215451	1.38E-07	7.82E-08	2.16E-07	2.11E-08	1.19E-08	3.30E-08	9.52E-09	4.90E-09	1.44E-08
678	570503.1	4215460	1.36E-07	7.73E-08	2.14E-07	2.08E-08	1.18E-08	3.26E-08	9.40E-09	4.84E-09	1.42E-08
679	570502.9	4215470	1.34E-07	7.61E-08	2.10E-07	2.05E-08	1.16E-08	3.21E-08	9.26E-09	4.77E-09	1.40E-08
680	570502.7	4215480	1.32E-07	7.48E-08	2.07E-07	2.02E-08	1.14E-08	3.15E-08	9.09E-09	4.68E-09	1.38E-08
681	570502.5	4215489	1.29E-07	7.33E-08	2.03E-07	1.98E-08	1.12E-08	3.09E-08	8.92E-09	4.59E-09	1.35E-08
682	570495.5	4215506	1.28E-07	7.23E-08	2.00E-07	1.95E-08	1.10E-08	3.05E-08	8.79E-09	4.52E-09	1.33E-08
683	570488.7	4215513	1.28E-07	7.26E-08	2.01E-07	1.96E-08	1.10E-08	3.06E-08	8.83E-09	4.54E-09	1.34E-08
684	570482	4215519	1.28E-07	7.27E-08	2.01E-07	1.96E-08	1.11E-08	3.07E-08	8.85E-09	4.55E-09	1.34E-08
685	570475.2	4215526	1.28E-07	7.27E-08	2.01E-07	1.96E-08	1.11E-08	3.06E-08	8.84E-09	4.55E-09	1.34E-08
686	570468.5	4215533	1.28E-07	7.28E-08	2.01E-07	1.96E-08	1.11E-08	3.07E-08	8.85E-09	4.56E-09	1.34E-08
687	570461.7	4215540	1.29E-07	7.28E-08	2.01E-07	1.96E-08	1.11E-08	3.07E-08	8.86E-09	4.56E-09	1.34E-08
688	570455	4215547	1.28E-07	7.27E-08	2.01E-07	1.96E-08	1.11E-08	3.07E-08	8.84E-09	4.55E-09	1.34E-08
689	570448.2	4215554	1.28E-07	7.24E-08	2.00E-07	1.95E-08	1.10E-08	3.05E-08	8.81E-09	4.53E-09	1.33E-08
690	570441.5	4215561	1.27E-07	7.18E-08	1.98E-07	1.93E-08	1.09E-08	3.03E-08	8.73E-09	4.49E-09	1.32E-08
691	570434.7	4215567	1.25E-07	7.07E-08	1.95E-07	1.91E-08	1.08E-08	2.98E-08	8.60E-09	4.43E-09	1.30E-08
692	570428	4215574	1.22E-07	6.94E-08	1.92E-07	1.87E-08	1.06E-08	2.92E-08	8.44E-09	4.34E-09	1.28E-08
693	570421.2	4215581	1.20E-07	6.78E-08	1.87E-07	1.83E-08	1.03E-08	2.86E-08	8.25E-09	4.24E-09	1.25E-08
694	570414.5	4215588	1.16E-07	6.60E-08	1.82E-07	1.78E-08	1.00E-08	2.78E-08	8.02E-09	4.13E-09	1.22E-08
695	570407.7	4215595	1.12E-07	6.37E-08	1.76E-07	1.72E-08	9.69E-09	2.69E-08	7.75E-09	3.99E-09	1.17E-08
696	570401	4215602	1.08E-07	6.13E-08	1.70E-07	1.65E-08	9.33E-09	2.59E-08	7.46E-09	3.84E-09	1.13E-08
697	570394.2	4215608	1.04E-07	5.88E-08	1.63E-07	1.59E-08	8.95E-09	2.48E-08	7.16E-09	3.68E-09	1.08E-08
698	570387.5	4215615	9.94E-08	5.63E-08	1.56E-07	1.52E-08	8.56E-09	2.37E-08	6.85E-09	3.53E-09	1.04E-08
699	570380.7	4215622	9.46E-08	5.36E-08	1.48E-07	1.44E-08	8.15E-09	2.26E-08	6.52E-09	3.36E-09	9.88E-09
700	570373.9	4215629	8.98E-08	5.09E-08	1.41E-07	1.37E-08	7.73E-09	2.14E-08	6.19E-09	3.18E-09	9.37E-09
701	570367.2	4215636	8.49E-08	4.81E-08	1.33E-07	1.30E-08	7.32E-09	2.03E-08	5.85E-09	3.01E-09	8.87E-09
702	570360.4	4215643	8.02E-08	4.55E-08	1.26E-07	1.23E-08	6.91E-09	1.92E-08	5.53E-09	2.85E-09	8.37E-09
703	570353.7	4215650	7.56E-08	4.28E-08	1.18E-07	1.15E-08	6.52E-09	1.81E-08	5.21E-09	2.68E-09	7.89E-09
704	570514.9	4215350	1.40E-07	7.95E-08	2.20E-07	2.14E-08	1.21E-08	3.35E-08	9.67E-09	4.98E-09	1.47E-08
705	570514.7	4215360	1.41E-07	7.97E-08	2.20E-07	2.15E-08	1.21E-08	3.36E-08	9.69E-09	4.99E-09	1.47E-08
706	570514.5	4215369	1.41E-07	7.97E-08	2.20E-07	2.15E-08	1.21E-08	3.36E-08	9.70E-09	4.99E-09	1.47E-08
707	570514.3	4215379	1.41E-07	7.97E-08	2.20E-07	2.15E-08	1.21E-08	3.36E-08	9.69E-09	4.99E-09	1.47E-08
708	570514	4215388	1.40E-07	7.95E-08	2.20E-07	2.14E-08	1.21E-08	3.35E-08	9.67E-09	4.98E-09	1.46E-08
709	570513.8	4215398	1.40E-07	7.92E-08	2.19E-07	2.14E-08	1.20E-08	3.34E-08	9.64E-09	4.96E-09	1.46E-08
710	570513.6	4215407	1.39E-07	7.88E-08	2.18E-07	2.12E-08	1.20E-08	3.32E-08	9.59E-09	4.94E-09	1.45E-08
711	570513.4	4215417	1.38E-07	7.83E-08	2.17E-07	2.11E-08	1.19E-08	3.30E-08	9.53E-09	4.90E-09	1.44E-08
712	570512.7	4215446	1.35E-07	7.62E-08	2.11E-07	2.05E-08	1.16E-08	3.21E-08	9.27E-09	4.77E-09	1.40E-08
713	570512.5	4215455	1.33E-07	7.54E-08	2.08E-07	2.03E-08	1.15E-08	3.18E-08	9.17E-09	4.72E-09	1.39E-08
714	570512.3	4215465	1.31E-07	7.44E-08	2.06E-07	2.01E-08	1.13E-08	3.14E-08	9.05E-09	4.66E-09	1.37E-08
715	570512.1	4215474	1.29E-07	7.33E-08	2.03E-07	1.97E-08	1.11E-08	3.09E-08	8.91E-09	4.59E-09	1.35E-08
716	570511.9	4215484	1.27E-07	7.20E-08	1.99E-07	1.94E-08	1.10E-08	3.04E-08	8.76E-09	4.51E-09	1.33E-08
717	570511.7	4215493	1.25E-07	7.07E-08	1.96E-07	1.91E-08	1.08E-08	2.98E-08	8.60E-09	4.43E-09	1.30E-08
718	570504.8	4215510	1.22E-07	6.94E-08	1.92E-07	1.87E-08	1.06E-08	2.92E-08	8.44E-09	4.34E-09	1.28E-08
719	570498.1	4215516	1.23E-07	6.96E-08	1.92E-07	1.88E-08	1.06E-08	2.93E-08	8.47E-09	4.36E-09	1.28E-08
720	570491.4	4215523	1.23E-07	6.98E-08	1.93E-07	1.88E-08	1.06E-08	2.94E-08	8.49E-09	4.37E-09	1.29E-08
721	570484.7	4215530	1.23E-07	6.98E-08	1.93E-07	1.88E-08	1.06E-08	2.94E-08	8.49E-09	4.37E-09	1.29E-08
722	570478	4215537	1.23E-07	6.96E-08	1.92E-07	1.88E-08	1.06E-08	2.93E-08	8.46E-09	4.36E-09	1.28E-08
723	570471.3	4215543	1.22E-07	6.93E-08	1.92E-07	1.87E-08	1.05E-08	2.92E-08	8.43E-09	4.34E-09	1.28E-08
724	570464.7	4215550	1.22E-07	6.92E-08	1.91E-07	1.87E-08	1.05E-08	2.92E-08	8.42E-09	4.33E-09	1.28E-08
725	570458	4215557	1.22E-07	6.90E-08	1.91E-07	1.86E-08	1.05E-08	2.91E-08	8.39E-09	4.32E-09	1.27E-08
726	570451.3	4215564	1.21E-07	6.85E-08	1.89E-07	1.85E-08	1.04E-08	2.89E-08	8.33E-09	4.29E-09	1.26E-08
727	570444.6	4215571	1.20E-07	6.78E-08	1.87E-07	1.83E-08	1.03E-08	2.86E-08	8.24E-09	4.24E-09	1.25E-08
728	570437.9	4215577	1.18E-07	6.67E-08	1.84E-07	1.80E-08	1.01E-08	2.81E-08	8.11E-09	4.17E-09	1.23E-08

729	570431.2	4215584	1.15E-07	6.53E-08	1.81E-07	1.76E-08	9.94E-09	2.75E-08	7.95E-09	4.09E-09	1.20E-08
730	570424.5	4215591	1.12E-07	6.37E-08	1.76E-07	1.72E-08	9.69E-09	2.69E-08	7.75E-09	3.99E-09	1.17E-08
731	570417.8	4215598	1.09E-07	6.19E-08	1.71E-07	1.67E-08	9.41E-09	2.61E-08	7.53E-09	3.87E-09	1.14E-08
732	570411.2	4215605	1.06E-07	5.98E-08	1.65E-07	1.61E-08	9.10E-09	2.52E-08	7.28E-09	3.75E-09	1.10E-08
733	570404.5	4215611	1.02E-07	5.76E-08	1.59E-07	1.55E-08	8.76E-09	2.43E-08	7.01E-09	3.61E-09	1.06E-08
734	570397.8	4215618	9.75E-08	5.53E-08	1.53E-07	1.49E-08	8.40E-09	2.33E-08	6.72E-09	3.46E-09	1.02E-08
735	570391.1	4215625	9.32E-08	5.28E-08	1.46E-07	1.42E-08	8.03E-09	2.23E-08	6.42E-09	3.31E-09	9.73E-09
736	570384.4	4215632	8.88E-08	5.03E-08	1.39E-07	1.36E-08	7.65E-09	2.12E-08	6.12E-09	3.15E-09	9.27E-09
737	570377.7	4215638	8.43E-08	4.78E-08	1.32E-07	1.29E-08	7.27E-09	2.01E-08	5.81E-09	2.99E-09	8.80E-09
738	570371	4215645	7.99E-08	4.53E-08	1.25E-07	1.22E-08	6.88E-09	1.91E-08	5.51E-09	2.83E-09	8.34E-09
739	570364.3	4215652	7.55E-08	4.28E-08	1.18E-07	1.15E-08	6.50E-09	1.80E-08	5.20E-09	2.68E-09	7.88E-09
740	570357.7	4215659	7.12E-08	4.03E-08	1.12E-07	1.09E-08	6.14E-09	1.70E-08	4.91E-09	2.53E-09	7.43E-09
741	569937.1	4214980	5.02E-08	2.85E-08	7.87E-08	7.67E-09	4.33E-09	1.20E-08	3.46E-09	1.78E-09	5.24E-09
742	569941.8	4214988	5.38E-08	3.05E-08	8.43E-08	8.22E-09	4.64E-09	1.29E-08	3.71E-09	1.91E-09	5.62E-09
743	569895.6	4214925	3.63E-08	2.06E-08	5.69E-08	5.54E-09	3.13E-09	8.67E-09	2.50E-09	1.29E-09	3.79E-09
744	569900.3	4214934	3.76E-08	2.13E-08	5.88E-08	5.74E-09	3.24E-09	8.97E-09	2.59E-09	1.33E-09	3.92E-09
745	569905	4214942	3.91E-08	2.21E-08	6.12E-08	5.97E-09	3.37E-09	9.33E-09	2.69E-09	1.39E-09	4.08E-09
746	569909.6	4214951	4.08E-08	2.31E-08	6.40E-08	6.24E-09	3.52E-09	9.75E-09	2.81E-09	1.45E-09	4.26E-09
747	569914.3	4214959	4.30E-08	2.44E-08	6.73E-08	6.56E-09	3.70E-09	1.03E-08	2.96E-09	1.52E-09	4.49E-09
748	569919	4214968	4.56E-08	2.58E-08	7.15E-08	6.97E-09	3.93E-09	1.09E-08	3.14E-09	1.62E-09	4.76E-09
749	569923.7	4214976	4.86E-08	2.75E-08	7.61E-08	7.41E-09	4.18E-09	1.16E-08	3.35E-09	1.72E-09	5.07E-09
750	569928.3	4214985	5.19E-08	2.94E-08	8.12E-08	7.92E-09	4.47E-09	1.24E-08	3.57E-09	1.84E-09	5.41E-09
751	569933	4214993	5.57E-08	3.15E-08	8.72E-08	8.50E-09	4.80E-09	1.33E-08	3.84E-09	1.98E-09	5.81E-09
752	569877.5	4214913	3.49E-08	1.98E-08	5.47E-08	5.33E-09	3.01E-09	8.34E-09	2.41E-09	1.24E-09	3.65E-09
753	569882.2	4214922	3.59E-08	2.03E-08	5.62E-08	5.48E-09	3.09E-09	8.58E-09	2.47E-09	1.27E-09	3.75E-09
754	569886.9	4214930	3.70E-08	2.10E-08	5.80E-08	5.66E-09	3.19E-09	8.85E-09	2.55E-09	1.31E-09	3.87E-09
755	569891.5	4214939	3.84E-08	2.17E-08	6.01E-08	5.86E-09	3.31E-09	9.17E-09	2.65E-09	1.36E-09	4.01E-09
756	569896.2	4214947	4.00E-08	2.27E-08	6.26E-08	6.11E-09	3.45E-09	9.55E-09	2.76E-09	1.42E-09	4.17E-09
757	569900.9	4214956	4.19E-08	2.37E-08	6.56E-08	6.39E-09	3.61E-09	1.00E-08	2.89E-09	1.49E-09	4.37E-09
758	569905.5	4214964	4.43E-08	2.51E-08	6.95E-08	6.77E-09	3.82E-09	1.06E-08	3.06E-09	1.57E-09	4.63E-09
759	569910.2	4214973	4.71E-08	2.67E-08	7.38E-08	7.19E-09	4.06E-09	1.12E-08	3.24E-09	1.67E-09	4.91E-09
760	569914.9	4214981	5.02E-08	2.84E-08	7.86E-08	7.66E-09	4.32E-09	1.20E-08	3.46E-09	1.78E-09	5.24E-09
761	569919.6	4214990	5.37E-08	3.04E-08	8.41E-08	8.20E-09	4.63E-09	1.28E-08	3.70E-09	1.90E-09	5.61E-09
762	569924.2	4214998	5.78E-08	3.28E-08	9.06E-08	8.83E-09	4.98E-09	1.38E-08	3.98E-09	2.05E-09	6.03E-09
763	569928.9	4215007	6.25E-08	3.54E-08	9.78E-08	9.54E-09	5.38E-09	1.49E-08	4.30E-09	2.22E-09	6.52E-09
764	569868.7	4214918	3.56E-08	2.02E-08	5.58E-08	5.44E-09	3.07E-09	8.51E-09	2.45E-09	1.26E-09	3.72E-09
765	569873.4	4214926	3.66E-08	2.08E-08	5.74E-08	5.60E-09	3.16E-09	8.75E-09	2.53E-09	1.30E-09	3.82E-09
766	569878.1	4214935	3.78E-08	2.14E-08	5.92E-08	5.78E-09	3.26E-09	9.03E-09	2.61E-09	1.34E-09	3.95E-09
767	569882.8	4214943	3.93E-08	2.22E-08	6.15E-08	6.00E-09	3.38E-09	9.38E-09	2.71E-09	1.39E-09	4.10E-09
768	569887.4	4214952	4.10E-08	2.32E-08	6.42E-08	6.26E-09	3.53E-09	9.79E-09	2.82E-09	1.45E-09	4.28E-09
769	569892.1	4214960	4.32E-08	2.45E-08	6.76E-08	6.59E-09	3.72E-09	1.03E-08	2.98E-09	1.53E-09	4.51E-09
770	569896.8	4214969	4.58E-08	2.59E-08	7.17E-08	6.99E-09	3.94E-09	1.09E-08	3.15E-09	1.62E-09	4.78E-09
771	569901.5	4214977	4.87E-08	2.76E-08	7.62E-08	7.43E-09	4.19E-09	1.16E-08	3.35E-09	1.73E-09	5.08E-09
772	569906.1	4214986	5.19E-08	2.94E-08	8.12E-08	7.92E-09	4.47E-09	1.24E-08	3.57E-09	1.84E-09	5.41E-09
773	569910.8	4214994	5.57E-08	3.16E-08	8.73E-08	8.51E-09	4.80E-09	1.33E-08	3.84E-09	1.98E-09	5.82E-09
774	569915.5	4215003	6.01E-08	3.40E-08	9.41E-08	9.17E-09	5.18E-09	1.44E-08	4.14E-09	2.13E-09	6.27E-09
775	569920.2	4215011	6.50E-08	3.69E-08	1.02E-07	9.93E-09	5.61E-09	1.55E-08	4.48E-09	2.31E-09	6.79E-09
776	569860	4214923	3.64E-08	2.06E-08	5.70E-08	5.56E-09	3.14E-09	8.70E-09	2.51E-09	1.29E-09	3.80E-09
777	569864.7	4214931	3.74E-08	2.12E-08	5.86E-08	5.71E-09	3.22E-09	8.94E-09	2.58E-09	1.33E-09	3.91E-09
778	569869.3	4214940	3.87E-08	2.19E-08	6.06E-08	5.91E-09	3.33E-09	9.24E-09	2.67E-09	1.37E-09	4.04E-09
779	569874	4214948	4.02E-08	2.28E-08	6.30E-08	6.14E-09	3.46E-09	9.61E-09	2.77E-09	1.43E-09	4.20E-09
780	569878.7	4214957	4.21E-08	2.39E-08	6.60E-08	6.43E-09	3.63E-09	1.01E-08	2.90E-09	1.49E-09	4.39E-09
781	569883.3	4214965	4.46E-08	2.53E-08	6.98E-08	6.81E-09	3.84E-09	1.06E-08	3.07E-09	1.58E-09	4.65E-09
782	569888	4214974	4.73E-08	2.68E-08	7.41E-08	7.22E-09	4.08E-09	1.13E-08	3.26E-09	1.68E-09	4.94E-09
783	569892.7	4214982	5.03E-08	2.85E-08	7.89E-08	7.69E-09	4.34E-09	1.20E-08	3.47E-09	1.79E-09	5.26E-09
784	569897.4	4214991	5.38E-08	3.05E-08	8.43E-08	8.22E-09	4.64E-09	1.29E-08	3.71E-09	1.91E-09	5.62E-09
785	569902	4214999	5.79E-08	3.28E-08	9.07E-08	8.84E-09	4.99E-09	1.38E-08	3.99E-09	2.05E-09	6.04E-09
786	569906.7	4215008	6.25E-08	3.54E-08	9.79E-08	9.54E-09	5.39E-09	1.49E-08	4.31E-09	2.22E-09	6.52E-09
787	569911.4	4215016	6.78E-08	3.84E-08	1.06E-07	1.03E-08	5.84E-09	1.62E-08	4.67E-09	2.40E-09	7.07E-09
788	569851.2	4214927	3.72E-08	2.11E-08	5.83E-08	5.68E-09	3.21E-09	8.89E-09	2.56E-09	1.32E-09	3.88E-09
789	569855.9	4214936	3.82E-08	2.17E-08	5.99E-08	5.84E-09	3.30E-09	9.13E-09	2.64E-09	1.36E-09	3.99E-09

790	569860.6	4214944	3.96E-08	2.24E-08	6.20E-08	6.05E-09	3.41E-09	9.46E-09	2.73E-09	1.40E-09	4.13E-09
791	569865.2	4214953	4.13E-08	2.34E-08	6.47E-08	6.30E-09	3.56E-09	9.86E-09	2.85E-09	1.46E-09	4.31E-09
792	569869.9	4214961	4.35E-08	2.46E-08	6.81E-08	6.64E-09	3.74E-09	1.04E-08	2.99E-09	1.54E-09	4.54E-09
793	569874.6	4214970	4.60E-08	2.61E-08	7.21E-08	7.03E-09	3.97E-09	1.10E-08	3.17E-09	1.63E-09	4.80E-09
794	569879.3	4214978	4.89E-08	2.77E-08	7.66E-08	7.47E-09	4.21E-09	1.17E-08	3.37E-09	1.73E-09	5.10E-09
795	569883.9	4214987	5.20E-08	2.95E-08	8.15E-08	7.95E-09	4.48E-09	1.24E-08	3.59E-09	1.85E-09	5.43E-09
796	569888.6	4214996	5.59E-08	3.17E-08	8.75E-08	8.53E-09	4.82E-09	1.33E-08	3.85E-09	1.98E-09	5.83E-09
797	569893.3	4215004	6.02E-08	3.41E-08	9.43E-08	9.19E-09	5.19E-09	1.44E-08	4.15E-09	2.14E-09	6.28E-09
798	569898	4215013	6.51E-08	3.69E-08	1.02E-07	9.94E-09	5.61E-09	1.55E-08	4.49E-09	2.31E-09	6.79E-09
799	569902.6	4215021	7.06E-08	4.00E-08	1.11E-07	1.08E-08	6.09E-09	1.69E-08	4.87E-09	2.51E-09	7.37E-09
800	569842.5	4214932	3.79E-08	2.15E-08	5.94E-08	5.79E-09	3.27E-09	9.06E-09	2.61E-09	1.35E-09	3.96E-09
801	569847.1	4214941	3.91E-08	2.21E-08	6.12E-08	5.97E-09	3.37E-09	9.34E-09	2.69E-09	1.39E-09	4.08E-09
802	569851.8	4214949	4.06E-08	2.30E-08	6.35E-08	6.19E-09	3.50E-09	9.69E-09	2.80E-09	1.44E-09	4.23E-09
803	569856.5	4214958	4.24E-08	2.40E-08	6.65E-08	6.48E-09	3.66E-09	1.01E-08	2.92E-09	1.51E-09	4.43E-09
804	569861.1	4214966	4.49E-08	2.54E-08	7.03E-08	6.85E-09	3.86E-09	1.07E-08	3.09E-09	1.59E-09	4.68E-09
805	569865.8	4214975	4.75E-08	2.69E-08	7.45E-08	7.26E-09	4.10E-09	1.14E-08	3.28E-09	1.69E-09	4.96E-09
806	569870.5	4214983	5.05E-08	2.86E-08	7.91E-08	7.71E-09	4.35E-09	1.21E-08	3.48E-09	1.79E-09	5.27E-09
807	569875.2	4214992	5.40E-08	3.06E-08	8.46E-08	8.24E-09	4.65E-09	1.29E-08	3.72E-09	1.92E-09	5.64E-09
808	569879.8	4215000	5.80E-08	3.29E-08	9.09E-08	8.86E-09	5.00E-09	1.39E-08	4.00E-09	2.06E-09	6.06E-09
809	569884.5	4215009	6.26E-08	3.55E-08	9.81E-08	9.56E-09	5.40E-09	1.50E-08	4.32E-09	2.22E-09	6.54E-09
810	569889.2	4215017	6.78E-08	3.84E-08	1.06E-07	1.04E-08	5.84E-09	1.62E-08	4.67E-09	2.40E-09	7.08E-09
811	569893.9	4215026	7.36E-08	4.17E-08	1.15E-07	1.12E-08	6.35E-09	1.76E-08	5.08E-09	2.61E-09	7.69E-09
812	569833.7	4214937	3.87E-08	2.19E-08	6.07E-08	5.92E-09	3.34E-09	9.25E-09	2.67E-09	1.37E-09	4.04E-09
813	569838.4	4214946	4.00E-08	2.27E-08	6.27E-08	6.11E-09	3.45E-09	9.56E-09	2.76E-09	1.42E-09	4.18E-09
814	569843	4214954	4.16E-08	2.36E-08	6.52E-08	6.35E-09	3.58E-09	9.93E-09	2.87E-09	1.48E-09	4.34E-09
815	569847.7	4214963	4.38E-08	2.48E-08	6.86E-08	6.68E-09	3.77E-09	1.05E-08	3.02E-09	1.55E-09	4.57E-09
816	569852.4	4214971	4.63E-08	2.62E-08	7.25E-08	7.07E-09	3.99E-09	1.11E-08	3.19E-09	1.64E-09	4.83E-09
817	569857.1	4214980	4.91E-08	2.78E-08	7.69E-08	7.49E-09	4.23E-09	1.17E-08	3.38E-09	1.74E-09	5.12E-09
818	569861.7	4214988	5.22E-08	2.96E-08	8.18E-08	7.97E-09	4.50E-09	1.25E-08	3.60E-09	1.85E-09	5.45E-09
819	569866.4	4214997	5.60E-08	3.17E-08	8.77E-08	8.55E-09	4.82E-09	1.34E-08	3.86E-09	1.99E-09	5.84E-09
820	569871.1	4215005	6.03E-08	3.41E-08	9.44E-08	9.20E-09	5.19E-09	1.44E-08	4.15E-09	2.14E-09	6.29E-09
821	569875.8	4215014	6.51E-08	3.69E-08	1.02E-07	9.94E-09	5.61E-09	1.55E-08	4.49E-09	2.31E-09	6.79E-09
822	569880.4	4215022	7.05E-08	3.99E-08	1.10E-07	1.08E-08	6.08E-09	1.68E-08	4.86E-09	2.50E-09	7.36E-09
823	569885.1	4215031	7.67E-08	4.34E-08	1.20E-07	1.17E-08	6.61E-09	1.83E-08	5.28E-09	2.72E-09	8.00E-09
824	569941.2	4215133	4.61E-07	2.61E-07	7.22E-07	7.04E-08	3.97E-08	1.10E-07	3.18E-08	1.64E-08	4.81E-08
825	569945.9	4215141	5.14E-07	2.91E-07	8.06E-07	7.86E-08	4.43E-08	1.23E-07	3.55E-08	1.82E-08	5.37E-08
826	569950.6	4215150	5.66E-07	3.21E-07	8.87E-07	8.64E-08	4.88E-08	1.35E-07	3.90E-08	2.01E-08	5.91E-08
827	569824.9	4214942	3.96E-08	2.24E-08	6.20E-08	6.05E-09	3.41E-09	9.46E-09	2.73E-09	1.40E-09	4.13E-09
828	569829.6	4214950	4.10E-08	2.32E-08	6.42E-08	6.26E-09	3.53E-09	9.79E-09	2.82E-09	1.45E-09	4.28E-09
829	569834.3	4214959	4.28E-08	2.43E-08	6.71E-08	6.54E-09	3.69E-09	1.02E-08	2.95E-09	1.52E-09	4.47E-09
830	569838.9	4214967	4.51E-08	2.56E-08	7.07E-08	6.89E-09	3.89E-09	1.08E-08	3.11E-09	1.60E-09	4.71E-09
831	569843.6	4214976	4.77E-08	2.70E-08	7.47E-08	7.28E-09	4.11E-09	1.14E-08	3.29E-09	1.69E-09	4.98E-09
832	569848.3	4214984	5.06E-08	2.87E-08	7.92E-08	7.72E-09	4.36E-09	1.21E-08	3.49E-09	1.79E-09	5.28E-09
833	569853	4214993	5.40E-08	3.06E-08	8.47E-08	8.25E-09	4.66E-09	1.29E-08	3.72E-09	1.92E-09	5.64E-09
834	569857.6	4215001	5.80E-08	3.29E-08	9.09E-08	8.86E-09	5.00E-09	1.39E-08	4.00E-09	2.06E-09	6.06E-09
835	569862.3	4215010	6.25E-08	3.54E-08	9.80E-08	9.55E-09	5.39E-09	1.49E-08	4.31E-09	2.22E-09	6.53E-09
836	569867	4215018	6.76E-08	3.83E-08	1.06E-07	1.03E-08	5.82E-09	1.61E-08	4.66E-09	2.40E-09	7.05E-09
837	569871.7	4215027	7.32E-08	4.15E-08	1.15E-07	1.12E-08	6.31E-09	1.75E-08	5.05E-09	2.60E-09	7.64E-09
838	569876.3	4215035	7.97E-08	4.51E-08	1.25E-07	1.22E-08	6.86E-09	1.90E-08	5.49E-09	2.83E-09	8.31E-09
839	569927.8	4215129	3.98E-07	2.26E-07	6.24E-07	6.08E-08	3.43E-08	9.52E-08	2.75E-08	1.41E-08	4.16E-08
840	569932.4	4215137	4.44E-07	2.52E-07	6.96E-07	6.78E-08	3.83E-08	1.06E-07	3.06E-08	1.58E-08	4.64E-08
841	569937.1	4215146	4.89E-07	2.77E-07	7.67E-07	7.47E-08	4.22E-08	1.17E-07	3.37E-08	1.74E-08	5.11E-08
842	569941.8	4215154	5.34E-07	3.02E-07	8.36E-07	8.15E-08	4.60E-08	1.27E-07	3.68E-08	1.89E-08	5.57E-08
843	569816.2	4214947	4.05E-08	2.29E-08	6.34E-08	6.18E-09	3.49E-09	9.67E-09	2.79E-09	1.44E-09	4.22E-09
844	569820.8	4214955	4.20E-08	2.38E-08	6.58E-08	6.41E-09	3.62E-09	1.00E-08	2.89E-09	1.49E-09	4.38E-09
845	569825.5	4214964	4.41E-08	2.50E-08	6.90E-08	6.73E-09	3.80E-09	1.05E-08	3.04E-09	1.56E-09	4.60E-09
846	569830.2	4214972	4.65E-08	2.63E-08	7.28E-08	7.09E-09	4.00E-09	1.11E-08	3.20E-09	1.65E-09	4.85E-09
847	569834.9	4214981	4.91E-08	2.78E-08	7.70E-08	7.50E-09	4.23E-09	1.17E-08	3.39E-09	1.74E-09	5.13E-09
848	569839.5	4214989	5.22E-08	2.96E-08	8.18E-08	7.98E-09	4.50E-09	1.25E-08	3.60E-09	1.85E-09	5.45E-09
849	569844.2	4214998	5.59E-08	3.17E-08	8.76E-08	8.54E-09	4.82E-09	1.34E-08	3.85E-09	1.98E-09	5.84E-09
850	569848.9	4215006	6.01E-08	3.41E-08	9.42E-08	9.18E-09	5.18E-09	1.44E-08	4.14E-09	2.13E-09	6.28E-09

851	569853.6	4215015	6.48E-08	3.67E-08	1.02E-07	9.90E-09	5.59E-09	1.55E-08	4.47E-09	2.30E-09	6.77E-09
852	569858.2	4215023	7.00E-08	3.97E-08	1.10E-07	1.07E-08	6.03E-09	1.67E-08	4.83E-09	2.48E-09	7.31E-09
853	569862.9	4215032	7.59E-08	4.30E-08	1.19E-07	1.16E-08	6.54E-09	1.81E-08	5.23E-09	2.69E-09	7.92E-09
854	569914.3	4215125	3.31E-07	1.88E-07	5.19E-07	5.06E-08	2.86E-08	7.92E-08	2.28E-08	1.18E-08	3.46E-08
855	569919	4215134	3.90E-07	2.21E-07	6.11E-07	5.96E-08	3.36E-08	9.32E-08	2.69E-08	1.38E-08	4.07E-08
856	569923.7	4215142	4.26E-07	2.41E-07	6.67E-07	6.50E-08	3.67E-08	1.02E-07	2.93E-08	1.51E-08	4.44E-08
857	569928.4	4215151	4.65E-07	2.64E-07	7.29E-07	7.10E-08	4.01E-08	1.11E-07	3.21E-08	1.65E-08	4.86E-08
858	569933	4215159	5.03E-07	2.85E-07	7.88E-07	7.68E-08	4.33E-08	1.20E-07	3.46E-08	1.78E-08	5.25E-08
859	569802.7	4214943	4.02E-08	2.28E-08	6.29E-08	6.14E-09	3.46E-09	9.60E-09	2.77E-09	1.43E-09	4.19E-09
860	569807.4	4214952	4.15E-08	2.35E-08	6.49E-08	6.33E-09	3.57E-09	9.90E-09	2.86E-09	1.47E-09	4.33E-09
861	569812.1	4214960	4.32E-08	2.45E-08	6.76E-08	6.59E-09	3.72E-09	1.03E-08	2.98E-09	1.53E-09	4.51E-09
862	569816.7	4214969	4.53E-08	2.57E-08	7.10E-08	6.92E-09	3.91E-09	1.08E-08	3.12E-09	1.61E-09	4.73E-09
863	569821.4	4214977	4.78E-08	2.71E-08	7.49E-08	7.30E-09	4.12E-09	1.14E-08	3.29E-09	1.70E-09	4.99E-09
864	569826.1	4214986	5.06E-08	2.86E-08	7.92E-08	7.72E-09	4.36E-09	1.21E-08	3.48E-09	1.79E-09	5.28E-09
865	569830.8	4214994	5.40E-08	3.06E-08	8.45E-08	8.24E-09	4.65E-09	1.29E-08	3.72E-09	1.91E-09	5.63E-09
866	569835.4	4215003	5.78E-08	3.28E-08	9.06E-08	8.83E-09	4.98E-09	1.38E-08	3.98E-09	2.05E-09	6.04E-09
867	569840.1	4215011	6.22E-08	3.52E-08	9.74E-08	9.50E-09	5.36E-09	1.49E-08	4.29E-09	2.21E-09	6.49E-09
868	569844.8	4215020	6.71E-08	3.80E-08	1.05E-07	1.02E-08	5.78E-09	1.60E-08	4.62E-09	2.38E-09	7.00E-09
869	569849.5	4215028	7.24E-08	4.10E-08	1.13E-07	1.11E-08	6.24E-09	1.73E-08	4.99E-09	2.57E-09	7.56E-09
870	569854.1	4215037	7.85E-08	4.45E-08	1.23E-07	1.20E-08	6.76E-09	1.87E-08	5.41E-09	2.78E-09	8.19E-09
871	569905.6	4215130	3.28E-07	1.86E-07	5.14E-07	5.01E-08	2.83E-08	7.83E-08	2.26E-08	1.16E-08	3.42E-08
872	569910.2	4215139	3.79E-07	2.15E-07	5.93E-07	5.79E-08	3.26E-08	9.05E-08	2.61E-08	1.34E-08	3.95E-08
873	569914.9	4215147	4.08E-07	2.31E-07	6.39E-07	6.22E-08	3.51E-08	9.74E-08	2.81E-08	1.45E-08	4.26E-08
874	569919.6	4215156	4.43E-07	2.51E-07	6.93E-07	6.76E-08	3.81E-08	1.06E-07	3.05E-08	1.57E-08	4.62E-08
875	569924.3	4215164	4.74E-07	2.69E-07	7.43E-07	7.24E-08	4.09E-08	1.13E-07	3.27E-08	1.68E-08	4.95E-08
876	569792.9	4214939	3.99E-08	2.26E-08	6.25E-08	6.09E-09	3.44E-09	9.53E-09	2.75E-09	1.41E-09	4.16E-09
877	569794	4214948	4.11E-08	2.33E-08	6.44E-08	6.28E-09	3.54E-09	9.82E-09	2.83E-09	1.46E-09	4.29E-09
878	569798.6	4214956	4.25E-08	2.41E-08	6.66E-08	6.49E-09	3.66E-09	1.02E-08	2.93E-09	1.51E-09	4.44E-09
879	569803.3	4214965	4.44E-08	2.52E-08	6.96E-08	6.79E-09	3.83E-09	1.06E-08	3.06E-09	1.58E-09	4.64E-09
880	569808	4214973	4.66E-08	2.64E-08	7.31E-08	7.12E-09	4.02E-09	1.11E-08	3.21E-09	1.65E-09	4.87E-09
881	569812.7	4214982	4.91E-08	2.78E-08	7.70E-08	7.50E-09	4.23E-09	1.17E-08	3.39E-09	1.74E-09	5.13E-09
882	569817.3	4214990	5.21E-08	2.95E-08	8.17E-08	7.96E-09	4.49E-09	1.25E-08	3.59E-09	1.85E-09	5.44E-09
883	569822	4214999	5.57E-08	3.15E-08	8.72E-08	8.50E-09	4.80E-09	1.33E-08	3.84E-09	1.97E-09	5.81E-09
884	569826.7	4215007	5.97E-08	3.38E-08	9.35E-08	9.11E-09	5.14E-09	1.43E-08	4.11E-09	2.12E-09	6.23E-09
885	569831.4	4215016	6.42E-08	3.64E-08	1.01E-07	9.80E-09	5.53E-09	1.53E-08	4.42E-09	2.28E-09	6.70E-09
886	569836	4215024	6.91E-08	3.92E-08	1.08E-07	1.06E-08	5.96E-09	1.65E-08	4.76E-09	2.45E-09	7.22E-09
887	569840.7	4215033	7.47E-08	4.23E-08	1.17E-07	1.14E-08	6.44E-09	1.78E-08	5.15E-09	2.65E-09	7.80E-09
888	569896.8	4215135	3.25E-07	1.84E-07	5.09E-07	4.96E-08	2.80E-08	7.76E-08	2.24E-08	1.15E-08	3.39E-08
889	569901.5	4215143	3.66E-07	2.08E-07	5.74E-07	5.60E-08	3.16E-08	8.75E-08	2.53E-08	1.30E-08	3.82E-08
890	569906.2	4215152	3.91E-07	2.21E-07	6.12E-07	5.97E-08	3.37E-08	9.33E-08	2.69E-08	1.39E-08	4.08E-08
891	569910.8	4215160	4.21E-07	2.39E-07	6.60E-07	6.43E-08	3.63E-08	1.01E-07	2.90E-08	1.49E-08	4.40E-08
892	569915.5	4215169	4.48E-07	2.54E-07	7.01E-07	6.84E-08	3.86E-08	1.07E-07	3.08E-08	1.59E-08	4.67E-08
893	569784.2	4214944	4.07E-08	2.31E-08	6.38E-08	6.22E-09	3.51E-09	9.73E-09	2.81E-09	1.45E-09	4.25E-09
894	569783.1	4214935	3.97E-08	2.25E-08	6.22E-08	6.07E-09	3.42E-09	9.49E-09	2.74E-09	1.41E-09	4.15E-09
895	569789.9	4214961	4.37E-08	2.47E-08	6.84E-08	6.67E-09	3.76E-09	1.04E-08	3.01E-09	1.55E-09	4.56E-09
896	569794.5	4214970	4.57E-08	2.59E-08	7.15E-08	6.97E-09	3.94E-09	1.09E-08	3.15E-09	1.62E-09	4.77E-09
897	569799.2	4214978	4.79E-08	2.72E-08	7.51E-08	7.32E-09	4.13E-09	1.15E-08	3.30E-09	1.70E-09	5.00E-09
898	569803.9	4214987	5.05E-08	2.86E-08	7.91E-08	7.72E-09	4.35E-09	1.21E-08	3.48E-09	1.79E-09	5.27E-09
899	569808.6	4214995	5.37E-08	3.04E-08	8.41E-08	8.20E-09	4.63E-09	1.28E-08	3.70E-09	1.91E-09	5.61E-09
900	569813.2	4215004	5.74E-08	3.25E-08	8.99E-08	8.76E-09	4.94E-09	1.37E-08	3.95E-09	2.03E-09	5.99E-09
901	569817.9	4215012	6.15E-08	3.48E-08	9.63E-08	9.39E-09	5.30E-09	1.47E-08	4.24E-09	2.18E-09	6.42E-09
902	569822.6	4215021	6.60E-08	3.74E-08	1.03E-07	1.01E-08	5.69E-09	1.58E-08	4.55E-09	2.34E-09	6.89E-09
903	569827.3	4215029	7.10E-08	4.03E-08	1.11E-07	1.08E-08	6.12E-09	1.70E-08	4.90E-09	2.52E-09	7.42E-09
904	569831.9	4215038	7.67E-08	4.34E-08	1.20E-07	1.17E-08	6.61E-09	1.83E-08	5.28E-09	2.72E-09	8.00E-09
905	569888	4215140	3.17E-07	1.80E-07	4.96E-07	4.84E-08	2.73E-08	7.57E-08	2.18E-08	1.12E-08	3.31E-08
906	569892.7	4215148	3.53E-07	2.00E-07	5.53E-07	5.39E-08	3.04E-08	8.43E-08	2.43E-08	1.25E-08	3.68E-08
907	569897.4	4215157	3.73E-07	2.11E-07	5.85E-07	5.70E-08	3.22E-08	8.91E-08	2.57E-08	1.32E-08	3.90E-08
908	569902.1	4215165	4.01E-07	2.27E-07	6.29E-07	6.13E-08	3.46E-08	9.59E-08	2.77E-08	1.42E-08	4.19E-08
909	569906.7	4215174	4.20E-07	2.38E-07	6.58E-07	6.42E-08	3.62E-08	1.00E-07	2.90E-08	1.49E-08	4.39E-08
910	569775.3	4214948	4.16E-08	2.36E-08	6.51E-08	6.35E-09	3.58E-09	9.93E-09	2.87E-09	1.47E-09	4.34E-09
911	569774.2	4214939	4.04E-08	2.29E-08	6.33E-08	6.17E-09	3.48E-09	9.65E-09	2.78E-09	1.43E-09	4.22E-09

912	569773.1	4214929	3.95E-08	2.24E-08	6.19E-08	6.04E-09	3.41E-09	9.44E-09	2.72E-09	1.40E-09	4.13E-09
913	569776.4	4214958	4.31E-08	2.44E-08	6.75E-08	6.58E-09	3.71E-09	1.03E-08	2.97E-09	1.53E-09	4.50E-09
914	569781.1	4214966	4.48E-08	2.54E-08	7.02E-08	6.85E-09	3.86E-09	1.07E-08	3.09E-09	1.59E-09	4.68E-09
915	569785.8	4214975	4.69E-08	2.65E-08	7.34E-08	7.16E-09	4.04E-09	1.12E-08	3.23E-09	1.66E-09	4.89E-09
916	569790.5	4214983	4.92E-08	2.79E-08	7.71E-08	7.52E-09	4.24E-09	1.18E-08	3.39E-09	1.75E-09	5.14E-09
917	569795.1	4214992	5.20E-08	2.95E-08	8.15E-08	7.94E-09	4.48E-09	1.24E-08	3.58E-09	1.84E-09	5.43E-09
918	569799.8	4215000	5.52E-08	3.13E-08	8.65E-08	8.43E-09	4.76E-09	1.32E-08	3.80E-09	1.96E-09	5.76E-09
919	569804.5	4215009	5.89E-08	3.33E-08	9.22E-08	8.99E-09	5.07E-09	1.41E-08	4.06E-09	2.09E-09	6.14E-09
920	569809.2	4215017	6.31E-08	3.57E-08	9.88E-08	9.63E-09	5.43E-09	1.51E-08	4.35E-09	2.24E-09	6.58E-09
921	569813.8	4215026	6.77E-08	3.84E-08	1.06E-07	1.03E-08	5.84E-09	1.62E-08	4.67E-09	2.40E-09	7.07E-09
922	569818.5	4215034	7.28E-08	4.13E-08	1.14E-07	1.11E-08	6.27E-09	1.74E-08	5.02E-09	2.58E-09	7.60E-09
923	569823.2	4215043	7.85E-08	4.45E-08	1.23E-07	1.20E-08	6.76E-09	1.87E-08	5.41E-09	2.78E-09	8.19E-09
924	569879.3	4215145	3.06E-07	1.73E-07	4.79E-07	4.67E-08	2.64E-08	7.31E-08	2.11E-08	1.08E-08	3.19E-08
925	569884	4215153	3.38E-07	1.91E-07	5.29E-07	5.16E-08	2.91E-08	8.07E-08	2.33E-08	1.20E-08	3.53E-08
926	569888.6	4215162	3.55E-07	2.01E-07	5.57E-07	5.43E-08	3.06E-08	8.49E-08	2.45E-08	1.26E-08	3.71E-08
927	569893.3	4215170	3.77E-07	2.14E-07	5.91E-07	5.76E-08	3.25E-08	9.02E-08	2.60E-08	1.34E-08	3.94E-08
928	569898	4215179	3.94E-07	2.23E-07	6.17E-07	6.01E-08	3.39E-08	9.40E-08	2.71E-08	1.40E-08	4.11E-08
929	569766.6	4214953	4.26E-08	2.41E-08	6.67E-08	6.50E-09	3.67E-09	1.02E-08	2.93E-09	1.51E-09	4.44E-09
930	569765.5	4214944	4.13E-08	2.34E-08	6.47E-08	6.31E-09	3.56E-09	9.86E-09	2.85E-09	1.46E-09	4.31E-09
931	569764.4	4214934	4.03E-08	2.28E-08	6.31E-08	6.15E-09	3.47E-09	9.63E-09	2.78E-09	1.43E-09	4.21E-09
932	569763.3	4214925	3.96E-08	2.24E-08	6.21E-08	6.05E-09	3.41E-09	9.46E-09	2.73E-09	1.41E-09	4.14E-09
933	569777.2	4214821	2.35E-08	1.33E-08	3.69E-08	3.59E-09	2.03E-09	5.62E-09	1.62E-09	8.35E-10	2.46E-09
934	569782.9	4214813	2.25E-08	1.27E-08	3.53E-08	3.44E-09	1.94E-09	5.38E-09	1.55E-09	7.98E-10	2.35E-09
935	569767.7	4214962	4.42E-08	2.51E-08	6.93E-08	6.76E-09	3.81E-09	1.06E-08	3.05E-09	1.57E-09	4.62E-09
936	569772.3	4214971	4.60E-08	2.61E-08	7.21E-08	7.03E-09	3.96E-09	1.10E-08	3.17E-09	1.63E-09	4.80E-09
937	569777	4214979	4.81E-08	2.72E-08	7.53E-08	7.34E-09	4.14E-09	1.15E-08	3.31E-09	1.71E-09	5.02E-09
938	569781.7	4214988	5.05E-08	2.86E-08	7.91E-08	7.71E-09	4.35E-09	1.21E-08	3.48E-09	1.79E-09	5.27E-09
939	569786.4	4214996	5.33E-08	3.02E-08	8.35E-08	8.14E-09	4.59E-09	1.27E-08	3.67E-09	1.89E-09	5.57E-09
940	569791	4215005	5.65E-08	3.20E-08	8.86E-08	8.63E-09	4.87E-09	1.35E-08	3.90E-09	2.01E-09	5.90E-09
941	569795.7	4215013	6.02E-08	3.41E-08	9.43E-08	9.19E-09	5.19E-09	1.44E-08	4.15E-09	2.13E-09	6.28E-09
942	569800.4	4215022	6.44E-08	3.65E-08	1.01E-07	9.83E-09	5.55E-09	1.54E-08	4.43E-09	2.28E-09	6.72E-09
943	569805.1	4215030	6.90E-08	3.91E-08	1.08E-07	1.05E-08	5.95E-09	1.65E-08	4.76E-09	2.45E-09	7.21E-09
944	569809.7	4215039	7.43E-08	4.21E-08	1.16E-07	1.13E-08	6.40E-09	1.77E-08	5.12E-09	2.63E-09	7.75E-09
945	569814.4	4215047	8.00E-08	4.53E-08	1.25E-07	1.22E-08	6.90E-09	1.91E-08	5.51E-09	2.84E-09	8.35E-09
946	569819.1	4215056	8.62E-08	4.88E-08	1.35E-07	1.32E-08	7.43E-09	2.06E-08	5.94E-09	3.06E-09	9.00E-09
947	569870.5	4215149	2.90E-07	1.64E-07	4.54E-07	4.42E-08	2.49E-08	6.92E-08	2.00E-08	1.03E-08	3.02E-08
948	569875.2	4215158	3.22E-07	1.82E-07	5.04E-07	4.91E-08	2.77E-08	7.68E-08	2.22E-08	1.14E-08	3.36E-08
949	569879.9	4215166	3.47E-07	1.96E-07	5.43E-07	5.29E-08	2.99E-08	8.28E-08	2.39E-08	1.23E-08	3.62E-08
950	569884.5	4215175	3.55E-07	2.01E-07	5.56E-07	5.42E-08	3.06E-08	8.48E-08	2.45E-08	1.26E-08	3.70E-08
951	569889.2	4215183	3.70E-07	2.09E-07	5.79E-07	5.65E-08	3.19E-08	8.83E-08	2.55E-08	1.31E-08	3.86E-08
952	569757.8	4214958	4.36E-08	2.47E-08	6.83E-08	6.66E-09	3.76E-09	1.04E-08	3.01E-09	1.55E-09	4.55E-09
953	569756.7	4214949	4.22E-08	2.39E-08	6.62E-08	6.45E-09	3.64E-09	1.01E-08	2.91E-09	1.50E-09	4.41E-09
954	569755.7	4214940	4.11E-08	2.33E-08	6.45E-08	6.28E-09	3.55E-09	9.83E-09	2.84E-09	1.46E-09	4.30E-09
955	569754.6	4214930	4.03E-08	2.28E-08	6.32E-08	6.16E-09	3.47E-09	9.63E-09	2.78E-09	1.43E-09	4.21E-09
956	569753.5	4214921	3.98E-08	2.26E-08	6.24E-08	6.08E-09	3.43E-09	9.51E-09	2.74E-09	1.41E-09	4.16E-09
957	569750.4	4214841	2.58E-08	1.46E-08	4.04E-08	3.94E-09	2.22E-09	6.16E-09	1.78E-09	9.15E-10	2.69E-09
958	569756	4214833	2.47E-08	1.40E-08	3.87E-08	3.78E-09	2.13E-09	5.91E-09	1.70E-09	8.77E-10	2.58E-09
959	569767.2	4214818	2.30E-08	1.30E-08	3.60E-08	3.51E-09	1.98E-09	5.48E-09	1.58E-09	8.14E-10	2.40E-09
960	569772.8	4214811	2.20E-08	1.25E-08	3.45E-08	3.37E-09	1.90E-09	5.27E-09	1.52E-09	7.82E-10	2.30E-09
961	569784	4214796	2.06E-08	1.17E-08	3.23E-08	3.15E-09	1.78E-09	4.93E-09	1.42E-09	7.32E-10	2.15E-09
962	569758.9	4214967	4.53E-08	2.57E-08	7.10E-08	6.92E-09	3.91E-09	1.08E-08	3.12E-09	1.61E-09	4.73E-09
963	569763.6	4214976	4.71E-08	2.67E-08	7.39E-08	7.20E-09	4.06E-09	1.13E-08	3.25E-09	1.67E-09	4.92E-09
964	569768.3	4214984	4.92E-08	2.79E-08	7.71E-08	7.52E-09	4.24E-09	1.18E-08	3.39E-09	1.75E-09	5.14E-09
965	569772.9	4214993	5.18E-08	2.93E-08	8.11E-08	7.91E-09	4.46E-09	1.24E-08	3.57E-09	1.84E-09	5.41E-09
966	569777.6	4215001	5.46E-08	3.10E-08	8.56E-08	8.34E-09	4.71E-09	1.31E-08	3.77E-09	1.94E-09	5.70E-09
967	569782.3	4215010	5.78E-08	3.27E-08	9.05E-08	8.82E-09	4.98E-09	1.38E-08	3.98E-09	2.05E-09	6.03E-09
968	569787	4215018	6.14E-08	3.48E-08	9.61E-08	9.37E-09	5.29E-09	1.47E-08	4.23E-09	2.18E-09	6.41E-09
969	569791.6	4215027	6.55E-08	3.71E-08	1.03E-07	1.00E-08	5.65E-09	1.57E-08	4.52E-09	2.32E-09	6.84E-09
970	569796.3	4215035	7.02E-08	3.98E-08	1.10E-07	1.07E-08	6.05E-09	1.68E-08	4.84E-09	2.49E-09	7.33E-09
971	569801	4215044	7.53E-08	4.27E-08	1.18E-07	1.15E-08	6.49E-09	1.80E-08	5.19E-09	2.67E-09	7.86E-09
972	569805.7	4215052	8.10E-08	4.59E-08	1.27E-07	1.24E-08	6.98E-09	1.93E-08	5.58E-09	2.87E-09	8.45E-09

973	569810.3	4215061	8.71E-08	4.94E-08	1.37E-07	1.33E-08	7.51E-09	2.08E-08	6.00E-09	3.09E-09	9.10E-09
974	569861.8	4215154	2.66E-07	1.51E-07	4.17E-07	4.07E-08	2.30E-08	6.36E-08	1.84E-08	9.45E-09	2.78E-08
975	569866.4	4215163	2.99E-07	1.70E-07	4.69E-07	4.57E-08	2.58E-08	7.15E-08	2.06E-08	1.06E-08	3.13E-08
976	569871.1	4215171	3.26E-07	1.85E-07	5.11E-07	4.98E-08	2.81E-08	7.79E-08	2.25E-08	1.16E-08	3.40E-08
977	569875.8	4215180	3.44E-07	1.95E-07	5.39E-07	5.25E-08	2.96E-08	8.22E-08	2.37E-08	1.22E-08	3.59E-08
978	569880.5	4215188	3.50E-07	1.98E-07	5.48E-07	5.34E-08	3.02E-08	8.36E-08	2.41E-08	1.24E-08	3.65E-08
979	569749.1	4214963	4.47E-08	2.53E-08	7.00E-08	6.83E-09	3.85E-09	1.07E-08	3.08E-09	1.59E-09	4.67E-09
980	569748	4214954	4.32E-08	2.45E-08	6.77E-08	6.60E-09	3.73E-09	1.03E-08	2.98E-09	1.53E-09	4.51E-09
981	569746.9	4214945	4.21E-08	2.38E-08	6.59E-08	6.42E-09	3.62E-09	1.00E-08	2.90E-09	1.49E-09	4.39E-09
982	569745.9	4214936	4.11E-08	2.33E-08	6.44E-08	6.28E-09	3.54E-09	9.82E-09	2.83E-09	1.46E-09	4.29E-09
983	569744.8	4214927	4.04E-08	2.29E-08	6.33E-08	6.17E-09	3.48E-09	9.65E-09	2.78E-09	1.43E-09	4.22E-09
984	569743.7	4214918	3.98E-08	2.26E-08	6.24E-08	6.08E-09	3.43E-09	9.52E-09	2.75E-09	1.41E-09	4.16E-09
985	569736.2	4214854	2.82E-08	1.60E-08	4.42E-08	4.31E-09	2.43E-09	6.74E-09	1.94E-09	1.00E-09	2.94E-09
986	569740.7	4214838	2.54E-08	1.44E-08	3.98E-08	3.88E-09	2.19E-09	6.07E-09	1.75E-09	9.01E-10	2.65E-09
987	569746.2	4214831	2.43E-08	1.38E-08	3.81E-08	3.72E-09	2.10E-09	5.81E-09	1.68E-09	8.63E-10	2.54E-09
988	569757.3	4214816	2.25E-08	1.27E-08	3.52E-08	3.43E-09	1.94E-09	5.37E-09	1.55E-09	7.97E-10	2.35E-09
989	569768.3	4214802	2.10E-08	1.19E-08	3.29E-08	3.21E-09	1.81E-09	5.02E-09	1.45E-09	7.45E-10	2.19E-09
990	569779.4	4214787	1.98E-08	1.12E-08	3.11E-08	3.03E-09	1.71E-09	4.74E-09	1.37E-09	7.04E-10	2.07E-09
991	569750.1	4214972	4.64E-08	2.63E-08	7.27E-08	7.09E-09	4.00E-09	1.11E-08	3.20E-09	1.65E-09	4.84E-09
992	569754.8	4214980	4.82E-08	2.73E-08	7.56E-08	7.37E-09	4.16E-09	1.15E-08	3.32E-09	1.71E-09	5.03E-09
993	569759.5	4214989	5.05E-08	2.86E-08	7.91E-08	7.71E-09	4.35E-09	1.21E-08	3.48E-09	1.79E-09	5.27E-09
994	569764.2	4214997	5.31E-08	3.01E-08	8.31E-08	8.10E-09	4.57E-09	1.27E-08	3.66E-09	1.88E-09	5.54E-09
995	569768.8	4215006	5.59E-08	3.17E-08	8.76E-08	8.54E-09	4.82E-09	1.34E-08	3.85E-09	1.98E-09	5.84E-09
996	569773.5	4215014	5.91E-08	3.35E-08	9.25E-08	9.02E-09	5.09E-09	1.41E-08	4.07E-09	2.10E-09	6.17E-09
997	569778.2	4215023	6.27E-08	3.55E-08	9.82E-08	9.57E-09	5.40E-09	1.50E-08	4.32E-09	2.22E-09	6.54E-09
998	569782.9	4215031	6.66E-08	3.78E-08	1.04E-07	1.02E-08	5.74E-09	1.59E-08	4.59E-09	2.36E-09	6.96E-09
999	569787.5	4215040	7.12E-08	4.03E-08	1.11E-07	1.09E-08	6.13E-09	1.70E-08	4.90E-09	2.52E-09	7.43E-09
1000	569792.2	4215048	7.62E-08	4.32E-08	1.19E-07	1.16E-08	6.56E-09	1.82E-08	5.25E-09	2.70E-09	7.95E-09
1001	569796.9	4215057	8.17E-08	4.63E-08	1.28E-07	1.25E-08	7.04E-09	1.95E-08	5.63E-09	2.90E-09	8.53E-09
1002	569801.6	4215066	8.77E-08	4.97E-08	1.37E-07	1.34E-08	7.56E-09	2.10E-08	6.05E-09	3.11E-09	9.16E-09
1003	569806.2	4215074	9.42E-08	5.34E-08	1.48E-07	1.44E-08	8.12E-09	2.25E-08	6.49E-09	3.34E-09	9.83E-09
1004	569853	4215159	2.44E-07	1.38E-07	3.82E-07	3.72E-08	2.10E-08	5.82E-08	1.68E-08	8.64E-09	2.54E-08
1005	569857.7	4215168	2.76E-07	1.56E-07	4.32E-07	4.21E-08	2.38E-08	6.59E-08	1.90E-08	9.78E-09	2.88E-08
1006	569862.3	4215176	3.05E-07	1.73E-07	4.77E-07	4.65E-08	2.63E-08	7.28E-08	2.10E-08	1.08E-08	3.18E-08
1007	569867	4215185	3.25E-07	1.84E-07	5.10E-07	4.97E-08	2.80E-08	7.77E-08	2.24E-08	1.15E-08	3.40E-08
1008	569871.7	4215193	3.33E-07	1.89E-07	5.22E-07	5.09E-08	2.87E-08	7.96E-08	2.30E-08	1.18E-08	3.48E-08
1009	569740.2	4214967	4.56E-08	2.59E-08	7.15E-08	6.97E-09	3.93E-09	1.09E-08	3.15E-09	1.62E-09	4.76E-09
1010	569739.1	4214958	4.41E-08	2.50E-08	6.91E-08	6.73E-09	3.80E-09	1.05E-08	3.04E-09	1.56E-09	4.60E-09
1011	569738	4214948	4.28E-08	2.42E-08	6.70E-08	6.53E-09	3.69E-09	1.02E-08	2.95E-09	1.52E-09	4.47E-09
1012	569736.8	4214938	4.17E-08	2.36E-08	6.54E-08	6.37E-09	3.60E-09	9.97E-09	2.88E-09	1.48E-09	4.36E-09
1013	569735.7	4214929	4.09E-08	2.32E-08	6.41E-08	6.25E-09	3.52E-09	9.77E-09	2.82E-09	1.45E-09	4.27E-09
1014	569734.6	4214919	4.01E-08	2.27E-08	6.28E-08	6.12E-09	3.45E-09	9.58E-09	2.76E-09	1.42E-09	4.18E-09
1015	569727.8	4214862	2.95E-08	1.67E-08	4.62E-08	4.51E-09	2.54E-09	7.05E-09	2.03E-09	1.05E-09	3.08E-09
1016	569726.6	4214852	2.77E-08	1.57E-08	4.34E-08	4.23E-09	2.39E-09	6.62E-09	1.91E-09	9.83E-10	2.89E-09
1017	569731.4	4214835	2.50E-08	1.41E-08	3.91E-08	3.81E-09	2.15E-09	5.96E-09	1.72E-09	8.85E-10	2.60E-09
1018	569737.2	4214827	2.39E-08	1.36E-08	3.75E-08	3.65E-09	2.06E-09	5.72E-09	1.65E-09	8.49E-10	2.50E-09
1019	569743.1	4214820	2.29E-08	1.30E-08	3.59E-08	3.50E-09	1.98E-09	5.48E-09	1.58E-09	8.13E-10	2.39E-09
1020	569748.9	4214812	2.20E-08	1.24E-08	3.44E-08	3.35E-09	1.89E-09	5.25E-09	1.51E-09	7.79E-10	2.29E-09
1021	569754.8	4214804	2.11E-08	1.20E-08	3.31E-08	3.23E-09	1.82E-09	5.05E-09	1.46E-09	7.50E-10	2.21E-09
1022	569760.6	4214797	2.06E-08	1.17E-08	3.22E-08	3.14E-09	1.77E-09	4.91E-09	1.42E-09	7.30E-10	2.15E-09
1023	569766.5	4214789	2.00E-08	1.13E-08	3.13E-08	3.05E-09	1.72E-09	4.78E-09	1.38E-09	7.09E-10	2.09E-09
1024	569772.3	4214781	1.94E-08	1.10E-08	3.04E-08	2.96E-09	1.67E-09	4.63E-09	1.34E-09	6.88E-10	2.02E-09
1025	569741.4	4214977	4.75E-08	2.69E-08	7.44E-08	7.25E-09	4.09E-09	1.13E-08	3.27E-09	1.68E-09	4.95E-09
1026	569746.1	4214985	4.93E-08	2.79E-08	7.72E-08	7.53E-09	4.25E-09	1.18E-08	3.40E-09	1.75E-09	5.15E-09
1027	569750.7	4214994	5.16E-08	2.92E-08	8.09E-08	7.88E-09	4.45E-09	1.23E-08	3.56E-09	1.83E-09	5.39E-09
1028	569755.4	4215002	5.42E-08	3.07E-08	8.50E-08	8.28E-09	4.67E-09	1.30E-08	3.74E-09	1.92E-09	5.66E-09
1029	569760.1	4215011	5.71E-08	3.24E-08	8.95E-08	8.72E-09	4.92E-09	1.36E-08	3.94E-09	2.03E-09	5.96E-09
1030	569764.8	4215019	6.03E-08	3.42E-08	9.45E-08	9.21E-09	5.20E-09	1.44E-08	4.16E-09	2.14E-09	6.30E-09
1031	569769.4	4215028	6.39E-08	3.62E-08	1.00E-07	9.76E-09	5.51E-09	1.53E-08	4.40E-09	2.27E-09	6.67E-09
1032	569774.1	4215036	6.79E-08	3.84E-08	1.06E-07	1.04E-08	5.85E-09	1.62E-08	4.68E-09	2.41E-09	7.08E-09
1033	569778.8	4215045	7.21E-08	4.09E-08	1.13E-07	1.10E-08	6.21E-09	1.72E-08	4.97E-09	2.56E-09	7.53E-09

1034	569783.5	4215053	7.70E-08	4.36E-08	1.21E-07	1.18E-08	6.63E-09	1.84E-08	5.30E-09	2.73E-09	8.03E-09
1035	569788.1	4215062	8.23E-08	4.66E-08	1.29E-07	1.26E-08	7.09E-09	1.97E-08	5.67E-09	2.92E-09	8.59E-09
1036	569792.8	4215070	8.81E-08	4.99E-08	1.38E-07	1.35E-08	7.59E-09	2.11E-08	6.07E-09	3.13E-09	9.20E-09
1037	569797.5	4215079	9.44E-08	5.35E-08	1.48E-07	1.44E-08	8.13E-09	2.25E-08	6.50E-09	3.35E-09	9.85E-09
1038	569844.2	4215164	2.22E-07	1.26E-07	3.48E-07	3.39E-08	1.91E-08	5.30E-08	1.53E-08	7.88E-09	2.32E-08
1039	569848.9	4215172	2.57E-07	1.46E-07	4.02E-07	3.92E-08	2.21E-08	6.13E-08	1.77E-08	9.11E-09	2.68E-08
1040	569853.6	4215181	2.87E-07	1.63E-07	4.50E-07	4.39E-08	2.48E-08	6.87E-08	1.98E-08	1.02E-08	3.00E-08
1041	569858.3	4215189	3.09E-07	1.75E-07	4.84E-07	4.72E-08	2.66E-08	7.39E-08	2.13E-08	1.10E-08	3.23E-08
1042	569862.9	4215198	3.22E-07	1.83E-07	5.05E-07	4.92E-08	2.78E-08	7.70E-08	2.22E-08	1.14E-08	3.36E-08
1043	569731.5	4214972	4.67E-08	2.64E-08	7.31E-08	7.13E-09	4.02E-09	1.12E-08	3.22E-09	1.66E-09	4.87E-09
1044	569730.4	4214963	4.51E-08	2.56E-08	7.07E-08	6.89E-09	3.89E-09	1.08E-08	3.11E-09	1.60E-09	4.71E-09
1045	569729.3	4214953	4.38E-08	2.48E-08	6.86E-08	6.69E-09	3.77E-09	1.05E-08	3.02E-09	1.55E-09	4.57E-09
1046	569728.1	4214944	4.27E-08	2.42E-08	6.68E-08	6.51E-09	3.68E-09	1.02E-08	2.94E-09	1.51E-09	4.45E-09
1047	569727	4214934	4.17E-08	2.36E-08	6.54E-08	6.37E-09	3.60E-09	9.97E-09	2.88E-09	1.48E-09	4.36E-09
1048	569725.9	4214925	4.09E-08	2.32E-08	6.41E-08	6.25E-09	3.53E-09	9.77E-09	2.82E-09	1.45E-09	4.27E-09
1049	569724.8	4214916	3.98E-08	2.25E-08	6.23E-08	6.07E-09	3.43E-09	9.50E-09	2.74E-09	1.41E-09	4.15E-09
1050	569719.2	4214868	3.07E-08	1.74E-08	4.82E-08	4.70E-09	2.65E-09	7.34E-09	2.12E-09	1.09E-09	3.21E-09
1051	569718.1	4214859	2.89E-08	1.64E-08	4.53E-08	4.42E-09	2.49E-09	6.91E-09	1.99E-09	1.03E-09	3.02E-09
1052	569717	4214849	2.73E-08	1.55E-08	4.28E-08	4.17E-09	2.35E-09	6.53E-09	1.88E-09	9.69E-10	2.85E-09
1053	569721.6	4214832	2.47E-08	1.40E-08	3.87E-08	3.77E-09	2.13E-09	5.90E-09	1.70E-09	8.76E-10	2.58E-09
1054	569727.4	4214825	2.37E-08	1.34E-08	3.71E-08	3.62E-09	2.04E-09	5.66E-09	1.63E-09	8.40E-10	2.47E-09
1055	569733.2	4214817	2.28E-08	1.29E-08	3.56E-08	3.47E-09	1.96E-09	5.43E-09	1.57E-09	8.07E-10	2.37E-09
1056	569738.9	4214810	2.18E-08	1.24E-08	3.42E-08	3.34E-09	1.88E-09	5.22E-09	1.51E-09	7.75E-10	2.28E-09
1057	569744.7	4214802	2.11E-08	1.20E-08	3.31E-08	3.22E-09	1.82E-09	5.04E-09	1.45E-09	7.49E-10	2.20E-09
1058	569750.5	4214795	2.05E-08	1.16E-08	3.21E-08	3.13E-09	1.77E-09	4.89E-09	1.41E-09	7.27E-10	2.14E-09
1059	569756.2	4214787	1.99E-08	1.13E-08	3.12E-08	3.04E-09	1.71E-09	4.75E-09	1.37E-09	7.06E-10	2.08E-09
1060	569762	4214779	1.94E-08	1.10E-08	3.03E-08	2.95E-09	1.67E-09	4.62E-09	1.33E-09	6.86E-10	2.02E-09
1061	569767.8	4214772	1.89E-08	1.07E-08	2.97E-08	2.89E-09	1.63E-09	4.52E-09	1.30E-09	6.71E-10	1.98E-09
1062	569732.6	4214982	4.85E-08	2.75E-08	7.60E-08	7.40E-09	4.18E-09	1.16E-08	3.34E-09	1.72E-09	5.06E-09
1063	569737.3	4214990	5.05E-08	2.86E-08	7.90E-08	7.70E-09	4.35E-09	1.21E-08	3.48E-09	1.79E-09	5.27E-09
1064	569742	4214999	5.28E-08	2.99E-08	8.27E-08	8.06E-09	4.55E-09	1.26E-08	3.64E-09	1.87E-09	5.51E-09
1065	569746.6	4215007	5.54E-08	3.14E-08	8.67E-08	8.45E-09	4.77E-09	1.32E-08	3.82E-09	1.96E-09	5.78E-09
1066	569751.3	4215016	5.82E-08	3.30E-08	9.12E-08	8.89E-09	5.02E-09	1.39E-08	4.01E-09	2.06E-09	6.08E-09
1067	569756	4215024	6.14E-08	3.48E-08	9.62E-08	9.38E-09	5.29E-09	1.47E-08	4.23E-09	2.18E-09	6.41E-09
1068	569760.7	4215033	6.49E-08	3.68E-08	1.02E-07	9.92E-09	5.60E-09	1.55E-08	4.47E-09	2.30E-09	6.78E-09
1069	569765.3	4215041	6.88E-08	3.90E-08	1.08E-07	1.05E-08	5.93E-09	1.64E-08	4.74E-09	2.44E-09	7.18E-09
1070	569770	4215050	7.30E-08	4.14E-08	1.14E-07	1.11E-08	6.29E-09	1.74E-08	5.03E-09	2.59E-09	7.62E-09
1071	569774.7	4215058	7.78E-08	4.41E-08	1.22E-07	1.19E-08	6.70E-09	1.86E-08	5.36E-09	2.76E-09	8.12E-09
1072	569779.4	4215067	8.29E-08	4.69E-08	1.30E-07	1.27E-08	7.14E-09	1.98E-08	5.71E-09	2.94E-09	8.65E-09
1073	569784	4215075	8.83E-08	5.00E-08	1.38E-07	1.35E-08	7.61E-09	2.11E-08	6.09E-09	3.13E-09	9.22E-09
1074	569788.7	4215084	9.43E-08	5.34E-08	1.48E-07	1.44E-08	8.12E-09	2.25E-08	6.50E-09	3.34E-09	9.84E-09
1075	569793.4	4215092	1.01E-07	5.70E-08	1.58E-07	1.54E-08	8.67E-09	2.40E-08	6.93E-09	3.57E-09	1.05E-08
1076	569835.5	4215169	2.14E-07	1.21E-07	3.35E-07	3.26E-08	1.84E-08	5.10E-08	1.47E-08	7.57E-09	2.23E-08
1077	569840.1	4215177	2.45E-07	1.39E-07	3.84E-07	3.74E-08	2.11E-08	5.85E-08	1.69E-08	8.69E-09	2.56E-08
1078	569844.8	4215186	2.75E-07	1.56E-07	4.31E-07	4.20E-08	2.37E-08	6.57E-08	1.90E-08	9.76E-09	2.87E-08
1079	569849.5	4215194	2.97E-07	1.68E-07	4.65E-07	4.53E-08	2.56E-08	7.08E-08	2.04E-08	1.05E-08	3.10E-08
1080	569854.2	4215203	3.02E-07	1.71E-07	4.74E-07	4.62E-08	2.61E-08	7.22E-08	2.08E-08	1.07E-08	3.16E-08
1081	569722.8	4214977	4.77E-08	2.70E-08	7.47E-08	7.28E-09	4.11E-09	1.14E-08	3.29E-09	1.69E-09	4.98E-09
1082	569721.7	4214968	4.61E-08	2.61E-08	7.22E-08	7.04E-09	3.97E-09	1.10E-08	3.18E-09	1.64E-09	4.81E-09
1083	569720.5	4214958	4.48E-08	2.54E-08	7.02E-08	6.84E-09	3.86E-09	1.07E-08	3.09E-09	1.59E-09	4.68E-09
1084	569719.4	4214949	4.36E-08	2.47E-08	6.83E-08	6.66E-09	3.76E-09	1.04E-08	3.00E-09	1.55E-09	4.55E-09
1085	569718.3	4214940	4.25E-08	2.41E-08	6.66E-08	6.50E-09	3.67E-09	1.02E-08	2.93E-09	1.51E-09	4.44E-09
1086	569717.2	4214931	4.17E-08	2.36E-08	6.52E-08	6.36E-09	3.59E-09	9.95E-09	2.87E-09	1.48E-09	4.35E-09
1087	569716.1	4214921	4.05E-08	2.30E-08	6.35E-08	6.19E-09	3.49E-09	9.69E-09	2.79E-09	1.44E-09	4.23E-09
1088	569715	4214912	3.92E-08	2.22E-08	6.14E-08	5.99E-09	3.38E-09	9.37E-09	2.70E-09	1.39E-09	4.09E-09
1089	569711.7	4214884	3.40E-08	1.93E-08	5.33E-08	5.19E-09	2.93E-09	8.13E-09	2.34E-09	1.21E-09	3.55E-09
1090	569710.6	4214875	3.20E-08	1.81E-08	5.02E-08	4.89E-09	2.76E-09	7.65E-09	2.21E-09	1.14E-09	3.34E-09
1091	569709.5	4214865	3.02E-08	1.71E-08	4.74E-08	4.62E-09	2.61E-09	7.22E-09	2.08E-09	1.07E-09	3.16E-09
1092	569708.4	4214856	2.86E-08	1.62E-08	4.48E-08	4.36E-09	2.46E-09	6.83E-09	1.97E-09	1.01E-09	2.98E-09
1093	569707.3	4214847	2.71E-08	1.53E-08	4.24E-08	4.14E-09	2.33E-09	6.47E-09	1.87E-09	9.61E-10	2.83E-09
1094	569711.9	4214830	2.47E-08	1.40E-08	3.86E-08	3.77E-09	2.12E-09	5.89E-09	1.70E-09	8.75E-10	2.57E-09

1095	569717.6	4214822	2.36E-08	1.34E-08	3.70E-08	3.61E-09	2.04E-09	5.64E-09	1.63E-09	8.38E-10	2.47E-09
1096	569723.3	4214815	2.26E-08	1.28E-08	3.54E-08	3.45E-09	1.95E-09	5.40E-09	1.56E-09	8.02E-10	2.36E-09
1097	569729	4214807	2.17E-08	1.23E-08	3.40E-08	3.32E-09	1.87E-09	5.19E-09	1.50E-09	7.71E-10	2.27E-09
1098	569734.7	4214800	2.11E-08	1.20E-08	3.31E-08	3.23E-09	1.82E-09	5.05E-09	1.46E-09	7.50E-10	2.21E-09
1099	569740.4	4214793	2.06E-08	1.17E-08	3.22E-08	3.14E-09	1.77E-09	4.91E-09	1.42E-09	7.30E-10	2.15E-09
1100	569746.1	4214785	2.00E-08	1.13E-08	3.13E-08	3.05E-09	1.72E-09	4.77E-09	1.38E-09	7.09E-10	2.09E-09
1101	569751.8	4214778	1.94E-08	1.10E-08	3.03E-08	2.96E-09	1.67E-09	4.63E-09	1.33E-09	6.87E-10	2.02E-09
1102	569757.4	4214770	1.90E-08	1.08E-08	2.98E-08	2.90E-09	1.64E-09	4.54E-09	1.31E-09	6.74E-10	1.98E-09
1103	569763.1	4214763	1.87E-08	1.06E-08	2.93E-08	2.86E-09	1.61E-09	4.47E-09	1.29E-09	6.64E-10	1.96E-09
1104	569723.9	4214986	4.95E-08	2.80E-08	7.75E-08	7.55E-09	4.26E-09	1.18E-08	3.41E-09	1.75E-09	5.16E-09
1105	569728.5	4214995	5.16E-08	2.92E-08	8.08E-08	7.87E-09	4.44E-09	1.23E-08	3.55E-09	1.83E-09	5.38E-09
1106	569733.2	4215003	5.39E-08	3.05E-08	8.44E-08	8.22E-09	4.64E-09	1.29E-08	3.71E-09	1.91E-09	5.62E-09
1107	569737.9	4215012	5.64E-08	3.20E-08	8.84E-08	8.62E-09	4.86E-09	1.35E-08	3.89E-09	2.00E-09	5.89E-09
1108	569742.6	4215020	5.93E-08	3.36E-08	9.29E-08	9.06E-09	5.11E-09	1.42E-08	4.09E-09	2.10E-09	6.19E-09
1109	569747.2	4215029	6.24E-08	3.54E-08	9.78E-08	9.53E-09	5.38E-09	1.49E-08	4.30E-09	2.21E-09	6.52E-09
1110	569751.9	4215037	6.58E-08	3.73E-08	1.03E-07	1.00E-08	5.67E-09	1.57E-08	4.53E-09	2.33E-09	6.87E-09
1111	569756.6	4215046	6.95E-08	3.94E-08	1.09E-07	1.06E-08	5.99E-09	1.66E-08	4.79E-09	2.46E-09	7.25E-09
1112	569761.3	4215054	7.38E-08	4.18E-08	1.16E-07	1.13E-08	6.36E-09	1.76E-08	5.08E-09	2.62E-09	7.70E-09
1113	569765.9	4215063	7.84E-08	4.44E-08	1.23E-07	1.20E-08	6.75E-09	1.87E-08	5.40E-09	2.78E-09	8.18E-09
1114	569770.6	4215071	8.33E-08	4.72E-08	1.30E-07	1.27E-08	7.18E-09	1.99E-08	5.74E-09	2.95E-09	8.69E-09
1115	569775.3	4215080	8.85E-08	5.02E-08	1.39E-07	1.35E-08	7.63E-09	2.11E-08	6.10E-09	3.14E-09	9.24E-09
1116	569780	4215088	9.41E-08	5.33E-08	1.47E-07	1.44E-08	8.11E-09	2.25E-08	6.48E-09	3.34E-09	9.82E-09
1117	569784.6	4215097	9.99E-08	5.66E-08	1.57E-07	1.53E-08	8.61E-09	2.39E-08	6.89E-09	3.55E-09	1.04E-08
1118	569789.3	4215105	1.06E-07	6.02E-08	1.66E-07	1.62E-08	9.16E-09	2.54E-08	7.32E-09	3.77E-09	1.11E-08
1119	569826.7	4215173	2.08E-07	1.18E-07	3.25E-07	3.17E-08	1.79E-08	4.96E-08	1.43E-08	7.37E-09	2.17E-08
1120	569831.4	4215182	2.37E-07	1.34E-07	3.71E-07	3.61E-08	2.04E-08	5.65E-08	1.63E-08	8.39E-09	2.47E-08
1121	569836.1	4215190	2.64E-07	1.50E-07	4.14E-07	4.03E-08	2.28E-08	6.31E-08	1.82E-08	9.37E-09	2.76E-08
1122	569840.7	4215199	2.81E-07	1.59E-07	4.41E-07	4.30E-08	2.42E-08	6.72E-08	1.94E-08	9.98E-09	2.94E-08
1123	569845.4	4215207	2.85E-07	1.61E-07	4.46E-07	4.35E-08	2.46E-08	6.81E-08	1.96E-08	1.01E-08	2.97E-08
1124	569714	4214982	4.86E-08	2.75E-08	7.61E-08	7.41E-09	4.18E-09	1.16E-08	3.35E-09	1.72E-09	5.07E-09
1125	569712.9	4214973	4.70E-08	2.66E-08	7.36E-08	7.18E-09	4.05E-09	1.12E-08	3.24E-09	1.67E-09	4.91E-09
1126	569711.8	4214964	4.57E-08	2.59E-08	7.16E-08	6.98E-09	3.94E-09	1.09E-08	3.15E-09	1.62E-09	4.77E-09
1127	569710.7	4214954	4.46E-08	2.52E-08	6.98E-08	6.80E-09	3.84E-09	1.06E-08	3.07E-09	1.58E-09	4.65E-09
1128	569709.6	4214945	4.34E-08	2.46E-08	6.80E-08	6.63E-09	3.74E-09	1.04E-08	2.99E-09	1.54E-09	4.53E-09
1129	569708.6	4214936	4.24E-08	2.40E-08	6.64E-08	6.47E-09	3.65E-09	1.01E-08	2.92E-09	1.50E-09	4.42E-09
1130	569707.5	4214927	4.15E-08	2.35E-08	6.50E-08	6.34E-09	3.58E-09	9.91E-09	2.86E-09	1.47E-09	4.33E-09
1131	569706.4	4214918	4.00E-08	2.27E-08	6.27E-08	6.11E-09	3.45E-09	9.55E-09	2.76E-09	1.42E-09	4.18E-09
1132	569705.3	4214908	3.85E-08	2.18E-08	6.03E-08	5.88E-09	3.32E-09	9.19E-09	2.65E-09	1.37E-09	4.02E-09
1133	569704.2	4214899	3.70E-08	2.10E-08	5.80E-08	5.65E-09	3.19E-09	8.84E-09	2.55E-09	1.31E-09	3.86E-09
1134	569703.1	4214890	3.51E-08	1.99E-08	5.50E-08	5.36E-09	3.02E-09	8.38E-09	2.42E-09	1.24E-09	3.66E-09
1135	569702	4214881	3.32E-08	1.88E-08	5.19E-08	5.06E-09	2.86E-09	7.92E-09	2.29E-09	1.18E-09	3.46E-09
1136	569700.9	4214872	3.14E-08	1.78E-08	4.92E-08	4.80E-09	2.71E-09	7.50E-09	2.16E-09	1.11E-09	3.28E-09
1137	569699.8	4214862	2.98E-08	1.69E-08	4.67E-08	4.55E-09	2.57E-09	7.12E-09	2.05E-09	1.06E-09	3.11E-09
1138	569698.7	4214853	2.83E-08	1.60E-08	4.43E-08	4.32E-09	2.44E-09	6.75E-09	1.95E-09	1.00E-09	2.95E-09
1139	569697.6	4214844	2.69E-08	1.52E-08	4.21E-08	4.10E-09	2.32E-09	6.42E-09	1.85E-09	9.53E-10	2.80E-09
1140	569702.2	4214827	2.47E-08	1.40E-08	3.86E-08	3.76E-09	2.12E-09	5.89E-09	1.70E-09	8.74E-10	2.57E-09
1141	569707.8	4214820	2.37E-08	1.34E-08	3.71E-08	3.61E-09	2.04E-09	5.65E-09	1.63E-09	8.39E-10	2.47E-09
1142	569713.4	4214813	2.27E-08	1.28E-08	3.55E-08	3.46E-09	1.95E-09	5.42E-09	1.56E-09	8.05E-10	2.37E-09
1143	569719.1	4214805	2.18E-08	1.23E-08	3.41E-08	3.32E-09	1.88E-09	5.20E-09	1.50E-09	7.72E-10	2.27E-09
1144	569730.3	4214790	2.07E-08	1.17E-08	3.24E-08	3.16E-09	1.78E-09	4.94E-09	1.43E-09	7.34E-10	2.16E-09
1145	569735.9	4214783	2.01E-08	1.14E-08	3.16E-08	3.08E-09	1.74E-09	4.81E-09	1.39E-09	7.15E-10	2.10E-09
1146	569741.6	4214776	1.96E-08	1.11E-08	3.07E-08	2.99E-09	1.69E-09	4.68E-09	1.35E-09	6.95E-10	2.04E-09
1147	569752.8	4214761	1.89E-08	1.07E-08	2.96E-08	2.89E-09	1.63E-09	4.52E-09	1.30E-09	6.71E-10	1.97E-09
1148	569715.1	4214991	5.05E-08	2.86E-08	7.90E-08	7.70E-09	4.35E-09	1.21E-08	3.48E-09	1.79E-09	5.27E-09
1149	569719.8	4215000	5.25E-08	2.98E-08	8.23E-08	8.02E-09	4.53E-09	1.26E-08	3.62E-09	1.86E-09	5.49E-09
1150	569724.4	4215008	5.49E-08	3.11E-08	8.60E-08	8.38E-09	4.73E-09	1.31E-08	3.78E-09	1.95E-09	5.73E-09
1151	569729.1	4215017	5.74E-08	3.25E-08	9.00E-08	8.77E-09	4.95E-09	1.37E-08	3.96E-09	2.04E-09	6.00E-09
1152	569733.8	4215025	6.03E-08	3.42E-08	9.45E-08	9.21E-09	5.20E-09	1.44E-08	4.16E-09	2.14E-09	6.29E-09
1153	569738.5	4215034	6.34E-08	3.59E-08	9.93E-08	9.68E-09	5.46E-09	1.51E-08	4.37E-09	2.25E-09	6.62E-09
1154	569743.1	4215042	6.67E-08	3.78E-08	1.04E-07	1.02E-08	5.74E-09	1.59E-08	4.59E-09	2.36E-09	6.96E-09
1155	569747.8	4215051	7.03E-08	3.98E-08	1.10E-07	1.07E-08	6.06E-09	1.68E-08	4.84E-09	2.49E-09	7.34E-09

1156	569752.5	4215059	7.43E-08	4.21E-08	1.16E-07	1.13E-08	6.40E-09	1.78E-08	5.12E-09	2.64E-09	7.76E-09
1157	569757.2	4215068	7.87E-08	4.46E-08	1.23E-07	1.20E-08	6.78E-09	1.88E-08	5.43E-09	2.79E-09	8.22E-09
1158	569761.8	4215076	8.35E-08	4.73E-08	1.31E-07	1.27E-08	7.19E-09	1.99E-08	5.75E-09	2.96E-09	8.71E-09
1159	569766.5	4215085	8.85E-08	5.02E-08	1.39E-07	1.35E-08	7.63E-09	2.11E-08	6.10E-09	3.14E-09	9.24E-09
1160	569771.2	4215093	9.39E-08	5.32E-08	1.47E-07	1.43E-08	8.09E-09	2.24E-08	6.47E-09	3.33E-09	9.80E-09
1161	569775.9	4215102	9.94E-08	5.63E-08	1.56E-07	1.52E-08	8.57E-09	2.37E-08	6.85E-09	3.53E-09	1.04E-08
1162	569780.5	4215110	1.05E-07	5.96E-08	1.65E-07	1.61E-08	9.07E-09	2.51E-08	7.25E-09	3.73E-09	1.10E-08
1163	569817.9	4215178	2.01E-07	1.14E-07	3.15E-07	3.07E-08	1.73E-08	4.81E-08	1.39E-08	7.14E-09	2.10E-08
1164	569822.6	4215187	2.28E-07	1.29E-07	3.57E-07	3.48E-08	1.96E-08	5.45E-08	1.57E-08	8.09E-09	2.38E-08
1165	569827.3	4215195	2.53E-07	1.43E-07	3.97E-07	3.87E-08	2.18E-08	6.05E-08	1.74E-08	8.98E-09	2.64E-08
1166	569832	4215204	2.62E-07	1.48E-07	4.10E-07	3.99E-08	2.25E-08	6.25E-08	1.80E-08	9.28E-09	2.73E-08
1167	569836.6	4215212	2.66E-07	1.51E-07	4.17E-07	4.06E-08	2.29E-08	6.35E-08	1.83E-08	9.43E-09	2.78E-08
1168	569705.3	4214987	4.94E-08	2.80E-08	7.74E-08	7.54E-09	4.26E-09	1.18E-08	3.40E-09	1.75E-09	5.16E-09
1169	569704.2	4214978	4.78E-08	2.71E-08	7.49E-08	7.31E-09	4.12E-09	1.14E-08	3.30E-09	1.70E-09	4.99E-09
1170	569703.1	4214969	4.65E-08	2.64E-08	7.29E-08	7.10E-09	4.01E-09	1.11E-08	3.21E-09	1.65E-09	4.86E-09
1171	569702	4214960	4.54E-08	2.57E-08	7.12E-08	6.94E-09	3.91E-09	1.09E-08	3.13E-09	1.61E-09	4.74E-09
1172	569700.9	4214951	4.43E-08	2.51E-08	6.94E-08	6.77E-09	3.82E-09	1.06E-08	3.05E-09	1.57E-09	4.63E-09
1173	569699.9	4214941	4.32E-08	2.45E-08	6.77E-08	6.60E-09	3.72E-09	1.03E-08	2.98E-09	1.53E-09	4.51E-09
1174	569698.8	4214932	4.22E-08	2.39E-08	6.61E-08	6.45E-09	3.64E-09	1.01E-08	2.91E-09	1.50E-09	4.41E-09
1175	569697.7	4214923	4.10E-08	2.32E-08	6.43E-08	6.26E-09	3.54E-09	9.80E-09	2.83E-09	1.46E-09	4.28E-09
1176	569696.6	4214914	3.93E-08	2.23E-08	6.16E-08	6.00E-09	3.39E-09	9.39E-09	2.71E-09	1.39E-09	4.10E-09
1177	569695.5	4214905	3.76E-08	2.13E-08	5.89E-08	5.75E-09	3.24E-09	8.99E-09	2.59E-09	1.33E-09	3.93E-09
1178	569694.5	4214896	3.60E-08	2.04E-08	5.64E-08	5.49E-09	3.10E-09	8.59E-09	2.48E-09	1.28E-09	3.76E-09
1179	569693.4	4214887	3.41E-08	1.93E-08	5.35E-08	5.21E-09	2.94E-09	8.15E-09	2.35E-09	1.21E-09	3.56E-09
1180	569692.3	4214878	3.25E-08	1.84E-08	5.09E-08	4.96E-09	2.80E-09	7.76E-09	2.24E-09	1.15E-09	3.39E-09
1181	569691.2	4214868	3.09E-08	1.75E-08	4.85E-08	4.72E-09	2.67E-09	7.39E-09	2.13E-09	1.10E-09	3.23E-09
1182	569690.1	4214859	2.94E-08	1.67E-08	4.61E-08	4.50E-09	2.54E-09	7.03E-09	2.03E-09	1.04E-09	3.07E-09
1183	569689.1	4214850	2.81E-08	1.59E-08	4.40E-08	4.28E-09	2.42E-09	6.70E-09	1.93E-09	9.95E-10	2.93E-09
1184	569688	4214841	2.68E-08	1.52E-08	4.20E-08	4.09E-09	2.31E-09	6.40E-09	1.85E-09	9.50E-10	2.80E-09
1185	569692.5	4214825	2.47E-08	1.40E-08	3.87E-08	3.77E-09	2.13E-09	5.90E-09	1.70E-09	8.77E-10	2.58E-09
1186	569703.6	4214810	2.28E-08	1.29E-08	3.57E-08	3.48E-09	1.97E-09	5.45E-09	1.57E-09	8.09E-10	2.38E-09
1187	569714.7	4214796	2.15E-08	1.22E-08	3.37E-08	3.28E-09	1.85E-09	5.13E-09	1.48E-09	7.62E-10	2.24E-09
1188	569725.9	4214781	2.04E-08	1.15E-08	3.19E-08	3.11E-09	1.76E-09	4.87E-09	1.40E-09	7.23E-10	2.13E-09
1189	569731.5	4214774	1.99E-08	1.13E-08	3.12E-08	3.05E-09	1.72E-09	4.76E-09	1.37E-09	7.08E-10	2.08E-09
1190	569742.6	4214759	1.94E-08	1.10E-08	3.03E-08	2.96E-09	1.67E-09	4.63E-09	1.34E-09	6.87E-10	2.02E-09
1191	569706.3	4214996	5.13E-08	2.91E-08	8.04E-08	7.84E-09	4.42E-09	1.23E-08	3.54E-09	1.82E-09	5.36E-09
1192	569711	4215005	5.34E-08	3.03E-08	8.37E-08	8.16E-09	4.60E-09	1.28E-08	3.68E-09	1.89E-09	5.58E-09
1193	569715.7	4215013	5.57E-08	3.16E-08	8.73E-08	8.51E-09	4.80E-09	1.33E-08	3.84E-09	1.98E-09	5.82E-09
1194	569720.4	4215022	5.84E-08	3.31E-08	9.14E-08	8.91E-09	5.03E-09	1.39E-08	4.02E-09	2.07E-09	6.09E-09
1195	569725	4215030	6.12E-08	3.47E-08	9.58E-08	9.34E-09	5.27E-09	1.46E-08	4.22E-09	2.17E-09	6.39E-09
1196	569729.7	4215039	6.42E-08	3.64E-08	1.01E-07	9.80E-09	5.53E-09	1.53E-08	4.42E-09	2.28E-09	6.70E-09
1197	569734.4	4215047	6.74E-08	3.82E-08	1.06E-07	1.03E-08	5.81E-09	1.61E-08	4.64E-09	2.39E-09	7.03E-09
1198	569739.1	4215056	7.11E-08	4.03E-08	1.11E-07	1.09E-08	6.12E-09	1.70E-08	4.90E-09	2.52E-09	7.42E-09
1199	569743.7	4215064	7.50E-08	4.25E-08	1.17E-07	1.15E-08	6.46E-09	1.79E-08	5.17E-09	2.66E-09	7.83E-09
1200	569748.4	4215073	7.91E-08	4.48E-08	1.24E-07	1.21E-08	6.82E-09	1.89E-08	5.45E-09	2.81E-09	8.26E-09
1201	569753.1	4215081	8.35E-08	4.73E-08	1.31E-07	1.28E-08	7.20E-09	1.99E-08	5.76E-09	2.96E-09	8.72E-09
1202	569757.8	4215090	8.84E-08	5.01E-08	1.38E-07	1.35E-08	7.62E-09	2.11E-08	6.09E-09	3.13E-09	9.22E-09
1203	569762.4	4215098	9.35E-08	5.30E-08	1.46E-07	1.43E-08	8.06E-09	2.23E-08	6.44E-09	3.32E-09	9.76E-09
1204	569767.1	4215107	9.88E-08	5.60E-08	1.55E-07	1.51E-08	8.51E-09	2.36E-08	6.81E-09	3.50E-09	1.03E-08
1205	569771.8	4215115	1.04E-07	5.92E-08	1.64E-07	1.60E-08	9.00E-09	2.50E-08	7.20E-09	3.71E-09	1.09E-08
1206	569809.2	4215183	1.97E-07	1.11E-07	3.08E-07	3.00E-08	1.69E-08	4.70E-08	1.35E-08	6.97E-09	2.05E-08
1207	569813.8	4215192	2.19E-07	1.24E-07	3.43E-07	3.35E-08	1.89E-08	5.24E-08	1.51E-08	7.78E-09	2.29E-08
1208	569818.5	4215200	2.36E-07	1.34E-07	3.70E-07	3.61E-08	2.04E-08	5.65E-08	1.63E-08	8.39E-09	2.47E-08
1209	569823.2	4215209	2.44E-07	1.38E-07	3.82E-07	3.72E-08	2.10E-08	5.82E-08	1.68E-08	8.65E-09	2.54E-08
1210	569827.9	4215217	2.49E-07	1.41E-07	3.90E-07	3.80E-08	2.14E-08	5.94E-08	1.71E-08	8.82E-09	2.60E-08
1211	569696.4	4214991	5.02E-08	2.84E-08	7.86E-08	7.66E-09	4.32E-09	1.20E-08	3.46E-09	1.78E-09	5.24E-09
1212	569695.3	4214982	4.85E-08	2.75E-08	7.59E-08	7.40E-09	4.18E-09	1.16E-08	3.34E-09	1.72E-09	5.06E-09
1213	569694.2	4214972	4.71E-08	2.67E-08	7.38E-08	7.20E-09	4.06E-09	1.13E-08	3.25E-09	1.67E-09	4.92E-09
1214	569693.1	4214963	4.60E-08	2.61E-08	7.21E-08	7.02E-09	3.96E-09	1.10E-08	3.17E-09	1.63E-09	4.80E-09
1215	569691.9	4214953	4.49E-08	2.54E-08	7.04E-08	6.86E-09	3.87E-09	1.07E-08	3.10E-09	1.59E-09	4.69E-09
1216	569690.8	4214944	4.36E-08	2.47E-08	6.83E-08	6.66E-09	3.76E-09	1.04E-08	3.01E-09	1.55E-09	4.55E-09

1217	569689.7	4214934	4.24E-08	2.40E-08	6.64E-08	6.48E-09	3.65E-09	1.01E-08	2.92E-09	1.50E-09	4.43E-09
1218	569688.5	4214925	4.11E-08	2.33E-08	6.44E-08	6.28E-09	3.54E-09	9.83E-09	2.83E-09	1.46E-09	4.29E-09
1219	569687.4	4214915	3.93E-08	2.22E-08	6.15E-08	5.99E-09	3.38E-09	9.38E-09	2.71E-09	1.39E-09	4.10E-09
1220	569686.3	4214906	3.75E-08	2.12E-08	5.88E-08	5.73E-09	3.23E-09	8.96E-09	2.58E-09	1.33E-09	3.91E-09
1221	569685.2	4214896	3.59E-08	2.03E-08	5.62E-08	5.48E-09	3.09E-09	8.57E-09	2.47E-09	1.27E-09	3.74E-09
1222	569684	4214887	3.41E-08	1.93E-08	5.34E-08	5.20E-09	2.94E-09	8.14E-09	2.35E-09	1.21E-09	3.56E-09
1223	569682.9	4214877	3.24E-08	1.84E-08	5.08E-08	4.95E-09	2.80E-09	7.75E-09	2.24E-09	1.15E-09	3.39E-09
1224	569681.8	4214868	3.09E-08	1.75E-08	4.85E-08	4.72E-09	2.67E-09	7.39E-09	2.13E-09	1.10E-09	3.23E-09
1225	569680.6	4214858	2.95E-08	1.67E-08	4.62E-08	4.50E-09	2.54E-09	7.04E-09	2.03E-09	1.05E-09	3.08E-09
1226	569679.5	4214848	2.81E-08	1.59E-08	4.41E-08	4.30E-09	2.42E-09	6.72E-09	1.94E-09	9.98E-10	2.94E-09
1227	569678.4	4214839	2.69E-08	1.52E-08	4.22E-08	4.11E-09	2.32E-09	6.43E-09	1.85E-09	9.55E-10	2.81E-09
1228	569683.1	4214822	2.49E-08	1.41E-08	3.90E-08	3.80E-09	2.15E-09	5.95E-09	1.72E-09	8.83E-10	2.60E-09
1229	569688.9	4214814	2.39E-08	1.35E-08	3.74E-08	3.64E-09	2.06E-09	5.70E-09	1.64E-09	8.46E-10	2.49E-09
1230	569694.7	4214807	2.28E-08	1.29E-08	3.58E-08	3.49E-09	1.97E-09	5.46E-09	1.57E-09	8.10E-10	2.38E-09
1231	569700.5	4214799	2.23E-08	1.26E-08	3.49E-08	3.40E-09	1.92E-09	5.33E-09	1.54E-09	7.91E-10	2.33E-09
1232	569706.4	4214791	2.18E-08	1.23E-08	3.41E-08	3.32E-09	1.87E-09	5.20E-09	1.50E-09	7.72E-10	2.27E-09
1233	569712.2	4214784	2.12E-08	1.20E-08	3.32E-08	3.24E-09	1.83E-09	5.06E-09	1.46E-09	7.52E-10	2.21E-09
1234	569718	4214776	2.06E-08	1.17E-08	3.23E-08	3.15E-09	1.78E-09	4.92E-09	1.42E-09	7.31E-10	2.15E-09
1235	569723.8	4214768	2.03E-08	1.15E-08	3.18E-08	3.10E-09	1.75E-09	4.85E-09	1.40E-09	7.20E-10	2.12E-09
1236	569697.6	4215001	5.22E-08	2.95E-08	8.17E-08	7.96E-09	4.49E-09	1.25E-08	3.59E-09	1.85E-09	5.44E-09
1237	569702.2	4215009	5.42E-08	3.07E-08	8.49E-08	8.28E-09	4.67E-09	1.29E-08	3.73E-09	1.92E-09	5.66E-09
1238	569706.9	4215018	5.65E-08	3.20E-08	8.86E-08	8.63E-09	4.87E-09	1.35E-08	3.90E-09	2.01E-09	5.90E-09
1239	569711.6	4215026	5.91E-08	3.35E-08	9.26E-08	9.03E-09	5.10E-09	1.41E-08	4.07E-09	2.10E-09	6.17E-09
1240	569716.3	4215035	6.19E-08	3.51E-08	9.70E-08	9.45E-09	5.33E-09	1.48E-08	4.27E-09	2.20E-09	6.46E-09
1241	569720.9	4215043	6.48E-08	3.67E-08	1.02E-07	9.90E-09	5.58E-09	1.55E-08	4.47E-09	2.30E-09	6.76E-09
1242	569725.6	4215052	6.81E-08	3.86E-08	1.07E-07	1.04E-08	5.87E-09	1.63E-08	4.69E-09	2.42E-09	7.11E-09
1243	569730.3	4215060	7.17E-08	4.06E-08	1.12E-07	1.09E-08	6.18E-09	1.71E-08	4.94E-09	2.54E-09	7.48E-09
1244	569735	4215069	7.55E-08	4.28E-08	1.18E-07	1.15E-08	6.50E-09	1.80E-08	5.20E-09	2.68E-09	7.88E-09
1245	569739.6	4215077	7.95E-08	4.50E-08	1.24E-07	1.21E-08	6.85E-09	1.90E-08	5.48E-09	2.82E-09	8.29E-09
1246	569744.3	4215086	8.38E-08	4.75E-08	1.31E-07	1.28E-08	7.22E-09	2.00E-08	5.78E-09	2.97E-09	8.75E-09
1247	569749	4215094	8.83E-08	5.00E-08	1.38E-07	1.35E-08	7.61E-09	2.11E-08	6.09E-09	3.13E-09	9.22E-09
1248	569753.7	4215103	9.30E-08	5.27E-08	1.46E-07	1.42E-08	8.01E-09	2.22E-08	6.41E-09	3.30E-09	9.70E-09
1249	569758.3	4215111	9.82E-08	5.56E-08	1.54E-07	1.50E-08	8.46E-09	2.35E-08	6.77E-09	3.48E-09	1.02E-08
1250	569763	4215120	1.04E-07	5.88E-08	1.63E-07	1.58E-08	8.94E-09	2.48E-08	7.15E-09	3.68E-09	1.08E-08
1251	569800.4	4215188	1.93E-07	1.09E-07	3.02E-07	2.94E-08	1.66E-08	4.60E-08	1.33E-08	6.83E-09	2.01E-08
1252	569805.1	4215196	2.13E-07	1.21E-07	3.34E-07	3.25E-08	1.84E-08	5.09E-08	1.47E-08	7.56E-09	2.22E-08
1253	569809.8	4215205	2.22E-07	1.26E-07	3.47E-07	3.38E-08	1.91E-08	5.29E-08	1.53E-08	7.86E-09	2.31E-08
1254	569814.4	4215213	2.29E-07	1.30E-07	3.59E-07	3.50E-08	1.97E-08	5.47E-08	1.58E-08	8.12E-09	2.39E-08
1255	569819.1	4215222	2.35E-07	1.33E-07	3.68E-07	3.58E-08	2.02E-08	5.61E-08	1.62E-08	8.33E-09	2.45E-08
1256	569687.7	4214996	5.10E-08	2.89E-08	7.99E-08	7.79E-09	4.40E-09	1.22E-08	3.52E-09	1.81E-09	5.33E-09
1257	569686.6	4214987	4.93E-08	2.79E-08	7.73E-08	7.53E-09	4.25E-09	1.18E-08	3.40E-09	1.75E-09	5.15E-09
1258	569685.5	4214977	4.79E-08	2.71E-08	7.50E-08	7.31E-09	4.13E-09	1.14E-08	3.30E-09	1.70E-09	5.00E-09
1259	569684.3	4214968	4.67E-08	2.64E-08	7.31E-08	7.12E-09	4.02E-09	1.11E-08	3.22E-09	1.65E-09	4.87E-09
1260	569683.2	4214959	4.56E-08	2.58E-08	7.14E-08	6.96E-09	3.93E-09	1.09E-08	3.14E-09	1.62E-09	4.76E-09
1261	569682.1	4214949	4.43E-08	2.51E-08	6.93E-08	6.76E-09	3.81E-09	1.06E-08	3.05E-09	1.57E-09	4.62E-09
1262	569681	4214940	4.29E-08	2.43E-08	6.72E-08	6.55E-09	3.70E-09	1.02E-08	2.96E-09	1.52E-09	4.48E-09
1263	569679.9	4214930	4.16E-08	2.36E-08	6.51E-08	6.35E-09	3.58E-09	9.93E-09	2.87E-09	1.47E-09	4.34E-09
1264	569678.8	4214921	4.00E-08	2.27E-08	6.27E-08	6.11E-09	3.45E-09	9.56E-09	2.76E-09	1.42E-09	4.18E-09
1265	569677.7	4214912	3.83E-08	2.17E-08	6.00E-08	5.85E-09	3.30E-09	9.15E-09	2.64E-09	1.36E-09	4.00E-09
1266	569676.5	4214902	3.67E-08	2.08E-08	5.75E-08	5.60E-09	3.16E-09	8.76E-09	2.53E-09	1.30E-09	3.83E-09
1267	569675.4	4214893	3.51E-08	1.99E-08	5.50E-08	5.36E-09	3.02E-09	8.38E-09	2.42E-09	1.25E-09	3.66E-09
1268	569674.3	4214883	3.35E-08	1.90E-08	5.25E-08	5.12E-09	2.89E-09	8.00E-09	2.31E-09	1.19E-09	3.50E-09
1269	569673.2	4214874	3.20E-08	1.81E-08	5.02E-08	4.89E-09	2.76E-09	7.65E-09	2.21E-09	1.14E-09	3.34E-09
1270	569672.1	4214864	3.06E-08	1.74E-08	4.80E-08	4.68E-09	2.64E-09	7.32E-09	2.11E-09	1.09E-09	3.20E-09
1271	569671	4214855	2.93E-08	1.66E-08	4.60E-08	4.48E-09	2.53E-09	7.01E-09	2.02E-09	1.04E-09	3.06E-09
1272	569669.8	4214846	2.81E-08	1.59E-08	4.41E-08	4.30E-09	2.43E-09	6.72E-09	1.94E-09	9.98E-10	2.94E-09
1273	569668.7	4214836	2.70E-08	1.53E-08	4.24E-08	4.13E-09	2.33E-09	6.46E-09	1.86E-09	9.59E-10	2.82E-09
1274	569673.4	4214819	2.52E-08	1.43E-08	3.95E-08	3.85E-09	2.17E-09	6.02E-09	1.74E-09	8.94E-10	2.63E-09
1275	569679.1	4214812	2.42E-08	1.37E-08	3.79E-08	3.69E-09	2.08E-09	5.78E-09	1.67E-09	8.58E-10	2.52E-09
1276	569684.9	4214804	2.33E-08	1.32E-08	3.65E-08	3.56E-09	2.01E-09	5.56E-09	1.61E-09	8.26E-10	2.43E-09
1277	569690.6	4214797	2.28E-08	1.29E-08	3.57E-08	3.48E-09	1.96E-09	5.44E-09	1.57E-09	8.08E-10	2.38E-09

1278	569696.4	4214789	2.23E-08	1.26E-08	3.49E-08	3.40E-09	1.92E-09	5.32E-09	1.54E-09	7.90E-10	2.33E-09
1279	569688.8	4215006	5.29E-08	3.00E-08	8.28E-08	8.07E-09	4.56E-09	1.26E-08	3.64E-09	1.88E-09	5.52E-09
1280	569693.5	4215014	5.49E-08	3.11E-08	8.60E-08	8.38E-09	4.73E-09	1.31E-08	3.78E-09	1.95E-09	5.73E-09
1281	569698.2	4215023	5.73E-08	3.24E-08	8.97E-08	8.74E-09	4.93E-09	1.37E-08	3.95E-09	2.03E-09	5.98E-09
1282	569702.8	4215031	5.98E-08	3.39E-08	9.37E-08	9.13E-09	5.15E-09	1.43E-08	4.12E-09	2.12E-09	6.24E-09
1283	569707.5	4215040	6.25E-08	3.54E-08	9.79E-08	9.54E-09	5.38E-09	1.49E-08	4.31E-09	2.22E-09	6.52E-09
1284	569712.2	4215048	6.54E-08	3.70E-08	1.02E-07	9.99E-09	5.63E-09	1.56E-08	4.51E-09	2.32E-09	6.83E-09
1285	569716.9	4215057	6.87E-08	3.89E-08	1.08E-07	1.05E-08	5.92E-09	1.64E-08	4.73E-09	2.44E-09	7.17E-09
1286	569721.5	4215065	7.22E-08	4.09E-08	1.13E-07	1.10E-08	6.22E-09	1.72E-08	4.97E-09	2.56E-09	7.53E-09
1287	569726.2	4215074	7.58E-08	4.29E-08	1.19E-07	1.16E-08	6.53E-09	1.81E-08	5.22E-09	2.69E-09	7.91E-09
1288	569730.9	4215082	7.98E-08	4.52E-08	1.25E-07	1.22E-08	6.88E-09	1.91E-08	5.50E-09	2.83E-09	8.33E-09
1289	569735.6	4215091	8.40E-08	4.76E-08	1.32E-07	1.28E-08	7.24E-09	2.01E-08	5.79E-09	2.98E-09	8.77E-09
1290	569740.2	4215099	8.84E-08	5.01E-08	1.39E-07	1.35E-08	7.62E-09	2.11E-08	6.09E-09	3.14E-09	9.23E-09
1291	569744.9	4215108	9.30E-08	5.27E-08	1.46E-07	1.42E-08	8.02E-09	2.22E-08	6.41E-09	3.30E-09	9.71E-09
1292	569749.6	4215116	9.79E-08	5.55E-08	1.53E-07	1.50E-08	8.44E-09	2.34E-08	6.75E-09	3.47E-09	1.02E-08
1293	569754.3	4215125	1.03E-07	5.84E-08	1.61E-07	1.57E-08	8.88E-09	2.46E-08	7.10E-09	3.66E-09	1.08E-08
1294	569787	4215184	1.69E-07	9.60E-08	2.65E-07	2.59E-08	1.46E-08	4.05E-08	1.17E-08	6.01E-09	1.77E-08
1295	569791.6	4215193	1.88E-07	1.07E-07	2.95E-07	2.87E-08	1.62E-08	4.49E-08	1.30E-08	6.67E-09	1.96E-08
1296	569796.3	4215201	2.01E-07	1.14E-07	3.15E-07	3.07E-08	1.73E-08	4.81E-08	1.39E-08	7.14E-09	2.10E-08
1297	569801	4215210	2.10E-07	1.19E-07	3.29E-07	3.20E-08	1.81E-08	5.01E-08	1.45E-08	7.44E-09	2.19E-08
1298	569805.7	4215218	2.17E-07	1.23E-07	3.40E-07	3.32E-08	1.87E-08	5.19E-08	1.50E-08	7.70E-09	2.27E-08
1299	569810.3	4215227	2.23E-07	1.26E-07	3.49E-07	3.40E-08	1.92E-08	5.32E-08	1.53E-08	7.90E-09	2.32E-08
1300	569678.9	4215001	5.18E-08	2.93E-08	8.11E-08	7.90E-09	4.46E-09	1.24E-08	3.57E-09	1.84E-09	5.40E-09
1301	569677.8	4214992	5.02E-08	2.84E-08	7.86E-08	7.66E-09	4.32E-09	1.20E-08	3.46E-09	1.78E-09	5.24E-09
1302	569676.7	4214983	4.88E-08	2.76E-08	7.64E-08	7.45E-09	4.20E-09	1.16E-08	3.36E-09	1.73E-09	5.09E-09
1303	569675.6	4214973	4.74E-08	2.69E-08	7.43E-08	7.24E-09	4.09E-09	1.13E-08	3.27E-09	1.68E-09	4.95E-09
1304	569674.5	4214964	4.62E-08	2.62E-08	7.24E-08	7.06E-09	3.98E-09	1.10E-08	3.19E-09	1.64E-09	4.83E-09
1305	569673.4	4214955	4.51E-08	2.55E-08	7.06E-08	6.88E-09	3.88E-09	1.08E-08	3.10E-09	1.60E-09	4.70E-09
1306	569672.3	4214945	4.35E-08	2.47E-08	6.82E-08	6.65E-09	3.75E-09	1.04E-08	3.00E-09	1.54E-09	4.54E-09
1307	569671.2	4214936	4.21E-08	2.38E-08	6.59E-08	6.42E-09	3.62E-09	1.00E-08	2.90E-09	1.49E-09	4.39E-09
1308	569670.1	4214927	4.06E-08	2.30E-08	6.37E-08	6.21E-09	3.50E-09	9.71E-09	2.80E-09	1.44E-09	4.24E-09
1309	569669	4214917	3.90E-08	2.21E-08	6.11E-08	5.95E-09	3.36E-09	9.31E-09	2.69E-09	1.38E-09	4.07E-09
1310	569667.9	4214908	3.74E-08	2.12E-08	5.86E-08	5.71E-09	3.22E-09	8.94E-09	2.58E-09	1.33E-09	3.91E-09
1311	569666.8	4214899	3.59E-08	2.04E-08	5.63E-08	5.49E-09	3.10E-09	8.59E-09	2.48E-09	1.27E-09	3.75E-09
1312	569665.7	4214889	3.44E-08	1.95E-08	5.40E-08	5.26E-09	2.97E-09	8.23E-09	2.37E-09	1.22E-09	3.60E-09
1313	569664.6	4214880	3.30E-08	1.87E-08	5.17E-08	5.04E-09	2.84E-09	7.89E-09	2.27E-09	1.17E-09	3.45E-09
1314	569663.5	4214871	3.17E-08	1.79E-08	4.96E-08	4.84E-09	2.73E-09	7.57E-09	2.18E-09	1.12E-09	3.31E-09
1315	569662.4	4214861	3.04E-08	1.72E-08	4.77E-08	4.65E-09	2.62E-09	7.27E-09	2.10E-09	1.08E-09	3.18E-09
1316	569661.3	4214852	2.93E-08	1.66E-08	4.59E-08	4.47E-09	2.52E-09	7.00E-09	2.02E-09	1.04E-09	3.06E-09
1317	569660.2	4214843	2.82E-08	1.60E-08	4.42E-08	4.31E-09	2.43E-09	6.74E-09	1.95E-09	1.00E-09	2.95E-09
1318	569659.1	4214833	2.73E-08	1.55E-08	4.28E-08	4.17E-09	2.35E-09	6.52E-09	1.88E-09	9.68E-10	2.85E-09
1319	569680	4215011	5.35E-08	3.03E-08	8.38E-08	8.17E-09	4.61E-09	1.28E-08	3.69E-09	1.90E-09	5.58E-09
1320	569684.7	4215019	5.55E-08	3.15E-08	8.70E-08	8.48E-09	4.79E-09	1.33E-08	3.83E-09	1.97E-09	5.80E-09
1321	569689.4	4215028	5.79E-08	3.28E-08	9.07E-08	8.84E-09	4.99E-09	1.38E-08	3.99E-09	2.05E-09	6.04E-09
1322	569694.1	4215036	6.04E-08	3.42E-08	9.46E-08	9.22E-09	5.20E-09	1.44E-08	4.16E-09	2.14E-09	6.30E-09
1323	569698.7	4215045	6.30E-08	3.57E-08	9.86E-08	9.61E-09	5.42E-09	1.50E-08	4.34E-09	2.23E-09	6.57E-09
1324	569703.4	4215053	6.60E-08	3.74E-08	1.03E-07	1.01E-08	5.68E-09	1.58E-08	4.55E-09	2.34E-09	6.88E-09
1325	569708.1	4215062	6.92E-08	3.92E-08	1.08E-07	1.06E-08	5.96E-09	1.65E-08	4.77E-09	2.45E-09	7.22E-09
1326	569712.8	4215070	7.26E-08	4.11E-08	1.14E-07	1.11E-08	6.25E-09	1.73E-08	5.00E-09	2.57E-09	7.57E-09
1327	569717.4	4215079	7.61E-08	4.31E-08	1.19E-07	1.16E-08	6.56E-09	1.82E-08	5.25E-09	2.70E-09	7.95E-09
1328	569722.1	4215087	8.01E-08	4.54E-08	1.25E-07	1.22E-08	6.90E-09	1.91E-08	5.52E-09	2.84E-09	8.36E-09
1329	569726.8	4215096	8.42E-08	4.77E-08	1.32E-07	1.29E-08	7.26E-09	2.01E-08	5.80E-09	2.99E-09	8.79E-09
1330	569731.5	4215104	8.86E-08	5.02E-08	1.39E-07	1.35E-08	7.63E-09	2.12E-08	6.10E-09	3.14E-09	9.25E-09
1331	569736.1	4215113	9.33E-08	5.29E-08	1.46E-07	1.42E-08	8.04E-09	2.23E-08	6.43E-09	3.31E-09	9.74E-09
1332	569740.8	4215121	9.84E-08	5.57E-08	1.54E-07	1.50E-08	8.48E-09	2.35E-08	6.78E-09	3.49E-09	1.03E-08
1333	569773.5	4215181	1.56E-07	8.84E-08	2.44E-07	2.38E-08	1.34E-08	3.73E-08	1.07E-08	5.53E-09	1.63E-08
1334	569778.2	4215189	1.69E-07	9.58E-08	2.65E-07	2.58E-08	1.46E-08	4.04E-08	1.17E-08	6.00E-09	1.77E-08
1335	569782.9	4215198	1.82E-07	1.03E-07	2.86E-07	2.79E-08	1.57E-08	4.36E-08	1.26E-08	6.47E-09	1.90E-08
1336	569787.6	4215206	1.91E-07	1.08E-07	3.00E-07	2.92E-08	1.65E-08	4.57E-08	1.32E-08	6.78E-09	2.00E-08
1337	569792.2	4215215	2.00E-07	1.13E-07	3.13E-07	3.05E-08	1.72E-08	4.77E-08	1.38E-08	7.08E-09	2.08E-08
1338	569796.9	4215223	2.07E-07	1.17E-07	3.24E-07	3.16E-08	1.78E-08	4.95E-08	1.43E-08	7.34E-09	2.16E-08

1339	569801.6	4215232	2.05E-07	1.16E-07	3.22E-07	3.14E-08	1.77E-08	4.91E-08	1.42E-08	7.29E-09	2.14E-08
1340	569670.2	4215006	5.24E-08	2.97E-08	8.20E-08	8.00E-09	4.51E-09	1.25E-08	3.61E-09	1.86E-09	5.47E-09
1341	569669.1	4214997	5.09E-08	2.88E-08	7.97E-08	7.77E-09	4.39E-09	1.22E-08	3.51E-09	1.81E-09	5.31E-09
1342	569668	4214988	4.96E-08	2.81E-08	7.77E-08	7.58E-09	4.28E-09	1.19E-08	3.42E-09	1.76E-09	5.18E-09
1343	569666.9	4214978	4.83E-08	2.74E-08	7.56E-08	7.37E-09	4.16E-09	1.15E-08	3.33E-09	1.71E-09	5.04E-09
1344	569665.8	4214969	4.70E-08	2.66E-08	7.36E-08	7.17E-09	4.05E-09	1.12E-08	3.24E-09	1.67E-09	4.90E-09
1345	569664.7	4214960	4.58E-08	2.59E-08	7.17E-08	6.99E-09	3.94E-09	1.09E-08	3.15E-09	1.62E-09	4.78E-09
1346	569663.6	4214951	4.43E-08	2.51E-08	6.94E-08	6.77E-09	3.82E-09	1.06E-08	3.05E-09	1.57E-09	4.63E-09
1347	569662.5	4214941	4.27E-08	2.42E-08	6.68E-08	6.52E-09	3.68E-09	1.02E-08	2.94E-09	1.51E-09	4.45E-09
1348	569661.4	4214932	4.11E-08	2.33E-08	6.44E-08	6.28E-09	3.54E-09	9.82E-09	2.83E-09	1.46E-09	4.29E-09
1349	569660.4	4214923	3.96E-08	2.24E-08	6.20E-08	6.05E-09	3.41E-09	9.46E-09	2.73E-09	1.40E-09	4.13E-09
1350	569659.3	4214914	3.81E-08	2.16E-08	5.96E-08	5.81E-09	3.28E-09	9.09E-09	2.62E-09	1.35E-09	3.97E-09
1351	569658.2	4214905	3.66E-08	2.08E-08	5.74E-08	5.59E-09	3.16E-09	8.75E-09	2.52E-09	1.30E-09	3.82E-09
1352	569657.1	4214895	3.53E-08	2.00E-08	5.52E-08	5.38E-09	3.04E-09	8.42E-09	2.43E-09	1.25E-09	3.68E-09
1353	569656	4214886	3.39E-08	1.92E-08	5.31E-08	5.17E-09	2.92E-09	8.09E-09	2.33E-09	1.20E-09	3.54E-09
1354	569654.9	4214877	3.26E-08	1.85E-08	5.11E-08	4.98E-09	2.81E-09	7.79E-09	2.25E-09	1.16E-09	3.40E-09
1355	569653.8	4214868	3.14E-08	1.78E-08	4.92E-08	4.79E-09	2.71E-09	7.50E-09	2.16E-09	1.11E-09	3.28E-09
1356	569652.7	4214858	3.03E-08	1.72E-08	4.75E-08	4.63E-09	2.61E-09	7.24E-09	2.09E-09	1.08E-09	3.16E-09
1357	569651.6	4214849	2.93E-08	1.66E-08	4.59E-08	4.48E-09	2.53E-09	7.00E-09	2.02E-09	1.04E-09	3.06E-09
1358	569650.5	4214840	2.84E-08	1.61E-08	4.45E-08	4.34E-09	2.45E-09	6.78E-09	1.96E-09	1.01E-09	2.96E-09
1359	569671.3	4215015	5.40E-08	3.06E-08	8.46E-08	8.25E-09	4.65E-09	1.29E-08	3.72E-09	1.92E-09	5.64E-09
1360	569676	4215024	5.61E-08	3.18E-08	8.79E-08	8.57E-09	4.84E-09	1.34E-08	3.87E-09	1.99E-09	5.86E-09
1361	569680.6	4215032	5.84E-08	3.31E-08	9.15E-08	8.92E-09	5.03E-09	1.40E-08	4.03E-09	2.07E-09	6.10E-09
1362	569685.3	4215041	6.08E-08	3.44E-08	9.52E-08	9.28E-09	5.24E-09	1.45E-08	4.19E-09	2.16E-09	6.35E-09
1363	569690	4215049	6.34E-08	3.59E-08	9.94E-08	9.69E-09	5.47E-09	1.52E-08	4.37E-09	2.25E-09	6.62E-09
1364	569694.7	4215058	6.65E-08	3.77E-08	1.04E-07	1.01E-08	5.73E-09	1.59E-08	4.58E-09	2.36E-09	6.94E-09
1365	569699.3	4215066	6.96E-08	3.94E-08	1.09E-07	1.06E-08	6.00E-09	1.66E-08	4.80E-09	2.47E-09	7.27E-09
1366	569704	4215075	7.29E-08	4.13E-08	1.14E-07	1.11E-08	6.28E-09	1.74E-08	5.02E-09	2.58E-09	7.60E-09
1367	569708.7	4215083	7.65E-08	4.33E-08	1.20E-07	1.17E-08	6.59E-09	1.83E-08	5.27E-09	2.71E-09	7.99E-09
1368	569713.4	4215092	8.04E-08	4.55E-08	1.26E-07	1.23E-08	6.93E-09	1.92E-08	5.54E-09	2.85E-09	8.39E-09
1369	569718	4215100	8.45E-08	4.79E-08	1.32E-07	1.29E-08	7.28E-09	2.02E-08	5.82E-09	3.00E-09	8.82E-09
1370	569722.7	4215109	8.89E-08	5.04E-08	1.39E-07	1.36E-08	7.66E-09	2.12E-08	6.13E-09	3.15E-09	9.28E-09
1371	569727.4	4215117	9.40E-08	5.32E-08	1.47E-07	1.43E-08	8.10E-09	2.24E-08	6.47E-09	3.33E-09	9.81E-09
1372	569764.8	4215185	1.58E-07	8.93E-08	2.47E-07	2.41E-08	1.36E-08	3.76E-08	1.09E-08	5.59E-09	1.64E-08
1373	569769.4	4215194	1.70E-07	9.66E-08	2.67E-07	2.60E-08	1.47E-08	4.07E-08	1.17E-08	6.05E-09	1.78E-08
1374	569774.1	4215202	1.78E-07	1.01E-07	2.78E-07	2.71E-08	1.53E-08	4.25E-08	1.22E-08	6.30E-09	1.86E-08
1375	569778.8	4215211	1.84E-07	1.04E-07	2.88E-07	2.81E-08	1.58E-08	4.39E-08	1.27E-08	6.52E-09	1.92E-08
1376	569783.5	4215219	1.91E-07	1.08E-07	2.99E-07	2.92E-08	1.65E-08	4.56E-08	1.32E-08	6.78E-09	1.99E-08
1377	569788.1	4215228	1.96E-07	1.11E-07	3.07E-07	2.99E-08	1.69E-08	4.67E-08	1.35E-08	6.94E-09	2.04E-08
1378	569792.8	4215236	1.89E-07	1.07E-07	2.96E-07	2.88E-08	1.63E-08	4.51E-08	1.30E-08	6.70E-09	1.97E-08
1379	569661.4	4215011	5.27E-08	2.99E-08	8.26E-08	8.05E-09	4.54E-09	1.26E-08	3.63E-09	1.87E-09	5.50E-09
1380	569660.2	4215001	5.13E-08	2.90E-08	8.03E-08	7.83E-09	4.42E-09	1.22E-08	3.53E-09	1.82E-09	5.35E-09
1381	569659.1	4214991	5.00E-08	2.83E-08	7.83E-08	7.63E-09	4.31E-09	1.19E-08	3.44E-09	1.77E-09	5.22E-09
1382	569658	4214982	4.86E-08	2.75E-08	7.61E-08	7.42E-09	4.19E-09	1.16E-08	3.35E-09	1.72E-09	5.07E-09
1383	569656.8	4214972	4.71E-08	2.67E-08	7.37E-08	7.19E-09	4.05E-09	1.12E-08	3.24E-09	1.67E-09	4.91E-09
1384	569655.7	4214963	4.56E-08	2.58E-08	7.14E-08	6.96E-09	3.93E-09	1.09E-08	3.14E-09	1.62E-09	4.76E-09
1385	569654.6	4214953	4.41E-08	2.50E-08	6.90E-08	6.73E-09	3.80E-09	1.05E-08	3.04E-09	1.56E-09	4.60E-09
1386	569653.4	4214943	4.24E-08	2.40E-08	6.65E-08	6.48E-09	3.66E-09	1.01E-08	2.92E-09	1.50E-09	4.43E-09
1387	569652.3	4214934	4.09E-08	2.32E-08	6.40E-08	6.24E-09	3.52E-09	9.77E-09	2.82E-09	1.45E-09	4.27E-09
1388	569651.2	4214924	3.94E-08	2.23E-08	6.17E-08	6.02E-09	3.40E-09	9.41E-09	2.72E-09	1.40E-09	4.11E-09
1389	569650	4214915	3.79E-08	2.15E-08	5.94E-08	5.79E-09	3.26E-09	9.05E-09	2.61E-09	1.34E-09	3.95E-09
1390	569648.9	4214905	3.65E-08	2.07E-08	5.71E-08	5.57E-09	3.14E-09	8.71E-09	2.51E-09	1.29E-09	3.81E-09
1391	569647.8	4214896	3.51E-08	1.99E-08	5.50E-08	5.36E-09	3.03E-09	8.39E-09	2.42E-09	1.25E-09	3.67E-09
1392	569646.6	4214886	3.38E-08	1.92E-08	5.30E-08	5.16E-09	2.91E-09	8.07E-09	2.33E-09	1.20E-09	3.53E-09
1393	569645.5	4214876	3.26E-08	1.85E-08	5.10E-08	4.97E-09	2.81E-09	7.78E-09	2.24E-09	1.16E-09	3.40E-09
1394	569644.4	4214867	3.14E-08	1.78E-08	4.92E-08	4.80E-09	2.71E-09	7.51E-09	2.17E-09	1.11E-09	3.28E-09
1395	569643.2	4214857	3.05E-08	1.73E-08	4.77E-08	4.65E-09	2.62E-09	7.27E-09	2.10E-09	1.08E-09	3.18E-09
1396	569662.5	4215020	5.45E-08	3.09E-08	8.55E-08	8.33E-09	4.70E-09	1.30E-08	3.76E-09	1.93E-09	5.69E-09
1397	569667.2	4215029	5.66E-08	3.21E-08	8.87E-08	8.65E-09	4.88E-09	1.35E-08	3.90E-09	2.01E-09	5.91E-09
1398	569671.9	4215037	5.88E-08	3.33E-08	9.22E-08	8.98E-09	5.07E-09	1.41E-08	4.05E-09	2.09E-09	6.14E-09
1399	569676.5	4215046	6.11E-08	3.46E-08	9.58E-08	9.34E-09	5.27E-09	1.46E-08	4.21E-09	2.17E-09	6.38E-09

1400	569681.2	4215054	6.39E-08	3.62E-08	1.00E-07	9.75E-09	5.50E-09	1.53E-08	4.40E-09	2.27E-09	6.67E-09
1401	569685.9	4215063	6.68E-08	3.78E-08	1.05E-07	1.02E-08	5.76E-09	1.60E-08	4.60E-09	2.37E-09	6.97E-09
1402	569690.6	4215071	6.99E-08	3.96E-08	1.09E-07	1.07E-08	6.02E-09	1.67E-08	4.81E-09	2.48E-09	7.29E-09
1403	569695.2	4215080	7.32E-08	4.15E-08	1.15E-07	1.12E-08	6.31E-09	1.75E-08	5.04E-09	2.60E-09	7.64E-09
1404	569699.9	4215088	7.69E-08	4.35E-08	1.20E-07	1.17E-08	6.62E-09	1.84E-08	5.30E-09	2.73E-09	8.02E-09
1405	569704.6	4215097	8.07E-08	4.57E-08	1.26E-07	1.23E-08	6.96E-09	1.93E-08	5.56E-09	2.86E-09	8.43E-09
1406	569709.3	4215105	8.48E-08	4.80E-08	1.33E-07	1.30E-08	7.31E-09	2.03E-08	5.84E-09	3.01E-09	8.85E-09
1407	569713.9	4215114	8.93E-08	5.06E-08	1.40E-07	1.36E-08	7.70E-09	2.13E-08	6.16E-09	3.17E-09	9.32E-09
1408	569718.6	4215122	9.46E-08	5.36E-08	1.48E-07	1.44E-08	8.15E-09	2.26E-08	6.52E-09	3.36E-09	9.88E-09
1409	569751.3	4215182	1.48E-07	8.36E-08	2.31E-07	2.25E-08	1.27E-08	3.52E-08	1.02E-08	5.23E-09	1.54E-08
1410	569756	4215190	1.59E-07	8.98E-08	2.48E-07	2.42E-08	1.37E-08	3.79E-08	1.09E-08	5.62E-09	1.65E-08
1411	569760.7	4215199	1.68E-07	9.52E-08	2.63E-07	2.57E-08	1.45E-08	4.01E-08	1.16E-08	5.96E-09	1.75E-08
1412	569765.4	4215207	1.72E-07	9.74E-08	2.69E-07	2.63E-08	1.48E-08	4.11E-08	1.18E-08	6.10E-09	1.79E-08
1413	569770	4215216	1.77E-07	1.00E-07	2.77E-07	2.70E-08	1.52E-08	4.22E-08	1.22E-08	6.27E-09	1.85E-08
1414	569774.7	4215224	1.83E-07	1.04E-07	2.86E-07	2.79E-08	1.58E-08	4.37E-08	1.26E-08	6.49E-09	1.91E-08
1415	569779.4	4215233	1.80E-07	1.02E-07	2.82E-07	2.75E-08	1.55E-08	4.30E-08	1.24E-08	6.38E-09	1.88E-08
1416	569784.1	4215241	1.73E-07	9.78E-08	2.71E-07	2.64E-08	1.49E-08	4.13E-08	1.19E-08	6.13E-09	1.80E-08
1417	569652.6	4215015	5.31E-08	3.01E-08	8.32E-08	8.11E-09	4.58E-09	1.27E-08	3.66E-09	1.88E-09	5.54E-09
1418	569651.5	4215006	5.16E-08	2.92E-08	8.08E-08	7.88E-09	4.45E-09	1.23E-08	3.56E-09	1.83E-09	5.39E-09
1419	569650.4	4214997	5.03E-08	2.85E-08	7.87E-08	7.67E-09	4.33E-09	1.20E-08	3.46E-09	1.78E-09	5.25E-09
1420	569649.3	4214987	4.90E-08	2.78E-08	7.68E-08	7.49E-09	4.22E-09	1.17E-08	3.38E-09	1.74E-09	5.12E-09
1421	569648.1	4214978	4.74E-08	2.69E-08	7.43E-08	7.24E-09	4.09E-09	1.13E-08	3.27E-09	1.68E-09	4.95E-09
1422	569647	4214968	4.58E-08	2.60E-08	7.18E-08	7.00E-09	3.95E-09	1.10E-08	3.16E-09	1.63E-09	4.79E-09
1423	569645.9	4214959	4.43E-08	2.51E-08	6.94E-08	6.76E-09	3.82E-09	1.06E-08	3.05E-09	1.57E-09	4.62E-09
1424	569644.8	4214949	4.27E-08	2.42E-08	6.69E-08	6.53E-09	3.68E-09	1.02E-08	2.95E-09	1.52E-09	4.46E-09
1425	569643.6	4214940	4.12E-08	2.34E-08	6.46E-08	6.30E-09	3.55E-09	9.85E-09	2.84E-09	1.46E-09	4.30E-09
1426	569642.5	4214930	3.98E-08	2.26E-08	6.24E-08	6.08E-09	3.43E-09	9.52E-09	2.75E-09	1.41E-09	4.16E-09
1427	569641.4	4214921	3.84E-08	2.18E-08	6.02E-08	5.87E-09	3.31E-09	9.18E-09	2.65E-09	1.36E-09	4.01E-09
1428	569640.3	4214911	3.70E-08	2.10E-08	5.80E-08	5.66E-09	3.19E-09	8.85E-09	2.55E-09	1.31E-09	3.87E-09
1429	569639.1	4214902	3.57E-08	2.02E-08	5.60E-08	5.46E-09	3.08E-09	8.54E-09	2.46E-09	1.27E-09	3.73E-09
1430	569638	4214892	3.45E-08	1.95E-08	5.40E-08	5.27E-09	2.97E-09	8.24E-09	2.38E-09	1.22E-09	3.60E-09
1431	569636.9	4214883	3.33E-08	1.89E-08	5.22E-08	5.09E-09	2.87E-09	7.96E-09	2.30E-09	1.18E-09	3.48E-09
1432	569635.8	4214873	3.23E-08	1.83E-08	5.05E-08	4.93E-09	2.78E-09	7.70E-09	2.22E-09	1.14E-09	3.37E-09
1433	569634.7	4214864	3.13E-08	1.77E-08	4.90E-08	4.78E-09	2.70E-09	7.47E-09	2.16E-09	1.11E-09	3.27E-09
1434	569653.8	4215025	5.50E-08	3.12E-08	8.62E-08	8.40E-09	4.74E-09	1.31E-08	3.79E-09	1.95E-09	5.74E-09
1435	569658.4	4215033	5.70E-08	3.23E-08	8.93E-08	8.71E-09	4.91E-09	1.36E-08	3.93E-09	2.02E-09	5.95E-09
1436	569663.1	4215042	5.92E-08	3.35E-08	9.27E-08	9.03E-09	5.10E-09	1.41E-08	4.08E-09	2.10E-09	6.18E-09
1437	569667.8	4215050	6.16E-08	3.49E-08	9.64E-08	9.40E-09	5.30E-09	1.47E-08	4.24E-09	2.18E-09	6.42E-09
1438	569672.5	4215059	6.42E-08	3.64E-08	1.01E-07	9.80E-09	5.53E-09	1.53E-08	4.42E-09	2.28E-09	6.70E-09
1439	569677.1	4215067	6.70E-08	3.79E-08	1.05E-07	1.02E-08	5.77E-09	1.60E-08	4.62E-09	2.38E-09	6.99E-09
1440	569681.8	4215076	6.99E-08	3.96E-08	1.09E-07	1.07E-08	6.02E-09	1.67E-08	4.82E-09	2.48E-09	7.30E-09
1441	569686.5	4215084	7.34E-08	4.16E-08	1.15E-07	1.12E-08	6.32E-09	1.75E-08	5.06E-09	2.60E-09	7.66E-09
1442	569691.2	4215093	7.72E-08	4.37E-08	1.21E-07	1.18E-08	6.65E-09	1.84E-08	5.32E-09	2.74E-09	8.05E-09
1443	569695.8	4215101	8.11E-08	4.60E-08	1.27E-07	1.24E-08	6.99E-09	1.94E-08	5.59E-09	2.88E-09	8.47E-09
1444	569700.5	4215110	8.52E-08	4.82E-08	1.33E-07	1.30E-08	7.34E-09	2.03E-08	5.87E-09	3.02E-09	8.89E-09
1445	569737.9	4215178	1.39E-07	7.86E-08	2.17E-07	2.12E-08	1.20E-08	3.31E-08	9.56E-09	4.92E-09	1.45E-08
1446	569742.6	4215187	1.48E-07	8.41E-08	2.33E-07	2.27E-08	1.28E-08	3.55E-08	1.02E-08	5.26E-09	1.55E-08
1447	569747.2	4215195	1.59E-07	9.02E-08	2.49E-07	2.43E-08	1.37E-08	3.80E-08	1.10E-08	5.65E-09	1.66E-08
1448	569751.9	4215204	1.63E-07	9.21E-08	2.55E-07	2.48E-08	1.40E-08	3.88E-08	1.12E-08	5.77E-09	1.70E-08
1449	569756.6	4215212	1.65E-07	9.36E-08	2.59E-07	2.52E-08	1.42E-08	3.95E-08	1.14E-08	5.86E-09	1.73E-08
1450	569761.3	4215221	1.69E-07	9.58E-08	2.65E-07	2.58E-08	1.46E-08	4.04E-08	1.17E-08	6.00E-09	1.77E-08
1451	569765.9	4215229	1.71E-07	9.66E-08	2.67E-07	2.60E-08	1.47E-08	4.07E-08	1.18E-08	6.05E-09	1.78E-08
1452	569770.6	4215238	1.65E-07	9.33E-08	2.58E-07	2.51E-08	1.42E-08	3.93E-08	1.13E-08	5.84E-09	1.72E-08
1453	569775.3	4215246	1.59E-07	8.98E-08	2.48E-07	2.42E-08	1.37E-08	3.79E-08	1.09E-08	5.63E-09	1.66E-08
1454	569643.9	4215020	5.35E-08	3.03E-08	8.38E-08	8.17E-09	4.61E-09	1.28E-08	3.69E-09	1.90E-09	5.59E-09
1455	569642.8	4215011	5.19E-08	2.94E-08	8.14E-08	7.93E-09	4.48E-09	1.24E-08	3.58E-09	1.84E-09	5.42E-09
1456	569641.7	4215002	5.06E-08	2.87E-08	7.92E-08	7.72E-09	4.36E-09	1.21E-08	3.49E-09	1.79E-09	5.28E-09
1457	569640.5	4214992	4.93E-08	2.79E-08	7.72E-08	7.53E-09	4.25E-09	1.18E-08	3.40E-09	1.75E-09	5.15E-09
1458	569639.4	4214983	4.79E-08	2.71E-08	7.51E-08	7.32E-09	4.13E-09	1.14E-08	3.30E-09	1.70E-09	5.00E-09
1459	569638.3	4214973	4.62E-08	2.62E-08	7.24E-08	7.06E-09	3.98E-09	1.10E-08	3.19E-09	1.64E-09	4.83E-09
1460	569637.2	4214964	4.46E-08	2.53E-08	6.98E-08	6.81E-09	3.84E-09	1.06E-08	3.07E-09	1.58E-09	4.65E-09

1461	569636.1	4214955	4.30E-08	2.43E-08	6.73E-08	6.56E-09	3.70E-09	1.03E-08	2.96E-09	1.52E-09	4.49E-09
1462	569635	4214945	4.15E-08	2.35E-08	6.51E-08	6.34E-09	3.58E-09	9.92E-09	2.86E-09	1.47E-09	4.34E-09
1463	569633.9	4214936	4.02E-08	2.28E-08	6.29E-08	6.13E-09	3.46E-09	9.60E-09	2.77E-09	1.42E-09	4.19E-09
1464	569632.7	4214926	3.89E-08	2.20E-08	6.09E-08	5.94E-09	3.35E-09	9.29E-09	2.68E-09	1.38E-09	4.06E-09
1465	569631.6	4214917	3.76E-08	2.13E-08	5.89E-08	5.74E-09	3.24E-09	8.98E-09	2.59E-09	1.33E-09	3.92E-09
1466	569630.5	4214908	3.63E-08	2.06E-08	5.69E-08	5.55E-09	3.13E-09	8.68E-09	2.50E-09	1.29E-09	3.79E-09
1467	569629.4	4214898	3.51E-08	1.99E-08	5.51E-08	5.37E-09	3.03E-09	8.39E-09	2.42E-09	1.25E-09	3.67E-09
1468	569628.3	4214889	3.41E-08	1.93E-08	5.34E-08	5.20E-09	2.93E-09	8.14E-09	2.35E-09	1.21E-09	3.56E-09
1469	569627.2	4214879	3.31E-08	1.87E-08	5.18E-08	5.05E-09	2.85E-09	7.90E-09	2.28E-09	1.17E-09	3.45E-09
1470	569626.1	4214870	3.21E-08	1.82E-08	5.03E-08	4.91E-09	2.77E-09	7.67E-09	2.21E-09	1.14E-09	3.35E-09
1471	569645	4215030	5.53E-08	3.14E-08	8.67E-08	8.45E-09	4.77E-09	1.32E-08	3.81E-09	1.96E-09	5.78E-09
1472	569649.7	4215038	5.73E-08	3.24E-08	8.97E-08	8.75E-09	4.94E-09	1.37E-08	3.95E-09	2.03E-09	5.98E-09
1473	569654.3	4215047	5.93E-08	3.36E-08	9.29E-08	9.06E-09	5.11E-09	1.42E-08	4.09E-09	2.10E-09	6.19E-09
1474	569659	4215055	6.18E-08	3.50E-08	9.68E-08	9.44E-09	5.33E-09	1.48E-08	4.26E-09	2.19E-09	6.45E-09
1475	569663.7	4215064	6.44E-08	3.65E-08	1.01E-07	9.83E-09	5.55E-09	1.54E-08	4.43E-09	2.28E-09	6.72E-09
1476	569668.4	4215072	6.70E-08	3.80E-08	1.05E-07	1.02E-08	5.77E-09	1.60E-08	4.62E-09	2.38E-09	6.99E-09
1477	569673	4215081	7.00E-08	3.97E-08	1.10E-07	1.07E-08	6.03E-09	1.67E-08	4.82E-09	2.48E-09	7.31E-09
1478	569677.7	4215089	7.34E-08	4.16E-08	1.15E-07	1.12E-08	6.33E-09	1.75E-08	5.06E-09	2.60E-09	7.66E-09
1479	569682.4	4215098	7.71E-08	4.37E-08	1.21E-07	1.18E-08	6.65E-09	1.84E-08	5.31E-09	2.74E-09	8.05E-09
1480	569687.1	4215106	8.12E-08	4.60E-08	1.27E-07	1.24E-08	6.99E-09	1.94E-08	5.59E-09	2.88E-09	8.47E-09
1481	569691.7	4215115	8.52E-08	4.83E-08	1.33E-07	1.30E-08	7.34E-09	2.04E-08	5.87E-09	3.02E-09	8.90E-09
1482	569724.5	4215174	1.31E-07	7.43E-08	2.05E-07	2.00E-08	1.13E-08	3.13E-08	9.04E-09	4.65E-09	1.37E-08
1483	569729.1	4215183	1.40E-07	7.91E-08	2.19E-07	2.13E-08	1.20E-08	3.34E-08	9.62E-09	4.95E-09	1.46E-08
1484	569733.8	4215191	1.49E-07	8.43E-08	2.33E-07	2.27E-08	1.28E-08	3.55E-08	1.03E-08	5.28E-09	1.55E-08
1485	569738.5	4215200	1.55E-07	8.80E-08	2.43E-07	2.37E-08	1.34E-08	3.71E-08	1.07E-08	5.51E-09	1.62E-08
1486	569743.2	4215208	1.57E-07	8.90E-08	2.46E-07	2.40E-08	1.35E-08	3.75E-08	1.08E-08	5.57E-09	1.64E-08
1487	569747.8	4215217	1.59E-07	9.00E-08	2.49E-07	2.43E-08	1.37E-08	3.80E-08	1.10E-08	5.64E-09	1.66E-08
1488	569752.5	4215225	1.61E-07	9.12E-08	2.52E-07	2.46E-08	1.39E-08	3.85E-08	1.11E-08	5.71E-09	1.68E-08
1489	569757.2	4215234	1.57E-07	8.87E-08	2.45E-07	2.39E-08	1.35E-08	3.74E-08	1.08E-08	5.55E-09	1.63E-08
1490	569761.9	4215242	1.52E-07	8.59E-08	2.37E-07	2.31E-08	1.31E-08	3.62E-08	1.04E-08	5.38E-09	1.58E-08
1491	569766.5	4215251	1.47E-07	8.30E-08	2.30E-07	2.24E-08	1.26E-08	3.50E-08	1.01E-08	5.20E-09	1.53E-08
1492	569635.1	4215025	5.39E-08	3.05E-08	8.44E-08	8.23E-09	4.64E-09	1.29E-08	3.71E-09	1.91E-09	5.62E-09
1493	569634	4215016	5.23E-08	2.96E-08	8.19E-08	7.98E-09	4.50E-09	1.25E-08	3.60E-09	1.85E-09	5.46E-09
1494	569632.9	4215007	5.09E-08	2.88E-08	7.97E-08	7.77E-09	4.38E-09	1.22E-08	3.51E-09	1.80E-09	5.31E-09
1495	569631.8	4214997	4.95E-08	2.81E-08	7.76E-08	7.56E-09	4.27E-09	1.18E-08	3.41E-09	1.76E-09	5.17E-09
1496	569630.7	4214988	4.82E-08	2.73E-08	7.56E-08	7.37E-09	4.16E-09	1.15E-08	3.32E-09	1.71E-09	5.03E-09
1497	569629.6	4214979	4.66E-08	2.64E-08	7.30E-08	7.12E-09	4.02E-09	1.11E-08	3.21E-09	1.65E-09	4.86E-09
1498	569628.5	4214969	4.49E-08	2.54E-08	7.04E-08	6.86E-09	3.87E-09	1.07E-08	3.10E-09	1.59E-09	4.69E-09
1499	569627.4	4214960	4.33E-08	2.45E-08	6.79E-08	6.62E-09	3.73E-09	1.03E-08	2.99E-09	1.54E-09	4.52E-09
1500	569626.3	4214951	4.19E-08	2.37E-08	6.56E-08	6.39E-09	3.61E-09	1.00E-08	2.89E-09	1.49E-09	4.37E-09
1501	569625.2	4214941	4.06E-08	2.30E-08	6.35E-08	6.19E-09	3.50E-09	9.69E-09	2.80E-09	1.44E-09	4.23E-09
1502	569624.1	4214932	3.93E-08	2.23E-08	6.16E-08	6.01E-09	3.39E-09	9.40E-09	2.71E-09	1.40E-09	4.11E-09
1503	569623	4214923	3.81E-08	2.16E-08	5.97E-08	5.82E-09	3.29E-09	9.11E-09	2.63E-09	1.35E-09	3.98E-09
1504	569621.9	4214913	3.69E-08	2.09E-08	5.78E-08	5.64E-09	3.18E-09	8.82E-09	2.54E-09	1.31E-09	3.85E-09
1505	569620.8	4214904	3.58E-08	2.03E-08	5.60E-08	5.46E-09	3.08E-09	8.54E-09	2.46E-09	1.27E-09	3.73E-09
1506	569619.7	4214895	3.47E-08	1.97E-08	5.44E-08	5.30E-09	2.99E-09	8.29E-09	2.39E-09	1.23E-09	3.62E-09
1507	569618.6	4214885	3.38E-08	1.91E-08	5.29E-08	5.16E-09	2.91E-09	8.07E-09	2.33E-09	1.20E-09	3.52E-09
1508	569636.2	4215035	5.56E-08	3.15E-08	8.71E-08	8.49E-09	4.79E-09	1.33E-08	3.83E-09	1.97E-09	5.80E-09
1509	569640.9	4215043	5.74E-08	3.25E-08	8.99E-08	8.76E-09	4.95E-09	1.37E-08	3.96E-09	2.04E-09	5.99E-09
1510	569645.6	4215052	5.96E-08	3.37E-08	9.33E-08	9.10E-09	5.13E-09	1.42E-08	4.10E-09	2.11E-09	6.22E-09
1511	569650.3	4215060	6.19E-08	3.51E-08	9.70E-08	9.46E-09	5.34E-09	1.48E-08	4.27E-09	2.20E-09	6.47E-09
1512	569654.9	4215069	6.44E-08	3.65E-08	1.01E-07	9.83E-09	5.55E-09	1.54E-08	4.44E-09	2.28E-09	6.72E-09
1513	569659.6	4215077	6.69E-08	3.79E-08	1.05E-07	1.02E-08	5.77E-09	1.60E-08	4.61E-09	2.37E-09	6.99E-09
1514	569664.3	4215086	7.00E-08	3.97E-08	1.10E-07	1.07E-08	6.04E-09	1.67E-08	4.83E-09	2.48E-09	7.31E-09
1515	569669	4215094	7.34E-08	4.16E-08	1.15E-07	1.12E-08	6.32E-09	1.75E-08	5.06E-09	2.60E-09	7.66E-09
1516	569673.6	4215103	7.70E-08	4.36E-08	1.21E-07	1.18E-08	6.64E-09	1.84E-08	5.31E-09	2.73E-09	8.04E-09
1517	569678.3	4215111	8.08E-08	4.57E-08	1.27E-07	1.23E-08	6.96E-09	1.93E-08	5.56E-09	2.86E-09	8.43E-09
1518	569683	4215120	8.47E-08	4.80E-08	1.33E-07	1.29E-08	7.30E-09	2.02E-08	5.83E-09	3.00E-09	8.84E-09
1519	569711	4215171	1.19E-07	6.73E-08	1.86E-07	1.81E-08	1.02E-08	2.84E-08	8.19E-09	4.21E-09	1.24E-08
1520	569715.7	4215179	1.28E-07	7.28E-08	2.01E-07	1.96E-08	1.11E-08	3.07E-08	8.85E-09	4.56E-09	1.34E-08
1521	569720.4	4215188	1.39E-07	7.86E-08	2.17E-07	2.12E-08	1.19E-08	3.31E-08	9.56E-09	4.92E-09	1.45E-08

1522	569725	4215196	1.49E-07	8.43E-08	2.33E-07	2.27E-08	1.28E-08	3.56E-08	1.03E-08	5.28E-09	1.55E-08
1523	569729.7	4215205	1.50E-07	8.50E-08	2.35E-07	2.29E-08	1.29E-08	3.58E-08	1.03E-08	5.32E-09	1.57E-08
1524	569734.4	4215213	1.51E-07	8.58E-08	2.37E-07	2.31E-08	1.30E-08	3.62E-08	1.04E-08	5.37E-09	1.58E-08
1525	569739.1	4215222	1.53E-07	8.66E-08	2.40E-07	2.33E-08	1.32E-08	3.65E-08	1.05E-08	5.42E-09	1.60E-08
1526	569743.7	4215230	1.51E-07	8.54E-08	2.36E-07	2.30E-08	1.30E-08	3.60E-08	1.04E-08	5.35E-09	1.57E-08
1527	569748.4	4215239	1.45E-07	8.23E-08	2.28E-07	2.22E-08	1.25E-08	3.47E-08	1.00E-08	5.15E-09	1.52E-08
1528	569753.1	4215247	1.40E-07	7.95E-08	2.20E-07	2.14E-08	1.21E-08	3.35E-08	9.67E-09	4.98E-09	1.47E-08
1529	569757.8	4215256	1.36E-07	7.72E-08	2.13E-07	2.08E-08	1.17E-08	3.25E-08	9.39E-09	4.83E-09	1.42E-08
1530	569626.3	4215030	5.39E-08	3.05E-08	8.44E-08	8.23E-09	4.64E-09	1.29E-08	3.71E-09	1.91E-09	5.63E-09
1531	569625.2	4215020	5.23E-08	2.96E-08	8.19E-08	7.98E-09	4.50E-09	1.25E-08	3.60E-09	1.85E-09	5.45E-09
1532	569624	4215011	5.07E-08	2.87E-08	7.94E-08	7.74E-09	4.37E-09	1.21E-08	3.49E-09	1.80E-09	5.29E-09
1533	569622.9	4215001	4.93E-08	2.79E-08	7.72E-08	7.52E-09	4.25E-09	1.18E-08	3.40E-09	1.75E-09	5.14E-09
1534	569621.8	4214991	4.79E-08	2.71E-08	7.50E-08	7.31E-09	4.13E-09	1.14E-08	3.30E-09	1.70E-09	5.00E-09
1535	569620.6	4214982	4.64E-08	2.63E-08	7.26E-08	7.08E-09	4.00E-09	1.11E-08	3.20E-09	1.64E-09	4.84E-09
1536	569619.5	4214972	4.47E-08	2.53E-08	7.01E-08	6.83E-09	3.85E-09	1.07E-08	3.08E-09	1.59E-09	4.67E-09
1537	569618.3	4214962	4.31E-08	2.44E-08	6.76E-08	6.59E-09	3.72E-09	1.03E-08	2.97E-09	1.53E-09	4.50E-09
1538	569617.2	4214953	4.17E-08	2.36E-08	6.53E-08	6.36E-09	3.59E-09	9.96E-09	2.87E-09	1.48E-09	4.35E-09
1539	569616.1	4214943	4.04E-08	2.29E-08	6.33E-08	6.17E-09	3.48E-09	9.65E-09	2.78E-09	1.43E-09	4.22E-09
1540	569614.9	4214933	3.92E-08	2.22E-08	6.14E-08	5.98E-09	3.38E-09	9.36E-09	2.70E-09	1.39E-09	4.09E-09
1541	569613.8	4214924	3.80E-08	2.15E-08	5.96E-08	5.81E-09	3.28E-09	9.08E-09	2.62E-09	1.35E-09	3.97E-09
1542	569612.6	4214914	3.68E-08	2.09E-08	5.77E-08	5.62E-09	3.17E-09	8.80E-09	2.54E-09	1.31E-09	3.84E-09
1543	569611.5	4214905	3.57E-08	2.02E-08	5.59E-08	5.45E-09	3.08E-09	8.53E-09	2.46E-09	1.27E-09	3.73E-09
1544	569610.4	4214895	3.47E-08	1.96E-08	5.43E-08	5.29E-09	2.99E-09	8.28E-09	2.39E-09	1.23E-09	3.62E-09
1545	569627.5	4215039	5.56E-08	3.15E-08	8.70E-08	8.48E-09	4.79E-09	1.33E-08	3.83E-09	1.97E-09	5.80E-09
1546	569632.1	4215048	5.75E-08	3.26E-08	9.00E-08	8.78E-09	4.95E-09	1.37E-08	3.96E-09	2.04E-09	6.00E-09
1547	569636.8	4215056	5.97E-08	3.38E-08	9.35E-08	9.11E-09	5.14E-09	1.43E-08	4.11E-09	2.12E-09	6.23E-09
1548	569641.5	4215065	6.20E-08	3.51E-08	9.71E-08	9.46E-09	5.34E-09	1.48E-08	4.27E-09	2.20E-09	6.47E-09
1549	569646.2	4215073	6.43E-08	3.64E-08	1.01E-07	9.82E-09	5.54E-09	1.54E-08	4.43E-09	2.28E-09	6.71E-09
1550	569650.8	4215082	6.70E-08	3.79E-08	1.05E-07	1.02E-08	5.77E-09	1.60E-08	4.61E-09	2.37E-09	6.99E-09
1551	569655.5	4215090	7.00E-08	3.96E-08	1.10E-07	1.07E-08	6.03E-09	1.67E-08	4.82E-09	2.48E-09	7.31E-09
1552	569660.2	4215099	7.32E-08	4.15E-08	1.15E-07	1.12E-08	6.31E-09	1.75E-08	5.05E-09	2.60E-09	7.65E-09
1553	569664.9	4215107	7.67E-08	4.35E-08	1.20E-07	1.17E-08	6.61E-09	1.83E-08	5.29E-09	2.72E-09	8.01E-09
1554	569669.5	4215116	8.02E-08	4.54E-08	1.26E-07	1.22E-08	6.91E-09	1.92E-08	5.53E-09	2.85E-09	8.37E-09
1555	569674.2	4215124	8.40E-08	4.76E-08	1.32E-07	1.28E-08	7.24E-09	2.01E-08	5.79E-09	2.98E-09	8.77E-09
1556	569688.2	4215150	9.70E-08	5.50E-08	1.52E-07	1.48E-08	8.36E-09	2.32E-08	6.68E-09	3.44E-09	1.01E-08
1557	569692.9	4215158	1.02E-07	5.77E-08	1.60E-07	1.56E-08	8.78E-09	2.43E-08	7.02E-09	3.61E-09	1.06E-08
1558	569697.6	4215167	1.08E-07	6.11E-08	1.69E-07	1.65E-08	9.29E-09	2.58E-08	7.43E-09	3.82E-09	1.13E-08
1559	569702.3	4215175	1.16E-07	6.59E-08	1.82E-07	1.78E-08	1.00E-08	2.78E-08	8.01E-09	4.13E-09	1.21E-08
1560	569706.9	4215184	1.26E-07	7.12E-08	1.97E-07	1.92E-08	1.08E-08	3.00E-08	8.66E-09	4.46E-09	1.31E-08
1561	569711.6	4215192	1.36E-07	7.68E-08	2.12E-07	2.07E-08	1.17E-08	3.24E-08	9.35E-09	4.81E-09	1.42E-08
1562	569716.3	4215201	1.42E-07	8.05E-08	2.23E-07	2.17E-08	1.22E-08	3.39E-08	9.79E-09	5.04E-09	1.48E-08
1563	569721	4215209	1.44E-07	8.18E-08	2.26E-07	2.20E-08	1.24E-08	3.45E-08	9.95E-09	5.12E-09	1.51E-08
1564	569725.6	4215218	1.46E-07	8.25E-08	2.28E-07	2.22E-08	1.26E-08	3.48E-08	1.00E-08	5.17E-09	1.52E-08
1565	569730.3	4215226	1.47E-07	8.30E-08	2.30E-07	2.24E-08	1.26E-08	3.50E-08	1.01E-08	5.20E-09	1.53E-08
1566	569735	4215235	1.41E-07	7.97E-08	2.20E-07	2.15E-08	1.21E-08	3.36E-08	9.69E-09	4.99E-09	1.47E-08
1567	569739.7	4215243	1.35E-07	7.67E-08	2.12E-07	2.07E-08	1.17E-08	3.24E-08	9.33E-09	4.80E-09	1.41E-08
1568	569744.3	4215252	1.31E-07	7.42E-08	2.05E-07	2.00E-08	1.13E-08	3.13E-08	9.03E-09	4.65E-09	1.37E-08
1569	569749	4215260	1.27E-07	7.21E-08	1.99E-07	1.94E-08	1.10E-08	3.04E-08	8.78E-09	4.52E-09	1.33E-08
1570	569984.8	4215238	7.00E-07	3.96E-07	1.10E-06	1.07E-07	6.03E-08	1.67E-07	4.82E-08	2.48E-08	7.30E-08
1571	569985.1	4215248	6.43E-07	3.64E-07	1.01E-06	9.82E-08	5.54E-08	1.54E-07	4.43E-08	2.28E-08	6.71E-08
1572	569985.4	4215257	5.86E-07	3.32E-07	9.17E-07	8.94E-08	5.05E-08	1.40E-07	4.04E-08	2.08E-08	6.11E-08
1573	569985.7	4215267	5.26E-07	2.98E-07	8.24E-07	8.04E-08	4.54E-08	1.26E-07	3.63E-08	1.87E-08	5.49E-08
1574	569986	4215277	4.73E-07	2.68E-07	7.42E-07	7.23E-08	4.08E-08	1.13E-07	3.26E-08	1.68E-08	4.94E-08
1575	569986.3	4215287	4.30E-07	2.44E-07	6.74E-07	6.57E-08	3.71E-08	1.03E-07	2.97E-08	1.53E-08	4.49E-08
1576	569986.7	4215296	4.20E-07	2.38E-07	6.58E-07	6.42E-08	3.62E-08	1.00E-07	2.90E-08	1.49E-08	4.39E-08
1577	569987	4215306	4.15E-07	2.35E-07	6.50E-07	6.33E-08	3.57E-08	9.91E-08	2.86E-08	1.47E-08	4.33E-08
1578	569987.3	4215316	4.14E-07	2.35E-07	6.49E-07	6.33E-08	3.57E-08	9.90E-08	2.86E-08	1.47E-08	4.33E-08
1579	569987.6	4215325	4.28E-07	2.42E-07	6.71E-07	6.54E-08	3.69E-08	1.02E-07	2.95E-08	1.52E-08	4.47E-08
1580	569987.9	4215335	4.46E-07	2.53E-07	6.99E-07	6.81E-08	3.84E-08	1.07E-07	3.07E-08	1.58E-08	4.66E-08
1581	569988.2	4215345	4.75E-07	2.69E-07	7.45E-07	7.26E-08	4.10E-08	1.14E-07	3.28E-08	1.69E-08	4.96E-08
1582	569988.6	4215354	4.72E-07	2.68E-07	7.40E-07	7.21E-08	4.07E-08	1.13E-07	3.25E-08	1.67E-08	4.93E-08

1583	569988.9	4215364	4.60E-07	2.60E-07	7.20E-07	7.02E-08	3.96E-08	1.10E-07	3.17E-08	1.63E-08	4.80E-08
1584	569989.2	4215374	4.60E-07	2.61E-07	7.21E-07	7.03E-08	3.97E-08	1.10E-07	3.17E-08	1.63E-08	4.81E-08
1585	569973.5	4215200	7.59E-07	4.30E-07	1.19E-06	1.16E-07	6.54E-08	1.81E-07	5.23E-08	2.69E-08	7.92E-08
1586	569973.8	4215209	7.32E-07	4.15E-07	1.15E-06	1.12E-07	6.31E-08	1.75E-07	5.04E-08	2.60E-08	7.64E-08
1587	569974.1	4215219	6.90E-07	3.91E-07	1.08E-06	1.05E-07	5.95E-08	1.65E-07	4.76E-08	2.45E-08	7.21E-08
1588	569974.5	4215229	6.45E-07	3.65E-07	1.01E-06	9.85E-08	5.56E-08	1.54E-07	4.44E-08	2.29E-08	6.73E-08
1589	569974.8	4215238	6.03E-07	3.42E-07	9.45E-07	9.21E-08	5.20E-08	1.44E-07	4.16E-08	2.14E-08	6.30E-08
1590	569975.1	4215248	5.60E-07	3.17E-07	8.77E-07	8.55E-08	4.82E-08	1.34E-07	3.86E-08	1.99E-08	5.84E-08
1591	569975.4	4215258	5.15E-07	2.92E-07	8.07E-07	7.87E-08	4.44E-08	1.23E-07	3.55E-08	1.83E-08	5.38E-08
1592	569975.7	4215267	4.67E-07	2.65E-07	7.32E-07	7.13E-08	4.02E-08	1.12E-07	3.22E-08	1.66E-08	4.87E-08
1593	569976	4215277	4.25E-07	2.41E-07	6.65E-07	6.48E-08	3.66E-08	1.01E-07	2.93E-08	1.51E-08	4.43E-08
1594	569976.4	4215287	3.91E-07	2.22E-07	6.13E-07	5.98E-08	3.37E-08	9.35E-08	2.70E-08	1.39E-08	4.09E-08
1595	569976.7	4215297	3.85E-07	2.18E-07	6.03E-07	5.88E-08	3.32E-08	9.20E-08	2.65E-08	1.37E-08	4.02E-08
1596	569977	4215306	3.82E-07	2.16E-07	5.98E-07	5.83E-08	3.29E-08	9.12E-08	2.63E-08	1.35E-08	3.99E-08
1597	569977.3	4215316	3.82E-07	2.17E-07	5.99E-07	5.84E-08	3.29E-08	9.13E-08	2.63E-08	1.36E-08	3.99E-08
1598	569977.6	4215326	3.97E-07	2.25E-07	6.21E-07	6.06E-08	3.42E-08	9.47E-08	2.73E-08	1.41E-08	4.14E-08
1599	569977.9	4215335	4.14E-07	2.35E-07	6.49E-07	6.32E-08	3.57E-08	9.89E-08	2.85E-08	1.47E-08	4.32E-08
1600	569978.2	4215345	4.43E-07	2.51E-07	6.95E-07	6.77E-08	3.82E-08	1.06E-07	3.06E-08	1.57E-08	4.63E-08
1601	569978.6	4215355	4.42E-07	2.51E-07	6.93E-07	6.75E-08	3.81E-08	1.06E-07	3.05E-08	1.57E-08	4.62E-08
1602	569978.9	4215364	4.36E-07	2.47E-07	6.83E-07	6.66E-08	3.76E-08	1.04E-07	3.01E-08	1.55E-08	4.55E-08
1603	569979.2	4215374	4.53E-07	2.56E-07	7.09E-07	6.91E-08	3.90E-08	1.08E-07	3.12E-08	1.61E-08	4.72E-08
1604	569962.6	4215171	6.92E-07	3.92E-07	1.08E-06	1.06E-07	5.96E-08	1.65E-07	4.77E-08	2.46E-08	7.23E-08
1605	569962.9	4215181	6.99E-07	3.96E-07	1.10E-06	1.07E-07	6.03E-08	1.67E-07	4.82E-08	2.48E-08	7.30E-08
1606	569963.2	4215190	6.89E-07	3.91E-07	1.08E-06	1.05E-07	5.94E-08	1.65E-07	4.75E-08	2.45E-08	7.20E-08
1607	569963.5	4215200	6.71E-07	3.80E-07	1.05E-06	1.03E-07	5.79E-08	1.60E-07	4.63E-08	2.38E-08	7.01E-08
1608	569963.8	4215210	6.38E-07	3.61E-07	9.99E-07	9.74E-08	5.49E-08	1.52E-07	4.39E-08	2.26E-08	6.66E-08
1609	569964.2	4215219	5.95E-07	3.37E-07	9.32E-07	9.09E-08	5.13E-08	1.42E-07	4.10E-08	2.11E-08	6.21E-08
1610	569964.5	4215229	5.54E-07	3.14E-07	8.67E-07	8.45E-08	4.77E-08	1.32E-07	3.81E-08	1.96E-08	5.78E-08
1611	569964.8	4215239	5.23E-07	2.96E-07	8.19E-07	7.98E-08	4.50E-08	1.25E-07	3.60E-08	1.85E-08	5.46E-08
1612	569965.1	4215248	4.91E-07	2.78E-07	7.69E-07	7.50E-08	4.23E-08	1.17E-07	3.38E-08	1.74E-08	5.12E-08
1613	569965.4	4215258	4.57E-07	2.59E-07	7.16E-07	6.98E-08	3.94E-08	1.09E-07	3.15E-08	1.62E-08	4.77E-08
1614	569965.7	4215268	4.18E-07	2.37E-07	6.54E-07	6.38E-08	3.60E-08	9.98E-08	2.88E-08	1.48E-08	4.36E-08
1615	569966	4215277	3.84E-07	2.17E-07	6.01E-07	5.86E-08	3.30E-08	9.16E-08	2.64E-08	1.36E-08	4.00E-08
1616	569966.4	4215287	3.58E-07	2.03E-07	5.60E-07	5.46E-08	3.08E-08	8.54E-08	2.47E-08	1.27E-08	3.73E-08
1617	569966.7	4215297	3.54E-07	2.00E-07	5.54E-07	5.40E-08	3.05E-08	8.45E-08	2.44E-08	1.26E-08	3.69E-08
1618	569967	4215307	3.52E-07	2.00E-07	5.52E-07	5.38E-08	3.04E-08	8.42E-08	2.43E-08	1.25E-08	3.68E-08
1619	569967.3	4215316	3.53E-07	2.00E-07	5.53E-07	5.40E-08	3.04E-08	8.44E-08	2.43E-08	1.25E-08	3.69E-08
1620	569967.6	4215326	3.68E-07	2.09E-07	5.77E-07	5.62E-08	3.17E-08	8.80E-08	2.54E-08	1.31E-08	3.84E-08
1621	569967.9	4215336	3.85E-07	2.18E-07	6.04E-07	5.88E-08	3.32E-08	9.21E-08	2.66E-08	1.37E-08	4.02E-08
1622	569968.2	4215345	4.06E-07	2.30E-07	6.35E-07	6.19E-08	3.49E-08	9.69E-08	2.79E-08	1.44E-08	4.23E-08
1623	569968.6	4215355	4.06E-07	2.30E-07	6.36E-07	6.20E-08	3.50E-08	9.70E-08	2.80E-08	1.44E-08	4.24E-08
1624	569968.9	4215365	4.16E-07	2.36E-07	6.52E-07	6.36E-08	3.59E-08	9.94E-08	2.87E-08	1.48E-08	4.35E-08
1625	569969.2	4215374	4.50E-07	2.55E-07	7.05E-07	6.87E-08	3.88E-08	1.07E-07	3.10E-08	1.60E-08	4.69E-08
1626	569952.3	4215162	6.04E-07	3.42E-07	9.46E-07	9.22E-08	5.20E-08	1.44E-07	4.16E-08	2.14E-08	6.30E-08
1627	569952.6	4215171	6.23E-07	3.53E-07	9.76E-07	9.51E-08	5.37E-08	1.49E-07	4.29E-08	2.21E-08	6.50E-08
1628	569952.9	4215181	6.28E-07	3.56E-07	9.83E-07	9.58E-08	5.41E-08	1.50E-07	4.32E-08	2.23E-08	6.55E-08
1629	569953.2	4215191	6.18E-07	3.50E-07	9.68E-07	9.44E-08	5.33E-08	1.48E-07	4.26E-08	2.19E-08	6.45E-08
1630	569953.5	4215200	6.01E-07	3.40E-07	9.42E-07	9.18E-08	5.18E-08	1.44E-07	4.14E-08	2.13E-08	6.27E-08
1631	569953.8	4215210	5.67E-07	3.21E-07	8.89E-07	8.66E-08	4.89E-08	1.35E-07	3.91E-08	2.01E-08	5.92E-08
1632	569954.2	4215220	5.25E-07	2.98E-07	8.23E-07	8.02E-08	4.53E-08	1.26E-07	3.62E-08	1.86E-08	5.49E-08
1633	569954.5	4215229	4.87E-07	2.76E-07	7.62E-07	7.43E-08	4.19E-08	1.16E-07	3.35E-08	1.73E-08	5.08E-08
1634	569954.8	4215239	4.60E-07	2.61E-07	7.20E-07	7.02E-08	3.96E-08	1.10E-07	3.17E-08	1.63E-08	4.80E-08
1635	569955.1	4215249	4.33E-07	2.45E-07	6.78E-07	6.61E-08	3.73E-08	1.03E-07	2.98E-08	1.54E-08	4.52E-08
1636	569955.4	4215258	4.06E-07	2.30E-07	6.35E-07	6.19E-08	3.49E-08	9.69E-08	2.79E-08	1.44E-08	4.23E-08
1637	569955.7	4215268	3.77E-07	2.14E-07	5.91E-07	5.76E-08	3.25E-08	9.01E-08	2.60E-08	1.34E-08	3.94E-08
1638	569956	4215278	3.52E-07	2.00E-07	5.52E-07	5.38E-08	3.04E-08	8.42E-08	2.43E-08	1.25E-08	3.68E-08
1639	569956.4	4215287	3.34E-07	1.89E-07	5.23E-07	5.10E-08	2.88E-08	7.97E-08	2.30E-08	1.18E-08	3.48E-08
1640	569956.7	4215297	3.30E-07	1.87E-07	5.17E-07	5.04E-08	2.84E-08	7.88E-08	2.27E-08	1.17E-08	3.45E-08
1641	569957	4215307	3.29E-07	1.86E-07	5.15E-07	5.02E-08	2.83E-08	7.85E-08	2.26E-08	1.17E-08	3.43E-08
1642	569957.3	4215317	3.29E-07	1.87E-07	5.16E-07	5.03E-08	2.84E-08	7.87E-08	2.27E-08	1.17E-08	3.44E-08
1643	569957.6	4215326	3.42E-07	1.94E-07	5.35E-07	5.22E-08	2.94E-08	8.16E-08	2.36E-08	1.21E-08	3.57E-08

1644	569957.9	4215336	3.56E-07	2.01E-07	5.57E-07	5.43E-08	3.06E-08	8.49E-08	2.45E-08	1.26E-08	3.71E-08
1645	569958.3	4215346	3.72E-07	2.11E-07	5.84E-07	5.69E-08	3.21E-08	8.90E-08	2.57E-08	1.32E-08	3.89E-08
1646	569958.6	4215355	3.77E-07	2.13E-07	5.90E-07	5.75E-08	3.24E-08	8.99E-08	2.59E-08	1.34E-08	3.93E-08
1647	569958.9	4215365	3.95E-07	2.24E-07	6.18E-07	6.02E-08	3.40E-08	9.42E-08	2.72E-08	1.40E-08	4.12E-08
1648	569959.2	4215375	4.46E-07	2.52E-07	6.98E-07	6.80E-08	3.84E-08	1.06E-07	3.07E-08	1.58E-08	4.65E-08
1649	569942.6	4215172	5.66E-07	3.20E-07	8.86E-07	8.64E-08	4.87E-08	1.35E-07	3.90E-08	2.01E-08	5.90E-08
1650	569942.9	4215181	5.68E-07	3.22E-07	8.90E-07	8.67E-08	4.89E-08	1.36E-07	3.91E-08	2.01E-08	5.93E-08
1651	569943.2	4215191	5.67E-07	3.21E-07	8.88E-07	8.66E-08	4.88E-08	1.35E-07	3.91E-08	2.01E-08	5.92E-08
1652	569943.5	4215201	5.41E-07	3.07E-07	8.48E-07	8.26E-08	4.66E-08	1.29E-07	3.73E-08	1.92E-08	5.65E-08
1653	569943.8	4215210	5.07E-07	2.87E-07	7.95E-07	7.75E-08	4.37E-08	1.21E-07	3.50E-08	1.80E-08	5.30E-08
1654	569944.2	4215220	4.67E-07	2.65E-07	7.32E-07	7.13E-08	4.02E-08	1.12E-07	3.22E-08	1.66E-08	4.87E-08
1655	569944.5	4215230	4.31E-07	2.44E-07	6.76E-07	6.59E-08	3.72E-08	1.03E-07	2.97E-08	1.53E-08	4.50E-08
1656	569944.8	4215239	4.08E-07	2.31E-07	6.38E-07	6.22E-08	3.51E-08	9.73E-08	2.81E-08	1.45E-08	4.25E-08
1657	569945.1	4215249	3.84E-07	2.18E-07	6.01E-07	5.86E-08	3.31E-08	9.17E-08	2.65E-08	1.36E-08	4.01E-08
1658	569945.4	4215259	3.62E-07	2.05E-07	5.67E-07	5.53E-08	3.12E-08	8.65E-08	2.49E-08	1.28E-08	3.78E-08
1659	569945.7	4215268	3.43E-07	1.94E-07	5.38E-07	5.24E-08	2.96E-08	8.20E-08	2.36E-08	1.22E-08	3.58E-08
1660	569946.1	4215278	3.26E-07	1.85E-07	5.11E-07	4.98E-08	2.81E-08	7.80E-08	2.25E-08	1.16E-08	3.41E-08
1661	569946.4	4215288	3.14E-07	1.78E-07	4.91E-07	4.79E-08	2.70E-08	7.49E-08	2.16E-08	1.11E-08	3.27E-08
1662	569946.7	4215297	3.10E-07	1.76E-07	4.86E-07	4.73E-08	2.67E-08	7.40E-08	2.14E-08	1.10E-08	3.24E-08
1663	569947	4215307	3.08E-07	1.74E-07	4.83E-07	4.70E-08	2.65E-08	7.36E-08	2.12E-08	1.09E-08	3.22E-08
1664	569947.3	4215317	3.08E-07	1.75E-07	4.83E-07	4.71E-08	2.66E-08	7.36E-08	2.12E-08	1.09E-08	3.22E-08
1665	569947.6	4215327	3.17E-07	1.80E-07	4.97E-07	4.84E-08	2.73E-08	7.58E-08	2.19E-08	1.13E-08	3.31E-08
1666	569947.9	4215336	3.28E-07	1.86E-07	5.13E-07	5.00E-08	2.82E-08	7.82E-08	2.26E-08	1.16E-08	3.42E-08
1667	569948.3	4215346	3.40E-07	1.93E-07	5.33E-07	5.20E-08	2.93E-08	8.13E-08	2.35E-08	1.21E-08	3.55E-08
1668	569948.6	4215356	3.49E-07	1.98E-07	5.46E-07	5.32E-08	3.00E-08	8.33E-08	2.40E-08	1.24E-08	3.64E-08
1669	569948.9	4215365	3.75E-07	2.12E-07	5.87E-07	5.72E-08	3.23E-08	8.95E-08	2.58E-08	1.33E-08	3.91E-08
1670	569949.2	4215375	4.43E-07	2.51E-07	6.94E-07	6.77E-08	3.82E-08	1.06E-07	3.05E-08	1.57E-08	4.63E-08
1671	569932.6	4215172	5.17E-07	2.93E-07	8.11E-07	7.90E-08	4.46E-08	1.24E-07	3.57E-08	1.84E-08	5.40E-08
1672	569932.9	4215182	5.18E-07	2.93E-07	8.11E-07	7.91E-08	4.46E-08	1.24E-07	3.57E-08	1.84E-08	5.41E-08
1673	569933.2	4215191	5.17E-07	2.93E-07	8.09E-07	7.89E-08	4.45E-08	1.23E-07	3.56E-08	1.83E-08	5.39E-08
1674	569933.5	4215201	4.90E-07	2.78E-07	7.67E-07	7.48E-08	4.22E-08	1.17E-07	3.38E-08	1.74E-08	5.11E-08
1675	569933.9	4215211	4.56E-07	2.58E-07	7.14E-07	6.96E-08	3.93E-08	1.09E-07	3.14E-08	1.62E-08	4.76E-08
1676	569934.2	4215220	4.17E-07	2.36E-07	6.53E-07	6.37E-08	3.59E-08	9.96E-08	2.87E-08	1.48E-08	4.35E-08
1677	569934.5	4215230	3.85E-07	2.18E-07	6.02E-07	5.87E-08	3.31E-08	9.19E-08	2.65E-08	1.36E-08	4.01E-08
1678	569934.8	4215240	3.63E-07	2.06E-07	5.69E-07	5.55E-08	3.13E-08	8.68E-08	2.50E-08	1.29E-08	3.79E-08
1679	569935.1	4215249	3.43E-07	1.94E-07	5.37E-07	5.24E-08	2.95E-08	8.19E-08	2.36E-08	1.22E-08	3.58E-08
1680	569935.4	4215259	3.26E-07	1.85E-07	5.10E-07	4.97E-08	2.81E-08	7.78E-08	2.24E-08	1.16E-08	3.40E-08
1681	569935.7	4215269	3.14E-07	1.78E-07	4.92E-07	4.80E-08	2.71E-08	7.50E-08	2.16E-08	1.11E-08	3.28E-08
1682	569936.1	4215278	3.04E-07	1.72E-07	4.76E-07	4.64E-08	2.62E-08	7.25E-08	2.09E-08	1.08E-08	3.17E-08
1683	569936.4	4215288	2.95E-07	1.67E-07	4.63E-07	4.51E-08	2.54E-08	7.05E-08	2.03E-08	1.05E-08	3.08E-08
1684	569936.7	4215298	2.92E-07	1.65E-07	4.57E-07	4.45E-08	2.51E-08	6.96E-08	2.01E-08	1.03E-08	3.04E-08
1685	569937	4215307	2.89E-07	1.64E-07	4.53E-07	4.41E-08	2.49E-08	6.91E-08	1.99E-08	1.03E-08	3.02E-08
1686	569937.3	4215317	2.89E-07	1.64E-07	4.52E-07	4.41E-08	2.49E-08	6.90E-08	1.99E-08	1.02E-08	3.01E-08
1687	569937.6	4215327	2.95E-07	1.67E-07	4.62E-07	4.50E-08	2.54E-08	7.05E-08	2.03E-08	1.05E-08	3.08E-08
1688	569937.9	4215336	3.03E-07	1.72E-07	4.75E-07	4.63E-08	2.61E-08	7.24E-08	2.09E-08	1.08E-08	3.16E-08
1689	569938.3	4215346	3.15E-07	1.78E-07	4.93E-07	4.81E-08	2.71E-08	7.52E-08	2.17E-08	1.12E-08	3.28E-08
1690	569938.6	4215356	3.28E-07	1.86E-07	5.14E-07	5.01E-08	2.83E-08	7.84E-08	2.26E-08	1.16E-08	3.42E-08
1691	569938.9	4215366	3.63E-07	2.05E-07	5.68E-07	5.54E-08	3.12E-08	8.66E-08	2.50E-08	1.29E-08	3.79E-08
1692	569939.2	4215375	4.48E-07	2.54E-07	7.01E-07	6.84E-08	3.86E-08	1.07E-07	3.09E-08	1.59E-08	4.67E-08
1693	569922.9	4215182	4.76E-07	2.70E-07	7.46E-07	7.27E-08	4.10E-08	1.14E-07	3.28E-08	1.69E-08	4.97E-08
1694	569923.2	4215192	4.77E-07	2.70E-07	7.48E-07	7.29E-08	4.11E-08	1.14E-07	3.29E-08	1.69E-08	4.98E-08
1695	569923.5	4215201	4.55E-07	2.58E-07	7.14E-07	6.96E-08	3.92E-08	1.09E-07	3.14E-08	1.62E-08	4.75E-08
1696	569923.9	4215211	4.22E-07	2.39E-07	6.62E-07	6.45E-08	3.64E-08	1.01E-07	2.91E-08	1.50E-08	4.41E-08
1697	569924.2	4215221	3.83E-07	2.17E-07	6.01E-07	5.86E-08	3.30E-08	9.16E-08	2.64E-08	1.36E-08	4.00E-08
1698	569924.5	4215230	3.52E-07	1.99E-07	5.52E-07	5.38E-08	3.03E-08	8.41E-08	2.43E-08	1.25E-08	3.67E-08
1699	569924.8	4215240	3.32E-07	1.88E-07	5.19E-07	5.06E-08	2.86E-08	7.92E-08	2.28E-08	1.18E-08	3.46E-08
1700	569925.1	4215250	3.12E-07	1.77E-07	4.89E-07	4.77E-08	2.69E-08	7.46E-08	2.15E-08	1.11E-08	3.26E-08
1701	569925.4	4215259	2.97E-07	1.68E-07	4.66E-07	4.54E-08	2.56E-08	7.10E-08	2.05E-08	1.05E-08	3.10E-08
1702	569925.7	4215269	2.89E-07	1.63E-07	4.52E-07	4.41E-08	2.49E-08	6.89E-08	1.99E-08	1.02E-08	3.01E-08
1703	569926.1	4215279	2.81E-07	1.59E-07	4.40E-07	4.29E-08	2.42E-08	6.71E-08	1.94E-08	9.97E-09	2.93E-08
1704	569926.4	4215288	2.75E-07	1.56E-07	4.31E-07	4.20E-08	2.37E-08	6.56E-08	1.89E-08	9.75E-09	2.87E-08

1705	569926.7	4215298	2.71E-07	1.54E-07	4.25E-07	4.14E-08	2.34E-08	6.48E-08	1.87E-08	9.62E-09	2.83E-08
1706	569927	4215308	2.69E-07	1.52E-07	4.21E-07	4.11E-08	2.32E-08	6.42E-08	1.85E-08	9.54E-09	2.81E-08
1707	569927.3	4215317	2.69E-07	1.52E-07	4.21E-07	4.10E-08	2.31E-08	6.41E-08	1.85E-08	9.53E-09	2.80E-08
1708	569927.6	4215327	2.75E-07	1.56E-07	4.30E-07	4.19E-08	2.37E-08	6.56E-08	1.89E-08	9.74E-09	2.87E-08
1709	569928	4215337	2.83E-07	1.60E-07	4.43E-07	4.32E-08	2.44E-08	6.76E-08	1.95E-08	1.00E-08	2.96E-08
1710	569928.3	4215346	2.96E-07	1.68E-07	4.63E-07	4.52E-08	2.55E-08	7.07E-08	2.04E-08	1.05E-08	3.09E-08
1711	569928.6	4215356	3.13E-07	1.77E-07	4.90E-07	4.78E-08	2.70E-08	7.47E-08	2.16E-08	1.11E-08	3.27E-08
1712	569928.9	4215366	3.53E-07	2.00E-07	5.53E-07	5.39E-08	3.04E-08	8.44E-08	2.43E-08	1.25E-08	3.69E-08
1713	569929.2	4215376	4.46E-07	2.53E-07	6.99E-07	6.82E-08	3.85E-08	1.07E-07	3.08E-08	1.58E-08	4.66E-08
1714	569912.9	4215182	4.40E-07	2.49E-07	6.89E-07	6.72E-08	3.79E-08	1.05E-07	3.03E-08	1.56E-08	4.59E-08
1715	569913.2	4215192	4.43E-07	2.51E-07	6.95E-07	6.77E-08	3.82E-08	1.06E-07	3.06E-08	1.57E-08	4.63E-08
1716	569913.5	4215202	4.25E-07	2.41E-07	6.66E-07	6.49E-08	3.66E-08	1.01E-07	2.93E-08	1.51E-08	4.43E-08
1717	569913.9	4215211	3.93E-07	2.22E-07	6.15E-07	6.00E-08	3.38E-08	9.38E-08	2.71E-08	1.39E-08	4.10E-08
1718	569914.2	4215221	3.54E-07	2.01E-07	5.55E-07	5.41E-08	3.05E-08	8.46E-08	2.44E-08	1.26E-08	3.70E-08
1719	569914.5	4215231	3.24E-07	1.84E-07	5.08E-07	4.95E-08	2.79E-08	7.74E-08	2.23E-08	1.15E-08	3.38E-08
1720	569914.8	4215240	3.04E-07	1.72E-07	4.77E-07	4.65E-08	2.62E-08	7.27E-08	2.10E-08	1.08E-08	3.18E-08
1721	569915.1	4215250	2.86E-07	1.62E-07	4.49E-07	4.37E-08	2.47E-08	6.84E-08	1.97E-08	1.02E-08	2.99E-08
1722	569915.4	4215260	2.73E-07	1.54E-07	4.27E-07	4.16E-08	2.35E-08	6.51E-08	1.88E-08	9.67E-09	2.85E-08
1723	569915.8	4215269	2.66E-07	1.50E-07	4.16E-07	4.06E-08	2.29E-08	6.34E-08	1.83E-08	9.42E-09	2.77E-08
1724	569916.1	4215279	2.59E-07	1.47E-07	4.06E-07	3.96E-08	2.23E-08	6.19E-08	1.79E-08	9.20E-09	2.71E-08
1725	569916.4	4215289	2.54E-07	1.44E-07	3.98E-07	3.88E-08	2.19E-08	6.07E-08	1.75E-08	9.01E-09	2.65E-08
1726	569916.7	4215298	2.50E-07	1.42E-07	3.92E-07	3.82E-08	2.16E-08	5.98E-08	1.73E-08	8.88E-09	2.61E-08
1727	569917	4215308	2.50E-07	1.41E-07	3.91E-07	3.81E-08	2.15E-08	5.96E-08	1.72E-08	8.86E-09	2.61E-08
1728	569917.3	4215318	2.50E-07	1.41E-07	3.91E-07	3.81E-08	2.15E-08	5.96E-08	1.72E-08	8.85E-09	2.60E-08
1729	569917.6	4215327	2.56E-07	1.45E-07	4.02E-07	3.92E-08	2.21E-08	6.13E-08	1.77E-08	9.10E-09	2.68E-08
1730	569918	4215337	2.66E-07	1.51E-07	4.17E-07	4.06E-08	2.29E-08	6.36E-08	1.83E-08	9.44E-09	2.78E-08
1731	569918.3	4215347	2.81E-07	1.59E-07	4.40E-07	4.28E-08	2.42E-08	6.70E-08	1.93E-08	9.95E-09	2.93E-08
1732	569918.6	4215356	2.98E-07	1.69E-07	4.67E-07	4.55E-08	2.57E-08	7.12E-08	2.06E-08	1.06E-08	3.11E-08
1733	569918.9	4215366	3.37E-07	1.91E-07	5.28E-07	5.15E-08	2.90E-08	8.05E-08	2.32E-08	1.20E-08	3.52E-08
1734	569919.2	4215376	4.18E-07	2.37E-07	6.55E-07	6.39E-08	3.60E-08	9.99E-08	2.88E-08	1.48E-08	4.37E-08
1735	569903.2	4215192	4.14E-07	2.34E-07	6.48E-07	6.31E-08	3.56E-08	9.88E-08	2.85E-08	1.47E-08	4.32E-08
1736	569903.6	4215202	3.98E-07	2.25E-07	6.23E-07	6.07E-08	3.43E-08	9.50E-08	2.74E-08	1.41E-08	4.15E-08
1737	569903.9	4215212	3.66E-07	2.07E-07	5.73E-07	5.59E-08	3.15E-08	8.74E-08	2.52E-08	1.30E-08	3.82E-08
1738	569904.2	4215221	3.28E-07	1.86E-07	5.14E-07	5.01E-08	2.83E-08	7.84E-08	2.26E-08	1.16E-08	3.42E-08
1739	569904.5	4215231	2.99E-07	1.70E-07	4.69E-07	4.57E-08	2.58E-08	7.15E-08	2.06E-08	1.06E-08	3.13E-08
1740	569904.8	4215241	2.81E-07	1.59E-07	4.40E-07	4.29E-08	2.42E-08	6.71E-08	1.93E-08	9.96E-09	2.93E-08
1741	569905.1	4215250	2.63E-07	1.49E-07	4.12E-07	4.02E-08	2.27E-08	6.29E-08	1.81E-08	9.33E-09	2.75E-08
1742	569905.4	4215260	2.52E-07	1.43E-07	3.94E-07	3.84E-08	2.17E-08	6.01E-08	1.73E-08	8.93E-09	2.63E-08
1743	569905.8	4215270	2.46E-07	1.39E-07	3.85E-07	3.76E-08	2.12E-08	5.88E-08	1.70E-08	8.73E-09	2.57E-08
1744	569906.1	4215279	2.41E-07	1.36E-07	3.77E-07	3.68E-08	2.08E-08	5.75E-08	1.66E-08	8.55E-09	2.51E-08
1745	569906.4	4215289	2.36E-07	1.34E-07	3.70E-07	3.61E-08	2.04E-08	5.65E-08	1.63E-08	8.39E-09	2.47E-08
1746	569906.7	4215299	2.33E-07	1.32E-07	3.65E-07	3.55E-08	2.01E-08	5.56E-08	1.60E-08	8.26E-09	2.43E-08
1747	569907	4215308	2.30E-07	1.30E-07	3.60E-07	3.51E-08	1.98E-08	5.49E-08	1.58E-08	8.15E-09	2.40E-08
1748	569907.3	4215318	2.29E-07	1.30E-07	3.59E-07	3.50E-08	1.98E-08	5.48E-08	1.58E-08	8.14E-09	2.39E-08
1749	569907.6	4215328	2.40E-07	1.36E-07	3.77E-07	3.67E-08	2.07E-08	5.74E-08	1.66E-08	8.53E-09	2.51E-08
1750	569908	4215337	2.51E-07	1.42E-07	3.93E-07	3.83E-08	2.16E-08	5.99E-08	1.73E-08	8.90E-09	2.62E-08
1751	569908.3	4215347	2.66E-07	1.50E-07	4.16E-07	4.05E-08	2.29E-08	6.34E-08	1.83E-08	9.42E-09	2.77E-08
1752	569908.6	4215357	2.82E-07	1.60E-07	4.41E-07	4.30E-08	2.43E-08	6.73E-08	1.94E-08	9.99E-09	2.94E-08
1753	569908.9	4215366	3.13E-07	1.77E-07	4.90E-07	4.78E-08	2.70E-08	7.47E-08	2.16E-08	1.11E-08	3.27E-08
1754	569909.2	4215376	3.68E-07	2.08E-07	5.76E-07	5.62E-08	3.17E-08	8.79E-08	2.53E-08	1.30E-08	3.84E-08
1755	569893.2	4215193	3.88E-07	2.20E-07	6.07E-07	5.92E-08	3.34E-08	9.26E-08	2.67E-08	1.37E-08	4.05E-08
1756	569893.6	4215202	3.76E-07	2.13E-07	5.89E-07	5.74E-08	3.24E-08	8.99E-08	2.59E-08	1.33E-08	3.93E-08
1757	569893.9	4215212	3.49E-07	1.97E-07	5.46E-07	5.32E-08	3.00E-08	8.33E-08	2.40E-08	1.24E-08	3.64E-08
1758	569894.2	4215222	3.13E-07	1.78E-07	4.91E-07	4.79E-08	2.70E-08	7.49E-08	2.16E-08	1.11E-08	3.27E-08
1759	569894.5	4215231	2.86E-07	1.62E-07	4.48E-07	4.37E-08	2.46E-08	6.83E-08	1.97E-08	1.01E-08	2.98E-08
1760	569894.8	4215241	2.66E-07	1.51E-07	4.17E-07	4.07E-08	2.29E-08	6.36E-08	1.83E-08	9.44E-09	2.78E-08
1761	569895.1	4215251	2.49E-07	1.41E-07	3.90E-07	3.80E-08	2.15E-08	5.95E-08	1.72E-08	8.84E-09	2.60E-08
1762	569895.4	4215260	2.37E-07	1.34E-07	3.71E-07	3.62E-08	2.04E-08	5.66E-08	1.63E-08	8.41E-09	2.48E-08
1763	569895.8	4215270	2.30E-07	1.30E-07	3.60E-07	3.51E-08	1.98E-08	5.49E-08	1.58E-08	8.15E-09	2.40E-08
1764	569896.1	4215280	2.23E-07	1.27E-07	3.50E-07	3.41E-08	1.93E-08	5.34E-08	1.54E-08	7.93E-09	2.33E-08
1765	569896.4	4215289	2.19E-07	1.24E-07	3.43E-07	3.34E-08	1.88E-08	5.23E-08	1.51E-08	7.76E-09	2.28E-08

1766	569896.7	4215299	2.16E-07	1.23E-07	3.39E-07	3.30E-08	1.86E-08	5.17E-08	1.49E-08	7.67E-09	2.26E-08
1767	569897	4215309	2.14E-07	1.21E-07	3.36E-07	3.27E-08	1.85E-08	5.12E-08	1.48E-08	7.60E-09	2.24E-08
1768	569897.3	4215318	2.14E-07	1.21E-07	3.36E-07	3.27E-08	1.85E-08	5.12E-08	1.48E-08	7.60E-09	2.24E-08
1769	569897.7	4215328	2.21E-07	1.25E-07	3.47E-07	3.38E-08	1.91E-08	5.29E-08	1.53E-08	7.85E-09	2.31E-08
1770	569898	4215338	2.36E-07	1.33E-07	3.69E-07	3.60E-08	2.03E-08	5.63E-08	1.62E-08	8.36E-09	2.46E-08
1771	569898.3	4215347	2.49E-07	1.41E-07	3.90E-07	3.80E-08	2.14E-08	5.94E-08	1.71E-08	8.82E-09	2.60E-08
1772	569898.6	4215357	2.62E-07	1.49E-07	4.11E-07	4.00E-08	2.26E-08	6.26E-08	1.81E-08	9.30E-09	2.74E-08
1773	569898.9	4215367	2.85E-07	1.61E-07	4.46E-07	4.35E-08	2.46E-08	6.81E-08	1.96E-08	1.01E-08	2.97E-08
1774	569883.6	4215203	3.56E-07	2.02E-07	5.58E-07	5.44E-08	3.07E-08	8.51E-08	2.46E-08	1.26E-08	3.72E-08
1775	569883.9	4215212	3.32E-07	1.88E-07	5.21E-07	5.08E-08	2.86E-08	7.94E-08	2.29E-08	1.18E-08	3.47E-08
1776	569884.2	4215222	3.00E-07	1.70E-07	4.70E-07	4.58E-08	2.59E-08	7.17E-08	2.07E-08	1.06E-08	3.13E-08
1777	569884.5	4215232	2.74E-07	1.55E-07	4.29E-07	4.18E-08	2.36E-08	6.54E-08	1.89E-08	9.72E-09	2.86E-08
1778	569884.8	4215241	2.54E-07	1.44E-07	3.98E-07	3.88E-08	2.19E-08	6.07E-08	1.75E-08	9.02E-09	2.65E-08
1779	569885.1	4215251	2.37E-07	1.34E-07	3.71E-07	3.62E-08	2.04E-08	5.66E-08	1.63E-08	8.41E-09	2.47E-08
1780	569885.5	4215261	2.24E-07	1.27E-07	3.52E-07	3.43E-08	1.93E-08	5.36E-08	1.55E-08	7.96E-09	2.34E-08
1781	569885.8	4215270	2.15E-07	1.22E-07	3.38E-07	3.29E-08	1.86E-08	5.15E-08	1.48E-08	7.64E-09	2.25E-08
1782	569886.1	4215280	2.08E-07	1.18E-07	3.26E-07	3.17E-08	1.79E-08	4.96E-08	1.43E-08	7.37E-09	2.17E-08
1783	569886.4	4215290	2.03E-07	1.15E-07	3.18E-07	3.10E-08	1.75E-08	4.85E-08	1.40E-08	7.20E-09	2.12E-08
1784	569886.7	4215299	2.02E-07	1.14E-07	3.16E-07	3.08E-08	1.74E-08	4.81E-08	1.39E-08	7.15E-09	2.10E-08
1785	569887	4215309	2.00E-07	1.14E-07	3.14E-07	3.06E-08	1.73E-08	4.79E-08	1.38E-08	7.11E-09	2.09E-08
1786	569887.3	4215319	2.01E-07	1.14E-07	3.15E-07	3.07E-08	1.73E-08	4.80E-08	1.39E-08	7.13E-09	2.10E-08
1787	569887.7	4215328	2.07E-07	1.17E-07	3.24E-07	3.16E-08	1.78E-08	4.94E-08	1.42E-08	7.33E-09	2.16E-08
1788	569888	4215338	2.15E-07	1.22E-07	3.37E-07	3.29E-08	1.86E-08	5.15E-08	1.48E-08	7.64E-09	2.25E-08
1789	569888.3	4215348	2.31E-07	1.31E-07	3.62E-07	3.52E-08	1.99E-08	5.51E-08	1.59E-08	8.19E-09	2.41E-08
1790	569888.6	4215357	2.41E-07	1.37E-07	3.78E-07	3.69E-08	2.08E-08	5.77E-08	1.66E-08	8.57E-09	2.52E-08
1791	569888.9	4215367	2.57E-07	1.46E-07	4.03E-07	3.92E-08	2.21E-08	6.14E-08	1.77E-08	9.12E-09	2.68E-08
1792	569873.6	4215203	3.38E-07	1.91E-07	5.29E-07	5.16E-08	2.91E-08	8.07E-08	2.33E-08	1.20E-08	3.53E-08
1793	569873.9	4215213	3.17E-07	1.80E-07	4.97E-07	4.84E-08	2.73E-08	7.58E-08	2.19E-08	1.13E-08	3.31E-08
1794	569874.2	4215222	2.88E-07	1.63E-07	4.51E-07	4.39E-08	2.48E-08	6.87E-08	1.98E-08	1.02E-08	3.00E-08
1795	569874.5	4215232	2.63E-07	1.49E-07	4.12E-07	4.01E-08	2.26E-08	6.28E-08	1.81E-08	9.32E-09	2.74E-08
1796	569874.8	4215242	2.43E-07	1.38E-07	3.80E-07	3.71E-08	2.09E-08	5.80E-08	1.67E-08	8.62E-09	2.54E-08
1797	569875.1	4215251	2.26E-07	1.28E-07	3.54E-07	3.45E-08	1.95E-08	5.39E-08	1.56E-08	8.01E-09	2.36E-08
1798	569875.5	4215261	2.13E-07	1.20E-07	3.33E-07	3.25E-08	1.83E-08	5.08E-08	1.46E-08	7.54E-09	2.22E-08
1799	569875.8	4215271	2.02E-07	1.15E-07	3.17E-07	3.09E-08	1.74E-08	4.83E-08	1.39E-08	7.18E-09	2.11E-08
1800	569876.1	4215280	1.94E-07	1.10E-07	3.04E-07	2.96E-08	1.67E-08	4.63E-08	1.34E-08	6.88E-09	2.02E-08
1801	569876.4	4215290	1.89E-07	1.07E-07	2.96E-07	2.89E-08	1.63E-08	4.52E-08	1.30E-08	6.71E-09	1.98E-08
1802	569876.7	4215300	1.89E-07	1.07E-07	2.95E-07	2.88E-08	1.62E-08	4.50E-08	1.30E-08	6.69E-09	1.97E-08
1803	569877	4215309	1.88E-07	1.07E-07	2.95E-07	2.87E-08	1.62E-08	4.49E-08	1.30E-08	6.67E-09	1.96E-08
1804	569877.3	4215319	1.89E-07	1.07E-07	2.96E-07	2.89E-08	1.63E-08	4.52E-08	1.30E-08	6.71E-09	1.97E-08
1805	569877.7	4215329	1.93E-07	1.10E-07	3.03E-07	2.95E-08	1.67E-08	4.62E-08	1.33E-08	6.86E-09	2.02E-08
1806	569878	4215338	2.00E-07	1.13E-07	3.14E-07	3.06E-08	1.73E-08	4.78E-08	1.38E-08	7.10E-09	2.09E-08
1807	569878.3	4215348	2.09E-07	1.19E-07	3.28E-07	3.20E-08	1.80E-08	5.00E-08	1.44E-08	7.43E-09	2.19E-08
1808	569878.6	4215358	2.19E-07	1.24E-07	3.43E-07	3.34E-08	1.88E-08	5.22E-08	1.51E-08	7.76E-09	2.28E-08
1809	569878.9	4215367	2.31E-07	1.31E-07	3.61E-07	3.52E-08	1.99E-08	5.51E-08	1.59E-08	8.18E-09	2.41E-08
1810	569863.9	4215213	3.03E-07	1.72E-07	4.75E-07	4.63E-08	2.61E-08	7.24E-08	2.09E-08	1.07E-08	3.16E-08
1811	569864.2	4215223	2.81E-07	1.59E-07	4.41E-07	4.30E-08	2.42E-08	6.72E-08	1.94E-08	9.98E-09	2.94E-08
1812	569864.5	4215232	2.59E-07	1.47E-07	4.06E-07	3.96E-08	2.23E-08	6.19E-08	1.79E-08	9.20E-09	2.71E-08
1813	569864.8	4215242	2.39E-07	1.35E-07	3.74E-07	3.65E-08	2.06E-08	5.71E-08	1.65E-08	8.48E-09	2.50E-08
1814	569865.1	4215252	2.20E-07	1.25E-07	3.45E-07	3.36E-08	1.90E-08	5.26E-08	1.52E-08	7.81E-09	2.30E-08
1815	569865.5	4215261	2.06E-07	1.17E-07	3.23E-07	3.15E-08	1.78E-08	4.93E-08	1.42E-08	7.32E-09	2.15E-08
1816	569865.8	4215271	1.96E-07	1.11E-07	3.07E-07	2.99E-08	1.69E-08	4.68E-08	1.35E-08	6.95E-09	2.04E-08
1817	569866.1	4215281	1.87E-07	1.06E-07	2.93E-07	2.86E-08	1.61E-08	4.47E-08	1.29E-08	6.64E-09	1.95E-08
1818	569866.4	4215290	1.82E-07	1.03E-07	2.85E-07	2.78E-08	1.57E-08	4.35E-08	1.25E-08	6.45E-09	1.90E-08
1819	569866.7	4215300	1.80E-07	1.02E-07	2.82E-07	2.75E-08	1.55E-08	4.30E-08	1.24E-08	6.39E-09	1.88E-08
1820	569867	4215310	1.79E-07	1.01E-07	2.80E-07	2.73E-08	1.54E-08	4.27E-08	1.23E-08	6.34E-09	1.87E-08
1821	569867.4	4215319	1.79E-07	1.01E-07	2.80E-07	2.73E-08	1.54E-08	4.27E-08	1.23E-08	6.34E-09	1.86E-08
1822	569867.7	4215329	1.81E-07	1.03E-07	2.84E-07	2.77E-08	1.56E-08	4.33E-08	1.25E-08	6.43E-09	1.89E-08
1823	569868	4215339	1.86E-07	1.05E-07	2.91E-07	2.84E-08	1.60E-08	4.44E-08	1.28E-08	6.60E-09	1.94E-08
1824	569868.3	4215348	1.92E-07	1.09E-07	3.01E-07	2.94E-08	1.66E-08	4.60E-08	1.33E-08	6.82E-09	2.01E-08
1825	569868.6	4215358	2.00E-07	1.13E-07	3.13E-07	3.05E-08	1.72E-08	4.77E-08	1.38E-08	7.08E-09	2.08E-08
1826	569868.9	4215368	2.08E-07	1.18E-07	3.26E-07	3.18E-08	1.79E-08	4.97E-08	1.43E-08	7.39E-09	2.17E-08

1827	569853.9	4215213	2.90E-07	1.64E-07	4.54E-07	4.43E-08	2.50E-08	6.93E-08	2.00E-08	1.03E-08	3.03E-08
1828	569854.2	4215223	2.75E-07	1.56E-07	4.31E-07	4.20E-08	2.37E-08	6.57E-08	1.90E-08	9.76E-09	2.87E-08
1829	569854.5	4215233	2.56E-07	1.45E-07	4.01E-07	3.91E-08	2.21E-08	6.12E-08	1.76E-08	9.08E-09	2.67E-08
1830	569854.8	4215242	2.36E-07	1.33E-07	3.69E-07	3.60E-08	2.03E-08	5.63E-08	1.62E-08	8.35E-09	2.46E-08
1831	569855.2	4215252	2.16E-07	1.22E-07	3.38E-07	3.30E-08	1.86E-08	5.16E-08	1.49E-08	7.66E-09	2.25E-08
1832	569855.5	4215262	2.02E-07	1.14E-07	3.16E-07	3.08E-08	1.74E-08	4.82E-08	1.39E-08	7.16E-09	2.11E-08
1833	569855.8	4215271	1.91E-07	1.08E-07	3.00E-07	2.92E-08	1.65E-08	4.57E-08	1.32E-08	6.79E-09	2.00E-08
1834	569856.1	4215281	1.83E-07	1.03E-07	2.86E-07	2.79E-08	1.57E-08	4.36E-08	1.26E-08	6.48E-09	1.91E-08
1835	569856.4	4215291	1.77E-07	1.00E-07	2.77E-07	2.70E-08	1.52E-08	4.23E-08	1.22E-08	6.27E-09	1.85E-08
1836	569856.7	4215300	1.74E-07	9.84E-08	2.72E-07	2.65E-08	1.50E-08	4.15E-08	1.20E-08	6.16E-09	1.81E-08
1837	569857	4215310	1.71E-07	9.67E-08	2.67E-07	2.61E-08	1.47E-08	4.08E-08	1.18E-08	6.06E-09	1.78E-08
1838	569857.4	4215320	1.69E-07	9.59E-08	2.65E-07	2.58E-08	1.46E-08	4.04E-08	1.17E-08	6.00E-09	1.77E-08
1839	569857.7	4215329	1.70E-07	9.65E-08	2.67E-07	2.60E-08	1.47E-08	4.07E-08	1.17E-08	6.04E-09	1.78E-08
1840	569858	4215339	1.73E-07	9.77E-08	2.70E-07	2.63E-08	1.49E-08	4.12E-08	1.19E-08	6.12E-09	1.80E-08
1841	569858.3	4215349	1.76E-07	9.99E-08	2.76E-07	2.69E-08	1.52E-08	4.21E-08	1.21E-08	6.25E-09	1.84E-08
1842	569858.6	4215358	1.81E-07	1.03E-07	2.84E-07	2.77E-08	1.56E-08	4.33E-08	1.25E-08	6.44E-09	1.89E-08
1843	569858.9	4215368	1.87E-07	1.06E-07	2.93E-07	2.86E-08	1.61E-08	4.47E-08	1.29E-08	6.64E-09	1.95E-08
1844	569844.2	4215223	2.69E-07	1.52E-07	4.21E-07	4.10E-08	2.32E-08	6.42E-08	1.85E-08	9.53E-09	2.81E-08
1845	569844.5	4215233	2.52E-07	1.43E-07	3.95E-07	3.85E-08	2.17E-08	6.03E-08	1.74E-08	8.95E-09	2.63E-08
1846	569844.8	4215243	2.32E-07	1.31E-07	3.63E-07	3.54E-08	2.00E-08	5.54E-08	1.60E-08	8.23E-09	2.42E-08
1847	569845.2	4215252	2.12E-07	1.20E-07	3.32E-07	3.23E-08	1.83E-08	5.06E-08	1.46E-08	7.51E-09	2.21E-08
1848	569845.5	4215262	1.98E-07	1.12E-07	3.10E-07	3.02E-08	1.70E-08	4.72E-08	1.36E-08	7.01E-09	2.06E-08
1849	569845.8	4215272	1.87E-07	1.06E-07	2.93E-07	2.86E-08	1.61E-08	4.47E-08	1.29E-08	6.64E-09	1.96E-08
1850	569846.1	4215281	1.78E-07	1.01E-07	2.79E-07	2.72E-08	1.54E-08	4.26E-08	1.23E-08	6.33E-09	1.86E-08
1851	569846.4	4215291	1.72E-07	9.75E-08	2.69E-07	2.63E-08	1.48E-08	4.11E-08	1.19E-08	6.10E-09	1.80E-08
1852	569846.7	4215301	1.67E-07	9.48E-08	2.62E-07	2.56E-08	1.44E-08	4.00E-08	1.15E-08	5.94E-09	1.75E-08
1853	569847.1	4215310	1.63E-07	9.24E-08	2.56E-07	2.49E-08	1.41E-08	3.90E-08	1.12E-08	5.79E-09	1.70E-08
1854	569847.4	4215320	1.60E-07	9.09E-08	2.51E-07	2.45E-08	1.38E-08	3.83E-08	1.11E-08	5.69E-09	1.67E-08
1855	569847.7	4215330	1.60E-07	9.07E-08	2.51E-07	2.44E-08	1.38E-08	3.82E-08	1.10E-08	5.68E-09	1.67E-08
1856	569848	4215339	1.60E-07	9.09E-08	2.51E-07	2.45E-08	1.38E-08	3.83E-08	1.11E-08	5.69E-09	1.67E-08
1857	569848.3	4215349	1.62E-07	9.18E-08	2.54E-07	2.47E-08	1.40E-08	3.87E-08	1.12E-08	5.75E-09	1.69E-08
1858	569848.6	4215359	1.65E-07	9.38E-08	2.59E-07	2.53E-08	1.43E-08	3.95E-08	1.14E-08	5.87E-09	1.73E-08
1859	569848.9	4215368	1.69E-07	9.58E-08	2.65E-07	2.58E-08	1.46E-08	4.04E-08	1.17E-08	6.00E-09	1.77E-08
1860	569834.2	4215224	2.54E-07	1.44E-07	3.98E-07	3.88E-08	2.19E-08	6.08E-08	1.75E-08	9.02E-09	2.65E-08
1861	569834.5	4215233	2.40E-07	1.36E-07	3.76E-07	3.67E-08	2.07E-08	5.74E-08	1.65E-08	8.52E-09	2.51E-08
1862	569834.9	4215243	2.22E-07	1.26E-07	3.48E-07	3.39E-08	1.91E-08	5.31E-08	1.53E-08	7.88E-09	2.32E-08
1863	569835.2	4215253	2.04E-07	1.16E-07	3.19E-07	3.11E-08	1.76E-08	4.87E-08	1.41E-08	7.23E-09	2.13E-08
1864	569835.5	4215262	1.91E-07	1.08E-07	2.99E-07	2.92E-08	1.65E-08	4.56E-08	1.32E-08	6.78E-09	1.99E-08
1865	569835.8	4215272	1.81E-07	1.03E-07	2.84E-07	2.77E-08	1.56E-08	4.33E-08	1.25E-08	6.43E-09	1.89E-08
1866	569836.1	4215282	1.73E-07	9.79E-08	2.71E-07	2.64E-08	1.49E-08	4.13E-08	1.19E-08	6.13E-09	1.80E-08
1867	569836.4	4215291	1.66E-07	9.42E-08	2.60E-07	2.54E-08	1.43E-08	3.97E-08	1.15E-08	5.90E-09	1.73E-08
1868	569836.7	4215301	1.61E-07	9.12E-08	2.52E-07	2.46E-08	1.39E-08	3.84E-08	1.11E-08	5.71E-09	1.68E-08
1869	569837.1	4215311	1.56E-07	8.84E-08	2.44E-07	2.38E-08	1.34E-08	3.73E-08	1.08E-08	5.53E-09	1.63E-08
1870	569837.4	4215320	1.53E-07	8.65E-08	2.39E-07	2.33E-08	1.32E-08	3.65E-08	1.05E-08	5.42E-09	1.59E-08
1871	569837.7	4215330	1.52E-07	8.59E-08	2.38E-07	2.32E-08	1.31E-08	3.62E-08	1.04E-08	5.38E-09	1.58E-08
1872	569838	4215340	1.51E-07	8.54E-08	2.36E-07	2.30E-08	1.30E-08	3.60E-08	1.04E-08	5.35E-09	1.57E-08
1873	569838.3	4215349	1.51E-07	8.55E-08	2.37E-07	2.31E-08	1.30E-08	3.61E-08	1.04E-08	5.36E-09	1.58E-08
1874	569838.6	4215359	1.53E-07	8.66E-08	2.39E-07	2.33E-08	1.32E-08	3.65E-08	1.05E-08	5.42E-09	1.60E-08
1875	569838.9	4215369	1.54E-07	8.75E-08	2.42E-07	2.36E-08	1.33E-08	3.69E-08	1.06E-08	5.48E-09	1.61E-08
1876	569824.5	4215234	2.28E-07	1.29E-07	3.58E-07	3.49E-08	1.97E-08	5.45E-08	1.57E-08	8.10E-09	2.38E-08
1877	569824.9	4215243	2.12E-07	1.20E-07	3.32E-07	3.24E-08	1.83E-08	5.07E-08	1.46E-08	7.53E-09	2.21E-08
1878	569825.2	4215253	1.96E-07	1.11E-07	3.07E-07	2.99E-08	1.69E-08	4.68E-08	1.35E-08	6.95E-09	2.04E-08
1879	569825.5	4215263	1.84E-07	1.04E-07	2.88E-07	2.81E-08	1.59E-08	4.40E-08	1.27E-08	6.53E-09	1.92E-08
1880	569825.8	4215272	1.75E-07	9.91E-08	2.74E-07	2.67E-08	1.51E-08	4.18E-08	1.20E-08	6.20E-09	1.83E-08
1881	569826.1	4215282	1.67E-07	9.45E-08	2.61E-07	2.55E-08	1.44E-08	3.98E-08	1.15E-08	5.92E-09	1.74E-08
1882	569826.4	4215292	1.60E-07	9.08E-08	2.51E-07	2.45E-08	1.38E-08	3.83E-08	1.10E-08	5.68E-09	1.67E-08
1883	569826.7	4215301	1.55E-07	8.76E-08	2.42E-07	2.36E-08	1.33E-08	3.69E-08	1.07E-08	5.48E-09	1.61E-08
1884	569827.1	4215311	1.49E-07	8.46E-08	2.34E-07	2.28E-08	1.29E-08	3.57E-08	1.03E-08	5.30E-09	1.56E-08
1885	569827.4	4215321	1.46E-07	8.27E-08	2.29E-07	2.23E-08	1.26E-08	3.49E-08	1.01E-08	5.18E-09	1.52E-08
1886	569827.7	4215330	1.44E-07	8.18E-08	2.26E-07	2.20E-08	1.24E-08	3.45E-08	9.95E-09	5.12E-09	1.51E-08
1887	569828	4215340	1.43E-07	8.10E-08	2.24E-07	2.18E-08	1.23E-08	3.41E-08	9.85E-09	5.07E-09	1.49E-08

1888	569828.3	4215350	1.42E-07	8.06E-08	2.23E-07	2.17E-08	1.23E-08	3.40E-08	9.80E-09	5.04E-09	1.48E-08
1889	569828.6	4215359	1.43E-07	8.08E-08	2.23E-07	2.18E-08	1.23E-08	3.41E-08	9.83E-09	5.06E-09	1.49E-08
1890	569829	4215369	1.43E-07	8.08E-08	2.24E-07	2.18E-08	1.23E-08	3.41E-08	9.83E-09	5.06E-09	1.49E-08
1891	569814.9	4215244	2.03E-07	1.15E-07	3.18E-07	3.10E-08	1.75E-08	4.85E-08	1.40E-08	7.20E-09	2.12E-08
1892	569815.2	4215253	1.88E-07	1.07E-07	2.95E-07	2.88E-08	1.62E-08	4.50E-08	1.30E-08	6.68E-09	1.97E-08
1893	569815.5	4215263	1.78E-07	1.01E-07	2.78E-07	2.71E-08	1.53E-08	4.24E-08	1.22E-08	6.30E-09	1.85E-08
1894	569815.8	4215273	1.69E-07	9.56E-08	2.64E-07	2.58E-08	1.45E-08	4.03E-08	1.16E-08	5.99E-09	1.76E-08
1895	569816.1	4215282	1.61E-07	9.13E-08	2.52E-07	2.46E-08	1.39E-08	3.85E-08	1.11E-08	5.71E-09	1.68E-08
1896	569816.4	4215292	1.54E-07	8.75E-08	2.42E-07	2.36E-08	1.33E-08	3.69E-08	1.06E-08	5.48E-09	1.61E-08
1897	569816.8	4215302	1.48E-07	8.41E-08	2.33E-07	2.27E-08	1.28E-08	3.55E-08	1.02E-08	5.27E-09	1.55E-08
1898	569817.1	4215311	1.43E-07	8.10E-08	2.24E-07	2.18E-08	1.23E-08	3.41E-08	9.85E-09	5.07E-09	1.49E-08
1899	569817.4	4215321	1.39E-07	7.90E-08	2.18E-07	2.13E-08	1.20E-08	3.33E-08	9.61E-09	4.94E-09	1.46E-08
1900	569817.7	4215331	1.37E-07	7.79E-08	2.15E-07	2.10E-08	1.18E-08	3.28E-08	9.47E-09	4.88E-09	1.44E-08
1901	569818	4215340	1.36E-07	7.68E-08	2.12E-07	2.07E-08	1.17E-08	3.24E-08	9.34E-09	4.81E-09	1.42E-08
1902	569818.3	4215350	1.34E-07	7.60E-08	2.10E-07	2.05E-08	1.16E-08	3.20E-08	9.24E-09	4.76E-09	1.40E-08
1903	569818.6	4215360	1.33E-07	7.56E-08	2.09E-07	2.04E-08	1.15E-08	3.19E-08	9.20E-09	4.73E-09	1.39E-08
1904	569819	4215369	1.32E-07	7.50E-08	2.07E-07	2.02E-08	1.14E-08	3.16E-08	9.12E-09	4.69E-09	1.38E-08
1905	569804.9	4215244	1.91E-07	1.08E-07	3.00E-07	2.92E-08	1.65E-08	4.57E-08	1.32E-08	6.78E-09	2.00E-08
1906	569805.2	4215254	1.77E-07	1.01E-07	2.78E-07	2.71E-08	1.53E-08	4.24E-08	1.22E-08	6.29E-09	1.85E-08
1907	569805.5	4215263	1.68E-07	9.49E-08	2.63E-07	2.56E-08	1.44E-08	4.00E-08	1.15E-08	5.94E-09	1.75E-08
1908	569805.8	4215273	1.60E-07	9.04E-08	2.50E-07	2.44E-08	1.38E-08	3.81E-08	1.10E-08	5.66E-09	1.67E-08
1909	569806.1	4215283	1.53E-07	8.64E-08	2.39E-07	2.33E-08	1.31E-08	3.64E-08	1.05E-08	5.41E-09	1.59E-08
1910	569806.4	4215292	1.47E-07	8.31E-08	2.30E-07	2.24E-08	1.26E-08	3.50E-08	1.01E-08	5.20E-09	1.53E-08
1911	569806.8	4215302	1.41E-07	8.00E-08	2.21E-07	2.16E-08	1.22E-08	3.37E-08	9.74E-09	5.01E-09	1.47E-08
1912	569807.1	4215312	1.36E-07	7.72E-08	2.13E-07	2.08E-08	1.17E-08	3.25E-08	9.39E-09	4.83E-09	1.42E-08
1913	569807.4	4215321	1.33E-07	7.53E-08	2.08E-07	2.03E-08	1.14E-08	3.17E-08	9.16E-09	4.71E-09	1.39E-08
1914	569807.7	4215331	1.31E-07	7.41E-08	2.05E-07	2.00E-08	1.13E-08	3.12E-08	9.01E-09	4.64E-09	1.37E-08
1915	569808	4215341	1.29E-07	7.29E-08	2.01E-07	1.96E-08	1.11E-08	3.07E-08	8.86E-09	4.56E-09	1.34E-08
1916	569808.3	4215350	1.27E-07	7.19E-08	1.99E-07	1.94E-08	1.09E-08	3.03E-08	8.74E-09	4.50E-09	1.32E-08
1917	569808.6	4215360	1.26E-07	7.11E-08	1.97E-07	1.92E-08	1.08E-08	3.00E-08	8.65E-09	4.45E-09	1.31E-08
1918	569809	4215370	1.24E-07	7.02E-08	1.94E-07	1.89E-08	1.07E-08	2.96E-08	8.54E-09	4.39E-09	1.29E-08
1919	569795.2	4215254	1.67E-07	9.45E-08	2.61E-07	2.55E-08	1.44E-08	3.98E-08	1.15E-08	5.92E-09	1.74E-08
1920	569795.5	4215264	1.58E-07	8.93E-08	2.47E-07	2.41E-08	1.36E-08	3.77E-08	1.09E-08	5.59E-09	1.65E-08
1921	569795.8	4215273	1.50E-07	8.52E-08	2.35E-07	2.30E-08	1.30E-08	3.59E-08	1.04E-08	5.33E-09	1.57E-08
1922	569796.1	4215283	1.44E-07	8.15E-08	2.25E-07	2.20E-08	1.24E-08	3.44E-08	9.92E-09	5.10E-09	1.50E-08
1923	569796.4	4215293	1.39E-07	7.86E-08	2.17E-07	2.12E-08	1.19E-08	3.31E-08	9.56E-09	4.92E-09	1.45E-08
1924	569796.8	4215302	1.34E-07	7.59E-08	2.10E-07	2.05E-08	1.16E-08	3.20E-08	9.24E-09	4.76E-09	1.40E-08
1925	569797.1	4215312	1.30E-07	7.34E-08	2.03E-07	1.98E-08	1.12E-08	3.10E-08	8.93E-09	4.60E-09	1.35E-08
1926	569797.4	4215322	1.27E-07	7.17E-08	1.98E-07	1.93E-08	1.09E-08	3.02E-08	8.72E-09	4.49E-09	1.32E-08
1927	569797.7	4215331	1.24E-07	7.05E-08	1.95E-07	1.90E-08	1.07E-08	2.97E-08	8.58E-09	4.41E-09	1.30E-08
1928	569798	4215341	1.22E-07	6.92E-08	1.91E-07	1.86E-08	1.05E-08	2.92E-08	8.42E-09	4.33E-09	1.27E-08
1929	569798.3	4215351	1.20E-07	6.81E-08	1.88E-07	1.84E-08	1.04E-08	2.87E-08	8.29E-09	4.26E-09	1.25E-08
1930	569798.7	4215360	1.19E-07	6.73E-08	1.86E-07	1.81E-08	1.02E-08	2.84E-08	8.19E-09	4.21E-09	1.24E-08
1931	569785.2	4215254	1.57E-07	8.90E-08	2.46E-07	2.40E-08	1.35E-08	3.75E-08	1.08E-08	5.57E-09	1.64E-08
1932	569785.5	4215264	1.49E-07	8.42E-08	2.33E-07	2.27E-08	1.28E-08	3.55E-08	1.02E-08	5.27E-09	1.55E-08
1933	569785.8	4215274	1.42E-07	8.04E-08	2.22E-07	2.17E-08	1.22E-08	3.39E-08	9.78E-09	5.03E-09	1.48E-08
1934	569786.1	4215283	1.36E-07	7.70E-08	2.13E-07	2.08E-08	1.17E-08	3.25E-08	9.37E-09	4.82E-09	1.42E-08
1935	569786.5	4215293	1.31E-07	7.44E-08	2.06E-07	2.01E-08	1.13E-08	3.14E-08	9.05E-09	4.66E-09	1.37E-08
1936	569786.8	4215303	1.27E-07	7.22E-08	2.00E-07	1.95E-08	1.10E-08	3.04E-08	8.78E-09	4.52E-09	1.33E-08
1937	569787.1	4215312	1.23E-07	6.99E-08	1.93E-07	1.88E-08	1.06E-08	2.95E-08	8.51E-09	4.38E-09	1.29E-08
1938	569787.4	4215322	1.21E-07	6.84E-08	1.89E-07	1.84E-08	1.04E-08	2.88E-08	8.32E-09	4.28E-09	1.26E-08
1939	569787.7	4215332	1.19E-07	6.71E-08	1.86E-07	1.81E-08	1.02E-08	2.83E-08	8.17E-09	4.20E-09	1.24E-08
1940	569788	4215341	1.16E-07	6.58E-08	1.82E-07	1.77E-08	1.00E-08	2.77E-08	8.00E-09	4.12E-09	1.21E-08
1941	569788.3	4215351	1.14E-07	6.47E-08	1.79E-07	1.74E-08	9.84E-09	2.73E-08	7.87E-09	4.05E-09	1.19E-08
1942	569788.7	4215361	1.13E-07	6.38E-08	1.76E-07	1.72E-08	9.70E-09	2.69E-08	7.76E-09	3.99E-09	1.18E-08
1943	569775.5	4215264	1.41E-07	8.00E-08	2.21E-07	2.16E-08	1.22E-08	3.37E-08	9.73E-09	5.01E-09	1.47E-08
1944	569775.8	4215274	1.35E-07	7.63E-08	2.11E-07	2.06E-08	1.16E-08	3.22E-08	9.29E-09	4.78E-09	1.41E-08
1945	569776.1	4215284	1.29E-07	7.31E-08	2.02E-07	1.97E-08	1.11E-08	3.08E-08	8.90E-09	4.58E-09	1.35E-08
1946	569776.5	4215293	1.25E-07	7.07E-08	1.96E-07	1.91E-08	1.08E-08	2.98E-08	8.60E-09	4.43E-09	1.30E-08
1947	569776.8	4215303	1.21E-07	6.85E-08	1.90E-07	1.85E-08	1.04E-08	2.89E-08	8.34E-09	4.29E-09	1.26E-08
1948	569777.1	4215313	1.17E-07	6.64E-08	1.84E-07	1.79E-08	1.01E-08	2.80E-08	8.08E-09	4.16E-09	1.22E-08

1949	569777.4	4215322	1.15E-07	6.49E-08	1.80E-07	1.75E-08	9.87E-09	2.74E-08	7.90E-09	4.07E-09	1.20E-08
1950	569777.7	4215332	1.12E-07	6.37E-08	1.76E-07	1.72E-08	9.69E-09	2.69E-08	7.75E-09	3.99E-09	1.17E-08
1951	569778	4215342	1.10E-07	6.23E-08	1.72E-07	1.68E-08	9.48E-09	2.63E-08	7.58E-09	3.90E-09	1.15E-08
1952	569778.3	4215351	1.08E-07	6.12E-08	1.69E-07	1.65E-08	9.31E-09	2.58E-08	7.45E-09	3.83E-09	1.13E-08
1953	569778.7	4215361	1.07E-07	6.04E-08	1.67E-07	1.63E-08	9.19E-09	2.55E-08	7.35E-09	3.78E-09	1.11E-08
1954	569765.5	4215265	1.34E-07	7.61E-08	2.11E-07	2.05E-08	1.16E-08	3.21E-08	9.26E-09	4.77E-09	1.40E-08
1955	569765.8	4215274	1.28E-07	7.27E-08	2.01E-07	1.96E-08	1.11E-08	3.06E-08	8.84E-09	4.55E-09	1.34E-08
1956	569766.1	4215284	1.23E-07	6.96E-08	1.93E-07	1.88E-08	1.06E-08	2.94E-08	8.47E-09	4.36E-09	1.28E-08
1957	569766.5	4215294	1.19E-07	6.73E-08	1.86E-07	1.81E-08	1.02E-08	2.84E-08	8.18E-09	4.21E-09	1.24E-08
1958	569766.8	4215303	1.15E-07	6.51E-08	1.80E-07	1.75E-08	9.90E-09	2.75E-08	7.92E-09	4.08E-09	1.20E-08
1959	569767.1	4215313	1.11E-07	6.30E-08	1.74E-07	1.70E-08	9.59E-09	2.66E-08	7.67E-09	3.95E-09	1.16E-08
1960	569767.4	4215323	1.09E-07	6.16E-08	1.70E-07	1.66E-08	9.37E-09	2.60E-08	7.49E-09	3.86E-09	1.14E-08
1961	569767.7	4215332	1.07E-07	6.04E-08	1.67E-07	1.63E-08	9.18E-09	2.55E-08	7.34E-09	3.78E-09	1.11E-08
1962	569768	4215342	1.04E-07	5.90E-08	1.63E-07	1.59E-08	8.97E-09	2.49E-08	7.18E-09	3.69E-09	1.09E-08
1963	569768.4	4215352	1.02E-07	5.79E-08	1.60E-07	1.56E-08	8.81E-09	2.44E-08	7.05E-09	3.63E-09	1.07E-08
1964	569768.7	4215361	1.01E-07	5.71E-08	1.58E-07	1.54E-08	8.69E-09	2.41E-08	6.95E-09	3.58E-09	1.05E-08
1965	569755.8	4215275	1.22E-07	6.92E-08	1.91E-07	1.87E-08	1.05E-08	2.92E-08	8.42E-09	4.34E-09	1.28E-08
1966	569756.2	4215284	1.17E-07	6.64E-08	1.84E-07	1.79E-08	1.01E-08	2.80E-08	8.08E-09	4.16E-09	1.22E-08
1967	569756.5	4215294	1.13E-07	6.41E-08	1.77E-07	1.73E-08	9.74E-09	2.70E-08	7.79E-09	4.01E-09	1.18E-08
1968	569756.8	4215304	1.09E-07	6.20E-08	1.71E-07	1.67E-08	9.42E-09	2.61E-08	7.54E-09	3.88E-09	1.14E-08
1969	569757.1	4215313	1.06E-07	6.00E-08	1.66E-07	1.62E-08	9.12E-09	2.53E-08	7.29E-09	3.75E-09	1.10E-08
1970	569757.4	4215323	1.03E-07	5.86E-08	1.62E-07	1.58E-08	8.92E-09	2.47E-08	7.13E-09	3.67E-09	1.08E-08
1971	569757.7	4215333	1.01E-07	5.74E-08	1.59E-07	1.55E-08	8.73E-09	2.42E-08	6.98E-09	3.59E-09	1.06E-08
1972	569758	4215342	9.89E-08	5.60E-08	1.55E-07	1.51E-08	8.52E-09	2.36E-08	6.81E-09	3.51E-09	1.03E-08
1973	569758.4	4215352	9.70E-08	5.50E-08	1.52E-07	1.48E-08	8.36E-09	2.32E-08	6.69E-09	3.44E-09	1.01E-08
1974	569758.7	4215362	9.56E-08	5.42E-08	1.50E-07	1.46E-08	8.24E-09	2.28E-08	6.59E-09	3.39E-09	9.98E-09
1975	569745.8	4215275	1.17E-07	6.60E-08	1.83E-07	1.78E-08	1.00E-08	2.78E-08	8.03E-09	4.14E-09	1.22E-08
1976	569746.2	4215285	1.12E-07	6.33E-08	1.75E-07	1.71E-08	9.63E-09	2.67E-08	7.70E-09	3.97E-09	1.17E-08
1977	569746.5	4215294	1.08E-07	6.12E-08	1.69E-07	1.65E-08	9.31E-09	2.58E-08	7.45E-09	3.83E-09	1.13E-08
1978	569746.8	4215304	1.05E-07	5.93E-08	1.64E-07	1.60E-08	9.02E-09	2.50E-08	7.21E-09	3.71E-09	1.09E-08
1979	569747.1	4215314	1.01E-07	5.74E-08	1.59E-07	1.55E-08	8.73E-09	2.42E-08	6.99E-09	3.60E-09	1.06E-08
1980	569747.4	4215323	9.91E-08	5.61E-08	1.55E-07	1.51E-08	8.54E-09	2.37E-08	6.83E-09	3.51E-09	1.03E-08
1981	569747.7	4215333	9.69E-08	5.49E-08	1.52E-07	1.48E-08	8.35E-09	2.31E-08	6.68E-09	3.44E-09	1.01E-08
1982	569748	4215343	9.45E-08	5.35E-08	1.48E-07	1.44E-08	8.14E-09	2.26E-08	6.51E-09	3.35E-09	9.86E-09
1983	569748.4	4215352	9.26E-08	5.25E-08	1.45E-07	1.41E-08	7.98E-09	2.21E-08	6.38E-09	3.28E-09	9.66E-09
1984	569735.2	4215256	1.23E-07	6.96E-08	1.92E-07	1.88E-08	1.06E-08	2.93E-08	8.46E-09	4.36E-09	1.28E-08
1985	569735.5	4215266	1.17E-07	6.60E-08	1.83E-07	1.78E-08	1.00E-08	2.78E-08	8.03E-09	4.13E-09	1.22E-08
1986	569735.8	4215275	1.11E-07	6.30E-08	1.74E-07	1.70E-08	9.59E-09	2.66E-08	7.67E-09	3.95E-09	1.16E-08
1987	569736.2	4215285	1.07E-07	6.05E-08	1.67E-07	1.63E-08	9.20E-09	2.55E-08	7.36E-09	3.79E-09	1.11E-08
1988	569736.5	4215295	1.03E-07	5.86E-08	1.62E-07	1.58E-08	8.91E-09	2.47E-08	7.13E-09	3.67E-09	1.08E-08
1989	569736.8	4215304	1.00E-07	5.69E-08	1.57E-07	1.53E-08	8.65E-09	2.40E-08	6.92E-09	3.56E-09	1.05E-08
1990	569737.1	4215314	9.74E-08	5.52E-08	1.53E-07	1.49E-08	8.39E-09	2.33E-08	6.71E-09	3.45E-09	1.02E-08
1991	569737.4	4215324	9.52E-08	5.39E-08	1.49E-07	1.45E-08	8.20E-09	2.27E-08	6.56E-09	3.38E-09	9.93E-09
1992	569737.7	4215333	9.30E-08	5.27E-08	1.46E-07	1.42E-08	8.01E-09	2.22E-08	6.41E-09	3.30E-09	9.70E-09
1993	569738.1	4215343	9.05E-08	5.13E-08	1.42E-07	1.38E-08	7.80E-09	2.16E-08	6.24E-09	3.21E-09	9.45E-09
1994	569738.4	4215353	8.87E-08	5.02E-08	1.39E-07	1.35E-08	7.64E-09	2.12E-08	6.11E-09	3.15E-09	9.26E-09
1995	569724.6	4215237	1.33E-07	7.52E-08	2.08E-07	2.03E-08	1.14E-08	3.17E-08	9.15E-09	4.71E-09	1.39E-08
1996	569724.9	4215247	1.24E-07	7.05E-08	1.95E-07	1.90E-08	1.07E-08	2.97E-08	8.58E-09	4.42E-09	1.30E-08
1997	569725.2	4215256	1.17E-07	6.65E-08	1.84E-07	1.79E-08	1.01E-08	2.80E-08	8.08E-09	4.16E-09	1.22E-08
1998	569725.5	4215266	1.11E-07	6.31E-08	1.74E-07	1.70E-08	9.60E-09	2.66E-08	7.67E-09	3.95E-09	1.16E-08
1999	569725.9	4215276	1.06E-07	6.02E-08	1.67E-07	1.62E-08	9.16E-09	2.54E-08	7.33E-09	3.77E-09	1.11E-08
2000	569726.2	4215285	1.02E-07	5.78E-08	1.60E-07	1.56E-08	8.79E-09	2.44E-08	7.03E-09	3.62E-09	1.07E-08
2001	569726.5	4215295	9.91E-08	5.62E-08	1.55E-07	1.51E-08	8.54E-09	2.37E-08	6.83E-09	3.52E-09	1.03E-08
2002	569726.8	4215305	9.64E-08	5.46E-08	1.51E-07	1.47E-08	8.30E-09	2.30E-08	6.64E-09	3.42E-09	1.01E-08
2003	569727.1	4215314	9.36E-08	5.30E-08	1.47E-07	1.43E-08	8.06E-09	2.24E-08	6.45E-09	3.32E-09	9.77E-09
2004	569727.4	4215324	9.14E-08	5.18E-08	1.43E-07	1.40E-08	7.88E-09	2.18E-08	6.30E-09	3.24E-09	9.55E-09
2005	569727.7	4215334	8.93E-08	5.06E-08	1.40E-07	1.36E-08	7.69E-09	2.13E-08	6.15E-09	3.17E-09	9.32E-09
2006	569728.1	4215343	8.68E-08	4.92E-08	1.36E-07	1.33E-08	7.48E-09	2.07E-08	5.98E-09	3.08E-09	9.06E-09
2007	569728.4	4215353	8.51E-08	4.82E-08	1.33E-07	1.30E-08	7.33E-09	2.03E-08	5.86E-09	3.02E-09	8.88E-09
2008	569728.7	4215363	8.38E-08	4.74E-08	1.31E-07	1.28E-08	7.22E-09	2.00E-08	5.77E-09	2.97E-09	8.74E-09
2009	569714	4215218	1.39E-07	7.88E-08	2.18E-07	2.12E-08	1.20E-08	3.32E-08	9.59E-09	4.93E-09	1.45E-08

2010	569714.3	4215228	1.37E-07	7.78E-08	2.15E-07	2.10E-08	1.18E-08	3.28E-08	9.46E-09	4.87E-09	1.43E-08
2011	569714.6	4215237	1.29E-07	7.29E-08	2.02E-07	1.97E-08	1.11E-08	3.07E-08	8.87E-09	4.56E-09	1.34E-08
2012	569714.9	4215247	1.21E-07	6.85E-08	1.89E-07	1.85E-08	1.04E-08	2.89E-08	8.33E-09	4.29E-09	1.26E-08
2013	569715.2	4215257	1.14E-07	6.46E-08	1.79E-07	1.74E-08	9.82E-09	2.72E-08	7.86E-09	4.04E-09	1.19E-08
2014	569715.5	4215266	1.08E-07	6.12E-08	1.69E-07	1.65E-08	9.31E-09	2.58E-08	7.45E-09	3.83E-09	1.13E-08
2015	569715.9	4215276	1.03E-07	5.84E-08	1.61E-07	1.57E-08	8.88E-09	2.46E-08	7.10E-09	3.65E-09	1.08E-08
2016	569716.2	4215286	9.87E-08	5.59E-08	1.55E-07	1.51E-08	8.51E-09	2.36E-08	6.80E-09	3.50E-09	1.03E-08
2017	569716.5	4215295	9.58E-08	5.43E-08	1.50E-07	1.46E-08	8.26E-09	2.29E-08	6.60E-09	3.40E-09	1.00E-08
2018	569716.8	4215305	9.30E-08	5.27E-08	1.46E-07	1.42E-08	8.02E-09	2.22E-08	6.41E-09	3.30E-09	9.71E-09
2019	569717.1	4215315	9.03E-08	5.12E-08	1.41E-07	1.38E-08	7.78E-09	2.16E-08	6.22E-09	3.20E-09	9.43E-09
2020	569717.4	4215324	8.82E-08	4.99E-08	1.38E-07	1.35E-08	7.60E-09	2.11E-08	6.08E-09	3.13E-09	9.20E-09
2021	569717.7	4215334	8.59E-08	4.87E-08	1.35E-07	1.31E-08	7.40E-09	2.05E-08	5.92E-09	3.05E-09	8.97E-09
2022	569718.1	4215344	8.35E-08	4.73E-08	1.31E-07	1.27E-08	7.19E-09	1.99E-08	5.75E-09	2.96E-09	8.71E-09
2023	569718.4	4215353	8.18E-08	4.63E-08	1.28E-07	1.25E-08	7.04E-09	1.95E-08	5.63E-09	2.90E-09	8.53E-09
2024	569718.7	4215363	8.04E-08	4.56E-08	1.26E-07	1.23E-08	6.93E-09	1.92E-08	5.54E-09	2.85E-09	8.39E-09
2025	569719	4215373	7.91E-08	4.48E-08	1.24E-07	1.21E-08	6.82E-09	1.89E-08	5.45E-09	2.81E-09	8.26E-09
2026	569719.3	4215382	7.86E-08	4.45E-08	1.23E-07	1.20E-08	6.77E-09	1.88E-08	5.42E-09	2.79E-09	8.20E-09
2027	569709.1	4215385	7.52E-08	4.26E-08	1.18E-07	1.15E-08	6.48E-09	1.80E-08	5.18E-09	2.67E-09	7.85E-09
2028	569699.1	4215385	7.21E-08	4.09E-08	1.13E-07	1.10E-08	6.21E-09	1.72E-08	4.97E-09	2.56E-09	7.53E-09
2029	569702.4	4215377	7.34E-08	4.16E-08	1.15E-07	1.12E-08	6.32E-09	1.75E-08	5.06E-09	2.60E-09	7.66E-09
2030	569705.6	4215368	7.56E-08	4.28E-08	1.18E-07	1.15E-08	6.52E-09	1.81E-08	5.21E-09	2.68E-09	7.89E-09
2031	569708.9	4215360	7.79E-08	4.41E-08	1.22E-07	1.19E-08	6.71E-09	1.86E-08	5.37E-09	2.76E-09	8.13E-09
2032	569689.3	4215385	6.94E-08	3.93E-08	1.09E-07	1.06E-08	5.98E-09	1.66E-08	4.78E-09	2.46E-09	7.25E-09
2033	569692.7	4215376	7.07E-08	4.01E-08	1.11E-07	1.08E-08	6.10E-09	1.69E-08	4.87E-09	2.51E-09	7.38E-09
2034	569696.1	4215367	7.31E-08	4.14E-08	1.14E-07	1.12E-08	6.29E-09	1.74E-08	5.03E-09	2.59E-09	7.63E-09
2035	569699.6	4215358	7.54E-08	4.27E-08	1.18E-07	1.15E-08	6.50E-09	1.80E-08	5.20E-09	2.68E-09	7.87E-09
2036	569703	4215349	7.78E-08	4.41E-08	1.22E-07	1.19E-08	6.70E-09	1.86E-08	5.36E-09	2.76E-09	8.12E-09
2037	569706.5	4215340	8.09E-08	4.58E-08	1.27E-07	1.23E-08	6.97E-09	1.93E-08	5.57E-09	2.87E-09	8.44E-09
2038	569679.2	4215386	6.70E-08	3.79E-08	1.05E-07	1.02E-08	5.77E-09	1.60E-08	4.61E-09	2.37E-09	6.99E-09
2039	569682.6	4215377	6.85E-08	3.88E-08	1.07E-07	1.05E-08	5.90E-09	1.64E-08	4.72E-09	2.43E-09	7.15E-09
2040	569686	4215368	7.06E-08	4.00E-08	1.11E-07	1.08E-08	6.09E-09	1.69E-08	4.87E-09	2.51E-09	7.37E-09
2041	569689.4	4215359	7.28E-08	4.12E-08	1.14E-07	1.11E-08	6.27E-09	1.74E-08	5.02E-09	2.58E-09	7.60E-09
2042	569692.8	4215350	7.49E-08	4.24E-08	1.17E-07	1.14E-08	6.46E-09	1.79E-08	5.16E-09	2.66E-09	7.82E-09
2043	569696.2	4215341	7.77E-08	4.40E-08	1.22E-07	1.19E-08	6.70E-09	1.86E-08	5.36E-09	2.76E-09	8.11E-09
2044	569699.6	4215332	8.10E-08	4.59E-08	1.27E-07	1.24E-08	6.98E-09	1.93E-08	5.58E-09	2.87E-09	8.45E-09
2045	569703	4215324	8.41E-08	4.77E-08	1.32E-07	1.28E-08	7.25E-09	2.01E-08	5.80E-09	2.98E-09	8.78E-09
2046	569706.4	4215315	8.72E-08	4.94E-08	1.37E-07	1.33E-08	7.52E-09	2.08E-08	6.01E-09	3.09E-09	9.10E-09
2047	569669.2	4215386	6.46E-08	3.66E-08	1.01E-07	9.86E-09	5.57E-09	1.54E-08	4.45E-09	2.29E-09	6.74E-09
2048	569672.6	4215377	6.63E-08	3.76E-08	1.04E-07	1.01E-08	5.71E-09	1.58E-08	4.57E-09	2.35E-09	6.92E-09
2049	569675.9	4215368	6.85E-08	3.88E-08	1.07E-07	1.05E-08	5.90E-09	1.64E-08	4.72E-09	2.43E-09	7.15E-09
2050	569679.3	4215360	7.07E-08	4.00E-08	1.11E-07	1.08E-08	6.09E-09	1.69E-08	4.87E-09	2.51E-09	7.37E-09
2051	569682.7	4215351	7.28E-08	4.12E-08	1.14E-07	1.11E-08	6.27E-09	1.74E-08	5.01E-09	2.58E-09	7.59E-09
2052	569686.1	4215342	7.52E-08	4.26E-08	1.18E-07	1.15E-08	6.48E-09	1.80E-08	5.18E-09	2.67E-09	7.85E-09
2053	569689.4	4215333	7.82E-08	4.43E-08	1.22E-07	1.19E-08	6.73E-09	1.87E-08	5.39E-09	2.77E-09	8.16E-09
2054	569692.8	4215325	8.11E-08	4.59E-08	1.27E-07	1.24E-08	6.99E-09	1.94E-08	5.59E-09	2.88E-09	8.46E-09
2055	569696.2	4215316	8.40E-08	4.76E-08	1.32E-07	1.28E-08	7.24E-09	2.01E-08	5.79E-09	2.98E-09	8.77E-09
2056	569699.5	4215307	8.76E-08	4.96E-08	1.37E-07	1.34E-08	7.55E-09	2.09E-08	6.03E-09	3.11E-09	9.14E-09
2057	569702.9	4215298	9.11E-08	5.16E-08	1.43E-07	1.39E-08	7.85E-09	2.18E-08	6.28E-09	3.23E-09	9.51E-09
2058	569706.3	4215290	9.48E-08	5.37E-08	1.48E-07	1.45E-08	8.17E-09	2.26E-08	6.53E-09	3.36E-09	9.89E-09
2059	569659.2	4215386	6.22E-08	3.52E-08	9.75E-08	9.50E-09	5.36E-09	1.49E-08	4.29E-09	2.21E-09	6.49E-09
2060	569662.5	4215378	6.42E-08	3.63E-08	1.01E-07	9.80E-09	5.53E-09	1.53E-08	4.42E-09	2.28E-09	6.70E-09
2061	569665.9	4215369	6.64E-08	3.76E-08	1.04E-07	1.01E-08	5.72E-09	1.59E-08	4.58E-09	2.36E-09	6.93E-09
2062	569669.2	4215360	6.86E-08	3.89E-08	1.07E-07	1.05E-08	5.91E-09	1.64E-08	4.73E-09	2.43E-09	7.16E-09
2063	569672.5	4215352	7.07E-08	4.01E-08	1.11E-07	1.08E-08	6.09E-09	1.69E-08	4.87E-09	2.51E-09	7.38E-09
2064	569675.9	4215343	7.30E-08	4.14E-08	1.14E-07	1.12E-08	6.29E-09	1.74E-08	5.03E-09	2.59E-09	7.62E-09
2065	569679.2	4215334	7.58E-08	4.29E-08	1.19E-07	1.16E-08	6.53E-09	1.81E-08	5.22E-09	2.69E-09	7.91E-09
2066	569682.6	4215326	7.86E-08	4.45E-08	1.23E-07	1.20E-08	6.77E-09	1.88E-08	5.41E-09	2.79E-09	8.20E-09
2067	569685.9	4215317	8.13E-08	4.61E-08	1.27E-07	1.24E-08	7.00E-09	1.94E-08	5.60E-09	2.88E-09	8.49E-09
2068	569689.2	4215308	8.47E-08	4.80E-08	1.33E-07	1.29E-08	7.30E-09	2.02E-08	5.84E-09	3.00E-09	8.84E-09
2069	569692.6	4215299	8.81E-08	4.99E-08	1.38E-07	1.35E-08	7.59E-09	2.11E-08	6.07E-09	3.13E-09	9.20E-09
2070	569695.9	4215291	9.17E-08	5.20E-08	1.44E-07	1.40E-08	7.90E-09	2.19E-08	6.32E-09	3.25E-09	9.57E-09

2071	569699.2	4215282	9.58E-08	5.43E-08	1.50E-07	1.46E-08	8.26E-09	2.29E-08	6.60E-09	3.40E-09	1.00E-08
2072	569702.6	4215273	1.01E-07	5.71E-08	1.58E-07	1.54E-08	8.69E-09	2.41E-08	6.95E-09	3.58E-09	1.05E-08
2073	569705.9	4215265	1.06E-07	6.03E-08	1.67E-07	1.62E-08	9.17E-09	2.54E-08	7.33E-09	3.77E-09	1.11E-08
2074	569649.2	4215387	5.98E-08	3.39E-08	9.37E-08	9.13E-09	5.15E-09	1.43E-08	4.12E-09	2.12E-09	6.24E-09
2075	569652.5	4215378	6.18E-08	3.50E-08	9.68E-08	9.44E-09	5.33E-09	1.48E-08	4.26E-09	2.19E-09	6.45E-09
2076	569655.8	4215369	6.42E-08	3.63E-08	1.01E-07	9.80E-09	5.53E-09	1.53E-08	4.42E-09	2.28E-09	6.70E-09
2077	569659.1	4215361	6.65E-08	3.77E-08	1.04E-07	1.02E-08	5.73E-09	1.59E-08	4.59E-09	2.36E-09	6.95E-09
2078	569662.4	4215352	6.88E-08	3.90E-08	1.08E-07	1.05E-08	5.93E-09	1.64E-08	4.74E-09	2.44E-09	7.18E-09
2079	569665.7	4215344	7.10E-08	4.02E-08	1.11E-07	1.08E-08	6.12E-09	1.70E-08	4.89E-09	2.52E-09	7.41E-09
2080	569669	4215335	7.36E-08	4.17E-08	1.15E-07	1.12E-08	6.34E-09	1.76E-08	5.07E-09	2.61E-09	7.69E-09
2081	569672.3	4215326	7.62E-08	4.32E-08	1.19E-07	1.16E-08	6.57E-09	1.82E-08	5.25E-09	2.70E-09	7.95E-09
2082	569675.7	4215318	7.88E-08	4.46E-08	1.23E-07	1.20E-08	6.79E-09	1.88E-08	5.43E-09	2.79E-09	8.22E-09
2083	569679	4215309	8.21E-08	4.65E-08	1.29E-07	1.25E-08	7.08E-09	1.96E-08	5.66E-09	2.91E-09	8.57E-09
2084	569682.3	4215301	8.57E-08	4.85E-08	1.34E-07	1.31E-08	7.38E-09	2.05E-08	5.90E-09	3.04E-09	8.94E-09
2085	569685.6	4215292	8.93E-08	5.06E-08	1.40E-07	1.36E-08	7.70E-09	2.13E-08	6.16E-09	3.17E-09	9.32E-09
2086	569688.9	4215283	9.31E-08	5.28E-08	1.46E-07	1.42E-08	8.03E-09	2.22E-08	6.42E-09	3.30E-09	9.72E-09
2087	569692.2	4215275	9.77E-08	5.53E-08	1.53E-07	1.49E-08	8.42E-09	2.33E-08	6.73E-09	3.47E-09	1.02E-08
2088	569695.5	4215266	1.03E-07	5.84E-08	1.61E-07	1.57E-08	8.88E-09	2.46E-08	7.10E-09	3.65E-09	1.08E-08
2089	569698.8	4215257	1.09E-07	6.19E-08	1.71E-07	1.67E-08	9.41E-09	2.61E-08	7.52E-09	3.87E-09	1.14E-08
2090	569702.2	4215249	1.16E-07	6.56E-08	1.81E-07	1.77E-08	9.97E-09	2.77E-08	7.98E-09	4.11E-09	1.21E-08
2091	569705.5	4215240	1.23E-07	6.98E-08	1.93E-07	1.88E-08	1.06E-08	2.94E-08	8.49E-09	4.37E-09	1.29E-08
2092	569639.3	4215387	5.76E-08	3.27E-08	9.03E-08	8.80E-09	4.97E-09	1.38E-08	3.97E-09	2.04E-09	6.02E-09
2093	569642.7	4215378	5.98E-08	3.39E-08	9.36E-08	9.13E-09	5.15E-09	1.43E-08	4.12E-09	2.12E-09	6.24E-09
2094	569646.2	4215369	6.23E-08	3.53E-08	9.76E-08	9.51E-09	5.37E-09	1.49E-08	4.29E-09	2.21E-09	6.50E-09
2095	569649.6	4215360	6.49E-08	3.67E-08	1.02E-07	9.90E-09	5.59E-09	1.55E-08	4.47E-09	2.30E-09	6.77E-09
2096	569653.1	4215351	6.72E-08	3.81E-08	1.05E-07	1.03E-08	5.79E-09	1.61E-08	4.63E-09	2.39E-09	7.02E-09
2097	569656.5	4215342	6.98E-08	3.95E-08	1.09E-07	1.07E-08	6.01E-09	1.67E-08	4.81E-09	2.47E-09	7.28E-09
2098	569660	4215333	7.25E-08	4.11E-08	1.14E-07	1.11E-08	6.24E-09	1.73E-08	4.99E-09	2.57E-09	7.56E-09
2099	569663.4	4215324	7.50E-08	4.25E-08	1.17E-07	1.15E-08	6.46E-09	1.79E-08	5.17E-09	2.66E-09	7.83E-09
2100	569666.9	4215315	7.76E-08	4.40E-08	1.22E-07	1.19E-08	6.69E-09	1.85E-08	5.35E-09	2.75E-09	8.10E-09
2101	569670.3	4215306	8.14E-08	4.61E-08	1.28E-07	1.24E-08	7.02E-09	1.94E-08	5.61E-09	2.89E-09	8.50E-09
2102	569673.7	4215297	8.54E-08	4.84E-08	1.34E-07	1.30E-08	7.35E-09	2.04E-08	5.88E-09	3.03E-09	8.91E-09
2103	569677.2	4215288	8.94E-08	5.07E-08	1.40E-07	1.37E-08	7.70E-09	2.14E-08	6.16E-09	3.17E-09	9.33E-09
2104	569680.6	4215279	9.37E-08	5.31E-08	1.47E-07	1.43E-08	8.07E-09	2.24E-08	6.46E-09	3.32E-09	9.78E-09
2105	569684.1	4215270	9.86E-08	5.58E-08	1.54E-07	1.50E-08	8.49E-09	2.35E-08	6.79E-09	3.50E-09	1.03E-08
2106	569687.5	4215261	1.04E-07	5.90E-08	1.63E-07	1.59E-08	8.98E-09	2.49E-08	7.18E-09	3.70E-09	1.09E-08
2107	569691	4215252	1.10E-07	6.26E-08	1.73E-07	1.69E-08	9.52E-09	2.64E-08	7.61E-09	3.92E-09	1.15E-08
2108	569694.4	4215243	1.17E-07	6.65E-08	1.84E-07	1.79E-08	1.01E-08	2.81E-08	8.09E-09	4.17E-09	1.23E-08
2109	569697.9	4215234	1.25E-07	7.10E-08	1.96E-07	1.91E-08	1.08E-08	2.99E-08	8.63E-09	4.44E-09	1.31E-08
2110	569701.3	4215225	1.33E-07	7.54E-08	2.08E-07	2.03E-08	1.15E-08	3.18E-08	9.17E-09	4.72E-09	1.39E-08
2111	569704.7	4215216	1.34E-07	7.61E-08	2.10E-07	2.05E-08	1.16E-08	3.21E-08	9.26E-09	4.77E-09	1.40E-08
2112	569629.3	4215387	5.56E-08	3.15E-08	8.71E-08	8.49E-09	4.79E-09	1.33E-08	3.83E-09	1.97E-09	5.80E-09
2113	569632.7	4215378	5.77E-08	3.27E-08	9.04E-08	8.81E-09	4.97E-09	1.38E-08	3.98E-09	2.05E-09	6.02E-09
2114	569636.1	4215369	6.02E-08	3.41E-08	9.43E-08	9.19E-09	5.19E-09	1.44E-08	4.15E-09	2.13E-09	6.28E-09
2115	569639.5	4215360	6.28E-08	3.56E-08	9.83E-08	9.58E-09	5.41E-09	1.50E-08	4.32E-09	2.23E-09	6.55E-09
2116	569642.9	4215352	6.52E-08	3.70E-08	1.02E-07	9.96E-09	5.62E-09	1.56E-08	4.50E-09	2.31E-09	6.81E-09
2117	569646.3	4215343	6.78E-08	3.84E-08	1.06E-07	1.04E-08	5.84E-09	1.62E-08	4.67E-09	2.41E-09	7.08E-09
2118	569649.8	4215334	7.06E-08	4.00E-08	1.11E-07	1.08E-08	6.08E-09	1.69E-08	4.86E-09	2.50E-09	7.37E-09
2119	569653.2	4215325	7.32E-08	4.15E-08	1.15E-07	1.12E-08	6.31E-09	1.75E-08	5.05E-09	2.60E-09	7.64E-09
2120	569656.6	4215316	7.57E-08	4.29E-08	1.19E-07	1.16E-08	6.52E-09	1.81E-08	5.22E-09	2.68E-09	7.90E-09
2121	569660	4215307	7.93E-08	4.49E-08	1.24E-07	1.21E-08	6.83E-09	1.89E-08	5.46E-09	2.81E-09	8.27E-09
2122	569663.4	4215298	8.31E-08	4.71E-08	1.30E-07	1.27E-08	7.16E-09	1.99E-08	5.73E-09	2.95E-09	8.68E-09
2123	569666.8	4215289	8.74E-08	4.95E-08	1.37E-07	1.34E-08	7.53E-09	2.09E-08	6.02E-09	3.10E-09	9.13E-09
2124	569670.2	4215280	9.16E-08	5.19E-08	1.44E-07	1.40E-08	7.89E-09	2.19E-08	6.31E-09	3.25E-09	9.56E-09
2125	569673.7	4215272	9.61E-08	5.44E-08	1.51E-07	1.47E-08	8.28E-09	2.30E-08	6.62E-09	3.41E-09	1.00E-08
2126	569677.1	4215263	1.01E-07	5.73E-08	1.59E-07	1.55E-08	8.72E-09	2.42E-08	6.97E-09	3.59E-09	1.06E-08
2127	569680.5	4215254	1.07E-07	6.05E-08	1.67E-07	1.63E-08	9.21E-09	2.55E-08	7.36E-09	3.79E-09	1.12E-08
2128	569683.9	4215245	1.13E-07	6.39E-08	1.77E-07	1.72E-08	9.71E-09	2.69E-08	7.77E-09	4.00E-09	1.18E-08
2129	569687.3	4215236	1.20E-07	6.78E-08	1.87E-07	1.83E-08	1.03E-08	2.86E-08	8.24E-09	4.24E-09	1.25E-08
2130	569690.7	4215227	1.28E-07	7.23E-08	2.00E-07	1.95E-08	1.10E-08	3.05E-08	8.79E-09	4.52E-09	1.33E-08
2131	569694.1	4215218	1.29E-07	7.32E-08	2.03E-07	1.97E-08	1.11E-08	3.09E-08	8.91E-09	4.59E-09	1.35E-08

2132	569697.6	4215209	1.30E-07	7.37E-08	2.04E-07	1.99E-08	1.12E-08	3.11E-08	8.96E-09	4.61E-09	1.36E-08
2133	569625.9	4215396	5.35E-08	3.03E-08	8.38E-08	8.17E-09	4.61E-09	1.28E-08	3.69E-09	1.90E-09	5.58E-09
2134	569619.3	4215387	5.38E-08	3.05E-08	8.42E-08	8.21E-09	4.63E-09	1.28E-08	3.71E-09	1.91E-09	5.61E-09
2135	569622.6	4215379	5.58E-08	3.16E-08	8.75E-08	8.53E-09	4.81E-09	1.33E-08	3.85E-09	1.98E-09	5.83E-09
2136	569626	4215370	5.82E-08	3.30E-08	9.12E-08	8.89E-09	5.02E-09	1.39E-08	4.01E-09	2.07E-09	6.08E-09
2137	569629.4	4215361	6.08E-08	3.44E-08	9.52E-08	9.28E-09	5.24E-09	1.45E-08	4.19E-09	2.16E-09	6.34E-09
2138	569632.8	4215352	6.33E-08	3.59E-08	9.92E-08	9.67E-09	5.46E-09	1.51E-08	4.36E-09	2.25E-09	6.61E-09
2139	569636.2	4215343	6.59E-08	3.73E-08	1.03E-07	1.01E-08	5.68E-09	1.57E-08	4.54E-09	2.34E-09	6.88E-09
2140	569639.6	4215335	6.88E-08	3.90E-08	1.08E-07	1.05E-08	5.93E-09	1.64E-08	4.74E-09	2.44E-09	7.18E-09
2141	569643	4215326	7.16E-08	4.06E-08	1.12E-07	1.09E-08	6.17E-09	1.71E-08	4.93E-09	2.54E-09	7.47E-09
2142	569646.3	4215317	7.43E-08	4.21E-08	1.16E-07	1.13E-08	6.40E-09	1.77E-08	5.12E-09	2.63E-09	7.75E-09
2143	569649.7	4215308	7.77E-08	4.40E-08	1.22E-07	1.19E-08	6.70E-09	1.86E-08	5.36E-09	2.76E-09	8.11E-09
2144	569653.1	4215299	8.15E-08	4.62E-08	1.28E-07	1.24E-08	7.02E-09	1.95E-08	5.62E-09	2.89E-09	8.51E-09
2145	569656.5	4215291	8.57E-08	4.85E-08	1.34E-07	1.31E-08	7.38E-09	2.05E-08	5.90E-09	3.04E-09	8.94E-09
2146	569659.9	4215282	8.98E-08	5.09E-08	1.41E-07	1.37E-08	7.74E-09	2.14E-08	6.19E-09	3.18E-09	9.37E-09
2147	569663.3	4215273	9.39E-08	5.32E-08	1.47E-07	1.43E-08	8.09E-09	2.24E-08	6.47E-09	3.33E-09	9.80E-09
2148	569666.7	4215264	9.85E-08	5.58E-08	1.54E-07	1.50E-08	8.49E-09	2.35E-08	6.79E-09	3.49E-09	1.03E-08
2149	569670.1	4215255	1.04E-07	5.87E-08	1.62E-07	1.58E-08	8.93E-09	2.48E-08	7.14E-09	3.68E-09	1.08E-08
2150	569673.4	4215246	1.09E-07	6.15E-08	1.70E-07	1.66E-08	9.35E-09	2.59E-08	7.48E-09	3.85E-09	1.13E-08
2151	569676.8	4215238	1.14E-07	6.47E-08	1.79E-07	1.74E-08	9.84E-09	2.73E-08	7.87E-09	4.05E-09	1.19E-08
2152	569680.2	4215229	1.21E-07	6.84E-08	1.89E-07	1.84E-08	1.04E-08	2.89E-08	8.32E-09	4.28E-09	1.26E-08
2153	569683.6	4215220	1.23E-07	6.97E-08	1.93E-07	1.88E-08	1.06E-08	2.94E-08	8.47E-09	4.36E-09	1.28E-08
2154	569687	4215211	1.23E-07	6.99E-08	1.93E-07	1.88E-08	1.06E-08	2.95E-08	8.50E-09	4.38E-09	1.29E-08
2155	569690.4	4215202	1.24E-07	7.04E-08	1.95E-07	1.90E-08	1.07E-08	2.97E-08	8.56E-09	4.41E-09	1.30E-08
2156	569615.9	4215396	5.17E-08	2.93E-08	8.10E-08	7.89E-09	4.45E-09	1.23E-08	3.56E-09	1.83E-09	5.39E-09
2157	569616.2	4215406	5.01E-08	2.84E-08	7.85E-08	7.65E-09	4.32E-09	1.20E-08	3.45E-09	1.78E-09	5.23E-09
2158	569616.5	4215416	4.87E-08	2.76E-08	7.64E-08	7.44E-09	4.20E-09	1.16E-08	3.36E-09	1.73E-09	5.09E-09
2159	569609.2	4215388	5.20E-08	2.95E-08	8.15E-08	7.94E-09	4.48E-09	1.24E-08	3.58E-09	1.85E-09	5.43E-09
2160	569612.6	4215379	5.41E-08	3.06E-08	8.47E-08	8.26E-09	4.66E-09	1.29E-08	3.73E-09	1.92E-09	5.64E-09
2161	569616	4215370	5.64E-08	3.19E-08	8.83E-08	8.61E-09	4.86E-09	1.35E-08	3.89E-09	2.00E-09	5.89E-09
2162	569619.3	4215362	5.89E-08	3.34E-08	9.22E-08	8.99E-09	5.07E-09	1.41E-08	4.06E-09	2.09E-09	6.15E-09
2163	569622.7	4215353	6.14E-08	3.48E-08	9.61E-08	9.37E-09	5.29E-09	1.47E-08	4.23E-09	2.18E-09	6.41E-09
2164	569626	4215344	6.40E-08	3.63E-08	1.00E-07	9.77E-09	5.51E-09	1.53E-08	4.41E-09	2.27E-09	6.68E-09
2165	569629.4	4215335	6.70E-08	3.80E-08	1.05E-07	1.02E-08	5.77E-09	1.60E-08	4.62E-09	2.38E-09	7.00E-09
2166	569632.8	4215327	7.01E-08	3.97E-08	1.10E-07	1.07E-08	6.04E-09	1.67E-08	4.83E-09	2.49E-09	7.31E-09
2167	569636.1	4215318	7.30E-08	4.13E-08	1.14E-07	1.11E-08	6.29E-09	1.74E-08	5.03E-09	2.59E-09	7.62E-09
2168	569639.5	4215309	7.63E-08	4.32E-08	1.20E-07	1.17E-08	6.58E-09	1.82E-08	5.26E-09	2.71E-09	7.97E-09
2169	569642.8	4215300	8.01E-08	4.54E-08	1.25E-07	1.22E-08	6.90E-09	1.91E-08	5.52E-09	2.84E-09	8.36E-09
2170	569646.2	4215292	8.41E-08	4.77E-08	1.32E-07	1.28E-08	7.25E-09	2.01E-08	5.80E-09	2.98E-09	8.78E-09
2171	569649.6	4215283	8.82E-08	5.00E-08	1.38E-07	1.35E-08	7.60E-09	2.11E-08	6.08E-09	3.13E-09	9.21E-09
2172	569652.9	4215274	9.19E-08	5.21E-08	1.44E-07	1.40E-08	7.92E-09	2.20E-08	6.34E-09	3.26E-09	9.60E-09
2173	569656.3	4215265	9.61E-08	5.45E-08	1.51E-07	1.47E-08	8.28E-09	2.30E-08	6.62E-09	3.41E-09	1.00E-08
2174	569659.7	4215257	1.01E-07	5.71E-08	1.58E-07	1.54E-08	8.69E-09	2.41E-08	6.95E-09	3.58E-09	1.05E-08
2175	569663	4215248	1.05E-07	5.94E-08	1.64E-07	1.60E-08	9.03E-09	2.50E-08	7.23E-09	3.72E-09	1.09E-08
2176	569666.4	4215239	1.09E-07	6.20E-08	1.72E-07	1.67E-08	9.43E-09	2.62E-08	7.54E-09	3.88E-09	1.14E-08
2177	569669.7	4215230	1.15E-07	6.51E-08	1.80E-07	1.75E-08	9.90E-09	2.74E-08	7.91E-09	4.07E-09	1.20E-08
2178	569673.1	4215222	1.17E-07	6.64E-08	1.84E-07	1.79E-08	1.01E-08	2.80E-08	8.08E-09	4.16E-09	1.22E-08
2179	569676.5	4215213	1.17E-07	6.62E-08	1.83E-07	1.78E-08	1.01E-08	2.79E-08	8.05E-09	4.14E-09	1.22E-08
2180	569679.8	4215204	1.17E-07	6.61E-08	1.83E-07	1.78E-08	1.01E-08	2.79E-08	8.04E-09	4.14E-09	1.22E-08
2181	569683.2	4215195	1.17E-07	6.61E-08	1.83E-07	1.78E-08	1.01E-08	2.79E-08	8.04E-09	4.14E-09	1.22E-08
2182	569695.1	4215183	1.17E-07	6.63E-08	1.83E-07	1.79E-08	1.01E-08	2.79E-08	8.06E-09	4.15E-09	1.22E-08
2183	569605.9	4215397	5.00E-08	2.83E-08	7.83E-08	7.63E-09	4.31E-09	1.19E-08	3.44E-09	1.77E-09	5.22E-09
2184	569606.2	4215406	4.84E-08	2.74E-08	7.58E-08	7.39E-09	4.17E-09	1.16E-08	3.33E-09	1.72E-09	5.05E-09
2185	569606.5	4215416	4.72E-08	2.67E-08	7.39E-08	7.20E-09	4.06E-09	1.13E-08	3.25E-09	1.67E-09	4.92E-09
2186	569606.8	4215426	4.60E-08	2.60E-08	7.20E-08	7.02E-09	3.96E-09	1.10E-08	3.17E-09	1.63E-09	4.80E-09
2187	569599.2	4215388	5.04E-08	2.85E-08	7.89E-08	7.69E-09	4.34E-09	1.20E-08	3.47E-09	1.79E-09	5.26E-09
2188	569602.6	4215379	5.24E-08	2.97E-08	8.21E-08	8.00E-09	4.52E-09	1.25E-08	3.61E-09	1.86E-09	5.47E-09
2189	569605.9	4215371	5.46E-08	3.10E-08	8.56E-08	8.34E-09	4.71E-09	1.31E-08	3.77E-09	1.94E-09	5.70E-09
2190	569609.2	4215362	5.71E-08	3.23E-08	8.94E-08	8.71E-09	4.92E-09	1.36E-08	3.93E-09	2.02E-09	5.96E-09
2191	569612.6	4215353	5.95E-08	3.37E-08	9.32E-08	9.09E-09	5.13E-09	1.42E-08	4.10E-09	2.11E-09	6.21E-09
2192	569615.9	4215345	6.21E-08	3.52E-08	9.72E-08	9.48E-09	5.35E-09	1.48E-08	4.28E-09	2.20E-09	6.48E-09

2193	569619.2	4215336	6.51E-08	3.69E-08	1.02E-07	9.94E-09	5.61E-09	1.56E-08	4.49E-09	2.31E-09	6.80E-09
2194	569622.6	4215327	6.82E-08	3.86E-08	1.07E-07	1.04E-08	5.88E-09	1.63E-08	4.70E-09	2.42E-09	7.12E-09
2195	569625.9	4215319	7.14E-08	4.04E-08	1.12E-07	1.09E-08	6.15E-09	1.70E-08	4.92E-09	2.53E-09	7.45E-09
2196	569629.3	4215310	7.48E-08	4.24E-08	1.17E-07	1.14E-08	6.45E-09	1.79E-08	5.16E-09	2.65E-09	7.81E-09
2197	569632.6	4215301	7.87E-08	4.46E-08	1.23E-07	1.20E-08	6.78E-09	1.88E-08	5.43E-09	2.79E-09	8.22E-09
2198	569635.9	4215293	8.28E-08	4.69E-08	1.30E-07	1.26E-08	7.13E-09	1.98E-08	5.71E-09	2.94E-09	8.64E-09
2199	569639.3	4215284	8.68E-08	4.92E-08	1.36E-07	1.33E-08	7.48E-09	2.07E-08	5.98E-09	3.08E-09	9.06E-09
2200	569642.6	4215275	9.02E-08	5.11E-08	1.41E-07	1.38E-08	7.77E-09	2.15E-08	6.21E-09	3.20E-09	9.41E-09
2201	569646	4215267	9.39E-08	5.32E-08	1.47E-07	1.43E-08	8.09E-09	2.24E-08	6.47E-09	3.33E-09	9.81E-09
2202	569649.3	4215258	9.81E-08	5.56E-08	1.54E-07	1.50E-08	8.45E-09	2.34E-08	6.76E-09	3.48E-09	1.02E-08
2203	569652.6	4215249	1.01E-07	5.74E-08	1.59E-07	1.55E-08	8.72E-09	2.42E-08	6.98E-09	3.59E-09	1.06E-08
2204	569656	4215241	1.05E-07	5.93E-08	1.64E-07	1.60E-08	9.02E-09	2.50E-08	7.21E-09	3.71E-09	1.09E-08
2205	569659.3	4215232	1.09E-07	6.18E-08	1.71E-07	1.66E-08	9.39E-09	2.60E-08	7.51E-09	3.87E-09	1.14E-08
2206	569662.6	4215223	1.12E-07	6.35E-08	1.76E-07	1.71E-08	9.66E-09	2.68E-08	7.72E-09	3.98E-09	1.17E-08
2207	569666	4215214	1.11E-07	6.29E-08	1.74E-07	1.69E-08	9.56E-09	2.65E-08	7.65E-09	3.94E-09	1.16E-08
2208	569669.3	4215206	1.10E-07	6.24E-08	1.73E-07	1.68E-08	9.49E-09	2.63E-08	7.59E-09	3.91E-09	1.15E-08
2209	569672.7	4215197	1.10E-07	6.21E-08	1.72E-07	1.67E-08	9.44E-09	2.62E-08	7.55E-09	3.89E-09	1.14E-08
2210	569676	4215188	1.08E-07	6.11E-08	1.69E-07	1.65E-08	9.30E-09	2.58E-08	7.44E-09	3.83E-09	1.13E-08
2211	569687.9	4215176	1.08E-07	6.13E-08	1.69E-07	1.65E-08	9.32E-09	2.58E-08	7.45E-09	3.84E-09	1.13E-08
2212	569595.9	4215397	4.84E-08	2.74E-08	7.59E-08	7.39E-09	4.17E-09	1.16E-08	3.34E-09	1.72E-09	5.05E-09
2213	569596.2	4215407	4.69E-08	2.66E-08	7.34E-08	7.16E-09	4.04E-09	1.12E-08	3.23E-09	1.66E-09	4.89E-09
2214	569596.5	4215416	4.57E-08	2.59E-08	7.16E-08	6.98E-09	3.94E-09	1.09E-08	3.15E-09	1.62E-09	4.77E-09
2215	569596.8	4215426	4.46E-08	2.53E-08	6.98E-08	6.81E-09	3.84E-09	1.06E-08	3.07E-09	1.58E-09	4.65E-09
2216	569597.1	4215435	4.35E-08	2.46E-08	6.81E-08	6.64E-09	3.75E-09	1.04E-08	3.00E-09	1.54E-09	4.54E-09
2217	569589.3	4215388	4.89E-08	2.77E-08	7.67E-08	7.47E-09	4.22E-09	1.17E-08	3.37E-09	1.74E-09	5.11E-09
2218	569592.8	4215379	5.10E-08	2.89E-08	7.98E-08	7.78E-09	4.39E-09	1.22E-08	3.51E-09	1.81E-09	5.32E-09
2219	569596.2	4215370	5.32E-08	3.02E-08	8.34E-08	8.13E-09	4.59E-09	1.27E-08	3.67E-09	1.89E-09	5.56E-09
2220	569599.7	4215361	5.57E-08	3.16E-08	8.73E-08	8.51E-09	4.80E-09	1.33E-08	3.84E-09	1.98E-09	5.81E-09
2221	569603.1	4215352	5.82E-08	3.30E-08	9.12E-08	8.89E-09	5.02E-09	1.39E-08	4.01E-09	2.07E-09	6.08E-09
2222	569606.6	4215343	6.10E-08	3.45E-08	9.55E-08	9.31E-09	5.25E-09	1.46E-08	4.20E-09	2.16E-09	6.36E-09
2223	569610	4215334	6.42E-08	3.63E-08	1.01E-07	9.80E-09	5.53E-09	1.53E-08	4.42E-09	2.28E-09	6.70E-09
2224	569613.5	4215325	6.75E-08	3.82E-08	1.06E-07	1.03E-08	5.81E-09	1.61E-08	4.65E-09	2.39E-09	7.04E-09
2225	569616.9	4215316	7.09E-08	4.02E-08	1.11E-07	1.08E-08	6.11E-09	1.69E-08	4.88E-09	2.51E-09	7.40E-09
2226	569620.4	4215307	7.45E-08	4.22E-08	1.17E-07	1.14E-08	6.42E-09	1.78E-08	5.14E-09	2.64E-09	7.78E-09
2227	569623.8	4215298	7.85E-08	4.45E-08	1.23E-07	1.20E-08	6.77E-09	1.88E-08	5.41E-09	2.79E-09	8.20E-09
2228	569627.3	4215289	8.29E-08	4.70E-08	1.30E-07	1.27E-08	7.15E-09	1.98E-08	5.72E-09	2.94E-09	8.66E-09
2229	569630.7	4215281	8.66E-08	4.91E-08	1.36E-07	1.32E-08	7.47E-09	2.07E-08	5.97E-09	3.07E-09	9.04E-09
2230	569634.2	4215272	9.05E-08	5.13E-08	1.42E-07	1.38E-08	7.80E-09	2.16E-08	6.23E-09	3.21E-09	9.44E-09
2231	569637.6	4215263	9.41E-08	5.33E-08	1.47E-07	1.44E-08	8.11E-09	2.25E-08	6.49E-09	3.34E-09	9.83E-09
2232	569641.1	4215254	9.75E-08	5.52E-08	1.53E-07	1.49E-08	8.40E-09	2.33E-08	6.72E-09	3.46E-09	1.02E-08
2233	569644.5	4215245	9.96E-08	5.64E-08	1.56E-07	1.52E-08	8.58E-09	2.38E-08	6.86E-09	3.53E-09	1.04E-08
2234	569648	4215236	1.02E-07	5.80E-08	1.60E-07	1.56E-08	8.82E-09	2.44E-08	7.05E-09	3.63E-09	1.07E-08
2235	569651.4	4215227	1.06E-07	6.00E-08	1.66E-07	1.62E-08	9.13E-09	2.53E-08	7.30E-09	3.76E-09	1.11E-08
2236	569654.9	4215218	1.06E-07	6.00E-08	1.66E-07	1.62E-08	9.13E-09	2.53E-08	7.30E-09	3.76E-09	1.11E-08
2237	569658.3	4215209	1.05E-07	5.96E-08	1.65E-07	1.61E-08	9.06E-09	2.51E-08	7.24E-09	3.73E-09	1.10E-08
2238	569661.8	4215200	1.04E-07	5.88E-08	1.63E-07	1.58E-08	8.94E-09	2.48E-08	7.15E-09	3.68E-09	1.08E-08
2239	569665.2	4215191	1.02E-07	5.80E-08	1.60E-07	1.56E-08	8.81E-09	2.44E-08	7.05E-09	3.63E-09	1.07E-08
2240	569668.7	4215182	1.01E-07	5.72E-08	1.58E-07	1.54E-08	8.70E-09	2.41E-08	6.95E-09	3.58E-09	1.05E-08
2241	569680.9	4215169	1.01E-07	5.73E-08	1.59E-07	1.55E-08	8.72E-09	2.42E-08	6.97E-09	3.59E-09	1.06E-08
2242	569585.9	4215397	4.70E-08	2.66E-08	7.36E-08	7.17E-09	4.05E-09	1.12E-08	3.24E-09	1.67E-09	4.90E-09
2243	569586.2	4215407	4.55E-08	2.58E-08	7.12E-08	6.94E-09	3.92E-09	1.09E-08	3.13E-09	1.61E-09	4.75E-09
2244	569586.5	4215416	4.44E-08	2.51E-08	6.95E-08	6.77E-09	3.82E-09	1.06E-08	3.06E-09	1.57E-09	4.63E-09
2245	569586.8	4215426	4.33E-08	2.45E-08	6.78E-08	6.61E-09	3.73E-09	1.03E-08	2.98E-09	1.54E-09	4.52E-09
2246	569587.1	4215436	4.22E-08	2.39E-08	6.61E-08	6.45E-09	3.64E-09	1.01E-08	2.91E-09	1.50E-09	4.41E-09
2247	569918.2	4215544	7.16E-08	4.06E-08	1.12E-07	1.09E-08	6.17E-09	1.71E-08	4.93E-09	2.54E-09	7.48E-09
2248	569927.5	4215543	7.29E-08	4.13E-08	1.14E-07	1.11E-08	6.28E-09	1.74E-08	5.02E-09	2.58E-09	7.61E-09
2249	569936.8	4215541	7.42E-08	4.20E-08	1.16E-07	1.13E-08	6.39E-09	1.77E-08	5.11E-09	2.63E-09	7.75E-09
2250	569946.1	4215539	7.57E-08	4.29E-08	1.19E-07	1.16E-08	6.52E-09	1.81E-08	5.21E-09	2.68E-09	7.90E-09
2251	569955.4	4215538	7.73E-08	4.38E-08	1.21E-07	1.18E-08	6.66E-09	1.85E-08	5.33E-09	2.74E-09	8.07E-09
2252	569964.8	4215536	7.91E-08	4.48E-08	1.24E-07	1.21E-08	6.81E-09	1.89E-08	5.45E-09	2.80E-09	8.25E-09
2253	569974.1	4215534	8.11E-08	4.60E-08	1.27E-07	1.24E-08	6.99E-09	1.94E-08	5.59E-09	2.88E-09	8.47E-09

2254	569983.4	4215533	8.34E-08	4.72E-08	1.31E-07	1.27E-08	7.18E-09	1.99E-08	5.75E-09	2.96E-09	8.70E-09
2255	569992.7	4215531	8.58E-08	4.86E-08	1.34E-07	1.31E-08	7.40E-09	2.05E-08	5.92E-09	3.04E-09	8.96E-09
2256	570002	4215529	8.84E-08	5.01E-08	1.39E-07	1.35E-08	7.62E-09	2.11E-08	6.09E-09	3.14E-09	9.23E-09
2257	570011.3	4215527	9.11E-08	5.16E-08	1.43E-07	1.39E-08	7.85E-09	2.18E-08	6.28E-09	3.23E-09	9.51E-09
2258	570020.6	4215526	9.38E-08	5.31E-08	1.47E-07	1.43E-08	8.08E-09	2.24E-08	6.47E-09	3.33E-09	9.79E-09
2259	569911.2	4215552	6.70E-08	3.80E-08	1.05E-07	1.02E-08	5.78E-09	1.60E-08	4.62E-09	2.38E-09	7.00E-09
2260	569902.5	4215550	6.82E-08	3.86E-08	1.07E-07	1.04E-08	5.88E-09	1.63E-08	4.70E-09	2.42E-09	7.12E-09
2261	569929.3	4215552	6.69E-08	3.79E-08	1.05E-07	1.02E-08	5.77E-09	1.60E-08	4.61E-09	2.37E-09	6.98E-09
2262	569938.6	4215551	6.80E-08	3.85E-08	1.07E-07	1.04E-08	5.86E-09	1.62E-08	4.69E-09	2.41E-09	7.10E-09
2263	569947.9	4215549	6.92E-08	3.92E-08	1.08E-07	1.06E-08	5.96E-09	1.65E-08	4.77E-09	2.46E-09	7.22E-09
2264	569957.2	4215547	7.05E-08	4.00E-08	1.10E-07	1.08E-08	6.08E-09	1.68E-08	4.86E-09	2.50E-09	7.36E-09
2265	569966.5	4215546	7.20E-08	4.08E-08	1.13E-07	1.10E-08	6.20E-09	1.72E-08	4.96E-09	2.55E-09	7.51E-09
2266	569975.8	4215544	7.36E-08	4.17E-08	1.15E-07	1.12E-08	6.34E-09	1.76E-08	5.07E-09	2.61E-09	7.68E-09
2267	569985.2	4215542	7.54E-08	4.27E-08	1.18E-07	1.15E-08	6.50E-09	1.80E-08	5.20E-09	2.68E-09	7.87E-09
2268	569994.5	4215541	7.74E-08	4.39E-08	1.21E-07	1.18E-08	6.67E-09	1.85E-08	5.34E-09	2.75E-09	8.08E-09
2269	570003.8	4215539	7.96E-08	4.51E-08	1.25E-07	1.21E-08	6.86E-09	1.90E-08	5.48E-09	2.82E-09	8.30E-09
2270	570013.1	4215537	8.17E-08	4.63E-08	1.28E-07	1.25E-08	7.04E-09	1.95E-08	5.63E-09	2.90E-09	8.53E-09
2271	570022.4	4215536	8.38E-08	4.75E-08	1.31E-07	1.28E-08	7.22E-09	2.00E-08	5.78E-09	2.97E-09	8.75E-09
2272	569913	4215562	6.18E-08	3.50E-08	9.69E-08	9.44E-09	5.33E-09	1.48E-08	4.26E-09	2.19E-09	6.45E-09
2273	569895.7	4215557	6.40E-08	3.63E-08	1.00E-07	9.77E-09	5.51E-09	1.53E-08	4.41E-09	2.27E-09	6.68E-09
2274	569878.3	4215553	6.61E-08	3.74E-08	1.04E-07	1.01E-08	5.69E-09	1.58E-08	4.55E-09	2.34E-09	6.90E-09
2275	569921.7	4215564	6.07E-08	3.44E-08	9.52E-08	9.28E-09	5.23E-09	1.45E-08	4.19E-09	2.15E-09	6.34E-09
2276	569931	4215562	6.16E-08	3.49E-08	9.65E-08	9.41E-09	5.31E-09	1.47E-08	4.25E-09	2.19E-09	6.43E-09
2277	569940.3	4215561	6.25E-08	3.54E-08	9.80E-08	9.55E-09	5.39E-09	1.49E-08	4.31E-09	2.22E-09	6.53E-09
2278	569949.7	4215559	6.35E-08	3.60E-08	9.95E-08	9.70E-09	5.47E-09	1.52E-08	4.38E-09	2.25E-09	6.63E-09
2279	569959	4215557	6.46E-08	3.66E-08	1.01E-07	9.86E-09	5.57E-09	1.54E-08	4.45E-09	2.29E-09	6.74E-09
2280	569968.3	4215556	6.58E-08	3.73E-08	1.03E-07	1.00E-08	5.67E-09	1.57E-08	4.53E-09	2.33E-09	6.87E-09
2281	569977.6	4215554	6.71E-08	3.80E-08	1.05E-07	1.03E-08	5.79E-09	1.60E-08	4.63E-09	2.38E-09	7.01E-09
2282	569986.9	4215552	6.86E-08	3.89E-08	1.08E-07	1.05E-08	5.91E-09	1.64E-08	4.73E-09	2.43E-09	7.16E-09
2283	569996.2	4215551	7.02E-08	3.98E-08	1.10E-07	1.07E-08	6.05E-09	1.68E-08	4.84E-09	2.49E-09	7.32E-09
2284	570005.6	4215549	7.18E-08	4.07E-08	1.12E-07	1.10E-08	6.19E-09	1.72E-08	4.95E-09	2.55E-09	7.50E-09
2285	570014.9	4215547	7.35E-08	4.17E-08	1.15E-07	1.12E-08	6.34E-09	1.76E-08	5.07E-09	2.61E-09	7.67E-09
2286	570024.2	4215546	7.53E-08	4.26E-08	1.18E-07	1.15E-08	6.49E-09	1.80E-08	5.19E-09	2.67E-09	7.86E-09
2287	570033.5	4215544	7.68E-08	4.35E-08	1.20E-07	1.17E-08	6.62E-09	1.83E-08	5.29E-09	2.72E-09	8.02E-09
2288	569914.8	4215572	5.72E-08	3.24E-08	8.95E-08	8.73E-09	4.93E-09	1.37E-08	3.94E-09	2.03E-09	5.97E-09
2289	569897.6	4215567	5.92E-08	3.35E-08	9.27E-08	9.04E-09	5.10E-09	1.41E-08	4.08E-09	2.10E-09	6.18E-09
2290	569880.3	4215563	6.12E-08	3.47E-08	9.58E-08	9.34E-09	5.27E-09	1.46E-08	4.22E-09	2.17E-09	6.39E-09
2291	569863	4215558	6.31E-08	3.57E-08	9.88E-08	9.63E-09	5.43E-09	1.51E-08	4.35E-09	2.24E-09	6.58E-09
2292	569923.5	4215574	5.62E-08	3.18E-08	8.80E-08	8.58E-09	4.84E-09	1.34E-08	3.87E-09	1.99E-09	5.86E-09
2293	569932.8	4215572	5.69E-08	3.22E-08	8.91E-08	8.69E-09	4.90E-09	1.36E-08	3.92E-09	2.02E-09	5.94E-09
2294	569942.1	4215570	5.77E-08	3.27E-08	9.03E-08	8.81E-09	4.97E-09	1.38E-08	3.97E-09	2.05E-09	6.02E-09
2295	569951.4	4215569	5.85E-08	3.31E-08	9.16E-08	8.93E-09	5.04E-09	1.40E-08	4.03E-09	2.07E-09	6.11E-09
2296	569960.7	4215567	5.94E-08	3.37E-08	9.31E-08	9.07E-09	5.12E-09	1.42E-08	4.09E-09	2.11E-09	6.20E-09
2297	569970.1	4215565	6.04E-08	3.42E-08	9.46E-08	9.22E-09	5.20E-09	1.44E-08	4.16E-09	2.14E-09	6.31E-09
2298	569979.4	4215564	6.15E-08	3.48E-08	9.63E-08	9.38E-09	5.30E-09	1.47E-08	4.24E-09	2.18E-09	6.42E-09
2299	569988.7	4215562	6.26E-08	3.55E-08	9.80E-08	9.56E-09	5.39E-09	1.49E-08	4.31E-09	2.22E-09	6.53E-09
2300	569998	4215560	6.38E-08	3.61E-08	1.00E-07	9.74E-09	5.50E-09	1.52E-08	4.40E-09	2.26E-09	6.66E-09
2301	570007.3	4215559	6.51E-08	3.69E-08	1.02E-07	9.95E-09	5.61E-09	1.56E-08	4.49E-09	2.31E-09	6.80E-09
2302	570016.6	4215557	6.65E-08	3.77E-08	1.04E-07	1.02E-08	5.73E-09	1.59E-08	4.59E-09	2.36E-09	6.95E-09
2303	570026	4215555	6.80E-08	3.85E-08	1.06E-07	1.04E-08	5.86E-09	1.62E-08	4.68E-09	2.41E-09	7.10E-09
2304	569916.7	4215581	5.29E-08	3.00E-08	8.29E-08	8.09E-09	4.56E-09	1.26E-08	3.65E-09	1.88E-09	5.53E-09
2305	569899.4	4215577	5.49E-08	3.11E-08	8.59E-08	8.38E-09	4.73E-09	1.31E-08	3.78E-09	1.95E-09	5.73E-09
2306	569882.2	4215573	5.67E-08	3.21E-08	8.89E-08	8.66E-09	4.89E-09	1.36E-08	3.91E-09	2.01E-09	5.92E-09
2307	569865	4215568	5.86E-08	3.32E-08	9.17E-08	8.94E-09	5.05E-09	1.40E-08	4.04E-09	2.08E-09	6.11E-09
2308	569847.8	4215564	6.03E-08	3.41E-08	9.44E-08	9.20E-09	5.19E-09	1.44E-08	4.15E-09	2.14E-09	6.29E-09
2309	569830.6	4215559	5.94E-08	3.37E-08	9.31E-08	9.07E-09	5.12E-09	1.42E-08	4.09E-09	2.11E-09	6.20E-09
2310	569934.6	4215582	5.26E-08	2.98E-08	8.24E-08	8.04E-09	4.54E-09	1.26E-08	3.63E-09	1.87E-09	5.49E-09
2311	569943.9	4215580	5.33E-08	3.02E-08	8.35E-08	8.14E-09	4.59E-09	1.27E-08	3.67E-09	1.89E-09	5.56E-09
2312	569953.2	4215579	5.40E-08	3.06E-08	8.46E-08	8.25E-09	4.65E-09	1.29E-08	3.72E-09	1.92E-09	5.64E-09
2313	569962.5	4215577	5.48E-08	3.10E-08	8.58E-08	8.37E-09	4.72E-09	1.31E-08	3.78E-09	1.94E-09	5.72E-09
2314	569971.8	4215575	5.56E-08	3.15E-08	8.71E-08	8.49E-09	4.79E-09	1.33E-08	3.83E-09	1.97E-09	5.80E-09

2315	569981.1	4215574	5.64E-08	3.20E-08	8.84E-08	8.61E-09	4.86E-09	1.35E-08	3.89E-09	2.00E-09	5.89E-09
2316	569990.5	4215572	5.73E-08	3.25E-08	8.98E-08	8.76E-09	4.94E-09	1.37E-08	3.95E-09	2.03E-09	5.99E-09
2317	569999.8	4215570	5.84E-08	3.31E-08	9.14E-08	8.91E-09	5.03E-09	1.39E-08	4.02E-09	2.07E-09	6.09E-09
2318	570009.1	4215569	5.95E-08	3.37E-08	9.32E-08	9.08E-09	5.12E-09	1.42E-08	4.10E-09	2.11E-09	6.21E-09
2319	570065	4215558	6.70E-08	3.80E-08	1.05E-07	1.02E-08	5.78E-09	1.60E-08	4.62E-09	2.38E-09	7.00E-09
2320	570074.3	4215557	6.89E-08	3.90E-08	1.08E-07	1.05E-08	5.93E-09	1.65E-08	4.75E-09	2.44E-09	7.19E-09
2321	570083.6	4215555	7.08E-08	4.01E-08	1.11E-07	1.08E-08	6.10E-09	1.69E-08	4.88E-09	2.51E-09	7.39E-09
2322	569917.9	4215591	4.92E-08	2.79E-08	7.70E-08	7.51E-09	4.24E-09	1.17E-08	3.39E-09	1.74E-09	5.13E-09
2323	569908.7	4215589	5.01E-08	2.84E-08	7.85E-08	7.65E-09	4.32E-09	1.20E-08	3.45E-09	1.78E-09	5.23E-09
2324	569899.6	4215586	5.11E-08	2.89E-08	8.00E-08	7.80E-09	4.40E-09	1.22E-08	3.52E-09	1.81E-09	5.33E-09
2325	569890.5	4215584	5.21E-08	2.95E-08	8.16E-08	7.95E-09	4.49E-09	1.24E-08	3.59E-09	1.85E-09	5.44E-09
2326	569881.3	4215582	5.30E-08	3.00E-08	8.30E-08	8.09E-09	4.57E-09	1.27E-08	3.65E-09	1.88E-09	5.53E-09
2327	569872.2	4215579	5.39E-08	3.06E-08	8.45E-08	8.24E-09	4.65E-09	1.29E-08	3.72E-09	1.91E-09	5.63E-09
2328	569863	4215577	5.48E-08	3.11E-08	8.59E-08	8.38E-09	4.73E-09	1.31E-08	3.78E-09	1.95E-09	5.73E-09
2329	569853.9	4215575	5.57E-08	3.16E-08	8.73E-08	8.51E-09	4.80E-09	1.33E-08	3.84E-09	1.98E-09	5.82E-09
2330	569844.8	4215572	5.66E-08	3.21E-08	8.87E-08	8.64E-09	4.88E-09	1.35E-08	3.90E-09	2.01E-09	5.91E-09
2331	569835.6	4215570	5.54E-08	3.14E-08	8.67E-08	8.45E-09	4.77E-09	1.32E-08	3.81E-09	1.96E-09	5.78E-09
2332	569826.5	4215568	5.59E-08	3.17E-08	8.75E-08	8.53E-09	4.81E-09	1.33E-08	3.85E-09	1.98E-09	5.83E-09
2333	569817.3	4215565	5.64E-08	3.20E-08	8.84E-08	8.62E-09	4.86E-09	1.35E-08	3.89E-09	2.00E-09	5.89E-09
2334	569808.2	4215563	5.69E-08	3.23E-08	8.92E-08	8.69E-09	4.91E-09	1.36E-08	3.92E-09	2.02E-09	5.94E-09
2335	569927	4215593	4.83E-08	2.73E-08	7.56E-08	7.37E-09	4.16E-09	1.15E-08	3.33E-09	1.71E-09	5.04E-09
2336	569936.3	4215592	4.88E-08	2.76E-08	7.64E-08	7.45E-09	4.20E-09	1.17E-08	3.36E-09	1.73E-09	5.09E-09
2337	569945.7	4215590	4.94E-08	2.80E-08	7.73E-08	7.54E-09	4.25E-09	1.18E-08	3.40E-09	1.75E-09	5.15E-09
2338	569955	4215588	5.00E-08	2.83E-08	7.83E-08	7.63E-09	4.31E-09	1.19E-08	3.44E-09	1.77E-09	5.22E-09
2339	569964.3	4215587	5.07E-08	2.87E-08	7.94E-08	7.73E-09	4.36E-09	1.21E-08	3.49E-09	1.80E-09	5.29E-09
2340	569973.6	4215585	5.13E-08	2.91E-08	8.03E-08	7.83E-09	4.42E-09	1.23E-08	3.53E-09	1.82E-09	5.35E-09
2341	569982.9	4215583	5.20E-08	2.95E-08	8.15E-08	7.94E-09	4.48E-09	1.24E-08	3.58E-09	1.84E-09	5.43E-09
2342	569992.2	4215582	5.28E-08	2.99E-08	8.27E-08	8.06E-09	4.55E-09	1.26E-08	3.64E-09	1.87E-09	5.51E-09
2343	570048.1	4215572	5.88E-08	3.33E-08	9.21E-08	8.98E-09	5.07E-09	1.40E-08	4.05E-09	2.09E-09	6.14E-09
2344	570057.4	4215570	6.01E-08	3.40E-08	9.41E-08	9.17E-09	5.18E-09	1.43E-08	4.14E-09	2.13E-09	6.27E-09
2345	570066.8	4215568	6.16E-08	3.49E-08	9.65E-08	9.40E-09	5.31E-09	1.47E-08	4.24E-09	2.18E-09	6.43E-09
2346	570076.1	4215567	6.32E-08	3.58E-08	9.91E-08	9.66E-09	5.45E-09	1.51E-08	4.36E-09	2.24E-09	6.60E-09
2347	570085.4	4215565	6.50E-08	3.68E-08	1.02E-07	9.93E-09	5.60E-09	1.55E-08	4.48E-09	2.31E-09	6.79E-09
2348	569919.7	4215601	4.58E-08	2.59E-08	7.17E-08	6.99E-09	3.95E-09	1.09E-08	3.16E-09	1.62E-09	4.78E-09
2349	569910.6	4215599	4.67E-08	2.64E-08	7.31E-08	7.12E-09	4.02E-09	1.11E-08	3.21E-09	1.65E-09	4.87E-09
2350	569901.6	4215596	4.75E-08	2.69E-08	7.45E-08	7.26E-09	4.10E-09	1.14E-08	3.28E-09	1.69E-09	4.96E-09
2351	569892.5	4215594	4.84E-08	2.74E-08	7.59E-08	7.40E-09	4.17E-09	1.16E-08	3.34E-09	1.72E-09	5.06E-09
2352	569883.4	4215592	4.93E-08	2.80E-08	7.73E-08	7.53E-09	4.25E-09	1.18E-08	3.40E-09	1.75E-09	5.15E-09
2353	569874.4	4215589	5.02E-08	2.84E-08	7.87E-08	7.67E-09	4.33E-09	1.20E-08	3.46E-09	1.78E-09	5.24E-09
2354	569865.3	4215587	5.11E-08	2.89E-08	8.00E-08	7.80E-09	4.40E-09	1.22E-08	3.52E-09	1.81E-09	5.33E-09
2355	569856.2	4215585	5.19E-08	2.94E-08	8.13E-08	7.93E-09	4.47E-09	1.24E-08	3.58E-09	1.84E-09	5.42E-09
2356	569847.1	4215582	5.27E-08	2.99E-08	8.26E-08	8.05E-09	4.55E-09	1.26E-08	3.63E-09	1.87E-09	5.51E-09
2357	569838.1	4215580	5.36E-08	3.03E-08	8.39E-08	8.18E-09	4.61E-09	1.28E-08	3.69E-09	1.90E-09	5.59E-09
2358	569829	4215578	5.23E-08	2.96E-08	8.19E-08	7.98E-09	4.50E-09	1.25E-08	3.60E-09	1.85E-09	5.46E-09
2359	569819.9	4215575	5.27E-08	2.99E-08	8.26E-08	8.05E-09	4.54E-09	1.26E-08	3.63E-09	1.87E-09	5.50E-09
2360	569810.8	4215573	5.32E-08	3.01E-08	8.34E-08	8.13E-09	4.59E-09	1.27E-08	3.67E-09	1.89E-09	5.55E-09
2361	569801.8	4215571	5.37E-08	3.04E-08	8.41E-08	8.20E-09	4.63E-09	1.28E-08	3.70E-09	1.91E-09	5.61E-09
2362	569792.7	4215568	5.42E-08	3.07E-08	8.49E-08	8.27E-09	4.67E-09	1.29E-08	3.73E-09	1.92E-09	5.65E-09
2363	569928.8	4215603	4.50E-08	2.55E-08	7.04E-08	6.86E-09	3.87E-09	1.07E-08	3.10E-09	1.59E-09	4.69E-09
2364	569938.1	4215602	4.54E-08	2.57E-08	7.11E-08	6.93E-09	3.91E-09	1.08E-08	3.13E-09	1.61E-09	4.74E-09
2365	569947.4	4215600	4.59E-08	2.60E-08	7.19E-08	7.01E-09	3.96E-09	1.10E-08	3.16E-09	1.63E-09	4.79E-09
2366	569956.7	4215598	4.65E-08	2.63E-08	7.28E-08	7.09E-09	4.00E-09	1.11E-08	3.20E-09	1.65E-09	4.85E-09
2367	569966.1	4215597	4.70E-08	2.66E-08	7.37E-08	7.18E-09	4.05E-09	1.12E-08	3.24E-09	1.67E-09	4.91E-09
2368	569975.4	4215595	4.76E-08	2.70E-08	7.45E-08	7.27E-09	4.10E-09	1.14E-08	3.28E-09	1.69E-09	4.97E-09
2369	570031.3	4215585	5.22E-08	2.96E-08	8.17E-08	7.97E-09	4.50E-09	1.25E-08	3.60E-09	1.85E-09	5.45E-09
2370	570040.6	4215583	5.32E-08	3.01E-08	8.33E-08	8.12E-09	4.58E-09	1.27E-08	3.67E-09	1.89E-09	5.55E-09
2371	570049.9	4215582	5.42E-08	3.07E-08	8.50E-08	8.28E-09	4.67E-09	1.30E-08	3.74E-09	1.92E-09	5.66E-09
2372	570059.2	4215580	5.55E-08	3.14E-08	8.69E-08	8.47E-09	4.78E-09	1.32E-08	3.82E-09	1.97E-09	5.79E-09
2373	570068.5	4215578	5.68E-08	3.22E-08	8.90E-08	8.68E-09	4.90E-09	1.36E-08	3.92E-09	2.02E-09	5.93E-09
2374	570077.8	4215576	5.83E-08	3.30E-08	9.14E-08	8.91E-09	5.03E-09	1.39E-08	4.02E-09	2.07E-09	6.09E-09
2375	570087.2	4215575	5.99E-08	3.40E-08	9.39E-08	9.15E-09	5.16E-09	1.43E-08	4.13E-09	2.13E-09	6.26E-09

2376	569921.6	4215611	4.28E-08	2.42E-08	6.70E-08	6.53E-09	3.68E-09	1.02E-08	2.95E-09	1.52E-09	4.46E-09
2377	569912.5	4215609	4.35E-08	2.47E-08	6.82E-08	6.65E-09	3.75E-09	1.04E-08	3.00E-09	1.54E-09	4.55E-09
2378	569903.5	4215606	4.43E-08	2.51E-08	6.95E-08	6.77E-09	3.82E-09	1.06E-08	3.06E-09	1.57E-09	4.63E-09
2379	569894.5	4215604	4.52E-08	2.56E-08	7.08E-08	6.90E-09	3.89E-09	1.08E-08	3.11E-09	1.60E-09	4.71E-09
2380	569885.5	4215602	4.60E-08	2.61E-08	7.21E-08	7.02E-09	3.96E-09	1.10E-08	3.17E-09	1.63E-09	4.80E-09
2381	569876.5	4215599	4.68E-08	2.65E-08	7.34E-08	7.15E-09	4.04E-09	1.12E-08	3.23E-09	1.66E-09	4.89E-09
2382	569867.5	4215597	4.76E-08	2.70E-08	7.46E-08	7.27E-09	4.10E-09	1.14E-08	3.28E-09	1.69E-09	4.97E-09
2383	569858.5	4215595	4.84E-08	2.74E-08	7.59E-08	7.40E-09	4.17E-09	1.16E-08	3.34E-09	1.72E-09	5.06E-09
2384	569849.4	4215592	4.92E-08	2.79E-08	7.71E-08	7.52E-09	4.24E-09	1.18E-08	3.39E-09	1.75E-09	5.14E-09
2385	569840.4	4215590	5.00E-08	2.83E-08	7.83E-08	7.64E-09	4.31E-09	1.19E-08	3.45E-09	1.77E-09	5.22E-09
2386	569831.4	4215588	5.08E-08	2.88E-08	7.95E-08	7.75E-09	4.37E-09	1.21E-08	3.50E-09	1.80E-09	5.30E-09
2387	569822.4	4215585	4.94E-08	2.80E-08	7.74E-08	7.54E-09	4.26E-09	1.18E-08	3.40E-09	1.75E-09	5.16E-09
2388	569813.4	4215583	4.98E-08	2.82E-08	7.80E-08	7.60E-09	4.29E-09	1.19E-08	3.43E-09	1.77E-09	5.20E-09
2389	569804.4	4215581	5.03E-08	2.85E-08	7.88E-08	7.68E-09	4.33E-09	1.20E-08	3.47E-09	1.78E-09	5.25E-09
2390	569795.4	4215578	5.08E-08	2.88E-08	7.96E-08	7.76E-09	4.38E-09	1.21E-08	3.50E-09	1.80E-09	5.30E-09
2391	569786.3	4215576	5.13E-08	2.90E-08	8.03E-08	7.83E-09	4.42E-09	1.22E-08	3.53E-09	1.82E-09	5.35E-09
2392	569930.6	4215613	4.20E-08	2.38E-08	6.58E-08	6.41E-09	3.62E-09	1.00E-08	2.89E-09	1.49E-09	4.38E-09
2393	569939.9	4215611	4.24E-08	2.40E-08	6.64E-08	6.47E-09	3.65E-09	1.01E-08	2.92E-09	1.50E-09	4.42E-09
2394	569949.2	4215610	4.28E-08	2.43E-08	6.71E-08	6.54E-09	3.69E-09	1.02E-08	2.95E-09	1.52E-09	4.47E-09
2395	570005.1	4215600	4.61E-08	2.61E-08	7.21E-08	7.03E-09	3.97E-09	1.10E-08	3.17E-09	1.63E-09	4.81E-09
2396	570014.4	4215598	4.67E-08	2.65E-08	7.32E-08	7.14E-09	4.03E-09	1.12E-08	3.22E-09	1.66E-09	4.88E-09
2397	570023.7	4215596	4.75E-08	2.69E-08	7.44E-08	7.25E-09	4.09E-09	1.13E-08	3.27E-09	1.68E-09	4.96E-09
2398	570033	4215595	4.84E-08	2.74E-08	7.58E-08	7.39E-09	4.17E-09	1.16E-08	3.33E-09	1.72E-09	5.05E-09
2399	570042.3	4215593	4.93E-08	2.79E-08	7.73E-08	7.53E-09	4.25E-09	1.18E-08	3.40E-09	1.75E-09	5.15E-09
2400	570051.7	4215591	5.03E-08	2.85E-08	7.89E-08	7.69E-09	4.34E-09	1.20E-08	3.47E-09	1.79E-09	5.25E-09
2401	570061	4215590	5.15E-08	2.92E-08	8.06E-08	7.86E-09	4.43E-09	1.23E-08	3.55E-09	1.83E-09	5.37E-09
2402	570070.3	4215588	5.27E-08	2.99E-08	8.25E-08	8.05E-09	4.54E-09	1.26E-08	3.63E-09	1.87E-09	5.50E-09
2403	570079.6	4215586	5.40E-08	3.06E-08	8.46E-08	8.25E-09	4.65E-09	1.29E-08	3.72E-09	1.92E-09	5.64E-09
2404	570088.9	4215585	5.55E-08	3.14E-08	8.69E-08	8.47E-09	4.78E-09	1.33E-08	3.82E-09	1.97E-09	5.79E-09
2405	569923.4	4215621	4.00E-08	2.27E-08	6.27E-08	6.11E-09	3.45E-09	9.56E-09	2.76E-09	1.42E-09	4.18E-09
2406	569914.4	4215618	4.08E-08	2.31E-08	6.38E-08	6.22E-09	3.51E-09	9.73E-09	2.81E-09	1.45E-09	4.25E-09
2407	569905.5	4215616	4.15E-08	2.35E-08	6.50E-08	6.33E-09	3.57E-09	9.91E-09	2.86E-09	1.47E-09	4.33E-09
2408	569896.5	4215614	4.22E-08	2.39E-08	6.61E-08	6.45E-09	3.64E-09	1.01E-08	2.91E-09	1.50E-09	4.41E-09
2409	569887.5	4215611	4.30E-08	2.43E-08	6.73E-08	6.56E-09	3.70E-09	1.03E-08	2.96E-09	1.52E-09	4.48E-09
2410	569878.6	4215609	4.37E-08	2.48E-08	6.85E-08	6.68E-09	3.77E-09	1.04E-08	3.01E-09	1.55E-09	4.56E-09
2411	569869.6	4215607	4.45E-08	2.52E-08	6.97E-08	6.80E-09	3.84E-09	1.06E-08	3.07E-09	1.58E-09	4.65E-09
2412	569860.6	4215605	4.53E-08	2.57E-08	7.09E-08	6.91E-09	3.90E-09	1.08E-08	3.12E-09	1.61E-09	4.73E-09
2413	569851.7	4215602	4.60E-08	2.61E-08	7.21E-08	7.03E-09	3.97E-09	1.10E-08	3.17E-09	1.63E-09	4.80E-09
2414	569842.7	4215600	4.68E-08	2.65E-08	7.33E-08	7.14E-09	4.03E-09	1.12E-08	3.22E-09	1.66E-09	4.88E-09
2415	569833.8	4215598	4.75E-08	2.69E-08	7.44E-08	7.25E-09	4.09E-09	1.13E-08	3.27E-09	1.68E-09	4.96E-09
2416	569824.8	4215595	4.82E-08	2.73E-08	7.55E-08	7.36E-09	4.15E-09	1.15E-08	3.32E-09	1.71E-09	5.03E-09
2417	569815.8	4215593	4.68E-08	2.65E-08	7.33E-08	7.14E-09	4.03E-09	1.12E-08	3.22E-09	1.66E-09	4.88E-09
2418	569806.9	4215591	4.72E-08	2.68E-08	7.40E-08	7.21E-09	4.07E-09	1.13E-08	3.25E-09	1.68E-09	4.93E-09
2419	569797.9	4215588	4.77E-08	2.70E-08	7.47E-08	7.28E-09	4.11E-09	1.14E-08	3.29E-09	1.69E-09	4.98E-09
2420	569789	4215586	4.82E-08	2.73E-08	7.54E-08	7.35E-09	4.15E-09	1.15E-08	3.32E-09	1.71E-09	5.03E-09
2421	569932.3	4215623	3.94E-08	2.23E-08	6.17E-08	6.01E-09	3.39E-09	9.40E-09	2.71E-09	1.40E-09	4.11E-09
2422	569988.2	4215613	4.19E-08	2.37E-08	6.57E-08	6.40E-09	3.61E-09	1.00E-08	2.89E-09	1.49E-09	4.38E-09
2423	569997.5	4215611	4.24E-08	2.40E-08	6.65E-08	6.48E-09	3.66E-09	1.01E-08	2.92E-09	1.51E-09	4.43E-09
2424	570006.9	4215610	4.30E-08	2.43E-08	6.73E-08	6.56E-09	3.70E-09	1.03E-08	2.96E-09	1.52E-09	4.48E-09
2425	570016.2	4215608	4.35E-08	2.47E-08	6.82E-08	6.65E-09	3.75E-09	1.04E-08	3.00E-09	1.54E-09	4.54E-09
2426	570025.5	4215606	4.42E-08	2.50E-08	6.92E-08	6.75E-09	3.81E-09	1.06E-08	3.05E-09	1.57E-09	4.61E-09
2427	570034.8	4215605	4.51E-08	2.55E-08	7.06E-08	6.88E-09	3.88E-09	1.08E-08	3.11E-09	1.60E-09	4.70E-09
2428	570044.1	4215603	4.60E-08	2.61E-08	7.20E-08	7.02E-09	3.96E-09	1.10E-08	3.17E-09	1.63E-09	4.80E-09
2429	570053.4	4215601	4.70E-08	2.66E-08	7.36E-08	7.17E-09	4.05E-09	1.12E-08	3.24E-09	1.67E-09	4.90E-09
2430	570062.7	4215600	4.80E-08	2.72E-08	7.52E-08	7.33E-09	4.14E-09	1.15E-08	3.31E-09	1.70E-09	5.01E-09
2431	570072.1	4215598	4.92E-08	2.79E-08	7.70E-08	7.51E-09	4.24E-09	1.17E-08	3.39E-09	1.74E-09	5.13E-09
2432	570081.4	4215596	5.04E-08	2.86E-08	7.90E-08	7.70E-09	4.34E-09	1.20E-08	3.47E-09	1.79E-09	5.26E-09
2433	570090.7	4215595	5.18E-08	2.93E-08	8.11E-08	7.90E-09	4.46E-09	1.24E-08	3.57E-09	1.84E-09	5.40E-09
2434	569925.2	4215631	3.76E-08	2.13E-08	5.90E-08	5.75E-09	3.24E-09	8.99E-09	2.59E-09	1.33E-09	3.93E-09
2435	569916.3	4215628	3.83E-08	2.17E-08	6.00E-08	5.84E-09	3.30E-09	9.14E-09	2.64E-09	1.36E-09	3.99E-09
2436	569907.4	4215626	3.89E-08	2.21E-08	6.10E-08	5.94E-09	3.35E-09	9.30E-09	2.68E-09	1.38E-09	4.06E-09

2437	569898.5	4215624	3.96E-08	2.24E-08	6.20E-08	6.05E-09	3.41E-09	9.46E-09	2.73E-09	1.40E-09	4.13E-09
2438	569889.5	4215621	4.03E-08	2.28E-08	6.31E-08	6.15E-09	3.47E-09	9.62E-09	2.77E-09	1.43E-09	4.20E-09
2439	569880.6	4215619	4.09E-08	2.32E-08	6.41E-08	6.25E-09	3.53E-09	9.78E-09	2.82E-09	1.45E-09	4.27E-09
2440	569871.7	4215617	4.16E-08	2.36E-08	6.52E-08	6.36E-09	3.59E-09	9.95E-09	2.87E-09	1.48E-09	4.35E-09
2441	569862.8	4215615	4.24E-08	2.40E-08	6.64E-08	6.47E-09	3.65E-09	1.01E-08	2.92E-09	1.50E-09	4.42E-09
2442	569853.9	4215612	4.31E-08	2.44E-08	6.75E-08	6.58E-09	3.71E-09	1.03E-08	2.97E-09	1.53E-09	4.50E-09
2443	569845	4215610	4.38E-08	2.48E-08	6.86E-08	6.69E-09	3.77E-09	1.05E-08	3.02E-09	1.55E-09	4.57E-09
2444	569836.1	4215608	4.45E-08	2.52E-08	6.97E-08	6.79E-09	3.83E-09	1.06E-08	3.07E-09	1.58E-09	4.64E-09
2445	569827.1	4215605	4.52E-08	2.56E-08	7.08E-08	6.90E-09	3.89E-09	1.08E-08	3.11E-09	1.60E-09	4.72E-09
2446	569818.2	4215603	4.41E-08	2.50E-08	6.91E-08	6.73E-09	3.80E-09	1.05E-08	3.04E-09	1.56E-09	4.60E-09
2447	569809.3	4215601	4.45E-08	2.52E-08	6.97E-08	6.79E-09	3.83E-09	1.06E-08	3.06E-09	1.58E-09	4.64E-09
2448	569800.4	4215598	4.49E-08	2.54E-08	7.03E-08	6.86E-09	3.87E-09	1.07E-08	3.09E-09	1.59E-09	4.69E-09
2449	569791.5	4215596	4.53E-08	2.57E-08	7.10E-08	6.92E-09	3.91E-09	1.08E-08	3.12E-09	1.61E-09	4.73E-09
2450	569971.4	4215626	3.84E-08	2.17E-08	6.01E-08	5.86E-09	3.31E-09	9.17E-09	2.64E-09	1.36E-09	4.01E-09
2451	569980.7	4215624	3.88E-08	2.20E-08	6.08E-08	5.93E-09	3.34E-09	9.27E-09	2.67E-09	1.38E-09	4.05E-09
2452	569990	4215623	3.93E-08	2.22E-08	6.15E-08	6.00E-09	3.38E-09	9.38E-09	2.71E-09	1.39E-09	4.10E-09
2453	569999.3	4215621	3.97E-08	2.25E-08	6.23E-08	6.07E-09	3.42E-09	9.49E-09	2.74E-09	1.41E-09	4.15E-09
2454	570008.6	4215619	4.02E-08	2.28E-08	6.30E-08	6.14E-09	3.47E-09	9.61E-09	2.77E-09	1.43E-09	4.20E-09
2455	570017.9	4215618	4.07E-08	2.31E-08	6.38E-08	6.22E-09	3.51E-09	9.73E-09	2.81E-09	1.44E-09	4.25E-09
2456	570027.3	4215616	4.13E-08	2.34E-08	6.47E-08	6.31E-09	3.56E-09	9.87E-09	2.85E-09	1.47E-09	4.31E-09
2457	570036.6	4215614	4.22E-08	2.39E-08	6.60E-08	6.44E-09	3.63E-09	1.01E-08	2.91E-09	1.50E-09	4.40E-09
2458	570045.9	4215613	4.31E-08	2.44E-08	6.74E-08	6.57E-09	3.71E-09	1.03E-08	2.97E-09	1.53E-09	4.49E-09
2459	570055.2	4215611	4.40E-08	2.49E-08	6.89E-08	6.72E-09	3.79E-09	1.05E-08	3.03E-09	1.56E-09	4.59E-09
2460	570064.5	4215609	4.50E-08	2.55E-08	7.05E-08	6.87E-09	3.88E-09	1.07E-08	3.10E-09	1.60E-09	4.70E-09
2461	570073.8	4215608	4.61E-08	2.61E-08	7.21E-08	7.03E-09	3.97E-09	1.10E-08	3.17E-09	1.63E-09	4.81E-09
2462	570083.2	4215606	4.72E-08	2.67E-08	7.39E-08	7.21E-09	4.07E-09	1.13E-08	3.25E-09	1.67E-09	4.93E-09
2463	570092.5	4215604	4.85E-08	2.75E-08	7.60E-08	7.41E-09	4.18E-09	1.16E-08	3.34E-09	1.72E-09	5.06E-09
2464	569909.3	4215636	3.66E-08	2.07E-08	5.74E-08	5.59E-09	3.16E-09	8.75E-09	2.52E-09	1.30E-09	3.82E-09
2465	569900.4	4215634	3.72E-08	2.11E-08	5.83E-08	5.68E-09	3.21E-09	8.89E-09	2.57E-09	1.32E-09	3.89E-09
2466	569891.5	4215631	3.78E-08	2.14E-08	5.93E-08	5.78E-09	3.26E-09	9.04E-09	2.61E-09	1.34E-09	3.95E-09
2467	569882.6	4215629	3.85E-08	2.18E-08	6.03E-08	5.88E-09	3.32E-09	9.19E-09	2.65E-09	1.36E-09	4.02E-09
2468	569873.8	4215627	3.91E-08	2.22E-08	6.13E-08	5.97E-09	3.37E-09	9.34E-09	2.70E-09	1.39E-09	4.08E-09
2469	569864.9	4215624	3.98E-08	2.25E-08	6.23E-08	6.07E-09	3.43E-09	9.50E-09	2.74E-09	1.41E-09	4.15E-09
2470	569856	4215622	4.04E-08	2.29E-08	6.33E-08	6.17E-09	3.48E-09	9.66E-09	2.79E-09	1.43E-09	4.22E-09
2471	569847.2	4215620	4.11E-08	2.33E-08	6.44E-08	6.27E-09	3.54E-09	9.82E-09	2.83E-09	1.46E-09	4.29E-09
2472	569838.3	4215618	4.17E-08	2.36E-08	6.54E-08	6.37E-09	3.60E-09	9.97E-09	2.88E-09	1.48E-09	4.36E-09
2473	569829.4	4215615	4.24E-08	2.40E-08	6.64E-08	6.47E-09	3.65E-09	1.01E-08	2.92E-09	1.50E-09	4.42E-09
2474	569820.5	4215613	4.30E-08	2.44E-08	6.74E-08	6.57E-09	3.71E-09	1.03E-08	2.96E-09	1.53E-09	4.49E-09
2475	569811.7	4215611	4.20E-08	2.38E-08	6.58E-08	6.41E-09	3.62E-09	1.00E-08	2.89E-09	1.49E-09	4.38E-09
2476	569802.8	4215608	4.23E-08	2.40E-08	6.63E-08	6.47E-09	3.65E-09	1.01E-08	2.92E-09	1.50E-09	4.42E-09
2477	569945.2	4215641	3.51E-08	1.99E-08	5.51E-08	5.37E-09	3.03E-09	8.40E-09	2.42E-09	1.25E-09	3.67E-09
2478	569954.5	4215639	3.54E-08	2.01E-08	5.55E-08	5.41E-09	3.05E-09	8.46E-09	2.44E-09	1.26E-09	3.70E-09
2479	569963.8	4215638	3.57E-08	2.02E-08	5.60E-08	5.45E-09	3.08E-09	8.53E-09	2.46E-09	1.27E-09	3.73E-09
2480	569973.1	4215636	3.61E-08	2.04E-08	5.65E-08	5.51E-09	3.11E-09	8.62E-09	2.49E-09	1.28E-09	3.77E-09
2481	569982.5	4215634	3.65E-08	2.07E-08	5.71E-08	5.57E-09	3.14E-09	8.71E-09	2.51E-09	1.29E-09	3.81E-09
2482	569991.8	4215633	3.69E-08	2.09E-08	5.78E-08	5.63E-09	3.18E-09	8.81E-09	2.54E-09	1.31E-09	3.85E-09
2483	570001.1	4215631	3.73E-08	2.12E-08	5.85E-08	5.70E-09	3.22E-09	8.92E-09	2.57E-09	1.32E-09	3.90E-09
2484	570010.4	4215629	3.78E-08	2.14E-08	5.93E-08	5.78E-09	3.26E-09	9.04E-09	2.61E-09	1.34E-09	3.95E-09
2485	570019.7	4215628	3.83E-08	2.17E-08	6.01E-08	5.85E-09	3.30E-09	9.16E-09	2.64E-09	1.36E-09	4.00E-09
2486	570029	4215626	3.90E-08	2.21E-08	6.10E-08	5.95E-09	3.36E-09	9.31E-09	2.68E-09	1.38E-09	4.07E-09
2487	570038.3	4215624	3.97E-08	2.25E-08	6.22E-08	6.06E-09	3.42E-09	9.48E-09	2.73E-09	1.41E-09	4.14E-09
2488	570047.7	4215623	4.05E-08	2.29E-08	6.34E-08	6.18E-09	3.49E-09	9.67E-09	2.79E-09	1.44E-09	4.23E-09
2489	570057	4215621	4.14E-08	2.34E-08	6.48E-08	6.32E-09	3.56E-09	9.88E-09	2.85E-09	1.47E-09	4.32E-09
2490	570066.3	4215619	4.23E-08	2.39E-08	6.62E-08	6.45E-09	3.64E-09	1.01E-08	2.91E-09	1.50E-09	4.41E-09
2491	570075.6	4215618	4.32E-08	2.45E-08	6.77E-08	6.60E-09	3.73E-09	1.03E-08	2.98E-09	1.53E-09	4.51E-09
2492	570084.9	4215616	4.43E-08	2.51E-08	6.94E-08	6.77E-09	3.82E-09	1.06E-08	3.05E-09	1.57E-09	4.63E-09
2493	570094.2	4215614	4.56E-08	2.58E-08	7.14E-08	6.96E-09	3.93E-09	1.09E-08	3.14E-09	1.62E-09	4.76E-09
2494	569902.3	4215643	3.51E-08	1.99E-08	5.49E-08	5.36E-09	3.02E-09	8.38E-09	2.42E-09	1.24E-09	3.66E-09
2495	569893.5	4215641	3.56E-08	2.02E-08	5.58E-08	5.44E-09	3.07E-09	8.51E-09	2.46E-09	1.26E-09	3.72E-09
2496	569884.6	4215639	3.62E-08	2.05E-08	5.67E-08	5.53E-09	3.12E-09	8.65E-09	2.50E-09	1.28E-09	3.78E-09
2497	569875.8	4215637	3.68E-08	2.08E-08	5.76E-08	5.62E-09	3.17E-09	8.79E-09	2.54E-09	1.31E-09	3.84E-09

2498	569867	4215634	3.74E-08	2.12E-08	5.86E-08	5.71E-09	3.22E-09	8.93E-09	2.58E-09	1.33E-09	3.90E-09
2499	569858.1	4215632	3.80E-08	2.15E-08	5.95E-08	5.80E-09	3.27E-09	9.08E-09	2.62E-09	1.35E-09	3.97E-09
2500	569849.3	4215630	3.86E-08	2.19E-08	6.05E-08	5.90E-09	3.33E-09	9.22E-09	2.66E-09	1.37E-09	4.03E-09
2501	569840.5	4215628	3.92E-08	2.22E-08	6.14E-08	5.99E-09	3.38E-09	9.37E-09	2.70E-09	1.39E-09	4.09E-09
2502	569831.6	4215625	3.98E-08	2.26E-08	6.24E-08	6.08E-09	3.43E-09	9.51E-09	2.74E-09	1.41E-09	4.16E-09
2503	569822.8	4215623	4.04E-08	2.29E-08	6.33E-08	6.17E-09	3.48E-09	9.66E-09	2.79E-09	1.43E-09	4.22E-09
2504	569814	4215621	4.10E-08	2.32E-08	6.43E-08	6.26E-09	3.53E-09	9.80E-09	2.83E-09	1.46E-09	4.28E-09
2505	569937.6	4215653	3.30E-08	1.87E-08	5.16E-08	5.03E-09	2.84E-09	7.87E-09	2.27E-09	1.17E-09	3.44E-09
2506	569947	4215651	3.32E-08	1.88E-08	5.20E-08	5.07E-09	2.86E-09	7.93E-09	2.29E-09	1.18E-09	3.46E-09
2507	569956.3	4215649	3.34E-08	1.89E-08	5.23E-08	5.10E-09	2.88E-09	7.98E-09	2.30E-09	1.19E-09	3.49E-09
2508	569965.6	4215647	3.37E-08	1.91E-08	5.28E-08	5.14E-09	2.90E-09	8.05E-09	2.32E-09	1.19E-09	3.52E-09
2509	569974.9	4215646	3.40E-08	1.93E-08	5.33E-08	5.19E-09	2.93E-09	8.12E-09	2.34E-09	1.21E-09	3.55E-09
2510	569984.2	4215644	3.44E-08	1.95E-08	5.38E-08	5.25E-09	2.96E-09	8.21E-09	2.37E-09	1.22E-09	3.59E-09
2511	569993.5	4215642	3.47E-08	1.97E-08	5.44E-08	5.31E-09	2.99E-09	8.30E-09	2.39E-09	1.23E-09	3.63E-09
2512	570002.9	4215641	3.52E-08	1.99E-08	5.51E-08	5.38E-09	3.03E-09	8.41E-09	2.43E-09	1.25E-09	3.67E-09
2513	570012.2	4215639	3.57E-08	2.02E-08	5.59E-08	5.45E-09	3.08E-09	8.53E-09	2.46E-09	1.27E-09	3.73E-09
2514	570021.5	4215637	3.62E-08	2.05E-08	5.67E-08	5.53E-09	3.12E-09	8.65E-09	2.50E-09	1.28E-09	3.78E-09
2515	570030.8	4215636	3.68E-08	2.09E-08	5.77E-08	5.62E-09	3.17E-09	8.79E-09	2.54E-09	1.31E-09	3.84E-09
2516	570040.1	4215634	3.75E-08	2.12E-08	5.87E-08	5.72E-09	3.23E-09	8.95E-09	2.58E-09	1.33E-09	3.91E-09
2517	570049.4	4215632	3.82E-08	2.16E-08	5.98E-08	5.83E-09	3.29E-09	9.12E-09	2.63E-09	1.35E-09	3.99E-09
2518	570058.7	4215631	3.90E-08	2.21E-08	6.11E-08	5.95E-09	3.36E-09	9.31E-09	2.69E-09	1.38E-09	4.07E-09
2519	570068.1	4215629	3.98E-08	2.26E-08	6.24E-08	6.08E-09	3.43E-09	9.51E-09	2.74E-09	1.41E-09	4.16E-09
2520	570077.4	4215627	4.07E-08	2.31E-08	6.38E-08	6.22E-09	3.51E-09	9.73E-09	2.81E-09	1.44E-09	4.25E-09
2521	570086.7	4215626	4.18E-08	2.37E-08	6.54E-08	6.38E-09	3.60E-09	9.97E-09	2.88E-09	1.48E-09	4.36E-09
2522	570096	4215624	4.29E-08	2.43E-08	6.72E-08	6.55E-09	3.70E-09	1.02E-08	2.96E-09	1.52E-09	4.48E-09
2523	569930.6	4215660	3.16E-08	1.79E-08	4.96E-08	4.83E-09	2.73E-09	7.56E-09	2.18E-09	1.12E-09	3.30E-09
2524	569921.8	4215658	3.21E-08	1.82E-08	5.03E-08	4.90E-09	2.77E-09	7.67E-09	2.21E-09	1.14E-09	3.35E-09
2525	569895.4	4215651	3.36E-08	1.90E-08	5.27E-08	5.13E-09	2.90E-09	8.03E-09	2.32E-09	1.19E-09	3.51E-09
2526	569886.6	4215649	3.41E-08	1.93E-08	5.35E-08	5.21E-09	2.94E-09	8.15E-09	2.35E-09	1.21E-09	3.56E-09
2527	569877.8	4215647	3.47E-08	1.96E-08	5.43E-08	5.30E-09	2.99E-09	8.28E-09	2.39E-09	1.23E-09	3.62E-09
2528	569869	4215644	3.52E-08	2.00E-08	5.52E-08	5.38E-09	3.04E-09	8.41E-09	2.43E-09	1.25E-09	3.68E-09
2529	569860.2	4215642	3.58E-08	2.03E-08	5.61E-08	5.46E-09	3.08E-09	8.55E-09	2.47E-09	1.27E-09	3.74E-09
2530	569851.4	4215640	3.64E-08	2.06E-08	5.69E-08	5.55E-09	3.13E-09	8.68E-09	2.51E-09	1.29E-09	3.79E-09
2531	569842.6	4215637	3.69E-08	2.09E-08	5.78E-08	5.64E-09	3.18E-09	8.82E-09	2.54E-09	1.31E-09	3.85E-09
2532	569833.8	4215635	3.75E-08	2.12E-08	5.87E-08	5.72E-09	3.23E-09	8.96E-09	2.58E-09	1.33E-09	3.91E-09
2533	569816.2	4215631	3.86E-08	2.19E-08	6.05E-08	5.90E-09	3.33E-09	9.22E-09	2.66E-09	1.37E-09	4.03E-09
2534	569939.4	4215662	3.12E-08	1.77E-08	4.88E-08	4.76E-09	2.69E-09	7.45E-09	2.15E-09	1.11E-09	3.25E-09
2535	569948.7	4215661	3.14E-08	1.78E-08	4.92E-08	4.79E-09	2.70E-09	7.50E-09	2.16E-09	1.11E-09	3.28E-09
2536	569958	4215659	3.16E-08	1.79E-08	4.95E-08	4.83E-09	2.72E-09	7.55E-09	2.18E-09	1.12E-09	3.30E-09
2537	569967.4	4215657	3.19E-08	1.81E-08	4.99E-08	4.87E-09	2.75E-09	7.61E-09	2.20E-09	1.13E-09	3.33E-09
2538	569976.7	4215656	3.22E-08	1.82E-08	5.04E-08	4.91E-09	2.77E-09	7.68E-09	2.22E-09	1.14E-09	3.36E-09
2539	569986	4215654	3.25E-08	1.84E-08	5.09E-08	4.96E-09	2.80E-09	7.76E-09	2.24E-09	1.15E-09	3.39E-09
2540	569995.3	4215652	3.28E-08	1.86E-08	5.14E-08	5.02E-09	2.83E-09	7.85E-09	2.26E-09	1.16E-09	3.43E-09
2541	570004.6	4215651	3.33E-08	1.89E-08	5.21E-08	5.08E-09	2.87E-09	7.95E-09	2.29E-09	1.18E-09	3.47E-09
2542	570013.9	4215649	3.38E-08	1.91E-08	5.29E-08	5.16E-09	2.91E-09	8.06E-09	2.33E-09	1.20E-09	3.52E-09
2543	570023.3	4215647	3.43E-08	1.94E-08	5.37E-08	5.24E-09	2.96E-09	8.19E-09	2.36E-09	1.22E-09	3.58E-09
2544	570032.6	4215646	3.49E-08	1.97E-08	5.46E-08	5.32E-09	3.00E-09	8.33E-09	2.40E-09	1.24E-09	3.64E-09
2545	570041.9	4215644	3.55E-08	2.01E-08	5.55E-08	5.41E-09	3.05E-09	8.47E-09	2.44E-09	1.26E-09	3.70E-09
2546	570051.2	4215642	3.61E-08	2.05E-08	5.66E-08	5.51E-09	3.11E-09	8.62E-09	2.49E-09	1.28E-09	3.77E-09
2547	570060.5	4215641	3.68E-08	2.09E-08	5.77E-08	5.62E-09	3.17E-09	8.80E-09	2.54E-09	1.31E-09	3.84E-09
2548	570069.8	4215639	3.76E-08	2.13E-08	5.89E-08	5.74E-09	3.24E-09	8.98E-09	2.59E-09	1.33E-09	3.93E-09
2549	570079.1	4215637	3.85E-08	2.18E-08	6.03E-08	5.87E-09	3.31E-09	9.19E-09	2.65E-09	1.36E-09	4.02E-09
2550	570088.5	4215636	3.94E-08	2.23E-08	6.17E-08	6.02E-09	3.40E-09	9.41E-09	2.72E-09	1.40E-09	4.11E-09
2551	570097.8	4215634	4.04E-08	2.29E-08	6.34E-08	6.18E-09	3.49E-09	9.66E-09	2.79E-09	1.43E-09	4.22E-09
2552	569932	4215670	3.00E-08	1.70E-08	4.70E-08	4.58E-09	2.59E-09	7.17E-09	2.07E-09	1.06E-09	3.13E-09
2553	569922.9	4215667	3.05E-08	1.73E-08	4.77E-08	4.65E-09	2.62E-09	7.27E-09	2.10E-09	1.08E-09	3.18E-09
2554	569913.7	4215665	3.09E-08	1.75E-08	4.84E-08	4.72E-09	2.66E-09	7.38E-09	2.13E-09	1.10E-09	3.23E-09
2555	569877	4215656	3.29E-08	1.86E-08	5.16E-08	5.03E-09	2.84E-09	7.86E-09	2.27E-09	1.17E-09	3.44E-09
2556	569867.9	4215653	3.34E-08	1.89E-08	5.24E-08	5.11E-09	2.88E-09	7.99E-09	2.30E-09	1.19E-09	3.49E-09
2557	569858.7	4215651	3.40E-08	1.93E-08	5.32E-08	5.19E-09	2.93E-09	8.12E-09	2.34E-09	1.21E-09	3.55E-09
2558	569849.5	4215649	3.45E-08	1.96E-08	5.41E-08	5.27E-09	2.98E-09	8.25E-09	2.38E-09	1.22E-09	3.60E-09

2559	569840.4	4215646	3.51E-08	1.99E-08	5.49E-08	5.36E-09	3.02E-09	8.38E-09	2.42E-09	1.24E-09	3.66E-09
2560	569831.2	4215644	3.56E-08	2.02E-08	5.58E-08	5.44E-09	3.07E-09	8.51E-09	2.46E-09	1.26E-09	3.72E-09
2561	569941.2	4215672	2.96E-08	1.68E-08	4.63E-08	4.52E-09	2.55E-09	7.06E-09	2.04E-09	1.05E-09	3.09E-09
2562	569950.5	4215671	2.98E-08	1.69E-08	4.66E-08	4.54E-09	2.56E-09	7.11E-09	2.05E-09	1.06E-09	3.11E-09
2563	569959.8	4215669	3.00E-08	1.70E-08	4.69E-08	4.58E-09	2.58E-09	7.16E-09	2.07E-09	1.06E-09	3.13E-09
2564	569969.1	4215667	3.02E-08	1.71E-08	4.73E-08	4.61E-09	2.60E-09	7.22E-09	2.08E-09	1.07E-09	3.15E-09
2565	569978.4	4215665	3.05E-08	1.73E-08	4.78E-08	4.66E-09	2.63E-09	7.28E-09	2.10E-09	1.08E-09	3.18E-09
2566	569987.8	4215664	3.08E-08	1.74E-08	4.82E-08	4.70E-09	2.65E-09	7.35E-09	2.12E-09	1.09E-09	3.21E-09
2567	569997.1	4215662	3.11E-08	1.76E-08	4.88E-08	4.75E-09	2.68E-09	7.44E-09	2.15E-09	1.10E-09	3.25E-09
2568	570006.4	4215660	3.15E-08	1.79E-08	4.94E-08	4.81E-09	2.72E-09	7.53E-09	2.17E-09	1.12E-09	3.29E-09
2569	570015.7	4215659	3.20E-08	1.81E-08	5.01E-08	4.88E-09	2.75E-09	7.63E-09	2.20E-09	1.13E-09	3.34E-09
2570	570025	4215657	3.24E-08	1.84E-08	5.08E-08	4.95E-09	2.80E-09	7.75E-09	2.24E-09	1.15E-09	3.39E-09
2571	570034.3	4215655	3.30E-08	1.87E-08	5.17E-08	5.03E-09	2.84E-09	7.88E-09	2.27E-09	1.17E-09	3.44E-09
2572	570043.7	4215654	3.36E-08	1.90E-08	5.26E-08	5.12E-09	2.89E-09	8.01E-09	2.31E-09	1.19E-09	3.50E-09
2573	570053	4215652	3.42E-08	1.94E-08	5.35E-08	5.22E-09	2.95E-09	8.16E-09	2.36E-09	1.21E-09	3.57E-09
2574	570062.3	4215650	3.49E-08	1.97E-08	5.46E-08	5.32E-09	3.00E-09	8.33E-09	2.40E-09	1.24E-09	3.64E-09
2575	570071.6	4215649	3.56E-08	2.02E-08	5.58E-08	5.44E-09	3.07E-09	8.50E-09	2.45E-09	1.26E-09	3.72E-09
2576	570080.9	4215647	3.64E-08	2.06E-08	5.70E-08	5.56E-09	3.14E-09	8.70E-09	2.51E-09	1.29E-09	3.80E-09
2577	570090.2	4215645	3.73E-08	2.11E-08	5.84E-08	5.69E-09	3.21E-09	8.90E-09	2.57E-09	1.32E-09	3.89E-09
2578	570099.5	4215644	3.82E-08	2.17E-08	5.99E-08	5.84E-09	3.29E-09	9.13E-09	2.63E-09	1.36E-09	3.99E-09
2579	569933.8	4215680	2.85E-08	1.61E-08	4.46E-08	4.35E-09	2.46E-09	6.81E-09	1.96E-09	1.01E-09	2.97E-09
2580	569924.7	4215677	2.89E-08	1.64E-08	4.53E-08	4.41E-09	2.49E-09	6.90E-09	1.99E-09	1.02E-09	3.02E-09
2581	569915.6	4215675	2.93E-08	1.66E-08	4.59E-08	4.47E-09	2.52E-09	7.00E-09	2.02E-09	1.04E-09	3.06E-09
2582	569906.5	4215673	2.97E-08	1.68E-08	4.66E-08	4.54E-09	2.56E-09	7.10E-09	2.05E-09	1.05E-09	3.10E-09
2583	569870	4215663	3.16E-08	1.79E-08	4.95E-08	4.83E-09	2.73E-09	7.56E-09	2.18E-09	1.12E-09	3.30E-09
2584	569860.9	4215661	3.21E-08	1.82E-08	5.03E-08	4.90E-09	2.77E-09	7.67E-09	2.21E-09	1.14E-09	3.35E-09
2585	569851.8	4215659	3.26E-08	1.85E-08	5.11E-08	4.98E-09	2.81E-09	7.79E-09	2.25E-09	1.16E-09	3.41E-09
2586	569842.7	4215656	3.31E-08	1.88E-08	5.19E-08	5.06E-09	2.85E-09	7.91E-09	2.28E-09	1.18E-09	3.46E-09
2587	569833.6	4215654	3.36E-08	1.91E-08	5.27E-08	5.14E-09	2.90E-09	8.04E-09	2.32E-09	1.19E-09	3.51E-09
2588	569943	4215682	2.81E-08	1.59E-08	4.40E-08	4.29E-09	2.42E-09	6.71E-09	1.94E-09	9.97E-10	2.93E-09
2589	569952.3	4215680	2.83E-08	1.60E-08	4.43E-08	4.32E-09	2.44E-09	6.76E-09	1.95E-09	1.00E-09	2.95E-09
2590	569961.6	4215679	2.85E-08	1.61E-08	4.46E-08	4.35E-09	2.45E-09	6.80E-09	1.96E-09	1.01E-09	2.97E-09
2591	569970.9	4215677	2.87E-08	1.63E-08	4.50E-08	4.38E-09	2.47E-09	6.86E-09	1.98E-09	1.02E-09	3.00E-09
2592	569980.2	4215675	2.90E-08	1.64E-08	4.54E-08	4.42E-09	2.50E-09	6.92E-09	2.00E-09	1.03E-09	3.02E-09
2593	569989.5	4215674	2.92E-08	1.66E-08	4.58E-08	4.47E-09	2.52E-09	6.99E-09	2.02E-09	1.04E-09	3.05E-09
2594	569998.8	4215672	2.96E-08	1.67E-08	4.63E-08	4.51E-09	2.55E-09	7.06E-09	2.04E-09	1.05E-09	3.09E-09
2595	570008.2	4215670	2.99E-08	1.69E-08	4.69E-08	4.57E-09	2.58E-09	7.15E-09	2.06E-09	1.06E-09	3.12E-09
2596	570017.5	4215669	3.03E-08	1.72E-08	4.75E-08	4.63E-09	2.61E-09	7.24E-09	2.09E-09	1.08E-09	3.16E-09
2597	570026.8	4215667	3.08E-08	1.74E-08	4.82E-08	4.70E-09	2.65E-09	7.35E-09	2.12E-09	1.09E-09	3.21E-09
2598	570036.1	4215665	3.13E-08	1.77E-08	4.90E-08	4.77E-09	2.69E-09	7.47E-09	2.15E-09	1.11E-09	3.26E-09
2599	570045.4	4215664	3.18E-08	1.80E-08	4.98E-08	4.86E-09	2.74E-09	7.60E-09	2.19E-09	1.13E-09	3.32E-09
2600	570054.7	4215662	3.24E-08	1.84E-08	5.08E-08	4.95E-09	2.79E-09	7.74E-09	2.23E-09	1.15E-09	3.38E-09
2601	570064.1	4215660	3.30E-08	1.87E-08	5.18E-08	5.04E-09	2.85E-09	7.89E-09	2.28E-09	1.17E-09	3.45E-09
2602	570073.4	4215659	3.37E-08	1.91E-08	5.28E-08	5.15E-09	2.91E-09	8.06E-09	2.32E-09	1.20E-09	3.52E-09
2603	570082.7	4215657	3.45E-08	1.95E-08	5.40E-08	5.26E-09	2.97E-09	8.23E-09	2.38E-09	1.22E-09	3.60E-09
2604	570092	4215655	3.53E-08	2.00E-08	5.53E-08	5.39E-09	3.04E-09	8.43E-09	2.43E-09	1.25E-09	3.68E-09
2605	570101.3	4215654	3.62E-08	2.05E-08	5.67E-08	5.52E-09	3.12E-09	8.64E-09	2.49E-09	1.28E-09	3.78E-09
2606	569935.7	4215690	2.71E-08	1.54E-08	4.25E-08	4.14E-09	2.34E-09	6.47E-09	1.87E-09	9.61E-10	2.83E-09
2607	569926.6	4215687	2.75E-08	1.56E-08	4.30E-08	4.19E-09	2.37E-09	6.56E-09	1.89E-09	9.74E-10	2.87E-09
2608	569917.5	4215685	2.78E-08	1.58E-08	4.36E-08	4.25E-09	2.40E-09	6.65E-09	1.92E-09	9.87E-10	2.91E-09
2609	569908.4	4215683	2.82E-08	1.60E-08	4.42E-08	4.31E-09	2.43E-09	6.74E-09	1.95E-09	1.00E-09	2.95E-09
2610	569899.4	4215680	2.86E-08	1.62E-08	4.49E-08	4.37E-09	2.47E-09	6.84E-09	1.97E-09	1.02E-09	2.99E-09
2611	569863.1	4215671	3.04E-08	1.72E-08	4.76E-08	4.64E-09	2.62E-09	7.26E-09	2.10E-09	1.08E-09	3.17E-09
2612	569854	4215669	3.09E-08	1.75E-08	4.84E-08	4.71E-09	2.66E-09	7.37E-09	2.13E-09	1.10E-09	3.22E-09
2613	569844.9	4215666	3.13E-08	1.78E-08	4.91E-08	4.79E-09	2.70E-09	7.49E-09	2.16E-09	1.11E-09	3.27E-09
2614	569944.7	4215692	2.68E-08	1.52E-08	4.19E-08	4.09E-09	2.31E-09	6.39E-09	1.84E-09	9.49E-10	2.79E-09
2615	569954	4215690	2.69E-08	1.53E-08	4.22E-08	4.11E-09	2.32E-09	6.43E-09	1.86E-09	9.56E-10	2.81E-09
2616	569963.4	4215689	2.71E-08	1.54E-08	4.25E-08	4.14E-09	2.34E-09	6.48E-09	1.87E-09	9.62E-10	2.83E-09
2617	569972.7	4215687	2.74E-08	1.55E-08	4.28E-08	4.18E-09	2.36E-09	6.53E-09	1.88E-09	9.70E-10	2.86E-09
2618	569982	4215685	2.76E-08	1.56E-08	4.32E-08	4.21E-09	2.38E-09	6.59E-09	1.90E-09	9.79E-10	2.88E-09
2619	569991.3	4215684	2.79E-08	1.58E-08	4.36E-08	4.25E-09	2.40E-09	6.65E-09	1.92E-09	9.88E-10	2.91E-09

2620	570000.6	4215682	2.81E-08	1.59E-08	4.41E-08	4.30E-09	2.42E-09	6.72E-09	1.94E-09	9.98E-10	2.94E-09
2621	570009.9	4215680	2.85E-08	1.61E-08	4.46E-08	4.35E-09	2.45E-09	6.80E-09	1.96E-09	1.01E-09	2.97E-09
2622	570019.2	4215678	2.88E-08	1.63E-08	4.51E-08	4.40E-09	2.48E-09	6.88E-09	1.99E-09	1.02E-09	3.01E-09
2623	570028.6	4215677	2.92E-08	1.66E-08	4.58E-08	4.46E-09	2.52E-09	6.98E-09	2.01E-09	1.04E-09	3.05E-09
2624	570037.9	4215675	2.97E-08	1.68E-08	4.65E-08	4.54E-09	2.56E-09	7.10E-09	2.05E-09	1.05E-09	3.10E-09
2625	570047.2	4215673	3.02E-08	1.71E-08	4.74E-08	4.62E-09	2.60E-09	7.22E-09	2.08E-09	1.07E-09	3.16E-09
2626	570056.5	4215672	3.08E-08	1.74E-08	4.82E-08	4.70E-09	2.65E-09	7.36E-09	2.12E-09	1.09E-09	3.21E-09
2627	570065.8	4215670	3.14E-08	1.78E-08	4.92E-08	4.79E-09	2.70E-09	7.50E-09	2.16E-09	1.11E-09	3.28E-09
2628	570075.1	4215668	3.20E-08	1.81E-08	5.02E-08	4.89E-09	2.76E-09	7.65E-09	2.21E-09	1.14E-09	3.34E-09
2629	570084.5	4215667	3.27E-08	1.85E-08	5.12E-08	5.00E-09	2.82E-09	7.81E-09	2.25E-09	1.16E-09	3.41E-09
2630	570093.8	4215665	3.35E-08	1.90E-08	5.24E-08	5.11E-09	2.88E-09	8.00E-09	2.31E-09	1.19E-09	3.49E-09
2631	570103.1	4215663	3.43E-08	1.94E-08	5.37E-08	5.24E-09	2.95E-09	8.19E-09	2.36E-09	1.22E-09	3.58E-09
2632	569937.5	4215699	2.58E-08	1.46E-08	4.05E-08	3.94E-09	2.23E-09	6.17E-09	1.78E-09	9.16E-10	2.70E-09
2633	569928.4	4215697	2.62E-08	1.48E-08	4.10E-08	3.99E-09	2.25E-09	6.25E-09	1.80E-09	9.28E-10	2.73E-09
2634	569919.4	4215695	2.65E-08	1.50E-08	4.15E-08	4.05E-09	2.28E-09	6.33E-09	1.83E-09	9.40E-10	2.77E-09
2635	569910.4	4215692	2.68E-08	1.52E-08	4.21E-08	4.10E-09	2.31E-09	6.41E-09	1.85E-09	9.52E-10	2.80E-09
2636	569901.3	4215690	2.72E-08	1.54E-08	4.26E-08	4.16E-09	2.34E-09	6.50E-09	1.88E-09	9.65E-10	2.84E-09
2637	569892.3	4215688	2.76E-08	1.56E-08	4.33E-08	4.22E-09	2.38E-09	6.60E-09	1.90E-09	9.79E-10	2.88E-09
2638	569946.5	4215702	2.55E-08	1.45E-08	4.00E-08	3.90E-09	2.20E-09	6.10E-09	1.76E-09	9.05E-10	2.66E-09
2639	569955.8	4215700	2.57E-08	1.46E-08	4.03E-08	3.92E-09	2.21E-09	6.14E-09	1.77E-09	9.12E-10	2.68E-09
2640	569965.1	4215698	2.59E-08	1.47E-08	4.06E-08	3.95E-09	2.23E-09	6.19E-09	1.78E-09	9.19E-10	2.70E-09
2641	569974.4	4215697	2.61E-08	1.48E-08	4.09E-08	3.99E-09	2.25E-09	6.24E-09	1.80E-09	9.26E-10	2.73E-09
2642	569983.8	4215695	2.63E-08	1.49E-08	4.13E-08	4.02E-09	2.27E-09	6.29E-09	1.81E-09	9.34E-10	2.75E-09
2643	569993.1	4215693	2.66E-08	1.51E-08	4.17E-08	4.06E-09	2.29E-09	6.35E-09	1.83E-09	9.43E-10	2.78E-09
2644	570002.4	4215692	2.68E-08	1.52E-08	4.21E-08	4.10E-09	2.31E-09	6.41E-09	1.85E-09	9.52E-10	2.80E-09
2645	570011.7	4215690	2.71E-08	1.54E-08	4.25E-08	4.14E-09	2.34E-09	6.48E-09	1.87E-09	9.63E-10	2.83E-09
2646	570021	4215688	2.75E-08	1.56E-08	4.30E-08	4.19E-09	2.37E-09	6.56E-09	1.89E-09	9.74E-10	2.87E-09
2647	570030.3	4215687	2.78E-08	1.58E-08	4.36E-08	4.25E-09	2.40E-09	6.65E-09	1.92E-09	9.88E-10	2.91E-09
2648	570039.6	4215685	2.83E-08	1.60E-08	4.43E-08	4.32E-09	2.44E-09	6.75E-09	1.95E-09	1.00E-09	2.95E-09
2649	570049	4215683	2.88E-08	1.63E-08	4.51E-08	4.39E-09	2.48E-09	6.87E-09	1.98E-09	1.02E-09	3.00E-09
2650	570058.3	4215682	2.93E-08	1.66E-08	4.59E-08	4.47E-09	2.52E-09	7.00E-09	2.02E-09	1.04E-09	3.06E-09
2651	570067.6	4215680	2.98E-08	1.69E-08	4.68E-08	4.56E-09	2.57E-09	7.13E-09	2.06E-09	1.06E-09	3.12E-09
2652	570076.9	4215678	3.05E-08	1.73E-08	4.77E-08	4.65E-09	2.62E-09	7.27E-09	2.10E-09	1.08E-09	3.18E-09
2653	570086.2	4215677	3.11E-08	1.76E-08	4.87E-08	4.75E-09	2.68E-09	7.43E-09	2.14E-09	1.10E-09	3.25E-09
2654	570095.5	4215675	3.18E-08	1.80E-08	4.98E-08	4.86E-09	2.74E-09	7.60E-09	2.19E-09	1.13E-09	3.32E-09
2655	570104.9	4215673	3.26E-08	1.85E-08	5.10E-08	4.97E-09	2.81E-09	7.78E-09	2.24E-09	1.16E-09	3.40E-09
2656	569939.3	4215709	2.47E-08	1.40E-08	3.86E-08	3.77E-09	2.13E-09	5.89E-09	1.70E-09	8.75E-10	2.57E-09
2657	569930.3	4215707	2.50E-08	1.41E-08	3.91E-08	3.81E-09	2.15E-09	5.96E-09	1.72E-09	8.85E-10	2.60E-09
2658	569921.3	4215705	2.53E-08	1.43E-08	3.96E-08	3.86E-09	2.18E-09	6.03E-09	1.74E-09	8.96E-10	2.64E-09
2659	569912.3	4215702	2.56E-08	1.45E-08	4.01E-08	3.91E-09	2.20E-09	6.11E-09	1.76E-09	9.07E-10	2.67E-09
2660	569903.3	4215700	2.59E-08	1.47E-08	4.06E-08	3.96E-09	2.23E-09	6.19E-09	1.79E-09	9.19E-10	2.70E-09
2661	569894.3	4215698	2.63E-08	1.49E-08	4.12E-08	4.01E-09	2.26E-09	6.27E-09	1.81E-09	9.32E-10	2.74E-09
2662	569885.3	4215695	2.66E-08	1.51E-08	4.17E-08	4.07E-09	2.30E-09	6.36E-09	1.84E-09	9.45E-10	2.78E-09
2663	569876.3	4215693	2.59E-08	1.47E-08	4.05E-08	3.95E-09	2.23E-09	6.18E-09	1.78E-09	9.18E-10	2.70E-09
2664	569948.3	4215712	2.44E-08	1.38E-08	3.82E-08	3.72E-09	2.10E-09	5.82E-09	1.68E-09	8.65E-10	2.55E-09
2665	569957.6	4215710	2.46E-08	1.39E-08	3.85E-08	3.75E-09	2.12E-09	5.87E-09	1.69E-09	8.71E-10	2.56E-09
2666	569966.9	4215708	2.48E-08	1.40E-08	3.88E-08	3.78E-09	2.13E-09	5.91E-09	1.71E-09	8.78E-10	2.58E-09
2667	569976.2	4215707	2.50E-08	1.41E-08	3.91E-08	3.81E-09	2.15E-09	5.96E-09	1.72E-09	8.85E-10	2.61E-09
2668	569985.5	4215705	2.52E-08	1.43E-08	3.94E-08	3.84E-09	2.17E-09	6.01E-09	1.74E-09	8.93E-10	2.63E-09
2669	569994.8	4215703	2.54E-08	1.44E-08	3.98E-08	3.88E-09	2.19E-09	6.07E-09	1.75E-09	9.02E-10	2.65E-09
2670	570004.2	4215702	2.57E-08	1.45E-08	4.02E-08	3.92E-09	2.21E-09	6.13E-09	1.77E-09	9.10E-10	2.68E-09
2671	570013.5	4215700	2.59E-08	1.47E-08	4.06E-08	3.96E-09	2.23E-09	6.19E-09	1.79E-09	9.19E-10	2.71E-09
2672	570022.8	4215698	2.62E-08	1.48E-08	4.11E-08	4.00E-09	2.26E-09	6.26E-09	1.81E-09	9.30E-10	2.74E-09
2673	570032.1	4215696	2.66E-08	1.51E-08	4.16E-08	4.06E-09	2.29E-09	6.35E-09	1.83E-09	9.42E-10	2.77E-09
2674	570041.4	4215695	2.70E-08	1.53E-08	4.22E-08	4.12E-09	2.32E-09	6.44E-09	1.86E-09	9.57E-10	2.81E-09
2675	570050.7	4215693	2.74E-08	1.55E-08	4.29E-08	4.19E-09	2.36E-09	6.55E-09	1.89E-09	9.72E-10	2.86E-09
2676	570060	4215691	2.79E-08	1.58E-08	4.37E-08	4.26E-09	2.40E-09	6.66E-09	1.92E-09	9.89E-10	2.91E-09
2677	570069.4	4215690	2.84E-08	1.61E-08	4.45E-08	4.34E-09	2.45E-09	6.79E-09	1.96E-09	1.01E-09	2.97E-09
2678	570078.7	4215688	2.90E-08	1.64E-08	4.54E-08	4.42E-09	2.50E-09	6.92E-09	2.00E-09	1.03E-09	3.02E-09
2679	570088	4215686	2.96E-08	1.68E-08	4.64E-08	4.52E-09	2.55E-09	7.07E-09	2.04E-09	1.05E-09	3.09E-09
2680	570097.3	4215685	3.03E-08	1.71E-08	4.74E-08	4.62E-09	2.61E-09	7.23E-09	2.09E-09	1.07E-09	3.16E-09

2681	569941.1	4215719	2.36E-08	1.34E-08	3.70E-08	3.60E-09	2.03E-09	5.64E-09	1.63E-09	8.37E-10	2.46E-09
2682	569932.1	4215717	2.39E-08	1.35E-08	3.74E-08	3.64E-09	2.06E-09	5.70E-09	1.64E-09	8.46E-10	2.49E-09
2683	569923.2	4215715	2.41E-08	1.37E-08	3.78E-08	3.69E-09	2.08E-09	5.77E-09	1.66E-09	8.56E-10	2.52E-09
2684	569914.2	4215712	2.44E-08	1.38E-08	3.83E-08	3.73E-09	2.10E-09	5.83E-09	1.68E-09	8.66E-10	2.55E-09
2685	569905.2	4215710	2.47E-08	1.40E-08	3.87E-08	3.77E-09	2.13E-09	5.90E-09	1.70E-09	8.77E-10	2.58E-09
2686	569896.3	4215708	2.50E-08	1.42E-08	3.92E-08	3.82E-09	2.16E-09	5.98E-09	1.73E-09	8.88E-10	2.61E-09
2687	569887.3	4215705	2.54E-08	1.44E-08	3.98E-08	3.87E-09	2.19E-09	6.06E-09	1.75E-09	9.00E-10	2.65E-09
2688	569878.3	4215703	2.57E-08	1.46E-08	4.03E-08	3.93E-09	2.22E-09	6.14E-09	1.77E-09	9.12E-10	2.69E-09
2689	569869.4	4215701	2.48E-08	1.41E-08	3.89E-08	3.79E-09	2.14E-09	5.93E-09	1.71E-09	8.81E-10	2.59E-09
2690	569950	4215721	2.33E-08	1.32E-08	3.66E-08	3.56E-09	2.01E-09	5.57E-09	1.61E-09	8.28E-10	2.44E-09
2691	569959.4	4215720	2.35E-08	1.33E-08	3.68E-08	3.59E-09	2.02E-09	5.61E-09	1.62E-09	8.33E-10	2.45E-09
2692	569968.7	4215718	2.37E-08	1.34E-08	3.71E-08	3.62E-09	2.04E-09	5.66E-09	1.63E-09	8.40E-10	2.47E-09
2693	569978	4215716	2.39E-08	1.35E-08	3.74E-08	3.65E-09	2.06E-09	5.70E-09	1.64E-09	8.47E-10	2.49E-09
2694	569987.3	4215715	2.41E-08	1.36E-08	3.77E-08	3.68E-09	2.08E-09	5.75E-09	1.66E-09	8.54E-10	2.51E-09
2695	569996.6	4215713	2.43E-08	1.38E-08	3.81E-08	3.71E-09	2.09E-09	5.81E-09	1.68E-09	8.62E-10	2.54E-09
2696	570005.9	4215711	2.45E-08	1.39E-08	3.84E-08	3.75E-09	2.11E-09	5.86E-09	1.69E-09	8.70E-10	2.56E-09
2697	570015.2	4215710	2.48E-08	1.40E-08	3.88E-08	3.78E-09	2.14E-09	5.92E-09	1.71E-09	8.79E-10	2.59E-09
2698	570024.6	4215708	2.51E-08	1.42E-08	3.92E-08	3.83E-09	2.16E-09	5.98E-09	1.73E-09	8.89E-10	2.62E-09
2699	570033.9	4215706	2.54E-08	1.44E-08	3.98E-08	3.88E-09	2.19E-09	6.06E-09	1.75E-09	9.00E-10	2.65E-09
2700	570043.2	4215705	2.58E-08	1.46E-08	4.03E-08	3.93E-09	2.22E-09	6.15E-09	1.77E-09	9.13E-10	2.69E-09
2701	570052.5	4215703	2.62E-08	1.48E-08	4.10E-08	3.99E-09	2.25E-09	6.25E-09	1.80E-09	9.28E-10	2.73E-09
2702	570061.8	4215701	2.66E-08	1.51E-08	4.17E-08	4.06E-09	2.29E-09	6.35E-09	1.83E-09	9.44E-10	2.78E-09
2703	570071.1	4215700	2.71E-08	1.53E-08	4.24E-08	4.14E-09	2.33E-09	6.47E-09	1.87E-09	9.61E-10	2.83E-09
2704	570080.5	4215698	2.76E-08	1.56E-08	4.33E-08	4.22E-09	2.38E-09	6.60E-09	1.90E-09	9.79E-10	2.88E-09
2705	570089.8	4215696	2.82E-08	1.60E-08	4.42E-08	4.31E-09	2.43E-09	6.74E-09	1.94E-09	1.00E-09	2.94E-09
2706	570099.1	4215695	2.88E-08	1.63E-08	4.52E-08	4.40E-09	2.49E-09	6.89E-09	1.99E-09	1.02E-09	3.01E-09
2707	570108.4	4215693	2.95E-08	1.67E-08	4.63E-08	4.51E-09	2.55E-09	7.06E-09	2.04E-09	1.05E-09	3.08E-09
2708	569942.9	4215729	2.26E-08	1.28E-08	3.54E-08	3.45E-09	1.95E-09	5.40E-09	1.56E-09	8.02E-10	2.36E-09
2709	569933.9	4215727	2.28E-08	1.29E-08	3.58E-08	3.49E-09	1.97E-09	5.46E-09	1.57E-09	8.10E-10	2.38E-09
2710	569925	4215724	2.31E-08	1.31E-08	3.62E-08	3.53E-09	1.99E-09	5.52E-09	1.59E-09	8.19E-10	2.41E-09
2711	569916.1	4215722	2.34E-08	1.32E-08	3.66E-08	3.57E-09	2.01E-09	5.58E-09	1.61E-09	8.28E-10	2.44E-09
2712	569907.2	4215720	2.36E-08	1.34E-08	3.70E-08	3.61E-09	2.04E-09	5.64E-09	1.63E-09	8.38E-10	2.47E-09
2713	569898.2	4215717	2.39E-08	1.35E-08	3.75E-08	3.65E-09	2.06E-09	5.71E-09	1.65E-09	8.48E-10	2.50E-09
2714	569889.3	4215715	2.42E-08	1.37E-08	3.79E-08	3.70E-09	2.09E-09	5.78E-09	1.67E-09	8.59E-10	2.53E-09
2715	569880.4	4215713	2.45E-08	1.39E-08	3.84E-08	3.75E-09	2.11E-09	5.86E-09	1.69E-09	8.70E-10	2.56E-09
2716	569871.4	4215711	2.37E-08	1.34E-08	3.72E-08	3.62E-09	2.04E-09	5.67E-09	1.64E-09	8.42E-10	2.48E-09
2717	569862.5	4215708	2.39E-08	1.35E-08	3.74E-08	3.65E-09	2.06E-09	5.71E-09	1.65E-09	8.48E-10	2.49E-09
2718	569591.2	4215444	4.20E-08	2.38E-08	6.58E-08	6.41E-09	3.62E-09	1.00E-08	2.89E-09	1.49E-09	4.38E-09
2719	569951.8	4215731	2.24E-08	1.27E-08	3.50E-08	3.41E-09	1.93E-09	5.34E-09	1.54E-09	7.93E-10	2.33E-09
2720	569961.1	4215730	2.25E-08	1.28E-08	3.53E-08	3.44E-09	1.94E-09	5.38E-09	1.55E-09	7.98E-10	2.35E-09
2721	569970.4	4215728	2.27E-08	1.28E-08	3.55E-08	3.46E-09	1.95E-09	5.42E-09	1.56E-09	8.04E-10	2.37E-09
2722	569979.8	4215726	2.29E-08	1.30E-08	3.58E-08	3.49E-09	1.97E-09	5.46E-09	1.58E-09	8.11E-10	2.39E-09
2723	569989.1	4215725	2.31E-08	1.31E-08	3.61E-08	3.52E-09	1.99E-09	5.51E-09	1.59E-09	8.18E-10	2.41E-09
2724	569998.4	4215723	2.33E-08	1.32E-08	3.65E-08	3.55E-09	2.01E-09	5.56E-09	1.60E-09	8.26E-10	2.43E-09
2725	570007.7	4215721	2.35E-08	1.33E-08	3.68E-08	3.59E-09	2.02E-09	5.61E-09	1.62E-09	8.33E-10	2.45E-09
2726	570017	4215720	2.37E-08	1.34E-08	3.72E-08	3.62E-09	2.04E-09	5.67E-09	1.63E-09	8.42E-10	2.48E-09
2727	570026.3	4215718	2.40E-08	1.36E-08	3.76E-08	3.66E-09	2.07E-09	5.73E-09	1.65E-09	8.51E-10	2.50E-09
2728	570035.6	4215716	2.43E-08	1.38E-08	3.81E-08	3.71E-09	2.09E-09	5.80E-09	1.67E-09	8.62E-10	2.54E-09
2729	570045	4215714	2.46E-08	1.40E-08	3.86E-08	3.76E-09	2.12E-09	5.88E-09	1.70E-09	8.74E-10	2.57E-09
2730	570054.3	4215713	2.50E-08	1.42E-08	3.92E-08	3.82E-09	2.15E-09	5.97E-09	1.72E-09	8.87E-10	2.61E-09
2731	570063.6	4215711	2.54E-08	1.44E-08	3.98E-08	3.88E-09	2.19E-09	6.07E-09	1.75E-09	9.01E-10	2.65E-09
2732	570072.9	4215709	2.59E-08	1.47E-08	4.05E-08	3.95E-09	2.23E-09	6.18E-09	1.78E-09	9.18E-10	2.70E-09
2733	570082.2	4215708	2.64E-08	1.49E-08	4.13E-08	4.02E-09	2.27E-09	6.30E-09	1.82E-09	9.35E-10	2.75E-09
2734	570091.5	4215706	2.69E-08	1.53E-08	4.22E-08	4.11E-09	2.32E-09	6.43E-09	1.86E-09	9.55E-10	2.81E-09
2735	570134.3	4215513	1.20E-07	6.81E-08	1.88E-07	1.84E-08	1.04E-08	2.87E-08	8.29E-09	4.27E-09	1.26E-08
2736	570122.9	4215521	1.05E-07	5.96E-08	1.65E-07	1.61E-08	9.06E-09	2.51E-08	7.25E-09	3.73E-09	1.10E-08
2737	570111.5	4215529	9.36E-08	5.30E-08	1.47E-07	1.43E-08	8.07E-09	2.24E-08	6.45E-09	3.32E-09	9.77E-09
2738	570121.1	4215531	9.43E-08	5.34E-08	1.48E-07	1.44E-08	8.12E-09	2.25E-08	6.50E-09	3.34E-09	9.84E-09
2739	570100.1	4215538	8.49E-08	4.81E-08	1.33E-07	1.30E-08	7.31E-09	2.03E-08	5.85E-09	3.01E-09	8.86E-09
2740	570109.8	4215539	8.48E-08	4.80E-08	1.33E-07	1.29E-08	7.30E-09	2.02E-08	5.84E-09	3.01E-09	8.85E-09
2741	570119.4	4215541	8.53E-08	4.83E-08	1.34E-07	1.30E-08	7.35E-09	2.04E-08	5.88E-09	3.02E-09	8.90E-09

2742	570129	4215543	8.63E-08	4.89E-08	1.35E-07	1.32E-08	7.44E-09	2.06E-08	5.95E-09	3.06E-09	9.01E-09
2743	570098.4	4215547	7.72E-08	4.38E-08	1.21E-07	1.18E-08	6.65E-09	1.84E-08	5.32E-09	2.74E-09	8.06E-09
2744	570108	4215549	7.72E-08	4.37E-08	1.21E-07	1.18E-08	6.65E-09	1.84E-08	5.32E-09	2.74E-09	8.05E-09
2745	570117.7	4215551	7.75E-08	4.39E-08	1.21E-07	1.18E-08	6.68E-09	1.85E-08	5.34E-09	2.75E-09	8.09E-09
2746	570096.7	4215557	7.06E-08	4.00E-08	1.11E-07	1.08E-08	6.08E-09	1.69E-08	4.86E-09	2.50E-09	7.37E-09
2747	570106.3	4215559	7.05E-08	4.00E-08	1.10E-07	1.08E-08	6.08E-09	1.68E-08	4.86E-09	2.50E-09	7.36E-09
2748	570115.9	4215561	7.08E-08	4.01E-08	1.11E-07	1.08E-08	6.10E-09	1.69E-08	4.88E-09	2.51E-09	7.39E-09
2749	570094.9	4215567	6.46E-08	3.66E-08	1.01E-07	9.87E-09	5.57E-09	1.54E-08	4.45E-09	2.29E-09	6.75E-09
2750	570104.6	4215569	6.47E-08	3.66E-08	1.01E-07	9.88E-09	5.57E-09	1.54E-08	4.46E-09	2.29E-09	6.75E-09
2751	570114.2	4215571	6.49E-08	3.68E-08	1.02E-07	9.92E-09	5.60E-09	1.55E-08	4.47E-09	2.30E-09	6.78E-09
2752	570123.8	4215572	6.56E-08	3.72E-08	1.03E-07	1.00E-08	5.66E-09	1.57E-08	4.52E-09	2.33E-09	6.85E-09
2753	570102.8	4215579	5.95E-08	3.37E-08	9.32E-08	9.09E-09	5.13E-09	1.42E-08	4.10E-09	2.11E-09	6.21E-09
2754	570112.5	4215580	5.98E-08	3.39E-08	9.37E-08	9.13E-09	5.15E-09	1.43E-08	4.12E-09	2.12E-09	6.24E-09
2755	570122.1	4215582	6.04E-08	3.42E-08	9.46E-08	9.22E-09	5.20E-09	1.44E-08	4.16E-09	2.14E-09	6.30E-09
2756	570101.1	4215589	5.50E-08	3.12E-08	8.61E-08	8.40E-09	4.74E-09	1.31E-08	3.79E-09	1.95E-09	5.74E-09
2757	570110.7	4215590	5.54E-08	3.14E-08	8.67E-08	8.45E-09	4.77E-09	1.32E-08	3.81E-09	1.96E-09	5.78E-09
2758	570099.3	4215598	5.12E-08	2.90E-08	8.01E-08	7.81E-09	4.41E-09	1.22E-08	3.53E-09	1.81E-09	5.34E-09
2759	570109	4215600	5.15E-08	2.92E-08	8.07E-08	7.87E-09	4.44E-09	1.23E-08	3.55E-09	1.83E-09	5.38E-09
2760	570118.6	4215602	5.20E-08	2.95E-08	8.15E-08	7.94E-09	4.48E-09	1.24E-08	3.58E-09	1.84E-09	5.43E-09
2761	570107.2	4215610	4.81E-08	2.72E-08	7.53E-08	7.34E-09	4.14E-09	1.15E-08	3.31E-09	1.71E-09	5.02E-09
2762	570105.5	4215620	4.49E-08	2.54E-08	7.04E-08	6.86E-09	3.87E-09	1.07E-08	3.10E-09	1.59E-09	4.69E-09
2763	570113.4	4215631	4.23E-08	2.40E-08	6.63E-08	6.47E-09	3.65E-09	1.01E-08	2.92E-09	1.50E-09	4.42E-09
2764	570111.7	4215641	3.97E-08	2.25E-08	6.21E-08	6.06E-09	3.42E-09	9.48E-09	2.73E-09	1.41E-09	4.14E-09
2765	570088.1	4215718	2.53E-08	1.43E-08	3.96E-08	3.86E-09	2.18E-09	6.04E-09	1.74E-09	8.96E-10	2.64E-09
2766	570097.7	4215720	2.54E-08	1.44E-08	3.98E-08	3.88E-09	2.19E-09	6.07E-09	1.75E-09	9.02E-10	2.65E-09

			T2		T2L3		T4f	
			314	570355.74				
			2.26E-02	1.28E-02	3.45E-03	1.95E-03	1.56E-03	8.02E-04
			Yr 1	Yr 2	Yr 1	Yr 2	Yr 1	Yr 2
1	570176.2	4215489	1.55E-02	8.77E-03	2.36E-03	1.33E-03	1.07E-03	5.49E-04
2	570192.2	4215484	1.75E-02	9.92E-03	2.67E-03	1.51E-03	1.21E-03	6.21E-04
3	570208.7	4215477	2.04E-02	1.16E-02	3.11E-03	1.76E-03	1.41E-03	7.23E-04
4	570225.2	4215470	2.35E-02	1.33E-02	3.58E-03	2.02E-03	1.62E-03	8.33E-04
5	570241.7	4215462	2.60E-02	1.47E-02	3.97E-03	2.24E-03	1.79E-03	9.22E-04
6	570258.2	4215455	2.76E-02	1.56E-02	4.21E-03	2.38E-03	1.90E-03	9.78E-04
7	570179.3	4215498	1.37E-02	7.75E-03	2.09E-03	1.18E-03	9.43E-04	4.85E-04
8	570162	4215500	1.23E-02	7.00E-03	1.89E-03	1.06E-03	8.51E-04	4.38E-04
9	570196.2	4215493	1.56E-02	8.81E-03	2.37E-03	1.34E-03	1.07E-03	5.52E-04
10	570212.7	4215486	1.82E-02	1.03E-02	2.79E-03	1.57E-03	1.26E-03	6.47E-04
11	570229.2	4215479	2.10E-02	1.19E-02	3.21E-03	1.81E-03	1.45E-03	7.47E-04
12	570237.5	4215475	2.23E-02	1.26E-02	3.40E-03	1.92E-03	1.54E-03	7.91E-04
13	570254	4215468	2.44E-02	1.38E-02	3.72E-03	2.10E-03	1.68E-03	8.64E-04
14	570183.7	4215507	1.24E-02	7.00E-03	1.89E-03	1.07E-03	8.52E-04	4.38E-04
15	570167.2	4215509	1.12E-02	6.34E-03	1.71E-03	9.64E-04	7.71E-04	3.97E-04
16	570150.7	4215511	1.02E-02	5.77E-03	1.55E-03	8.77E-04	7.01E-04	3.61E-04
17	570200.2	4215503	1.40E-02	7.95E-03	2.14E-03	1.21E-03	9.67E-04	4.98E-04
18	570216.7	4215495	1.64E-02	9.32E-03	2.51E-03	1.42E-03	1.13E-03	5.83E-04
19	570225	4215492	1.78E-02	1.01E-02	2.71E-03	1.53E-03	1.22E-03	6.30E-04
20	570241.5	4215484	2.01E-02	1.14E-02	3.07E-03	1.73E-03	1.39E-03	7.14E-04
21	570249.8	4215481	2.12E-02	1.20E-02	3.23E-03	1.82E-03	1.46E-03	7.50E-04
22	570266.3	4215473	2.28E-02	1.29E-02	3.48E-03	1.97E-03	1.57E-03	8.09E-04
23	570188.1	4215516	1.13E-02	6.39E-03	1.72E-03	9.72E-04	7.77E-04	4.00E-04
24	570172.2	4215518	1.02E-02	5.76E-03	1.55E-03	8.77E-04	7.01E-04	3.61E-04
25	570156.3	4215520	9.32E-03	5.28E-03	1.42E-03	8.03E-04	6.42E-04	3.31E-04
26	570140.5	4215522	8.58E-03	4.86E-03	1.31E-03	7.39E-04	5.91E-04	3.04E-04
27	570204.3	4215512	1.28E-02	7.27E-03	1.96E-03	1.11E-03	8.84E-04	4.55E-04
28	570220.8	4215504	1.50E-02	8.50E-03	2.29E-03	1.29E-03	1.03E-03	5.32E-04
29	570237.3	4215497	1.73E-02	9.77E-03	2.63E-03	1.49E-03	1.19E-03	6.12E-04
30	570253.8	4215490	1.92E-02	1.09E-02	2.93E-03	1.66E-03	1.32E-03	6.82E-04
31	570262.1	4215486	2.01E-02	1.14E-02	3.07E-03	1.73E-03	1.38E-03	7.12E-04
32	570191.4	4215526	1.03E-02	5.84E-03	1.57E-03	8.88E-04	7.11E-04	3.66E-04
33	570174.1	4215528	9.18E-03	5.20E-03	1.40E-03	7.91E-04	6.32E-04	3.25E-04
34	570156.8	4215530	8.38E-03	4.75E-03	1.28E-03	7.22E-04	5.77E-04	2.97E-04
35	570139.4	4215532	7.69E-03	4.36E-03	1.17E-03	6.63E-04	5.30E-04	2.73E-04
36	570208.3	4215521	1.18E-02	6.69E-03	1.80E-03	1.02E-03	8.14E-04	4.19E-04
37	570216.6	4215517	1.28E-02	7.22E-03	1.95E-03	1.10E-03	8.79E-04	4.52E-04
38	570233.1	4215510	1.48E-02	8.36E-03	2.25E-03	1.27E-03	1.02E-03	5.24E-04
39	570249.6	4215503	1.67E-02	9.45E-03	2.55E-03	1.44E-03	1.15E-03	5.92E-04
40	570266.1	4215495	1.83E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.50E-04
41	570274.4	4215492	1.90E-02	1.08E-02	2.91E-03	1.64E-03	1.31E-03	6.75E-04
42	570195.7	4215535	9.57E-03	5.42E-03	1.46E-03	8.24E-04	6.59E-04	3.39E-04
43	570179.1	4215537	8.58E-03	4.86E-03	1.31E-03	7.39E-04	5.91E-04	3.04E-04
44	570162.4	4215539	7.82E-03	4.43E-03	1.19E-03	6.74E-04	5.39E-04	2.77E-04
45	570145.7	4215541	7.21E-03	4.08E-03	1.10E-03	6.21E-04	4.97E-04	2.56E-04
46	570212.3	4215530	1.09E-02	6.18E-03	1.67E-03	9.40E-04	7.52E-04	3.87E-04
47	570228.8	4215523	1.26E-02	7.15E-03	1.93E-03	1.09E-03	8.70E-04	4.48E-04
48	570245.4	4215515	1.45E-02	8.19E-03	2.21E-03	1.25E-03	9.96E-04	5.13E-04

49	570261.9	4215508	1.62E-02	9.15E-03	2.47E-03	1.39E-03	1.11E-03	5.73E-04
50	570278.4	4215501	1.75E-02	9.93E-03	2.68E-03	1.51E-03	1.21E-03	6.22E-04
51	570200	4215544	8.90E-03	5.04E-03	1.36E-03	7.67E-04	6.14E-04	3.16E-04
52	570183.9	4215546	8.04E-03	4.56E-03	1.23E-03	6.93E-04	5.54E-04	2.85E-04
53	570167.7	4215548	7.32E-03	4.15E-03	1.12E-03	6.31E-04	5.04E-04	2.60E-04
54	570151.5	4215550	6.76E-03	3.83E-03	1.03E-03	5.83E-04	4.66E-04	2.40E-04
55	570135.4	4215552	6.29E-03	3.56E-03	9.60E-04	5.42E-04	4.33E-04	2.23E-04
56	570216.4	4215539	1.01E-02	5.73E-03	1.55E-03	8.72E-04	6.97E-04	3.59E-04
57	570232.9	4215532	1.17E-02	6.62E-03	1.78E-03	1.01E-03	8.05E-04	4.14E-04
58	570241.1	4215528	1.25E-02	7.08E-03	1.91E-03	1.08E-03	8.61E-04	4.43E-04
59	570257.6	4215521	1.41E-02	8.01E-03	2.16E-03	1.22E-03	9.75E-04	5.02E-04
60	570274.2	4215514	1.56E-02	8.83E-03	2.38E-03	1.34E-03	1.07E-03	5.53E-04
61	570203.5	4215553	8.27E-03	4.68E-03	1.26E-03	7.12E-04	5.70E-04	2.93E-04
62	570186.2	4215555	7.44E-03	4.21E-03	1.14E-03	6.41E-04	5.13E-04	2.64E-04
63	570168.8	4215557	6.73E-03	3.82E-03	1.03E-03	5.80E-04	4.64E-04	2.39E-04
64	570151.5	4215559	6.20E-03	3.51E-03	9.47E-04	5.34E-04	4.27E-04	2.20E-04
65	570134.2	4215561	5.74E-03	3.25E-03	8.77E-04	4.95E-04	3.96E-04	2.04E-04
66	570220.4	4215548	9.43E-03	5.34E-03	1.44E-03	8.13E-04	6.50E-04	3.35E-04
67	570228.6	4215545	1.02E-02	5.75E-03	1.55E-03	8.75E-04	7.00E-04	3.60E-04
68	570245.2	4215537	1.16E-02	6.59E-03	1.78E-03	1.00E-03	8.02E-04	4.13E-04
69	570253.4	4215534	1.24E-02	7.02E-03	1.89E-03	1.07E-03	8.53E-04	4.39E-04
70	570269.9	4215526	1.38E-02	7.81E-03	2.11E-03	1.19E-03	9.50E-04	4.89E-04
71	570286.5	4215519	1.50E-02	8.51E-03	2.29E-03	1.29E-03	1.03E-03	5.33E-04
72	570207.8	4215562	7.78E-03	4.41E-03	1.19E-03	6.70E-04	5.36E-04	2.76E-04
73	570191	4215564	7.03E-03	3.98E-03	1.07E-03	6.05E-04	4.84E-04	2.49E-04
74	570174.2	4215566	6.36E-03	3.60E-03	9.71E-04	5.48E-04	4.38E-04	2.25E-04
75	570157.4	4215568	5.86E-03	3.32E-03	8.94E-04	5.05E-04	4.03E-04	2.08E-04
76	570140.6	4215570	5.43E-03	3.08E-03	8.29E-04	4.68E-04	3.74E-04	1.93E-04
77	570224.4	4215557	8.82E-03	5.00E-03	1.35E-03	7.60E-04	6.08E-04	3.13E-04
78	570240.9	4215550	1.02E-02	5.75E-03	1.55E-03	8.75E-04	7.00E-04	3.60E-04
79	570257.5	4215543	1.15E-02	6.53E-03	1.76E-03	9.94E-04	7.95E-04	4.09E-04
80	570274	4215536	1.28E-02	7.27E-03	1.96E-03	1.11E-03	8.84E-04	4.55E-04
81	570282.2	4215532	1.34E-02	7.60E-03	2.05E-03	1.16E-03	9.25E-04	4.76E-04
82	570211.3	4215571	7.30E-03	4.14E-03	1.12E-03	6.29E-04	5.03E-04	2.59E-04
83	570193.4	4215573	6.56E-03	3.72E-03	1.00E-03	5.66E-04	4.52E-04	2.33E-04
84	570175.6	4215576	5.91E-03	3.35E-03	9.02E-04	5.09E-04	4.07E-04	2.10E-04
85	570157.8	4215578	5.41E-03	3.07E-03	8.26E-04	4.66E-04	3.73E-04	1.92E-04
86	570139.9	4215580	5.00E-03	2.83E-03	7.64E-04	4.31E-04	3.45E-04	1.77E-04
87	570220.2	4215570	7.70E-03	4.36E-03	1.18E-03	6.64E-04	5.31E-04	2.73E-04
88	570236.7	4215563	8.86E-03	5.02E-03	1.35E-03	7.64E-04	6.11E-04	3.14E-04
89	570253.2	4215556	1.01E-02	5.72E-03	1.54E-03	8.70E-04	6.96E-04	3.58E-04
90	570269.7	4215548	1.13E-02	6.43E-03	1.73E-03	9.78E-04	7.82E-04	4.03E-04
91	570286.3	4215541	1.25E-02	7.09E-03	1.91E-03	1.08E-03	8.62E-04	4.44E-04
92	570215.6	4215580	6.89E-03	3.91E-03	1.05E-03	5.94E-04	4.75E-04	2.45E-04
93	570198.3	4215583	6.23E-03	3.53E-03	9.52E-04	5.37E-04	4.29E-04	2.21E-04
94	570180.9	4215585	5.64E-03	3.19E-03	8.61E-04	4.86E-04	3.88E-04	2.00E-04
95	570163.6	4215587	5.15E-03	2.92E-03	7.86E-04	4.44E-04	3.55E-04	1.83E-04
96	570146.3	4215589	4.76E-03	2.70E-03	7.27E-04	4.10E-04	3.28E-04	1.69E-04
97	570129	4215591	4.46E-03	2.52E-03	6.81E-04	3.84E-04	3.07E-04	1.58E-04
98	570232.5	4215576	7.75E-03	4.39E-03	1.18E-03	6.68E-04	5.34E-04	2.75E-04
99	570249	4215568	8.83E-03	5.00E-03	1.35E-03	7.61E-04	6.08E-04	3.13E-04
100	570265.5	4215561	9.96E-03	5.64E-03	1.52E-03	8.58E-04	6.86E-04	3.53E-04

101	570282	4215554	1.11E-02	6.29E-03	1.70E-03	9.57E-04	7.65E-04	3.94E-04
102	570290.3	4215550	1.16E-02	6.60E-03	1.78E-03	1.00E-03	8.02E-04	4.13E-04
103	570298.5	4215547	1.21E-02	6.88E-03	1.85E-03	1.05E-03	8.37E-04	4.31E-04
104	570219.8	4215590	6.49E-03	3.68E-03	9.92E-04	5.60E-04	4.48E-04	2.30E-04
105	570203	4215592	5.91E-03	3.35E-03	9.02E-04	5.09E-04	4.07E-04	2.10E-04
106	570186.1	4215594	5.37E-03	3.04E-03	8.20E-04	4.63E-04	3.70E-04	1.90E-04
107	570169.2	4215596	4.90E-03	2.78E-03	7.49E-04	4.22E-04	3.38E-04	1.74E-04
108	570152.4	4215598	4.55E-03	2.58E-03	6.94E-04	3.92E-04	3.13E-04	1.61E-04
109	570135.5	4215600	4.26E-03	2.41E-03	6.50E-04	3.67E-04	2.93E-04	1.51E-04
110	570236.5	4215585	7.20E-03	4.08E-03	1.10E-03	6.20E-04	4.96E-04	2.55E-04
111	570253	4215578	8.14E-03	4.61E-03	1.24E-03	7.01E-04	5.61E-04	2.89E-04
112	570261.3	4215574	8.65E-03	4.90E-03	1.32E-03	7.45E-04	5.96E-04	3.07E-04
113	570277.8	4215567	9.72E-03	5.51E-03	1.48E-03	8.38E-04	6.70E-04	3.45E-04
114	570294.3	4215559	1.08E-02	6.12E-03	1.65E-03	9.30E-04	7.44E-04	3.83E-04
115	570223.4	4215599	6.08E-03	3.44E-03	9.28E-04	5.24E-04	4.19E-04	2.16E-04
116	570205.7	4215601	5.54E-03	3.14E-03	8.46E-04	4.77E-04	3.82E-04	1.97E-04
117	570187.9	4215603	5.03E-03	2.85E-03	7.68E-04	4.33E-04	3.46E-04	1.78E-04
118	570170.1	4215605	4.58E-03	2.59E-03	6.99E-04	3.94E-04	3.15E-04	1.62E-04
119	570161.3	4215606	4.40E-03	2.49E-03	6.72E-04	3.79E-04	3.03E-04	1.56E-04
120	570143.5	4215608	4.09E-03	2.32E-03	6.25E-04	3.53E-04	2.82E-04	1.45E-04
121	570125.8	4215611	3.86E-03	2.19E-03	5.89E-04	3.32E-04	2.66E-04	1.37E-04
122	570232.3	4215598	6.32E-03	3.58E-03	9.64E-04	5.44E-04	4.35E-04	2.24E-04
123	570248.8	4215590	7.12E-03	4.03E-03	1.09E-03	6.13E-04	4.90E-04	2.52E-04
124	570265.3	4215583	7.49E-03	4.24E-03	1.14E-03	6.45E-04	5.16E-04	2.66E-04
125	570281.8	4215576	8.99E-03	5.09E-03	1.37E-03	7.75E-04	6.20E-04	3.19E-04
126	570290.1	4215572	9.49E-03	5.38E-03	1.45E-03	8.18E-04	6.54E-04	3.37E-04
127	570298.4	4215569	9.99E-03	5.66E-03	1.53E-03	8.61E-04	6.89E-04	3.54E-04
128	570227.7	4215608	5.69E-03	3.23E-03	8.70E-04	4.91E-04	3.92E-04	2.02E-04
129	570210.4	4215610	5.26E-03	2.98E-03	8.03E-04	4.53E-04	3.62E-04	1.87E-04
130	570193	4215612	4.80E-03	2.72E-03	7.33E-04	4.14E-04	3.31E-04	1.70E-04
131	570175.7	4215614	4.38E-03	2.48E-03	6.69E-04	3.78E-04	3.02E-04	1.55E-04
132	570158.4	4215616	4.06E-03	2.30E-03	6.20E-04	3.50E-04	2.80E-04	1.44E-04
133	570141.1	4215618	3.80E-03	2.15E-03	5.80E-04	3.27E-04	2.62E-04	1.35E-04
134	570123.8	4215620	3.60E-03	2.04E-03	5.49E-04	3.10E-04	2.48E-04	1.28E-04
135	570244.6	4215603	6.27E-03	3.55E-03	9.57E-04	5.40E-04	4.32E-04	2.22E-04
136	570261.1	4215596	6.52E-03	3.69E-03	9.95E-04	5.62E-04	4.49E-04	2.31E-04
137	570277.6	4215589	7.31E-03	4.14E-03	1.12E-03	6.30E-04	5.04E-04	2.59E-04
138	570294.1	4215581	8.29E-03	4.70E-03	1.27E-03	7.14E-04	5.71E-04	2.94E-04
139	570302.4	4215578	8.89E-03	5.03E-03	1.36E-03	7.66E-04	6.12E-04	3.15E-04
140	570231.9	4215617	5.35E-03	3.03E-03	8.17E-04	4.61E-04	3.69E-04	1.90E-04
141	570215	4215619	4.99E-03	2.83E-03	7.61E-04	4.30E-04	3.44E-04	1.77E-04
142	570198	4215621	4.58E-03	2.59E-03	6.99E-04	3.94E-04	3.15E-04	1.62E-04
143	570181.1	4215623	4.19E-03	2.38E-03	6.40E-04	3.61E-04	2.89E-04	1.49E-04
144	570164.2	4215625	3.88E-03	2.20E-03	5.93E-04	3.34E-04	2.67E-04	1.38E-04
145	570147.3	4215627	3.63E-03	2.06E-03	5.55E-04	3.13E-04	2.50E-04	1.29E-04
146	570130.3	4215629	3.44E-03	1.95E-03	5.25E-04	2.96E-04	2.37E-04	1.22E-04
147	570248.6	4215612	5.50E-03	3.11E-03	8.39E-04	4.74E-04	3.79E-04	1.95E-04
148	570256.9	4215609	5.76E-03	3.26E-03	8.80E-04	4.96E-04	3.97E-04	2.04E-04
149	570273.4	4215601	6.42E-03	3.64E-03	9.81E-04	5.53E-04	4.43E-04	2.28E-04
150	570289.9	4215594	7.21E-03	4.08E-03	1.10E-03	6.21E-04	4.97E-04	2.56E-04
151	570298.2	4215591	7.65E-03	4.34E-03	1.17E-03	6.59E-04	5.27E-04	2.71E-04
152	570314.7	4215583	8.67E-03	4.91E-03	1.32E-03	7.47E-04	5.97E-04	3.08E-04

153	570235.5	4215626	5.04E-03	2.86E-03	7.70E-04	4.34E-04	3.47E-04	1.79E-04
154	570226.7	4215627	4.86E-03	2.75E-03	7.42E-04	4.19E-04	3.35E-04	1.72E-04
155	570209	4215629	4.49E-03	2.54E-03	6.85E-04	3.87E-04	3.09E-04	1.59E-04
156	570191.3	4215632	4.11E-03	2.33E-03	6.27E-04	3.54E-04	2.83E-04	1.46E-04
157	570173.6	4215634	3.76E-03	2.13E-03	5.75E-04	3.24E-04	2.59E-04	1.34E-04
158	570164.8	4215635	3.64E-03	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
159	570147.1	4215637	3.41E-03	1.93E-03	5.20E-04	2.94E-04	2.35E-04	1.21E-04
160	570129.4	4215639	3.23E-03	1.83E-03	4.92E-04	2.78E-04	2.22E-04	1.14E-04
161	570252.6	4215622	5.17E-03	2.93E-03	7.89E-04	4.45E-04	3.56E-04	1.83E-04
162	570269.2	4215614	5.66E-03	3.21E-03	8.65E-04	4.88E-04	3.90E-04	2.01E-04
163	570285.7	4215607	6.36E-03	3.61E-03	9.72E-04	5.48E-04	4.39E-04	2.26E-04
164	570302.2	4215600	7.18E-03	4.07E-03	1.10E-03	6.19E-04	4.95E-04	2.55E-04
165	570318.7	4215592	8.08E-03	4.58E-03	1.23E-03	6.96E-04	5.57E-04	2.86E-04
166	570239.8	4215635	4.77E-03	2.70E-03	7.28E-04	4.11E-04	3.29E-04	1.69E-04
167	570222.5	4215637	4.45E-03	2.52E-03	6.79E-04	3.83E-04	3.06E-04	1.58E-04
168	570205.1	4215640	4.09E-03	2.32E-03	6.25E-04	3.52E-04	2.82E-04	1.45E-04
169	570187.8	4215642	3.76E-03	2.13E-03	5.75E-04	3.24E-04	2.59E-04	1.34E-04
170	570170.5	4215644	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
171	570153.2	4215646	3.27E-03	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
172	570135.9	4215648	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
173	570118.6	4215650	2.95E-03	1.67E-03	4.51E-04	2.54E-04	2.03E-04	1.05E-04
174	570256.7	4215631	5.22E-03	2.96E-03	7.97E-04	4.50E-04	3.60E-04	1.85E-04
175	570273.2	4215623	5.39E-03	3.05E-03	8.22E-04	4.64E-04	3.71E-04	1.91E-04
176	570281.5	4215620	5.67E-03	3.21E-03	8.66E-04	4.88E-04	3.91E-04	2.01E-04
177	570298	4215612	6.34E-03	3.59E-03	9.68E-04	5.46E-04	4.37E-04	2.25E-04
178	570306.2	4215609	6.76E-03	3.83E-03	1.03E-03	5.82E-04	4.66E-04	2.40E-04
179	570314.5	4215605	7.18E-03	4.06E-03	1.10E-03	6.18E-04	4.94E-04	2.55E-04
180	570244	4215644	4.52E-03	2.56E-03	6.90E-04	3.89E-04	3.11E-04	1.60E-04
181	570227	4215647	4.23E-03	2.39E-03	6.45E-04	3.64E-04	2.91E-04	1.50E-04
182	570210	4215649	3.90E-03	2.21E-03	5.96E-04	3.36E-04	2.69E-04	1.38E-04
183	570193	4215651	3.60E-03	2.04E-03	5.50E-04	3.10E-04	2.48E-04	1.28E-04
184	570176.1	4215653	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.18E-04
185	570159.1	4215655	3.14E-03	1.78E-03	4.79E-04	2.71E-04	2.16E-04	1.11E-04
186	570142.1	4215657	2.97E-03	1.69E-03	4.54E-04	2.56E-04	2.05E-04	1.06E-04
187	570125.2	4215659	2.84E-03	1.61E-03	4.33E-04	2.44E-04	1.95E-04	1.01E-04
188	570260.7	4215640	4.93E-03	2.79E-03	7.53E-04	4.25E-04	3.40E-04	1.75E-04
189	570269	4215636	5.20E-03	2.95E-03	7.94E-04	4.48E-04	3.59E-04	1.85E-04
190	570277.2	4215633	5.15E-03	2.92E-03	7.86E-04	4.44E-04	3.55E-04	1.83E-04
191	570293.7	4215625	5.69E-03	3.22E-03	8.69E-04	4.90E-04	3.92E-04	2.02E-04
192	570310.3	4215618	6.39E-03	3.62E-03	9.75E-04	5.50E-04	4.40E-04	2.27E-04
193	570326.8	4215611	7.42E-03	4.21E-03	1.13E-03	6.40E-04	5.12E-04	2.63E-04
194	570247.7	4215654	4.29E-03	2.43E-03	6.55E-04	3.70E-04	2.96E-04	1.52E-04
195	570230	4215656	3.98E-03	2.26E-03	6.08E-04	3.43E-04	2.74E-04	1.41E-04
196	570212.4	4215658	3.67E-03	2.08E-03	5.61E-04	3.16E-04	2.53E-04	1.30E-04
197	570194.7	4215660	3.39E-03	1.92E-03	5.18E-04	2.92E-04	2.34E-04	1.20E-04
198	570177.1	4215662	3.15E-03	1.78E-03	4.81E-04	2.71E-04	2.17E-04	1.12E-04
199	570159.4	4215664	2.96E-03	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
200	570141.7	4215666	2.81E-03	1.59E-03	4.29E-04	2.42E-04	1.93E-04	9.96E-05
201	570124.1	4215669	2.68E-03	1.52E-03	4.09E-04	2.31E-04	1.84E-04	9.50E-05
202	570264.7	4215649	4.67E-03	2.65E-03	7.14E-04	4.03E-04	3.22E-04	1.66E-04
203	570281.3	4215642	5.19E-03	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
204	570297.8	4215634	5.75E-03	3.26E-03	8.78E-04	4.95E-04	3.96E-04	2.04E-04

205	570314.3	4215627	6.36E-03	3.60E-03	9.70E-04	5.48E-04	4.38E-04	2.25E-04
206	570330.8	4215620	6.98E-03	3.95E-03	1.07E-03	6.01E-04	4.81E-04	2.48E-04
207	570251.9	4215663	4.07E-03	2.31E-03	6.21E-04	3.51E-04	2.80E-04	1.44E-04
208	570234.6	4215665	3.78E-03	2.14E-03	5.77E-04	3.26E-04	2.60E-04	1.34E-04
209	570217.2	4215667	3.50E-03	1.98E-03	5.35E-04	3.02E-04	2.41E-04	1.24E-04
210	570199.9	4215669	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
211	570182.6	4215671	3.03E-03	1.71E-03	4.62E-04	2.61E-04	2.09E-04	1.07E-04
212	570165.3	4215673	2.85E-03	1.61E-03	4.35E-04	2.45E-04	1.96E-04	1.01E-04
213	570148	4215675	2.71E-03	1.53E-03	4.13E-04	2.33E-04	1.86E-04	9.60E-05
214	570130.7	4215677	2.58E-03	1.46E-03	3.94E-04	2.22E-04	1.78E-04	9.16E-05
215	570113.4	4215680	2.47E-03	1.40E-03	3.78E-04	2.13E-04	1.70E-04	8.77E-05
216	570268.8	4215658	4.44E-03	2.51E-03	6.78E-04	3.83E-04	3.06E-04	1.57E-04
217	570277	4215654	4.67E-03	2.65E-03	7.13E-04	4.02E-04	3.22E-04	1.66E-04
218	570293.6	4215647	5.17E-03	2.93E-03	7.89E-04	4.45E-04	3.56E-04	1.83E-04
219	570310.1	4215640	5.71E-03	3.23E-03	8.72E-04	4.92E-04	3.93E-04	2.03E-04
220	570326.6	4215633	6.28E-03	3.56E-03	9.59E-04	5.41E-04	4.33E-04	2.23E-04
221	570256	4215672	3.85E-03	2.18E-03	5.88E-04	3.32E-04	2.65E-04	1.37E-04
222	570239	4215674	3.58E-03	2.03E-03	5.47E-04	3.09E-04	2.47E-04	1.27E-04
223	570222	4215676	3.33E-03	1.89E-03	5.09E-04	2.87E-04	2.30E-04	1.18E-04
224	570205	4215678	3.11E-03	1.76E-03	4.74E-04	2.68E-04	2.14E-04	1.10E-04
225	570188	4215680	2.91E-03	1.65E-03	4.44E-04	2.50E-04	2.00E-04	1.03E-04
226	570171	4215682	2.74E-03	1.55E-03	4.18E-04	2.36E-04	1.89E-04	9.71E-05
227	570154	4215684	2.60E-03	1.48E-03	3.98E-04	2.24E-04	1.79E-04	9.24E-05
228	570137	4215686	2.49E-03	1.41E-03	3.80E-04	2.14E-04	1.71E-04	8.82E-05
229	570120	4215688	2.39E-03	1.35E-03	3.64E-04	2.06E-04	1.64E-04	8.47E-05
230	570272.8	4215667	4.21E-03	2.38E-03	6.43E-04	3.63E-04	2.90E-04	1.49E-04
231	570281.1	4215664	4.43E-03	2.51E-03	6.77E-04	3.82E-04	3.06E-04	1.57E-04
232	570297.6	4215656	4.90E-03	2.77E-03	7.48E-04	4.22E-04	3.38E-04	1.74E-04
233	570305.8	4215653	5.14E-03	2.91E-03	7.86E-04	4.43E-04	3.55E-04	1.82E-04
234	570314.1	4215649	5.40E-03	3.06E-03	8.24E-04	4.65E-04	3.72E-04	1.92E-04
235	570330.6	4215642	5.93E-03	3.36E-03	9.06E-04	5.11E-04	4.09E-04	2.10E-04
236	570338.9	4215638	6.20E-03	3.51E-03	9.47E-04	5.34E-04	4.27E-04	2.20E-04
237	570259.8	4215681	3.64E-03	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
238	570242.2	4215683	3.37E-03	1.91E-03	5.15E-04	2.91E-04	2.32E-04	1.20E-04
239	570224.5	4215685	3.14E-03	1.78E-03	4.79E-04	2.70E-04	2.16E-04	1.11E-04
240	570206.9	4215687	2.93E-03	1.66E-03	4.47E-04	2.52E-04	2.02E-04	1.04E-04
241	570189.3	4215690	2.75E-03	1.56E-03	4.19E-04	2.37E-04	1.89E-04	9.74E-05
242	570171.7	4215692	2.59E-03	1.47E-03	3.96E-04	2.23E-04	1.79E-04	9.20E-05
243	570154.1	4215694	2.47E-03	1.40E-03	3.77E-04	2.13E-04	1.70E-04	8.75E-05
244	570136.5	4215696	2.36E-03	1.34E-03	3.60E-04	2.03E-04	1.63E-04	8.37E-05
245	570118.8	4215698	2.27E-03	1.28E-03	3.46E-04	1.95E-04	1.56E-04	8.04E-05
246	570276.8	4215676	3.98E-03	2.25E-03	6.07E-04	3.43E-04	2.74E-04	1.41E-04
247	570285.1	4215673	4.19E-03	2.37E-03	6.39E-04	3.61E-04	2.89E-04	1.49E-04
248	570293.4	4215669	4.41E-03	2.50E-03	6.73E-04	3.80E-04	3.04E-04	1.56E-04
249	570309.9	4215662	4.87E-03	2.76E-03	7.44E-04	4.20E-04	3.36E-04	1.73E-04
250	570318.1	4215658	5.11E-03	2.90E-03	7.81E-04	4.41E-04	3.52E-04	1.81E-04
251	570334.6	4215651	5.60E-03	3.17E-03	8.55E-04	4.83E-04	3.86E-04	1.99E-04
252	570264	4215690	3.43E-03	1.94E-03	5.24E-04	2.95E-04	2.36E-04	1.22E-04
253	570246.6	4215692	3.19E-03	1.81E-03	4.87E-04	2.75E-04	2.20E-04	1.13E-04
254	570229.3	4215694	2.97E-03	1.68E-03	4.54E-04	2.56E-04	2.05E-04	1.05E-04
255	570212	4215697	2.79E-03	1.58E-03	4.26E-04	2.40E-04	1.92E-04	9.90E-05
256	570194.7	4215699	2.63E-03	1.49E-03	4.02E-04	2.27E-04	1.81E-04	9.33E-05

257	570177.4	4215701	2.50E-03	1.42E-03	3.81E-04	2.15E-04	1.72E-04	8.86E-05
258	570160.1	4215703	2.38E-03	1.35E-03	3.63E-04	2.05E-04	1.64E-04	8.44E-05
259	570142.8	4215705	2.28E-03	1.29E-03	3.47E-04	1.96E-04	1.57E-04	8.07E-05
260	570125.5	4215707	2.19E-03	1.24E-03	3.34E-04	1.89E-04	1.51E-04	7.77E-05
261	570108.1	4215709	2.11E-03	1.19E-03	3.22E-04	1.82E-04	1.45E-04	7.48E-05
262	570280.9	4215686	3.75E-03	2.12E-03	5.72E-04	3.23E-04	2.58E-04	1.33E-04
263	570297.4	4215678	4.16E-03	2.36E-03	6.35E-04	3.59E-04	2.87E-04	1.48E-04
264	570305.6	4215675	4.38E-03	2.48E-03	6.69E-04	3.77E-04	3.02E-04	1.55E-04
265	570322.2	4215667	4.83E-03	2.73E-03	7.37E-04	4.16E-04	3.33E-04	1.71E-04
266	570330.4	4215664	5.05E-03	2.86E-03	7.71E-04	4.35E-04	3.48E-04	1.79E-04
267	570346.9	4215656	5.51E-03	3.12E-03	8.41E-04	4.74E-04	3.79E-04	1.95E-04
268	570267.7	4215699	3.23E-03	1.83E-03	4.93E-04	2.78E-04	2.22E-04	1.14E-04
269	570249.8	4215702	3.00E-03	1.70E-03	4.58E-04	2.59E-04	2.07E-04	1.06E-04
270	570231.9	4215704	2.80E-03	1.58E-03	4.27E-04	2.41E-04	1.93E-04	9.92E-05
271	570223	4215705	2.71E-03	1.54E-03	4.14E-04	2.33E-04	1.87E-04	9.61E-05
272	570214	4215706	2.63E-03	1.49E-03	4.01E-04	2.27E-04	1.81E-04	9.33E-05
273	570196.1	4215708	2.49E-03	1.41E-03	3.81E-04	2.15E-04	1.72E-04	8.84E-05
274	570178.3	4215710	2.38E-03	1.35E-03	3.63E-04	2.05E-04	1.64E-04	8.43E-05
275	570169.3	4215711	2.32E-03	1.32E-03	3.55E-04	2.00E-04	1.60E-04	8.24E-05
276	570151.4	4215713	2.22E-03	1.26E-03	3.38E-04	1.91E-04	1.53E-04	7.86E-05
277	570133.5	4215716	2.12E-03	1.20E-03	3.24E-04	1.83E-04	1.46E-04	7.53E-05
278	570115.6	4215718	2.05E-03	1.16E-03	3.12E-04	1.76E-04	1.41E-04	7.26E-05
279	570284.9	4215695	3.53E-03	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
280	570293.2	4215691	3.72E-03	2.11E-03	5.68E-04	3.21E-04	2.56E-04	1.32E-04
281	570309.7	4215684	4.13E-03	2.34E-03	6.30E-04	3.56E-04	2.85E-04	1.46E-04
282	570317.9	4215680	4.34E-03	2.46E-03	6.63E-04	3.74E-04	2.99E-04	1.54E-04
283	570334.5	4215673	4.77E-03	2.70E-03	7.28E-04	4.11E-04	3.29E-04	1.69E-04
284	570342.7	4215669	4.98E-03	2.82E-03	7.60E-04	4.29E-04	3.43E-04	1.77E-04
285	570282.2	4215444	2.81E-02	1.59E-02	4.29E-03	2.42E-03	1.94E-03	9.97E-04
286	570275.6	4215451	2.73E-02	1.55E-02	4.18E-03	2.36E-03	1.88E-03	9.70E-04
287	570268.9	4215458	2.63E-02	1.49E-02	4.02E-03	2.27E-03	1.81E-03	9.34E-04
288	570298.6	4215441	2.68E-02	1.52E-02	4.10E-03	2.31E-03	1.85E-03	9.52E-04
289	570292.2	4215447	2.64E-02	1.50E-02	4.03E-03	2.28E-03	1.82E-03	9.37E-04
290	570285.7	4215454	2.58E-02	1.46E-02	3.95E-03	2.23E-03	1.78E-03	9.16E-04
291	570279.2	4215460	2.51E-02	1.42E-02	3.83E-03	2.16E-03	1.73E-03	8.89E-04
292	570272.8	4215467	2.41E-02	1.36E-02	3.68E-03	2.07E-03	1.66E-03	8.54E-04
293	570308.3	4215444	2.53E-02	1.43E-02	3.86E-03	2.18E-03	1.74E-03	8.98E-04
294	570302	4215450	2.50E-02	1.41E-02	3.81E-03	2.15E-03	1.72E-03	8.85E-04
295	570295.6	4215457	2.44E-02	1.39E-02	3.73E-03	2.11E-03	1.68E-03	8.67E-04
296	570289.3	4215463	2.38E-02	1.35E-02	3.64E-03	2.05E-03	1.64E-03	8.45E-04
297	570276.6	4215476	2.20E-02	1.24E-02	3.35E-03	1.89E-03	1.51E-03	7.79E-04
298	570322.7	4215443	2.40E-02	1.36E-02	3.67E-03	2.07E-03	1.66E-03	8.53E-04
299	570315.8	4215450	2.38E-02	1.35E-02	3.64E-03	2.05E-03	1.64E-03	8.46E-04
300	570308.9	4215457	2.35E-02	1.33E-02	3.59E-03	2.02E-03	1.62E-03	8.33E-04
301	570302	4215464	2.29E-02	1.30E-02	3.50E-03	1.98E-03	1.58E-03	8.14E-04
302	570295.1	4215471	2.22E-02	1.26E-02	3.39E-03	1.91E-03	1.53E-03	7.88E-04
303	570288.2	4215478	2.13E-02	1.21E-02	3.25E-03	1.84E-03	1.47E-03	7.55E-04
304	570281.3	4215485	2.02E-02	1.15E-02	3.09E-03	1.74E-03	1.39E-03	7.18E-04
305	570339	4215439	2.25E-02	1.28E-02	3.44E-03	1.94E-03	1.55E-03	7.98E-04
306	570332.2	4215446	2.26E-02	1.28E-02	3.46E-03	1.95E-03	1.56E-03	8.03E-04
307	570325.5	4215453	2.26E-02	1.28E-02	3.45E-03	1.95E-03	1.56E-03	8.01E-04
308	570318.8	4215460	2.23E-02	1.26E-02	3.41E-03	1.92E-03	1.54E-03	7.91E-04

309	570312	4215467	2.19E-02	1.24E-02	3.34E-03	1.88E-03	1.51E-03	7.76E-04
310	570305.3	4215474	2.13E-02	1.21E-02	3.25E-03	1.83E-03	1.47E-03	7.55E-04
311	570298.6	4215480	2.05E-02	1.16E-02	3.13E-03	1.77E-03	1.41E-03	7.27E-04
312	570291.8	4215487	1.96E-02	1.11E-02	2.99E-03	1.69E-03	1.35E-03	6.95E-04
313	570285.1	4215494	1.86E-02	1.05E-02	2.84E-03	1.60E-03	1.28E-03	6.59E-04
314	570355.7	4215399	2.26E-02	1.28E-02	3.45E-03	1.95E-03	1.56E-03	8.02E-04
315	570355.5	4215408	2.22E-02	1.26E-02	3.38E-03	1.91E-03	1.53E-03	7.86E-04
316	570355.3	4215418	2.18E-02	1.24E-02	3.33E-03	1.88E-03	1.50E-03	7.74E-04
317	570348.3	4215443	2.13E-02	1.20E-02	3.25E-03	1.83E-03	1.46E-03	7.54E-04
318	570341.7	4215450	2.14E-02	1.21E-02	3.27E-03	1.85E-03	1.48E-03	7.60E-04
319	570335.1	4215457	2.14E-02	1.21E-02	3.27E-03	1.85E-03	1.48E-03	7.60E-04
320	570328.5	4215463	2.12E-02	1.20E-02	3.24E-03	1.83E-03	1.46E-03	7.53E-04
321	570322	4215470	2.09E-02	1.18E-02	3.19E-03	1.80E-03	1.44E-03	7.40E-04
322	570315.4	4215477	2.04E-02	1.16E-02	3.11E-03	1.76E-03	1.40E-03	7.23E-04
323	570308.8	4215483	1.98E-02	1.12E-02	3.02E-03	1.70E-03	1.36E-03	7.01E-04
324	570302.2	4215490	1.90E-02	1.08E-02	2.90E-03	1.64E-03	1.31E-03	6.74E-04
325	570295.6	4215497	1.81E-02	1.03E-02	2.76E-03	1.56E-03	1.25E-03	6.42E-04
326	570289	4215503	1.72E-02	9.73E-03	2.62E-03	1.48E-03	1.18E-03	6.09E-04
327	570365.1	4215394	2.16E-02	1.23E-02	3.30E-03	1.86E-03	1.49E-03	7.67E-04
328	570364.9	4215404	2.13E-02	1.20E-02	3.25E-03	1.83E-03	1.47E-03	7.54E-04
329	570364.7	4215413	2.10E-02	1.19E-02	3.20E-03	1.81E-03	1.44E-03	7.43E-04
330	570357.6	4215447	2.02E-02	1.14E-02	3.08E-03	1.74E-03	1.39E-03	7.15E-04
331	570351.2	4215454	2.04E-02	1.15E-02	3.11E-03	1.75E-03	1.40E-03	7.22E-04
332	570344.7	4215460	2.04E-02	1.16E-02	3.11E-03	1.76E-03	1.41E-03	7.23E-04
333	570338.2	4215467	2.03E-02	1.15E-02	3.09E-03	1.75E-03	1.40E-03	7.19E-04
334	570331.8	4215473	2.00E-02	1.13E-02	3.05E-03	1.72E-03	1.38E-03	7.08E-04
335	570325.3	4215480	1.96E-02	1.11E-02	2.99E-03	1.68E-03	1.35E-03	6.94E-04
336	570318.8	4215486	1.90E-02	1.08E-02	2.91E-03	1.64E-03	1.31E-03	6.75E-04
337	570312.3	4215493	1.84E-02	1.04E-02	2.81E-03	1.58E-03	1.27E-03	6.52E-04
338	570305.9	4215499	1.76E-02	9.98E-03	2.69E-03	1.52E-03	1.21E-03	6.25E-04
339	570299.4	4215506	1.68E-02	9.52E-03	2.56E-03	1.45E-03	1.16E-03	5.96E-04
340	570292.9	4215513	1.59E-02	9.02E-03	2.43E-03	1.37E-03	1.10E-03	5.65E-04
341	570374.4	4215395	2.05E-02	1.16E-02	3.13E-03	1.77E-03	1.41E-03	7.27E-04
342	570374.2	4215405	2.02E-02	1.14E-02	3.08E-03	1.74E-03	1.39E-03	7.16E-04
343	570374	4215415	1.99E-02	1.13E-02	3.04E-03	1.72E-03	1.37E-03	7.07E-04
344	570366.4	4215451	1.92E-02	1.09E-02	2.93E-03	1.65E-03	1.32E-03	6.81E-04
345	570359.5	4215458	1.94E-02	1.10E-02	2.96E-03	1.67E-03	1.34E-03	6.88E-04
346	570352.6	4215465	1.95E-02	1.10E-02	2.97E-03	1.68E-03	1.34E-03	6.91E-04
347	570345.7	4215472	1.93E-02	1.09E-02	2.95E-03	1.66E-03	1.33E-03	6.85E-04
348	570338.8	4215479	1.90E-02	1.08E-02	2.90E-03	1.64E-03	1.31E-03	6.74E-04
349	570331.9	4215486	1.86E-02	1.05E-02	2.84E-03	1.60E-03	1.28E-03	6.59E-04
350	570325	4215493	1.80E-02	1.02E-02	2.75E-03	1.55E-03	1.24E-03	6.39E-04
351	570318.1	4215500	1.73E-02	9.82E-03	2.65E-03	1.49E-03	1.19E-03	6.15E-04
352	570311.2	4215507	1.66E-02	9.38E-03	2.53E-03	1.43E-03	1.14E-03	5.88E-04
353	570304.3	4215514	1.57E-02	8.91E-03	2.40E-03	1.36E-03	1.08E-03	5.58E-04
354	570297.4	4215521	1.48E-02	8.41E-03	2.27E-03	1.28E-03	1.02E-03	5.27E-04
355	570383.8	4215390	1.96E-02	1.11E-02	2.99E-03	1.69E-03	1.35E-03	6.95E-04
356	570383.6	4215400	1.94E-02	1.10E-02	2.96E-03	1.67E-03	1.34E-03	6.87E-04
357	570383.4	4215410	1.91E-02	1.08E-02	2.92E-03	1.65E-03	1.32E-03	6.79E-04
358	570382.7	4215439	1.83E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.49E-04
359	570375.8	4215455	1.83E-02	1.04E-02	2.79E-03	1.58E-03	1.26E-03	6.48E-04
360	570369	4215462	1.85E-02	1.05E-02	2.82E-03	1.59E-03	1.27E-03	6.55E-04

361	570362.2	4215469	1.86E-02	1.05E-02	2.83E-03	1.60E-03	1.28E-03	6.58E-04
362	570355.4	4215476	1.85E-02	1.05E-02	2.82E-03	1.59E-03	1.27E-03	6.55E-04
363	570348.7	4215483	1.82E-02	1.03E-02	2.79E-03	1.57E-03	1.26E-03	6.47E-04
364	570341.9	4215489	1.79E-02	1.01E-02	2.73E-03	1.54E-03	1.23E-03	6.34E-04
365	570335.1	4215496	1.74E-02	9.86E-03	2.66E-03	1.50E-03	1.20E-03	6.18E-04
366	570328.4	4215503	1.68E-02	9.53E-03	2.57E-03	1.45E-03	1.16E-03	5.96E-04
367	570321.6	4215510	1.61E-02	9.14E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
368	570314.8	4215517	1.54E-02	8.72E-03	2.35E-03	1.33E-03	1.06E-03	5.46E-04
369	570308.1	4215524	1.46E-02	8.27E-03	2.23E-03	1.26E-03	1.01E-03	5.18E-04
370	570301.3	4215531	1.38E-02	7.83E-03	2.11E-03	1.19E-03	9.53E-04	4.90E-04
371	570393	4215395	1.86E-02	1.05E-02	2.83E-03	1.60E-03	1.28E-03	6.58E-04
372	570392.8	4215405	1.84E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.51E-04
373	570392.6	4215414	1.82E-02	1.03E-02	2.77E-03	1.57E-03	1.25E-03	6.44E-04
374	570392	4215443	1.74E-02	9.88E-03	2.66E-03	1.50E-03	1.20E-03	6.19E-04
375	570385.1	4215459	1.74E-02	9.88E-03	2.66E-03	1.50E-03	1.20E-03	6.19E-04
376	570378.4	4215466	1.76E-02	9.99E-03	2.69E-03	1.52E-03	1.21E-03	6.25E-04
377	570371.8	4215472	1.77E-02	1.00E-02	2.70E-03	1.52E-03	1.22E-03	6.27E-04
378	570365.1	4215479	1.76E-02	1.00E-02	2.69E-03	1.52E-03	1.22E-03	6.26E-04
379	570358.5	4215486	1.75E-02	9.91E-03	2.67E-03	1.51E-03	1.21E-03	6.20E-04
380	570351.8	4215493	1.72E-02	9.75E-03	2.63E-03	1.48E-03	1.19E-03	6.11E-04
381	570345.1	4215499	1.68E-02	9.52E-03	2.57E-03	1.45E-03	1.16E-03	5.96E-04
382	570338.5	4215506	1.63E-02	9.23E-03	2.49E-03	1.40E-03	1.12E-03	5.78E-04
383	570331.8	4215513	1.57E-02	8.89E-03	2.40E-03	1.35E-03	1.08E-03	5.57E-04
384	570325.2	4215520	1.50E-02	8.50E-03	2.29E-03	1.29E-03	1.03E-03	5.32E-04
385	570318.5	4215526	1.43E-02	8.10E-03	2.18E-03	1.23E-03	9.86E-04	5.07E-04
386	570311.9	4215533	1.36E-02	7.72E-03	2.08E-03	1.17E-03	9.39E-04	4.83E-04
387	570305.2	4215540	1.29E-02	7.31E-03	1.97E-03	1.11E-03	8.89E-04	4.58E-04
388	570402.4	4215391	1.77E-02	1.01E-02	2.71E-03	1.53E-03	1.22E-03	6.30E-04
389	570402.2	4215400	1.76E-02	9.97E-03	2.69E-03	1.52E-03	1.21E-03	6.24E-04
390	570402	4215409	1.74E-02	9.88E-03	2.66E-03	1.50E-03	1.20E-03	6.19E-04
391	570401.2	4215447	1.66E-02	9.43E-03	2.54E-03	1.43E-03	1.15E-03	5.90E-04
392	570394.4	4215463	1.66E-02	9.42E-03	2.54E-03	1.43E-03	1.15E-03	5.90E-04
393	570387.8	4215469	1.68E-02	9.52E-03	2.57E-03	1.45E-03	1.16E-03	5.96E-04
394	570381.3	4215476	1.69E-02	9.57E-03	2.58E-03	1.46E-03	1.16E-03	5.99E-04
395	570374.7	4215483	1.69E-02	9.56E-03	2.58E-03	1.45E-03	1.16E-03	5.99E-04
396	570368.2	4215489	1.68E-02	9.49E-03	2.56E-03	1.44E-03	1.15E-03	5.94E-04
397	570361.6	4215496	1.65E-02	9.37E-03	2.53E-03	1.42E-03	1.14E-03	5.87E-04
398	570355	4215503	1.62E-02	9.19E-03	2.48E-03	1.40E-03	1.12E-03	5.75E-04
399	570348.5	4215509	1.58E-02	8.94E-03	2.41E-03	1.36E-03	1.09E-03	5.60E-04
400	570341.9	4215516	1.53E-02	8.64E-03	2.33E-03	1.31E-03	1.05E-03	5.41E-04
401	570335.4	4215523	1.47E-02	8.30E-03	2.24E-03	1.26E-03	1.01E-03	5.20E-04
402	570328.8	4215529	1.40E-02	7.94E-03	2.14E-03	1.21E-03	9.66E-04	4.97E-04
403	570322.3	4215536	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.22E-04	4.75E-04
404	570315.7	4215542	1.27E-02	7.21E-03	1.94E-03	1.10E-03	8.77E-04	4.51E-04
405	570309.1	4215549	1.20E-02	6.81E-03	1.84E-03	1.04E-03	8.29E-04	4.27E-04
406	570411.7	4215391	1.69E-02	9.59E-03	2.58E-03	1.46E-03	1.17E-03	6.00E-04
407	570411.5	4215401	1.68E-02	9.51E-03	2.56E-03	1.45E-03	1.16E-03	5.96E-04
408	570411.3	4215411	1.67E-02	9.43E-03	2.54E-03	1.43E-03	1.15E-03	5.91E-04
409	570410.6	4215440	1.61E-02	9.13E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
410	570410.4	4215450	1.59E-02	9.01E-03	2.43E-03	1.37E-03	1.10E-03	5.64E-04
411	570403.3	4215467	1.59E-02	9.00E-03	2.43E-03	1.37E-03	1.09E-03	5.63E-04
412	570396.3	4215474	1.60E-02	9.08E-03	2.45E-03	1.38E-03	1.10E-03	5.69E-04

413	570389.4	4215481	1.61E-02	9.14E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
414	570382.5	4215488	1.62E-02	9.15E-03	2.47E-03	1.39E-03	1.11E-03	5.73E-04
415	570375.6	4215495	1.60E-02	9.08E-03	2.45E-03	1.38E-03	1.10E-03	5.68E-04
416	570368.7	4215502	1.58E-02	8.94E-03	2.41E-03	1.36E-03	1.09E-03	5.59E-04
417	570361.8	4215509	1.54E-02	8.75E-03	2.36E-03	1.33E-03	1.06E-03	5.48E-04
418	570354.9	4215516	1.50E-02	8.52E-03	2.30E-03	1.30E-03	1.04E-03	5.33E-04
419	570348	4215523	1.45E-02	8.22E-03	2.22E-03	1.25E-03	1.00E-03	5.15E-04
420	570341.1	4215530	1.39E-02	7.88E-03	2.12E-03	1.20E-03	9.59E-04	4.94E-04
421	570334.2	4215537	1.33E-02	7.53E-03	2.03E-03	1.15E-03	9.16E-04	4.71E-04
422	570327.3	4215544	1.26E-02	7.16E-03	1.93E-03	1.09E-03	8.70E-04	4.48E-04
423	570320.4	4215551	1.20E-02	6.77E-03	1.82E-03	1.03E-03	8.23E-04	4.24E-04
424	570313.5	4215558	1.12E-02	6.37E-03	1.72E-03	9.69E-04	7.75E-04	3.99E-04
425	570421.1	4215386	1.62E-02	9.18E-03	2.47E-03	1.40E-03	1.12E-03	5.75E-04
426	570420.9	4215396	1.61E-02	9.13E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
427	570420.7	4215406	1.60E-02	9.07E-03	2.44E-03	1.38E-03	1.10E-03	5.68E-04
428	570420.5	4215415	1.59E-02	9.00E-03	2.43E-03	1.37E-03	1.10E-03	5.64E-04
429	570419.8	4215444	1.54E-02	8.72E-03	2.35E-03	1.33E-03	1.06E-03	5.46E-04
430	570419.6	4215454	1.52E-02	8.60E-03	2.32E-03	1.31E-03	1.05E-03	5.39E-04
431	570412.6	4215471	1.52E-02	8.58E-03	2.31E-03	1.31E-03	1.04E-03	5.37E-04
432	570405.8	4215478	1.53E-02	8.66E-03	2.33E-03	1.32E-03	1.05E-03	5.42E-04
433	570399	4215484	1.54E-02	8.71E-03	2.35E-03	1.33E-03	1.06E-03	5.46E-04
434	570392.2	4215491	1.54E-02	8.73E-03	2.35E-03	1.33E-03	1.06E-03	5.47E-04
435	570385.4	4215498	1.54E-02	8.71E-03	2.35E-03	1.32E-03	1.06E-03	5.45E-04
436	570378.6	4215505	1.52E-02	8.59E-03	2.31E-03	1.31E-03	1.04E-03	5.38E-04
437	570371.8	4215512	1.49E-02	8.42E-03	2.27E-03	1.28E-03	1.02E-03	5.27E-04
438	570365	4215519	1.45E-02	8.22E-03	2.22E-03	1.25E-03	1.00E-03	5.15E-04
439	570358.2	4215526	1.41E-02	7.98E-03	2.15E-03	1.21E-03	9.71E-04	5.00E-04
440	570351.4	4215533	1.36E-02	7.70E-03	2.08E-03	1.17E-03	9.37E-04	4.82E-04
441	570344.6	4215540	1.30E-02	7.38E-03	1.99E-03	1.12E-03	8.97E-04	4.62E-04
442	570337.8	4215547	1.24E-02	7.04E-03	1.90E-03	1.07E-03	8.56E-04	4.41E-04
443	570331	4215553	1.18E-02	6.68E-03	1.80E-03	1.02E-03	8.12E-04	4.18E-04
444	570324.2	4215560	1.11E-02	6.31E-03	1.70E-03	9.59E-04	7.67E-04	3.95E-04
445	570317.4	4215567	1.04E-02	5.91E-03	1.59E-03	8.99E-04	7.19E-04	3.70E-04
446	570430.5	4215382	1.55E-02	8.77E-03	2.36E-03	1.33E-03	1.07E-03	5.49E-04
447	570430.3	4215391	1.55E-02	8.76E-03	2.36E-03	1.33E-03	1.07E-03	5.48E-04
448	570430.1	4215401	1.54E-02	8.72E-03	2.35E-03	1.33E-03	1.06E-03	5.46E-04
449	570429.9	4215410	1.53E-02	8.67E-03	2.34E-03	1.32E-03	1.05E-03	5.43E-04
450	570429.2	4215439	1.49E-02	8.41E-03	2.27E-03	1.28E-03	1.02E-03	5.27E-04
451	570429	4215449	1.47E-02	8.32E-03	2.24E-03	1.27E-03	1.01E-03	5.21E-04
452	570428.8	4215458	1.45E-02	8.21E-03	2.21E-03	1.25E-03	9.98E-04	5.14E-04
453	570421.9	4215474	1.44E-02	8.17E-03	2.20E-03	1.24E-03	9.94E-04	5.12E-04
454	570415.2	4215481	1.46E-02	8.26E-03	2.23E-03	1.26E-03	1.01E-03	5.17E-04
455	570408.5	4215488	1.47E-02	8.32E-03	2.24E-03	1.26E-03	1.01E-03	5.21E-04
456	570401.8	4215495	1.47E-02	8.34E-03	2.25E-03	1.27E-03	1.01E-03	5.22E-04
457	570395.1	4215502	1.47E-02	8.31E-03	2.24E-03	1.26E-03	1.01E-03	5.20E-04
458	570388.4	4215508	1.45E-02	8.23E-03	2.22E-03	1.25E-03	1.00E-03	5.15E-04
459	570381.7	4215515	1.43E-02	8.11E-03	2.19E-03	1.23E-03	9.86E-04	5.08E-04
460	570375	4215522	1.40E-02	7.93E-03	2.14E-03	1.21E-03	9.65E-04	4.97E-04
461	570368.3	4215529	1.36E-02	7.72E-03	2.08E-03	1.17E-03	9.39E-04	4.83E-04
462	570361.6	4215536	1.32E-02	7.47E-03	2.01E-03	1.14E-03	9.09E-04	4.68E-04
463	570354.9	4215542	1.27E-02	7.20E-03	1.94E-03	1.10E-03	8.76E-04	4.51E-04
464	570348.2	4215549	1.22E-02	6.90E-03	1.86E-03	1.05E-03	8.39E-04	4.32E-04

465	570341.5	4215556	1.16E-02	6.57E-03	1.77E-03	9.99E-04	7.99E-04	4.11E-04
466	570334.8	4215563	1.10E-02	6.23E-03	1.68E-03	9.47E-04	7.57E-04	3.90E-04
467	570328.1	4215570	1.04E-02	5.86E-03	1.58E-03	8.92E-04	7.13E-04	3.67E-04
468	570321.4	4215576	9.70E-03	5.50E-03	1.48E-03	8.36E-04	6.68E-04	3.44E-04
469	570439.7	4215387	1.48E-02	8.38E-03	2.26E-03	1.28E-03	1.02E-03	5.25E-04
470	570439.5	4215396	1.48E-02	8.38E-03	2.26E-03	1.27E-03	1.02E-03	5.24E-04
471	570439.3	4215406	1.47E-02	8.35E-03	2.25E-03	1.27E-03	1.02E-03	5.23E-04
472	570439.1	4215415	1.46E-02	8.29E-03	2.24E-03	1.26E-03	1.01E-03	5.19E-04
473	570438.4	4215443	1.42E-02	8.04E-03	2.17E-03	1.22E-03	9.78E-04	5.03E-04
474	570438.2	4215453	1.40E-02	7.95E-03	2.14E-03	1.21E-03	9.67E-04	4.98E-04
475	570438	4215462	1.38E-02	7.84E-03	2.11E-03	1.19E-03	9.54E-04	4.91E-04
476	570431.2	4215478	1.37E-02	7.79E-03	2.10E-03	1.18E-03	9.47E-04	4.87E-04
477	570424.6	4215485	1.39E-02	7.86E-03	2.12E-03	1.20E-03	9.56E-04	4.92E-04
478	570417.9	4215492	1.40E-02	7.93E-03	2.14E-03	1.21E-03	9.64E-04	4.96E-04
479	570411.3	4215498	1.40E-02	7.96E-03	2.15E-03	1.21E-03	9.68E-04	4.98E-04
480	570404.7	4215505	1.40E-02	7.93E-03	2.14E-03	1.21E-03	9.65E-04	4.97E-04
481	570398.1	4215512	1.39E-02	7.87E-03	2.12E-03	1.20E-03	9.58E-04	4.93E-04
482	570391.5	4215519	1.37E-02	7.78E-03	2.10E-03	1.18E-03	9.46E-04	4.87E-04
483	570384.9	4215525	1.35E-02	7.64E-03	2.06E-03	1.16E-03	9.30E-04	4.79E-04
484	570378.2	4215532	1.32E-02	7.45E-03	2.01E-03	1.13E-03	9.07E-04	4.67E-04
485	570371.6	4215539	1.28E-02	7.24E-03	1.95E-03	1.10E-03	8.80E-04	4.53E-04
486	570365	4215545	1.23E-02	7.00E-03	1.89E-03	1.06E-03	8.51E-04	4.38E-04
487	570358.4	4215552	1.19E-02	6.73E-03	1.81E-03	1.02E-03	8.19E-04	4.22E-04
488	570351.8	4215559	1.14E-02	6.44E-03	1.74E-03	9.80E-04	7.84E-04	4.03E-04
489	570345.2	4215566	1.08E-02	6.13E-03	1.65E-03	9.32E-04	7.45E-04	3.84E-04
490	570338.6	4215572	1.02E-02	5.80E-03	1.56E-03	8.82E-04	7.05E-04	3.63E-04
491	570331.9	4215579	9.64E-03	5.46E-03	1.47E-03	8.30E-04	6.64E-04	3.42E-04
492	570325.3	4215586	8.71E-03	4.93E-03	1.33E-03	7.50E-04	6.00E-04	3.09E-04
493	570449.2	4215377	1.42E-02	8.03E-03	2.16E-03	1.22E-03	9.77E-04	5.03E-04
494	570449	4215387	1.42E-02	8.03E-03	2.17E-03	1.22E-03	9.77E-04	5.03E-04
495	570448.8	4215397	1.42E-02	8.02E-03	2.16E-03	1.22E-03	9.76E-04	5.02E-04
496	570448.5	4215407	1.41E-02	7.99E-03	2.15E-03	1.22E-03	9.72E-04	5.00E-04
497	570448.3	4215416	1.40E-02	7.93E-03	2.14E-03	1.21E-03	9.65E-04	4.97E-04
498	570447.7	4215446	1.36E-02	7.69E-03	2.07E-03	1.17E-03	9.36E-04	4.82E-04
499	570447.4	4215456	1.34E-02	7.60E-03	2.05E-03	1.16E-03	9.24E-04	4.76E-04
500	570447.2	4215466	1.32E-02	7.49E-03	2.02E-03	1.14E-03	9.11E-04	4.69E-04
501	570440.1	4215482	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.03E-04	4.65E-04
502	570433.2	4215489	1.32E-02	7.49E-03	2.02E-03	1.14E-03	9.11E-04	4.69E-04
503	570426.3	4215496	1.33E-02	7.55E-03	2.03E-03	1.15E-03	9.18E-04	4.73E-04
504	570419.4	4215503	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.22E-04	4.75E-04
505	570412.5	4215510	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.22E-04	4.74E-04
506	570405.6	4215517	1.33E-02	7.52E-03	2.03E-03	1.14E-03	9.14E-04	4.71E-04
507	570398.7	4215524	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.02E-04	4.65E-04
508	570391.8	4215531	1.28E-02	7.28E-03	1.96E-03	1.11E-03	8.85E-04	4.56E-04
509	570384.9	4215538	1.25E-02	7.10E-03	1.91E-03	1.08E-03	8.63E-04	4.44E-04
510	570378	4215546	1.21E-02	6.88E-03	1.86E-03	1.05E-03	8.37E-04	4.31E-04
511	570371.1	4215553	1.17E-02	6.64E-03	1.79E-03	1.01E-03	8.08E-04	4.16E-04
512	570364.2	4215560	1.13E-02	6.38E-03	1.72E-03	9.70E-04	7.76E-04	3.99E-04
513	570357.3	4215567	1.08E-02	6.09E-03	1.64E-03	9.26E-04	7.41E-04	3.81E-04
514	570350.4	4215574	1.02E-02	5.78E-03	1.56E-03	8.79E-04	7.03E-04	3.62E-04
515	570343.5	4215581	9.64E-03	5.46E-03	1.47E-03	8.30E-04	6.64E-04	3.42E-04
516	570336.5	4215588	9.05E-03	5.13E-03	1.38E-03	7.80E-04	6.24E-04	3.21E-04

517	570329.6	4215595	8.48E-03	4.80E-03	1.29E-03	7.30E-04	5.84E-04	3.01E-04
518	570458.6	4215373	1.36E-02	7.73E-03	2.08E-03	1.18E-03	9.40E-04	4.84E-04
519	570458.4	4215382	1.36E-02	7.71E-03	2.08E-03	1.17E-03	9.38E-04	4.83E-04
520	570458.2	4215392	1.36E-02	7.69E-03	2.07E-03	1.17E-03	9.36E-04	4.82E-04
521	570458	4215402	1.35E-02	7.66E-03	2.06E-03	1.16E-03	9.31E-04	4.79E-04
522	570457.7	4215411	1.34E-02	7.61E-03	2.05E-03	1.16E-03	9.26E-04	4.77E-04
523	570457.1	4215441	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.03E-04	4.65E-04
524	570456.9	4215450	1.29E-02	7.34E-03	1.98E-03	1.12E-03	8.92E-04	4.59E-04
525	570456.6	4215460	1.28E-02	7.24E-03	1.95E-03	1.10E-03	8.80E-04	4.53E-04
526	570456.4	4215470	1.26E-02	7.12E-03	1.92E-03	1.08E-03	8.66E-04	4.46E-04
527	570449.4	4215486	1.25E-02	7.06E-03	1.90E-03	1.07E-03	8.59E-04	4.42E-04
528	570442.6	4215493	1.26E-02	7.13E-03	1.92E-03	1.09E-03	8.68E-04	4.47E-04
529	570435.8	4215500	1.27E-02	7.18E-03	1.94E-03	1.09E-03	8.74E-04	4.50E-04
530	570429	4215507	1.27E-02	7.21E-03	1.94E-03	1.10E-03	8.77E-04	4.52E-04
531	570422.1	4215514	1.27E-02	7.22E-03	1.95E-03	1.10E-03	8.78E-04	4.52E-04
532	570415.3	4215521	1.27E-02	7.20E-03	1.94E-03	1.09E-03	8.76E-04	4.51E-04
533	570408.5	4215528	1.26E-02	7.12E-03	1.92E-03	1.08E-03	8.66E-04	4.46E-04
534	570401.7	4215535	1.24E-02	7.00E-03	1.89E-03	1.06E-03	8.52E-04	4.38E-04
535	570394.9	4215542	1.21E-02	6.85E-03	1.85E-03	1.04E-03	8.33E-04	4.29E-04
536	570388.1	4215548	1.18E-02	6.66E-03	1.80E-03	1.01E-03	8.11E-04	4.17E-04
537	570381.3	4215555	1.14E-02	6.45E-03	1.74E-03	9.81E-04	7.85E-04	4.04E-04
538	570374.5	4215562	1.10E-02	6.22E-03	1.68E-03	9.45E-04	7.56E-04	3.89E-04
539	570367.6	4215569	1.05E-02	5.96E-03	1.61E-03	9.06E-04	7.25E-04	3.73E-04
540	570360.8	4215576	1.00E-02	5.69E-03	1.53E-03	8.65E-04	6.92E-04	3.56E-04
541	570354	4215583	9.53E-03	5.40E-03	1.45E-03	8.21E-04	6.57E-04	3.38E-04
542	570347.2	4215590	9.00E-03	5.10E-03	1.37E-03	7.75E-04	6.20E-04	3.19E-04
543	570340.4	4215597	8.46E-03	4.80E-03	1.29E-03	7.29E-04	5.83E-04	3.00E-04
544	570333.6	4215604	7.94E-03	4.50E-03	1.21E-03	6.84E-04	5.47E-04	2.82E-04
545	570468	4215368	1.31E-02	7.44E-03	2.01E-03	1.13E-03	9.05E-04	4.66E-04
546	570467.8	4215378	1.31E-02	7.43E-03	2.00E-03	1.13E-03	9.03E-04	4.65E-04
547	570467.6	4215387	1.31E-02	7.40E-03	1.99E-03	1.12E-03	9.00E-04	4.63E-04
548	570467.4	4215397	1.30E-02	7.35E-03	1.98E-03	1.12E-03	8.94E-04	4.60E-04
549	570467.1	4215407	1.29E-02	7.30E-03	1.97E-03	1.11E-03	8.88E-04	4.57E-04
550	570466.9	4215416	1.28E-02	7.27E-03	1.96E-03	1.11E-03	8.84E-04	4.55E-04
551	570466.3	4215445	1.25E-02	7.09E-03	1.91E-03	1.08E-03	8.62E-04	4.44E-04
552	570466.1	4215454	1.24E-02	7.00E-03	1.89E-03	1.06E-03	8.51E-04	4.38E-04
553	570465.8	4215464	1.22E-02	6.90E-03	1.86E-03	1.05E-03	8.39E-04	4.32E-04
554	570465.6	4215474	1.20E-02	6.77E-03	1.83E-03	1.03E-03	8.24E-04	4.24E-04
555	570458.7	4215490	1.19E-02	6.71E-03	1.81E-03	1.02E-03	8.17E-04	4.20E-04
556	570452	4215497	1.20E-02	6.78E-03	1.83E-03	1.03E-03	8.25E-04	4.25E-04
557	570445.2	4215504	1.21E-02	6.84E-03	1.84E-03	1.04E-03	8.32E-04	4.28E-04
558	570438.5	4215511	1.21E-02	6.87E-03	1.85E-03	1.04E-03	8.35E-04	4.30E-04
559	570431.8	4215517	1.21E-02	6.88E-03	1.85E-03	1.05E-03	8.37E-04	4.31E-04
560	570425	4215524	1.21E-02	6.87E-03	1.85E-03	1.04E-03	8.35E-04	4.30E-04
561	570418.3	4215531	1.20E-02	6.82E-03	1.84E-03	1.04E-03	8.30E-04	4.27E-04
562	570411.6	4215538	1.19E-02	6.74E-03	1.82E-03	1.02E-03	8.19E-04	4.22E-04
563	570404.8	4215545	1.17E-02	6.60E-03	1.78E-03	1.00E-03	8.03E-04	4.13E-04
564	570398.1	4215552	1.14E-02	6.44E-03	1.74E-03	9.80E-04	7.84E-04	4.04E-04
565	570391.4	4215558	1.10E-02	6.26E-03	1.69E-03	9.52E-04	7.61E-04	3.92E-04
566	570384.7	4215565	1.07E-02	6.05E-03	1.63E-03	9.19E-04	7.35E-04	3.79E-04
567	570377.9	4215572	1.03E-02	5.82E-03	1.57E-03	8.85E-04	7.08E-04	3.64E-04
568	570371.2	4215579	9.84E-03	5.57E-03	1.50E-03	8.48E-04	6.78E-04	3.49E-04

569	570364.5	4215586	9.39E-03	5.32E-03	1.43E-03	8.09E-04	6.47E-04	3.33E-04
570	570357.7	4215593	8.91E-03	5.05E-03	1.36E-03	7.68E-04	6.14E-04	3.16E-04
571	570351	4215599	8.42E-03	4.77E-03	1.29E-03	7.25E-04	5.80E-04	2.99E-04
572	570344.3	4215606	7.93E-03	4.49E-03	1.21E-03	6.83E-04	5.46E-04	2.81E-04
573	570337.5	4215613	7.45E-03	4.22E-03	1.14E-03	6.42E-04	5.13E-04	2.64E-04
574	570477.4	4215364	1.26E-02	7.16E-03	1.93E-03	1.09E-03	8.72E-04	4.49E-04
575	570477.2	4215373	1.26E-02	7.16E-03	1.93E-03	1.09E-03	8.71E-04	4.48E-04
576	570477	4215383	1.26E-02	7.13E-03	1.92E-03	1.08E-03	8.67E-04	4.46E-04
577	570476.8	4215392	1.25E-02	7.09E-03	1.91E-03	1.08E-03	8.62E-04	4.44E-04
578	570476.5	4215402	1.24E-02	7.03E-03	1.90E-03	1.07E-03	8.56E-04	4.40E-04
579	570476.3	4215411	1.23E-02	6.99E-03	1.88E-03	1.06E-03	8.50E-04	4.38E-04
580	570475.7	4215440	1.21E-02	6.85E-03	1.85E-03	1.04E-03	8.33E-04	4.29E-04
581	570475.5	4215449	1.20E-02	6.77E-03	1.83E-03	1.03E-03	8.24E-04	4.24E-04
582	570475.3	4215459	1.18E-02	6.68E-03	1.80E-03	1.02E-03	8.13E-04	4.18E-04
583	570475	4215468	1.16E-02	6.58E-03	1.77E-03	1.00E-03	8.00E-04	4.12E-04
584	570474.8	4215478	1.14E-02	6.46E-03	1.74E-03	9.82E-04	7.85E-04	4.04E-04
585	570468	4215494	1.13E-02	6.39E-03	1.72E-03	9.72E-04	7.77E-04	4.00E-04
586	570461.3	4215501	1.14E-02	6.45E-03	1.74E-03	9.81E-04	7.84E-04	4.04E-04
587	570454.7	4215507	1.15E-02	6.50E-03	1.75E-03	9.88E-04	7.90E-04	4.07E-04
588	570448	4215514	1.15E-02	6.54E-03	1.76E-03	9.94E-04	7.95E-04	4.09E-04
589	570441.3	4215521	1.16E-02	6.56E-03	1.77E-03	9.97E-04	7.98E-04	4.11E-04
590	570434.7	4215528	1.16E-02	6.55E-03	1.76E-03	9.96E-04	7.96E-04	4.10E-04
591	570428	4215534	1.15E-02	6.51E-03	1.75E-03	9.90E-04	7.92E-04	4.08E-04
592	570421.4	4215541	1.14E-02	6.45E-03	1.74E-03	9.81E-04	7.85E-04	4.04E-04
593	570414.7	4215548	1.12E-02	6.37E-03	1.72E-03	9.68E-04	7.74E-04	3.99E-04
594	570408.1	4215555	1.10E-02	6.23E-03	1.68E-03	9.48E-04	7.58E-04	3.90E-04
595	570401.4	4215561	1.07E-02	6.06E-03	1.63E-03	9.22E-04	7.37E-04	3.80E-04
596	570394.7	4215568	1.04E-02	5.87E-03	1.58E-03	8.93E-04	7.14E-04	3.68E-04
597	570388.1	4215575	1.00E-02	5.67E-03	1.53E-03	8.62E-04	6.89E-04	3.55E-04
598	570381.4	4215582	9.62E-03	5.45E-03	1.47E-03	8.29E-04	6.63E-04	3.41E-04
599	570374.8	4215588	9.21E-03	5.22E-03	1.41E-03	7.94E-04	6.35E-04	3.27E-04
600	570368.1	4215595	8.78E-03	4.97E-03	1.34E-03	7.57E-04	6.05E-04	3.11E-04
601	570361.5	4215602	8.34E-03	4.72E-03	1.27E-03	7.19E-04	5.75E-04	2.96E-04
602	570354.8	4215609	7.89E-03	4.47E-03	1.21E-03	6.80E-04	5.44E-04	2.80E-04
603	570348.2	4215615	7.44E-03	4.22E-03	1.14E-03	6.41E-04	5.13E-04	2.64E-04
604	570341.5	4215622	7.00E-03	3.97E-03	1.07E-03	6.03E-04	4.82E-04	2.48E-04
605	570486.7	4215363	1.22E-02	6.89E-03	1.86E-03	1.05E-03	8.39E-04	4.32E-04
606	570486.5	4215373	1.22E-02	6.89E-03	1.86E-03	1.05E-03	8.38E-04	4.31E-04
607	570486.3	4215383	1.21E-02	6.87E-03	1.85E-03	1.04E-03	8.35E-04	4.30E-04
608	570486	4215393	1.21E-02	6.83E-03	1.84E-03	1.04E-03	8.31E-04	4.28E-04
609	570485.8	4215403	1.20E-02	6.79E-03	1.83E-03	1.03E-03	8.25E-04	4.25E-04
610	570485.6	4215412	1.19E-02	6.74E-03	1.82E-03	1.03E-03	8.20E-04	4.22E-04
611	570484.9	4215442	1.16E-02	6.58E-03	1.77E-03	1.00E-03	8.01E-04	4.12E-04
612	570484.7	4215452	1.15E-02	6.50E-03	1.75E-03	9.89E-04	7.91E-04	4.07E-04
613	570484.5	4215462	1.13E-02	6.42E-03	1.73E-03	9.76E-04	7.80E-04	4.02E-04
614	570484.3	4215471	1.11E-02	6.31E-03	1.70E-03	9.59E-04	7.67E-04	3.95E-04
615	570484.1	4215481	1.09E-02	6.19E-03	1.67E-03	9.41E-04	7.52E-04	3.87E-04
616	570476.9	4215498	1.08E-02	6.10E-03	1.64E-03	9.28E-04	7.42E-04	3.82E-04
617	570470	4215505	1.08E-02	6.14E-03	1.65E-03	9.34E-04	7.47E-04	3.84E-04
618	570463.1	4215512	1.09E-02	6.18E-03	1.67E-03	9.40E-04	7.52E-04	3.87E-04
619	570456.2	4215519	1.10E-02	6.22E-03	1.68E-03	9.45E-04	7.56E-04	3.89E-04
620	570449.3	4215526	1.10E-02	6.24E-03	1.68E-03	9.49E-04	7.59E-04	3.91E-04

621	570442.4	4215533	1.10E-02	6.24E-03	1.68E-03	9.49E-04	7.59E-04	3.91E-04
622	570435.5	4215540	1.09E-02	6.20E-03	1.67E-03	9.43E-04	7.54E-04	3.88E-04
623	570428.6	4215547	1.08E-02	6.14E-03	1.66E-03	9.34E-04	7.47E-04	3.85E-04
624	570421.7	4215554	1.07E-02	6.06E-03	1.63E-03	9.22E-04	7.37E-04	3.79E-04
625	570414.8	4215561	1.05E-02	5.94E-03	1.60E-03	9.04E-04	7.23E-04	3.72E-04
626	570407.9	4215568	1.02E-02	5.78E-03	1.56E-03	8.79E-04	7.03E-04	3.62E-04
627	570401	4215575	9.87E-03	5.59E-03	1.51E-03	8.51E-04	6.80E-04	3.50E-04
628	570394.1	4215582	9.52E-03	5.39E-03	1.45E-03	8.20E-04	6.56E-04	3.38E-04
629	570387.2	4215589	9.14E-03	5.18E-03	1.40E-03	7.88E-04	6.30E-04	3.24E-04
630	570380.3	4215596	8.74E-03	4.95E-03	1.33E-03	7.53E-04	6.02E-04	3.10E-04
631	570373.4	4215603	8.32E-03	4.72E-03	1.27E-03	7.17E-04	5.74E-04	2.95E-04
632	570366.5	4215610	7.90E-03	4.47E-03	1.21E-03	6.80E-04	5.44E-04	2.80E-04
633	570359.6	4215617	7.46E-03	4.23E-03	1.14E-03	6.43E-04	5.14E-04	2.65E-04
634	570352.7	4215624	7.03E-03	3.98E-03	1.07E-03	6.06E-04	4.85E-04	2.49E-04
635	570345.8	4215631	6.61E-03	3.75E-03	1.01E-03	5.70E-04	4.56E-04	2.35E-04
636	570496.1	4215359	1.17E-02	6.64E-03	1.79E-03	1.01E-03	8.07E-04	4.15E-04
637	570495.9	4215369	1.17E-02	6.64E-03	1.79E-03	1.01E-03	8.07E-04	4.16E-04
638	570495.7	4215378	1.17E-02	6.63E-03	1.79E-03	1.01E-03	8.06E-04	4.15E-04
639	570495.5	4215388	1.17E-02	6.61E-03	1.78E-03	1.00E-03	8.04E-04	4.14E-04
640	570495.2	4215398	1.16E-02	6.57E-03	1.77E-03	1.00E-03	8.00E-04	4.12E-04
641	570495	4215407	1.15E-02	6.53E-03	1.76E-03	9.94E-04	7.95E-04	4.09E-04
642	570494.8	4215417	1.15E-02	6.49E-03	1.75E-03	9.87E-04	7.90E-04	4.06E-04
643	570494.1	4215446	1.11E-02	6.31E-03	1.70E-03	9.60E-04	7.68E-04	3.95E-04
644	570493.9	4215456	1.10E-02	6.24E-03	1.68E-03	9.48E-04	7.59E-04	3.90E-04
645	570493.7	4215466	1.09E-02	6.15E-03	1.66E-03	9.35E-04	7.48E-04	3.85E-04
646	570493.5	4215475	1.07E-02	6.04E-03	1.63E-03	9.19E-04	7.35E-04	3.78E-04
647	570493.3	4215485	1.05E-02	5.92E-03	1.60E-03	9.01E-04	7.21E-04	3.71E-04
648	570486.2	4215502	1.03E-02	5.84E-03	1.57E-03	8.88E-04	7.10E-04	3.66E-04
649	570479.4	4215509	1.04E-02	5.86E-03	1.58E-03	8.92E-04	7.13E-04	3.67E-04
650	570472.6	4215516	1.04E-02	5.88E-03	1.58E-03	8.94E-04	7.15E-04	3.68E-04
651	570465.7	4215523	1.04E-02	5.91E-03	1.59E-03	8.99E-04	7.19E-04	3.70E-04
652	570458.9	4215530	1.05E-02	5.93E-03	1.60E-03	9.01E-04	7.21E-04	3.71E-04
653	570452.1	4215536	1.05E-02	5.93E-03	1.60E-03	9.02E-04	7.21E-04	3.71E-04
654	570445.3	4215543	1.04E-02	5.92E-03	1.59E-03	9.00E-04	7.20E-04	3.71E-04
655	570438.4	4215550	1.04E-02	5.87E-03	1.58E-03	8.93E-04	7.15E-04	3.68E-04
656	570431.6	4215557	1.02E-02	5.81E-03	1.56E-03	8.83E-04	7.06E-04	3.63E-04
657	570424.8	4215564	1.01E-02	5.71E-03	1.54E-03	8.68E-04	6.94E-04	3.57E-04
658	570418	4215571	9.86E-03	5.58E-03	1.51E-03	8.49E-04	6.79E-04	3.50E-04
659	570411.1	4215578	9.59E-03	5.43E-03	1.46E-03	8.26E-04	6.61E-04	3.40E-04
660	570404.3	4215585	9.27E-03	5.25E-03	1.42E-03	7.99E-04	6.39E-04	3.29E-04
661	570397.5	4215592	8.93E-03	5.06E-03	1.36E-03	7.70E-04	6.15E-04	3.17E-04
662	570390.7	4215599	8.57E-03	4.86E-03	1.31E-03	7.39E-04	5.91E-04	3.04E-04
663	570383.9	4215606	8.20E-03	4.64E-03	1.25E-03	7.06E-04	5.65E-04	2.91E-04
664	570377	4215613	7.81E-03	4.42E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
665	570370.2	4215620	7.41E-03	4.20E-03	1.13E-03	6.38E-04	5.10E-04	2.63E-04
666	570363.4	4215627	7.00E-03	3.97E-03	1.07E-03	6.03E-04	4.83E-04	2.48E-04
667	570356.6	4215633	6.61E-03	3.74E-03	1.01E-03	5.69E-04	4.55E-04	2.34E-04
668	570349.7	4215640	6.22E-03	3.52E-03	9.50E-04	5.36E-04	4.29E-04	2.21E-04
669	570505.5	4215355	1.13E-02	6.39E-03	1.72E-03	9.72E-04	7.77E-04	4.00E-04
670	570505.3	4215364	1.13E-02	6.40E-03	1.72E-03	9.73E-04	7.78E-04	4.01E-04
671	570505.1	4215374	1.13E-02	6.40E-03	1.72E-03	9.73E-04	7.78E-04	4.00E-04
672	570504.9	4215383	1.13E-02	6.39E-03	1.72E-03	9.71E-04	7.77E-04	4.00E-04

673	570504.6	4215393	1.12E-02	6.36E-03	1.72E-03	9.68E-04	7.74E-04	3.99E-04
674	570504.4	4215403	1.12E-02	6.33E-03	1.71E-03	9.64E-04	7.71E-04	3.97E-04
675	570504.2	4215412	1.11E-02	6.30E-03	1.70E-03	9.57E-04	7.66E-04	3.94E-04
676	570503.6	4215441	1.08E-02	6.12E-03	1.65E-03	9.31E-04	7.45E-04	3.83E-04
677	570503.3	4215451	1.07E-02	6.06E-03	1.63E-03	9.21E-04	7.37E-04	3.79E-04
678	570503.1	4215460	1.06E-02	5.98E-03	1.61E-03	9.10E-04	7.28E-04	3.75E-04
679	570502.9	4215470	1.04E-02	5.89E-03	1.59E-03	8.96E-04	7.17E-04	3.69E-04
680	570502.7	4215480	1.02E-02	5.79E-03	1.56E-03	8.80E-04	7.04E-04	3.62E-04
681	570502.5	4215489	1.00E-02	5.68E-03	1.53E-03	8.63E-04	6.91E-04	3.55E-04
682	570495.5	4215506	9.87E-03	5.59E-03	1.51E-03	8.51E-04	6.80E-04	3.50E-04
683	570488.7	4215513	9.92E-03	5.62E-03	1.51E-03	8.55E-04	6.83E-04	3.52E-04
684	570482	4215519	9.94E-03	5.63E-03	1.52E-03	8.56E-04	6.85E-04	3.53E-04
685	570475.2	4215526	9.93E-03	5.63E-03	1.52E-03	8.56E-04	6.84E-04	3.52E-04
686	570468.5	4215533	9.95E-03	5.63E-03	1.52E-03	8.57E-04	6.85E-04	3.53E-04
687	570461.7	4215540	9.95E-03	5.64E-03	1.52E-03	8.58E-04	6.86E-04	3.53E-04
688	570455	4215547	9.94E-03	5.63E-03	1.52E-03	8.56E-04	6.85E-04	3.52E-04
689	570448.2	4215554	9.90E-03	5.61E-03	1.51E-03	8.53E-04	6.82E-04	3.51E-04
690	570441.5	4215561	9.81E-03	5.56E-03	1.50E-03	8.45E-04	6.76E-04	3.48E-04
691	570434.7	4215567	9.66E-03	5.47E-03	1.48E-03	8.32E-04	6.66E-04	3.43E-04
692	570428	4215574	9.48E-03	5.37E-03	1.45E-03	8.17E-04	6.53E-04	3.36E-04
693	570421.2	4215581	9.27E-03	5.25E-03	1.41E-03	7.98E-04	6.38E-04	3.29E-04
694	570414.5	4215588	9.01E-03	5.11E-03	1.38E-03	7.77E-04	6.21E-04	3.20E-04
695	570407.7	4215595	8.71E-03	4.93E-03	1.33E-03	7.50E-04	6.00E-04	3.09E-04
696	570401	4215602	8.38E-03	4.75E-03	1.28E-03	7.22E-04	5.78E-04	2.97E-04
697	570394.2	4215608	8.04E-03	4.56E-03	1.23E-03	6.93E-04	5.54E-04	2.85E-04
698	570387.5	4215615	7.69E-03	4.36E-03	1.17E-03	6.63E-04	5.30E-04	2.73E-04
699	570380.7	4215622	7.33E-03	4.15E-03	1.12E-03	6.31E-04	5.05E-04	2.60E-04
700	570373.9	4215629	6.95E-03	3.94E-03	1.06E-03	5.99E-04	4.79E-04	2.47E-04
701	570367.2	4215636	6.58E-03	3.73E-03	1.00E-03	5.67E-04	4.53E-04	2.33E-04
702	570360.4	4215643	6.21E-03	3.52E-03	9.49E-04	5.35E-04	4.28E-04	2.20E-04
703	570353.7	4215650	5.85E-03	3.32E-03	8.94E-04	5.04E-04	4.03E-04	2.08E-04
704	570514.9	4215350	1.09E-02	6.16E-03	1.66E-03	9.36E-04	7.49E-04	3.85E-04
705	570514.7	4215360	1.09E-02	6.17E-03	1.66E-03	9.38E-04	7.50E-04	3.86E-04
706	570514.5	4215369	1.09E-02	6.17E-03	1.66E-03	9.39E-04	7.51E-04	3.86E-04
707	570514.3	4215379	1.09E-02	6.17E-03	1.66E-03	9.38E-04	7.50E-04	3.86E-04
708	570514	4215388	1.09E-02	6.15E-03	1.66E-03	9.36E-04	7.49E-04	3.85E-04
709	570513.8	4215398	1.08E-02	6.13E-03	1.65E-03	9.33E-04	7.46E-04	3.84E-04
710	570513.6	4215407	1.08E-02	6.10E-03	1.64E-03	9.28E-04	7.42E-04	3.82E-04
711	570513.4	4215417	1.07E-02	6.06E-03	1.63E-03	9.22E-04	7.38E-04	3.80E-04
712	570512.7	4215446	1.04E-02	5.90E-03	1.59E-03	8.98E-04	7.18E-04	3.69E-04
713	570512.5	4215455	1.03E-02	5.83E-03	1.57E-03	8.87E-04	7.10E-04	3.65E-04
714	570512.3	4215465	1.02E-02	5.76E-03	1.55E-03	8.76E-04	7.01E-04	3.61E-04
715	570512.1	4215474	1.00E-02	5.67E-03	1.53E-03	8.63E-04	6.90E-04	3.55E-04
716	570511.9	4215484	9.85E-03	5.58E-03	1.50E-03	8.48E-04	6.78E-04	3.49E-04
717	570511.7	4215493	9.66E-03	5.47E-03	1.48E-03	8.33E-04	6.66E-04	3.43E-04
718	570504.8	4215510	9.48E-03	5.37E-03	1.45E-03	8.17E-04	6.53E-04	3.36E-04
719	570498.1	4215516	9.51E-03	5.39E-03	1.45E-03	8.20E-04	6.56E-04	3.37E-04
720	570491.4	4215523	9.53E-03	5.40E-03	1.46E-03	8.21E-04	6.57E-04	3.38E-04
721	570484.7	4215530	9.53E-03	5.40E-03	1.46E-03	8.21E-04	6.57E-04	3.38E-04
722	570478	4215537	9.51E-03	5.39E-03	1.45E-03	8.19E-04	6.55E-04	3.37E-04
723	570471.3	4215543	9.47E-03	5.37E-03	1.45E-03	8.16E-04	6.53E-04	3.36E-04
724	570464.7	4215550	9.46E-03	5.36E-03	1.44E-03	8.15E-04	6.52E-04	3.36E-04

725	570458	4215557	9.43E-03	5.34E-03	1.44E-03	8.12E-04	6.50E-04	3.34E-04
726	570451.3	4215564	9.36E-03	5.30E-03	1.43E-03	8.07E-04	6.45E-04	3.32E-04
727	570444.6	4215571	9.26E-03	5.25E-03	1.41E-03	7.98E-04	6.38E-04	3.29E-04
728	570437.9	4215577	9.11E-03	5.16E-03	1.39E-03	7.85E-04	6.28E-04	3.23E-04
729	570431.2	4215584	8.93E-03	5.06E-03	1.36E-03	7.69E-04	6.15E-04	3.17E-04
730	570424.5	4215591	8.71E-03	4.93E-03	1.33E-03	7.50E-04	6.00E-04	3.09E-04
731	570417.8	4215598	8.46E-03	4.79E-03	1.29E-03	7.29E-04	5.83E-04	3.00E-04
732	570411.2	4215605	8.18E-03	4.63E-03	1.25E-03	7.05E-04	5.64E-04	2.90E-04
733	570404.5	4215611	7.87E-03	4.46E-03	1.20E-03	6.78E-04	5.42E-04	2.79E-04
734	570397.8	4215618	7.55E-03	4.28E-03	1.15E-03	6.51E-04	5.20E-04	2.68E-04
735	570391.1	4215625	7.22E-03	4.09E-03	1.10E-03	6.22E-04	4.97E-04	2.56E-04
736	570384.4	4215632	6.88E-03	3.90E-03	1.05E-03	5.93E-04	4.74E-04	2.44E-04
737	570377.7	4215638	6.53E-03	3.70E-03	9.97E-04	5.63E-04	4.50E-04	2.32E-04
738	570371	4215645	6.19E-03	3.50E-03	9.45E-04	5.33E-04	4.26E-04	2.19E-04
739	570364.3	4215652	5.84E-03	3.31E-03	8.92E-04	5.04E-04	4.03E-04	2.07E-04
740	570357.7	4215659	5.51E-03	3.12E-03	8.42E-04	4.75E-04	3.80E-04	1.96E-04
741	569937.1	4214980	3.89E-03	2.20E-03	5.94E-04	3.35E-04	2.68E-04	1.38E-04
742	569941.8	4214988	4.17E-03	2.36E-03	6.36E-04	3.59E-04	2.87E-04	1.48E-04
743	569895.6	4214925	2.81E-03	1.59E-03	4.29E-04	2.42E-04	1.94E-04	9.97E-05
744	569900.3	4214934	2.91E-03	1.65E-03	4.44E-04	2.51E-04	2.00E-04	1.03E-04
745	569905	4214942	3.03E-03	1.71E-03	4.62E-04	2.61E-04	2.08E-04	1.07E-04
746	569909.6	4214951	3.16E-03	1.79E-03	4.83E-04	2.72E-04	2.18E-04	1.12E-04
747	569914.3	4214959	3.33E-03	1.89E-03	5.08E-04	2.87E-04	2.29E-04	1.18E-04
748	569919	4214968	3.53E-03	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
749	569923.7	4214976	3.76E-03	2.13E-03	5.74E-04	3.24E-04	2.59E-04	1.33E-04
750	569928.3	4214985	4.01E-03	2.27E-03	6.13E-04	3.46E-04	2.77E-04	1.42E-04
751	569933	4214993	4.31E-03	2.44E-03	6.58E-04	3.72E-04	2.97E-04	1.53E-04
752	569877.5	4214913	2.70E-03	1.53E-03	4.13E-04	2.33E-04	1.86E-04	9.59E-05
753	569882.2	4214922	2.78E-03	1.57E-03	4.24E-04	2.39E-04	1.92E-04	9.86E-05
754	569886.9	4214930	2.87E-03	1.62E-03	4.38E-04	2.47E-04	1.98E-04	1.02E-04
755	569891.5	4214939	2.97E-03	1.68E-03	4.54E-04	2.56E-04	2.05E-04	1.05E-04
756	569896.2	4214947	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
757	569900.9	4214956	3.24E-03	1.84E-03	4.95E-04	2.79E-04	2.23E-04	1.15E-04
758	569905.5	4214964	3.43E-03	1.94E-03	5.24E-04	2.96E-04	2.37E-04	1.22E-04
759	569910.2	4214973	3.65E-03	2.07E-03	5.57E-04	3.14E-04	2.51E-04	1.29E-04
760	569914.9	4214981	3.88E-03	2.20E-03	5.93E-04	3.35E-04	2.68E-04	1.38E-04
761	569919.6	4214990	4.16E-03	2.36E-03	6.35E-04	3.58E-04	2.86E-04	1.47E-04
762	569924.2	4214998	4.48E-03	2.54E-03	6.83E-04	3.86E-04	3.08E-04	1.59E-04
763	569928.9	4215007	4.84E-03	2.74E-03	7.38E-04	4.17E-04	3.33E-04	1.72E-04
764	569868.7	4214918	2.76E-03	1.56E-03	4.21E-04	2.38E-04	1.90E-04	9.78E-05
765	569873.4	4214926	2.84E-03	1.61E-03	4.33E-04	2.44E-04	1.96E-04	1.01E-04
766	569878.1	4214935	2.93E-03	1.66E-03	4.47E-04	2.52E-04	2.02E-04	1.04E-04
767	569882.8	4214943	3.04E-03	1.72E-03	4.64E-04	2.62E-04	2.10E-04	1.08E-04
768	569887.4	4214952	3.17E-03	1.80E-03	4.85E-04	2.73E-04	2.19E-04	1.13E-04
769	569892.1	4214960	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.19E-04
770	569896.8	4214969	3.54E-03	2.01E-03	5.41E-04	3.05E-04	2.44E-04	1.26E-04
771	569901.5	4214977	3.77E-03	2.13E-03	5.75E-04	3.25E-04	2.60E-04	1.34E-04
772	569906.1	4214986	4.02E-03	2.27E-03	6.13E-04	3.46E-04	2.77E-04	1.42E-04
773	569910.8	4214994	4.31E-03	2.44E-03	6.59E-04	3.72E-04	2.97E-04	1.53E-04
774	569915.5	4215003	4.65E-03	2.64E-03	7.10E-04	4.01E-04	3.21E-04	1.65E-04
775	569920.2	4215011	5.04E-03	2.85E-03	7.69E-04	4.34E-04	3.47E-04	1.79E-04
776	569860	4214923	2.82E-03	1.60E-03	4.30E-04	2.43E-04	1.94E-04	1.00E-04

777	569864.7	4214931	2.90E-03	1.64E-03	4.42E-04	2.50E-04	2.00E-04	1.03E-04
778	569869.3	4214940	2.99E-03	1.70E-03	4.57E-04	2.58E-04	2.06E-04	1.06E-04
779	569874	4214948	3.11E-03	1.76E-03	4.75E-04	2.68E-04	2.15E-04	1.10E-04
780	569878.7	4214957	3.26E-03	1.85E-03	4.98E-04	2.81E-04	2.25E-04	1.16E-04
781	569883.3	4214965	3.45E-03	1.95E-03	5.27E-04	2.97E-04	2.38E-04	1.22E-04
782	569888	4214974	3.66E-03	2.07E-03	5.59E-04	3.16E-04	2.52E-04	1.30E-04
783	569892.7	4214982	3.90E-03	2.21E-03	5.95E-04	3.36E-04	2.69E-04	1.38E-04
784	569897.4	4214991	4.17E-03	2.36E-03	6.36E-04	3.59E-04	2.87E-04	1.48E-04
785	569902	4214999	4.48E-03	2.54E-03	6.84E-04	3.86E-04	3.09E-04	1.59E-04
786	569906.7	4215008	4.84E-03	2.74E-03	7.39E-04	4.17E-04	3.33E-04	1.72E-04
787	569911.4	4215016	5.25E-03	2.97E-03	8.01E-04	4.52E-04	3.62E-04	1.86E-04
788	569851.2	4214927	2.88E-03	1.63E-03	4.40E-04	2.48E-04	1.98E-04	1.02E-04
789	569855.9	4214936	2.96E-03	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
790	569860.6	4214944	3.07E-03	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04
791	569865.2	4214953	3.20E-03	1.81E-03	4.88E-04	2.75E-04	2.20E-04	1.13E-04
792	569869.9	4214961	3.36E-03	1.91E-03	5.14E-04	2.90E-04	2.32E-04	1.19E-04
793	569874.6	4214970	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.46E-04	1.26E-04
794	569879.3	4214978	3.79E-03	2.14E-03	5.78E-04	3.26E-04	2.61E-04	1.34E-04
795	569883.9	4214987	4.03E-03	2.28E-03	6.15E-04	3.47E-04	2.78E-04	1.43E-04
796	569888.6	4214996	4.33E-03	2.45E-03	6.61E-04	3.73E-04	2.98E-04	1.53E-04
797	569893.3	4215004	4.66E-03	2.64E-03	7.12E-04	4.02E-04	3.21E-04	1.65E-04
798	569898	4215013	5.04E-03	2.85E-03	7.69E-04	4.34E-04	3.47E-04	1.79E-04
799	569902.6	4215021	5.47E-03	3.10E-03	8.35E-04	4.71E-04	3.77E-04	1.94E-04
800	569842.5	4214932	2.94E-03	1.66E-03	4.49E-04	2.53E-04	2.02E-04	1.04E-04
801	569847.1	4214941	3.03E-03	1.71E-03	4.62E-04	2.61E-04	2.09E-04	1.07E-04
802	569851.8	4214949	3.14E-03	1.78E-03	4.80E-04	2.71E-04	2.16E-04	1.11E-04
803	569856.5	4214958	3.29E-03	1.86E-03	5.02E-04	2.83E-04	2.26E-04	1.17E-04
804	569861.1	4214966	3.47E-03	1.97E-03	5.30E-04	2.99E-04	2.39E-04	1.23E-04
805	569865.8	4214975	3.68E-03	2.08E-03	5.62E-04	3.17E-04	2.54E-04	1.31E-04
806	569870.5	4214983	3.91E-03	2.22E-03	5.97E-04	3.37E-04	2.70E-04	1.39E-04
807	569875.2	4214992	4.18E-03	2.37E-03	6.38E-04	3.60E-04	2.88E-04	1.48E-04
808	569879.8	4215000	4.49E-03	2.55E-03	6.86E-04	3.87E-04	3.10E-04	1.59E-04
809	569884.5	4215009	4.85E-03	2.75E-03	7.40E-04	4.18E-04	3.34E-04	1.72E-04
810	569889.2	4215017	5.25E-03	2.97E-03	8.01E-04	4.52E-04	3.62E-04	1.86E-04
811	569893.9	4215026	5.70E-03	3.23E-03	8.71E-04	4.91E-04	3.93E-04	2.02E-04
812	569833.7	4214937	3.00E-03	1.70E-03	4.58E-04	2.58E-04	2.07E-04	1.06E-04
813	569838.4	4214946	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
814	569843	4214954	3.22E-03	1.82E-03	4.92E-04	2.77E-04	2.22E-04	1.14E-04
815	569847.7	4214963	3.39E-03	1.92E-03	5.17E-04	2.92E-04	2.33E-04	1.20E-04
816	569852.4	4214971	3.58E-03	2.03E-03	5.47E-04	3.09E-04	2.47E-04	1.27E-04
817	569857.1	4214980	3.80E-03	2.15E-03	5.80E-04	3.27E-04	2.62E-04	1.35E-04
818	569861.7	4214988	4.04E-03	2.29E-03	6.17E-04	3.48E-04	2.78E-04	1.43E-04
819	569866.4	4214997	4.34E-03	2.46E-03	6.62E-04	3.74E-04	2.99E-04	1.54E-04
820	569871.1	4215005	4.67E-03	2.64E-03	7.12E-04	4.02E-04	3.22E-04	1.66E-04
821	569875.8	4215014	5.04E-03	2.86E-03	7.70E-04	4.34E-04	3.47E-04	1.79E-04
822	569880.4	4215022	5.46E-03	3.09E-03	8.34E-04	4.70E-04	3.76E-04	1.94E-04
823	569885.1	4215031	5.94E-03	3.36E-03	9.06E-04	5.11E-04	4.09E-04	2.11E-04
824	569941.2	4215133	3.57E-02	2.02E-02	5.45E-03	3.08E-03	2.46E-03	1.27E-03
825	569945.9	4215141	3.98E-02	2.26E-02	6.08E-03	3.43E-03	2.74E-03	1.41E-03
826	569950.6	4215150	4.38E-02	2.48E-02	6.69E-03	3.78E-03	3.02E-03	1.55E-03
827	569824.9	4214942	3.07E-03	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04
828	569829.6	4214950	3.17E-03	1.80E-03	4.85E-04	2.73E-04	2.19E-04	1.13E-04

829	569834.3	4214959	3.32E-03	1.88E-03	5.06E-04	2.86E-04	2.28E-04	1.18E-04
830	569838.9	4214967	3.49E-03	1.98E-03	5.33E-04	3.01E-04	2.41E-04	1.24E-04
831	569843.6	4214976	3.69E-03	2.09E-03	5.64E-04	3.18E-04	2.54E-04	1.31E-04
832	569848.3	4214984	3.92E-03	2.22E-03	5.98E-04	3.37E-04	2.70E-04	1.39E-04
833	569853	4214993	4.18E-03	2.37E-03	6.39E-04	3.61E-04	2.88E-04	1.48E-04
834	569857.6	4215001	4.49E-03	2.55E-03	6.86E-04	3.87E-04	3.10E-04	1.59E-04
835	569862.3	4215010	4.84E-03	2.74E-03	7.39E-04	4.17E-04	3.34E-04	1.72E-04
836	569867	4215018	5.23E-03	2.96E-03	7.99E-04	4.51E-04	3.61E-04	1.86E-04
837	569871.7	4215027	5.67E-03	3.21E-03	8.66E-04	4.88E-04	3.91E-04	2.01E-04
838	569876.3	4215035	6.17E-03	3.49E-03	9.42E-04	5.31E-04	4.25E-04	2.19E-04
839	569927.8	4215129	3.08E-02	1.75E-02	4.71E-03	2.66E-03	2.13E-03	1.09E-03
840	569932.4	4215137	3.44E-02	1.95E-02	5.25E-03	2.96E-03	2.37E-03	1.22E-03
841	569937.1	4215146	3.79E-02	2.15E-02	5.79E-03	3.26E-03	2.61E-03	1.34E-03
842	569941.8	4215154	4.13E-02	2.34E-02	6.31E-03	3.56E-03	2.85E-03	1.47E-03
843	569816.2	4214947	3.13E-03	1.78E-03	4.79E-04	2.70E-04	2.16E-04	1.11E-04
844	569820.8	4214955	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
845	569825.5	4214964	3.41E-03	1.93E-03	5.21E-04	2.94E-04	2.35E-04	1.21E-04
846	569830.2	4214972	3.60E-03	2.04E-03	5.49E-04	3.10E-04	2.48E-04	1.28E-04
847	569834.9	4214981	3.81E-03	2.16E-03	5.81E-04	3.28E-04	2.62E-04	1.35E-04
848	569839.5	4214989	4.04E-03	2.29E-03	6.18E-04	3.49E-04	2.79E-04	1.43E-04
849	569844.2	4214998	4.33E-03	2.45E-03	6.61E-04	3.73E-04	2.98E-04	1.54E-04
850	569848.9	4215006	4.65E-03	2.64E-03	7.11E-04	4.01E-04	3.21E-04	1.65E-04
851	569853.6	4215015	5.02E-03	2.84E-03	7.66E-04	4.33E-04	3.46E-04	1.78E-04
852	569858.2	4215023	5.42E-03	3.07E-03	8.28E-04	4.67E-04	3.74E-04	1.92E-04
853	569862.9	4215032	5.88E-03	3.33E-03	8.97E-04	5.06E-04	4.05E-04	2.08E-04
854	569914.3	4215125	2.57E-02	1.45E-02	3.92E-03	2.21E-03	1.77E-03	9.10E-04
855	569919	4215134	3.02E-02	1.71E-02	4.61E-03	2.60E-03	2.08E-03	1.07E-03
856	569923.7	4215142	3.30E-02	1.87E-02	5.03E-03	2.84E-03	2.27E-03	1.17E-03
857	569928.4	4215151	3.60E-02	2.04E-02	5.50E-03	3.10E-03	2.48E-03	1.28E-03
858	569933	4215159	3.89E-02	2.21E-02	5.94E-03	3.35E-03	2.68E-03	1.38E-03
859	569802.7	4214943	3.11E-03	1.76E-03	4.75E-04	2.68E-04	2.14E-04	1.10E-04
860	569807.4	4214952	3.21E-03	1.82E-03	4.90E-04	2.77E-04	2.21E-04	1.14E-04
861	569812.1	4214960	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.19E-04
862	569816.7	4214969	3.51E-03	1.99E-03	5.36E-04	3.03E-04	2.42E-04	1.25E-04
863	569821.4	4214977	3.70E-03	2.10E-03	5.65E-04	3.19E-04	2.55E-04	1.31E-04
864	569826.1	4214986	3.92E-03	2.22E-03	5.98E-04	3.37E-04	2.70E-04	1.39E-04
865	569830.8	4214994	4.18E-03	2.37E-03	6.38E-04	3.60E-04	2.88E-04	1.48E-04
866	569835.4	4215003	4.48E-03	2.54E-03	6.84E-04	3.86E-04	3.09E-04	1.59E-04
867	569840.1	4215011	4.81E-03	2.73E-03	7.35E-04	4.15E-04	3.32E-04	1.71E-04
868	569844.8	4215020	5.19E-03	2.94E-03	7.93E-04	4.47E-04	3.58E-04	1.84E-04
869	569849.5	4215028	5.61E-03	3.18E-03	8.56E-04	4.83E-04	3.86E-04	1.99E-04
870	569854.1	4215037	6.08E-03	3.44E-03	9.28E-04	5.24E-04	4.19E-04	2.16E-04
871	569905.6	4215130	2.54E-02	1.44E-02	3.88E-03	2.19E-03	1.75E-03	9.01E-04
872	569910.2	4215139	2.93E-02	1.66E-02	4.48E-03	2.53E-03	2.02E-03	1.04E-03
873	569914.9	4215147	3.16E-02	1.79E-02	4.82E-03	2.72E-03	2.17E-03	1.12E-03
874	569919.6	4215156	3.43E-02	1.94E-02	5.23E-03	2.95E-03	2.36E-03	1.22E-03
875	569924.3	4215164	3.67E-02	2.08E-02	5.61E-03	3.16E-03	2.53E-03	1.30E-03
876	569792.9	4214939	3.09E-03	1.75E-03	4.71E-04	2.66E-04	2.13E-04	1.10E-04
877	569794	4214948	3.18E-03	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04
878	569798.6	4214956	3.29E-03	1.86E-03	5.03E-04	2.84E-04	2.27E-04	1.17E-04
879	569803.3	4214965	3.44E-03	1.95E-03	5.25E-04	2.96E-04	2.37E-04	1.22E-04
880	569808	4214973	3.61E-03	2.05E-03	5.51E-04	3.11E-04	2.49E-04	1.28E-04

881	569812.7	4214982	3.80E-03	2.16E-03	5.81E-04	3.28E-04	2.62E-04	1.35E-04
882	569817.3	4214990	4.04E-03	2.29E-03	6.16E-04	3.48E-04	2.78E-04	1.43E-04
883	569822	4214999	4.31E-03	2.44E-03	6.58E-04	3.71E-04	2.97E-04	1.53E-04
884	569826.7	4215007	4.62E-03	2.62E-03	7.06E-04	3.98E-04	3.18E-04	1.64E-04
885	569831.4	4215016	4.97E-03	2.82E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
886	569836	4215024	5.35E-03	3.03E-03	8.17E-04	4.61E-04	3.69E-04	1.90E-04
887	569840.7	4215033	5.78E-03	3.28E-03	8.83E-04	4.98E-04	3.99E-04	2.05E-04
888	569896.8	4215135	2.51E-02	1.42E-02	3.84E-03	2.17E-03	1.73E-03	8.92E-04
889	569901.5	4215143	2.84E-02	1.61E-02	4.33E-03	2.44E-03	1.96E-03	1.01E-03
890	569906.2	4215152	3.02E-02	1.71E-02	4.62E-03	2.61E-03	2.08E-03	1.07E-03
891	569910.8	4215160	3.26E-02	1.85E-02	4.98E-03	2.81E-03	2.25E-03	1.16E-03
892	569915.5	4215169	3.47E-02	1.96E-02	5.29E-03	2.99E-03	2.39E-03	1.23E-03
893	569784.2	4214944	3.15E-03	1.79E-03	4.82E-04	2.72E-04	2.17E-04	1.12E-04
894	569783.1	4214935	3.08E-03	1.74E-03	4.70E-04	2.65E-04	2.12E-04	1.09E-04
895	569789.9	4214961	3.38E-03	1.92E-03	5.16E-04	2.91E-04	2.33E-04	1.20E-04
896	569794.5	4214970	3.54E-03	2.00E-03	5.40E-04	3.05E-04	2.44E-04	1.25E-04
897	569799.2	4214978	3.71E-03	2.10E-03	5.67E-04	3.20E-04	2.56E-04	1.32E-04
898	569803.9	4214987	3.91E-03	2.22E-03	5.97E-04	3.37E-04	2.70E-04	1.39E-04
899	569808.6	4214995	4.16E-03	2.36E-03	6.35E-04	3.58E-04	2.87E-04	1.48E-04
900	569813.2	4215004	4.44E-03	2.52E-03	6.78E-04	3.83E-04	3.06E-04	1.58E-04
901	569817.9	4215012	4.76E-03	2.70E-03	7.27E-04	4.10E-04	3.28E-04	1.69E-04
902	569822.6	4215021	5.11E-03	2.90E-03	7.81E-04	4.41E-04	3.52E-04	1.81E-04
903	569827.3	4215029	5.50E-03	3.12E-03	8.40E-04	4.74E-04	3.79E-04	1.95E-04
904	569831.9	4215038	5.94E-03	3.36E-03	9.07E-04	5.12E-04	4.09E-04	2.11E-04
905	569888	4215140	2.45E-02	1.39E-02	3.75E-03	2.11E-03	1.69E-03	8.70E-04
906	569892.7	4215148	2.73E-02	1.55E-02	4.17E-03	2.35E-03	1.88E-03	9.69E-04
907	569897.4	4215157	2.89E-02	1.64E-02	4.41E-03	2.49E-03	1.99E-03	1.02E-03
908	569902.1	4215165	3.11E-02	1.76E-02	4.75E-03	2.68E-03	2.14E-03	1.10E-03
909	569906.7	4215174	3.25E-02	1.84E-02	4.97E-03	2.80E-03	2.24E-03	1.15E-03
910	569775.3	4214948	3.22E-03	1.82E-03	4.92E-04	2.77E-04	2.22E-04	1.14E-04
911	569774.2	4214939	3.13E-03	1.77E-03	4.78E-04	2.69E-04	2.16E-04	1.11E-04
912	569773.1	4214929	3.06E-03	1.73E-03	4.67E-04	2.64E-04	2.11E-04	1.09E-04
913	569776.4	4214958	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.18E-04
914	569781.1	4214966	3.47E-03	1.97E-03	5.30E-04	2.99E-04	2.39E-04	1.23E-04
915	569785.8	4214975	3.63E-03	2.06E-03	5.54E-04	3.13E-04	2.50E-04	1.29E-04
916	569790.5	4214983	3.81E-03	2.16E-03	5.82E-04	3.28E-04	2.63E-04	1.35E-04
917	569795.1	4214992	4.03E-03	2.28E-03	6.15E-04	3.47E-04	2.77E-04	1.43E-04
918	569799.8	4215000	4.27E-03	2.42E-03	6.53E-04	3.68E-04	2.95E-04	1.52E-04
919	569804.5	4215009	4.56E-03	2.58E-03	6.96E-04	3.93E-04	3.14E-04	1.62E-04
920	569809.2	4215017	4.88E-03	2.77E-03	7.46E-04	4.21E-04	3.36E-04	1.73E-04
921	569813.8	4215026	5.25E-03	2.97E-03	8.01E-04	4.52E-04	3.61E-04	1.86E-04
922	569818.5	4215034	5.64E-03	3.19E-03	8.61E-04	4.86E-04	3.89E-04	2.00E-04
923	569823.2	4215043	6.08E-03	3.44E-03	9.28E-04	5.24E-04	4.19E-04	2.16E-04
924	569879.3	4215145	2.37E-02	1.34E-02	3.62E-03	2.04E-03	1.63E-03	8.40E-04
925	569884	4215153	2.62E-02	1.48E-02	3.99E-03	2.25E-03	1.80E-03	9.28E-04
926	569888.6	4215162	2.75E-02	1.56E-02	4.20E-03	2.37E-03	1.90E-03	9.76E-04
927	569893.3	4215170	2.92E-02	1.66E-02	4.46E-03	2.52E-03	2.01E-03	1.04E-03
928	569898	4215179	3.05E-02	1.73E-02	4.65E-03	2.63E-03	2.10E-03	1.08E-03
929	569766.6	4214953	3.30E-03	1.87E-03	5.03E-04	2.84E-04	2.27E-04	1.17E-04
930	569765.5	4214944	3.20E-03	1.81E-03	4.88E-04	2.75E-04	2.20E-04	1.13E-04
931	569764.4	4214934	3.12E-03	1.77E-03	4.76E-04	2.69E-04	2.15E-04	1.11E-04
932	569763.3	4214925	3.07E-03	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04

933	569777.2	4214821	1.82E-03	1.03E-03	2.78E-04	1.57E-04	1.26E-04	6.46E-05
934	569782.9	4214813	1.74E-03	9.87E-04	2.66E-04	1.50E-04	1.20E-04	6.18E-05
935	569767.7	4214962	3.43E-03	1.94E-03	5.23E-04	2.95E-04	2.36E-04	1.22E-04
936	569772.3	4214971	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.45E-04	1.26E-04
937	569777	4214979	3.72E-03	2.11E-03	5.68E-04	3.21E-04	2.56E-04	1.32E-04
938	569781.7	4214988	3.91E-03	2.21E-03	5.97E-04	3.37E-04	2.69E-04	1.39E-04
939	569786.4	4214996	4.13E-03	2.34E-03	6.30E-04	3.56E-04	2.85E-04	1.46E-04
940	569791	4215005	4.38E-03	2.48E-03	6.69E-04	3.77E-04	3.02E-04	1.55E-04
941	569795.7	4215013	4.66E-03	2.64E-03	7.12E-04	4.02E-04	3.21E-04	1.65E-04
942	569800.4	4215022	4.98E-03	2.82E-03	7.61E-04	4.29E-04	3.43E-04	1.77E-04
943	569805.1	4215030	5.35E-03	3.03E-03	8.16E-04	4.61E-04	3.68E-04	1.90E-04
944	569809.7	4215039	5.75E-03	3.26E-03	8.78E-04	4.95E-04	3.96E-04	2.04E-04
945	569814.4	4215047	6.20E-03	3.51E-03	9.46E-04	5.34E-04	4.27E-04	2.20E-04
946	569819.1	4215056	6.67E-03	3.78E-03	1.02E-03	5.75E-04	4.60E-04	2.37E-04
947	569870.5	4215149	2.24E-02	1.27E-02	3.42E-03	1.93E-03	1.54E-03	7.95E-04
948	569875.2	4215158	2.49E-02	1.41E-02	3.80E-03	2.15E-03	1.72E-03	8.83E-04
949	569879.9	4215166	2.68E-02	1.52E-02	4.10E-03	2.31E-03	1.85E-03	9.52E-04
950	569884.5	4215175	2.75E-02	1.56E-02	4.20E-03	2.37E-03	1.89E-03	9.75E-04
951	569889.2	4215183	2.86E-02	1.62E-02	4.37E-03	2.47E-03	1.97E-03	1.02E-03
952	569757.8	4214958	3.38E-03	1.91E-03	5.16E-04	2.91E-04	2.33E-04	1.20E-04
953	569756.7	4214949	3.27E-03	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
954	569755.7	4214940	3.19E-03	1.80E-03	4.86E-04	2.75E-04	2.20E-04	1.13E-04
955	569754.6	4214930	3.12E-03	1.77E-03	4.77E-04	2.69E-04	2.15E-04	1.11E-04
956	569753.5	4214921	3.08E-03	1.75E-03	4.71E-04	2.66E-04	2.12E-04	1.09E-04
957	569750.4	4214841	2.00E-03	1.13E-03	3.05E-04	1.72E-04	1.38E-04	7.09E-05
958	569756	4214833	1.91E-03	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.79E-05
959	569767.2	4214818	1.78E-03	1.01E-03	2.71E-04	1.53E-04	1.22E-04	6.30E-05
960	569772.8	4214811	1.71E-03	9.67E-04	2.61E-04	1.47E-04	1.18E-04	6.06E-05
961	569784	4214796	1.60E-03	9.05E-04	2.44E-04	1.38E-04	1.10E-04	5.66E-05
962	569758.9	4214967	3.51E-03	1.99E-03	5.36E-04	3.03E-04	2.42E-04	1.25E-04
963	569763.6	4214976	3.65E-03	2.07E-03	5.57E-04	3.15E-04	2.52E-04	1.29E-04
964	569768.3	4214984	3.81E-03	2.16E-03	5.82E-04	3.29E-04	2.63E-04	1.35E-04
965	569772.9	4214993	4.01E-03	2.27E-03	6.12E-04	3.46E-04	2.76E-04	1.42E-04
966	569777.6	4215001	4.23E-03	2.40E-03	6.46E-04	3.65E-04	2.92E-04	1.50E-04
967	569782.3	4215010	4.47E-03	2.53E-03	6.83E-04	3.85E-04	3.08E-04	1.59E-04
968	569787	4215018	4.75E-03	2.69E-03	7.26E-04	4.09E-04	3.27E-04	1.69E-04
969	569791.6	4215027	5.07E-03	2.87E-03	7.75E-04	4.37E-04	3.50E-04	1.80E-04
970	569796.3	4215035	5.43E-03	3.08E-03	8.30E-04	4.68E-04	3.74E-04	1.93E-04
971	569801	4215044	5.83E-03	3.30E-03	8.90E-04	5.02E-04	4.02E-04	2.07E-04
972	569805.7	4215052	6.27E-03	3.55E-03	9.57E-04	5.40E-04	4.32E-04	2.22E-04
973	569810.3	4215061	6.75E-03	3.82E-03	1.03E-03	5.81E-04	4.65E-04	2.39E-04
974	569861.8	4215154	2.06E-02	1.17E-02	3.15E-03	1.78E-03	1.42E-03	7.31E-04
975	569866.4	4215163	2.32E-02	1.31E-02	3.54E-03	2.00E-03	1.60E-03	8.22E-04
976	569871.1	4215171	2.52E-02	1.43E-02	3.85E-03	2.18E-03	1.74E-03	8.95E-04
977	569875.8	4215180	2.66E-02	1.51E-02	4.07E-03	2.30E-03	1.84E-03	9.45E-04
978	569880.5	4215188	2.71E-02	1.53E-02	4.14E-03	2.33E-03	1.87E-03	9.61E-04
979	569749.1	4214963	3.46E-03	1.96E-03	5.28E-04	2.98E-04	2.39E-04	1.23E-04
980	569748	4214954	3.35E-03	1.90E-03	5.11E-04	2.88E-04	2.31E-04	1.19E-04
981	569746.9	4214945	3.26E-03	1.84E-03	4.97E-04	2.81E-04	2.24E-04	1.16E-04
982	569745.9	4214936	3.18E-03	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04
983	569744.8	4214927	3.13E-03	1.77E-03	4.78E-04	2.69E-04	2.16E-04	1.11E-04
984	569743.7	4214918	3.09E-03	1.75E-03	4.71E-04	2.66E-04	2.13E-04	1.09E-04

985	569736.2	4214854	2.18E-03	1.24E-03	3.33E-04	1.88E-04	1.50E-04	7.75E-05
986	569740.7	4214838	1.97E-03	1.11E-03	3.00E-04	1.69E-04	1.35E-04	6.97E-05
987	569746.2	4214831	1.88E-03	1.07E-03	2.88E-04	1.62E-04	1.30E-04	6.68E-05
988	569757.3	4214816	1.74E-03	9.86E-04	2.66E-04	1.50E-04	1.20E-04	6.17E-05
989	569768.3	4214802	1.63E-03	9.22E-04	2.48E-04	1.40E-04	1.12E-04	5.77E-05
990	569779.4	4214787	1.54E-03	8.70E-04	2.34E-04	1.32E-04	1.06E-04	5.45E-05
991	569750.1	4214972	3.59E-03	2.04E-03	5.49E-04	3.10E-04	2.48E-04	1.27E-04
992	569754.8	4214980	3.73E-03	2.12E-03	5.70E-04	3.22E-04	2.57E-04	1.32E-04
993	569759.5	4214989	3.91E-03	2.21E-03	5.97E-04	3.37E-04	2.69E-04	1.39E-04
994	569764.2	4214997	4.11E-03	2.33E-03	6.27E-04	3.54E-04	2.83E-04	1.46E-04
995	569768.8	4215006	4.33E-03	2.45E-03	6.61E-04	3.73E-04	2.98E-04	1.54E-04
996	569773.5	4215014	4.57E-03	2.59E-03	6.98E-04	3.94E-04	3.15E-04	1.62E-04
997	569778.2	4215023	4.85E-03	2.75E-03	7.41E-04	4.18E-04	3.34E-04	1.72E-04
998	569782.9	4215031	5.16E-03	2.92E-03	7.88E-04	4.45E-04	3.56E-04	1.83E-04
999	569787.5	4215040	5.51E-03	3.12E-03	8.41E-04	4.75E-04	3.80E-04	1.95E-04
1000	569792.2	4215048	5.90E-03	3.34E-03	9.01E-04	5.08E-04	4.06E-04	2.09E-04
1001	569796.9	4215057	6.33E-03	3.58E-03	9.66E-04	5.45E-04	4.36E-04	2.24E-04
1002	569801.6	4215066	6.79E-03	3.85E-03	1.04E-03	5.85E-04	4.68E-04	2.41E-04
1003	569806.2	4215074	7.29E-03	4.13E-03	1.11E-03	6.28E-04	5.03E-04	2.59E-04
1004	569853	4215159	1.89E-02	1.07E-02	2.88E-03	1.63E-03	1.30E-03	6.69E-04
1005	569857.7	4215168	2.14E-02	1.21E-02	3.26E-03	1.84E-03	1.47E-03	7.57E-04
1006	569862.3	4215176	2.36E-02	1.34E-02	3.60E-03	2.03E-03	1.63E-03	8.37E-04
1007	569867	4215185	2.52E-02	1.43E-02	3.85E-03	2.17E-03	1.74E-03	8.94E-04
1008	569871.7	4215193	2.58E-02	1.46E-02	3.94E-03	2.22E-03	1.78E-03	9.15E-04
1009	569740.2	4214967	3.53E-03	2.00E-03	5.40E-04	3.05E-04	2.44E-04	1.25E-04
1010	569739.1	4214958	3.41E-03	1.93E-03	5.21E-04	2.94E-04	2.35E-04	1.21E-04
1011	569738	4214948	3.31E-03	1.88E-03	5.06E-04	2.85E-04	2.28E-04	1.17E-04
1012	569736.8	4214938	3.23E-03	1.83E-03	4.93E-04	2.78E-04	2.23E-04	1.15E-04
1013	569735.7	4214929	3.17E-03	1.79E-03	4.84E-04	2.73E-04	2.18E-04	1.12E-04
1014	569734.6	4214919	3.10E-03	1.76E-03	4.74E-04	2.67E-04	2.14E-04	1.10E-04
1015	569727.8	4214862	2.28E-03	1.29E-03	3.49E-04	1.97E-04	1.57E-04	8.10E-05
1016	569726.6	4214852	2.15E-03	1.22E-03	3.28E-04	1.85E-04	1.48E-04	7.61E-05
1017	569731.4	4214835	1.93E-03	1.09E-03	2.95E-04	1.66E-04	1.33E-04	6.85E-05
1018	569737.2	4214827	1.85E-03	1.05E-03	2.83E-04	1.60E-04	1.28E-04	6.57E-05
1019	569743.1	4214820	1.77E-03	1.01E-03	2.71E-04	1.53E-04	1.22E-04	6.30E-05
1020	569748.9	4214812	1.70E-03	9.63E-04	2.60E-04	1.47E-04	1.17E-04	6.03E-05
1021	569754.8	4214804	1.64E-03	9.27E-04	2.50E-04	1.41E-04	1.13E-04	5.80E-05
1022	569760.6	4214797	1.59E-03	9.02E-04	2.43E-04	1.37E-04	1.10E-04	5.65E-05
1023	569766.5	4214789	1.55E-03	8.77E-04	2.36E-04	1.33E-04	1.07E-04	5.49E-05
1024	569772.3	4214781	1.50E-03	8.51E-04	2.29E-04	1.29E-04	1.03E-04	5.33E-05
1025	569741.4	4214977	3.68E-03	2.08E-03	5.61E-04	3.17E-04	2.53E-04	1.30E-04
1026	569746.1	4214985	3.82E-03	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
1027	569750.7	4214994	4.00E-03	2.26E-03	6.10E-04	3.44E-04	2.75E-04	1.42E-04
1028	569755.4	4215002	4.20E-03	2.38E-03	6.41E-04	3.62E-04	2.89E-04	1.49E-04
1029	569760.1	4215011	4.42E-03	2.51E-03	6.75E-04	3.81E-04	3.05E-04	1.57E-04
1030	569764.8	4215019	4.67E-03	2.65E-03	7.13E-04	4.02E-04	3.22E-04	1.66E-04
1031	569769.4	4215028	4.95E-03	2.80E-03	7.56E-04	4.26E-04	3.41E-04	1.76E-04
1032	569774.1	4215036	5.25E-03	2.98E-03	8.02E-04	4.53E-04	3.62E-04	1.86E-04
1033	569778.8	4215045	5.58E-03	3.16E-03	8.53E-04	4.81E-04	3.85E-04	1.98E-04
1034	569783.5	4215053	5.96E-03	3.38E-03	9.10E-04	5.13E-04	4.11E-04	2.11E-04
1035	569788.1	4215062	6.37E-03	3.61E-03	9.73E-04	5.49E-04	4.39E-04	2.26E-04
1036	569792.8	4215070	6.82E-03	3.87E-03	1.04E-03	5.88E-04	4.70E-04	2.42E-04

1037	569797.5	4215079	7.31E-03	4.14E-03	1.12E-03	6.29E-04	5.03E-04	2.59E-04
1038	569844.2	4215164	1.72E-02	9.74E-03	2.62E-03	1.48E-03	1.18E-03	6.10E-04
1039	569848.9	4215172	1.99E-02	1.13E-02	3.04E-03	1.71E-03	1.37E-03	7.05E-04
1040	569853.6	4215181	2.23E-02	1.26E-02	3.40E-03	1.92E-03	1.53E-03	7.89E-04
1041	569858.3	4215189	2.39E-02	1.36E-02	3.66E-03	2.06E-03	1.65E-03	8.49E-04
1042	569862.9	4215198	2.49E-02	1.41E-02	3.81E-03	2.15E-03	1.72E-03	8.85E-04
1043	569731.5	4214972	3.61E-03	2.05E-03	5.52E-04	3.11E-04	2.49E-04	1.28E-04
1044	569730.4	4214963	3.49E-03	1.98E-03	5.34E-04	3.01E-04	2.41E-04	1.24E-04
1045	569729.3	4214953	3.39E-03	1.92E-03	5.18E-04	2.92E-04	2.34E-04	1.20E-04
1046	569728.1	4214944	3.30E-03	1.87E-03	5.04E-04	2.85E-04	2.28E-04	1.17E-04
1047	569727	4214934	3.23E-03	1.83E-03	4.93E-04	2.78E-04	2.23E-04	1.15E-04
1048	569725.9	4214925	3.17E-03	1.79E-03	4.84E-04	2.73E-04	2.18E-04	1.12E-04
1049	569724.8	4214916	3.08E-03	1.74E-03	4.70E-04	2.65E-04	2.12E-04	1.09E-04
1050	569719.2	4214868	2.38E-03	1.35E-03	3.64E-04	2.05E-04	1.64E-04	8.44E-05
1051	569718.1	4214859	2.24E-03	1.27E-03	3.42E-04	1.93E-04	1.54E-04	7.95E-05
1052	569717	4214849	2.12E-03	1.20E-03	3.23E-04	1.82E-04	1.46E-04	7.51E-05
1053	569721.6	4214832	1.91E-03	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.78E-05
1054	569727.4	4214825	1.83E-03	1.04E-03	2.80E-04	1.58E-04	1.26E-04	6.51E-05
1055	569733.2	4214817	1.76E-03	9.98E-04	2.69E-04	1.52E-04	1.21E-04	6.25E-05
1056	569738.9	4214810	1.69E-03	9.58E-04	2.58E-04	1.46E-04	1.17E-04	6.00E-05
1057	569744.7	4214802	1.63E-03	9.26E-04	2.50E-04	1.41E-04	1.13E-04	5.80E-05
1058	569750.5	4214795	1.59E-03	8.99E-04	2.42E-04	1.37E-04	1.09E-04	5.63E-05
1059	569756.2	4214787	1.54E-03	8.73E-04	2.35E-04	1.33E-04	1.06E-04	5.47E-05
1060	569762	4214779	1.50E-03	8.49E-04	2.29E-04	1.29E-04	1.03E-04	5.31E-05
1061	569767.8	4214772	1.47E-03	8.30E-04	2.24E-04	1.26E-04	1.01E-04	5.20E-05
1062	569732.6	4214982	3.75E-03	2.13E-03	5.73E-04	3.23E-04	2.59E-04	1.33E-04
1063	569737.3	4214990	3.91E-03	2.21E-03	5.96E-04	3.37E-04	2.69E-04	1.39E-04
1064	569742	4214999	4.09E-03	2.31E-03	6.24E-04	3.52E-04	2.82E-04	1.45E-04
1065	569746.6	4215007	4.29E-03	2.43E-03	6.55E-04	3.69E-04	2.95E-04	1.52E-04
1066	569751.3	4215016	4.51E-03	2.55E-03	6.88E-04	3.88E-04	3.11E-04	1.60E-04
1067	569756	4215024	4.75E-03	2.69E-03	7.26E-04	4.10E-04	3.28E-04	1.69E-04
1068	569760.7	4215033	5.03E-03	2.85E-03	7.68E-04	4.33E-04	3.46E-04	1.78E-04
1069	569765.3	4215041	5.32E-03	3.02E-03	8.13E-04	4.59E-04	3.67E-04	1.89E-04
1070	569770	4215050	5.65E-03	3.20E-03	8.63E-04	4.87E-04	3.90E-04	2.01E-04
1071	569774.7	4215058	6.02E-03	3.41E-03	9.19E-04	5.19E-04	4.15E-04	2.14E-04
1072	569779.4	4215067	6.42E-03	3.63E-03	9.80E-04	5.53E-04	4.42E-04	2.28E-04
1073	569784	4215075	6.84E-03	3.87E-03	1.04E-03	5.89E-04	4.71E-04	2.43E-04
1074	569788.7	4215084	7.30E-03	4.14E-03	1.11E-03	6.29E-04	5.03E-04	2.59E-04
1075	569793.4	4215092	7.79E-03	4.41E-03	1.19E-03	6.71E-04	5.37E-04	2.76E-04
1076	569835.5	4215169	1.65E-02	9.37E-03	2.52E-03	1.42E-03	1.14E-03	5.86E-04
1077	569840.1	4215177	1.90E-02	1.07E-02	2.90E-03	1.63E-03	1.31E-03	6.73E-04
1078	569844.8	4215186	2.13E-02	1.21E-02	3.25E-03	1.83E-03	1.47E-03	7.55E-04
1079	569849.5	4215194	2.30E-02	1.30E-02	3.51E-03	1.98E-03	1.58E-03	8.14E-04
1080	569854.2	4215203	2.34E-02	1.33E-02	3.58E-03	2.02E-03	1.61E-03	8.31E-04
1081	569722.8	4214977	3.69E-03	2.09E-03	5.64E-04	3.18E-04	2.54E-04	1.31E-04
1082	569721.7	4214968	3.57E-03	2.02E-03	5.45E-04	3.08E-04	2.46E-04	1.27E-04
1083	569720.5	4214958	3.47E-03	1.97E-03	5.30E-04	2.99E-04	2.39E-04	1.23E-04
1084	569719.4	4214949	3.38E-03	1.91E-03	5.16E-04	2.91E-04	2.33E-04	1.20E-04
1085	569718.3	4214940	3.29E-03	1.87E-03	5.03E-04	2.84E-04	2.27E-04	1.17E-04
1086	569717.2	4214931	3.22E-03	1.83E-03	4.92E-04	2.78E-04	2.22E-04	1.14E-04
1087	569716.1	4214921	3.14E-03	1.78E-03	4.79E-04	2.71E-04	2.16E-04	1.11E-04
1088	569715	4214912	3.04E-03	1.72E-03	4.64E-04	2.62E-04	2.09E-04	1.08E-04

1089	569711.7	4214884	2.63E-03	1.49E-03	4.02E-04	2.27E-04	1.81E-04	9.34E-05
1090	569710.6	4214875	2.48E-03	1.40E-03	3.79E-04	2.14E-04	1.71E-04	8.80E-05
1091	569709.5	4214865	2.34E-03	1.33E-03	3.57E-04	2.02E-04	1.61E-04	8.30E-05
1092	569708.4	4214856	2.21E-03	1.25E-03	3.38E-04	1.91E-04	1.52E-04	7.85E-05
1093	569707.3	4214847	2.10E-03	1.19E-03	3.20E-04	1.81E-04	1.44E-04	7.44E-05
1094	569711.9	4214830	1.91E-03	1.08E-03	2.92E-04	1.64E-04	1.32E-04	6.77E-05
1095	569717.6	4214822	1.83E-03	1.04E-03	2.79E-04	1.58E-04	1.26E-04	6.49E-05
1096	569723.3	4214815	1.75E-03	9.91E-04	2.67E-04	1.51E-04	1.21E-04	6.21E-05
1097	569729	4214807	1.68E-03	9.53E-04	2.57E-04	1.45E-04	1.16E-04	5.97E-05
1098	569734.7	4214800	1.64E-03	9.27E-04	2.50E-04	1.41E-04	1.13E-04	5.80E-05
1099	569740.4	4214793	1.59E-03	9.02E-04	2.43E-04	1.37E-04	1.10E-04	5.65E-05
1100	569746.1	4214785	1.55E-03	8.76E-04	2.36E-04	1.33E-04	1.07E-04	5.49E-05
1101	569751.8	4214778	1.50E-03	8.49E-04	2.29E-04	1.29E-04	1.03E-04	5.32E-05
1102	569757.4	4214770	1.47E-03	8.34E-04	2.25E-04	1.27E-04	1.01E-04	5.22E-05
1103	569763.1	4214763	1.45E-03	8.22E-04	2.21E-04	1.25E-04	9.99E-05	5.14E-05
1104	569723.9	4214986	3.83E-03	2.17E-03	5.85E-04	3.30E-04	2.64E-04	1.36E-04
1105	569728.5	4214995	3.99E-03	2.26E-03	6.09E-04	3.44E-04	2.75E-04	1.42E-04
1106	569733.2	4215003	4.17E-03	2.36E-03	6.37E-04	3.59E-04	2.87E-04	1.48E-04
1107	569737.9	4215012	4.37E-03	2.48E-03	6.67E-04	3.76E-04	3.01E-04	1.55E-04
1108	569742.6	4215020	4.59E-03	2.60E-03	7.01E-04	3.96E-04	3.16E-04	1.63E-04
1109	569747.2	4215029	4.83E-03	2.74E-03	7.38E-04	4.17E-04	3.33E-04	1.71E-04
1110	569751.9	4215037	5.09E-03	2.89E-03	7.78E-04	4.39E-04	3.51E-04	1.81E-04
1111	569756.6	4215046	5.38E-03	3.05E-03	8.21E-04	4.64E-04	3.71E-04	1.91E-04
1112	569761.3	4215054	5.71E-03	3.24E-03	8.72E-04	4.92E-04	3.94E-04	2.03E-04
1113	569765.9	4215063	6.07E-03	3.44E-03	9.26E-04	5.23E-04	4.18E-04	2.15E-04
1114	569770.6	4215071	6.45E-03	3.65E-03	9.85E-04	5.56E-04	4.44E-04	2.29E-04
1115	569775.3	4215080	6.85E-03	3.88E-03	1.05E-03	5.91E-04	4.72E-04	2.43E-04
1116	569780	4215088	7.29E-03	4.13E-03	1.11E-03	6.28E-04	5.02E-04	2.58E-04
1117	569784.6	4215097	7.74E-03	4.38E-03	1.18E-03	6.67E-04	5.33E-04	2.74E-04
1118	569789.3	4215105	8.23E-03	4.66E-03	1.26E-03	7.09E-04	5.67E-04	2.92E-04
1119	569826.7	4215173	1.61E-02	9.11E-03	2.46E-03	1.39E-03	1.11E-03	5.70E-04
1120	569831.4	4215182	1.83E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.50E-04
1121	569836.1	4215190	2.04E-02	1.16E-02	3.12E-03	1.76E-03	1.41E-03	7.25E-04
1122	569840.7	4215199	2.18E-02	1.23E-02	3.33E-03	1.88E-03	1.50E-03	7.73E-04
1123	569845.4	4215207	2.21E-02	1.25E-02	3.37E-03	1.90E-03	1.52E-03	7.83E-04
1124	569714	4214982	3.76E-03	2.13E-03	5.74E-04	3.24E-04	2.59E-04	1.33E-04
1125	569712.9	4214973	3.64E-03	2.06E-03	5.56E-04	3.14E-04	2.51E-04	1.29E-04
1126	569711.8	4214964	3.54E-03	2.00E-03	5.40E-04	3.05E-04	2.44E-04	1.25E-04
1127	569710.7	4214954	3.45E-03	1.95E-03	5.27E-04	2.97E-04	2.38E-04	1.22E-04
1128	569709.6	4214945	3.36E-03	1.90E-03	5.13E-04	2.89E-04	2.32E-04	1.19E-04
1129	569708.6	4214936	3.28E-03	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
1130	569707.5	4214927	3.21E-03	1.82E-03	4.91E-04	2.77E-04	2.21E-04	1.14E-04
1131	569706.4	4214918	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
1132	569705.3	4214908	2.98E-03	1.69E-03	4.55E-04	2.57E-04	2.05E-04	1.06E-04
1133	569704.2	4214899	2.86E-03	1.62E-03	4.37E-04	2.47E-04	1.97E-04	1.02E-04
1134	569703.1	4214890	2.72E-03	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.64E-05
1135	569702	4214881	2.57E-03	1.45E-03	3.92E-04	2.21E-04	1.77E-04	9.11E-05
1136	569700.9	4214872	2.43E-03	1.38E-03	3.71E-04	2.10E-04	1.68E-04	8.63E-05
1137	569699.8	4214862	2.31E-03	1.31E-03	3.52E-04	1.99E-04	1.59E-04	8.18E-05
1138	569698.7	4214853	2.19E-03	1.24E-03	3.34E-04	1.89E-04	1.51E-04	7.76E-05
1139	569697.6	4214844	2.08E-03	1.18E-03	3.18E-04	1.79E-04	1.43E-04	7.38E-05
1140	569702.2	4214827	1.91E-03	1.08E-03	2.91E-04	1.64E-04	1.32E-04	6.77E-05

1141	569707.8	4214820	1.83E-03	1.04E-03	2.80E-04	1.58E-04	1.26E-04	6.50E-05
1142	569713.4	4214813	1.76E-03	9.95E-04	2.68E-04	1.51E-04	1.21E-04	6.23E-05
1143	569719.1	4214805	1.69E-03	9.55E-04	2.57E-04	1.45E-04	1.16E-04	5.98E-05
1144	569730.3	4214790	1.60E-03	9.07E-04	2.45E-04	1.38E-04	1.10E-04	5.68E-05
1145	569735.9	4214783	1.56E-03	8.84E-04	2.38E-04	1.34E-04	1.07E-04	5.53E-05
1146	569741.6	4214776	1.52E-03	8.59E-04	2.32E-04	1.31E-04	1.05E-04	5.38E-05
1147	569752.8	4214761	1.46E-03	8.30E-04	2.24E-04	1.26E-04	1.01E-04	5.20E-05
1148	569715.1	4214991	3.91E-03	2.21E-03	5.96E-04	3.37E-04	2.69E-04	1.39E-04
1149	569719.8	4215000	4.07E-03	2.30E-03	6.21E-04	3.51E-04	2.80E-04	1.44E-04
1150	569724.4	4215008	4.25E-03	2.41E-03	6.49E-04	3.66E-04	2.93E-04	1.51E-04
1151	569729.1	4215017	4.45E-03	2.52E-03	6.79E-04	3.83E-04	3.07E-04	1.58E-04
1152	569733.8	4215025	4.67E-03	2.65E-03	7.13E-04	4.02E-04	3.22E-04	1.66E-04
1153	569738.5	4215034	4.91E-03	2.78E-03	7.49E-04	4.23E-04	3.38E-04	1.74E-04
1154	569743.1	4215042	5.16E-03	2.92E-03	7.88E-04	4.45E-04	3.56E-04	1.83E-04
1155	569747.8	4215051	5.44E-03	3.08E-03	8.31E-04	4.69E-04	3.75E-04	1.93E-04
1156	569752.5	4215059	5.75E-03	3.26E-03	8.79E-04	4.96E-04	3.97E-04	2.04E-04
1157	569757.2	4215068	6.10E-03	3.45E-03	9.31E-04	5.25E-04	4.20E-04	2.16E-04
1158	569761.8	4215076	6.46E-03	3.66E-03	9.87E-04	5.57E-04	4.45E-04	2.29E-04
1159	569766.5	4215085	6.86E-03	3.88E-03	1.05E-03	5.91E-04	4.72E-04	2.43E-04
1160	569771.2	4215093	7.27E-03	4.12E-03	1.11E-03	6.26E-04	5.01E-04	2.58E-04
1161	569775.9	4215102	7.70E-03	4.36E-03	1.18E-03	6.63E-04	5.30E-04	2.73E-04
1162	569780.5	4215110	8.15E-03	4.62E-03	1.24E-03	7.02E-04	5.61E-04	2.89E-04
1163	569817.9	4215178	1.56E-02	8.83E-03	2.38E-03	1.34E-03	1.07E-03	5.53E-04
1164	569822.6	4215187	1.77E-02	1.00E-02	2.70E-03	1.52E-03	1.22E-03	6.26E-04
1165	569827.3	4215195	1.96E-02	1.11E-02	2.99E-03	1.69E-03	1.35E-03	6.95E-04
1166	569832	4215204	2.03E-02	1.15E-02	3.09E-03	1.74E-03	1.40E-03	7.18E-04
1167	569836.6	4215212	2.06E-02	1.17E-02	3.14E-03	1.77E-03	1.42E-03	7.30E-04
1168	569705.3	4214987	3.82E-03	2.17E-03	5.84E-04	3.30E-04	2.64E-04	1.36E-04
1169	569704.2	4214978	3.70E-03	2.10E-03	5.66E-04	3.19E-04	2.55E-04	1.31E-04
1170	569703.1	4214969	3.60E-03	2.04E-03	5.50E-04	3.10E-04	2.48E-04	1.28E-04
1171	569702	4214960	3.52E-03	1.99E-03	5.37E-04	3.03E-04	2.42E-04	1.25E-04
1172	569700.9	4214951	3.43E-03	1.94E-03	5.24E-04	2.96E-04	2.36E-04	1.22E-04
1173	569699.9	4214941	3.35E-03	1.90E-03	5.11E-04	2.88E-04	2.31E-04	1.19E-04
1174	569698.8	4214932	3.27E-03	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
1175	569697.7	4214923	3.18E-03	1.80E-03	4.85E-04	2.74E-04	2.19E-04	1.13E-04
1176	569696.6	4214914	3.04E-03	1.72E-03	4.65E-04	2.62E-04	2.10E-04	1.08E-04
1177	569695.5	4214905	2.91E-03	1.65E-03	4.45E-04	2.51E-04	2.01E-04	1.03E-04
1178	569694.5	4214896	2.79E-03	1.58E-03	4.25E-04	2.40E-04	1.92E-04	9.88E-05
1179	569693.4	4214887	2.64E-03	1.50E-03	4.04E-04	2.28E-04	1.82E-04	9.38E-05
1180	569692.3	4214878	2.51E-03	1.42E-03	3.84E-04	2.17E-04	1.73E-04	8.92E-05
1181	569691.2	4214868	2.40E-03	1.36E-03	3.66E-04	2.06E-04	1.65E-04	8.50E-05
1182	569690.1	4214859	2.28E-03	1.29E-03	3.48E-04	1.96E-04	1.57E-04	8.09E-05
1183	569689.1	4214850	2.17E-03	1.23E-03	3.32E-04	1.87E-04	1.50E-04	7.71E-05
1184	569688	4214841	2.07E-03	1.18E-03	3.17E-04	1.79E-04	1.43E-04	7.36E-05
1185	569692.5	4214825	1.91E-03	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.79E-05
1186	569703.6	4214810	1.77E-03	1.00E-03	2.70E-04	1.52E-04	1.22E-04	6.26E-05
1187	569714.7	4214796	1.66E-03	9.43E-04	2.54E-04	1.43E-04	1.15E-04	5.90E-05
1188	569725.9	4214781	1.58E-03	8.94E-04	2.41E-04	1.36E-04	1.09E-04	5.60E-05
1189	569731.5	4214774	1.54E-03	8.75E-04	2.36E-04	1.33E-04	1.06E-04	5.48E-05
1190	569742.6	4214759	1.50E-03	8.50E-04	2.29E-04	1.29E-04	1.03E-04	5.32E-05
1191	569706.3	4214996	3.98E-03	2.25E-03	6.07E-04	3.43E-04	2.74E-04	1.41E-04
1192	569711	4215005	4.14E-03	2.34E-03	6.32E-04	3.56E-04	2.85E-04	1.47E-04

1193	569715.7	4215013	4.31E-03	2.44E-03	6.59E-04	3.72E-04	2.97E-04	1.53E-04
1194	569720.4	4215022	4.52E-03	2.56E-03	6.90E-04	3.89E-04	3.11E-04	1.60E-04
1195	569725	4215030	4.74E-03	2.68E-03	7.23E-04	4.08E-04	3.26E-04	1.68E-04
1196	569729.7	4215039	4.97E-03	2.81E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
1197	569734.4	4215047	5.22E-03	2.96E-03	7.97E-04	4.50E-04	3.60E-04	1.85E-04
1198	569739.1	4215056	5.50E-03	3.12E-03	8.40E-04	4.74E-04	3.79E-04	1.95E-04
1199	569743.7	4215064	5.81E-03	3.29E-03	8.87E-04	5.00E-04	4.00E-04	2.06E-04
1200	569748.4	4215073	6.13E-03	3.47E-03	9.35E-04	5.28E-04	4.22E-04	2.17E-04
1201	569753.1	4215081	6.47E-03	3.66E-03	9.87E-04	5.57E-04	4.46E-04	2.29E-04
1202	569757.8	4215090	6.84E-03	3.88E-03	1.04E-03	5.90E-04	4.72E-04	2.43E-04
1203	569762.4	4215098	7.24E-03	4.10E-03	1.11E-03	6.24E-04	4.99E-04	2.57E-04
1204	569767.1	4215107	7.65E-03	4.33E-03	1.17E-03	6.59E-04	5.27E-04	2.71E-04
1205	569771.8	4215115	8.09E-03	4.58E-03	1.24E-03	6.97E-04	5.57E-04	2.87E-04
1206	569809.2	4215183	1.52E-02	8.62E-03	2.32E-03	1.31E-03	1.05E-03	5.40E-04
1207	569813.8	4215192	1.70E-02	9.62E-03	2.59E-03	1.46E-03	1.17E-03	6.02E-04
1208	569818.5	4215200	1.83E-02	1.04E-02	2.79E-03	1.58E-03	1.26E-03	6.49E-04
1209	569823.2	4215209	1.89E-02	1.07E-02	2.88E-03	1.63E-03	1.30E-03	6.69E-04
1210	569827.9	4215217	1.93E-02	1.09E-02	2.94E-03	1.66E-03	1.33E-03	6.83E-04
1211	569696.4	4214991	3.89E-03	2.20E-03	5.93E-04	3.35E-04	2.68E-04	1.38E-04
1212	569695.3	4214982	3.75E-03	2.13E-03	5.73E-04	3.23E-04	2.59E-04	1.33E-04
1213	569694.2	4214972	3.65E-03	2.07E-03	5.57E-04	3.14E-04	2.51E-04	1.29E-04
1214	569693.1	4214963	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.45E-04	1.26E-04
1215	569691.9	4214953	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
1216	569690.8	4214944	3.38E-03	1.91E-03	5.16E-04	2.91E-04	2.33E-04	1.20E-04
1217	569689.7	4214934	3.28E-03	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
1218	569688.5	4214925	3.19E-03	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04
1219	569687.4	4214915	3.04E-03	1.72E-03	4.64E-04	2.62E-04	2.09E-04	1.08E-04
1220	569686.3	4214906	2.90E-03	1.65E-03	4.43E-04	2.50E-04	2.00E-04	1.03E-04
1221	569685.2	4214896	2.78E-03	1.57E-03	4.24E-04	2.39E-04	1.91E-04	9.85E-05
1222	569684	4214887	2.64E-03	1.49E-03	4.03E-04	2.27E-04	1.82E-04	9.36E-05
1223	569682.9	4214877	2.51E-03	1.42E-03	3.84E-04	2.16E-04	1.73E-04	8.91E-05
1224	569681.8	4214868	2.40E-03	1.36E-03	3.66E-04	2.06E-04	1.65E-04	8.50E-05
1225	569680.6	4214858	2.28E-03	1.29E-03	3.49E-04	1.97E-04	1.57E-04	8.10E-05
1226	569679.5	4214848	2.18E-03	1.23E-03	3.33E-04	1.88E-04	1.50E-04	7.73E-05
1227	569678.4	4214839	2.08E-03	1.18E-03	3.18E-04	1.80E-04	1.44E-04	7.39E-05
1228	569683.1	4214822	1.93E-03	1.09E-03	2.94E-04	1.66E-04	1.33E-04	6.84E-05
1229	569688.9	4214814	1.85E-03	1.05E-03	2.82E-04	1.59E-04	1.27E-04	6.55E-05
1230	569694.7	4214807	1.77E-03	1.00E-03	2.70E-04	1.52E-04	1.22E-04	6.27E-05
1231	569700.5	4214799	1.73E-03	9.78E-04	2.64E-04	1.49E-04	1.19E-04	6.12E-05
1232	569706.4	4214791	1.68E-03	9.54E-04	2.57E-04	1.45E-04	1.16E-04	5.97E-05
1233	569712.2	4214784	1.64E-03	9.29E-04	2.50E-04	1.41E-04	1.13E-04	5.82E-05
1234	569718	4214776	1.60E-03	9.04E-04	2.44E-04	1.37E-04	1.10E-04	5.66E-05
1235	569723.8	4214768	1.57E-03	8.90E-04	2.40E-04	1.35E-04	1.08E-04	5.57E-05
1236	569697.6	4215001	4.04E-03	2.29E-03	6.17E-04	3.48E-04	2.78E-04	1.43E-04
1237	569702.2	4215009	4.20E-03	2.38E-03	6.41E-04	3.62E-04	2.89E-04	1.49E-04
1238	569706.9	4215018	4.38E-03	2.48E-03	6.68E-04	3.77E-04	3.02E-04	1.55E-04
1239	569711.6	4215026	4.58E-03	2.59E-03	6.99E-04	3.94E-04	3.15E-04	1.62E-04
1240	569716.3	4215035	4.79E-03	2.71E-03	7.32E-04	4.13E-04	3.30E-04	1.70E-04
1241	569720.9	4215043	5.02E-03	2.84E-03	7.66E-04	4.32E-04	3.46E-04	1.78E-04
1242	569725.6	4215052	5.27E-03	2.99E-03	8.05E-04	4.54E-04	3.63E-04	1.87E-04
1243	569730.3	4215060	5.55E-03	3.14E-03	8.48E-04	4.78E-04	3.83E-04	1.97E-04
1244	569735	4215069	5.84E-03	3.31E-03	8.92E-04	5.04E-04	4.03E-04	2.07E-04

1245	569739.6	4215077	6.15E-03	3.49E-03	9.40E-04	5.30E-04	4.24E-04	2.18E-04
1246	569744.3	4215086	6.49E-03	3.68E-03	9.91E-04	5.59E-04	4.47E-04	2.30E-04
1247	569749	4215094	6.84E-03	3.87E-03	1.04E-03	5.89E-04	4.71E-04	2.43E-04
1248	569753.7	4215103	7.20E-03	4.08E-03	1.10E-03	6.20E-04	4.96E-04	2.55E-04
1249	569758.3	4215111	7.60E-03	4.31E-03	1.16E-03	6.55E-04	5.24E-04	2.70E-04
1250	569763	4215120	8.03E-03	4.55E-03	1.23E-03	6.92E-04	5.53E-04	2.85E-04
1251	569800.4	4215188	1.49E-02	8.45E-03	2.28E-03	1.28E-03	1.03E-03	5.29E-04
1252	569805.1	4215196	1.65E-02	9.34E-03	2.52E-03	1.42E-03	1.14E-03	5.85E-04
1253	569809.8	4215205	1.72E-02	9.72E-03	2.62E-03	1.48E-03	1.18E-03	6.09E-04
1254	569814.4	4215213	1.77E-02	1.00E-02	2.71E-03	1.53E-03	1.22E-03	6.29E-04
1255	569819.1	4215222	1.82E-02	1.03E-02	2.78E-03	1.57E-03	1.25E-03	6.45E-04
1256	569687.7	4214996	3.95E-03	2.24E-03	6.03E-04	3.40E-04	2.72E-04	1.40E-04
1257	569686.6	4214987	3.82E-03	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
1258	569685.5	4214977	3.71E-03	2.10E-03	5.66E-04	3.20E-04	2.56E-04	1.32E-04
1259	569684.3	4214968	3.61E-03	2.05E-03	5.52E-04	3.11E-04	2.49E-04	1.28E-04
1260	569683.2	4214959	3.53E-03	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
1261	569682.1	4214949	3.43E-03	1.94E-03	5.23E-04	2.95E-04	2.36E-04	1.22E-04
1262	569681	4214940	3.32E-03	1.88E-03	5.07E-04	2.86E-04	2.29E-04	1.18E-04
1263	569679.9	4214930	3.22E-03	1.82E-03	4.92E-04	2.77E-04	2.22E-04	1.14E-04
1264	569678.8	4214921	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
1265	569677.7	4214912	2.96E-03	1.68E-03	4.53E-04	2.55E-04	2.04E-04	1.05E-04
1266	569676.5	4214902	2.84E-03	1.61E-03	4.34E-04	2.45E-04	1.96E-04	1.01E-04
1267	569675.4	4214893	2.72E-03	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.64E-05
1268	569674.3	4214883	2.59E-03	1.47E-03	3.96E-04	2.24E-04	1.79E-04	9.20E-05
1269	569673.2	4214874	2.48E-03	1.40E-03	3.79E-04	2.14E-04	1.71E-04	8.80E-05
1270	569672.1	4214864	2.37E-03	1.34E-03	3.62E-04	2.04E-04	1.64E-04	8.42E-05
1271	569671	4214855	2.27E-03	1.29E-03	3.47E-04	1.96E-04	1.57E-04	8.06E-05
1272	569669.8	4214846	2.18E-03	1.23E-03	3.33E-04	1.88E-04	1.50E-04	7.73E-05
1273	569668.7	4214836	2.09E-03	1.19E-03	3.20E-04	1.80E-04	1.44E-04	7.42E-05
1274	569673.4	4214819	1.95E-03	1.11E-03	2.98E-04	1.68E-04	1.35E-04	6.92E-05
1275	569679.1	4214812	1.87E-03	1.06E-03	2.86E-04	1.61E-04	1.29E-04	6.64E-05
1276	569684.9	4214804	1.80E-03	1.02E-03	2.75E-04	1.55E-04	1.24E-04	6.40E-05
1277	569690.6	4214797	1.76E-03	9.99E-04	2.69E-04	1.52E-04	1.22E-04	6.26E-05
1278	569696.4	4214789	1.73E-03	9.77E-04	2.63E-04	1.49E-04	1.19E-04	6.12E-05
1279	569688.8	4215006	4.09E-03	2.32E-03	6.25E-04	3.53E-04	2.82E-04	1.45E-04
1280	569693.5	4215014	4.25E-03	2.41E-03	6.49E-04	3.66E-04	2.93E-04	1.51E-04
1281	569698.2	4215023	4.43E-03	2.51E-03	6.77E-04	3.82E-04	3.06E-04	1.57E-04
1282	569702.8	4215031	4.63E-03	2.62E-03	7.07E-04	3.99E-04	3.19E-04	1.64E-04
1283	569707.5	4215040	4.84E-03	2.74E-03	7.39E-04	4.17E-04	3.33E-04	1.72E-04
1284	569712.2	4215048	5.06E-03	2.87E-03	7.73E-04	4.36E-04	3.49E-04	1.80E-04
1285	569716.9	4215057	5.32E-03	3.01E-03	8.12E-04	4.58E-04	3.67E-04	1.89E-04
1286	569721.5	4215065	5.59E-03	3.17E-03	8.53E-04	4.82E-04	3.85E-04	1.98E-04
1287	569726.2	4215074	5.87E-03	3.33E-03	8.96E-04	5.06E-04	4.04E-04	2.08E-04
1288	569730.9	4215082	6.18E-03	3.50E-03	9.43E-04	5.32E-04	4.26E-04	2.19E-04
1289	569735.6	4215091	6.51E-03	3.69E-03	9.94E-04	5.61E-04	4.48E-04	2.31E-04
1290	569740.2	4215099	6.85E-03	3.88E-03	1.05E-03	5.90E-04	4.72E-04	2.43E-04
1291	569744.9	4215108	7.20E-03	4.08E-03	1.10E-03	6.21E-04	4.96E-04	2.55E-04
1292	569749.6	4215116	7.58E-03	4.30E-03	1.16E-03	6.53E-04	5.22E-04	2.69E-04
1293	569754.3	4215125	7.98E-03	4.52E-03	1.22E-03	6.88E-04	5.50E-04	2.83E-04
1294	569787	4215184	1.31E-02	7.43E-03	2.00E-03	1.13E-03	9.04E-04	4.65E-04
1295	569791.6	4215193	1.46E-02	8.25E-03	2.22E-03	1.26E-03	1.00E-03	5.17E-04
1296	569796.3	4215201	1.56E-02	8.83E-03	2.38E-03	1.34E-03	1.07E-03	5.53E-04

1297	569801	4215210	1.62E-02	9.20E-03	2.48E-03	1.40E-03	1.12E-03	5.76E-04
1298	569805.7	4215218	1.68E-02	9.53E-03	2.57E-03	1.45E-03	1.16E-03	5.96E-04
1299	569810.3	4215227	1.72E-02	9.77E-03	2.63E-03	1.49E-03	1.19E-03	6.12E-04
1300	569678.9	4215001	4.01E-03	2.27E-03	6.12E-04	3.45E-04	2.76E-04	1.42E-04
1301	569677.8	4214992	3.89E-03	2.20E-03	5.93E-04	3.35E-04	2.68E-04	1.38E-04
1302	569676.7	4214983	3.78E-03	2.14E-03	5.76E-04	3.25E-04	2.60E-04	1.34E-04
1303	569675.6	4214973	3.67E-03	2.08E-03	5.61E-04	3.16E-04	2.53E-04	1.30E-04
1304	569674.5	4214964	3.58E-03	2.03E-03	5.46E-04	3.08E-04	2.47E-04	1.27E-04
1305	569673.4	4214955	3.49E-03	1.98E-03	5.33E-04	3.01E-04	2.40E-04	1.24E-04
1306	569672.3	4214945	3.37E-03	1.91E-03	5.15E-04	2.90E-04	2.32E-04	1.20E-04
1307	569671.2	4214936	3.26E-03	1.85E-03	4.97E-04	2.81E-04	2.24E-04	1.16E-04
1308	569670.1	4214927	3.15E-03	1.78E-03	4.81E-04	2.71E-04	2.17E-04	1.12E-04
1309	569669	4214917	3.02E-03	1.71E-03	4.61E-04	2.60E-04	2.08E-04	1.07E-04
1310	569667.9	4214908	2.90E-03	1.64E-03	4.42E-04	2.50E-04	2.00E-04	1.03E-04
1311	569666.8	4214899	2.78E-03	1.58E-03	4.25E-04	2.40E-04	1.92E-04	9.87E-05
1312	569665.7	4214889	2.67E-03	1.51E-03	4.07E-04	2.30E-04	1.84E-04	9.46E-05
1313	569664.6	4214880	2.56E-03	1.45E-03	3.90E-04	2.20E-04	1.76E-04	9.07E-05
1314	569663.5	4214871	2.45E-03	1.39E-03	3.75E-04	2.11E-04	1.69E-04	8.70E-05
1315	569662.4	4214861	2.36E-03	1.33E-03	3.60E-04	2.03E-04	1.62E-04	8.36E-05
1316	569661.3	4214852	2.27E-03	1.28E-03	3.46E-04	1.95E-04	1.56E-04	8.04E-05
1317	569660.2	4214843	2.19E-03	1.24E-03	3.34E-04	1.88E-04	1.51E-04	7.75E-05
1318	569659.1	4214833	2.11E-03	1.20E-03	3.23E-04	1.82E-04	1.46E-04	7.50E-05
1319	569680	4215011	4.14E-03	2.35E-03	6.32E-04	3.57E-04	2.85E-04	1.47E-04
1320	569684.7	4215019	4.30E-03	2.44E-03	6.57E-04	3.71E-04	2.96E-04	1.53E-04
1321	569689.4	4215028	4.48E-03	2.54E-03	6.84E-04	3.86E-04	3.09E-04	1.59E-04
1322	569694.1	4215036	4.67E-03	2.65E-03	7.14E-04	4.03E-04	3.22E-04	1.66E-04
1323	569698.7	4215045	4.87E-03	2.76E-03	7.44E-04	4.20E-04	3.36E-04	1.73E-04
1324	569703.4	4215053	5.11E-03	2.89E-03	7.80E-04	4.40E-04	3.52E-04	1.81E-04
1325	569708.1	4215062	5.36E-03	3.04E-03	8.18E-04	4.62E-04	3.69E-04	1.90E-04
1326	569712.8	4215070	5.62E-03	3.18E-03	8.58E-04	4.84E-04	3.87E-04	1.99E-04
1327	569717.4	4215079	5.89E-03	3.34E-03	9.00E-04	5.08E-04	4.06E-04	2.09E-04
1328	569722.1	4215087	6.20E-03	3.51E-03	9.47E-04	5.34E-04	4.27E-04	2.20E-04
1329	569726.8	4215096	6.52E-03	3.69E-03	9.96E-04	5.62E-04	4.49E-04	2.31E-04
1330	569731.5	4215104	6.86E-03	3.88E-03	1.05E-03	5.91E-04	4.73E-04	2.43E-04
1331	569736.1	4215113	7.22E-03	4.09E-03	1.10E-03	6.22E-04	4.98E-04	2.56E-04
1332	569740.8	4215121	7.62E-03	4.31E-03	1.16E-03	6.56E-04	5.25E-04	2.70E-04
1333	569773.5	4215181	1.21E-02	6.84E-03	1.84E-03	1.04E-03	8.32E-04	4.28E-04
1334	569778.2	4215189	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.02E-04	4.64E-04
1335	569782.9	4215198	1.41E-02	8.00E-03	2.16E-03	1.22E-03	9.74E-04	5.01E-04
1336	569787.6	4215206	1.48E-02	8.39E-03	2.26E-03	1.28E-03	1.02E-03	5.25E-04
1337	569792.2	4215215	1.55E-02	8.76E-03	2.36E-03	1.33E-03	1.07E-03	5.48E-04
1338	569796.9	4215223	1.60E-02	9.08E-03	2.45E-03	1.38E-03	1.10E-03	5.69E-04
1339	569801.6	4215232	1.59E-02	9.01E-03	2.43E-03	1.37E-03	1.10E-03	5.64E-04
1340	569670.2	4215006	4.05E-03	2.30E-03	6.19E-04	3.49E-04	2.79E-04	1.44E-04
1341	569669.1	4214997	3.94E-03	2.23E-03	6.02E-04	3.40E-04	2.72E-04	1.40E-04
1342	569668	4214988	3.84E-03	2.18E-03	5.87E-04	3.31E-04	2.65E-04	1.36E-04
1343	569666.9	4214978	3.74E-03	2.12E-03	5.71E-04	3.22E-04	2.58E-04	1.33E-04
1344	569665.8	4214969	3.64E-03	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
1345	569664.7	4214960	3.54E-03	2.01E-03	5.41E-04	3.05E-04	2.44E-04	1.26E-04
1346	569663.6	4214951	3.43E-03	1.94E-03	5.24E-04	2.96E-04	2.36E-04	1.22E-04
1347	569662.5	4214941	3.30E-03	1.87E-03	5.05E-04	2.85E-04	2.28E-04	1.17E-04
1348	569661.4	4214932	3.18E-03	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04

1349	569660.4	4214923	3.07E-03	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04
1350	569659.3	4214914	2.95E-03	1.67E-03	4.50E-04	2.54E-04	2.03E-04	1.05E-04
1351	569658.2	4214905	2.84E-03	1.61E-03	4.33E-04	2.44E-04	1.95E-04	1.01E-04
1352	569657.1	4214895	2.73E-03	1.55E-03	4.17E-04	2.35E-04	1.88E-04	9.68E-05
1353	569656	4214886	2.62E-03	1.49E-03	4.01E-04	2.26E-04	1.81E-04	9.30E-05
1354	569654.9	4214877	2.52E-03	1.43E-03	3.85E-04	2.17E-04	1.74E-04	8.95E-05
1355	569653.8	4214868	2.43E-03	1.38E-03	3.71E-04	2.09E-04	1.68E-04	8.62E-05
1356	569652.7	4214858	2.35E-03	1.33E-03	3.58E-04	2.02E-04	1.62E-04	8.33E-05
1357	569651.6	4214849	2.27E-03	1.29E-03	3.47E-04	1.96E-04	1.56E-04	8.05E-05
1358	569650.5	4214840	2.20E-03	1.25E-03	3.36E-04	1.89E-04	1.52E-04	7.80E-05
1359	569671.3	4215015	4.18E-03	2.37E-03	6.39E-04	3.60E-04	2.88E-04	1.48E-04
1360	569676	4215024	4.35E-03	2.46E-03	6.64E-04	3.75E-04	3.00E-04	1.54E-04
1361	569680.6	4215032	4.52E-03	2.56E-03	6.91E-04	3.90E-04	3.12E-04	1.60E-04
1362	569685.3	4215041	4.71E-03	2.67E-03	7.19E-04	4.06E-04	3.24E-04	1.67E-04
1363	569690	4215049	4.91E-03	2.78E-03	7.50E-04	4.23E-04	3.39E-04	1.74E-04
1364	569694.7	4215058	5.15E-03	2.92E-03	7.86E-04	4.43E-04	3.55E-04	1.83E-04
1365	569699.3	4215066	5.39E-03	3.05E-03	8.23E-04	4.64E-04	3.71E-04	1.91E-04
1366	569704	4215075	5.64E-03	3.20E-03	8.61E-04	4.86E-04	3.89E-04	2.00E-04
1367	569708.7	4215083	5.92E-03	3.36E-03	9.04E-04	5.10E-04	4.08E-04	2.10E-04
1368	569713.4	4215092	6.22E-03	3.53E-03	9.50E-04	5.36E-04	4.29E-04	2.21E-04
1369	569718	4215100	6.54E-03	3.71E-03	9.99E-04	5.64E-04	4.51E-04	2.32E-04
1370	569722.7	4215109	6.88E-03	3.90E-03	1.05E-03	5.93E-04	4.74E-04	2.44E-04
1371	569727.4	4215117	7.27E-03	4.12E-03	1.11E-03	6.27E-04	5.01E-04	2.58E-04
1372	569764.8	4215185	1.22E-02	6.91E-03	1.86E-03	1.05E-03	8.41E-04	4.33E-04
1373	569769.4	4215194	1.32E-02	7.48E-03	2.02E-03	1.14E-03	9.10E-04	4.68E-04
1374	569774.1	4215202	1.38E-02	7.79E-03	2.10E-03	1.19E-03	9.48E-04	4.88E-04
1375	569778.8	4215211	1.42E-02	8.06E-03	2.17E-03	1.23E-03	9.81E-04	5.05E-04
1376	569783.5	4215219	1.48E-02	8.38E-03	2.26E-03	1.27E-03	1.02E-03	5.25E-04
1377	569788.1	4215228	1.52E-02	8.58E-03	2.31E-03	1.31E-03	1.04E-03	5.37E-04
1378	569792.8	4215236	1.46E-02	8.28E-03	2.23E-03	1.26E-03	1.01E-03	5.19E-04
1379	569661.4	4215011	4.08E-03	2.31E-03	6.23E-04	3.52E-04	2.81E-04	1.45E-04
1380	569660.2	4215001	3.97E-03	2.25E-03	6.06E-04	3.42E-04	2.74E-04	1.41E-04
1381	569659.1	4214991	3.87E-03	2.19E-03	5.91E-04	3.33E-04	2.67E-04	1.37E-04
1382	569658	4214982	3.76E-03	2.13E-03	5.75E-04	3.24E-04	2.59E-04	1.33E-04
1383	569656.8	4214972	3.64E-03	2.06E-03	5.56E-04	3.14E-04	2.51E-04	1.29E-04
1384	569655.7	4214963	3.53E-03	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
1385	569654.6	4214953	3.41E-03	1.93E-03	5.21E-04	2.94E-04	2.35E-04	1.21E-04
1386	569653.4	4214943	3.28E-03	1.86E-03	5.02E-04	2.83E-04	2.26E-04	1.17E-04
1387	569652.3	4214934	3.17E-03	1.79E-03	4.83E-04	2.73E-04	2.18E-04	1.12E-04
1388	569651.2	4214924	3.05E-03	1.73E-03	4.66E-04	2.63E-04	2.10E-04	1.08E-04
1389	569650	4214915	2.93E-03	1.66E-03	4.48E-04	2.53E-04	2.02E-04	1.04E-04
1390	569648.9	4214905	2.82E-03	1.60E-03	4.31E-04	2.43E-04	1.95E-04	1.00E-04
1391	569647.8	4214896	2.72E-03	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.65E-05
1392	569646.6	4214886	2.62E-03	1.48E-03	4.00E-04	2.26E-04	1.80E-04	9.28E-05
1393	569645.5	4214876	2.52E-03	1.43E-03	3.85E-04	2.17E-04	1.74E-04	8.95E-05
1394	569644.4	4214867	2.43E-03	1.38E-03	3.72E-04	2.10E-04	1.68E-04	8.63E-05
1395	569643.2	4214857	2.36E-03	1.34E-03	3.60E-04	2.03E-04	1.62E-04	8.36E-05
1396	569662.5	4215020	4.22E-03	2.39E-03	6.45E-04	3.64E-04	2.91E-04	1.50E-04
1397	569667.2	4215029	4.39E-03	2.48E-03	6.70E-04	3.78E-04	3.02E-04	1.56E-04
1398	569671.9	4215037	4.56E-03	2.58E-03	6.96E-04	3.93E-04	3.14E-04	1.62E-04
1399	569676.5	4215046	4.73E-03	2.68E-03	7.23E-04	4.08E-04	3.26E-04	1.68E-04
1400	569681.2	4215054	4.95E-03	2.80E-03	7.55E-04	4.26E-04	3.41E-04	1.75E-04

1401	569685.9	4215063	5.17E-03	2.93E-03	7.90E-04	4.46E-04	3.56E-04	1.83E-04
1402	569690.6	4215071	5.41E-03	3.06E-03	8.26E-04	4.66E-04	3.73E-04	1.92E-04
1403	569695.2	4215080	5.67E-03	3.21E-03	8.65E-04	4.88E-04	3.91E-04	2.01E-04
1404	569699.9	4215088	5.95E-03	3.37E-03	9.09E-04	5.13E-04	4.10E-04	2.11E-04
1405	569704.6	4215097	6.25E-03	3.54E-03	9.54E-04	5.39E-04	4.31E-04	2.22E-04
1406	569709.3	4215105	6.57E-03	3.72E-03	1.00E-03	5.66E-04	4.53E-04	2.33E-04
1407	569713.9	4215114	6.92E-03	3.92E-03	1.06E-03	5.96E-04	4.77E-04	2.45E-04
1408	569718.6	4215122	7.33E-03	4.15E-03	1.12E-03	6.31E-04	5.05E-04	2.60E-04
1409	569751.3	4215182	1.14E-02	6.47E-03	1.74E-03	9.84E-04	7.87E-04	4.05E-04
1410	569756	4215190	1.23E-02	6.95E-03	1.87E-03	1.06E-03	8.46E-04	4.35E-04
1411	569760.7	4215199	1.30E-02	7.37E-03	1.99E-03	1.12E-03	8.97E-04	4.62E-04
1412	569765.4	4215207	1.33E-02	7.54E-03	2.03E-03	1.15E-03	9.17E-04	4.72E-04
1413	569770	4215216	1.37E-02	7.76E-03	2.09E-03	1.18E-03	9.44E-04	4.86E-04
1414	569774.7	4215224	1.42E-02	8.02E-03	2.16E-03	1.22E-03	9.76E-04	5.02E-04
1415	569779.4	4215233	1.39E-02	7.89E-03	2.13E-03	1.20E-03	9.59E-04	4.94E-04
1416	569784.1	4215241	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.21E-04	4.74E-04
1417	569652.6	4215015	4.11E-03	2.33E-03	6.28E-04	3.54E-04	2.83E-04	1.46E-04
1418	569651.5	4215006	4.00E-03	2.26E-03	6.10E-04	3.44E-04	2.75E-04	1.42E-04
1419	569650.4	4214997	3.89E-03	2.20E-03	5.94E-04	3.35E-04	2.68E-04	1.38E-04
1420	569649.3	4214987	3.80E-03	2.15E-03	5.80E-04	3.27E-04	2.62E-04	1.35E-04
1421	569648.1	4214978	3.67E-03	2.08E-03	5.61E-04	3.16E-04	2.53E-04	1.30E-04
1422	569647	4214968	3.55E-03	2.01E-03	5.42E-04	3.06E-04	2.45E-04	1.26E-04
1423	569645.9	4214959	3.43E-03	1.94E-03	5.24E-04	2.96E-04	2.36E-04	1.22E-04
1424	569644.8	4214949	3.31E-03	1.87E-03	5.05E-04	2.85E-04	2.28E-04	1.17E-04
1425	569643.6	4214940	3.19E-03	1.81E-03	4.88E-04	2.75E-04	2.20E-04	1.13E-04
1426	569642.5	4214930	3.08E-03	1.75E-03	4.71E-04	2.66E-04	2.13E-04	1.09E-04
1427	569641.4	4214921	2.98E-03	1.69E-03	4.54E-04	2.56E-04	2.05E-04	1.06E-04
1428	569640.3	4214911	2.87E-03	1.62E-03	4.38E-04	2.47E-04	1.98E-04	1.02E-04
1429	569639.1	4214902	2.77E-03	1.57E-03	4.22E-04	2.38E-04	1.91E-04	9.81E-05
1430	569638	4214892	2.67E-03	1.51E-03	4.08E-04	2.30E-04	1.84E-04	9.48E-05
1431	569636.9	4214883	2.58E-03	1.46E-03	3.94E-04	2.22E-04	1.78E-04	9.16E-05
1432	569635.8	4214873	2.50E-03	1.41E-03	3.81E-04	2.15E-04	1.72E-04	8.86E-05
1433	569634.7	4214864	2.42E-03	1.37E-03	3.70E-04	2.09E-04	1.67E-04	8.59E-05
1434	569653.8	4215025	4.26E-03	2.41E-03	6.50E-04	3.67E-04	2.93E-04	1.51E-04
1435	569658.4	4215033	4.42E-03	2.50E-03	6.74E-04	3.80E-04	3.04E-04	1.57E-04
1436	569663.1	4215042	4.58E-03	2.59E-03	6.99E-04	3.95E-04	3.16E-04	1.62E-04
1437	569667.8	4215050	4.77E-03	2.70E-03	7.28E-04	4.11E-04	3.28E-04	1.69E-04
1438	569672.5	4215059	4.97E-03	2.82E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
1439	569677.1	4215067	5.19E-03	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
1440	569681.8	4215076	5.41E-03	3.07E-03	8.26E-04	4.66E-04	3.73E-04	1.92E-04
1441	569686.5	4215084	5.68E-03	3.22E-03	8.68E-04	4.90E-04	3.92E-04	2.02E-04
1442	569691.2	4215093	5.97E-03	3.38E-03	9.12E-04	5.15E-04	4.12E-04	2.12E-04
1443	569695.8	4215101	6.28E-03	3.56E-03	9.59E-04	5.41E-04	4.33E-04	2.23E-04
1444	569700.5	4215110	6.59E-03	3.74E-03	1.01E-03	5.68E-04	4.54E-04	2.34E-04
1445	569737.9	4215178	1.07E-02	6.09E-03	1.64E-03	9.26E-04	7.40E-04	3.81E-04
1446	569742.6	4215187	1.15E-02	6.51E-03	1.75E-03	9.90E-04	7.92E-04	4.08E-04
1447	569747.2	4215195	1.23E-02	6.98E-03	1.88E-03	1.06E-03	8.49E-04	4.37E-04
1448	569751.9	4215204	1.26E-02	7.13E-03	1.92E-03	1.08E-03	8.67E-04	4.46E-04
1449	569756.6	4215212	1.28E-02	7.25E-03	1.95E-03	1.10E-03	8.82E-04	4.54E-04
1450	569761.3	4215221	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.02E-04	4.64E-04
1451	569765.9	4215229	1.32E-02	7.48E-03	2.02E-03	1.14E-03	9.10E-04	4.68E-04
1452	569770.6	4215238	1.27E-02	7.22E-03	1.95E-03	1.10E-03	8.78E-04	4.52E-04

1453	569775.3	4215246	1.23E-02	6.96E-03	1.87E-03	1.06E-03	8.46E-04	4.36E-04
1454	569643.9	4215020	4.14E-03	2.35E-03	6.33E-04	3.57E-04	2.86E-04	1.47E-04
1455	569642.8	4215011	4.02E-03	2.28E-03	6.14E-04	3.47E-04	2.77E-04	1.43E-04
1456	569641.7	4215002	3.92E-03	2.22E-03	5.98E-04	3.37E-04	2.70E-04	1.39E-04
1457	569640.5	4214992	3.82E-03	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
1458	569639.4	4214983	3.71E-03	2.10E-03	5.67E-04	3.20E-04	2.56E-04	1.32E-04
1459	569638.3	4214973	3.58E-03	2.03E-03	5.47E-04	3.08E-04	2.47E-04	1.27E-04
1460	569637.2	4214964	3.45E-03	1.96E-03	5.27E-04	2.97E-04	2.38E-04	1.22E-04
1461	569636.1	4214955	3.33E-03	1.89E-03	5.08E-04	2.87E-04	2.29E-04	1.18E-04
1462	569635	4214945	3.22E-03	1.82E-03	4.91E-04	2.77E-04	2.22E-04	1.14E-04
1463	569633.9	4214936	3.11E-03	1.76E-03	4.75E-04	2.68E-04	2.14E-04	1.10E-04
1464	569632.7	4214926	3.01E-03	1.71E-03	4.60E-04	2.60E-04	2.08E-04	1.07E-04
1465	569631.6	4214917	2.91E-03	1.65E-03	4.44E-04	2.51E-04	2.00E-04	1.03E-04
1466	569630.5	4214908	2.81E-03	1.59E-03	4.29E-04	2.42E-04	1.94E-04	9.97E-05
1467	569629.4	4214898	2.72E-03	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.65E-05
1468	569628.3	4214889	2.64E-03	1.49E-03	4.03E-04	2.27E-04	1.82E-04	9.35E-05
1469	569627.2	4214879	2.56E-03	1.45E-03	3.91E-04	2.21E-04	1.76E-04	9.08E-05
1470	569626.1	4214870	2.49E-03	1.41E-03	3.80E-04	2.14E-04	1.71E-04	8.82E-05
1471	569645	4215030	4.28E-03	2.43E-03	6.54E-04	3.69E-04	2.95E-04	1.52E-04
1472	569649.7	4215038	4.43E-03	2.51E-03	6.77E-04	3.82E-04	3.06E-04	1.57E-04
1473	569654.3	4215047	4.59E-03	2.60E-03	7.01E-04	3.96E-04	3.17E-04	1.63E-04
1474	569659	4215055	4.79E-03	2.71E-03	7.31E-04	4.12E-04	3.30E-04	1.70E-04
1475	569663.7	4215064	4.98E-03	2.82E-03	7.61E-04	4.29E-04	3.43E-04	1.77E-04
1476	569668.4	4215072	5.19E-03	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
1477	569673	4215081	5.42E-03	3.07E-03	8.28E-04	4.67E-04	3.74E-04	1.92E-04
1478	569677.7	4215089	5.69E-03	3.22E-03	8.68E-04	4.90E-04	3.92E-04	2.02E-04
1479	569682.4	4215098	5.97E-03	3.38E-03	9.12E-04	5.15E-04	4.11E-04	2.12E-04
1480	569687.1	4215106	6.28E-03	3.56E-03	9.60E-04	5.42E-04	4.33E-04	2.23E-04
1481	569691.7	4215115	6.60E-03	3.74E-03	1.01E-03	5.69E-04	4.55E-04	2.34E-04
1482	569724.5	4215174	1.02E-02	5.75E-03	1.55E-03	8.75E-04	7.00E-04	3.60E-04
1483	569729.1	4215183	1.08E-02	6.12E-03	1.65E-03	9.32E-04	7.45E-04	3.83E-04
1484	569733.8	4215191	1.15E-02	6.53E-03	1.76E-03	9.93E-04	7.94E-04	4.09E-04
1485	569738.5	4215200	1.20E-02	6.81E-03	1.84E-03	1.04E-03	8.29E-04	4.26E-04
1486	569743.2	4215208	1.22E-02	6.89E-03	1.86E-03	1.05E-03	8.38E-04	4.31E-04
1487	569747.8	4215217	1.23E-02	6.97E-03	1.88E-03	1.06E-03	8.48E-04	4.36E-04
1488	569752.5	4215225	1.25E-02	7.06E-03	1.90E-03	1.07E-03	8.59E-04	4.42E-04
1489	569757.2	4215234	1.21E-02	6.87E-03	1.85E-03	1.04E-03	8.35E-04	4.30E-04
1490	569761.9	4215242	1.17E-02	6.65E-03	1.79E-03	1.01E-03	8.09E-04	4.16E-04
1491	569766.5	4215251	1.13E-02	6.43E-03	1.73E-03	9.78E-04	7.82E-04	4.02E-04
1492	569635.1	4215025	4.17E-03	2.36E-03	6.37E-04	3.59E-04	2.87E-04	1.48E-04
1493	569634	4215016	4.05E-03	2.29E-03	6.18E-04	3.49E-04	2.79E-04	1.44E-04
1494	569632.9	4215007	3.94E-03	2.23E-03	6.01E-04	3.39E-04	2.71E-04	1.40E-04
1495	569631.8	4214997	3.83E-03	2.17E-03	5.85E-04	3.30E-04	2.64E-04	1.36E-04
1496	569630.7	4214988	3.73E-03	2.12E-03	5.70E-04	3.22E-04	2.57E-04	1.32E-04
1497	569629.6	4214979	3.61E-03	2.04E-03	5.51E-04	3.11E-04	2.49E-04	1.28E-04
1498	569628.5	4214969	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
1499	569627.4	4214960	3.35E-03	1.90E-03	5.12E-04	2.89E-04	2.31E-04	1.19E-04
1500	569626.3	4214951	3.24E-03	1.84E-03	4.95E-04	2.79E-04	2.23E-04	1.15E-04
1501	569625.2	4214941	3.14E-03	1.78E-03	4.80E-04	2.71E-04	2.16E-04	1.11E-04
1502	569624.1	4214932	3.05E-03	1.73E-03	4.65E-04	2.62E-04	2.10E-04	1.08E-04
1503	569623	4214923	2.95E-03	1.67E-03	4.51E-04	2.54E-04	2.03E-04	1.05E-04
1504	569621.9	4214913	2.86E-03	1.62E-03	4.36E-04	2.46E-04	1.97E-04	1.01E-04

1505	569620.8	4214904	2.77E-03	1.57E-03	4.23E-04	2.39E-04	1.91E-04	9.82E-05
1506	569619.7	4214895	2.69E-03	1.52E-03	4.10E-04	2.32E-04	1.85E-04	9.53E-05
1507	569618.6	4214885	2.61E-03	1.48E-03	3.99E-04	2.25E-04	1.80E-04	9.27E-05
1508	569636.2	4215035	4.30E-03	2.44E-03	6.57E-04	3.71E-04	2.96E-04	1.53E-04
1509	569640.9	4215043	4.44E-03	2.52E-03	6.79E-04	3.83E-04	3.06E-04	1.58E-04
1510	569645.6	4215052	4.61E-03	2.61E-03	7.04E-04	3.97E-04	3.18E-04	1.64E-04
1511	569650.3	4215060	4.80E-03	2.72E-03	7.32E-04	4.13E-04	3.31E-04	1.70E-04
1512	569654.9	4215069	4.99E-03	2.82E-03	7.61E-04	4.30E-04	3.44E-04	1.77E-04
1513	569659.6	4215077	5.18E-03	2.94E-03	7.91E-04	4.46E-04	3.57E-04	1.84E-04
1514	569664.3	4215086	5.42E-03	3.07E-03	8.28E-04	4.67E-04	3.74E-04	1.92E-04
1515	569669	4215094	5.68E-03	3.22E-03	8.68E-04	4.90E-04	3.92E-04	2.02E-04
1516	569673.6	4215103	5.96E-03	3.38E-03	9.10E-04	5.14E-04	4.11E-04	2.11E-04
1517	569678.3	4215111	6.25E-03	3.54E-03	9.55E-04	5.39E-04	4.31E-04	2.22E-04
1518	569683	4215120	6.56E-03	3.71E-03	1.00E-03	5.65E-04	4.52E-04	2.33E-04
1519	569711	4215171	9.20E-03	5.21E-03	1.40E-03	7.93E-04	6.34E-04	3.26E-04
1520	569715.7	4215179	9.94E-03	5.63E-03	1.52E-03	8.57E-04	6.85E-04	3.53E-04
1521	569720.4	4215188	1.07E-02	6.08E-03	1.64E-03	9.25E-04	7.40E-04	3.81E-04
1522	569725	4215196	1.15E-02	6.53E-03	1.76E-03	9.93E-04	7.94E-04	4.09E-04
1523	569729.7	4215205	1.16E-02	6.58E-03	1.77E-03	1.00E-03	8.01E-04	4.12E-04
1524	569734.4	4215213	1.17E-02	6.64E-03	1.79E-03	1.01E-03	8.08E-04	4.16E-04
1525	569739.1	4215222	1.18E-02	6.71E-03	1.81E-03	1.02E-03	8.16E-04	4.20E-04
1526	569743.7	4215230	1.17E-02	6.62E-03	1.78E-03	1.01E-03	8.05E-04	4.14E-04
1527	569748.4	4215239	1.13E-02	6.37E-03	1.72E-03	9.70E-04	7.75E-04	3.99E-04
1528	569753.1	4215247	1.09E-02	6.16E-03	1.66E-03	9.37E-04	7.49E-04	3.86E-04
1529	569757.8	4215256	1.06E-02	5.98E-03	1.61E-03	9.09E-04	7.27E-04	3.74E-04
1530	569626.3	4215030	4.17E-03	2.36E-03	6.37E-04	3.60E-04	2.88E-04	1.48E-04
1531	569625.2	4215020	4.05E-03	2.29E-03	6.18E-04	3.49E-04	2.79E-04	1.44E-04
1532	569624	4215011	3.93E-03	2.22E-03	6.00E-04	3.38E-04	2.71E-04	1.39E-04
1533	569622.9	4215001	3.82E-03	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
1534	569621.8	4214991	3.71E-03	2.10E-03	5.66E-04	3.20E-04	2.56E-04	1.32E-04
1535	569620.6	4214982	3.59E-03	2.03E-03	5.48E-04	3.09E-04	2.47E-04	1.27E-04
1536	569619.5	4214972	3.46E-03	1.96E-03	5.29E-04	2.98E-04	2.39E-04	1.23E-04
1537	569618.3	4214962	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.18E-04
1538	569617.2	4214953	3.23E-03	1.83E-03	4.93E-04	2.78E-04	2.22E-04	1.14E-04
1539	569616.1	4214943	3.13E-03	1.77E-03	4.78E-04	2.69E-04	2.15E-04	1.11E-04
1540	569614.9	4214933	3.03E-03	1.72E-03	4.63E-04	2.61E-04	2.09E-04	1.08E-04
1541	569613.8	4214924	2.94E-03	1.67E-03	4.50E-04	2.54E-04	2.03E-04	1.04E-04
1542	569612.6	4214914	2.85E-03	1.62E-03	4.35E-04	2.46E-04	1.96E-04	1.01E-04
1543	569611.5	4214905	2.76E-03	1.57E-03	4.22E-04	2.38E-04	1.90E-04	9.81E-05
1544	569610.4	4214895	2.68E-03	1.52E-03	4.10E-04	2.31E-04	1.85E-04	9.52E-05
1545	569627.5	4215039	4.30E-03	2.44E-03	6.57E-04	3.71E-04	2.96E-04	1.53E-04
1546	569632.1	4215048	4.45E-03	2.52E-03	6.80E-04	3.83E-04	3.07E-04	1.58E-04
1547	569636.8	4215056	4.62E-03	2.62E-03	7.06E-04	3.98E-04	3.18E-04	1.64E-04
1548	569641.5	4215065	4.80E-03	2.72E-03	7.33E-04	4.13E-04	3.31E-04	1.70E-04
1549	569646.2	4215073	4.98E-03	2.82E-03	7.60E-04	4.29E-04	3.43E-04	1.77E-04
1550	569650.8	4215082	5.18E-03	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
1551	569655.5	4215090	5.42E-03	3.07E-03	8.27E-04	4.67E-04	3.73E-04	1.92E-04
1552	569660.2	4215099	5.67E-03	3.21E-03	8.66E-04	4.89E-04	3.91E-04	2.01E-04
1553	569664.9	4215107	5.94E-03	3.37E-03	9.07E-04	5.12E-04	4.09E-04	2.11E-04
1554	569669.5	4215116	6.21E-03	3.52E-03	9.48E-04	5.35E-04	4.28E-04	2.20E-04
1555	569674.2	4215124	6.50E-03	3.68E-03	9.93E-04	5.60E-04	4.48E-04	2.31E-04
1556	569688.2	4215150	7.51E-03	4.25E-03	1.15E-03	6.47E-04	5.18E-04	2.66E-04

1557	569692.9	4215158	7.88E-03	4.47E-03	1.20E-03	6.79E-04	5.43E-04	2.80E-04
1558	569697.6	4215167	8.35E-03	4.73E-03	1.27E-03	7.19E-04	5.75E-04	2.96E-04
1559	569702.3	4215175	9.00E-03	5.10E-03	1.37E-03	7.76E-04	6.20E-04	3.19E-04
1560	569706.9	4215184	9.73E-03	5.51E-03	1.49E-03	8.38E-04	6.70E-04	3.45E-04
1561	569711.6	4215192	1.05E-02	5.95E-03	1.60E-03	9.05E-04	7.24E-04	3.73E-04
1562	569716.3	4215201	1.10E-02	6.23E-03	1.68E-03	9.48E-04	7.58E-04	3.90E-04
1563	569721	4215209	1.12E-02	6.33E-03	1.71E-03	9.63E-04	7.70E-04	3.97E-04
1564	569725.6	4215218	1.13E-02	6.39E-03	1.72E-03	9.72E-04	7.77E-04	4.00E-04
1565	569730.3	4215226	1.13E-02	6.43E-03	1.73E-03	9.78E-04	7.82E-04	4.03E-04
1566	569735	4215235	1.09E-02	6.17E-03	1.66E-03	9.38E-04	7.50E-04	3.86E-04
1567	569739.7	4215243	1.05E-02	5.94E-03	1.60E-03	9.04E-04	7.23E-04	3.72E-04
1568	569744.3	4215252	1.01E-02	5.75E-03	1.55E-03	8.74E-04	6.99E-04	3.60E-04
1569	569749	4215260	9.86E-03	5.59E-03	1.51E-03	8.50E-04	6.79E-04	3.50E-04
1570	569984.8	4215238	5.42E-02	3.07E-02	8.27E-03	4.67E-03	3.73E-03	1.92E-03
1571	569985.1	4215248	4.98E-02	2.82E-02	7.61E-03	4.29E-03	3.43E-03	1.77E-03
1572	569985.4	4215257	4.53E-02	2.57E-02	6.92E-03	3.91E-03	3.12E-03	1.61E-03
1573	569985.7	4215267	4.08E-02	2.31E-02	6.22E-03	3.51E-03	2.81E-03	1.45E-03
1574	569986	4215277	3.67E-02	2.08E-02	5.60E-03	3.16E-03	2.53E-03	1.30E-03
1575	569986.3	4215287	3.33E-02	1.89E-02	5.09E-03	2.87E-03	2.30E-03	1.18E-03
1576	569986.7	4215296	3.25E-02	1.84E-02	4.97E-03	2.80E-03	2.24E-03	1.15E-03
1577	569987	4215306	3.21E-02	1.82E-02	4.90E-03	2.77E-03	2.21E-03	1.14E-03
1578	569987.3	4215316	3.21E-02	1.82E-02	4.90E-03	2.76E-03	2.21E-03	1.14E-03
1579	569987.6	4215325	3.31E-02	1.88E-02	5.06E-03	2.86E-03	2.28E-03	1.18E-03
1580	569987.9	4215335	3.45E-02	1.96E-02	5.28E-03	2.98E-03	2.38E-03	1.23E-03
1581	569988.2	4215345	3.68E-02	2.09E-02	5.62E-03	3.17E-03	2.54E-03	1.31E-03
1582	569988.6	4215354	3.66E-02	2.07E-02	5.58E-03	3.15E-03	2.52E-03	1.30E-03
1583	569988.9	4215364	3.56E-02	2.02E-02	5.43E-03	3.07E-03	2.45E-03	1.26E-03
1584	569989.2	4215374	3.56E-02	2.02E-02	5.44E-03	3.07E-03	2.46E-03	1.26E-03
1585	569973.5	4215200	5.88E-02	3.33E-02	8.97E-03	5.06E-03	4.05E-03	2.08E-03
1586	569973.8	4215209	5.67E-02	3.21E-02	8.65E-03	4.88E-03	3.90E-03	2.01E-03
1587	569974.1	4215219	5.35E-02	3.03E-02	8.16E-03	4.61E-03	3.68E-03	1.90E-03
1588	569974.5	4215229	4.99E-02	2.83E-02	7.63E-03	4.30E-03	3.44E-03	1.77E-03
1589	569974.8	4215238	4.67E-02	2.65E-02	7.13E-03	4.02E-03	3.22E-03	1.66E-03
1590	569975.1	4215248	4.33E-02	2.45E-02	6.62E-03	3.73E-03	2.99E-03	1.54E-03
1591	569975.4	4215258	3.99E-02	2.26E-02	6.09E-03	3.44E-03	2.75E-03	1.41E-03
1592	569975.7	4215267	3.62E-02	2.05E-02	5.52E-03	3.12E-03	2.49E-03	1.28E-03
1593	569976	4215277	3.29E-02	1.86E-02	5.02E-03	2.83E-03	2.27E-03	1.17E-03
1594	569976.4	4215287	3.03E-02	1.72E-02	4.63E-03	2.61E-03	2.09E-03	1.08E-03
1595	569976.7	4215297	2.98E-02	1.69E-02	4.55E-03	2.57E-03	2.05E-03	1.06E-03
1596	569977	4215306	2.96E-02	1.68E-02	4.51E-03	2.55E-03	2.04E-03	1.05E-03
1597	569977.3	4215316	2.96E-02	1.68E-02	4.52E-03	2.55E-03	2.04E-03	1.05E-03
1598	569977.6	4215326	3.07E-02	1.74E-02	4.69E-03	2.65E-03	2.12E-03	1.09E-03
1599	569977.9	4215335	3.21E-02	1.82E-02	4.90E-03	2.76E-03	2.21E-03	1.14E-03
1600	569978.2	4215345	3.43E-02	1.95E-02	5.24E-03	2.96E-03	2.37E-03	1.22E-03
1601	569978.6	4215355	3.42E-02	1.94E-02	5.23E-03	2.95E-03	2.36E-03	1.21E-03
1602	569978.9	4215364	3.38E-02	1.91E-02	5.16E-03	2.91E-03	2.33E-03	1.20E-03
1603	569979.2	4215374	3.50E-02	1.98E-02	5.35E-03	3.02E-03	2.41E-03	1.24E-03
1604	569962.6	4215171	5.36E-02	3.04E-02	8.18E-03	4.62E-03	3.69E-03	1.90E-03
1605	569962.9	4215181	5.42E-02	3.07E-02	8.27E-03	4.67E-03	3.73E-03	1.92E-03
1606	569963.2	4215190	5.34E-02	3.02E-02	8.15E-03	4.60E-03	3.68E-03	1.89E-03
1607	569963.5	4215200	5.20E-02	2.94E-02	7.94E-03	4.48E-03	3.58E-03	1.84E-03
1608	569963.8	4215210	4.94E-02	2.80E-02	7.54E-03	4.25E-03	3.40E-03	1.75E-03

1609	569964.2	4215219	4.61E-02	2.61E-02	7.03E-03	3.97E-03	3.17E-03	1.63E-03
1610	569964.5	4215229	4.29E-02	2.43E-02	6.54E-03	3.69E-03	2.95E-03	1.52E-03
1611	569964.8	4215239	4.05E-02	2.29E-02	6.18E-03	3.49E-03	2.79E-03	1.44E-03
1612	569965.1	4215248	3.80E-02	2.15E-02	5.80E-03	3.28E-03	2.62E-03	1.35E-03
1613	569965.4	4215258	3.54E-02	2.01E-02	5.41E-03	3.05E-03	2.44E-03	1.26E-03
1614	569965.7	4215268	3.23E-02	1.83E-02	4.94E-03	2.79E-03	2.23E-03	1.15E-03
1615	569966	4215277	2.97E-02	1.68E-02	4.53E-03	2.56E-03	2.05E-03	1.05E-03
1616	569966.4	4215287	2.77E-02	1.57E-02	4.23E-03	2.39E-03	1.91E-03	9.82E-04
1617	569966.7	4215297	2.74E-02	1.55E-02	4.18E-03	2.36E-03	1.89E-03	9.72E-04
1618	569967	4215307	2.73E-02	1.55E-02	4.17E-03	2.35E-03	1.88E-03	9.68E-04
1619	569967.3	4215316	2.74E-02	1.55E-02	4.18E-03	2.36E-03	1.89E-03	9.70E-04
1620	569967.6	4215326	2.85E-02	1.62E-02	4.35E-03	2.46E-03	1.97E-03	1.01E-03
1621	569967.9	4215336	2.98E-02	1.69E-02	4.56E-03	2.57E-03	2.06E-03	1.06E-03
1622	569968.2	4215345	3.14E-02	1.78E-02	4.79E-03	2.71E-03	2.16E-03	1.11E-03
1623	569968.6	4215355	3.15E-02	1.78E-02	4.80E-03	2.71E-03	2.17E-03	1.12E-03
1624	569968.9	4215365	3.22E-02	1.83E-02	4.92E-03	2.78E-03	2.22E-03	1.14E-03
1625	569969.2	4215374	3.48E-02	1.97E-02	5.32E-03	3.00E-03	2.40E-03	1.24E-03
1626	569952.3	4215162	4.68E-02	2.65E-02	7.14E-03	4.03E-03	3.22E-03	1.66E-03
1627	569952.6	4215171	4.82E-02	2.73E-02	7.37E-03	4.16E-03	3.32E-03	1.71E-03
1628	569952.9	4215181	4.86E-02	2.75E-02	7.42E-03	4.19E-03	3.35E-03	1.72E-03
1629	569953.2	4215191	4.79E-02	2.71E-02	7.31E-03	4.12E-03	3.30E-03	1.70E-03
1630	569953.5	4215200	4.65E-02	2.64E-02	7.11E-03	4.01E-03	3.21E-03	1.65E-03
1631	569953.8	4215210	4.39E-02	2.49E-02	6.71E-03	3.78E-03	3.03E-03	1.56E-03
1632	569954.2	4215220	4.07E-02	2.30E-02	6.21E-03	3.51E-03	2.80E-03	1.44E-03
1633	569954.5	4215229	3.77E-02	2.13E-02	5.75E-03	3.25E-03	2.60E-03	1.34E-03
1634	569954.8	4215239	3.56E-02	2.02E-02	5.44E-03	3.07E-03	2.45E-03	1.26E-03
1635	569955.1	4215249	3.35E-02	1.90E-02	5.12E-03	2.89E-03	2.31E-03	1.19E-03
1636	569955.4	4215258	3.14E-02	1.78E-02	4.80E-03	2.71E-03	2.16E-03	1.11E-03
1637	569955.7	4215268	2.92E-02	1.65E-02	4.46E-03	2.52E-03	2.01E-03	1.04E-03
1638	569956	4215278	2.73E-02	1.55E-02	4.17E-03	2.35E-03	1.88E-03	9.68E-04
1639	569956.4	4215287	2.58E-02	1.46E-02	3.94E-03	2.23E-03	1.78E-03	9.16E-04
1640	569956.7	4215297	2.56E-02	1.45E-02	3.90E-03	2.20E-03	1.76E-03	9.07E-04
1641	569957	4215307	2.54E-02	1.44E-02	3.88E-03	2.19E-03	1.75E-03	9.02E-04
1642	569957.3	4215317	2.55E-02	1.44E-02	3.89E-03	2.20E-03	1.76E-03	9.05E-04
1643	569957.6	4215326	2.65E-02	1.50E-02	4.04E-03	2.28E-03	1.82E-03	9.39E-04
1644	569957.9	4215336	2.75E-02	1.56E-02	4.20E-03	2.37E-03	1.90E-03	9.77E-04
1645	569958.3	4215346	2.88E-02	1.63E-02	4.40E-03	2.49E-03	1.99E-03	1.02E-03
1646	569958.6	4215355	2.92E-02	1.65E-02	4.45E-03	2.51E-03	2.01E-03	1.03E-03
1647	569958.9	4215365	3.05E-02	1.73E-02	4.66E-03	2.63E-03	2.10E-03	1.08E-03
1648	569959.2	4215375	3.45E-02	1.95E-02	5.27E-03	2.97E-03	2.38E-03	1.22E-03
1649	569942.6	4215172	4.38E-02	2.48E-02	6.69E-03	3.77E-03	3.02E-03	1.55E-03
1650	569942.9	4215181	4.40E-02	2.49E-02	6.72E-03	3.79E-03	3.03E-03	1.56E-03
1651	569943.2	4215191	4.39E-02	2.49E-02	6.70E-03	3.78E-03	3.02E-03	1.56E-03
1652	569943.5	4215201	4.19E-02	2.37E-02	6.40E-03	3.61E-03	2.89E-03	1.49E-03
1653	569943.8	4215210	3.93E-02	2.23E-02	6.00E-03	3.39E-03	2.71E-03	1.39E-03
1654	569944.2	4215220	3.62E-02	2.05E-02	5.52E-03	3.12E-03	2.49E-03	1.28E-03
1655	569944.5	4215230	3.34E-02	1.89E-02	5.10E-03	2.88E-03	2.30E-03	1.18E-03
1656	569944.8	4215239	3.16E-02	1.79E-02	4.82E-03	2.72E-03	2.17E-03	1.12E-03
1657	569945.1	4215249	2.97E-02	1.68E-02	4.54E-03	2.56E-03	2.05E-03	1.05E-03
1658	569945.4	4215259	2.80E-02	1.59E-02	4.28E-03	2.42E-03	1.93E-03	9.94E-04
1659	569945.7	4215268	2.66E-02	1.51E-02	4.06E-03	2.29E-03	1.83E-03	9.42E-04
1660	569946.1	4215278	2.53E-02	1.43E-02	3.86E-03	2.18E-03	1.74E-03	8.96E-04

1661	569946.4	4215288	2.43E-02	1.38E-02	3.71E-03	2.09E-03	1.67E-03	8.61E-04
1662	569946.7	4215297	2.40E-02	1.36E-02	3.67E-03	2.07E-03	1.65E-03	8.51E-04
1663	569947	4215307	2.38E-02	1.35E-02	3.64E-03	2.05E-03	1.64E-03	8.46E-04
1664	569947.3	4215317	2.39E-02	1.35E-02	3.65E-03	2.06E-03	1.64E-03	8.47E-04
1665	569947.6	4215327	2.46E-02	1.39E-02	3.75E-03	2.12E-03	1.69E-03	8.71E-04
1666	569947.9	4215336	2.54E-02	1.44E-02	3.87E-03	2.19E-03	1.75E-03	8.99E-04
1667	569948.3	4215346	2.63E-02	1.49E-02	4.02E-03	2.27E-03	1.82E-03	9.35E-04
1668	569948.6	4215356	2.70E-02	1.53E-02	4.12E-03	2.33E-03	1.86E-03	9.57E-04
1669	569948.9	4215365	2.90E-02	1.64E-02	4.43E-03	2.50E-03	2.00E-03	1.03E-03
1670	569949.2	4215375	3.43E-02	1.94E-02	5.24E-03	2.96E-03	2.36E-03	1.22E-03
1671	569932.6	4215172	4.01E-02	2.27E-02	6.12E-03	3.45E-03	2.76E-03	1.42E-03
1672	569932.9	4215182	4.01E-02	2.27E-02	6.12E-03	3.46E-03	2.76E-03	1.42E-03
1673	569933.2	4215191	4.00E-02	2.27E-02	6.11E-03	3.45E-03	2.76E-03	1.42E-03
1674	569933.5	4215201	3.79E-02	2.15E-02	5.79E-03	3.27E-03	2.61E-03	1.35E-03
1675	569933.9	4215211	3.53E-02	2.00E-02	5.39E-03	3.04E-03	2.43E-03	1.25E-03
1676	569934.2	4215220	3.23E-02	1.83E-02	4.93E-03	2.78E-03	2.23E-03	1.15E-03
1677	569934.5	4215230	2.98E-02	1.69E-02	4.55E-03	2.57E-03	2.05E-03	1.06E-03
1678	569934.8	4215240	2.81E-02	1.59E-02	4.30E-03	2.42E-03	1.94E-03	9.98E-04
1679	569935.1	4215249	2.65E-02	1.50E-02	4.05E-03	2.29E-03	1.83E-03	9.42E-04
1680	569935.4	4215259	2.52E-02	1.43E-02	3.85E-03	2.17E-03	1.74E-03	8.95E-04
1681	569935.7	4215269	2.43E-02	1.38E-02	3.71E-03	2.10E-03	1.68E-03	8.63E-04
1682	569936.1	4215278	2.35E-02	1.33E-02	3.59E-03	2.03E-03	1.62E-03	8.34E-04
1683	569936.4	4215288	2.29E-02	1.30E-02	3.49E-03	1.97E-03	1.58E-03	8.11E-04
1684	569936.7	4215298	2.26E-02	1.28E-02	3.45E-03	1.95E-03	1.56E-03	8.01E-04
1685	569937	4215307	2.24E-02	1.27E-02	3.42E-03	1.93E-03	1.54E-03	7.94E-04
1686	569937.3	4215317	2.24E-02	1.27E-02	3.41E-03	1.93E-03	1.54E-03	7.93E-04
1687	569937.6	4215327	2.28E-02	1.29E-02	3.49E-03	1.97E-03	1.57E-03	8.10E-04
1688	569937.9	4215336	2.35E-02	1.33E-02	3.58E-03	2.02E-03	1.62E-03	8.33E-04
1689	569938.3	4215346	2.44E-02	1.38E-02	3.72E-03	2.10E-03	1.68E-03	8.64E-04
1690	569938.6	4215356	2.54E-02	1.44E-02	3.88E-03	2.19E-03	1.75E-03	9.01E-04
1691	569938.9	4215366	2.81E-02	1.59E-02	4.29E-03	2.42E-03	1.93E-03	9.96E-04
1692	569939.2	4215375	3.47E-02	1.96E-02	5.29E-03	2.99E-03	2.39E-03	1.23E-03
1693	569922.9	4215182	3.69E-02	2.09E-02	5.63E-03	3.18E-03	2.54E-03	1.31E-03
1694	569923.2	4215192	3.70E-02	2.09E-02	5.64E-03	3.18E-03	2.55E-03	1.31E-03
1695	569923.5	4215201	3.53E-02	2.00E-02	5.39E-03	3.04E-03	2.43E-03	1.25E-03
1696	569923.9	4215211	3.27E-02	1.85E-02	4.99E-03	2.82E-03	2.25E-03	1.16E-03
1697	569924.2	4215221	2.97E-02	1.68E-02	4.53E-03	2.56E-03	2.05E-03	1.05E-03
1698	569924.5	4215230	2.73E-02	1.54E-02	4.16E-03	2.35E-03	1.88E-03	9.67E-04
1699	569924.8	4215240	2.57E-02	1.45E-02	3.92E-03	2.21E-03	1.77E-03	9.11E-04
1700	569925.1	4215250	2.42E-02	1.37E-02	3.69E-03	2.08E-03	1.67E-03	8.57E-04
1701	569925.4	4215259	2.30E-02	1.30E-02	3.51E-03	1.98E-03	1.59E-03	8.16E-04
1702	569925.7	4215269	2.23E-02	1.27E-02	3.41E-03	1.93E-03	1.54E-03	7.92E-04
1703	569926.1	4215279	2.18E-02	1.23E-02	3.32E-03	1.87E-03	1.50E-03	7.72E-04
1704	569926.4	4215288	2.13E-02	1.21E-02	3.25E-03	1.83E-03	1.47E-03	7.55E-04
1705	569926.7	4215298	2.10E-02	1.19E-02	3.21E-03	1.81E-03	1.45E-03	7.45E-04
1706	569927	4215308	2.08E-02	1.18E-02	3.18E-03	1.79E-03	1.43E-03	7.38E-04
1707	569927.3	4215317	2.08E-02	1.18E-02	3.18E-03	1.79E-03	1.43E-03	7.38E-04
1708	569927.6	4215327	2.13E-02	1.20E-02	3.25E-03	1.83E-03	1.47E-03	7.54E-04
1709	569928	4215337	2.19E-02	1.24E-02	3.35E-03	1.89E-03	1.51E-03	7.78E-04
1710	569928.3	4215346	2.29E-02	1.30E-02	3.50E-03	1.97E-03	1.58E-03	8.12E-04
1711	569928.6	4215356	2.42E-02	1.37E-02	3.70E-03	2.09E-03	1.67E-03	8.59E-04
1712	569928.9	4215366	2.73E-02	1.55E-02	4.18E-03	2.36E-03	1.88E-03	9.70E-04

1713	569929.2	4215376	3.46E-02	1.96E-02	5.28E-03	2.98E-03	2.38E-03	1.23E-03
1714	569912.9	4215182	3.41E-02	1.93E-02	5.20E-03	2.93E-03	2.35E-03	1.21E-03
1715	569913.2	4215192	3.43E-02	1.94E-02	5.24E-03	2.96E-03	2.37E-03	1.22E-03
1716	569913.5	4215202	3.29E-02	1.86E-02	5.02E-03	2.83E-03	2.27E-03	1.17E-03
1717	569913.9	4215211	3.04E-02	1.72E-02	4.64E-03	2.62E-03	2.09E-03	1.08E-03
1718	569914.2	4215221	2.74E-02	1.55E-02	4.19E-03	2.36E-03	1.89E-03	9.73E-04
1719	569914.5	4215231	2.51E-02	1.42E-02	3.83E-03	2.16E-03	1.73E-03	8.90E-04
1720	569914.8	4215240	2.36E-02	1.34E-02	3.60E-03	2.03E-03	1.62E-03	8.36E-04
1721	569915.1	4215250	2.22E-02	1.26E-02	3.39E-03	1.91E-03	1.53E-03	7.86E-04
1722	569915.4	4215260	2.11E-02	1.20E-02	3.22E-03	1.82E-03	1.45E-03	7.49E-04
1723	569915.8	4215269	2.06E-02	1.17E-02	3.14E-03	1.77E-03	1.42E-03	7.29E-04
1724	569916.1	4215279	2.01E-02	1.14E-02	3.07E-03	1.73E-03	1.38E-03	7.12E-04
1725	569916.4	4215289	1.97E-02	1.11E-02	3.00E-03	1.70E-03	1.36E-03	6.98E-04
1726	569916.7	4215298	1.94E-02	1.10E-02	2.96E-03	1.67E-03	1.34E-03	6.88E-04
1727	569917	4215308	1.93E-02	1.10E-02	2.95E-03	1.67E-03	1.33E-03	6.86E-04
1728	569917.3	4215318	1.93E-02	1.09E-02	2.95E-03	1.66E-03	1.33E-03	6.85E-04
1729	569917.6	4215327	1.99E-02	1.13E-02	3.03E-03	1.71E-03	1.37E-03	7.04E-04
1730	569918	4215337	2.06E-02	1.17E-02	3.15E-03	1.78E-03	1.42E-03	7.31E-04
1731	569918.3	4215347	2.17E-02	1.23E-02	3.32E-03	1.87E-03	1.50E-03	7.71E-04
1732	569918.6	4215356	2.31E-02	1.31E-02	3.53E-03	1.99E-03	1.59E-03	8.19E-04
1733	569918.9	4215366	2.61E-02	1.48E-02	3.99E-03	2.25E-03	1.80E-03	9.26E-04
1734	569919.2	4215376	3.24E-02	1.83E-02	4.94E-03	2.79E-03	2.23E-03	1.15E-03
1735	569903.2	4215192	3.20E-02	1.81E-02	4.89E-03	2.76E-03	2.21E-03	1.14E-03
1736	569903.6	4215202	3.08E-02	1.74E-02	4.70E-03	2.65E-03	2.12E-03	1.09E-03
1737	569903.9	4215212	2.83E-02	1.61E-02	4.33E-03	2.44E-03	1.95E-03	1.01E-03
1738	569904.2	4215221	2.54E-02	1.44E-02	3.88E-03	2.19E-03	1.75E-03	9.01E-04
1739	569904.5	4215231	2.32E-02	1.31E-02	3.54E-03	2.00E-03	1.60E-03	8.22E-04
1740	569904.8	4215241	2.17E-02	1.23E-02	3.32E-03	1.87E-03	1.50E-03	7.71E-04
1741	569905.1	4215250	2.04E-02	1.15E-02	3.11E-03	1.76E-03	1.40E-03	7.23E-04
1742	569905.4	4215260	1.95E-02	1.10E-02	2.98E-03	1.68E-03	1.34E-03	6.91E-04
1743	569905.8	4215270	1.91E-02	1.08E-02	2.91E-03	1.64E-03	1.31E-03	6.76E-04
1744	569906.1	4215279	1.87E-02	1.06E-02	2.85E-03	1.61E-03	1.29E-03	6.62E-04
1745	569906.4	4215289	1.83E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.49E-04
1746	569906.7	4215299	1.80E-02	1.02E-02	2.75E-03	1.55E-03	1.24E-03	6.39E-04
1747	569907	4215308	1.78E-02	1.01E-02	2.72E-03	1.53E-03	1.23E-03	6.31E-04
1748	569907.3	4215318	1.78E-02	1.01E-02	2.71E-03	1.53E-03	1.22E-03	6.30E-04
1749	569907.6	4215328	1.86E-02	1.05E-02	2.84E-03	1.60E-03	1.28E-03	6.60E-04
1750	569908	4215337	1.94E-02	1.10E-02	2.97E-03	1.67E-03	1.34E-03	6.89E-04
1751	569908.3	4215347	2.06E-02	1.16E-02	3.14E-03	1.77E-03	1.42E-03	7.29E-04
1752	569908.6	4215357	2.18E-02	1.23E-02	3.33E-03	1.88E-03	1.50E-03	7.73E-04
1753	569908.9	4215366	2.42E-02	1.37E-02	3.70E-03	2.09E-03	1.67E-03	8.59E-04
1754	569909.2	4215376	2.85E-02	1.61E-02	4.35E-03	2.45E-03	1.96E-03	1.01E-03
1755	569893.2	4215193	3.00E-02	1.70E-02	4.58E-03	2.59E-03	2.07E-03	1.06E-03
1756	569893.6	4215202	2.91E-02	1.65E-02	4.45E-03	2.51E-03	2.01E-03	1.03E-03
1757	569893.9	4215212	2.70E-02	1.53E-02	4.12E-03	2.33E-03	1.86E-03	9.57E-04
1758	569894.2	4215222	2.43E-02	1.37E-02	3.71E-03	2.09E-03	1.67E-03	8.61E-04
1759	569894.5	4215231	2.21E-02	1.25E-02	3.38E-03	1.91E-03	1.53E-03	7.85E-04
1760	569894.8	4215241	2.06E-02	1.17E-02	3.15E-03	1.78E-03	1.42E-03	7.31E-04
1761	569895.1	4215251	1.93E-02	1.09E-02	2.95E-03	1.66E-03	1.33E-03	6.84E-04
1762	569895.4	4215260	1.84E-02	1.04E-02	2.80E-03	1.58E-03	1.27E-03	6.51E-04
1763	569895.8	4215270	1.78E-02	1.01E-02	2.72E-03	1.53E-03	1.23E-03	6.31E-04
1764	569896.1	4215280	1.73E-02	9.80E-03	2.64E-03	1.49E-03	1.19E-03	6.14E-04

1765	569896.4	4215289	1.69E-02	9.60E-03	2.59E-03	1.46E-03	1.17E-03	6.01E-04
1766	569896.7	4215299	1.67E-02	9.49E-03	2.56E-03	1.44E-03	1.15E-03	5.94E-04
1767	569897	4215309	1.66E-02	9.39E-03	2.53E-03	1.43E-03	1.14E-03	5.88E-04
1768	569897.3	4215318	1.66E-02	9.40E-03	2.53E-03	1.43E-03	1.14E-03	5.88E-04
1769	569897.7	4215328	1.71E-02	9.71E-03	2.62E-03	1.48E-03	1.18E-03	6.08E-04
1770	569898	4215338	1.82E-02	1.03E-02	2.79E-03	1.57E-03	1.26E-03	6.47E-04
1771	569898.3	4215347	1.93E-02	1.09E-02	2.94E-03	1.66E-03	1.33E-03	6.83E-04
1772	569898.6	4215357	2.03E-02	1.15E-02	3.10E-03	1.75E-03	1.40E-03	7.20E-04
1773	569898.9	4215367	2.21E-02	1.25E-02	3.37E-03	1.90E-03	1.52E-03	7.83E-04
1774	569883.6	4215203	2.76E-02	1.56E-02	4.21E-03	2.38E-03	1.90E-03	9.79E-04
1775	569883.9	4215212	2.57E-02	1.46E-02	3.93E-03	2.22E-03	1.77E-03	9.13E-04
1776	569884.2	4215222	2.32E-02	1.32E-02	3.55E-03	2.00E-03	1.60E-03	8.24E-04
1777	569884.5	4215232	2.12E-02	1.20E-02	3.24E-03	1.83E-03	1.46E-03	7.52E-04
1778	569884.8	4215241	1.97E-02	1.11E-02	3.01E-03	1.70E-03	1.36E-03	6.98E-04
1779	569885.1	4215251	1.84E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.51E-04
1780	569885.5	4215261	1.74E-02	9.84E-03	2.65E-03	1.50E-03	1.20E-03	6.16E-04
1781	569885.8	4215270	1.67E-02	9.45E-03	2.55E-03	1.44E-03	1.15E-03	5.92E-04
1782	569886.1	4215280	1.61E-02	9.11E-03	2.46E-03	1.39E-03	1.11E-03	5.71E-04
1783	569886.4	4215290	1.57E-02	8.90E-03	2.40E-03	1.35E-03	1.08E-03	5.57E-04
1784	569886.7	4215299	1.56E-02	8.84E-03	2.38E-03	1.34E-03	1.08E-03	5.53E-04
1785	569887	4215309	1.55E-02	8.79E-03	2.37E-03	1.34E-03	1.07E-03	5.50E-04
1786	569887.3	4215319	1.56E-02	8.82E-03	2.38E-03	1.34E-03	1.07E-03	5.52E-04
1787	569887.7	4215328	1.60E-02	9.07E-03	2.44E-03	1.38E-03	1.10E-03	5.68E-04
1788	569888	4215338	1.67E-02	9.45E-03	2.55E-03	1.44E-03	1.15E-03	5.92E-04
1789	569888.3	4215348	1.79E-02	1.01E-02	2.73E-03	1.54E-03	1.23E-03	6.34E-04
1790	569888.6	4215357	1.87E-02	1.06E-02	2.86E-03	1.61E-03	1.29E-03	6.63E-04
1791	569888.9	4215367	1.99E-02	1.13E-02	3.04E-03	1.71E-03	1.37E-03	7.06E-04
1792	569873.6	4215203	2.62E-02	1.48E-02	4.00E-03	2.25E-03	1.80E-03	9.28E-04
1793	569873.9	4215213	2.46E-02	1.39E-02	3.75E-03	2.12E-03	1.69E-03	8.71E-04
1794	569874.2	4215222	2.23E-02	1.26E-02	3.40E-03	1.92E-03	1.54E-03	7.90E-04
1795	569874.5	4215232	2.03E-02	1.15E-02	3.11E-03	1.75E-03	1.40E-03	7.22E-04
1796	569874.8	4215242	1.88E-02	1.07E-02	2.87E-03	1.62E-03	1.30E-03	6.67E-04
1797	569875.1	4215251	1.75E-02	9.90E-03	2.67E-03	1.51E-03	1.20E-03	6.20E-04
1798	569875.5	4215261	1.65E-02	9.32E-03	2.51E-03	1.42E-03	1.13E-03	5.84E-04
1799	569875.8	4215271	1.57E-02	8.88E-03	2.39E-03	1.35E-03	1.08E-03	5.56E-04
1800	569876.1	4215280	1.50E-02	8.51E-03	2.29E-03	1.29E-03	1.03E-03	5.33E-04
1801	569876.4	4215290	1.47E-02	8.30E-03	2.24E-03	1.26E-03	1.01E-03	5.20E-04
1802	569876.7	4215300	1.46E-02	8.27E-03	2.23E-03	1.26E-03	1.01E-03	5.18E-04
1803	569877	4215309	1.46E-02	8.25E-03	2.22E-03	1.25E-03	1.00E-03	5.17E-04
1804	569877.3	4215319	1.46E-02	8.29E-03	2.23E-03	1.26E-03	1.01E-03	5.19E-04
1805	569877.7	4215329	1.50E-02	8.48E-03	2.29E-03	1.29E-03	1.03E-03	5.31E-04
1806	569878	4215338	1.55E-02	8.78E-03	2.37E-03	1.34E-03	1.07E-03	5.50E-04
1807	569878.3	4215348	1.62E-02	9.19E-03	2.48E-03	1.40E-03	1.12E-03	5.75E-04
1808	569878.6	4215358	1.69E-02	9.59E-03	2.59E-03	1.46E-03	1.17E-03	6.00E-04
1809	569878.9	4215367	1.79E-02	1.01E-02	2.73E-03	1.54E-03	1.23E-03	6.34E-04
1810	569863.9	4215213	2.35E-02	1.33E-02	3.58E-03	2.02E-03	1.62E-03	8.32E-04
1811	569864.2	4215223	2.18E-02	1.23E-02	3.33E-03	1.88E-03	1.50E-03	7.73E-04
1812	569864.5	4215232	2.01E-02	1.14E-02	3.07E-03	1.73E-03	1.38E-03	7.12E-04
1813	569864.8	4215242	1.85E-02	1.05E-02	2.83E-03	1.59E-03	1.28E-03	6.57E-04
1814	569865.1	4215252	1.71E-02	9.66E-03	2.60E-03	1.47E-03	1.18E-03	6.05E-04
1815	569865.5	4215261	1.60E-02	9.05E-03	2.44E-03	1.38E-03	1.10E-03	5.67E-04
1816	569865.8	4215271	1.52E-02	8.59E-03	2.32E-03	1.31E-03	1.05E-03	5.38E-04

1817	569866.1	4215281	1.45E-02	8.21E-03	2.21E-03	1.25E-03	9.98E-04	5.14E-04
1818	569866.4	4215290	1.41E-02	7.98E-03	2.15E-03	1.21E-03	9.71E-04	5.00E-04
1819	569866.7	4215300	1.40E-02	7.90E-03	2.13E-03	1.20E-03	9.61E-04	4.95E-04
1820	569867	4215310	1.38E-02	7.84E-03	2.11E-03	1.19E-03	9.54E-04	4.91E-04
1821	569867.4	4215319	1.38E-02	7.84E-03	2.11E-03	1.19E-03	9.53E-04	4.91E-04
1822	569867.7	4215329	1.40E-02	7.95E-03	2.14E-03	1.21E-03	9.68E-04	4.98E-04
1823	569868	4215339	1.44E-02	8.15E-03	2.20E-03	1.24E-03	9.92E-04	5.11E-04
1824	569868.3	4215348	1.49E-02	8.44E-03	2.27E-03	1.28E-03	1.03E-03	5.28E-04
1825	569868.6	4215358	1.55E-02	8.75E-03	2.36E-03	1.33E-03	1.06E-03	5.48E-04
1826	569868.9	4215368	1.61E-02	9.13E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
1827	569853.9	4215213	2.24E-02	1.27E-02	3.43E-03	1.93E-03	1.55E-03	7.96E-04
1828	569854.2	4215223	2.13E-02	1.21E-02	3.25E-03	1.84E-03	1.47E-03	7.56E-04
1829	569854.5	4215233	1.98E-02	1.12E-02	3.03E-03	1.71E-03	1.37E-03	7.03E-04
1830	569854.8	4215242	1.82E-02	1.03E-02	2.78E-03	1.57E-03	1.26E-03	6.47E-04
1831	569855.2	4215252	1.67E-02	9.47E-03	2.55E-03	1.44E-03	1.15E-03	5.93E-04
1832	569855.5	4215262	1.56E-02	8.85E-03	2.39E-03	1.35E-03	1.08E-03	5.54E-04
1833	569855.8	4215271	1.48E-02	8.39E-03	2.26E-03	1.28E-03	1.02E-03	5.26E-04
1834	569856.1	4215281	1.41E-02	8.01E-03	2.16E-03	1.22E-03	9.74E-04	5.01E-04
1835	569856.4	4215291	1.37E-02	7.76E-03	2.09E-03	1.18E-03	9.44E-04	4.86E-04
1836	569856.7	4215300	1.35E-02	7.62E-03	2.05E-03	1.16E-03	9.27E-04	4.77E-04
1837	569857	4215310	1.32E-02	7.49E-03	2.02E-03	1.14E-03	9.11E-04	4.69E-04
1838	569857.4	4215320	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.03E-04	4.65E-04
1839	569857.7	4215329	1.32E-02	7.47E-03	2.01E-03	1.14E-03	9.09E-04	4.68E-04
1840	569858	4215339	1.34E-02	7.57E-03	2.04E-03	1.15E-03	9.21E-04	4.74E-04
1841	569858.3	4215349	1.36E-02	7.73E-03	2.08E-03	1.18E-03	9.40E-04	4.84E-04
1842	569858.6	4215358	1.40E-02	7.96E-03	2.15E-03	1.21E-03	9.68E-04	4.98E-04
1843	569858.9	4215368	1.45E-02	8.21E-03	2.21E-03	1.25E-03	9.99E-04	5.14E-04
1844	569844.2	4215223	2.08E-02	1.18E-02	3.18E-03	1.79E-03	1.43E-03	7.38E-04
1845	569844.5	4215233	1.95E-02	1.11E-02	2.98E-03	1.68E-03	1.35E-03	6.93E-04
1846	569844.8	4215243	1.80E-02	1.02E-02	2.74E-03	1.55E-03	1.24E-03	6.37E-04
1847	569845.2	4215252	1.64E-02	9.29E-03	2.50E-03	1.41E-03	1.13E-03	5.82E-04
1848	569845.5	4215262	1.53E-02	8.67E-03	2.34E-03	1.32E-03	1.05E-03	5.43E-04
1849	569845.8	4215272	1.45E-02	8.22E-03	2.21E-03	1.25E-03	9.99E-04	5.14E-04
1850	569846.1	4215281	1.38E-02	7.83E-03	2.11E-03	1.19E-03	9.52E-04	4.90E-04
1851	569846.4	4215291	1.33E-02	7.55E-03	2.03E-03	1.15E-03	9.18E-04	4.72E-04
1852	569846.7	4215301	1.30E-02	7.34E-03	1.98E-03	1.12E-03	8.93E-04	4.60E-04
1853	569847.1	4215310	1.26E-02	7.15E-03	1.93E-03	1.09E-03	8.70E-04	4.48E-04
1854	569847.4	4215320	1.24E-02	7.04E-03	1.90E-03	1.07E-03	8.56E-04	4.41E-04
1855	569847.7	4215330	1.24E-02	7.02E-03	1.89E-03	1.07E-03	8.54E-04	4.40E-04
1856	569848	4215339	1.24E-02	7.04E-03	1.90E-03	1.07E-03	8.56E-04	4.41E-04
1857	569848.3	4215349	1.25E-02	7.11E-03	1.92E-03	1.08E-03	8.65E-04	4.45E-04
1858	569848.6	4215359	1.28E-02	7.26E-03	1.96E-03	1.10E-03	8.83E-04	4.54E-04
1859	569848.9	4215368	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.02E-04	4.65E-04
1860	569834.2	4215224	1.97E-02	1.12E-02	3.01E-03	1.70E-03	1.36E-03	6.99E-04
1861	569834.5	4215233	1.86E-02	1.05E-02	2.84E-03	1.60E-03	1.28E-03	6.60E-04
1862	569834.9	4215243	1.72E-02	9.74E-03	2.63E-03	1.48E-03	1.19E-03	6.10E-04
1863	569835.2	4215253	1.58E-02	8.95E-03	2.41E-03	1.36E-03	1.09E-03	5.60E-04
1864	569835.5	4215262	1.48E-02	8.38E-03	2.26E-03	1.27E-03	1.02E-03	5.25E-04
1865	569835.8	4215272	1.40E-02	7.95E-03	2.14E-03	1.21E-03	9.67E-04	4.98E-04
1866	569836.1	4215282	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.22E-04	4.74E-04
1867	569836.4	4215291	1.29E-02	7.29E-03	1.97E-03	1.11E-03	8.87E-04	4.56E-04
1868	569836.7	4215301	1.25E-02	7.06E-03	1.90E-03	1.07E-03	8.59E-04	4.42E-04

1869	569837.1	4215311	1.21E-02	6.84E-03	1.84E-03	1.04E-03	8.32E-04	4.28E-04
1870	569837.4	4215320	1.18E-02	6.70E-03	1.81E-03	1.02E-03	8.15E-04	4.20E-04
1871	569837.7	4215330	1.17E-02	6.65E-03	1.79E-03	1.01E-03	8.09E-04	4.16E-04
1872	569838	4215340	1.17E-02	6.62E-03	1.78E-03	1.01E-03	8.05E-04	4.14E-04
1873	569838.3	4215349	1.17E-02	6.62E-03	1.79E-03	1.01E-03	8.06E-04	4.15E-04
1874	569838.6	4215359	1.18E-02	6.70E-03	1.81E-03	1.02E-03	8.15E-04	4.20E-04
1875	569838.9	4215369	1.20E-02	6.78E-03	1.83E-03	1.03E-03	8.24E-04	4.24E-04
1876	569824.5	4215234	1.77E-02	1.00E-02	2.70E-03	1.52E-03	1.22E-03	6.27E-04
1877	569824.9	4215243	1.64E-02	9.31E-03	2.51E-03	1.42E-03	1.13E-03	5.83E-04
1878	569825.2	4215253	1.52E-02	8.59E-03	2.32E-03	1.31E-03	1.05E-03	5.38E-04
1879	569825.5	4215263	1.43E-02	8.08E-03	2.18E-03	1.23E-03	9.82E-04	5.06E-04
1880	569825.8	4215272	1.35E-02	7.67E-03	2.07E-03	1.17E-03	9.33E-04	4.80E-04
1881	569826.1	4215282	1.29E-02	7.32E-03	1.97E-03	1.11E-03	8.90E-04	4.58E-04
1882	569826.4	4215292	1.24E-02	7.03E-03	1.89E-03	1.07E-03	8.55E-04	4.40E-04
1883	569826.7	4215301	1.20E-02	6.78E-03	1.83E-03	1.03E-03	8.25E-04	4.25E-04
1884	569827.1	4215311	1.16E-02	6.55E-03	1.77E-03	9.96E-04	7.97E-04	4.10E-04
1885	569827.4	4215321	1.13E-02	6.40E-03	1.73E-03	9.73E-04	7.78E-04	4.01E-04
1886	569827.7	4215330	1.12E-02	6.33E-03	1.71E-03	9.63E-04	7.70E-04	3.96E-04
1887	569828	4215340	1.11E-02	6.27E-03	1.69E-03	9.54E-04	7.63E-04	3.93E-04
1888	569828.3	4215350	1.10E-02	6.24E-03	1.68E-03	9.49E-04	7.59E-04	3.91E-04
1889	569828.6	4215359	1.10E-02	6.26E-03	1.69E-03	9.51E-04	7.61E-04	3.92E-04
1890	569829	4215369	1.10E-02	6.26E-03	1.69E-03	9.52E-04	7.61E-04	3.92E-04
1891	569814.9	4215244	1.57E-02	8.90E-03	2.40E-03	1.35E-03	1.08E-03	5.58E-04
1892	569815.2	4215253	1.46E-02	8.26E-03	2.23E-03	1.26E-03	1.00E-03	5.17E-04
1893	569815.5	4215263	1.37E-02	7.79E-03	2.10E-03	1.18E-03	9.47E-04	4.88E-04
1894	569815.8	4215273	1.31E-02	7.40E-03	2.00E-03	1.13E-03	9.01E-04	4.64E-04
1895	569816.1	4215282	1.25E-02	7.07E-03	1.90E-03	1.07E-03	8.59E-04	4.42E-04
1896	569816.4	4215292	1.20E-02	6.77E-03	1.83E-03	1.03E-03	8.24E-04	4.24E-04
1897	569816.8	4215302	1.15E-02	6.51E-03	1.76E-03	9.91E-04	7.92E-04	4.08E-04
1898	569817.1	4215311	1.11E-02	6.27E-03	1.69E-03	9.54E-04	7.63E-04	3.93E-04
1899	569817.4	4215321	1.08E-02	6.11E-03	1.65E-03	9.30E-04	7.44E-04	3.83E-04
1900	569817.7	4215331	1.06E-02	6.03E-03	1.63E-03	9.17E-04	7.33E-04	3.78E-04
1901	569818	4215340	1.05E-02	5.95E-03	1.60E-03	9.04E-04	7.23E-04	3.72E-04
1902	569818.3	4215350	1.04E-02	5.88E-03	1.59E-03	8.95E-04	7.16E-04	3.68E-04
1903	569818.6	4215360	1.03E-02	5.85E-03	1.58E-03	8.90E-04	7.12E-04	3.67E-04
1904	569819	4215369	1.02E-02	5.80E-03	1.56E-03	8.83E-04	7.06E-04	3.63E-04
1905	569804.9	4215244	1.48E-02	8.39E-03	2.26E-03	1.28E-03	1.02E-03	5.25E-04
1906	569805.2	4215254	1.37E-02	7.78E-03	2.10E-03	1.18E-03	9.47E-04	4.87E-04
1907	569805.5	4215263	1.30E-02	7.35E-03	1.98E-03	1.12E-03	8.94E-04	4.60E-04
1908	569805.8	4215273	1.24E-02	7.00E-03	1.89E-03	1.06E-03	8.52E-04	4.38E-04
1909	569806.1	4215283	1.18E-02	6.69E-03	1.80E-03	1.02E-03	8.14E-04	4.19E-04
1910	569806.4	4215292	1.14E-02	6.43E-03	1.73E-03	9.78E-04	7.82E-04	4.03E-04
1911	569806.8	4215302	1.09E-02	6.20E-03	1.67E-03	9.43E-04	7.54E-04	3.88E-04
1912	569807.1	4215312	1.05E-02	5.97E-03	1.61E-03	9.09E-04	7.27E-04	3.74E-04
1913	569807.4	4215321	1.03E-02	5.83E-03	1.57E-03	8.86E-04	7.09E-04	3.65E-04
1914	569807.7	4215331	1.01E-02	5.74E-03	1.55E-03	8.73E-04	6.98E-04	3.59E-04
1915	569808	4215341	9.96E-03	5.64E-03	1.52E-03	8.58E-04	6.86E-04	3.53E-04
1916	569808.3	4215350	9.82E-03	5.56E-03	1.50E-03	8.46E-04	6.77E-04	3.48E-04
1917	569808.6	4215360	9.72E-03	5.51E-03	1.48E-03	8.38E-04	6.70E-04	3.45E-04
1918	569809	4215370	9.59E-03	5.43E-03	1.46E-03	8.26E-04	6.61E-04	3.40E-04
1919	569795.2	4215254	1.29E-02	7.31E-03	1.97E-03	1.11E-03	8.90E-04	4.58E-04
1920	569795.5	4215264	1.22E-02	6.92E-03	1.86E-03	1.05E-03	8.41E-04	4.33E-04

1921	569795.8	4215273	1.16E-02	6.59E-03	1.78E-03	1.00E-03	8.02E-04	4.13E-04
1922	569796.1	4215283	1.11E-02	6.31E-03	1.70E-03	9.60E-04	7.68E-04	3.95E-04
1923	569796.4	4215293	1.07E-02	6.08E-03	1.64E-03	9.25E-04	7.40E-04	3.81E-04
1924	569796.8	4215302	1.04E-02	5.88E-03	1.59E-03	8.94E-04	7.15E-04	3.68E-04
1925	569797.1	4215312	1.00E-02	5.68E-03	1.53E-03	8.65E-04	6.91E-04	3.56E-04
1926	569797.4	4215322	9.80E-03	5.55E-03	1.50E-03	8.44E-04	6.75E-04	3.48E-04
1927	569797.7	4215331	9.63E-03	5.46E-03	1.47E-03	8.30E-04	6.64E-04	3.42E-04
1928	569798	4215341	9.46E-03	5.36E-03	1.44E-03	8.15E-04	6.52E-04	3.35E-04
1929	569798.3	4215351	9.31E-03	5.27E-03	1.42E-03	8.02E-04	6.41E-04	3.30E-04
1930	569798.7	4215360	9.20E-03	5.21E-03	1.40E-03	7.93E-04	6.34E-04	3.26E-04
1931	569785.2	4215254	1.22E-02	6.89E-03	1.86E-03	1.05E-03	8.38E-04	4.31E-04
1932	569785.5	4215264	1.15E-02	6.52E-03	1.76E-03	9.92E-04	7.93E-04	4.08E-04
1933	569785.8	4215274	1.10E-02	6.22E-03	1.68E-03	9.47E-04	7.57E-04	3.90E-04
1934	569786.1	4215283	1.05E-02	5.96E-03	1.61E-03	9.07E-04	7.25E-04	3.73E-04
1935	569786.5	4215293	1.02E-02	5.76E-03	1.55E-03	8.77E-04	7.01E-04	3.61E-04
1936	569786.8	4215303	9.86E-03	5.59E-03	1.51E-03	8.50E-04	6.80E-04	3.50E-04
1937	569787.1	4215312	9.56E-03	5.41E-03	1.46E-03	8.23E-04	6.59E-04	3.39E-04
1938	569787.4	4215322	9.34E-03	5.29E-03	1.43E-03	8.05E-04	6.44E-04	3.31E-04
1939	569787.7	4215332	9.18E-03	5.20E-03	1.40E-03	7.91E-04	6.32E-04	3.25E-04
1940	569788	4215341	8.99E-03	5.09E-03	1.37E-03	7.75E-04	6.19E-04	3.19E-04
1941	569788.3	4215351	8.84E-03	5.01E-03	1.35E-03	7.62E-04	6.09E-04	3.13E-04
1942	569788.7	4215361	8.72E-03	4.94E-03	1.33E-03	7.51E-04	6.01E-04	3.09E-04
1943	569775.5	4215264	1.09E-02	6.19E-03	1.67E-03	9.42E-04	7.53E-04	3.88E-04
1944	569775.8	4215274	1.04E-02	5.91E-03	1.59E-03	8.99E-04	7.19E-04	3.70E-04
1945	569776.1	4215284	1.00E-02	5.66E-03	1.53E-03	8.61E-04	6.89E-04	3.55E-04
1946	569776.5	4215293	9.66E-03	5.47E-03	1.48E-03	8.33E-04	6.66E-04	3.43E-04
1947	569776.8	4215303	9.37E-03	5.31E-03	1.43E-03	8.07E-04	6.45E-04	3.32E-04
1948	569777.1	4215313	9.07E-03	5.14E-03	1.39E-03	7.82E-04	6.25E-04	3.22E-04
1949	569777.4	4215322	8.87E-03	5.03E-03	1.35E-03	7.65E-04	6.11E-04	3.15E-04
1950	569777.7	4215332	8.71E-03	4.93E-03	1.33E-03	7.50E-04	6.00E-04	3.09E-04
1951	569778	4215342	8.52E-03	4.83E-03	1.30E-03	7.34E-04	5.87E-04	3.02E-04
1952	569778.3	4215351	8.37E-03	4.74E-03	1.28E-03	7.21E-04	5.77E-04	2.97E-04
1953	569778.7	4215361	8.25E-03	4.68E-03	1.26E-03	7.11E-04	5.69E-04	2.93E-04
1954	569765.5	4215265	1.04E-02	5.90E-03	1.59E-03	8.97E-04	7.17E-04	3.69E-04
1955	569765.8	4215274	9.93E-03	5.63E-03	1.52E-03	8.56E-04	6.84E-04	3.52E-04
1956	569766.1	4215284	9.52E-03	5.39E-03	1.45E-03	8.20E-04	6.56E-04	3.38E-04
1957	569766.5	4215294	9.19E-03	5.21E-03	1.40E-03	7.92E-04	6.34E-04	3.26E-04
1958	569766.8	4215303	8.90E-03	5.04E-03	1.36E-03	7.67E-04	6.13E-04	3.16E-04
1959	569767.1	4215313	8.61E-03	4.88E-03	1.32E-03	7.42E-04	5.94E-04	3.06E-04
1960	569767.4	4215323	8.42E-03	4.77E-03	1.29E-03	7.25E-04	5.80E-04	2.99E-04
1961	569767.7	4215332	8.25E-03	4.68E-03	1.26E-03	7.11E-04	5.69E-04	2.93E-04
1962	569768	4215342	8.06E-03	4.57E-03	1.23E-03	6.95E-04	5.56E-04	2.86E-04
1963	569768.4	4215352	7.92E-03	4.49E-03	1.21E-03	6.82E-04	5.46E-04	2.81E-04
1964	569768.7	4215361	7.81E-03	4.42E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
1965	569755.8	4215275	9.46E-03	5.36E-03	1.45E-03	8.15E-04	6.52E-04	3.36E-04
1966	569756.2	4215284	9.07E-03	5.14E-03	1.39E-03	7.82E-04	6.25E-04	3.22E-04
1967	569756.5	4215294	8.76E-03	4.96E-03	1.34E-03	7.54E-04	6.03E-04	3.11E-04
1968	569756.8	4215304	8.47E-03	4.80E-03	1.29E-03	7.30E-04	5.83E-04	3.00E-04
1969	569757.1	4215313	8.20E-03	4.64E-03	1.25E-03	7.06E-04	5.65E-04	2.91E-04
1970	569757.4	4215323	8.01E-03	4.54E-03	1.22E-03	6.90E-04	5.52E-04	2.84E-04
1971	569757.7	4215333	7.84E-03	4.44E-03	1.20E-03	6.76E-04	5.40E-04	2.78E-04
1972	569758	4215342	7.66E-03	4.34E-03	1.17E-03	6.60E-04	5.28E-04	2.72E-04

1973	569758.4	4215352	7.51E-03	4.26E-03	1.15E-03	6.47E-04	5.18E-04	2.66E-04
1974	569758.7	4215362	7.40E-03	4.19E-03	1.13E-03	6.38E-04	5.10E-04	2.63E-04
1975	569745.8	4215275	9.03E-03	5.11E-03	1.38E-03	7.78E-04	6.22E-04	3.20E-04
1976	569746.2	4215285	8.66E-03	4.90E-03	1.32E-03	7.46E-04	5.97E-04	3.07E-04
1977	569746.5	4215294	8.37E-03	4.74E-03	1.28E-03	7.21E-04	5.77E-04	2.97E-04
1978	569746.8	4215304	8.10E-03	4.59E-03	1.24E-03	6.98E-04	5.58E-04	2.87E-04
1979	569747.1	4215314	7.85E-03	4.45E-03	1.20E-03	6.76E-04	5.41E-04	2.78E-04
1980	569747.4	4215323	7.67E-03	4.35E-03	1.17E-03	6.61E-04	5.29E-04	2.72E-04
1981	569747.7	4215333	7.50E-03	4.25E-03	1.15E-03	6.46E-04	5.17E-04	2.66E-04
1982	569748	4215343	7.31E-03	4.14E-03	1.12E-03	6.30E-04	5.04E-04	2.59E-04
1983	569748.4	4215352	7.17E-03	4.06E-03	1.09E-03	6.18E-04	4.94E-04	2.54E-04
1984	569735.2	4215256	9.51E-03	5.39E-03	1.45E-03	8.19E-04	6.55E-04	3.37E-04
1985	569735.5	4215266	9.02E-03	5.11E-03	1.38E-03	7.78E-04	6.22E-04	3.20E-04
1986	569735.8	4215275	8.62E-03	4.88E-03	1.32E-03	7.42E-04	5.94E-04	3.06E-04
1987	569736.2	4215285	8.27E-03	4.68E-03	1.26E-03	7.12E-04	5.70E-04	2.93E-04
1988	569736.5	4215295	8.01E-03	4.54E-03	1.22E-03	6.90E-04	5.52E-04	2.84E-04
1989	569736.8	4215304	7.77E-03	4.40E-03	1.19E-03	6.70E-04	5.35E-04	2.76E-04
1990	569737.1	4215314	7.54E-03	4.27E-03	1.15E-03	6.50E-04	5.20E-04	2.67E-04
1991	569737.4	4215324	7.37E-03	4.17E-03	1.13E-03	6.35E-04	5.08E-04	2.61E-04
1992	569737.7	4215333	7.20E-03	4.08E-03	1.10E-03	6.20E-04	4.96E-04	2.55E-04
1993	569738.1	4215343	7.01E-03	3.97E-03	1.07E-03	6.04E-04	4.83E-04	2.49E-04
1994	569738.4	4215353	6.87E-03	3.89E-03	1.05E-03	5.92E-04	4.73E-04	2.44E-04
1995	569724.6	4215237	1.03E-02	5.82E-03	1.57E-03	8.86E-04	7.09E-04	3.65E-04
1996	569724.9	4215247	9.64E-03	5.46E-03	1.47E-03	8.30E-04	6.64E-04	3.42E-04
1997	569725.2	4215256	9.08E-03	5.15E-03	1.39E-03	7.83E-04	6.26E-04	3.22E-04
1998	569725.5	4215266	8.62E-03	4.88E-03	1.32E-03	7.43E-04	5.94E-04	3.06E-04
1999	569725.9	4215276	8.23E-03	4.66E-03	1.26E-03	7.09E-04	5.67E-04	2.92E-04
2000	569726.2	4215285	7.90E-03	4.48E-03	1.21E-03	6.81E-04	5.45E-04	2.80E-04
2001	569726.5	4215295	7.68E-03	4.35E-03	1.17E-03	6.61E-04	5.29E-04	2.72E-04
2002	569726.8	4215305	7.46E-03	4.23E-03	1.14E-03	6.43E-04	5.14E-04	2.65E-04
2003	569727.1	4215314	7.25E-03	4.11E-03	1.11E-03	6.24E-04	4.99E-04	2.57E-04
2004	569727.4	4215324	7.08E-03	4.01E-03	1.08E-03	6.10E-04	4.88E-04	2.51E-04
2005	569727.7	4215334	6.91E-03	3.91E-03	1.06E-03	5.95E-04	4.76E-04	2.45E-04
2006	569728.1	4215343	6.72E-03	3.81E-03	1.03E-03	5.79E-04	4.63E-04	2.38E-04
2007	569728.4	4215353	6.59E-03	3.73E-03	1.01E-03	5.68E-04	4.54E-04	2.34E-04
2008	569728.7	4215363	6.48E-03	3.67E-03	9.90E-04	5.59E-04	4.47E-04	2.30E-04
2009	569714	4215218	1.08E-02	6.10E-03	1.64E-03	9.28E-04	7.42E-04	3.82E-04
2010	569714.3	4215228	1.06E-02	6.02E-03	1.62E-03	9.16E-04	7.32E-04	3.77E-04
2011	569714.6	4215237	9.96E-03	5.64E-03	1.52E-03	8.59E-04	6.87E-04	3.53E-04
2012	569714.9	4215247	9.36E-03	5.30E-03	1.43E-03	8.06E-04	6.45E-04	3.32E-04
2013	569715.2	4215257	8.83E-03	5.00E-03	1.35E-03	7.61E-04	6.08E-04	3.13E-04
2014	569715.5	4215266	8.36E-03	4.74E-03	1.28E-03	7.21E-04	5.76E-04	2.97E-04
2015	569715.9	4215276	7.98E-03	4.52E-03	1.22E-03	6.87E-04	5.50E-04	2.83E-04
2016	569716.2	4215286	7.64E-03	4.33E-03	1.17E-03	6.59E-04	5.27E-04	2.71E-04
2017	569716.5	4215295	7.42E-03	4.20E-03	1.13E-03	6.39E-04	5.11E-04	2.63E-04
2018	569716.8	4215305	7.20E-03	4.08E-03	1.10E-03	6.21E-04	4.96E-04	2.55E-04
2019	569717.1	4215315	6.99E-03	3.96E-03	1.07E-03	6.03E-04	4.82E-04	2.48E-04
2020	569717.4	4215324	6.83E-03	3.87E-03	1.04E-03	5.88E-04	4.70E-04	2.42E-04
2021	569717.7	4215334	6.65E-03	3.77E-03	1.02E-03	5.73E-04	4.58E-04	2.36E-04
2022	569718.1	4215344	6.46E-03	3.66E-03	9.87E-04	5.57E-04	4.45E-04	2.29E-04
2023	569718.4	4215353	6.33E-03	3.59E-03	9.67E-04	5.45E-04	4.36E-04	2.25E-04
2024	569718.7	4215363	6.23E-03	3.53E-03	9.51E-04	5.36E-04	4.29E-04	2.21E-04

2025	569719	4215373	6.13E-03	3.47E-03	9.35E-04	5.28E-04	4.22E-04	2.17E-04
2026	569719.3	4215382	6.09E-03	3.45E-03	9.29E-04	5.24E-04	4.19E-04	2.16E-04
2027	569709.1	4215385	5.82E-03	3.30E-03	8.89E-04	5.02E-04	4.01E-04	2.07E-04
2028	569699.1	4215385	5.58E-03	3.16E-03	8.53E-04	4.81E-04	3.85E-04	1.98E-04
2029	569702.4	4215377	5.68E-03	3.22E-03	8.68E-04	4.90E-04	3.92E-04	2.02E-04
2030	569705.6	4215368	5.85E-03	3.32E-03	8.94E-04	5.04E-04	4.03E-04	2.08E-04
2031	569708.9	4215360	6.03E-03	3.42E-03	9.21E-04	5.20E-04	4.16E-04	2.14E-04
2032	569689.3	4215385	5.38E-03	3.05E-03	8.21E-04	4.63E-04	3.70E-04	1.91E-04
2033	569692.7	4215376	5.48E-03	3.10E-03	8.36E-04	4.72E-04	3.77E-04	1.94E-04
2034	569696.1	4215367	5.66E-03	3.20E-03	8.64E-04	4.87E-04	3.90E-04	2.01E-04
2035	569699.6	4215358	5.84E-03	3.31E-03	8.92E-04	5.03E-04	4.02E-04	2.07E-04
2036	569703	4215349	6.02E-03	3.41E-03	9.20E-04	5.19E-04	4.15E-04	2.14E-04
2037	569706.5	4215340	6.26E-03	3.55E-03	9.56E-04	5.39E-04	4.31E-04	2.22E-04
2038	569679.2	4215386	5.18E-03	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
2039	569682.6	4215377	5.30E-03	3.00E-03	8.09E-04	4.57E-04	3.65E-04	1.88E-04
2040	569686	4215368	5.47E-03	3.10E-03	8.35E-04	4.71E-04	3.77E-04	1.94E-04
2041	569689.4	4215359	5.64E-03	3.19E-03	8.61E-04	4.86E-04	3.88E-04	2.00E-04
2042	569692.8	4215350	5.80E-03	3.29E-03	8.86E-04	5.00E-04	4.00E-04	2.06E-04
2043	569696.2	4215341	6.02E-03	3.41E-03	9.19E-04	5.19E-04	4.15E-04	2.13E-04
2044	569699.6	4215332	6.27E-03	3.55E-03	9.57E-04	5.40E-04	4.32E-04	2.22E-04
2045	569703	4215324	6.51E-03	3.69E-03	9.95E-04	5.61E-04	4.49E-04	2.31E-04
2046	569706.4	4215315	6.75E-03	3.83E-03	1.03E-03	5.82E-04	4.65E-04	2.40E-04
2047	569669.2	4215386	5.00E-03	2.83E-03	7.64E-04	4.31E-04	3.45E-04	1.77E-04
2048	569672.6	4215377	5.13E-03	2.91E-03	7.84E-04	4.42E-04	3.54E-04	1.82E-04
2049	569675.9	4215368	5.30E-03	3.00E-03	8.09E-04	4.57E-04	3.65E-04	1.88E-04
2050	569679.3	4215360	5.47E-03	3.10E-03	8.35E-04	4.71E-04	3.77E-04	1.94E-04
2051	569682.7	4215351	5.63E-03	3.19E-03	8.60E-04	4.85E-04	3.88E-04	2.00E-04
2052	569686.1	4215342	5.82E-03	3.30E-03	8.89E-04	5.02E-04	4.01E-04	2.07E-04
2053	569689.4	4215333	6.05E-03	3.43E-03	9.24E-04	5.21E-04	4.17E-04	2.15E-04
2054	569692.8	4215325	6.28E-03	3.56E-03	9.59E-04	5.41E-04	4.33E-04	2.23E-04
2055	569696.2	4215316	6.51E-03	3.69E-03	9.94E-04	5.61E-04	4.48E-04	2.31E-04
2056	569699.5	4215307	6.78E-03	3.84E-03	1.04E-03	5.84E-04	4.67E-04	2.40E-04
2057	569702.9	4215298	7.06E-03	4.00E-03	1.08E-03	6.08E-04	4.86E-04	2.50E-04
2058	569706.3	4215290	7.34E-03	4.16E-03	1.12E-03	6.32E-04	5.06E-04	2.60E-04
2059	569659.2	4215386	4.82E-03	2.73E-03	7.36E-04	4.15E-04	3.32E-04	1.71E-04
2060	569662.5	4215378	4.97E-03	2.81E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
2061	569665.9	4215369	5.14E-03	2.91E-03	7.85E-04	4.43E-04	3.54E-04	1.82E-04
2062	569669.2	4215360	5.31E-03	3.01E-03	8.11E-04	4.58E-04	3.66E-04	1.88E-04
2063	569672.5	4215352	5.48E-03	3.10E-03	8.36E-04	4.72E-04	3.77E-04	1.94E-04
2064	569675.9	4215343	5.66E-03	3.20E-03	8.64E-04	4.87E-04	3.90E-04	2.01E-04
2065	569679.2	4215334	5.87E-03	3.32E-03	8.96E-04	5.06E-04	4.04E-04	2.08E-04
2066	569682.6	4215326	6.08E-03	3.45E-03	9.29E-04	5.24E-04	4.19E-04	2.16E-04
2067	569685.9	4215317	6.29E-03	3.57E-03	9.61E-04	5.42E-04	4.34E-04	2.23E-04
2068	569689.2	4215308	6.56E-03	3.71E-03	1.00E-03	5.65E-04	4.52E-04	2.33E-04
2069	569692.6	4215299	6.82E-03	3.87E-03	1.04E-03	5.88E-04	4.70E-04	2.42E-04
2070	569695.9	4215291	7.10E-03	4.02E-03	1.08E-03	6.12E-04	4.89E-04	2.52E-04
2071	569699.2	4215282	7.42E-03	4.20E-03	1.13E-03	6.39E-04	5.11E-04	2.63E-04
2072	569702.6	4215273	7.81E-03	4.42E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
2073	569705.9	4215265	8.24E-03	4.67E-03	1.26E-03	7.10E-04	5.68E-04	2.92E-04
2074	569649.2	4215387	4.63E-03	2.62E-03	7.07E-04	3.99E-04	3.19E-04	1.64E-04
2075	569652.5	4215378	4.79E-03	2.71E-03	7.31E-04	4.12E-04	3.30E-04	1.70E-04
2076	569655.8	4215369	4.97E-03	2.81E-03	7.58E-04	4.28E-04	3.42E-04	1.76E-04

2077	569659.1	4215361	5.15E-03	2.92E-03	7.87E-04	4.44E-04	3.55E-04	1.83E-04
2078	569662.4	4215352	5.32E-03	3.02E-03	8.13E-04	4.59E-04	3.67E-04	1.89E-04
2079	569665.7	4215344	5.50E-03	3.11E-03	8.39E-04	4.74E-04	3.79E-04	1.95E-04
2080	569669	4215335	5.70E-03	3.23E-03	8.71E-04	4.91E-04	3.93E-04	2.02E-04
2081	569672.3	4215326	5.90E-03	3.34E-03	9.01E-04	5.08E-04	4.07E-04	2.09E-04
2082	569675.7	4215318	6.10E-03	3.46E-03	9.31E-04	5.26E-04	4.20E-04	2.16E-04
2083	569679	4215309	6.36E-03	3.60E-03	9.71E-04	5.48E-04	4.38E-04	2.26E-04
2084	569682.3	4215301	6.63E-03	3.76E-03	1.01E-03	5.72E-04	4.57E-04	2.35E-04
2085	569685.6	4215292	6.92E-03	3.92E-03	1.06E-03	5.96E-04	4.77E-04	2.45E-04
2086	569688.9	4215283	7.21E-03	4.09E-03	1.10E-03	6.21E-04	4.97E-04	2.56E-04
2087	569692.2	4215275	7.56E-03	4.29E-03	1.16E-03	6.52E-04	5.21E-04	2.68E-04
2088	569695.5	4215266	7.98E-03	4.52E-03	1.22E-03	6.87E-04	5.50E-04	2.83E-04
2089	569698.8	4215257	8.45E-03	4.79E-03	1.29E-03	7.28E-04	5.83E-04	3.00E-04
2090	569702.2	4215249	8.96E-03	5.08E-03	1.37E-03	7.72E-04	6.18E-04	3.18E-04
2091	569705.5	4215240	9.54E-03	5.40E-03	1.46E-03	8.22E-04	6.57E-04	3.38E-04
2092	569639.3	4215387	4.46E-03	2.53E-03	6.81E-04	3.85E-04	3.08E-04	1.58E-04
2093	569642.7	4215378	4.63E-03	2.62E-03	7.07E-04	3.99E-04	3.19E-04	1.64E-04
2094	569646.2	4215369	4.82E-03	2.73E-03	7.36E-04	4.16E-04	3.32E-04	1.71E-04
2095	569649.6	4215360	5.02E-03	2.84E-03	7.67E-04	4.33E-04	3.46E-04	1.78E-04
2096	569653.1	4215351	5.21E-03	2.95E-03	7.95E-04	4.49E-04	3.59E-04	1.85E-04
2097	569656.5	4215342	5.40E-03	3.06E-03	8.25E-04	4.65E-04	3.72E-04	1.92E-04
2098	569660	4215333	5.61E-03	3.18E-03	8.57E-04	4.83E-04	3.87E-04	1.99E-04
2099	569663.4	4215324	5.81E-03	3.29E-03	8.87E-04	5.00E-04	4.00E-04	2.06E-04
2100	569666.9	4215315	6.01E-03	3.41E-03	9.18E-04	5.18E-04	4.14E-04	2.13E-04
2101	569670.3	4215306	6.30E-03	3.57E-03	9.63E-04	5.43E-04	4.34E-04	2.24E-04
2102	569673.7	4215297	6.61E-03	3.74E-03	1.01E-03	5.69E-04	4.55E-04	2.34E-04
2103	569677.2	4215288	6.92E-03	3.92E-03	1.06E-03	5.97E-04	4.77E-04	2.46E-04
2104	569680.6	4215279	7.25E-03	4.11E-03	1.11E-03	6.25E-04	5.00E-04	2.57E-04
2105	569684.1	4215270	7.63E-03	4.32E-03	1.17E-03	6.57E-04	5.26E-04	2.71E-04
2106	569687.5	4215261	8.07E-03	4.57E-03	1.23E-03	6.95E-04	5.56E-04	2.86E-04
2107	569691	4215252	8.55E-03	4.85E-03	1.31E-03	7.37E-04	5.89E-04	3.03E-04
2108	569694.4	4215243	9.09E-03	5.15E-03	1.39E-03	7.83E-04	6.27E-04	3.23E-04
2109	569697.9	4215234	9.70E-03	5.49E-03	1.48E-03	8.36E-04	6.68E-04	3.44E-04
2110	569701.3	4215225	1.03E-02	5.84E-03	1.57E-03	8.88E-04	7.10E-04	3.65E-04
2111	569704.7	4215216	1.04E-02	5.89E-03	1.59E-03	8.96E-04	7.17E-04	3.69E-04
2112	569629.3	4215387	4.31E-03	2.44E-03	6.57E-04	3.71E-04	2.97E-04	1.53E-04
2113	569632.7	4215378	4.47E-03	2.53E-03	6.82E-04	3.85E-04	3.08E-04	1.58E-04
2114	569636.1	4215369	4.66E-03	2.64E-03	7.12E-04	4.01E-04	3.21E-04	1.65E-04
2115	569639.5	4215360	4.86E-03	2.75E-03	7.42E-04	4.19E-04	3.35E-04	1.72E-04
2116	569642.9	4215352	5.05E-03	2.86E-03	7.71E-04	4.35E-04	3.48E-04	1.79E-04
2117	569646.3	4215343	5.25E-03	2.97E-03	8.02E-04	4.52E-04	3.62E-04	1.86E-04
2118	569649.8	4215334	5.46E-03	3.10E-03	8.34E-04	4.71E-04	3.77E-04	1.94E-04
2119	569653.2	4215325	5.67E-03	3.21E-03	8.66E-04	4.89E-04	3.91E-04	2.01E-04
2120	569656.6	4215316	5.86E-03	3.32E-03	8.95E-04	5.05E-04	4.04E-04	2.08E-04
2121	569660	4215307	6.14E-03	3.48E-03	9.37E-04	5.29E-04	4.23E-04	2.18E-04
2122	569663.4	4215298	6.44E-03	3.65E-03	9.83E-04	5.55E-04	4.44E-04	2.28E-04
2123	569666.8	4215289	6.77E-03	3.83E-03	1.03E-03	5.83E-04	4.66E-04	2.40E-04
2124	569670.2	4215280	7.09E-03	4.02E-03	1.08E-03	6.11E-04	4.89E-04	2.52E-04
2125	569673.7	4215272	7.44E-03	4.21E-03	1.14E-03	6.41E-04	5.13E-04	2.64E-04
2126	569677.1	4215263	7.83E-03	4.44E-03	1.20E-03	6.75E-04	5.40E-04	2.78E-04
2127	569680.5	4215254	8.27E-03	4.69E-03	1.26E-03	7.13E-04	5.70E-04	2.93E-04
2128	569683.9	4215245	8.73E-03	4.94E-03	1.33E-03	7.52E-04	6.01E-04	3.10E-04

2129	569687.3	4215236	9.26E-03	5.25E-03	1.41E-03	7.98E-04	6.38E-04	3.29E-04
2130	569690.7	4215227	9.88E-03	5.60E-03	1.51E-03	8.51E-04	6.81E-04	3.50E-04
2131	569694.1	4215218	1.00E-02	5.67E-03	1.53E-03	8.63E-04	6.90E-04	3.55E-04
2132	569697.6	4215209	1.01E-02	5.70E-03	1.54E-03	8.67E-04	6.94E-04	3.57E-04
2133	569625.9	4215396	4.14E-03	2.35E-03	6.32E-04	3.57E-04	2.85E-04	1.47E-04
2134	569619.3	4215387	4.16E-03	2.36E-03	6.36E-04	3.59E-04	2.87E-04	1.48E-04
2135	569622.6	4215379	4.32E-03	2.45E-03	6.60E-04	3.73E-04	2.98E-04	1.53E-04
2136	569626	4215370	4.51E-03	2.55E-03	6.88E-04	3.88E-04	3.11E-04	1.60E-04
2137	569629.4	4215361	4.71E-03	2.67E-03	7.18E-04	4.05E-04	3.24E-04	1.67E-04
2138	569632.8	4215352	4.90E-03	2.78E-03	7.49E-04	4.22E-04	3.38E-04	1.74E-04
2139	569636.2	4215343	5.10E-03	2.89E-03	7.79E-04	4.40E-04	3.52E-04	1.81E-04
2140	569639.6	4215335	5.33E-03	3.02E-03	8.14E-04	4.59E-04	3.67E-04	1.89E-04
2141	569643	4215326	5.54E-03	3.14E-03	8.47E-04	4.78E-04	3.82E-04	1.97E-04
2142	569646.3	4215317	5.75E-03	3.26E-03	8.78E-04	4.95E-04	3.96E-04	2.04E-04
2143	569649.7	4215308	6.02E-03	3.41E-03	9.19E-04	5.18E-04	4.15E-04	2.13E-04
2144	569653.1	4215299	6.31E-03	3.58E-03	9.64E-04	5.44E-04	4.35E-04	2.24E-04
2145	569656.5	4215291	6.63E-03	3.76E-03	1.01E-03	5.71E-04	4.57E-04	2.35E-04
2146	569659.9	4215282	6.95E-03	3.94E-03	1.06E-03	5.99E-04	4.79E-04	2.47E-04
2147	569663.3	4215273	7.27E-03	4.12E-03	1.11E-03	6.26E-04	5.01E-04	2.58E-04
2148	569666.7	4215264	7.63E-03	4.32E-03	1.16E-03	6.57E-04	5.26E-04	2.71E-04
2149	569670.1	4215255	8.03E-03	4.55E-03	1.23E-03	6.92E-04	5.53E-04	2.85E-04
2150	569673.4	4215246	8.41E-03	4.76E-03	1.28E-03	7.24E-04	5.79E-04	2.98E-04
2151	569676.8	4215238	8.84E-03	5.01E-03	1.35E-03	7.62E-04	6.09E-04	3.14E-04
2152	569680.2	4215229	9.35E-03	5.30E-03	1.43E-03	8.06E-04	6.44E-04	3.32E-04
2153	569683.6	4215220	9.52E-03	5.39E-03	1.45E-03	8.20E-04	6.56E-04	3.38E-04
2154	569687	4215211	9.55E-03	5.41E-03	1.46E-03	8.23E-04	6.58E-04	3.39E-04
2155	569690.4	4215202	9.62E-03	5.45E-03	1.47E-03	8.29E-04	6.63E-04	3.41E-04
2156	569615.9	4215396	4.00E-03	2.27E-03	6.11E-04	3.45E-04	2.76E-04	1.42E-04
2157	569616.2	4215406	3.88E-03	2.20E-03	5.92E-04	3.34E-04	2.67E-04	1.38E-04
2158	569616.5	4215416	3.77E-03	2.14E-03	5.76E-04	3.25E-04	2.60E-04	1.34E-04
2159	569609.2	4215388	4.03E-03	2.28E-03	6.15E-04	3.47E-04	2.78E-04	1.43E-04
2160	569612.6	4215379	4.19E-03	2.37E-03	6.39E-04	3.61E-04	2.89E-04	1.49E-04
2161	569616	4215370	4.37E-03	2.47E-03	6.67E-04	3.76E-04	3.01E-04	1.55E-04
2162	569619.3	4215362	4.56E-03	2.58E-03	6.96E-04	3.93E-04	3.14E-04	1.62E-04
2163	569622.7	4215353	4.75E-03	2.69E-03	7.26E-04	4.09E-04	3.27E-04	1.69E-04
2164	569626	4215344	4.95E-03	2.81E-03	7.57E-04	4.27E-04	3.41E-04	1.76E-04
2165	569629.4	4215335	5.19E-03	2.94E-03	7.92E-04	4.47E-04	3.58E-04	1.84E-04
2166	569632.8	4215327	5.43E-03	3.07E-03	8.28E-04	4.67E-04	3.74E-04	1.92E-04
2167	569636.1	4215318	5.65E-03	3.20E-03	8.63E-04	4.87E-04	3.89E-04	2.00E-04
2168	569639.5	4215309	5.91E-03	3.35E-03	9.02E-04	5.09E-04	4.07E-04	2.10E-04
2169	569642.8	4215300	6.20E-03	3.51E-03	9.47E-04	5.34E-04	4.27E-04	2.20E-04
2170	569646.2	4215292	6.51E-03	3.69E-03	9.95E-04	5.61E-04	4.49E-04	2.31E-04
2171	569649.6	4215283	6.83E-03	3.87E-03	1.04E-03	5.88E-04	4.71E-04	2.42E-04
2172	569652.9	4215274	7.12E-03	4.03E-03	1.09E-03	6.13E-04	4.91E-04	2.53E-04
2173	569656.3	4215265	7.44E-03	4.22E-03	1.14E-03	6.41E-04	5.13E-04	2.64E-04
2174	569659.7	4215257	7.81E-03	4.42E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
2175	569663	4215248	8.12E-03	4.60E-03	1.24E-03	6.99E-04	5.59E-04	2.88E-04
2176	569666.4	4215239	8.48E-03	4.80E-03	1.29E-03	7.30E-04	5.84E-04	3.01E-04
2177	569669.7	4215230	8.89E-03	5.04E-03	1.36E-03	7.66E-04	6.13E-04	3.15E-04
2178	569673.1	4215222	9.08E-03	5.14E-03	1.39E-03	7.83E-04	6.26E-04	3.22E-04
2179	569676.5	4215213	9.04E-03	5.12E-03	1.38E-03	7.79E-04	6.23E-04	3.21E-04
2180	569679.8	4215204	9.03E-03	5.12E-03	1.38E-03	7.78E-04	6.23E-04	3.20E-04

2181	569683.2	4215195	9.04E-03	5.12E-03	1.38E-03	7.79E-04	6.23E-04	3.21E-04
2182	569695.1	4215183	9.06E-03	5.13E-03	1.38E-03	7.80E-04	6.24E-04	3.21E-04
2183	569605.9	4215397	3.87E-03	2.19E-03	5.91E-04	3.33E-04	2.67E-04	1.37E-04
2184	569606.2	4215406	3.75E-03	2.12E-03	5.72E-04	3.23E-04	2.58E-04	1.33E-04
2185	569606.5	4215416	3.65E-03	2.07E-03	5.58E-04	3.15E-04	2.52E-04	1.30E-04
2186	569606.8	4215426	3.56E-03	2.02E-03	5.43E-04	3.07E-04	2.45E-04	1.26E-04
2187	569599.2	4215388	3.90E-03	2.21E-03	5.96E-04	3.36E-04	2.69E-04	1.38E-04
2188	569602.6	4215379	4.06E-03	2.30E-03	6.19E-04	3.50E-04	2.80E-04	1.44E-04
2189	569605.9	4215371	4.23E-03	2.40E-03	6.46E-04	3.64E-04	2.92E-04	1.50E-04
2190	569609.2	4215362	4.42E-03	2.50E-03	6.75E-04	3.81E-04	3.04E-04	1.57E-04
2191	569612.6	4215353	4.61E-03	2.61E-03	7.04E-04	3.97E-04	3.18E-04	1.63E-04
2192	569615.9	4215345	4.81E-03	2.72E-03	7.34E-04	4.14E-04	3.31E-04	1.70E-04
2193	569619.2	4215336	5.04E-03	2.86E-03	7.70E-04	4.34E-04	3.47E-04	1.79E-04
2194	569622.6	4215327	5.28E-03	2.99E-03	8.07E-04	4.55E-04	3.64E-04	1.87E-04
2195	569625.9	4215319	5.53E-03	3.13E-03	8.44E-04	4.76E-04	3.81E-04	1.96E-04
2196	569629.3	4215310	5.80E-03	3.28E-03	8.85E-04	4.99E-04	3.99E-04	2.06E-04
2197	569632.6	4215301	6.10E-03	3.45E-03	9.31E-04	5.25E-04	4.20E-04	2.16E-04
2198	569635.9	4215293	6.41E-03	3.63E-03	9.79E-04	5.52E-04	4.42E-04	2.27E-04
2199	569639.3	4215284	6.72E-03	3.81E-03	1.03E-03	5.79E-04	4.63E-04	2.38E-04
2200	569642.6	4215275	6.98E-03	3.96E-03	1.07E-03	6.02E-04	4.81E-04	2.48E-04
2201	569646	4215267	7.27E-03	4.12E-03	1.11E-03	6.27E-04	5.01E-04	2.58E-04
2202	569649.3	4215258	7.60E-03	4.30E-03	1.16E-03	6.55E-04	5.24E-04	2.69E-04
2203	569652.6	4215249	7.84E-03	4.44E-03	1.20E-03	6.75E-04	5.40E-04	2.78E-04
2204	569656	4215241	8.11E-03	4.59E-03	1.24E-03	6.98E-04	5.59E-04	2.88E-04
2205	569659.3	4215232	8.44E-03	4.78E-03	1.29E-03	7.27E-04	5.82E-04	2.99E-04
2206	569662.6	4215223	8.68E-03	4.92E-03	1.33E-03	7.48E-04	5.98E-04	3.08E-04
2207	569666	4215214	8.59E-03	4.87E-03	1.31E-03	7.40E-04	5.92E-04	3.05E-04
2208	569669.3	4215206	8.53E-03	4.83E-03	1.30E-03	7.35E-04	5.88E-04	3.02E-04
2209	569672.7	4215197	8.49E-03	4.81E-03	1.30E-03	7.31E-04	5.85E-04	3.01E-04
2210	569676	4215188	8.36E-03	4.73E-03	1.28E-03	7.20E-04	5.76E-04	2.96E-04
2211	569687.9	4215176	8.38E-03	4.74E-03	1.28E-03	7.22E-04	5.77E-04	2.97E-04
2212	569595.9	4215397	3.75E-03	2.12E-03	5.72E-04	3.23E-04	2.58E-04	1.33E-04
2213	569596.2	4215407	3.63E-03	2.06E-03	5.54E-04	3.13E-04	2.50E-04	1.29E-04
2214	569596.5	4215416	3.54E-03	2.01E-03	5.40E-04	3.05E-04	2.44E-04	1.26E-04
2215	569596.8	4215426	3.45E-03	1.96E-03	5.27E-04	2.97E-04	2.38E-04	1.22E-04
2216	569597.1	4215435	3.37E-03	1.91E-03	5.14E-04	2.90E-04	2.32E-04	1.19E-04
2217	569589.3	4215388	3.79E-03	2.15E-03	5.79E-04	3.26E-04	2.61E-04	1.34E-04
2218	569592.8	4215379	3.95E-03	2.24E-03	6.03E-04	3.40E-04	2.72E-04	1.40E-04
2219	569596.2	4215370	4.12E-03	2.34E-03	6.29E-04	3.55E-04	2.84E-04	1.46E-04
2220	569599.7	4215361	4.31E-03	2.44E-03	6.59E-04	3.72E-04	2.97E-04	1.53E-04
2221	569603.1	4215352	4.51E-03	2.55E-03	6.89E-04	3.89E-04	3.11E-04	1.60E-04
2222	569606.6	4215343	4.72E-03	2.67E-03	7.21E-04	4.07E-04	3.25E-04	1.67E-04
2223	569610	4215334	4.97E-03	2.81E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
2224	569613.5	4215325	5.22E-03	2.96E-03	7.98E-04	4.50E-04	3.60E-04	1.85E-04
2225	569616.9	4215316	5.49E-03	3.11E-03	8.38E-04	4.73E-04	3.78E-04	1.95E-04
2226	569620.4	4215307	5.77E-03	3.27E-03	8.81E-04	4.97E-04	3.98E-04	2.05E-04
2227	569623.8	4215298	6.08E-03	3.45E-03	9.29E-04	5.24E-04	4.19E-04	2.16E-04
2228	569627.3	4215289	6.42E-03	3.64E-03	9.80E-04	5.53E-04	4.42E-04	2.28E-04
2229	569630.7	4215281	6.71E-03	3.80E-03	1.02E-03	5.78E-04	4.62E-04	2.38E-04
2230	569634.2	4215272	7.00E-03	3.97E-03	1.07E-03	6.04E-04	4.83E-04	2.48E-04
2231	569637.6	4215263	7.29E-03	4.13E-03	1.11E-03	6.28E-04	5.02E-04	2.59E-04
2232	569641.1	4215254	7.55E-03	4.28E-03	1.15E-03	6.50E-04	5.20E-04	2.68E-04

2233	569644.5	4215245	7.71E-03	4.37E-03	1.18E-03	6.64E-04	5.31E-04	2.73E-04
2234	569648	4215236	7.92E-03	4.49E-03	1.21E-03	6.83E-04	5.46E-04	2.81E-04
2235	569651.4	4215227	8.20E-03	4.65E-03	1.25E-03	7.07E-04	5.65E-04	2.91E-04
2236	569654.9	4215218	8.20E-03	4.65E-03	1.25E-03	7.07E-04	5.65E-04	2.91E-04
2237	569658.3	4215209	8.14E-03	4.61E-03	1.24E-03	7.01E-04	5.61E-04	2.89E-04
2238	569661.8	4215200	8.03E-03	4.55E-03	1.23E-03	6.92E-04	5.54E-04	2.85E-04
2239	569665.2	4215191	7.92E-03	4.49E-03	1.21E-03	6.82E-04	5.46E-04	2.81E-04
2240	569668.7	4215182	7.81E-03	4.43E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
2241	569680.9	4215169	7.83E-03	4.44E-03	1.20E-03	6.75E-04	5.40E-04	2.78E-04
2242	569585.9	4215397	3.64E-03	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
2243	569586.2	4215407	3.52E-03	1.99E-03	5.38E-04	3.03E-04	2.43E-04	1.25E-04
2244	569586.5	4215416	3.43E-03	1.95E-03	5.24E-04	2.96E-04	2.37E-04	1.22E-04
2245	569586.8	4215426	3.35E-03	1.90E-03	5.12E-04	2.89E-04	2.31E-04	1.19E-04
2246	569587.1	4215436	3.27E-03	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
2247	569918.2	4215544	5.54E-03	3.14E-03	8.47E-04	4.78E-04	3.82E-04	1.97E-04
2248	569927.5	4215543	5.64E-03	3.20E-03	8.61E-04	4.86E-04	3.89E-04	2.00E-04
2249	569936.8	4215541	5.75E-03	3.26E-03	8.77E-04	4.95E-04	3.96E-04	2.04E-04
2250	569946.1	4215539	5.86E-03	3.32E-03	8.95E-04	5.05E-04	4.04E-04	2.08E-04
2251	569955.4	4215538	5.98E-03	3.39E-03	9.14E-04	5.16E-04	4.12E-04	2.12E-04
2252	569964.8	4215536	6.12E-03	3.47E-03	9.35E-04	5.28E-04	4.22E-04	2.17E-04
2253	569974.1	4215534	6.28E-03	3.56E-03	9.59E-04	5.41E-04	4.33E-04	2.23E-04
2254	569983.4	4215533	6.45E-03	3.66E-03	9.86E-04	5.56E-04	4.45E-04	2.29E-04
2255	569992.7	4215531	6.65E-03	3.77E-03	1.01E-03	5.73E-04	4.58E-04	2.36E-04
2256	570002	4215529	6.85E-03	3.88E-03	1.05E-03	5.90E-04	4.72E-04	2.43E-04
2257	570011.3	4215527	7.06E-03	4.00E-03	1.08E-03	6.08E-04	4.86E-04	2.50E-04
2258	570020.6	4215526	7.26E-03	4.12E-03	1.11E-03	6.26E-04	5.01E-04	2.58E-04
2259	569911.2	4215552	5.19E-03	2.94E-03	7.93E-04	4.47E-04	3.58E-04	1.84E-04
2260	569902.5	4215550	5.28E-03	2.99E-03	8.06E-04	4.55E-04	3.64E-04	1.87E-04
2261	569929.3	4215552	5.18E-03	2.94E-03	7.91E-04	4.46E-04	3.57E-04	1.84E-04
2262	569938.6	4215551	5.27E-03	2.98E-03	8.04E-04	4.54E-04	3.63E-04	1.87E-04
2263	569947.9	4215549	5.36E-03	3.04E-03	8.18E-04	4.62E-04	3.69E-04	1.90E-04
2264	569957.2	4215547	5.46E-03	3.09E-03	8.34E-04	4.70E-04	3.76E-04	1.94E-04
2265	569966.5	4215546	5.57E-03	3.16E-03	8.51E-04	4.80E-04	3.84E-04	1.98E-04
2266	569975.8	4215544	5.70E-03	3.23E-03	8.70E-04	4.91E-04	3.93E-04	2.02E-04
2267	569985.2	4215542	5.84E-03	3.31E-03	8.92E-04	5.03E-04	4.02E-04	2.07E-04
2268	569994.5	4215541	5.99E-03	3.40E-03	9.15E-04	5.17E-04	4.13E-04	2.13E-04
2269	570003.8	4215539	6.16E-03	3.49E-03	9.41E-04	5.31E-04	4.24E-04	2.18E-04
2270	570013.1	4215537	6.33E-03	3.58E-03	9.66E-04	5.45E-04	4.36E-04	2.24E-04
2271	570022.4	4215536	6.49E-03	3.68E-03	9.91E-04	5.59E-04	4.47E-04	2.30E-04
2272	569913	4215562	4.79E-03	2.71E-03	7.31E-04	4.13E-04	3.30E-04	1.70E-04
2273	569895.7	4215557	4.95E-03	2.81E-03	7.57E-04	4.27E-04	3.41E-04	1.76E-04
2274	569878.3	4215553	5.12E-03	2.90E-03	7.81E-04	4.41E-04	3.53E-04	1.81E-04
2275	569921.7	4215564	4.70E-03	2.66E-03	7.18E-04	4.05E-04	3.24E-04	1.67E-04
2276	569931	4215562	4.77E-03	2.70E-03	7.28E-04	4.11E-04	3.29E-04	1.69E-04
2277	569940.3	4215561	4.84E-03	2.74E-03	7.39E-04	4.17E-04	3.34E-04	1.72E-04
2278	569949.7	4215559	4.92E-03	2.79E-03	7.51E-04	4.24E-04	3.39E-04	1.74E-04
2279	569959	4215557	5.00E-03	2.83E-03	7.64E-04	4.31E-04	3.45E-04	1.77E-04
2280	569968.3	4215556	5.09E-03	2.89E-03	7.78E-04	4.39E-04	3.51E-04	1.81E-04
2281	569977.6	4215554	5.20E-03	2.94E-03	7.94E-04	4.48E-04	3.58E-04	1.84E-04
2282	569986.9	4215552	5.31E-03	3.01E-03	8.11E-04	4.58E-04	3.66E-04	1.88E-04
2283	569996.2	4215551	5.43E-03	3.08E-03	8.30E-04	4.68E-04	3.74E-04	1.93E-04
2284	570005.6	4215549	5.56E-03	3.15E-03	8.49E-04	4.79E-04	3.83E-04	1.97E-04

2285	570014.9	4215547	5.69E-03	3.22E-03	8.69E-04	4.90E-04	3.92E-04	2.02E-04
2286	570024.2	4215546	5.83E-03	3.30E-03	8.90E-04	5.02E-04	4.02E-04	2.07E-04
2287	570033.5	4215544	5.95E-03	3.37E-03	9.08E-04	5.12E-04	4.10E-04	2.11E-04
2288	569914.8	4215572	4.43E-03	2.51E-03	6.76E-04	3.81E-04	3.05E-04	1.57E-04
2289	569897.6	4215567	4.58E-03	2.60E-03	7.00E-04	3.95E-04	3.16E-04	1.63E-04
2290	569880.3	4215563	4.74E-03	2.68E-03	7.23E-04	4.08E-04	3.26E-04	1.68E-04
2291	569863	4215558	4.88E-03	2.77E-03	7.46E-04	4.21E-04	3.36E-04	1.73E-04
2292	569923.5	4215574	4.35E-03	2.46E-03	6.64E-04	3.75E-04	3.00E-04	1.54E-04
2293	569932.8	4215572	4.40E-03	2.50E-03	6.73E-04	3.80E-04	3.04E-04	1.56E-04
2294	569942.1	4215570	4.46E-03	2.53E-03	6.82E-04	3.85E-04	3.08E-04	1.58E-04
2295	569951.4	4215569	4.53E-03	2.57E-03	6.92E-04	3.90E-04	3.12E-04	1.61E-04
2296	569960.7	4215567	4.60E-03	2.61E-03	7.02E-04	3.96E-04	3.17E-04	1.63E-04
2297	569970.1	4215565	4.68E-03	2.65E-03	7.14E-04	4.03E-04	3.22E-04	1.66E-04
2298	569979.4	4215564	4.76E-03	2.70E-03	7.27E-04	4.10E-04	3.28E-04	1.69E-04
2299	569988.7	4215562	4.85E-03	2.75E-03	7.40E-04	4.18E-04	3.34E-04	1.72E-04
2300	569998	4215560	4.94E-03	2.80E-03	7.54E-04	4.26E-04	3.40E-04	1.75E-04
2301	570007.3	4215559	5.04E-03	2.86E-03	7.70E-04	4.35E-04	3.48E-04	1.79E-04
2302	570016.6	4215557	5.15E-03	2.92E-03	7.87E-04	4.44E-04	3.55E-04	1.83E-04
2303	570026	4215555	5.26E-03	2.98E-03	8.04E-04	4.54E-04	3.63E-04	1.87E-04
2304	569916.7	4215581	4.10E-03	2.32E-03	6.26E-04	3.53E-04	2.83E-04	1.45E-04
2305	569899.4	4215577	4.25E-03	2.41E-03	6.49E-04	3.66E-04	2.93E-04	1.51E-04
2306	569882.2	4215573	4.39E-03	2.49E-03	6.71E-04	3.79E-04	3.03E-04	1.56E-04
2307	569865	4215568	4.53E-03	2.57E-03	6.92E-04	3.91E-04	3.12E-04	1.61E-04
2308	569847.8	4215564	4.67E-03	2.64E-03	7.13E-04	4.02E-04	3.22E-04	1.66E-04
2309	569830.6	4215559	4.60E-03	2.61E-03	7.02E-04	3.96E-04	3.17E-04	1.63E-04
2310	569934.6	4215582	4.08E-03	2.31E-03	6.22E-04	3.51E-04	2.81E-04	1.45E-04
2311	569943.9	4215580	4.13E-03	2.34E-03	6.30E-04	3.56E-04	2.84E-04	1.46E-04
2312	569953.2	4215579	4.18E-03	2.37E-03	6.39E-04	3.60E-04	2.88E-04	1.48E-04
2313	569962.5	4215577	4.24E-03	2.40E-03	6.48E-04	3.66E-04	2.92E-04	1.50E-04
2314	569971.8	4215575	4.30E-03	2.44E-03	6.57E-04	3.71E-04	2.96E-04	1.53E-04
2315	569981.1	4215574	4.37E-03	2.47E-03	6.67E-04	3.76E-04	3.01E-04	1.55E-04
2316	569990.5	4215572	4.44E-03	2.52E-03	6.78E-04	3.83E-04	3.06E-04	1.57E-04
2317	569999.8	4215570	4.52E-03	2.56E-03	6.90E-04	3.89E-04	3.11E-04	1.60E-04
2318	570009.1	4215569	4.60E-03	2.61E-03	7.03E-04	3.97E-04	3.17E-04	1.63E-04
2319	570065	4215558	5.19E-03	2.94E-03	7.93E-04	4.47E-04	3.58E-04	1.84E-04
2320	570074.3	4215557	5.33E-03	3.02E-03	8.14E-04	4.59E-04	3.67E-04	1.89E-04
2321	570083.6	4215555	5.49E-03	3.11E-03	8.38E-04	4.73E-04	3.78E-04	1.95E-04
2322	569917.9	4215591	3.81E-03	2.16E-03	5.81E-04	3.28E-04	2.62E-04	1.35E-04
2323	569908.7	4215589	3.88E-03	2.20E-03	5.92E-04	3.34E-04	2.67E-04	1.38E-04
2324	569899.6	4215586	3.95E-03	2.24E-03	6.04E-04	3.41E-04	2.72E-04	1.40E-04
2325	569890.5	4215584	4.03E-03	2.28E-03	6.16E-04	3.47E-04	2.78E-04	1.43E-04
2326	569881.3	4215582	4.10E-03	2.33E-03	6.27E-04	3.54E-04	2.83E-04	1.46E-04
2327	569872.2	4215579	4.18E-03	2.37E-03	6.38E-04	3.60E-04	2.88E-04	1.48E-04
2328	569863	4215577	4.25E-03	2.41E-03	6.48E-04	3.66E-04	2.93E-04	1.51E-04
2329	569853.9	4215575	4.32E-03	2.44E-03	6.59E-04	3.72E-04	2.97E-04	1.53E-04
2330	569844.8	4215572	4.38E-03	2.48E-03	6.69E-04	3.78E-04	3.02E-04	1.55E-04
2331	569835.6	4215570	4.29E-03	2.43E-03	6.54E-04	3.69E-04	2.95E-04	1.52E-04
2332	569826.5	4215568	4.33E-03	2.45E-03	6.61E-04	3.73E-04	2.98E-04	1.53E-04
2333	569817.3	4215565	4.37E-03	2.47E-03	6.67E-04	3.76E-04	3.01E-04	1.55E-04
2334	569808.2	4215563	4.41E-03	2.50E-03	6.73E-04	3.80E-04	3.04E-04	1.56E-04
2335	569927	4215593	3.74E-03	2.12E-03	5.71E-04	3.22E-04	2.57E-04	1.33E-04
2336	569936.3	4215592	3.78E-03	2.14E-03	5.77E-04	3.26E-04	2.60E-04	1.34E-04

2337	569945.7	4215590	3.82E-03	2.17E-03	5.84E-04	3.29E-04	2.63E-04	1.36E-04
2338	569955	4215588	3.87E-03	2.19E-03	5.91E-04	3.33E-04	2.67E-04	1.37E-04
2339	569964.3	4215587	3.92E-03	2.22E-03	5.99E-04	3.38E-04	2.70E-04	1.39E-04
2340	569973.6	4215585	3.97E-03	2.25E-03	6.06E-04	3.42E-04	2.74E-04	1.41E-04
2341	569982.9	4215583	4.03E-03	2.28E-03	6.15E-04	3.47E-04	2.77E-04	1.43E-04
2342	569992.2	4215582	4.09E-03	2.31E-03	6.24E-04	3.52E-04	2.82E-04	1.45E-04
2343	570048.1	4215572	4.55E-03	2.58E-03	6.95E-04	3.92E-04	3.14E-04	1.62E-04
2344	570057.4	4215570	4.65E-03	2.63E-03	7.10E-04	4.01E-04	3.20E-04	1.65E-04
2345	570066.8	4215568	4.77E-03	2.70E-03	7.28E-04	4.11E-04	3.29E-04	1.69E-04
2346	570076.1	4215567	4.90E-03	2.77E-03	7.48E-04	4.22E-04	3.37E-04	1.74E-04
2347	570085.4	4215565	5.03E-03	2.85E-03	7.69E-04	4.34E-04	3.47E-04	1.79E-04
2348	569919.7	4215601	3.55E-03	2.01E-03	5.41E-04	3.06E-04	2.44E-04	1.26E-04
2349	569910.6	4215599	3.61E-03	2.05E-03	5.52E-04	3.11E-04	2.49E-04	1.28E-04
2350	569901.6	4215596	3.68E-03	2.08E-03	5.62E-04	3.17E-04	2.54E-04	1.31E-04
2351	569892.5	4215594	3.75E-03	2.12E-03	5.73E-04	3.23E-04	2.58E-04	1.33E-04
2352	569883.4	4215592	3.82E-03	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.36E-04
2353	569874.4	4215589	3.89E-03	2.20E-03	5.94E-04	3.35E-04	2.68E-04	1.38E-04
2354	569865.3	4215587	3.95E-03	2.24E-03	6.04E-04	3.41E-04	2.72E-04	1.40E-04
2355	569856.2	4215585	4.02E-03	2.28E-03	6.14E-04	3.46E-04	2.77E-04	1.43E-04
2356	569847.1	4215582	4.08E-03	2.31E-03	6.24E-04	3.52E-04	2.81E-04	1.45E-04
2357	569838.1	4215580	4.15E-03	2.35E-03	6.33E-04	3.57E-04	2.86E-04	1.47E-04
2358	569829	4215578	4.05E-03	2.29E-03	6.18E-04	3.49E-04	2.79E-04	1.44E-04
2359	569819.9	4215575	4.08E-03	2.31E-03	6.23E-04	3.52E-04	2.81E-04	1.45E-04
2360	569810.8	4215573	4.12E-03	2.33E-03	6.29E-04	3.55E-04	2.84E-04	1.46E-04
2361	569801.8	4215571	4.16E-03	2.36E-03	6.35E-04	3.58E-04	2.87E-04	1.48E-04
2362	569792.7	4215568	4.19E-03	2.38E-03	6.40E-04	3.61E-04	2.89E-04	1.49E-04
2363	569928.8	4215603	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
2364	569938.1	4215602	3.52E-03	1.99E-03	5.37E-04	3.03E-04	2.42E-04	1.25E-04
2365	569947.4	4215600	3.55E-03	2.01E-03	5.43E-04	3.06E-04	2.45E-04	1.26E-04
2366	569956.7	4215598	3.60E-03	2.04E-03	5.49E-04	3.10E-04	2.48E-04	1.28E-04
2367	569966.1	4215597	3.64E-03	2.06E-03	5.56E-04	3.14E-04	2.51E-04	1.29E-04
2368	569975.4	4215595	3.68E-03	2.09E-03	5.62E-04	3.17E-04	2.54E-04	1.31E-04
2369	570031.3	4215585	4.04E-03	2.29E-03	6.17E-04	3.48E-04	2.78E-04	1.43E-04
2370	570040.6	4215583	4.12E-03	2.33E-03	6.29E-04	3.55E-04	2.84E-04	1.46E-04
2371	570049.9	4215582	4.20E-03	2.38E-03	6.41E-04	3.62E-04	2.89E-04	1.49E-04
2372	570059.2	4215580	4.29E-03	2.43E-03	6.56E-04	3.70E-04	2.96E-04	1.52E-04
2373	570068.5	4215578	4.40E-03	2.49E-03	6.72E-04	3.79E-04	3.03E-04	1.56E-04
2374	570077.8	4215576	4.52E-03	2.56E-03	6.90E-04	3.89E-04	3.11E-04	1.60E-04
2375	570087.2	4215575	4.64E-03	2.63E-03	7.09E-04	4.00E-04	3.20E-04	1.65E-04
2376	569921.6	4215611	3.31E-03	1.88E-03	5.05E-04	2.85E-04	2.28E-04	1.17E-04
2377	569912.5	4215609	3.37E-03	1.91E-03	5.15E-04	2.90E-04	2.32E-04	1.20E-04
2378	569903.5	4215606	3.43E-03	1.95E-03	5.24E-04	2.96E-04	2.37E-04	1.22E-04
2379	569894.5	4215604	3.50E-03	1.98E-03	5.34E-04	3.01E-04	2.41E-04	1.24E-04
2380	569885.5	4215602	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.45E-04	1.26E-04
2381	569876.5	4215599	3.63E-03	2.05E-03	5.54E-04	3.12E-04	2.50E-04	1.29E-04
2382	569867.5	4215597	3.69E-03	2.09E-03	5.63E-04	3.18E-04	2.54E-04	1.31E-04
2383	569858.5	4215595	3.75E-03	2.13E-03	5.73E-04	3.23E-04	2.58E-04	1.33E-04
2384	569849.4	4215592	3.81E-03	2.16E-03	5.82E-04	3.28E-04	2.63E-04	1.35E-04
2385	569840.4	4215590	3.87E-03	2.19E-03	5.91E-04	3.34E-04	2.67E-04	1.37E-04
2386	569831.4	4215588	3.93E-03	2.23E-03	6.00E-04	3.39E-04	2.71E-04	1.39E-04
2387	569822.4	4215585	3.82E-03	2.17E-03	5.84E-04	3.30E-04	2.64E-04	1.36E-04
2388	569813.4	4215583	3.86E-03	2.18E-03	5.89E-04	3.32E-04	2.66E-04	1.37E-04

2389	569804.4	4215581	3.89E-03	2.21E-03	5.95E-04	3.36E-04	2.68E-04	1.38E-04
2390	569795.4	4215578	3.93E-03	2.23E-03	6.01E-04	3.39E-04	2.71E-04	1.39E-04
2391	569786.3	4215576	3.97E-03	2.25E-03	6.06E-04	3.42E-04	2.73E-04	1.41E-04
2392	569930.6	4215613	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
2393	569939.9	4215611	3.28E-03	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
2394	569949.2	4215610	3.32E-03	1.88E-03	5.06E-04	2.86E-04	2.29E-04	1.18E-04
2395	570005.1	4215600	3.57E-03	2.02E-03	5.44E-04	3.07E-04	2.46E-04	1.26E-04
2396	570014.4	4215598	3.62E-03	2.05E-03	5.52E-04	3.12E-04	2.49E-04	1.28E-04
2397	570023.7	4215596	3.68E-03	2.08E-03	5.61E-04	3.17E-04	2.53E-04	1.30E-04
2398	570033	4215595	3.75E-03	2.12E-03	5.72E-04	3.23E-04	2.58E-04	1.33E-04
2399	570042.3	4215593	3.82E-03	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
2400	570051.7	4215591	3.90E-03	2.21E-03	5.95E-04	3.36E-04	2.69E-04	1.38E-04
2401	570061	4215590	3.98E-03	2.26E-03	6.08E-04	3.43E-04	2.75E-04	1.41E-04
2402	570070.3	4215588	4.08E-03	2.31E-03	6.23E-04	3.52E-04	2.81E-04	1.45E-04
2403	570079.6	4215586	4.18E-03	2.37E-03	6.39E-04	3.60E-04	2.88E-04	1.48E-04
2404	570088.9	4215585	4.30E-03	2.43E-03	6.56E-04	3.70E-04	2.96E-04	1.52E-04
2405	569923.4	4215621	3.10E-03	1.76E-03	4.73E-04	2.67E-04	2.14E-04	1.10E-04
2406	569914.4	4215618	3.16E-03	1.79E-03	4.82E-04	2.72E-04	2.17E-04	1.12E-04
2407	569905.5	4215616	3.21E-03	1.82E-03	4.90E-04	2.77E-04	2.21E-04	1.14E-04
2408	569896.5	4215614	3.27E-03	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
2409	569887.5	4215611	3.33E-03	1.88E-03	5.08E-04	2.87E-04	2.29E-04	1.18E-04
2410	569878.6	4215609	3.39E-03	1.92E-03	5.17E-04	2.92E-04	2.33E-04	1.20E-04
2411	569869.6	4215607	3.45E-03	1.95E-03	5.26E-04	2.97E-04	2.38E-04	1.22E-04
2412	569860.6	4215605	3.51E-03	1.99E-03	5.35E-04	3.02E-04	2.42E-04	1.24E-04
2413	569851.7	4215602	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.46E-04	1.26E-04
2414	569842.7	4215600	3.62E-03	2.05E-03	5.53E-04	3.12E-04	2.50E-04	1.28E-04
2415	569833.8	4215598	3.68E-03	2.08E-03	5.62E-04	3.17E-04	2.53E-04	1.30E-04
2416	569824.8	4215595	3.73E-03	2.11E-03	5.70E-04	3.22E-04	2.57E-04	1.32E-04
2417	569815.8	4215593	3.62E-03	2.05E-03	5.53E-04	3.12E-04	2.50E-04	1.28E-04
2418	569806.9	4215591	3.66E-03	2.07E-03	5.58E-04	3.15E-04	2.52E-04	1.30E-04
2419	569797.9	4215588	3.69E-03	2.09E-03	5.64E-04	3.18E-04	2.54E-04	1.31E-04
2420	569789	4215586	3.73E-03	2.11E-03	5.69E-04	3.21E-04	2.57E-04	1.32E-04
2421	569932.3	4215623	3.05E-03	1.73E-03	4.65E-04	2.63E-04	2.10E-04	1.08E-04
2422	569988.2	4215613	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
2423	569997.5	4215611	3.29E-03	1.86E-03	5.02E-04	2.83E-04	2.26E-04	1.17E-04
2424	570006.9	4215610	3.33E-03	1.88E-03	5.08E-04	2.87E-04	2.29E-04	1.18E-04
2425	570016.2	4215608	3.37E-03	1.91E-03	5.15E-04	2.90E-04	2.32E-04	1.20E-04
2426	570025.5	4215606	3.42E-03	1.94E-03	5.23E-04	2.95E-04	2.36E-04	1.21E-04
2427	570034.8	4215605	3.49E-03	1.98E-03	5.33E-04	3.01E-04	2.40E-04	1.24E-04
2428	570044.1	4215603	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.45E-04	1.26E-04
2429	570053.4	4215601	3.64E-03	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
2430	570062.7	4215600	3.72E-03	2.11E-03	5.68E-04	3.20E-04	2.56E-04	1.32E-04
2431	570072.1	4215598	3.81E-03	2.16E-03	5.81E-04	3.28E-04	2.62E-04	1.35E-04
2432	570081.4	4215596	3.90E-03	2.21E-03	5.96E-04	3.36E-04	2.69E-04	1.38E-04
2433	570090.7	4215595	4.01E-03	2.27E-03	6.12E-04	3.45E-04	2.76E-04	1.42E-04
2434	569925.2	4215631	2.91E-03	1.65E-03	4.45E-04	2.51E-04	2.01E-04	1.03E-04
2435	569916.3	4215628	2.96E-03	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
2436	569907.4	4215626	3.01E-03	1.71E-03	4.60E-04	2.60E-04	2.08E-04	1.07E-04
2437	569898.5	4215624	3.07E-03	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04
2438	569889.5	4215621	3.12E-03	1.77E-03	4.76E-04	2.69E-04	2.15E-04	1.11E-04
2439	569880.6	4215619	3.17E-03	1.80E-03	4.84E-04	2.73E-04	2.18E-04	1.12E-04
2440	569871.7	4215617	3.22E-03	1.83E-03	4.92E-04	2.78E-04	2.22E-04	1.14E-04

2441	569862.8	4215615	3.28E-03	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
2442	569853.9	4215612	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.18E-04
2443	569845	4215610	3.39E-03	1.92E-03	5.18E-04	2.92E-04	2.34E-04	1.20E-04
2444	569836.1	4215608	3.44E-03	1.95E-03	5.26E-04	2.97E-04	2.37E-04	1.22E-04
2445	569827.1	4215605	3.50E-03	1.98E-03	5.34E-04	3.01E-04	2.41E-04	1.24E-04
2446	569818.2	4215603	3.41E-03	1.93E-03	5.21E-04	2.94E-04	2.35E-04	1.21E-04
2447	569809.3	4215601	3.44E-03	1.95E-03	5.26E-04	2.97E-04	2.37E-04	1.22E-04
2448	569800.4	4215598	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
2449	569791.5	4215596	3.51E-03	1.99E-03	5.36E-04	3.02E-04	2.42E-04	1.24E-04
2450	569971.4	4215626	2.97E-03	1.68E-03	4.54E-04	2.56E-04	2.05E-04	1.05E-04
2451	569980.7	4215624	3.00E-03	1.70E-03	4.59E-04	2.59E-04	2.07E-04	1.07E-04
2452	569990	4215623	3.04E-03	1.72E-03	4.64E-04	2.62E-04	2.10E-04	1.08E-04
2453	569999.3	4215621	3.08E-03	1.74E-03	4.70E-04	2.65E-04	2.12E-04	1.09E-04
2454	570008.6	4215619	3.11E-03	1.76E-03	4.76E-04	2.68E-04	2.15E-04	1.10E-04
2455	570017.9	4215618	3.15E-03	1.79E-03	4.81E-04	2.72E-04	2.17E-04	1.12E-04
2456	570027.3	4215616	3.20E-03	1.81E-03	4.89E-04	2.76E-04	2.21E-04	1.14E-04
2457	570036.6	4215614	3.26E-03	1.85E-03	4.98E-04	2.81E-04	2.25E-04	1.16E-04
2458	570045.9	4215613	3.33E-03	1.89E-03	5.09E-04	2.87E-04	2.30E-04	1.18E-04
2459	570055.2	4215611	3.41E-03	1.93E-03	5.20E-04	2.94E-04	2.35E-04	1.21E-04
2460	570064.5	4215609	3.48E-03	1.97E-03	5.32E-04	3.00E-04	2.40E-04	1.24E-04
2461	570073.8	4215608	3.57E-03	2.02E-03	5.44E-04	3.07E-04	2.46E-04	1.26E-04
2462	570083.2	4215606	3.65E-03	2.07E-03	5.58E-04	3.15E-04	2.52E-04	1.30E-04
2463	570092.5	4215604	3.75E-03	2.13E-03	5.73E-04	3.24E-04	2.59E-04	1.33E-04
2464	569909.3	4215636	2.84E-03	1.61E-03	4.33E-04	2.44E-04	1.95E-04	1.01E-04
2465	569900.4	4215634	2.88E-03	1.63E-03	4.40E-04	2.48E-04	1.99E-04	1.02E-04
2466	569891.5	4215631	2.93E-03	1.66E-03	4.47E-04	2.53E-04	2.02E-04	1.04E-04
2467	569882.6	4215629	2.98E-03	1.69E-03	4.55E-04	2.57E-04	2.05E-04	1.06E-04
2468	569873.8	4215627	3.03E-03	1.72E-03	4.62E-04	2.61E-04	2.09E-04	1.07E-04
2469	569864.9	4215624	3.08E-03	1.74E-03	4.70E-04	2.65E-04	2.12E-04	1.09E-04
2470	569856	4215622	3.13E-03	1.77E-03	4.78E-04	2.70E-04	2.16E-04	1.11E-04
2471	569847.2	4215620	3.18E-03	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04
2472	569838.3	4215618	3.23E-03	1.83E-03	4.93E-04	2.78E-04	2.23E-04	1.15E-04
2473	569829.4	4215615	3.28E-03	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
2474	569820.5	4215613	3.33E-03	1.89E-03	5.09E-04	2.87E-04	2.30E-04	1.18E-04
2475	569811.7	4215611	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
2476	569802.8	4215608	3.28E-03	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
2477	569945.2	4215641	2.72E-03	1.54E-03	4.16E-04	2.34E-04	1.88E-04	9.65E-05
2478	569954.5	4215639	2.74E-03	1.55E-03	4.19E-04	2.36E-04	1.89E-04	9.73E-05
2479	569963.8	4215638	2.77E-03	1.57E-03	4.22E-04	2.38E-04	1.91E-04	9.81E-05
2480	569973.1	4215636	2.79E-03	1.58E-03	4.26E-04	2.41E-04	1.92E-04	9.91E-05
2481	569982.5	4215634	2.82E-03	1.60E-03	4.31E-04	2.43E-04	1.95E-04	1.00E-04
2482	569991.8	4215633	2.86E-03	1.62E-03	4.36E-04	2.46E-04	1.97E-04	1.01E-04
2483	570001.1	4215631	2.89E-03	1.64E-03	4.41E-04	2.49E-04	1.99E-04	1.03E-04
2484	570010.4	4215629	2.93E-03	1.66E-03	4.47E-04	2.52E-04	2.02E-04	1.04E-04
2485	570019.7	4215628	2.97E-03	1.68E-03	4.53E-04	2.56E-04	2.05E-04	1.05E-04
2486	570029	4215626	3.02E-03	1.71E-03	4.61E-04	2.60E-04	2.08E-04	1.07E-04
2487	570038.3	4215624	3.07E-03	1.74E-03	4.69E-04	2.65E-04	2.12E-04	1.09E-04
2488	570047.7	4215623	3.13E-03	1.78E-03	4.79E-04	2.70E-04	2.16E-04	1.11E-04
2489	570057	4215621	3.20E-03	1.81E-03	4.89E-04	2.76E-04	2.21E-04	1.14E-04
2490	570066.3	4215619	3.27E-03	1.85E-03	5.00E-04	2.82E-04	2.25E-04	1.16E-04
2491	570075.6	4215618	3.35E-03	1.90E-03	5.11E-04	2.89E-04	2.31E-04	1.19E-04
2492	570084.9	4215616	3.43E-03	1.94E-03	5.24E-04	2.96E-04	2.37E-04	1.22E-04

2493	570094.2	4215614	3.53E-03	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
2494	569902.3	4215643	2.72E-03	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.63E-05
2495	569893.5	4215641	2.76E-03	1.56E-03	4.21E-04	2.38E-04	1.90E-04	9.79E-05
2496	569884.6	4215639	2.80E-03	1.59E-03	4.28E-04	2.42E-04	1.93E-04	9.94E-05
2497	569875.8	4215637	2.85E-03	1.61E-03	4.35E-04	2.45E-04	1.96E-04	1.01E-04
2498	569867	4215634	2.90E-03	1.64E-03	4.42E-04	2.49E-04	2.00E-04	1.03E-04
2499	569858.1	4215632	2.94E-03	1.67E-03	4.49E-04	2.54E-04	2.03E-04	1.04E-04
2500	569849.3	4215630	2.99E-03	1.69E-03	4.57E-04	2.58E-04	2.06E-04	1.06E-04
2501	569840.5	4215628	3.04E-03	1.72E-03	4.64E-04	2.62E-04	2.09E-04	1.08E-04
2502	569831.6	4215625	3.08E-03	1.75E-03	4.71E-04	2.66E-04	2.13E-04	1.09E-04
2503	569822.8	4215623	3.13E-03	1.77E-03	4.78E-04	2.70E-04	2.16E-04	1.11E-04
2504	569814	4215621	3.18E-03	1.80E-03	4.85E-04	2.74E-04	2.19E-04	1.13E-04
2505	569937.6	4215653	2.55E-03	1.45E-03	3.90E-04	2.20E-04	1.76E-04	9.05E-05
2506	569947	4215651	2.57E-03	1.46E-03	3.92E-04	2.21E-04	1.77E-04	9.11E-05
2507	569956.3	4215649	2.59E-03	1.47E-03	3.95E-04	2.23E-04	1.78E-04	9.18E-05
2508	569965.6	4215647	2.61E-03	1.48E-03	3.98E-04	2.25E-04	1.80E-04	9.25E-05
2509	569974.9	4215646	2.63E-03	1.49E-03	4.02E-04	2.27E-04	1.81E-04	9.34E-05
2510	569984.2	4215644	2.66E-03	1.51E-03	4.06E-04	2.29E-04	1.83E-04	9.43E-05
2511	569993.5	4215642	2.69E-03	1.52E-03	4.11E-04	2.32E-04	1.85E-04	9.54E-05
2512	570002.9	4215641	2.73E-03	1.54E-03	4.16E-04	2.35E-04	1.88E-04	9.67E-05
2513	570012.2	4215639	2.76E-03	1.57E-03	4.22E-04	2.38E-04	1.90E-04	9.80E-05
2514	570021.5	4215637	2.80E-03	1.59E-03	4.28E-04	2.42E-04	1.93E-04	9.95E-05
2515	570030.8	4215636	2.85E-03	1.61E-03	4.35E-04	2.46E-04	1.96E-04	1.01E-04
2516	570040.1	4215634	2.90E-03	1.64E-03	4.43E-04	2.50E-04	2.00E-04	1.03E-04
2517	570049.4	4215632	2.96E-03	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
2518	570058.7	4215631	3.02E-03	1.71E-03	4.61E-04	2.60E-04	2.08E-04	1.07E-04
2519	570068.1	4215629	3.08E-03	1.75E-03	4.71E-04	2.66E-04	2.12E-04	1.09E-04
2520	570077.4	4215627	3.15E-03	1.79E-03	4.82E-04	2.72E-04	2.17E-04	1.12E-04
2521	570086.7	4215626	3.23E-03	1.83E-03	4.94E-04	2.79E-04	2.23E-04	1.15E-04
2522	570096	4215624	3.32E-03	1.88E-03	5.07E-04	2.86E-04	2.29E-04	1.18E-04
2523	569930.6	4215660	2.45E-03	1.39E-03	3.74E-04	2.11E-04	1.69E-04	8.69E-05
2524	569921.8	4215658	2.49E-03	1.41E-03	3.80E-04	2.14E-04	1.71E-04	8.82E-05
2525	569895.4	4215651	2.60E-03	1.47E-03	3.97E-04	2.24E-04	1.79E-04	9.23E-05
2526	569886.6	4215649	2.64E-03	1.50E-03	4.04E-04	2.28E-04	1.82E-04	9.38E-05
2527	569877.8	4215647	2.68E-03	1.52E-03	4.10E-04	2.31E-04	1.85E-04	9.52E-05
2528	569869	4215644	2.73E-03	1.55E-03	4.16E-04	2.35E-04	1.88E-04	9.67E-05
2529	569860.2	4215642	2.77E-03	1.57E-03	4.23E-04	2.39E-04	1.91E-04	9.83E-05
2530	569851.4	4215640	2.81E-03	1.59E-03	4.30E-04	2.43E-04	1.94E-04	9.98E-05
2531	569842.6	4215637	2.86E-03	1.62E-03	4.37E-04	2.46E-04	1.97E-04	1.01E-04
2532	569833.8	4215635	2.90E-03	1.64E-03	4.43E-04	2.50E-04	2.00E-04	1.03E-04
2533	569816.2	4215631	2.99E-03	1.69E-03	4.57E-04	2.58E-04	2.06E-04	1.06E-04
2534	569939.4	4215662	2.41E-03	1.37E-03	3.69E-04	2.08E-04	1.66E-04	8.56E-05
2535	569948.7	4215661	2.43E-03	1.38E-03	3.71E-04	2.09E-04	1.67E-04	8.62E-05
2536	569958	4215659	2.45E-03	1.39E-03	3.74E-04	2.11E-04	1.69E-04	8.68E-05
2537	569967.4	4215657	2.47E-03	1.40E-03	3.77E-04	2.13E-04	1.70E-04	8.75E-05
2538	569976.7	4215656	2.49E-03	1.41E-03	3.80E-04	2.15E-04	1.72E-04	8.83E-05
2539	569986	4215654	2.51E-03	1.42E-03	3.84E-04	2.17E-04	1.73E-04	8.92E-05
2540	569995.3	4215652	2.54E-03	1.44E-03	3.88E-04	2.19E-04	1.75E-04	9.02E-05
2541	570004.6	4215651	2.58E-03	1.46E-03	3.93E-04	2.22E-04	1.78E-04	9.14E-05
2542	570013.9	4215649	2.61E-03	1.48E-03	3.99E-04	2.25E-04	1.80E-04	9.27E-05
2543	570023.3	4215647	2.66E-03	1.50E-03	4.06E-04	2.29E-04	1.83E-04	9.42E-05
2544	570032.6	4215646	2.70E-03	1.53E-03	4.12E-04	2.33E-04	1.86E-04	9.57E-05

2545	570041.9	4215644	2.74E-03	1.55E-03	4.19E-04	2.36E-04	1.89E-04	9.74E-05
2546	570051.2	4215642	2.80E-03	1.58E-03	4.27E-04	2.41E-04	1.93E-04	9.92E-05
2547	570060.5	4215641	2.85E-03	1.62E-03	4.35E-04	2.46E-04	1.97E-04	1.01E-04
2548	570069.8	4215639	2.91E-03	1.65E-03	4.45E-04	2.51E-04	2.01E-04	1.03E-04
2549	570079.1	4215637	2.98E-03	1.69E-03	4.55E-04	2.57E-04	2.05E-04	1.06E-04
2550	570088.5	4215636	3.05E-03	1.73E-03	4.66E-04	2.63E-04	2.10E-04	1.08E-04
2551	570097.8	4215634	3.13E-03	1.77E-03	4.78E-04	2.70E-04	2.16E-04	1.11E-04
2552	569932	4215670	2.32E-03	1.32E-03	3.55E-04	2.00E-04	1.60E-04	8.24E-05
2553	569922.9	4215667	2.36E-03	1.34E-03	3.60E-04	2.03E-04	1.62E-04	8.36E-05
2554	569913.7	4215665	2.39E-03	1.36E-03	3.65E-04	2.06E-04	1.65E-04	8.49E-05
2555	569877	4215656	2.55E-03	1.44E-03	3.89E-04	2.20E-04	1.76E-04	9.04E-05
2556	569867.9	4215653	2.59E-03	1.47E-03	3.95E-04	2.23E-04	1.78E-04	9.19E-05
2557	569858.7	4215651	2.63E-03	1.49E-03	4.02E-04	2.27E-04	1.81E-04	9.33E-05
2558	569849.5	4215649	2.67E-03	1.51E-03	4.08E-04	2.30E-04	1.84E-04	9.48E-05
2559	569840.4	4215646	2.72E-03	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.63E-05
2560	569831.2	4215644	2.76E-03	1.56E-03	4.21E-04	2.38E-04	1.90E-04	9.79E-05
2561	569941.2	4215672	2.29E-03	1.30E-03	3.50E-04	1.97E-04	1.58E-04	8.12E-05
2562	569950.5	4215671	2.30E-03	1.31E-03	3.52E-04	1.99E-04	1.59E-04	8.17E-05
2563	569959.8	4215669	2.32E-03	1.31E-03	3.54E-04	2.00E-04	1.60E-04	8.23E-05
2564	569969.1	4215667	2.34E-03	1.33E-03	3.57E-04	2.02E-04	1.61E-04	8.30E-05
2565	569978.4	4215665	2.36E-03	1.34E-03	3.60E-04	2.03E-04	1.63E-04	8.37E-05
2566	569987.8	4215664	2.38E-03	1.35E-03	3.64E-04	2.05E-04	1.64E-04	8.46E-05
2567	569997.1	4215662	2.41E-03	1.37E-03	3.68E-04	2.08E-04	1.66E-04	8.55E-05
2568	570006.4	4215660	2.44E-03	1.38E-03	3.73E-04	2.10E-04	1.68E-04	8.66E-05
2569	570015.7	4215659	2.47E-03	1.40E-03	3.78E-04	2.13E-04	1.71E-04	8.78E-05
2570	570025	4215657	2.51E-03	1.42E-03	3.84E-04	2.16E-04	1.73E-04	8.91E-05
2571	570034.3	4215655	2.55E-03	1.45E-03	3.90E-04	2.20E-04	1.76E-04	9.06E-05
2572	570043.7	4215654	2.60E-03	1.47E-03	3.97E-04	2.24E-04	1.79E-04	9.21E-05
2573	570053	4215652	2.65E-03	1.50E-03	4.04E-04	2.28E-04	1.82E-04	9.39E-05
2574	570062.3	4215650	2.70E-03	1.53E-03	4.12E-04	2.33E-04	1.86E-04	9.57E-05
2575	570071.6	4215649	2.76E-03	1.56E-03	4.21E-04	2.37E-04	1.90E-04	9.78E-05
2576	570080.9	4215647	2.82E-03	1.60E-03	4.30E-04	2.43E-04	1.94E-04	1.00E-04
2577	570090.2	4215645	2.89E-03	1.64E-03	4.41E-04	2.49E-04	1.99E-04	1.02E-04
2578	570099.5	4215644	2.96E-03	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
2579	569933.8	4215680	2.21E-03	1.25E-03	3.37E-04	1.90E-04	1.52E-04	7.82E-05
2580	569924.7	4215677	2.24E-03	1.27E-03	3.42E-04	1.93E-04	1.54E-04	7.93E-05
2581	569915.6	4215675	2.27E-03	1.29E-03	3.46E-04	1.95E-04	1.56E-04	8.05E-05
2582	569906.5	4215673	2.30E-03	1.30E-03	3.52E-04	1.98E-04	1.59E-04	8.17E-05
2583	569870	4215663	2.45E-03	1.39E-03	3.74E-04	2.11E-04	1.69E-04	8.69E-05
2584	569860.9	4215661	2.49E-03	1.41E-03	3.80E-04	2.14E-04	1.71E-04	8.82E-05
2585	569851.8	4215659	2.53E-03	1.43E-03	3.86E-04	2.18E-04	1.74E-04	8.96E-05
2586	569842.7	4215656	2.56E-03	1.45E-03	3.92E-04	2.21E-04	1.77E-04	9.10E-05
2587	569833.6	4215654	2.60E-03	1.48E-03	3.98E-04	2.24E-04	1.79E-04	9.24E-05
2588	569943	4215682	2.18E-03	1.23E-03	3.32E-04	1.87E-04	1.50E-04	7.72E-05
2589	569952.3	4215680	2.19E-03	1.24E-03	3.34E-04	1.89E-04	1.51E-04	7.77E-05
2590	569961.6	4215679	2.20E-03	1.25E-03	3.37E-04	1.90E-04	1.52E-04	7.82E-05
2591	569970.9	4215677	2.22E-03	1.26E-03	3.39E-04	1.91E-04	1.53E-04	7.88E-05
2592	569980.2	4215675	2.24E-03	1.27E-03	3.42E-04	1.93E-04	1.55E-04	7.95E-05
2593	569989.5	4215674	2.26E-03	1.28E-03	3.46E-04	1.95E-04	1.56E-04	8.03E-05
2594	569998.8	4215672	2.29E-03	1.30E-03	3.49E-04	1.97E-04	1.58E-04	8.12E-05
2595	570008.2	4215670	2.32E-03	1.31E-03	3.54E-04	2.00E-04	1.60E-04	8.21E-05
2596	570017.5	4215669	2.35E-03	1.33E-03	3.58E-04	2.02E-04	1.62E-04	8.32E-05

2597	570026.8	4215667	2.38E-03	1.35E-03	3.64E-04	2.05E-04	1.64E-04	8.45E-05
2598	570036.1	4215665	2.42E-03	1.37E-03	3.70E-04	2.09E-04	1.67E-04	8.58E-05
2599	570045.4	4215664	2.46E-03	1.40E-03	3.76E-04	2.12E-04	1.70E-04	8.74E-05
2600	570054.7	4215662	2.51E-03	1.42E-03	3.83E-04	2.16E-04	1.73E-04	8.90E-05
2601	570064.1	4215660	2.56E-03	1.45E-03	3.91E-04	2.20E-04	1.76E-04	9.07E-05
2602	570073.4	4215659	2.61E-03	1.48E-03	3.99E-04	2.25E-04	1.80E-04	9.26E-05
2603	570082.7	4215657	2.67E-03	1.51E-03	4.08E-04	2.30E-04	1.84E-04	9.47E-05
2604	570092	4215655	2.73E-03	1.55E-03	4.17E-04	2.35E-04	1.88E-04	9.69E-05
2605	570101.3	4215654	2.80E-03	1.59E-03	4.28E-04	2.41E-04	1.93E-04	9.93E-05
2606	569935.7	4215690	2.10E-03	1.19E-03	3.20E-04	1.81E-04	1.45E-04	7.44E-05
2607	569926.6	4215687	2.13E-03	1.20E-03	3.25E-04	1.83E-04	1.47E-04	7.54E-05
2608	569917.5	4215685	2.16E-03	1.22E-03	3.29E-04	1.86E-04	1.49E-04	7.65E-05
2609	569908.4	4215683	2.19E-03	1.24E-03	3.34E-04	1.88E-04	1.51E-04	7.75E-05
2610	569899.4	4215680	2.22E-03	1.26E-03	3.39E-04	1.91E-04	1.53E-04	7.86E-05
2611	569863.1	4215671	2.35E-03	1.33E-03	3.60E-04	2.03E-04	1.62E-04	8.35E-05
2612	569854	4215669	2.39E-03	1.35E-03	3.65E-04	2.06E-04	1.65E-04	8.48E-05
2613	569844.9	4215666	2.43E-03	1.37E-03	3.71E-04	2.09E-04	1.67E-04	8.61E-05
2614	569944.7	4215692	2.07E-03	1.17E-03	3.16E-04	1.78E-04	1.43E-04	7.35E-05
2615	569954	4215690	2.09E-03	1.18E-03	3.18E-04	1.80E-04	1.44E-04	7.40E-05
2616	569963.4	4215689	2.10E-03	1.19E-03	3.21E-04	1.81E-04	1.45E-04	7.45E-05
2617	569972.7	4215687	2.12E-03	1.20E-03	3.23E-04	1.82E-04	1.46E-04	7.51E-05
2618	569982	4215685	2.14E-03	1.21E-03	3.26E-04	1.84E-04	1.47E-04	7.58E-05
2619	569991.3	4215684	2.16E-03	1.22E-03	3.29E-04	1.86E-04	1.49E-04	7.65E-05
2620	570000.6	4215682	2.18E-03	1.23E-03	3.33E-04	1.88E-04	1.50E-04	7.73E-05
2621	570009.9	4215680	2.20E-03	1.25E-03	3.36E-04	1.90E-04	1.52E-04	7.81E-05
2622	570019.2	4215678	2.23E-03	1.26E-03	3.41E-04	1.92E-04	1.54E-04	7.91E-05
2623	570028.6	4215677	2.26E-03	1.28E-03	3.45E-04	1.95E-04	1.56E-04	8.03E-05
2624	570037.9	4215675	2.30E-03	1.30E-03	3.51E-04	1.98E-04	1.58E-04	8.16E-05
2625	570047.2	4215673	2.34E-03	1.33E-03	3.57E-04	2.02E-04	1.61E-04	8.30E-05
2626	570056.5	4215672	2.38E-03	1.35E-03	3.64E-04	2.05E-04	1.64E-04	8.46E-05
2627	570065.8	4215670	2.43E-03	1.38E-03	3.71E-04	2.09E-04	1.67E-04	8.62E-05
2628	570075.1	4215668	2.48E-03	1.40E-03	3.79E-04	2.14E-04	1.71E-04	8.79E-05
2629	570084.5	4215667	2.53E-03	1.44E-03	3.87E-04	2.18E-04	1.75E-04	8.98E-05
2630	570093.8	4215665	2.59E-03	1.47E-03	3.96E-04	2.23E-04	1.79E-04	9.19E-05
2631	570103.1	4215663	2.65E-03	1.50E-03	4.05E-04	2.29E-04	1.83E-04	9.42E-05
2632	569937.5	4215699	2.00E-03	1.13E-03	3.05E-04	1.72E-04	1.38E-04	7.09E-05
2633	569928.4	4215697	2.02E-03	1.15E-03	3.09E-04	1.74E-04	1.40E-04	7.18E-05
2634	569919.4	4215695	2.05E-03	1.16E-03	3.13E-04	1.77E-04	1.41E-04	7.28E-05
2635	569910.4	4215692	2.08E-03	1.18E-03	3.17E-04	1.79E-04	1.43E-04	7.37E-05
2636	569901.3	4215690	2.11E-03	1.19E-03	3.22E-04	1.82E-04	1.45E-04	7.47E-05
2637	569892.3	4215688	2.14E-03	1.21E-03	3.26E-04	1.84E-04	1.47E-04	7.58E-05
2638	569946.5	4215702	1.98E-03	1.12E-03	3.02E-04	1.70E-04	1.36E-04	7.01E-05
2639	569955.8	4215700	1.99E-03	1.13E-03	3.04E-04	1.71E-04	1.37E-04	7.06E-05
2640	569965.1	4215698	2.01E-03	1.14E-03	3.06E-04	1.73E-04	1.38E-04	7.11E-05
2641	569974.4	4215697	2.02E-03	1.15E-03	3.09E-04	1.74E-04	1.39E-04	7.17E-05
2642	569983.8	4215695	2.04E-03	1.16E-03	3.11E-04	1.76E-04	1.41E-04	7.23E-05
2643	569993.1	4215693	2.06E-03	1.17E-03	3.14E-04	1.77E-04	1.42E-04	7.30E-05
2644	570002.4	4215692	2.08E-03	1.18E-03	3.17E-04	1.79E-04	1.43E-04	7.37E-05
2645	570011.7	4215690	2.10E-03	1.19E-03	3.21E-04	1.81E-04	1.45E-04	7.45E-05
2646	570021	4215688	2.13E-03	1.20E-03	3.25E-04	1.83E-04	1.46E-04	7.54E-05
2647	570030.3	4215687	2.16E-03	1.22E-03	3.29E-04	1.86E-04	1.49E-04	7.65E-05
2648	570039.6	4215685	2.19E-03	1.24E-03	3.34E-04	1.89E-04	1.51E-04	7.77E-05

2649	570049	4215683	2.23E-03	1.26E-03	3.40E-04	1.92E-04	1.53E-04	7.90E-05
2650	570058.3	4215682	2.27E-03	1.28E-03	3.46E-04	1.95E-04	1.56E-04	8.04E-05
2651	570067.6	4215680	2.31E-03	1.31E-03	3.53E-04	1.99E-04	1.59E-04	8.20E-05
2652	570076.9	4215678	2.36E-03	1.34E-03	3.60E-04	2.03E-04	1.62E-04	8.36E-05
2653	570086.2	4215677	2.41E-03	1.36E-03	3.68E-04	2.08E-04	1.66E-04	8.54E-05
2654	570095.5	4215675	2.46E-03	1.40E-03	3.76E-04	2.12E-04	1.70E-04	8.74E-05
2655	570104.9	4215673	2.52E-03	1.43E-03	3.85E-04	2.17E-04	1.74E-04	8.95E-05
2656	569939.3	4215709	1.91E-03	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.77E-05
2657	569930.3	4215707	1.93E-03	1.09E-03	2.95E-04	1.66E-04	1.33E-04	6.85E-05
2658	569921.3	4215705	1.96E-03	1.11E-03	2.99E-04	1.68E-04	1.35E-04	6.94E-05
2659	569912.3	4215702	1.98E-03	1.12E-03	3.02E-04	1.71E-04	1.36E-04	7.02E-05
2660	569903.3	4215700	2.01E-03	1.14E-03	3.06E-04	1.73E-04	1.38E-04	7.11E-05
2661	569894.3	4215698	2.03E-03	1.15E-03	3.11E-04	1.75E-04	1.40E-04	7.21E-05
2662	569885.3	4215695	2.06E-03	1.17E-03	3.15E-04	1.78E-04	1.42E-04	7.32E-05
2663	569876.3	4215693	2.00E-03	1.13E-03	3.06E-04	1.73E-04	1.38E-04	7.10E-05
2664	569948.3	4215712	1.89E-03	1.07E-03	2.88E-04	1.63E-04	1.30E-04	6.70E-05
2665	569957.6	4215710	1.90E-03	1.08E-03	2.90E-04	1.64E-04	1.31E-04	6.75E-05
2666	569966.9	4215708	1.92E-03	1.09E-03	2.93E-04	1.65E-04	1.32E-04	6.80E-05
2667	569976.2	4215707	1.93E-03	1.09E-03	2.95E-04	1.67E-04	1.33E-04	6.85E-05
2668	569985.5	4215705	1.95E-03	1.10E-03	2.98E-04	1.68E-04	1.34E-04	6.91E-05
2669	569994.8	4215703	1.97E-03	1.11E-03	3.00E-04	1.70E-04	1.36E-04	6.98E-05
2670	570004.2	4215702	1.99E-03	1.13E-03	3.03E-04	1.71E-04	1.37E-04	7.05E-05
2671	570013.5	4215700	2.01E-03	1.14E-03	3.06E-04	1.73E-04	1.38E-04	7.12E-05
2672	570022.8	4215698	2.03E-03	1.15E-03	3.10E-04	1.75E-04	1.40E-04	7.20E-05
2673	570032.1	4215696	2.06E-03	1.17E-03	3.14E-04	1.77E-04	1.42E-04	7.30E-05
2674	570041.4	4215695	2.09E-03	1.18E-03	3.19E-04	1.80E-04	1.44E-04	7.41E-05
2675	570050.7	4215693	2.12E-03	1.20E-03	3.24E-04	1.83E-04	1.46E-04	7.53E-05
2676	570060	4215691	2.16E-03	1.22E-03	3.30E-04	1.86E-04	1.49E-04	7.66E-05
2677	570069.4	4215690	2.20E-03	1.25E-03	3.36E-04	1.90E-04	1.52E-04	7.80E-05
2678	570078.7	4215688	2.24E-03	1.27E-03	3.43E-04	1.93E-04	1.55E-04	7.96E-05
2679	570088	4215686	2.29E-03	1.30E-03	3.50E-04	1.97E-04	1.58E-04	8.13E-05
2680	570097.3	4215685	2.34E-03	1.33E-03	3.58E-04	2.02E-04	1.61E-04	8.31E-05
2681	569941.1	4215719	1.83E-03	1.03E-03	2.79E-04	1.57E-04	1.26E-04	6.48E-05
2682	569932.1	4215717	1.85E-03	1.05E-03	2.82E-04	1.59E-04	1.27E-04	6.55E-05
2683	569923.2	4215715	1.87E-03	1.06E-03	2.85E-04	1.61E-04	1.29E-04	6.63E-05
2684	569914.2	4215712	1.89E-03	1.07E-03	2.89E-04	1.63E-04	1.30E-04	6.71E-05
2685	569905.2	4215710	1.91E-03	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.79E-05
2686	569896.3	4215708	1.94E-03	1.10E-03	2.96E-04	1.67E-04	1.34E-04	6.88E-05
2687	569887.3	4215705	1.96E-03	1.11E-03	3.00E-04	1.69E-04	1.35E-04	6.97E-05
2688	569878.3	4215703	1.99E-03	1.13E-03	3.04E-04	1.72E-04	1.37E-04	7.06E-05
2689	569869.4	4215701	1.92E-03	1.09E-03	2.94E-04	1.66E-04	1.33E-04	6.82E-05
2690	569950	4215721	1.81E-03	1.02E-03	2.76E-04	1.56E-04	1.25E-04	6.41E-05
2691	569959.4	4215720	1.82E-03	1.03E-03	2.78E-04	1.57E-04	1.25E-04	6.45E-05
2692	569968.7	4215718	1.83E-03	1.04E-03	2.80E-04	1.58E-04	1.26E-04	6.50E-05
2693	569978	4215716	1.85E-03	1.05E-03	2.82E-04	1.59E-04	1.27E-04	6.56E-05
2694	569987.3	4215715	1.86E-03	1.06E-03	2.85E-04	1.61E-04	1.28E-04	6.61E-05
2695	569996.6	4215713	1.88E-03	1.07E-03	2.87E-04	1.62E-04	1.30E-04	6.68E-05
2696	570005.9	4215711	1.90E-03	1.08E-03	2.90E-04	1.64E-04	1.31E-04	6.74E-05
2697	570015.2	4215710	1.92E-03	1.09E-03	2.93E-04	1.65E-04	1.32E-04	6.81E-05
2698	570024.6	4215708	1.94E-03	1.10E-03	2.96E-04	1.67E-04	1.34E-04	6.88E-05
2699	570033.9	4215706	1.97E-03	1.11E-03	3.00E-04	1.69E-04	1.35E-04	6.97E-05
2700	570043.2	4215705	1.99E-03	1.13E-03	3.04E-04	1.72E-04	1.37E-04	7.07E-05

2701	570052.5	4215703	2.03E-03	1.15E-03	3.09E-04	1.75E-04	1.40E-04	7.18E-05
2702	570061.8	4215701	2.06E-03	1.17E-03	3.14E-04	1.77E-04	1.42E-04	7.31E-05
2703	570071.1	4215700	2.10E-03	1.19E-03	3.20E-04	1.81E-04	1.45E-04	7.44E-05
2704	570080.5	4215698	2.14E-03	1.21E-03	3.26E-04	1.84E-04	1.47E-04	7.58E-05
2705	570089.8	4215696	2.18E-03	1.24E-03	3.33E-04	1.88E-04	1.50E-04	7.75E-05
2706	570099.1	4215695	2.23E-03	1.27E-03	3.41E-04	1.92E-04	1.54E-04	7.92E-05
2707	570108.4	4215693	2.29E-03	1.30E-03	3.49E-04	1.97E-04	1.58E-04	8.11E-05
2708	569942.9	4215729	1.75E-03	9.91E-04	2.67E-04	1.51E-04	1.21E-04	6.21E-05
2709	569933.9	4215727	1.77E-03	1.00E-03	2.70E-04	1.52E-04	1.22E-04	6.27E-05
2710	569925	4215724	1.79E-03	1.01E-03	2.73E-04	1.54E-04	1.23E-04	6.34E-05
2711	569916.1	4215722	1.81E-03	1.02E-03	2.76E-04	1.56E-04	1.25E-04	6.41E-05
2712	569907.2	4215720	1.83E-03	1.04E-03	2.79E-04	1.58E-04	1.26E-04	6.49E-05
2713	569898.2	4215717	1.85E-03	1.05E-03	2.83E-04	1.60E-04	1.28E-04	6.57E-05
2714	569889.3	4215715	1.88E-03	1.06E-03	2.86E-04	1.62E-04	1.29E-04	6.65E-05
2715	569880.4	4215713	1.90E-03	1.08E-03	2.90E-04	1.64E-04	1.31E-04	6.74E-05
2716	569871.4	4215711	1.84E-03	1.04E-03	2.81E-04	1.58E-04	1.27E-04	6.52E-05
2717	569862.5	4215708	1.85E-03	1.05E-03	2.82E-04	1.59E-04	1.27E-04	6.56E-05
2718	569591.2	4215444	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
2719	569951.8	4215731	1.73E-03	9.81E-04	2.64E-04	1.49E-04	1.19E-04	6.14E-05
2720	569961.1	4215730	1.74E-03	9.87E-04	2.66E-04	1.50E-04	1.20E-04	6.18E-05
2721	569970.4	4215728	1.76E-03	9.95E-04	2.68E-04	1.51E-04	1.21E-04	6.23E-05
2722	569979.8	4215726	1.77E-03	1.00E-03	2.70E-04	1.53E-04	1.22E-04	6.28E-05
2723	569989.1	4215725	1.79E-03	1.01E-03	2.73E-04	1.54E-04	1.23E-04	6.34E-05
2724	569998.4	4215723	1.80E-03	1.02E-03	2.75E-04	1.55E-04	1.24E-04	6.39E-05
2725	570007.7	4215721	1.82E-03	1.03E-03	2.78E-04	1.57E-04	1.25E-04	6.45E-05
2726	570017	4215720	1.84E-03	1.04E-03	2.80E-04	1.58E-04	1.27E-04	6.52E-05
2727	570026.3	4215718	1.86E-03	1.05E-03	2.84E-04	1.60E-04	1.28E-04	6.59E-05
2728	570035.6	4215716	1.88E-03	1.07E-03	2.87E-04	1.62E-04	1.30E-04	6.67E-05
2729	570045	4215714	1.91E-03	1.08E-03	2.91E-04	1.64E-04	1.31E-04	6.76E-05
2730	570054.3	4215713	1.94E-03	1.10E-03	2.96E-04	1.67E-04	1.33E-04	6.87E-05
2731	570063.6	4215711	1.97E-03	1.11E-03	3.00E-04	1.70E-04	1.36E-04	6.98E-05
2732	570072.9	4215709	2.00E-03	1.13E-03	3.06E-04	1.73E-04	1.38E-04	7.10E-05
2733	570082.2	4215708	2.04E-03	1.16E-03	3.12E-04	1.76E-04	1.41E-04	7.24E-05
2734	570091.5	4215706	2.08E-03	1.18E-03	3.18E-04	1.80E-04	1.44E-04	7.39E-05
2735	570134.3	4215513	9.31E-03	5.27E-03	1.42E-03	8.02E-04	6.42E-04	3.30E-04
2736	570122.9	4215521	8.15E-03	4.61E-03	1.24E-03	7.02E-04	5.61E-04	2.89E-04
2737	570111.5	4215529	7.25E-03	4.11E-03	1.11E-03	6.24E-04	4.99E-04	2.57E-04
2738	570121.1	4215531	7.30E-03	4.13E-03	1.11E-03	6.29E-04	5.03E-04	2.59E-04
2739	570100.1	4215538	6.57E-03	3.72E-03	1.00E-03	5.66E-04	4.53E-04	2.33E-04
2740	570109.8	4215539	6.56E-03	3.72E-03	1.00E-03	5.66E-04	4.52E-04	2.33E-04
2741	570119.4	4215541	6.60E-03	3.74E-03	1.01E-03	5.69E-04	4.55E-04	2.34E-04
2742	570129	4215543	6.68E-03	3.79E-03	1.02E-03	5.76E-04	4.60E-04	2.37E-04
2743	570098.4	4215547	5.98E-03	3.39E-03	9.13E-04	5.15E-04	4.12E-04	2.12E-04
2744	570108	4215549	5.97E-03	3.38E-03	9.12E-04	5.15E-04	4.12E-04	2.12E-04
2745	570117.7	4215551	6.00E-03	3.40E-03	9.17E-04	5.17E-04	4.14E-04	2.13E-04
2746	570096.7	4215557	5.46E-03	3.10E-03	8.34E-04	4.71E-04	3.76E-04	1.94E-04
2747	570106.3	4215559	5.46E-03	3.09E-03	8.34E-04	4.71E-04	3.76E-04	1.94E-04
2748	570115.9	4215561	5.48E-03	3.11E-03	8.37E-04	4.72E-04	3.78E-04	1.94E-04
2749	570094.9	4215567	5.00E-03	2.83E-03	7.64E-04	4.31E-04	3.45E-04	1.77E-04
2750	570104.6	4215569	5.01E-03	2.84E-03	7.65E-04	4.31E-04	3.45E-04	1.78E-04
2751	570114.2	4215571	5.03E-03	2.85E-03	7.68E-04	4.33E-04	3.46E-04	1.78E-04
2752	570123.8	4215572	5.08E-03	2.88E-03	7.76E-04	4.38E-04	3.50E-04	1.80E-04

2753	570102.8	4215579	4.61E-03	2.61E-03	7.04E-04	3.97E-04	3.18E-04	1.63E-04
2754	570112.5	4215580	4.63E-03	2.62E-03	7.07E-04	3.99E-04	3.19E-04	1.64E-04
2755	570122.1	4215582	4.67E-03	2.65E-03	7.14E-04	4.03E-04	3.22E-04	1.66E-04
2756	570101.1	4215589	4.26E-03	2.41E-03	6.50E-04	3.67E-04	2.93E-04	1.51E-04
2757	570110.7	4215590	4.29E-03	2.43E-03	6.54E-04	3.69E-04	2.95E-04	1.52E-04
2758	570099.3	4215598	3.96E-03	2.24E-03	6.05E-04	3.41E-04	2.73E-04	1.40E-04
2759	570109	4215600	3.99E-03	2.26E-03	6.09E-04	3.44E-04	2.75E-04	1.41E-04
2760	570118.6	4215602	4.03E-03	2.28E-03	6.15E-04	3.47E-04	2.77E-04	1.43E-04
2761	570107.2	4215610	3.72E-03	2.11E-03	5.68E-04	3.21E-04	2.57E-04	1.32E-04
2762	570105.5	4215620	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
2763	570113.4	4215631	3.28E-03	1.86E-03	5.01E-04	2.82E-04	2.26E-04	1.16E-04
2764	570111.7	4215641	3.07E-03	1.74E-03	4.69E-04	2.65E-04	2.12E-04	1.09E-04
2765	570088.1	4215718	1.96E-03	1.11E-03	2.99E-04	1.69E-04	1.35E-04	6.94E-05
2766	570097.7	4215720	1.97E-03	1.12E-03	3.01E-04	1.70E-04	1.36E-04	6.98E-05

	Max Yr	**1**	T2	T2L3	T4f
	Row	**18**	1.13E-01	1.73E-02	7.79E-03
		Col	**3**	**4**	**5**
		Adjustment	**100%**	**15%**	**7%**
			Year 1	Year 1	Year 1
1	570176.2	4215489	7.74E-02	1.18E-02	5.34E-03
2	570192.2	4215484	8.75E-02	1.34E-02	6.03E-03
3	570208.7	4215477	1.02E-01	1.56E-02	7.03E-03
4	570225.2	4215470	1.17E-01	1.79E-02	8.09E-03
5	570241.7	4215462	1.30E-01	1.98E-02	8.96E-03
6	570258.2	4215455	1.38E-01	2.11E-02	9.50E-03
7	570179.3	4215498	6.84E-02	1.04E-02	4.71E-03
8	570162	4215500	6.17E-02	9.43E-03	4.25E-03
9	570196.2	4215493	7.78E-02	1.19E-02	5.36E-03
10	570212.7	4215486	9.12E-02	1.39E-02	6.28E-03
11	570229.2	4215479	1.05E-01	1.61E-02	7.25E-03
12	570237.5	4215475	1.11E-01	1.70E-02	7.68E-03
13	570254	4215468	1.22E-01	1.86E-02	8.39E-03
14	570183.7	4215507	6.18E-02	9.44E-03	4.26E-03
15	570167.2	4215509	5.59E-02	8.54E-03	3.85E-03
16	570150.7	4215511	5.09E-02	7.77E-03	3.51E-03
17	570200.2	4215503	7.02E-02	1.07E-02	4.84E-03
18	570216.7	4215495	8.22E-02	1.26E-02	5.67E-03
19	570225	4215492	8.88E-02	1.36E-02	6.12E-03
20	570241.5	4215484	1.01E-01	1.54E-02	6.94E-03
21	570249.8	4215481	1.06E-01	1.62E-02	7.29E-03
22	570266.3	4215473	1.14E-01	1.74E-02	7.86E-03
23	570188.1	4215516	5.64E-02	8.61E-03	3.89E-03
24	570172.2	4215518	5.09E-02	7.77E-03	3.51E-03
25	570156.3	4215520	4.66E-02	7.11E-03	3.21E-03
26	570140.5	4215522	4.29E-02	6.55E-03	2.95E-03
27	570204.3	4215512	6.41E-02	9.79E-03	4.42E-03
28	570220.8	4215504	7.50E-02	1.15E-02	5.17E-03
29	570237.3	4215497	8.63E-02	1.32E-02	5.95E-03
30	570253.8	4215490	9.61E-02	1.47E-02	6.62E-03
31	570262.1	4215486	1.00E-01	1.53E-02	6.92E-03
32	570191.4	4215526	5.16E-02	7.87E-03	3.55E-03
33	570174.1	4215528	4.59E-02	7.01E-03	3.16E-03
34	570156.8	4215530	4.19E-02	6.40E-03	2.89E-03
35	570139.4	4215532	3.85E-02	5.87E-03	2.65E-03
36	570208.3	4215521	5.90E-02	9.02E-03	4.07E-03
37	570216.6	4215517	6.38E-02	9.74E-03	4.39E-03
38	570233.1	4215510	7.38E-02	1.13E-02	5.09E-03
39	570249.6	4215503	8.34E-02	1.27E-02	5.75E-03
40	570266.1	4215495	9.16E-02	1.40E-02	6.31E-03
41	570274.4	4215492	9.52E-02	1.45E-02	6.56E-03
42	570195.7	4215535	4.78E-02	7.30E-03	3.30E-03
43	570179.1	4215537	4.29E-02	6.55E-03	2.96E-03
44	570162.4	4215539	3.91E-02	5.97E-03	2.69E-03
45	570145.7	4215541	3.60E-02	5.50E-03	2.48E-03
46	570212.3	4215530	5.45E-02	8.33E-03	3.76E-03

47	570228.8	4215523	6.31E-02	9.64E-03	4.35E-03
48	570245.4	4215515	7.22E-02	1.10E-02	4.98E-03
49	570261.9	4215508	8.08E-02	1.23E-02	5.57E-03
50	570278.4	4215501	8.76E-02	1.34E-02	6.04E-03
51	570200	4215544	4.45E-02	6.80E-03	3.07E-03
52	570183.9	4215546	4.02E-02	6.14E-03	2.77E-03
53	570167.7	4215548	3.66E-02	5.59E-03	2.52E-03
54	570151.5	4215550	3.38E-02	5.16E-03	2.33E-03
55	570135.4	4215552	3.14E-02	4.80E-03	2.17E-03
56	570216.4	4215539	5.06E-02	7.73E-03	3.49E-03
57	570232.9	4215532	5.84E-02	8.92E-03	4.03E-03
58	570241.1	4215528	6.25E-02	9.54E-03	4.31E-03
59	570257.6	4215521	7.07E-02	1.08E-02	4.87E-03
60	570274.2	4215514	7.80E-02	1.19E-02	5.37E-03
61	570203.5	4215553	4.13E-02	6.31E-03	2.85E-03
62	570186.2	4215555	3.72E-02	5.68E-03	2.56E-03
63	570168.8	4215557	3.37E-02	5.14E-03	2.32E-03
64	570151.5	4215559	3.10E-02	4.73E-03	2.14E-03
65	570134.2	4215561	2.87E-02	4.38E-03	1.98E-03
66	570220.4	4215548	4.72E-02	7.20E-03	3.25E-03
67	570228.6	4215545	5.08E-02	7.75E-03	3.50E-03
68	570245.2	4215537	5.82E-02	8.88E-03	4.01E-03
69	570253.4	4215534	6.19E-02	9.46E-03	4.27E-03
70	570269.9	4215526	6.89E-02	1.05E-02	4.75E-03
71	570286.5	4215519	7.51E-02	1.15E-02	5.17E-03
72	570207.8	4215562	3.89E-02	5.94E-03	2.68E-03
73	570191	4215564	3.51E-02	5.36E-03	2.42E-03
74	570174.2	4215566	3.18E-02	4.85E-03	2.19E-03
75	570157.4	4215568	2.93E-02	4.47E-03	2.02E-03
76	570140.6	4215570	2.72E-02	4.15E-03	1.87E-03
77	570224.4	4215557	4.41E-02	6.74E-03	3.04E-03
78	570240.9	4215550	5.08E-02	7.75E-03	3.50E-03
79	570257.5	4215543	5.77E-02	8.80E-03	3.97E-03
80	570274	4215536	6.42E-02	9.80E-03	4.42E-03
81	570282.2	4215532	6.71E-02	1.02E-02	4.62E-03
82	570211.3	4215571	3.65E-02	5.58E-03	2.52E-03
83	570193.4	4215573	3.28E-02	5.01E-03	2.26E-03
84	570175.6	4215576	2.95E-02	4.51E-03	2.04E-03
85	570157.8	4215578	2.71E-02	4.13E-03	1.86E-03
86	570139.9	4215580	2.50E-02	3.82E-03	1.72E-03
87	570220.2	4215570	3.85E-02	5.88E-03	2.65E-03
88	570236.7	4215563	4.43E-02	6.77E-03	3.05E-03
89	570253.2	4215556	5.05E-02	7.71E-03	3.48E-03
90	570269.7	4215548	5.67E-02	8.66E-03	3.91E-03
91	570286.3	4215541	6.25E-02	9.55E-03	4.31E-03
92	570215.6	4215580	3.45E-02	5.26E-03	2.38E-03
93	570198.3	4215583	3.12E-02	4.76E-03	2.15E-03
94	570180.9	4215585	2.82E-02	4.30E-03	1.94E-03
95	570163.6	4215587	2.57E-02	3.93E-03	1.77E-03
96	570146.3	4215589	2.38E-02	3.63E-03	1.64E-03
97	570129	4215591	2.23E-02	3.40E-03	1.54E-03
98	570232.5	4215576	3.87E-02	5.92E-03	2.67E-03

99	570249	4215568	4.41E-02	6.74E-03	3.04E-03
100	570265.5	4215561	4.98E-02	7.60E-03	3.43E-03
101	570282	4215554	5.55E-02	8.48E-03	3.83E-03
102	570290.3	4215550	5.82E-02	8.89E-03	4.01E-03
103	570298.5	4215547	6.07E-02	9.27E-03	4.19E-03
104	570219.8	4215590	3.25E-02	4.96E-03	2.24E-03
105	570203	4215592	2.95E-02	4.51E-03	2.04E-03
106	570186.1	4215594	2.69E-02	4.10E-03	1.85E-03
107	570169.2	4215596	2.45E-02	3.74E-03	1.69E-03
108	570152.4	4215598	2.27E-02	3.47E-03	1.57E-03
109	570135.5	4215600	2.13E-02	3.25E-03	1.47E-03
110	570236.5	4215585	3.60E-02	5.50E-03	2.48E-03
111	570253	4215578	4.07E-02	6.22E-03	2.80E-03
112	570261.3	4215574	4.32E-02	6.60E-03	2.98E-03
113	570277.8	4215567	4.86E-02	7.42E-03	3.35E-03
114	570294.3	4215559	5.40E-02	8.24E-03	3.72E-03
115	570223.4	4215599	3.04E-02	4.64E-03	2.10E-03
116	570205.7	4215601	2.77E-02	4.23E-03	1.91E-03
117	570187.9	4215603	2.51E-02	3.84E-03	1.73E-03
118	570170.1	4215605	2.29E-02	3.50E-03	1.58E-03
119	570161.3	4215606	2.20E-02	3.36E-03	1.52E-03
120	570143.5	4215608	2.05E-02	3.12E-03	1.41E-03
121	570125.8	4215611	1.93E-02	2.95E-03	1.33E-03
122	570232.3	4215598	3.16E-02	4.82E-03	2.18E-03
123	570248.8	4215590	3.56E-02	5.43E-03	2.45E-03
124	570265.3	4215583	3.74E-02	5.72E-03	2.58E-03
125	570281.8	4215576	4.50E-02	6.87E-03	3.10E-03
126	570290.1	4215572	4.75E-02	7.25E-03	3.27E-03
127	570298.4	4215569	5.00E-02	7.63E-03	3.44E-03
128	570227.7	4215608	2.85E-02	4.35E-03	1.96E-03
129	570210.4	4215610	2.63E-02	4.02E-03	1.81E-03
130	570193	4215612	2.40E-02	3.67E-03	1.65E-03
131	570175.7	4215614	2.19E-02	3.35E-03	1.51E-03
132	570158.4	4215616	2.03E-02	3.10E-03	1.40E-03
133	570141.1	4215618	1.90E-02	2.90E-03	1.31E-03
134	570123.8	4215620	1.80E-02	2.75E-03	1.24E-03
135	570244.6	4215603	3.13E-02	4.79E-03	2.16E-03
136	570261.1	4215596	3.26E-02	4.98E-03	2.25E-03
137	570277.6	4215589	3.66E-02	5.58E-03	2.52E-03
138	570294.1	4215581	4.14E-02	6.33E-03	2.86E-03
139	570302.4	4215578	4.44E-02	6.78E-03	3.06E-03
140	570231.9	4215617	2.68E-02	4.09E-03	1.84E-03
141	570215	4215619	2.49E-02	3.81E-03	1.72E-03
142	570198	4215621	2.29E-02	3.49E-03	1.58E-03
143	570181.1	4215623	2.10E-02	3.20E-03	1.44E-03
144	570164.2	4215625	1.94E-02	2.96E-03	1.34E-03
145	570147.3	4215627	1.82E-02	2.78E-03	1.25E-03
146	570130.3	4215629	1.72E-02	2.63E-03	1.19E-03
147	570248.6	4215612	2.75E-02	4.20E-03	1.89E-03
148	570256.9	4215609	2.88E-02	4.40E-03	1.99E-03
149	570273.4	4215601	3.21E-02	4.90E-03	2.21E-03
150	570289.9	4215594	3.60E-02	5.50E-03	2.48E-03

151	570298.2	4215591	3.83E-02	5.84E-03	2.64E-03
152	570314.7	4215583	4.34E-02	6.62E-03	2.99E-03
153	570235.5	4215626	2.52E-02	3.85E-03	1.74E-03
154	570226.7	4215627	2.43E-02	3.71E-03	1.67E-03
155	570209	4215629	2.24E-02	3.42E-03	1.55E-03
156	570191.3	4215632	2.05E-02	3.14E-03	1.41E-03
157	570173.6	4215634	1.88E-02	2.87E-03	1.30E-03
158	570164.8	4215635	1.82E-02	2.78E-03	1.25E-03
159	570147.1	4215637	1.70E-02	2.60E-03	1.17E-03
160	570129.4	4215639	1.61E-02	2.46E-03	1.11E-03
161	570252.6	4215622	2.58E-02	3.94E-03	1.78E-03
162	570269.2	4215614	2.83E-02	4.32E-03	1.95E-03
163	570285.7	4215607	3.18E-02	4.86E-03	2.19E-03
164	570302.2	4215600	3.59E-02	5.48E-03	2.47E-03
165	570318.7	4215592	4.04E-02	6.17E-03	2.78E-03
166	570239.8	4215635	2.38E-02	3.64E-03	1.64E-03
167	570222.5	4215637	2.22E-02	3.40E-03	1.53E-03
168	570205.1	4215640	2.05E-02	3.12E-03	1.41E-03
169	570187.8	4215642	1.88E-02	2.87E-03	1.30E-03
170	570170.5	4215644	1.74E-02	2.66E-03	1.20E-03
171	570153.2	4215646	1.64E-02	2.50E-03	1.13E-03
172	570135.9	4215648	1.55E-02	2.36E-03	1.07E-03
173	570118.6	4215650	1.48E-02	2.25E-03	1.02E-03
174	570256.7	4215631	2.61E-02	3.98E-03	1.80E-03
175	570273.2	4215623	2.69E-02	4.11E-03	1.86E-03
176	570281.5	4215620	2.83E-02	4.33E-03	1.95E-03
177	570298	4215612	3.17E-02	4.84E-03	2.19E-03
178	570306.2	4215609	3.38E-02	5.16E-03	2.33E-03
179	570314.5	4215605	3.59E-02	5.48E-03	2.47E-03
180	570244	4215644	2.26E-02	3.45E-03	1.56E-03
181	570227	4215647	2.11E-02	3.23E-03	1.46E-03
182	570210	4215649	1.95E-02	2.98E-03	1.34E-03
183	570193	4215651	1.80E-02	2.75E-03	1.24E-03
184	570176.1	4215653	1.67E-02	2.55E-03	1.15E-03
185	570159.1	4215655	1.57E-02	2.40E-03	1.08E-03
186	570142.1	4215657	1.49E-02	2.27E-03	1.02E-03
187	570125.2	4215659	1.42E-02	2.17E-03	9.77E-04
188	570260.7	4215640	2.47E-02	3.77E-03	1.70E-03
189	570269	4215636	2.60E-02	3.97E-03	1.79E-03
190	570277.2	4215633	2.58E-02	3.93E-03	1.77E-03
191	570293.7	4215625	2.85E-02	4.34E-03	1.96E-03
192	570310.3	4215618	3.19E-02	4.88E-03	2.20E-03
193	570326.8	4215611	3.71E-02	5.67E-03	2.56E-03
194	570247.7	4215654	2.14E-02	3.27E-03	1.48E-03
195	570230	4215656	1.99E-02	3.04E-03	1.37E-03
196	570212.4	4215658	1.84E-02	2.80E-03	1.27E-03
197	570194.7	4215660	1.70E-02	2.59E-03	1.17E-03
198	570177.1	4215662	1.57E-02	2.40E-03	1.08E-03
199	570159.4	4215664	1.48E-02	2.26E-03	1.02E-03
200	570141.7	4215666	1.40E-02	2.14E-03	9.67E-04
201	570124.1	4215669	1.34E-02	2.04E-03	9.22E-04
202	570264.7	4215649	2.34E-02	3.57E-03	1.61E-03

203	570281.3	4215642	2.59E-02	3.96E-03	1.79E-03
204	570297.8	4215634	2.87E-02	4.39E-03	1.98E-03
205	570314.3	4215627	3.18E-02	4.85E-03	2.19E-03
206	570330.8	4215620	3.49E-02	5.33E-03	2.40E-03
207	570251.9	4215663	2.03E-02	3.11E-03	1.40E-03
208	570234.6	4215665	1.89E-02	2.89E-03	1.30E-03
209	570217.2	4215667	1.75E-02	2.67E-03	1.21E-03
210	570199.9	4215669	1.62E-02	2.48E-03	1.12E-03
211	570182.6	4215671	1.51E-02	2.31E-03	1.04E-03
212	570165.3	4215673	1.42E-02	2.17E-03	9.81E-04
213	570148	4215675	1.35E-02	2.07E-03	9.32E-04
214	570130.7	4215677	1.29E-02	1.97E-03	8.89E-04
215	570113.4	4215680	1.24E-02	1.89E-03	8.52E-04
216	570268.8	4215658	2.22E-02	3.39E-03	1.53E-03
217	570277	4215654	2.33E-02	3.56E-03	1.61E-03
218	570293.6	4215647	2.58E-02	3.94E-03	1.78E-03
219	570310.1	4215640	2.85E-02	4.36E-03	1.97E-03
220	570326.6	4215633	3.14E-02	4.80E-03	2.16E-03
221	570256	4215672	1.93E-02	2.94E-03	1.33E-03
222	570239	4215674	1.79E-02	2.74E-03	1.23E-03
223	570222	4215676	1.67E-02	2.55E-03	1.15E-03
224	570205	4215678	1.55E-02	2.37E-03	1.07E-03
225	570188	4215680	1.45E-02	2.22E-03	1.00E-03
226	570171	4215682	1.37E-02	2.09E-03	9.43E-04
227	570154	4215684	1.30E-02	1.99E-03	8.97E-04
228	570137	4215686	1.24E-02	1.90E-03	8.57E-04
229	570120	4215688	1.19E-02	1.82E-03	8.22E-04
230	570272.8	4215667	2.10E-02	3.21E-03	1.45E-03
231	570281.1	4215664	2.22E-02	3.39E-03	1.53E-03
232	570297.6	4215656	2.45E-02	3.74E-03	1.69E-03
233	570305.8	4215653	2.57E-02	3.93E-03	1.77E-03
234	570314.1	4215649	2.70E-02	4.12E-03	1.86E-03
235	570330.6	4215642	2.97E-02	4.53E-03	2.04E-03
236	570338.9	4215638	3.10E-02	4.73E-03	2.14E-03
237	570259.8	4215681	1.82E-02	2.78E-03	1.25E-03
238	570242.2	4215683	1.69E-02	2.58E-03	1.16E-03
239	570224.5	4215685	1.57E-02	2.39E-03	1.08E-03
240	570206.9	4215687	1.46E-02	2.23E-03	1.01E-03
241	570189.3	4215690	1.37E-02	2.10E-03	9.46E-04
242	570171.7	4215692	1.30E-02	1.98E-03	8.94E-04
243	570154.1	4215694	1.23E-02	1.88E-03	8.50E-04
244	570136.5	4215696	1.18E-02	1.80E-03	8.13E-04
245	570118.8	4215698	1.13E-02	1.73E-03	7.81E-04
246	570276.8	4215676	1.99E-02	3.04E-03	1.37E-03
247	570285.1	4215673	2.09E-02	3.20E-03	1.44E-03
248	570293.4	4215669	2.20E-02	3.37E-03	1.52E-03
249	570309.9	4215662	2.44E-02	3.72E-03	1.68E-03
250	570318.1	4215658	2.56E-02	3.90E-03	1.76E-03
251	570334.6	4215651	2.80E-02	4.28E-03	1.93E-03
252	570264	4215690	1.71E-02	2.62E-03	1.18E-03
253	570246.6	4215692	1.59E-02	2.44E-03	1.10E-03
254	570229.3	4215694	1.49E-02	2.27E-03	1.02E-03

255	570212	4215697	1.39E-02	2.13E-03	9.61E-04
256	570194.7	4215699	1.32E-02	2.01E-03	9.07E-04
257	570177.4	4215701	1.25E-02	1.91E-03	8.61E-04
258	570160.1	4215703	1.19E-02	1.82E-03	8.20E-04
259	570142.8	4215705	1.14E-02	1.74E-03	7.84E-04
260	570125.5	4215707	1.09E-02	1.67E-03	7.54E-04
261	570108.1	4215709	1.05E-02	1.61E-03	7.27E-04
262	570280.9	4215686	1.87E-02	2.86E-03	1.29E-03
263	570297.4	4215678	2.08E-02	3.18E-03	1.43E-03
264	570305.6	4215675	2.19E-02	3.34E-03	1.51E-03
265	570322.2	4215667	2.41E-02	3.68E-03	1.66E-03
266	570330.4	4215664	2.53E-02	3.86E-03	1.74E-03
267	570346.9	4215656	2.75E-02	4.20E-03	1.90E-03
268	570267.7	4215699	1.61E-02	2.46E-03	1.11E-03
269	570249.8	4215702	1.50E-02	2.29E-03	1.03E-03
270	570231.9	4215704	1.40E-02	2.13E-03	9.63E-04
271	570223	4215705	1.35E-02	2.07E-03	9.34E-04
272	570214	4215706	1.31E-02	2.01E-03	9.06E-04
273	570196.1	4215708	1.25E-02	1.90E-03	8.59E-04
274	570178.3	4215710	1.19E-02	1.82E-03	8.19E-04
275	570169.3	4215711	1.16E-02	1.77E-03	8.00E-04
276	570151.4	4215713	1.11E-02	1.69E-03	7.63E-04
277	570133.5	4215716	1.06E-02	1.62E-03	7.32E-04
278	570115.6	4215718	1.02E-02	1.56E-03	7.05E-04
279	570284.9	4215695	1.76E-02	2.69E-03	1.22E-03
280	570293.2	4215691	1.86E-02	2.84E-03	1.28E-03
281	570309.7	4215684	2.06E-02	3.15E-03	1.42E-03
282	570317.9	4215680	2.17E-02	3.32E-03	1.50E-03
283	570334.5	4215673	2.38E-02	3.64E-03	1.64E-03
284	570342.7	4215669	2.49E-02	3.80E-03	1.72E-03
285	570282.2	4215444	1.41E-01	2.15E-02	9.68E-03
286	570275.6	4215451	1.37E-01	2.09E-02	9.42E-03
287	570268.9	4215458	1.32E-01	2.01E-02	9.07E-03
288	570298.6	4215441	1.34E-01	2.05E-02	9.24E-03
289	570292.2	4215447	1.32E-01	2.02E-02	9.10E-03
290	570285.7	4215454	1.29E-01	1.97E-02	8.90E-03
291	570279.2	4215460	1.25E-01	1.91E-02	8.63E-03
292	570272.8	4215467	1.20E-01	1.84E-02	8.29E-03
293	570308.3	4215444	1.27E-01	1.93E-02	8.72E-03
294	570302	4215450	1.25E-01	1.91E-02	8.60E-03
295	570295.6	4215457	1.22E-01	1.87E-02	8.42E-03
296	570289.3	4215463	1.19E-01	1.82E-02	8.21E-03
297	570276.6	4215476	1.10E-01	1.68E-02	7.57E-03
298	570322.7	4215443	1.20E-01	1.84E-02	8.28E-03
299	570315.8	4215450	1.19E-01	1.82E-02	8.22E-03
300	570308.9	4215457	1.17E-01	1.79E-02	8.09E-03
301	570302	4215464	1.15E-01	1.75E-02	7.90E-03
302	570295.1	4215471	1.11E-01	1.70E-02	7.65E-03
303	570288.2	4215478	1.06E-01	1.63E-02	7.34E-03
304	570281.3	4215485	1.01E-01	1.54E-02	6.97E-03
305	570339	4215439	1.13E-01	1.72E-02	7.75E-03
306	570332.2	4215446	1.13E-01	1.73E-02	7.80E-03

307	570325.5	4215453	1.13E-01	1.72E-02	7.78E-03
308	570318.8	4215460	1.12E-01	1.70E-02	7.68E-03
309	570312	4215467	1.09E-01	1.67E-02	7.53E-03
310	570305.3	4215474	1.06E-01	1.62E-02	7.33E-03
311	570298.6	4215480	1.03E-01	1.57E-02	7.07E-03
312	570291.8	4215487	9.80E-02	1.50E-02	6.75E-03
313	570285.1	4215494	9.30E-02	1.42E-02	6.41E-03
314	570355.7	4215399	1.13E-01	1.73E-02	7.79E-03
315	570355.5	4215408	1.11E-01	1.69E-02	7.64E-03
316	570355.3	4215418	1.09E-01	1.67E-02	7.52E-03
317	570348.3	4215443	1.06E-01	1.62E-02	7.32E-03
318	570341.7	4215450	1.07E-01	1.64E-02	7.38E-03
319	570335.1	4215457	1.07E-01	1.64E-02	7.38E-03
320	570328.5	4215463	1.06E-01	1.62E-02	7.31E-03
321	570322	4215470	1.04E-01	1.59E-02	7.19E-03
322	570315.4	4215477	1.02E-01	1.56E-02	7.02E-03
323	570308.8	4215483	9.88E-02	1.51E-02	6.81E-03
324	570302.2	4215490	9.50E-02	1.45E-02	6.54E-03
325	570295.6	4215497	9.05E-02	1.38E-02	6.24E-03
326	570289	4215503	8.59E-02	1.31E-02	5.92E-03
327	570365.1	4215394	1.08E-01	1.65E-02	7.45E-03
328	570364.9	4215404	1.06E-01	1.62E-02	7.33E-03
329	570364.7	4215413	1.05E-01	1.60E-02	7.22E-03
330	570357.6	4215447	1.01E-01	1.54E-02	6.95E-03
331	570351.2	4215454	1.02E-01	1.55E-02	7.01E-03
332	570344.7	4215460	1.02E-01	1.56E-02	7.03E-03
333	570338.2	4215467	1.01E-01	1.55E-02	6.98E-03
334	570331.8	4215473	9.98E-02	1.52E-02	6.88E-03
335	570325.3	4215480	9.78E-02	1.49E-02	6.74E-03
336	570318.8	4215486	9.51E-02	1.45E-02	6.56E-03
337	570312.3	4215493	9.19E-02	1.40E-02	6.33E-03
338	570305.9	4215499	8.81E-02	1.35E-02	6.07E-03
339	570299.4	4215506	8.40E-02	1.28E-02	5.79E-03
340	570292.9	4215513	7.96E-02	1.22E-02	5.49E-03
341	570374.4	4215395	1.03E-01	1.57E-02	7.06E-03
342	570374.2	4215405	1.01E-01	1.54E-02	6.96E-03
343	570374	4215415	9.96E-02	1.52E-02	6.86E-03
344	570366.4	4215451	9.59E-02	1.47E-02	6.61E-03
345	570359.5	4215458	9.69E-02	1.48E-02	6.68E-03
346	570352.6	4215465	9.74E-02	1.49E-02	6.71E-03
347	570345.7	4215472	9.65E-02	1.47E-02	6.65E-03
348	570338.8	4215479	9.50E-02	1.45E-02	6.55E-03
349	570331.9	4215486	9.29E-02	1.42E-02	6.40E-03
350	570325	4215493	9.01E-02	1.38E-02	6.21E-03
351	570318.1	4215500	8.67E-02	1.32E-02	5.97E-03
352	570311.2	4215507	8.28E-02	1.26E-02	5.71E-03
353	570304.3	4215514	7.86E-02	1.20E-02	5.42E-03
354	570297.4	4215521	7.42E-02	1.13E-02	5.11E-03
355	570383.8	4215390	9.80E-02	1.50E-02	6.75E-03
356	570383.6	4215400	9.69E-02	1.48E-02	6.68E-03
357	570383.4	4215410	9.57E-02	1.46E-02	6.60E-03
358	570382.7	4215439	9.15E-02	1.40E-02	6.31E-03

359	570375.8	4215455	9.14E-02	1.40E-02	6.30E-03
360	570369	4215462	9.24E-02	1.41E-02	6.36E-03
361	570362.2	4215469	9.28E-02	1.42E-02	6.39E-03
362	570355.4	4215476	9.24E-02	1.41E-02	6.37E-03
363	570348.7	4215483	9.12E-02	1.39E-02	6.29E-03
364	570341.9	4215489	8.94E-02	1.37E-02	6.16E-03
365	570335.1	4215496	8.71E-02	1.33E-02	6.00E-03
366	570328.4	4215503	8.41E-02	1.28E-02	5.79E-03
367	570321.6	4215510	8.06E-02	1.23E-02	5.56E-03
368	570314.8	4215517	7.69E-02	1.17E-02	5.30E-03
369	570308.1	4215524	7.30E-02	1.11E-02	5.03E-03
370	570301.3	4215531	6.91E-02	1.06E-02	4.76E-03
371	570393	4215395	9.28E-02	1.42E-02	6.39E-03
372	570392.8	4215405	9.18E-02	1.40E-02	6.32E-03
373	570392.6	4215414	9.08E-02	1.39E-02	6.26E-03
374	570392	4215443	8.72E-02	1.33E-02	6.01E-03
375	570385.1	4215459	8.72E-02	1.33E-02	6.01E-03
376	570378.4	4215466	8.81E-02	1.35E-02	6.07E-03
377	570371.8	4215472	8.84E-02	1.35E-02	6.09E-03
378	570365.1	4215479	8.82E-02	1.35E-02	6.08E-03
379	570358.5	4215486	8.75E-02	1.34E-02	6.03E-03
380	570351.8	4215493	8.61E-02	1.31E-02	5.93E-03
381	570345.1	4215499	8.40E-02	1.28E-02	5.79E-03
382	570338.5	4215506	8.15E-02	1.24E-02	5.62E-03
383	570331.8	4215513	7.85E-02	1.20E-02	5.41E-03
384	570325.2	4215520	7.51E-02	1.15E-02	5.17E-03
385	570318.5	4215526	7.15E-02	1.09E-02	4.93E-03
386	570311.9	4215533	6.81E-02	1.04E-02	4.69E-03
387	570305.2	4215540	6.45E-02	9.85E-03	4.45E-03
388	570402.4	4215391	8.87E-02	1.36E-02	6.12E-03
389	570402.2	4215400	8.80E-02	1.34E-02	6.07E-03
390	570402	4215409	8.72E-02	1.33E-02	6.01E-03
391	570401.2	4215447	8.32E-02	1.27E-02	5.73E-03
392	570394.4	4215463	8.31E-02	1.27E-02	5.73E-03
393	570387.8	4215469	8.40E-02	1.28E-02	5.79E-03
394	570381.3	4215476	8.45E-02	1.29E-02	5.82E-03
395	570374.7	4215483	8.44E-02	1.29E-02	5.81E-03
396	570368.2	4215489	8.38E-02	1.28E-02	5.77E-03
397	570361.6	4215496	8.27E-02	1.26E-02	5.70E-03
398	570355	4215503	8.11E-02	1.24E-02	5.59E-03
399	570348.5	4215509	7.89E-02	1.20E-02	5.44E-03
400	570341.9	4215516	7.63E-02	1.16E-02	5.26E-03
401	570335.4	4215523	7.33E-02	1.12E-02	5.05E-03
402	570328.8	4215529	7.01E-02	1.07E-02	4.83E-03
403	570322.3	4215536	6.69E-02	1.02E-02	4.61E-03
404	570315.7	4215542	6.36E-02	9.71E-03	4.38E-03
405	570309.1	4215549	6.01E-02	9.18E-03	4.14E-03
406	570411.7	4215391	8.46E-02	1.29E-02	5.83E-03
407	570411.5	4215401	8.40E-02	1.28E-02	5.79E-03
408	570411.3	4215411	8.33E-02	1.27E-02	5.74E-03
409	570410.6	4215440	8.06E-02	1.23E-02	5.56E-03
410	570410.4	4215450	7.95E-02	1.21E-02	5.48E-03

411	570403.3	4215467	7.94E-02	1.21E-02	5.47E-03
412	570396.3	4215474	8.02E-02	1.22E-02	5.52E-03
413	570389.4	4215481	8.07E-02	1.23E-02	5.56E-03
414	570382.5	4215488	8.08E-02	1.23E-02	5.57E-03
415	570375.6	4215495	8.01E-02	1.22E-02	5.52E-03
416	570368.7	4215502	7.89E-02	1.20E-02	5.43E-03
417	570361.8	4215509	7.72E-02	1.18E-02	5.32E-03
418	570354.9	4215516	7.52E-02	1.15E-02	5.18E-03
419	570348	4215523	7.25E-02	1.11E-02	5.00E-03
420	570341.1	4215530	6.96E-02	1.06E-02	4.79E-03
421	570334.2	4215537	6.64E-02	1.01E-02	4.58E-03
422	570327.3	4215544	6.32E-02	9.64E-03	4.35E-03
423	570320.4	4215551	5.98E-02	9.12E-03	4.12E-03
424	570313.5	4215558	5.62E-02	8.59E-03	3.87E-03
425	570421.1	4215386	8.10E-02	1.24E-02	5.58E-03
426	570420.9	4215396	8.06E-02	1.23E-02	5.55E-03
427	570420.7	4215406	8.00E-02	1.22E-02	5.52E-03
428	570420.5	4215415	7.95E-02	1.21E-02	5.48E-03
429	570419.8	4215444	7.69E-02	1.17E-02	5.30E-03
430	570419.6	4215454	7.59E-02	1.16E-02	5.23E-03
431	570412.6	4215471	7.58E-02	1.16E-02	5.22E-03
432	570405.8	4215478	7.65E-02	1.17E-02	5.27E-03
433	570399	4215484	7.69E-02	1.17E-02	5.30E-03
434	570392.2	4215491	7.71E-02	1.18E-02	5.31E-03
435	570385.4	4215498	7.68E-02	1.17E-02	5.29E-03
436	570378.6	4215505	7.58E-02	1.16E-02	5.22E-03
437	570371.8	4215512	7.43E-02	1.14E-02	5.12E-03
438	570365	4215519	7.26E-02	1.11E-02	5.00E-03
439	570358.2	4215526	7.04E-02	1.08E-02	4.85E-03
440	570351.4	4215533	6.80E-02	1.04E-02	4.68E-03
441	570344.6	4215540	6.51E-02	9.94E-03	4.49E-03
442	570337.8	4215547	6.21E-02	9.48E-03	4.28E-03
443	570331	4215553	5.89E-02	9.00E-03	4.06E-03
444	570324.2	4215560	5.57E-02	8.50E-03	3.84E-03
445	570317.4	4215567	5.22E-02	7.97E-03	3.60E-03
446	570430.5	4215382	7.74E-02	1.18E-02	5.34E-03
447	570430.3	4215391	7.73E-02	1.18E-02	5.33E-03
448	570430.1	4215401	7.70E-02	1.18E-02	5.30E-03
449	570429.9	4215410	7.65E-02	1.17E-02	5.27E-03
450	570429.2	4215439	7.43E-02	1.13E-02	5.12E-03
451	570429	4215449	7.34E-02	1.12E-02	5.06E-03
452	570428.8	4215458	7.24E-02	1.11E-02	4.99E-03
453	570421.9	4215474	7.21E-02	1.10E-02	4.97E-03
454	570415.2	4215481	7.29E-02	1.11E-02	5.03E-03
455	570408.5	4215488	7.34E-02	1.12E-02	5.06E-03
456	570401.8	4215495	7.36E-02	1.12E-02	5.07E-03
457	570395.1	4215502	7.33E-02	1.12E-02	5.05E-03
458	570388.4	4215508	7.27E-02	1.11E-02	5.01E-03
459	570381.7	4215515	7.16E-02	1.09E-02	4.93E-03
460	570375	4215522	7.00E-02	1.07E-02	4.82E-03
461	570368.3	4215529	6.81E-02	1.04E-02	4.69E-03
462	570361.6	4215536	6.60E-02	1.01E-02	4.55E-03

463	570354.9	4215542	6.36E-02	9.71E-03	4.38E-03
464	570348.2	4215549	6.09E-02	9.29E-03	4.19E-03
465	570341.5	4215556	5.80E-02	8.85E-03	4.00E-03
466	570334.8	4215563	5.49E-02	8.39E-03	3.79E-03
467	570328.1	4215570	5.18E-02	7.90E-03	3.57E-03
468	570321.4	4215576	4.85E-02	7.41E-03	3.34E-03
469	570439.7	4215387	7.40E-02	1.13E-02	5.10E-03
470	570439.5	4215396	7.39E-02	1.13E-02	5.09E-03
471	570439.3	4215406	7.37E-02	1.13E-02	5.08E-03
472	570439.1	4215415	7.32E-02	1.12E-02	5.04E-03
473	570438.4	4215443	7.09E-02	1.08E-02	4.89E-03
474	570438.2	4215453	7.01E-02	1.07E-02	4.83E-03
475	570438	4215462	6.92E-02	1.06E-02	4.77E-03
476	570431.2	4215478	6.87E-02	1.05E-02	4.74E-03
477	570424.6	4215485	6.94E-02	1.06E-02	4.78E-03
478	570417.9	4215492	7.00E-02	1.07E-02	4.82E-03
479	570411.3	4215498	7.02E-02	1.07E-02	4.84E-03
480	570404.7	4215505	7.00E-02	1.07E-02	4.83E-03
481	570398.1	4215512	6.95E-02	1.06E-02	4.79E-03
482	570391.5	4215519	6.87E-02	1.05E-02	4.73E-03
483	570384.9	4215525	6.75E-02	1.03E-02	4.65E-03
484	570378.2	4215532	6.58E-02	1.00E-02	4.53E-03
485	570371.6	4215539	6.39E-02	9.75E-03	4.40E-03
486	570365	4215545	6.17E-02	9.43E-03	4.25E-03
487	570358.4	4215552	5.94E-02	9.07E-03	4.09E-03
488	570351.8	4215559	5.69E-02	8.68E-03	3.92E-03
489	570345.2	4215566	5.41E-02	8.26E-03	3.73E-03
490	570338.6	4215572	5.12E-02	7.81E-03	3.53E-03
491	570331.9	4215579	4.82E-02	7.36E-03	3.32E-03
492	570325.3	4215586	4.35E-02	6.65E-03	3.00E-03
493	570449.2	4215377	7.09E-02	1.08E-02	4.88E-03
494	570449	4215387	7.09E-02	1.08E-02	4.89E-03
495	570448.8	4215397	7.08E-02	1.08E-02	4.88E-03
496	570448.5	4215407	7.05E-02	1.08E-02	4.86E-03
497	570448.3	4215416	7.00E-02	1.07E-02	4.83E-03
498	570447.7	4215446	6.79E-02	1.04E-02	4.68E-03
499	570447.4	4215456	6.70E-02	1.02E-02	4.62E-03
500	570447.2	4215466	6.61E-02	1.01E-02	4.55E-03
501	570440.1	4215482	6.55E-02	1.00E-02	4.51E-03
502	570433.2	4215489	6.61E-02	1.01E-02	4.56E-03
503	570426.3	4215496	6.66E-02	1.02E-02	4.59E-03
504	570419.4	4215503	6.69E-02	1.02E-02	4.61E-03
505	570412.5	4215510	6.69E-02	1.02E-02	4.61E-03
506	570405.6	4215517	6.63E-02	1.01E-02	4.57E-03
507	570398.7	4215524	6.55E-02	1.00E-02	4.51E-03
508	570391.8	4215531	6.42E-02	9.81E-03	4.43E-03
509	570384.9	4215538	6.27E-02	9.57E-03	4.32E-03
510	570378	4215546	6.07E-02	9.28E-03	4.19E-03
511	570371.1	4215553	5.86E-02	8.95E-03	4.04E-03
512	570364.2	4215560	5.63E-02	8.60E-03	3.88E-03
513	570357.3	4215567	5.38E-02	8.21E-03	3.70E-03
514	570350.4	4215574	5.10E-02	7.79E-03	3.52E-03

515	570343.5	4215581	4.82E-02	7.36E-03	3.32E-03
516	570336.5	4215588	4.53E-02	6.91E-03	3.12E-03
517	570329.6	4215595	4.24E-02	6.47E-03	2.92E-03
518	570458.6	4215373	6.82E-02	1.04E-02	4.70E-03
519	570458.4	4215382	6.81E-02	1.04E-02	4.69E-03
520	570458.2	4215392	6.79E-02	1.04E-02	4.68E-03
521	570458	4215402	6.76E-02	1.03E-02	4.66E-03
522	570457.7	4215411	6.72E-02	1.03E-02	4.63E-03
523	570457.1	4215441	6.55E-02	1.00E-02	4.51E-03
524	570456.9	4215450	6.47E-02	9.89E-03	4.46E-03
525	570456.6	4215460	6.39E-02	9.75E-03	4.40E-03
526	570456.4	4215470	6.28E-02	9.59E-03	4.33E-03
527	570449.4	4215486	6.23E-02	9.51E-03	4.29E-03
528	570442.6	4215493	6.30E-02	9.61E-03	4.34E-03
529	570435.8	4215500	6.34E-02	9.68E-03	4.37E-03
530	570429	4215507	6.37E-02	9.72E-03	4.39E-03
531	570422.1	4215514	6.37E-02	9.73E-03	4.39E-03
532	570415.3	4215521	6.35E-02	9.70E-03	4.38E-03
533	570408.5	4215528	6.29E-02	9.60E-03	4.33E-03
534	570401.7	4215535	6.18E-02	9.43E-03	4.26E-03
535	570394.9	4215542	6.04E-02	9.23E-03	4.16E-03
536	570388.1	4215548	5.88E-02	8.98E-03	4.05E-03
537	570381.3	4215555	5.70E-02	8.70E-03	3.92E-03
538	570374.5	4215562	5.49E-02	8.38E-03	3.78E-03
539	570367.6	4215569	5.26E-02	8.03E-03	3.62E-03
540	570360.8	4215576	5.02E-02	7.66E-03	3.46E-03
541	570354	4215583	4.76E-02	7.27E-03	3.28E-03
542	570347.2	4215590	4.50E-02	6.87E-03	3.10E-03
543	570340.4	4215597	4.23E-02	6.46E-03	2.92E-03
544	570333.6	4215604	3.97E-02	6.06E-03	2.73E-03
545	570468	4215368	6.57E-02	1.00E-02	4.53E-03
546	570467.8	4215378	6.55E-02	1.00E-02	4.52E-03
547	570467.6	4215387	6.53E-02	9.97E-03	4.50E-03
548	570467.4	4215397	6.49E-02	9.91E-03	4.47E-03
549	570467.1	4215407	6.44E-02	9.84E-03	4.44E-03
550	570466.9	4215416	6.41E-02	9.79E-03	4.42E-03
551	570466.3	4215445	6.25E-02	9.55E-03	4.31E-03
552	570466.1	4215454	6.18E-02	9.43E-03	4.26E-03
553	570465.8	4215464	6.09E-02	9.30E-03	4.20E-03
554	570465.6	4215474	5.98E-02	9.13E-03	4.12E-03
555	570458.7	4215490	5.93E-02	9.05E-03	4.08E-03
556	570452	4215497	5.99E-02	9.14E-03	4.12E-03
557	570445.2	4215504	6.03E-02	9.21E-03	4.16E-03
558	570438.5	4215511	6.06E-02	9.26E-03	4.18E-03
559	570431.8	4215517	6.07E-02	9.27E-03	4.18E-03
560	570425	4215524	6.06E-02	9.25E-03	4.18E-03
561	570418.3	4215531	6.02E-02	9.19E-03	4.15E-03
562	570411.6	4215538	5.95E-02	9.08E-03	4.10E-03
563	570404.8	4215545	5.83E-02	8.90E-03	4.02E-03
564	570398.1	4215552	5.69E-02	8.69E-03	3.92E-03
565	570391.4	4215558	5.52E-02	8.43E-03	3.81E-03
566	570384.7	4215565	5.34E-02	8.15E-03	3.68E-03

567	570377.9	4215572	5.13E-02	7.84E-03	3.54E-03
568	570371.2	4215579	4.92E-02	7.51E-03	3.39E-03
569	570364.5	4215586	4.69E-02	7.17E-03	3.23E-03
570	570357.7	4215593	4.45E-02	6.80E-03	3.07E-03
571	570351	4215599	4.21E-02	6.43E-03	2.90E-03
572	570344.3	4215606	3.96E-02	6.05E-03	2.73E-03
573	570337.5	4215613	3.72E-02	5.69E-03	2.57E-03
574	570477.4	4215364	6.32E-02	9.66E-03	4.36E-03
575	570477.2	4215373	6.32E-02	9.65E-03	4.35E-03
576	570477	4215383	6.29E-02	9.61E-03	4.34E-03
577	570476.8	4215392	6.26E-02	9.55E-03	4.31E-03
578	570476.5	4215402	6.21E-02	9.48E-03	4.28E-03
579	570476.3	4215411	6.17E-02	9.42E-03	4.25E-03
580	570475.7	4215440	6.05E-02	9.23E-03	4.17E-03
581	570475.5	4215449	5.98E-02	9.13E-03	4.12E-03
582	570475.3	4215459	5.90E-02	9.01E-03	4.06E-03
583	570475	4215468	5.81E-02	8.87E-03	4.00E-03
584	570474.8	4215478	5.70E-02	8.70E-03	3.93E-03
585	570468	4215494	5.64E-02	8.61E-03	3.89E-03
586	570461.3	4215501	5.69E-02	8.69E-03	3.92E-03
587	570454.7	4215507	5.73E-02	8.75E-03	3.95E-03
588	570448	4215514	5.77E-02	8.81E-03	3.97E-03
589	570441.3	4215521	5.79E-02	8.84E-03	3.99E-03
590	570434.7	4215528	5.78E-02	8.82E-03	3.98E-03
591	570428	4215534	5.75E-02	8.77E-03	3.96E-03
592	570421.4	4215541	5.69E-02	8.69E-03	3.92E-03
593	570414.7	4215548	5.62E-02	8.58E-03	3.87E-03
594	570408.1	4215555	5.50E-02	8.40E-03	3.79E-03
595	570401.4	4215561	5.35E-02	8.17E-03	3.69E-03
596	570394.7	4215568	5.18E-02	7.91E-03	3.57E-03
597	570388.1	4215575	5.00E-02	7.64E-03	3.45E-03
598	570381.4	4215582	4.81E-02	7.34E-03	3.31E-03
599	570374.8	4215588	4.61E-02	7.03E-03	3.17E-03
600	570368.1	4215595	4.39E-02	6.70E-03	3.03E-03
601	570361.5	4215602	4.17E-02	6.37E-03	2.87E-03
602	570354.8	4215609	3.95E-02	6.03E-03	2.72E-03
603	570348.2	4215615	3.72E-02	5.68E-03	2.56E-03
604	570341.5	4215622	3.50E-02	5.35E-03	2.41E-03
605	570486.7	4215363	6.08E-02	9.29E-03	4.19E-03
606	570486.5	4215373	6.08E-02	9.28E-03	4.19E-03
607	570486.3	4215383	6.06E-02	9.25E-03	4.18E-03
608	570486	4215393	6.03E-02	9.21E-03	4.16E-03
609	570485.8	4215403	5.99E-02	9.14E-03	4.13E-03
610	570485.6	4215412	5.95E-02	9.09E-03	4.10E-03
611	570484.9	4215442	5.81E-02	8.87E-03	4.00E-03
612	570484.7	4215452	5.74E-02	8.77E-03	3.96E-03
613	570484.5	4215462	5.66E-02	8.65E-03	3.90E-03
614	570484.3	4215471	5.57E-02	8.50E-03	3.84E-03
615	570484.1	4215481	5.46E-02	8.34E-03	3.76E-03
616	570476.9	4215498	5.38E-02	8.22E-03	3.71E-03
617	570470	4215505	5.42E-02	8.27E-03	3.73E-03
618	570463.1	4215512	5.46E-02	8.33E-03	3.76E-03

619	570456.2	4215519	5.49E-02	8.38E-03	3.78E-03
620	570449.3	4215526	5.51E-02	8.41E-03	3.79E-03
621	570442.4	4215533	5.50E-02	8.41E-03	3.79E-03
622	570435.5	4215540	5.47E-02	8.36E-03	3.77E-03
623	570428.6	4215547	5.42E-02	8.28E-03	3.74E-03
624	570421.7	4215554	5.35E-02	8.17E-03	3.69E-03
625	570414.8	4215561	5.25E-02	8.01E-03	3.62E-03
626	570407.9	4215568	5.10E-02	7.79E-03	3.51E-03
627	570401	4215575	4.94E-02	7.54E-03	3.40E-03
628	570394.1	4215582	4.76E-02	7.27E-03	3.28E-03
629	570387.2	4215589	4.57E-02	6.98E-03	3.15E-03
630	570380.3	4215596	4.37E-02	6.67E-03	3.01E-03
631	570373.4	4215603	4.16E-02	6.35E-03	2.87E-03
632	570366.5	4215610	3.95E-02	6.03E-03	2.72E-03
633	570359.6	4215617	3.73E-02	5.70E-03	2.57E-03
634	570352.7	4215624	3.52E-02	5.37E-03	2.42E-03
635	570345.8	4215631	3.31E-02	5.05E-03	2.28E-03
636	570496.1	4215359	5.86E-02	8.94E-03	4.04E-03
637	570495.9	4215369	5.86E-02	8.95E-03	4.04E-03
638	570495.7	4215378	5.85E-02	8.93E-03	4.03E-03
639	570495.5	4215388	5.83E-02	8.90E-03	4.02E-03
640	570495.2	4215398	5.80E-02	8.86E-03	4.00E-03
641	570495	4215407	5.77E-02	8.80E-03	3.97E-03
642	570494.8	4215417	5.73E-02	8.75E-03	3.95E-03
643	570494.1	4215446	5.57E-02	8.51E-03	3.84E-03
644	570493.9	4215456	5.50E-02	8.40E-03	3.79E-03
645	570493.7	4215466	5.43E-02	8.29E-03	3.74E-03
646	570493.5	4215475	5.33E-02	8.14E-03	3.67E-03
647	570493.3	4215485	5.23E-02	7.98E-03	3.60E-03
648	570486.2	4215502	5.15E-02	7.87E-03	3.55E-03
649	570479.4	4215509	5.18E-02	7.90E-03	3.57E-03
650	570472.6	4215516	5.19E-02	7.92E-03	3.58E-03
651	570465.7	4215523	5.21E-02	7.96E-03	3.59E-03
652	570458.9	4215530	5.23E-02	7.99E-03	3.60E-03
653	570452.1	4215536	5.23E-02	7.99E-03	3.61E-03
654	570445.3	4215543	5.22E-02	7.97E-03	3.60E-03
655	570438.4	4215550	5.18E-02	7.92E-03	3.57E-03
656	570431.6	4215557	5.12E-02	7.82E-03	3.53E-03
657	570424.8	4215564	5.04E-02	7.69E-03	3.47E-03
658	570418	4215571	4.93E-02	7.53E-03	3.40E-03
659	570411.1	4215578	4.79E-02	7.32E-03	3.30E-03
660	570404.3	4215585	4.64E-02	7.08E-03	3.20E-03
661	570397.5	4215592	4.47E-02	6.82E-03	3.08E-03
662	570390.7	4215599	4.29E-02	6.54E-03	2.95E-03
663	570383.9	4215606	4.10E-02	6.26E-03	2.82E-03
664	570377	4215613	3.90E-02	5.96E-03	2.69E-03
665	570370.2	4215620	3.70E-02	5.65E-03	2.55E-03
666	570363.4	4215627	3.50E-02	5.35E-03	2.41E-03
667	570356.6	4215633	3.30E-02	5.04E-03	2.28E-03
668	570349.7	4215640	3.11E-02	4.75E-03	2.14E-03
669	570505.5	4215355	5.64E-02	8.61E-03	3.89E-03
670	570505.3	4215364	5.65E-02	8.62E-03	3.89E-03

671	570505.1	4215374	5.65E-02	8.62E-03	3.89E-03
672	570504.9	4215383	5.64E-02	8.61E-03	3.88E-03
673	570504.6	4215393	5.62E-02	8.58E-03	3.87E-03
674	570504.4	4215403	5.59E-02	8.54E-03	3.85E-03
675	570504.2	4215412	5.56E-02	8.48E-03	3.83E-03
676	570503.6	4215441	5.41E-02	8.25E-03	3.72E-03
677	570503.3	4215451	5.35E-02	8.16E-03	3.68E-03
678	570503.1	4215460	5.28E-02	8.06E-03	3.64E-03
679	570502.9	4215470	5.20E-02	7.94E-03	3.58E-03
680	570502.7	4215480	5.11E-02	7.80E-03	3.52E-03
681	570502.5	4215489	5.01E-02	7.65E-03	3.45E-03
682	570495.5	4215506	4.94E-02	7.54E-03	3.40E-03
683	570488.7	4215513	4.96E-02	7.57E-03	3.42E-03
684	570482	4215519	4.97E-02	7.59E-03	3.42E-03
685	570475.2	4215526	4.97E-02	7.58E-03	3.42E-03
686	570468.5	4215533	4.97E-02	7.59E-03	3.43E-03
687	570461.7	4215540	4.98E-02	7.60E-03	3.43E-03
688	570455	4215547	4.97E-02	7.59E-03	3.42E-03
689	570448.2	4215554	4.95E-02	7.56E-03	3.41E-03
690	570441.5	4215561	4.90E-02	7.49E-03	3.38E-03
691	570434.7	4215567	4.83E-02	7.38E-03	3.33E-03
692	570428	4215574	4.74E-02	7.24E-03	3.27E-03
693	570421.2	4215581	4.63E-02	7.07E-03	3.19E-03
694	570414.5	4215588	4.51E-02	6.88E-03	3.11E-03
695	570407.7	4215595	4.35E-02	6.65E-03	3.00E-03
696	570401	4215602	4.19E-02	6.40E-03	2.89E-03
697	570394.2	4215608	4.02E-02	6.14E-03	2.77E-03
698	570387.5	4215615	3.85E-02	5.87E-03	2.65E-03
699	570380.7	4215622	3.66E-02	5.59E-03	2.52E-03
700	570373.9	4215629	3.47E-02	5.31E-03	2.39E-03
701	570367.2	4215636	3.29E-02	5.02E-03	2.27E-03
702	570360.4	4215643	3.11E-02	4.74E-03	2.14E-03
703	570353.7	4215650	2.93E-02	4.47E-03	2.02E-03
704	570514.9	4215350	5.43E-02	8.30E-03	3.74E-03
705	570514.7	4215360	5.44E-02	8.31E-03	3.75E-03
706	570514.5	4215369	5.45E-02	8.32E-03	3.75E-03
707	570514.3	4215379	5.44E-02	8.31E-03	3.75E-03
708	570514	4215388	5.43E-02	8.29E-03	3.74E-03
709	570513.8	4215398	5.41E-02	8.27E-03	3.73E-03
710	570513.6	4215407	5.39E-02	8.22E-03	3.71E-03
711	570513.4	4215417	5.35E-02	8.17E-03	3.69E-03
712	570512.7	4215446	5.21E-02	7.95E-03	3.59E-03
713	570512.5	4215455	5.15E-02	7.86E-03	3.55E-03
714	570512.3	4215465	5.08E-02	7.76E-03	3.50E-03
715	570512.1	4215474	5.01E-02	7.64E-03	3.45E-03
716	570511.9	4215484	4.92E-02	7.52E-03	3.39E-03
717	570511.7	4215493	4.83E-02	7.38E-03	3.33E-03
718	570504.8	4215510	4.74E-02	7.24E-03	3.27E-03
719	570498.1	4215516	4.76E-02	7.26E-03	3.28E-03
720	570491.4	4215523	4.77E-02	7.28E-03	3.28E-03
721	570484.7	4215530	4.77E-02	7.28E-03	3.28E-03
722	570478	4215537	4.75E-02	7.26E-03	3.28E-03

723	570471.3	4215543	4.74E-02	7.23E-03	3.26E-03
724	570464.7	4215550	4.73E-02	7.22E-03	3.26E-03
725	570458	4215557	4.71E-02	7.20E-03	3.25E-03
726	570451.3	4215564	4.68E-02	7.15E-03	3.23E-03
727	570444.6	4215571	4.63E-02	7.07E-03	3.19E-03
728	570437.9	4215577	4.56E-02	6.96E-03	3.14E-03
729	570431.2	4215584	4.46E-02	6.82E-03	3.08E-03
730	570424.5	4215591	4.35E-02	6.65E-03	3.00E-03
731	570417.8	4215598	4.23E-02	6.46E-03	2.91E-03
732	570411.2	4215605	4.09E-02	6.24E-03	2.82E-03
733	570404.5	4215611	3.94E-02	6.01E-03	2.71E-03
734	570397.8	4215618	3.78E-02	5.77E-03	2.60E-03
735	570391.1	4215625	3.61E-02	5.51E-03	2.49E-03
736	570384.4	4215632	3.44E-02	5.25E-03	2.37E-03
737	570377.7	4215638	3.27E-02	4.99E-03	2.25E-03
738	570371	4215645	3.09E-02	4.72E-03	2.13E-03
739	570364.3	4215652	2.92E-02	4.46E-03	2.01E-03
740	570357.7	4215659	2.76E-02	4.21E-03	1.90E-03
741	569937.1	4214980	1.94E-02	2.97E-03	1.34E-03
742	569941.8	4214988	2.08E-02	3.18E-03	1.44E-03
743	569895.6	4214925	1.41E-02	2.15E-03	9.69E-04
744	569900.3	4214934	1.45E-02	2.22E-03	1.00E-03
745	569905	4214942	1.51E-02	2.31E-03	1.04E-03
746	569909.6	4214951	1.58E-02	2.41E-03	1.09E-03
747	569914.3	4214959	1.66E-02	2.54E-03	1.15E-03
748	569919	4214968	1.77E-02	2.70E-03	1.22E-03
749	569923.7	4214976	1.88E-02	2.87E-03	1.30E-03
750	569928.3	4214985	2.01E-02	3.07E-03	1.38E-03
751	569933	4214993	2.16E-02	3.29E-03	1.49E-03
752	569877.5	4214913	1.35E-02	2.06E-03	9.32E-04
753	569882.2	4214922	1.39E-02	2.12E-03	9.58E-04
754	569886.9	4214930	1.43E-02	2.19E-03	9.88E-04
755	569891.5	4214939	1.49E-02	2.27E-03	1.02E-03
756	569896.2	4214947	1.55E-02	2.36E-03	1.07E-03
757	569900.9	4214956	1.62E-02	2.48E-03	1.12E-03
758	569905.5	4214964	1.72E-02	2.62E-03	1.18E-03
759	569910.2	4214973	1.82E-02	2.78E-03	1.26E-03
760	569914.9	4214981	1.94E-02	2.96E-03	1.34E-03
761	569919.6	4214990	2.08E-02	3.17E-03	1.43E-03
762	569924.2	4214998	2.24E-02	3.42E-03	1.54E-03
763	569928.9	4215007	2.42E-02	3.69E-03	1.67E-03
764	569868.7	4214918	1.38E-02	2.11E-03	9.50E-04
765	569873.4	4214926	1.42E-02	2.17E-03	9.78E-04
766	569878.1	4214935	1.46E-02	2.24E-03	1.01E-03
767	569882.8	4214943	1.52E-02	2.32E-03	1.05E-03
768	569887.4	4214952	1.59E-02	2.42E-03	1.09E-03
769	569892.1	4214960	1.67E-02	2.55E-03	1.15E-03
770	569896.8	4214969	1.77E-02	2.71E-03	1.22E-03
771	569901.5	4214977	1.88E-02	2.88E-03	1.30E-03
772	569906.1	4214986	2.01E-02	3.07E-03	1.38E-03
773	569910.8	4214994	2.16E-02	3.29E-03	1.49E-03
774	569915.5	4215003	2.33E-02	3.55E-03	1.60E-03

775	569920.2	4215011	2.52E-02	3.85E-03	1.74E-03
776	569860	4214923	1.41E-02	2.15E-03	9.71E-04
777	569864.7	4214931	1.45E-02	2.21E-03	9.98E-04
778	569869.3	4214940	1.50E-02	2.29E-03	1.03E-03
779	569874	4214948	1.56E-02	2.38E-03	1.07E-03
780	569878.7	4214957	1.63E-02	2.49E-03	1.12E-03
781	569883.3	4214965	1.73E-02	2.63E-03	1.19E-03
782	569888	4214974	1.83E-02	2.80E-03	1.26E-03
783	569892.7	4214982	1.95E-02	2.98E-03	1.34E-03
784	569897.4	4214991	2.08E-02	3.18E-03	1.44E-03
785	569902	4214999	2.24E-02	3.42E-03	1.54E-03
786	569906.7	4215008	2.42E-02	3.69E-03	1.67E-03
787	569911.4	4215016	2.62E-02	4.01E-03	1.81E-03
788	569851.2	4214927	1.44E-02	2.20E-03	9.93E-04
789	569855.9	4214936	1.48E-02	2.26E-03	1.02E-03
790	569860.6	4214944	1.53E-02	2.34E-03	1.06E-03
791	569865.2	4214953	1.60E-02	2.44E-03	1.10E-03
792	569869.9	4214961	1.68E-02	2.57E-03	1.16E-03
793	569874.6	4214970	1.78E-02	2.72E-03	1.23E-03
794	569879.3	4214978	1.89E-02	2.89E-03	1.30E-03
795	569883.9	4214987	2.01E-02	3.08E-03	1.39E-03
796	569888.6	4214996	2.16E-02	3.30E-03	1.49E-03
797	569893.3	4215004	2.33E-02	3.56E-03	1.61E-03
798	569898	4215013	2.52E-02	3.85E-03	1.74E-03
799	569902.6	4215021	2.73E-02	4.18E-03	1.88E-03
800	569842.5	4214932	1.47E-02	2.24E-03	1.01E-03
801	569847.1	4214941	1.51E-02	2.31E-03	1.04E-03
802	569851.8	4214949	1.57E-02	2.40E-03	1.08E-03
803	569856.5	4214958	1.64E-02	2.51E-03	1.13E-03
804	569861.1	4214966	1.74E-02	2.65E-03	1.20E-03
805	569865.8	4214975	1.84E-02	2.81E-03	1.27E-03
806	569870.5	4214983	1.96E-02	2.99E-03	1.35E-03
807	569875.2	4214992	2.09E-02	3.19E-03	1.44E-03
808	569879.8	4215000	2.25E-02	3.43E-03	1.55E-03
809	569884.5	4215009	2.42E-02	3.70E-03	1.67E-03
810	569889.2	4215017	2.62E-02	4.01E-03	1.81E-03
811	569893.9	4215026	2.85E-02	4.35E-03	1.96E-03
812	569833.7	4214937	1.50E-02	2.29E-03	1.03E-03
813	569838.4	4214946	1.55E-02	2.36E-03	1.07E-03
814	569843	4214954	1.61E-02	2.46E-03	1.11E-03
815	569847.7	4214963	1.69E-02	2.59E-03	1.17E-03
816	569852.4	4214971	1.79E-02	2.74E-03	1.23E-03
817	569857.1	4214980	1.90E-02	2.90E-03	1.31E-03
818	569861.7	4214988	2.02E-02	3.09E-03	1.39E-03
819	569866.4	4214997	2.17E-02	3.31E-03	1.49E-03
820	569871.1	4215005	2.33E-02	3.56E-03	1.61E-03
821	569875.8	4215014	2.52E-02	3.85E-03	1.74E-03
822	569880.4	4215022	2.73E-02	4.17E-03	1.88E-03
823	569885.1	4215031	2.97E-02	4.53E-03	2.05E-03
824	569941.2	4215133	1.79E-01	2.73E-02	1.23E-02
825	569945.9	4215141	1.99E-01	3.04E-02	1.37E-02
826	569950.6	4215150	2.19E-01	3.35E-02	1.51E-02

827	569824.9	4214942	1.53E-02	2.34E-03	1.06E-03
828	569829.6	4214950	1.59E-02	2.42E-03	1.09E-03
829	569834.3	4214959	1.66E-02	2.53E-03	1.14E-03
830	569838.9	4214967	1.75E-02	2.67E-03	1.20E-03
831	569843.6	4214976	1.85E-02	2.82E-03	1.27E-03
832	569848.3	4214984	1.96E-02	2.99E-03	1.35E-03
833	569853	4214993	2.09E-02	3.19E-03	1.44E-03
834	569857.6	4215001	2.25E-02	3.43E-03	1.55E-03
835	569862.3	4215010	2.42E-02	3.70E-03	1.67E-03
836	569867	4215018	2.62E-02	4.00E-03	1.80E-03
837	569871.7	4215027	2.83E-02	4.33E-03	1.95E-03
838	569876.3	4215035	3.08E-02	4.71E-03	2.12E-03
839	569927.8	4215129	1.54E-01	2.36E-02	1.06E-02
840	569932.4	4215137	1.72E-01	2.63E-02	1.19E-02
841	569937.1	4215146	1.89E-01	2.89E-02	1.31E-02
842	569941.8	4215154	2.07E-01	3.15E-02	1.42E-02
843	569816.2	4214947	1.57E-02	2.39E-03	1.08E-03
844	569820.8	4214955	1.63E-02	2.48E-03	1.12E-03
845	569825.5	4214964	1.71E-02	2.61E-03	1.18E-03
846	569830.2	4214972	1.80E-02	2.75E-03	1.24E-03
847	569834.9	4214981	1.90E-02	2.91E-03	1.31E-03
848	569839.5	4214989	2.02E-02	3.09E-03	1.39E-03
849	569844.2	4214998	2.16E-02	3.31E-03	1.49E-03
850	569848.9	4215006	2.33E-02	3.55E-03	1.60E-03
851	569853.6	4215015	2.51E-02	3.83E-03	1.73E-03
852	569858.2	4215023	2.71E-02	4.14E-03	1.87E-03
853	569862.9	4215032	2.94E-02	4.49E-03	2.02E-03
854	569914.3	4215125	1.28E-01	1.96E-02	8.84E-03
855	569919	4215134	1.51E-01	2.31E-02	1.04E-02
856	569923.7	4215142	1.65E-01	2.52E-02	1.14E-02
857	569928.4	4215151	1.80E-01	2.75E-02	1.24E-02
858	569933	4215159	1.95E-01	2.97E-02	1.34E-02
859	569802.7	4214943	1.56E-02	2.38E-03	1.07E-03
860	569807.4	4214952	1.61E-02	2.45E-03	1.11E-03
861	569812.1	4214960	1.67E-02	2.55E-03	1.15E-03
862	569816.7	4214969	1.76E-02	2.68E-03	1.21E-03
863	569821.4	4214977	1.85E-02	2.83E-03	1.28E-03
864	569826.1	4214986	1.96E-02	2.99E-03	1.35E-03
865	569830.8	4214994	2.09E-02	3.19E-03	1.44E-03
866	569835.4	4215003	2.24E-02	3.42E-03	1.54E-03
867	569840.1	4215011	2.41E-02	3.68E-03	1.66E-03
868	569844.8	4215020	2.60E-02	3.96E-03	1.79E-03
869	569849.5	4215028	2.80E-02	4.28E-03	1.93E-03
870	569854.1	4215037	3.04E-02	4.64E-03	2.09E-03
871	569905.6	4215130	1.27E-01	1.94E-02	8.75E-03
872	569910.2	4215139	1.47E-01	2.24E-02	1.01E-02
873	569914.9	4215147	1.58E-01	2.41E-02	1.09E-02
874	569919.6	4215156	1.71E-01	2.62E-02	1.18E-02
875	569924.3	4215164	1.84E-01	2.80E-02	1.27E-02
876	569792.9	4214939	1.54E-02	2.36E-03	1.06E-03
877	569794	4214948	1.59E-02	2.43E-03	1.10E-03
878	569798.6	4214956	1.65E-02	2.51E-03	1.13E-03

879	569803.3	4214965	1.72E-02	2.63E-03	1.19E-03
880	569808	4214973	1.81E-02	2.76E-03	1.24E-03
881	569812.7	4214982	1.90E-02	2.90E-03	1.31E-03
882	569817.3	4214990	2.02E-02	3.08E-03	1.39E-03
883	569822	4214999	2.16E-02	3.29E-03	1.49E-03
884	569826.7	4215007	2.31E-02	3.53E-03	1.59E-03
885	569831.4	4215016	2.48E-02	3.79E-03	1.71E-03
886	569836	4215024	2.68E-02	4.09E-03	1.84E-03
887	569840.7	4215033	2.89E-02	4.42E-03	1.99E-03
888	569896.8	4215135	1.26E-01	1.92E-02	8.66E-03
889	569901.5	4215143	1.42E-01	2.17E-02	9.78E-03
890	569906.2	4215152	1.51E-01	2.31E-02	1.04E-02
891	569910.8	4215160	1.63E-01	2.49E-02	1.12E-02
892	569915.5	4215169	1.73E-01	2.65E-02	1.19E-02
893	569784.2	4214944	1.58E-02	2.41E-03	1.09E-03
894	569783.1	4214935	1.54E-02	2.35E-03	1.06E-03
895	569789.9	4214961	1.69E-02	2.58E-03	1.17E-03
896	569794.5	4214970	1.77E-02	2.70E-03	1.22E-03
897	569799.2	4214978	1.86E-02	2.83E-03	1.28E-03
898	569803.9	4214987	1.96E-02	2.99E-03	1.35E-03
899	569808.6	4214995	2.08E-02	3.18E-03	1.43E-03
900	569813.2	4215004	2.22E-02	3.39E-03	1.53E-03
901	569817.9	4215012	2.38E-02	3.63E-03	1.64E-03
902	569822.6	4215021	2.56E-02	3.90E-03	1.76E-03
903	569827.3	4215029	2.75E-02	4.20E-03	1.90E-03
904	569831.9	4215038	2.97E-02	4.53E-03	2.05E-03
905	569888	4215140	1.23E-01	1.87E-02	8.45E-03
906	569892.7	4215148	1.37E-01	2.09E-02	9.41E-03
907	569897.4	4215157	1.44E-01	2.21E-02	9.96E-03
908	569902.1	4215165	1.55E-01	2.37E-02	1.07E-02
909	569906.7	4215174	1.63E-01	2.48E-02	1.12E-02
910	569775.3	4214948	1.61E-02	2.46E-03	1.11E-03
911	569774.2	4214939	1.56E-02	2.39E-03	1.08E-03
912	569773.1	4214929	1.53E-02	2.34E-03	1.05E-03
913	569776.4	4214958	1.67E-02	2.55E-03	1.15E-03
914	569781.1	4214966	1.74E-02	2.65E-03	1.20E-03
915	569785.8	4214975	1.81E-02	2.77E-03	1.25E-03
916	569790.5	4214983	1.91E-02	2.91E-03	1.31E-03
917	569795.1	4214992	2.01E-02	3.07E-03	1.39E-03
918	569799.8	4215000	2.14E-02	3.26E-03	1.47E-03
919	569804.5	4215009	2.28E-02	3.48E-03	1.57E-03
920	569809.2	4215017	2.44E-02	3.73E-03	1.68E-03
921	569813.8	4215026	2.62E-02	4.00E-03	1.81E-03
922	569818.5	4215034	2.82E-02	4.30E-03	1.94E-03
923	569823.2	4215043	3.04E-02	4.64E-03	2.09E-03
924	569879.3	4215145	1.18E-01	1.81E-02	8.16E-03
925	569884	4215153	1.31E-01	2.00E-02	9.01E-03
926	569888.6	4215162	1.38E-01	2.10E-02	9.48E-03
927	569893.3	4215170	1.46E-01	2.23E-02	1.01E-02
928	569898	4215179	1.52E-01	2.33E-02	1.05E-02
929	569766.6	4214953	1.65E-02	2.52E-03	1.14E-03
930	569765.5	4214944	1.60E-02	2.44E-03	1.10E-03

931	569764.4	4214934	1.56E-02	2.38E-03	1.08E-03
932	569763.3	4214925	1.53E-02	2.34E-03	1.06E-03
933	569777.2	4214821	9.11E-03	1.39E-03	6.28E-04
934	569782.9	4214813	8.71E-03	1.33E-03	6.00E-04
935	569767.7	4214962	1.71E-02	2.62E-03	1.18E-03
936	569772.3	4214971	1.78E-02	2.72E-03	1.23E-03
937	569777	4214979	1.86E-02	2.84E-03	1.28E-03
938	569781.7	4214988	1.95E-02	2.98E-03	1.35E-03
939	569786.4	4214996	2.06E-02	3.15E-03	1.42E-03
940	569791	4215005	2.19E-02	3.34E-03	1.51E-03
941	569795.7	4215013	2.33E-02	3.56E-03	1.61E-03
942	569800.4	4215022	2.49E-02	3.80E-03	1.72E-03
943	569805.1	4215030	2.67E-02	4.08E-03	1.84E-03
944	569809.7	4215039	2.87E-02	4.39E-03	1.98E-03
945	569814.4	4215047	3.10E-02	4.73E-03	2.13E-03
946	569819.1	4215056	3.34E-02	5.10E-03	2.30E-03
947	569870.5	4215149	1.12E-01	1.71E-02	7.72E-03
948	569875.2	4215158	1.24E-01	1.90E-02	8.58E-03
949	569879.9	4215166	1.34E-01	2.05E-02	9.24E-03
950	569884.5	4215175	1.37E-01	2.10E-02	9.47E-03
951	569889.2	4215183	1.43E-01	2.19E-02	9.86E-03
952	569757.8	4214958	1.69E-02	2.58E-03	1.16E-03
953	569756.7	4214949	1.64E-02	2.50E-03	1.13E-03
954	569755.7	4214940	1.59E-02	2.43E-03	1.10E-03
955	569754.6	4214930	1.56E-02	2.38E-03	1.08E-03
956	569753.5	4214921	1.54E-02	2.35E-03	1.06E-03
957	569750.4	4214841	9.99E-03	1.53E-03	6.89E-04
958	569756	4214833	9.57E-03	1.46E-03	6.60E-04
959	569767.2	4214818	8.89E-03	1.36E-03	6.12E-04
960	569772.8	4214811	8.54E-03	1.30E-03	5.88E-04
961	569784	4214796	7.98E-03	1.22E-03	5.50E-04
962	569758.9	4214967	1.76E-02	2.68E-03	1.21E-03
963	569763.6	4214976	1.83E-02	2.79E-03	1.26E-03
964	569768.3	4214984	1.91E-02	2.91E-03	1.31E-03
965	569772.9	4214993	2.01E-02	3.06E-03	1.38E-03
966	569777.6	4215001	2.12E-02	3.23E-03	1.46E-03
967	569782.3	4215010	2.24E-02	3.42E-03	1.54E-03
968	569787	4215018	2.38E-02	3.63E-03	1.64E-03
969	569791.6	4215027	2.54E-02	3.87E-03	1.75E-03
970	569796.3	4215035	2.72E-02	4.15E-03	1.87E-03
971	569801	4215044	2.92E-02	4.45E-03	2.01E-03
972	569805.7	4215052	3.13E-02	4.79E-03	2.16E-03
973	569810.3	4215061	3.37E-02	5.15E-03	2.32E-03
974	569861.8	4215154	1.03E-01	1.57E-02	7.11E-03
975	569866.4	4215163	1.16E-01	1.77E-02	7.99E-03
976	569871.1	4215171	1.26E-01	1.93E-02	8.70E-03
977	569875.8	4215180	1.33E-01	2.03E-02	9.18E-03
978	569880.5	4215188	1.35E-01	2.07E-02	9.34E-03
979	569749.1	4214963	1.73E-02	2.64E-03	1.19E-03
980	569748	4214954	1.67E-02	2.56E-03	1.15E-03
981	569746.9	4214945	1.63E-02	2.49E-03	1.12E-03
982	569745.9	4214936	1.59E-02	2.43E-03	1.10E-03

983	569744.8	4214927	1.56E-02	2.39E-03	1.08E-03
984	569743.7	4214918	1.54E-02	2.36E-03	1.06E-03
985	569736.2	4214854	1.09E-02	1.67E-03	7.52E-04
986	569740.7	4214838	9.83E-03	1.50E-03	6.77E-04
987	569746.2	4214831	9.42E-03	1.44E-03	6.49E-04
988	569757.3	4214816	8.70E-03	1.33E-03	6.00E-04
989	569768.3	4214802	8.13E-03	1.24E-03	5.60E-04
990	569779.4	4214787	7.68E-03	1.17E-03	5.29E-04
991	569750.1	4214972	1.80E-02	2.74E-03	1.24E-03
992	569754.8	4214980	1.87E-02	2.85E-03	1.29E-03
993	569759.5	4214989	1.95E-02	2.98E-03	1.35E-03
994	569764.2	4214997	2.05E-02	3.14E-03	1.42E-03
995	569768.8	4215006	2.16E-02	3.31E-03	1.49E-03
996	569773.5	4215014	2.29E-02	3.49E-03	1.58E-03
997	569778.2	4215023	2.43E-02	3.70E-03	1.67E-03
998	569782.9	4215031	2.58E-02	3.94E-03	1.78E-03
999	569787.5	4215040	2.75E-02	4.21E-03	1.90E-03
1000	569792.2	4215048	2.95E-02	4.50E-03	2.03E-03
1001	569796.9	4215057	3.16E-02	4.83E-03	2.18E-03
1002	569801.6	4215066	3.40E-02	5.19E-03	2.34E-03
1003	569806.2	4215074	3.65E-02	5.57E-03	2.51E-03
1004	569853	4215159	9.43E-02	1.44E-02	6.50E-03
1005	569857.7	4215168	1.07E-01	1.63E-02	7.36E-03
1006	569862.3	4215176	1.18E-01	1.80E-02	8.13E-03
1007	569867	4215185	1.26E-01	1.92E-02	8.68E-03
1008	569871.7	4215193	1.29E-01	1.97E-02	8.89E-03
1009	569740.2	4214967	1.77E-02	2.70E-03	1.22E-03
1010	569739.1	4214958	1.71E-02	2.61E-03	1.18E-03
1011	569738	4214948	1.66E-02	2.53E-03	1.14E-03
1012	569736.8	4214938	1.62E-02	2.47E-03	1.11E-03
1013	569735.7	4214929	1.58E-02	2.42E-03	1.09E-03
1014	569734.6	4214919	1.55E-02	2.37E-03	1.07E-03
1015	569727.8	4214862	1.14E-02	1.74E-03	7.87E-04
1016	569726.6	4214852	1.07E-02	1.64E-03	7.39E-04
1017	569731.4	4214835	9.66E-03	1.48E-03	6.66E-04
1018	569737.2	4214827	9.26E-03	1.41E-03	6.38E-04
1019	569743.1	4214820	8.87E-03	1.36E-03	6.12E-04
1020	569748.9	4214812	8.50E-03	1.30E-03	5.86E-04
1021	569754.8	4214804	8.18E-03	1.25E-03	5.64E-04
1022	569760.6	4214797	7.96E-03	1.22E-03	5.49E-04
1023	569766.5	4214789	7.74E-03	1.18E-03	5.33E-04
1024	569772.3	4214781	7.51E-03	1.15E-03	5.17E-04
1025	569741.4	4214977	1.84E-02	2.81E-03	1.27E-03
1026	569746.1	4214985	1.91E-02	2.91E-03	1.32E-03
1027	569750.7	4214994	2.00E-02	3.05E-03	1.38E-03
1028	569755.4	4215002	2.10E-02	3.21E-03	1.45E-03
1029	569760.1	4215011	2.21E-02	3.38E-03	1.52E-03
1030	569764.8	4215019	2.33E-02	3.57E-03	1.61E-03
1031	569769.4	4215028	2.47E-02	3.78E-03	1.70E-03
1032	569774.1	4215036	2.63E-02	4.01E-03	1.81E-03
1033	569778.8	4215045	2.79E-02	4.26E-03	1.92E-03
1034	569783.5	4215053	2.98E-02	4.55E-03	2.05E-03

1035	569788.1	4215062	3.19E-02	4.87E-03	2.20E-03
1036	569792.8	4215070	3.41E-02	5.21E-03	2.35E-03
1037	569797.5	4215079	3.65E-02	5.58E-03	2.52E-03
1038	569844.2	4215164	8.60E-02	1.31E-02	5.92E-03
1039	569848.9	4215172	9.94E-02	1.52E-02	6.85E-03
1040	569853.6	4215181	1.11E-01	1.70E-02	7.67E-03
1041	569858.3	4215189	1.20E-01	1.83E-02	8.25E-03
1042	569862.9	4215198	1.25E-01	1.90E-02	8.60E-03
1043	569731.5	4214972	1.81E-02	2.76E-03	1.25E-03
1044	569730.4	4214963	1.75E-02	2.67E-03	1.20E-03
1045	569729.3	4214953	1.70E-02	2.59E-03	1.17E-03
1046	569728.1	4214944	1.65E-02	2.52E-03	1.14E-03
1047	569727	4214934	1.62E-02	2.47E-03	1.11E-03
1048	569725.9	4214925	1.58E-02	2.42E-03	1.09E-03
1049	569724.8	4214916	1.54E-02	2.35E-03	1.06E-03
1050	569719.2	4214868	1.19E-02	1.82E-03	8.20E-04
1051	569718.1	4214859	1.12E-02	1.71E-03	7.72E-04
1052	569717	4214849	1.06E-02	1.62E-03	7.29E-04
1053	569721.6	4214832	9.56E-03	1.46E-03	6.59E-04
1054	569727.4	4214825	9.17E-03	1.40E-03	6.32E-04
1055	569733.2	4214817	8.81E-03	1.34E-03	6.07E-04
1056	569738.9	4214810	8.46E-03	1.29E-03	5.83E-04
1057	569744.7	4214802	8.17E-03	1.25E-03	5.63E-04
1058	569750.5	4214795	7.93E-03	1.21E-03	5.47E-04
1059	569756.2	4214787	7.70E-03	1.18E-03	5.31E-04
1060	569762	4214779	7.49E-03	1.14E-03	5.16E-04
1061	569767.8	4214772	7.33E-03	1.12E-03	5.05E-04
1062	569732.6	4214982	1.88E-02	2.87E-03	1.29E-03
1063	569737.3	4214990	1.95E-02	2.98E-03	1.35E-03
1064	569742	4214999	2.04E-02	3.12E-03	1.41E-03
1065	569746.6	4215007	2.14E-02	3.27E-03	1.48E-03
1066	569751.3	4215016	2.25E-02	3.44E-03	1.55E-03
1067	569756	4215024	2.38E-02	3.63E-03	1.64E-03
1068	569760.7	4215033	2.51E-02	3.84E-03	1.73E-03
1069	569765.3	4215041	2.66E-02	4.07E-03	1.83E-03
1070	569770	4215050	2.83E-02	4.32E-03	1.95E-03
1071	569774.7	4215058	3.01E-02	4.60E-03	2.07E-03
1072	569779.4	4215067	3.21E-02	4.90E-03	2.21E-03
1073	569784	4215075	3.42E-02	5.22E-03	2.36E-03
1074	569788.7	4215084	3.65E-02	5.57E-03	2.52E-03
1075	569793.4	4215092	3.90E-02	5.95E-03	2.68E-03
1076	569835.5	4215169	8.27E-02	1.26E-02	5.70E-03
1077	569840.1	4215177	9.49E-02	1.45E-02	6.54E-03
1078	569844.8	4215186	1.06E-01	1.63E-02	7.34E-03
1079	569849.5	4215194	1.15E-01	1.75E-02	7.91E-03
1080	569854.2	4215203	1.17E-01	1.79E-02	8.07E-03
1081	569722.8	4214977	1.85E-02	2.82E-03	1.27E-03
1082	569721.7	4214968	1.79E-02	2.73E-03	1.23E-03
1083	569720.5	4214958	1.73E-02	2.65E-03	1.20E-03
1084	569719.4	4214949	1.69E-02	2.58E-03	1.16E-03
1085	569718.3	4214940	1.65E-02	2.52E-03	1.13E-03
1086	569717.2	4214931	1.61E-02	2.46E-03	1.11E-03

1087	569716.1	4214921	1.57E-02	2.40E-03	1.08E-03
1088	569715	4214912	1.52E-02	2.32E-03	1.05E-03
1089	569711.7	4214884	1.32E-02	2.01E-03	9.07E-04
1090	569710.6	4214875	1.24E-02	1.89E-03	8.54E-04
1091	569709.5	4214865	1.17E-02	1.79E-03	8.07E-04
1092	569708.4	4214856	1.11E-02	1.69E-03	7.62E-04
1093	569707.3	4214847	1.05E-02	1.60E-03	7.22E-04
1094	569711.9	4214830	9.55E-03	1.46E-03	6.58E-04
1095	569717.6	4214822	9.14E-03	1.40E-03	6.30E-04
1096	569723.3	4214815	8.75E-03	1.34E-03	6.03E-04
1097	569729	4214807	8.41E-03	1.28E-03	5.80E-04
1098	569734.7	4214800	8.18E-03	1.25E-03	5.64E-04
1099	569740.4	4214793	7.96E-03	1.22E-03	5.49E-04
1100	569746.1	4214785	7.73E-03	1.18E-03	5.33E-04
1101	569751.8	4214778	7.50E-03	1.14E-03	5.17E-04
1102	569757.4	4214770	7.36E-03	1.12E-03	5.07E-04
1103	569763.1	4214763	7.25E-03	1.11E-03	5.00E-04
1104	569723.9	4214986	1.92E-02	2.92E-03	1.32E-03
1105	569728.5	4214995	2.00E-02	3.05E-03	1.38E-03
1106	569733.2	4215003	2.09E-02	3.18E-03	1.44E-03
1107	569737.9	4215012	2.18E-02	3.34E-03	1.51E-03
1108	569742.6	4215020	2.30E-02	3.51E-03	1.58E-03
1109	569747.2	4215029	2.42E-02	3.69E-03	1.67E-03
1110	569751.9	4215037	2.55E-02	3.89E-03	1.76E-03
1111	569756.6	4215046	2.69E-02	4.11E-03	1.85E-03
1112	569761.3	4215054	2.86E-02	4.36E-03	1.97E-03
1113	569765.9	4215063	3.03E-02	4.63E-03	2.09E-03
1114	569770.6	4215071	3.22E-02	4.92E-03	2.22E-03
1115	569775.3	4215080	3.43E-02	5.23E-03	2.36E-03
1116	569780	4215088	3.64E-02	5.56E-03	2.51E-03
1117	569784.6	4215097	3.87E-02	5.91E-03	2.67E-03
1118	569789.3	4215105	4.11E-02	6.28E-03	2.83E-03
1119	569826.7	4215173	8.04E-02	1.23E-02	5.54E-03
1120	569831.4	4215182	9.16E-02	1.40E-02	6.31E-03
1121	569836.1	4215190	1.02E-01	1.56E-02	7.04E-03
1122	569840.7	4215199	1.09E-01	1.66E-02	7.50E-03
1123	569845.4	4215207	1.10E-01	1.68E-02	7.60E-03
1124	569714	4214982	1.88E-02	2.87E-03	1.30E-03
1125	569712.9	4214973	1.82E-02	2.78E-03	1.25E-03
1126	569711.8	4214964	1.77E-02	2.70E-03	1.22E-03
1127	569710.7	4214954	1.72E-02	2.63E-03	1.19E-03
1128	569709.6	4214945	1.68E-02	2.57E-03	1.16E-03
1129	569708.6	4214936	1.64E-02	2.51E-03	1.13E-03
1130	569707.5	4214927	1.61E-02	2.45E-03	1.11E-03
1131	569706.4	4214918	1.55E-02	2.36E-03	1.07E-03
1132	569705.3	4214908	1.49E-02	2.27E-03	1.03E-03
1133	569704.2	4214899	1.43E-02	2.19E-03	9.87E-04
1134	569703.1	4214890	1.36E-02	2.07E-03	9.36E-04
1135	569702	4214881	1.28E-02	1.96E-03	8.85E-04
1136	569700.9	4214872	1.22E-02	1.86E-03	8.38E-04
1137	569699.8	4214862	1.15E-02	1.76E-03	7.95E-04
1138	569698.7	4214853	1.09E-02	1.67E-03	7.54E-04

1139	569697.6	4214844	1.04E-02	1.59E-03	7.17E-04
1140	569702.2	4214827	9.54E-03	1.46E-03	6.58E-04
1141	569707.8	4214820	9.16E-03	1.40E-03	6.31E-04
1142	569713.4	4214813	8.78E-03	1.34E-03	6.05E-04
1143	569719.1	4214805	8.43E-03	1.29E-03	5.81E-04
1144	569730.3	4214790	8.01E-03	1.22E-03	5.52E-04
1145	569735.9	4214783	7.80E-03	1.19E-03	5.37E-04
1146	569741.6	4214776	7.58E-03	1.16E-03	5.23E-04
1147	569752.8	4214761	7.32E-03	1.12E-03	5.05E-04
1148	569715.1	4214991	1.95E-02	2.98E-03	1.35E-03
1149	569719.8	4215000	2.03E-02	3.11E-03	1.40E-03
1150	569724.4	4215008	2.12E-02	3.24E-03	1.46E-03
1151	569729.1	4215017	2.22E-02	3.40E-03	1.53E-03
1152	569733.8	4215025	2.33E-02	3.56E-03	1.61E-03
1153	569738.5	4215034	2.45E-02	3.75E-03	1.69E-03
1154	569743.1	4215042	2.58E-02	3.94E-03	1.78E-03
1155	569747.8	4215051	2.72E-02	4.16E-03	1.88E-03
1156	569752.5	4215059	2.88E-02	4.39E-03	1.98E-03
1157	569757.2	4215068	3.05E-02	4.65E-03	2.10E-03
1158	569761.8	4215076	3.23E-02	4.93E-03	2.23E-03
1159	569766.5	4215085	3.43E-02	5.23E-03	2.36E-03
1160	569771.2	4215093	3.63E-02	5.55E-03	2.50E-03
1161	569775.9	4215102	3.85E-02	5.88E-03	2.65E-03
1162	569780.5	4215110	4.07E-02	6.22E-03	2.81E-03
1163	569817.9	4215178	7.79E-02	1.19E-02	5.37E-03
1164	569822.6	4215187	8.83E-02	1.35E-02	6.08E-03
1165	569827.3	4215195	9.80E-02	1.50E-02	6.75E-03
1166	569832	4215204	1.01E-01	1.55E-02	6.98E-03
1167	569836.6	4215212	1.03E-01	1.57E-02	7.09E-03
1168	569705.3	4214987	1.91E-02	2.92E-03	1.32E-03
1169	569704.2	4214978	1.85E-02	2.83E-03	1.28E-03
1170	569703.1	4214969	1.80E-02	2.75E-03	1.24E-03
1171	569702	4214960	1.76E-02	2.69E-03	1.21E-03
1172	569700.9	4214951	1.72E-02	2.62E-03	1.18E-03
1173	569699.9	4214941	1.67E-02	2.55E-03	1.15E-03
1174	569698.8	4214932	1.63E-02	2.50E-03	1.13E-03
1175	569697.7	4214923	1.59E-02	2.43E-03	1.09E-03
1176	569696.6	4214914	1.52E-02	2.32E-03	1.05E-03
1177	569695.5	4214905	1.46E-02	2.22E-03	1.00E-03
1178	569694.5	4214896	1.39E-02	2.13E-03	9.60E-04
1179	569693.4	4214887	1.32E-02	2.02E-03	9.11E-04
1180	569692.3	4214878	1.26E-02	1.92E-03	8.66E-04
1181	569691.2	4214868	1.20E-02	1.83E-03	8.25E-04
1182	569690.1	4214859	1.14E-02	1.74E-03	7.86E-04
1183	569689.1	4214850	1.09E-02	1.66E-03	7.49E-04
1184	569688	4214841	1.04E-02	1.58E-03	7.15E-04
1185	569692.5	4214825	9.57E-03	1.46E-03	6.59E-04
1186	569703.6	4214810	8.83E-03	1.35E-03	6.08E-04
1187	569714.7	4214796	8.32E-03	1.27E-03	5.73E-04
1188	569725.9	4214781	7.89E-03	1.20E-03	5.44E-04
1189	569731.5	4214774	7.72E-03	1.18E-03	5.32E-04
1190	569742.6	4214759	7.50E-03	1.15E-03	5.17E-04

1191	569706.3	4214996	1.99E-02	3.04E-03	1.37E-03
1192	569711	4215005	2.07E-02	3.16E-03	1.43E-03
1193	569715.7	4215013	2.16E-02	3.29E-03	1.49E-03
1194	569720.4	4215022	2.26E-02	3.45E-03	1.56E-03
1195	569725	4215030	2.37E-02	3.62E-03	1.63E-03
1196	569729.7	4215039	2.48E-02	3.79E-03	1.71E-03
1197	569734.4	4215047	2.61E-02	3.98E-03	1.80E-03
1198	569739.1	4215056	2.75E-02	4.20E-03	1.90E-03
1199	569743.7	4215064	2.90E-02	4.43E-03	2.00E-03
1200	569748.4	4215073	3.06E-02	4.68E-03	2.11E-03
1201	569753.1	4215081	3.23E-02	4.94E-03	2.23E-03
1202	569757.8	4215090	3.42E-02	5.22E-03	2.36E-03
1203	569762.4	4215098	3.62E-02	5.53E-03	2.49E-03
1204	569767.1	4215107	3.82E-02	5.84E-03	2.64E-03
1205	569771.8	4215115	4.04E-02	6.18E-03	2.79E-03
1206	569809.2	4215183	7.61E-02	1.16E-02	5.24E-03
1207	569813.8	4215192	8.49E-02	1.30E-02	5.85E-03
1208	569818.5	4215200	9.15E-02	1.40E-02	6.31E-03
1209	569823.2	4215209	9.44E-02	1.44E-02	6.50E-03
1210	569827.9	4215217	9.63E-02	1.47E-02	6.63E-03
1211	569696.4	4214991	1.94E-02	2.97E-03	1.34E-03
1212	569695.3	4214982	1.88E-02	2.87E-03	1.29E-03
1213	569694.2	4214972	1.82E-02	2.79E-03	1.26E-03
1214	569693.1	4214963	1.78E-02	2.72E-03	1.23E-03
1215	569691.9	4214953	1.74E-02	2.66E-03	1.20E-03
1216	569690.8	4214944	1.69E-02	2.58E-03	1.16E-03
1217	569689.7	4214934	1.64E-02	2.51E-03	1.13E-03
1218	569688.5	4214925	1.59E-02	2.43E-03	1.10E-03
1219	569687.4	4214915	1.52E-02	2.32E-03	1.05E-03
1220	569686.3	4214906	1.45E-02	2.22E-03	1.00E-03
1221	569685.2	4214896	1.39E-02	2.12E-03	9.57E-04
1222	569684	4214887	1.32E-02	2.01E-03	9.09E-04
1223	569682.9	4214877	1.26E-02	1.92E-03	8.66E-04
1224	569681.8	4214868	1.20E-02	1.83E-03	8.25E-04
1225	569680.6	4214858	1.14E-02	1.74E-03	7.87E-04
1226	569679.5	4214848	1.09E-02	1.66E-03	7.51E-04
1227	569678.4	4214839	1.04E-02	1.59E-03	7.18E-04
1228	569683.1	4214822	9.64E-03	1.47E-03	6.64E-04
1229	569688.9	4214814	9.23E-03	1.41E-03	6.36E-04
1230	569694.7	4214807	8.84E-03	1.35E-03	6.09E-04
1231	569700.5	4214799	8.63E-03	1.32E-03	5.95E-04
1232	569706.4	4214791	8.42E-03	1.29E-03	5.80E-04
1233	569712.2	4214784	8.20E-03	1.25E-03	5.65E-04
1234	569718	4214776	7.98E-03	1.22E-03	5.50E-04
1235	569723.8	4214768	7.86E-03	1.20E-03	5.41E-04
1236	569697.6	4215001	2.02E-02	3.08E-03	1.39E-03
1237	569702.2	4215009	2.10E-02	3.20E-03	1.45E-03
1238	569706.9	4215018	2.19E-02	3.34E-03	1.51E-03
1239	569711.6	4215026	2.29E-02	3.50E-03	1.58E-03
1240	569716.3	4215035	2.40E-02	3.66E-03	1.65E-03
1241	569720.9	4215043	2.51E-02	3.83E-03	1.73E-03
1242	569725.6	4215052	2.64E-02	4.03E-03	1.82E-03

1243	569730.3	4215060	2.78E-02	4.24E-03	1.91E-03
1244	569735	4215069	2.92E-02	4.46E-03	2.01E-03
1245	569739.6	4215077	3.08E-02	4.70E-03	2.12E-03
1246	569744.3	4215086	3.24E-02	4.95E-03	2.24E-03
1247	569749	4215094	3.42E-02	5.22E-03	2.36E-03
1248	569753.7	4215103	3.60E-02	5.50E-03	2.48E-03
1249	569758.3	4215111	3.80E-02	5.80E-03	2.62E-03
1250	569763	4215120	4.02E-02	6.13E-03	2.77E-03
1251	569800.4	4215188	7.46E-02	1.14E-02	5.14E-03
1252	569805.1	4215196	8.25E-02	1.26E-02	5.68E-03
1253	569809.8	4215205	8.58E-02	1.31E-02	5.91E-03
1254	569814.4	4215213	8.87E-02	1.35E-02	6.11E-03
1255	569819.1	4215222	9.09E-02	1.39E-02	6.26E-03
1256	569687.7	4214996	1.98E-02	3.02E-03	1.36E-03
1257	569686.6	4214987	1.91E-02	2.92E-03	1.32E-03
1258	569685.5	4214977	1.85E-02	2.83E-03	1.28E-03
1259	569684.3	4214968	1.81E-02	2.76E-03	1.24E-03
1260	569683.2	4214959	1.76E-02	2.69E-03	1.22E-03
1261	569682.1	4214949	1.71E-02	2.62E-03	1.18E-03
1262	569681	4214940	1.66E-02	2.54E-03	1.14E-03
1263	569679.9	4214930	1.61E-02	2.46E-03	1.11E-03
1264	569678.8	4214921	1.55E-02	2.36E-03	1.07E-03
1265	569677.7	4214912	1.48E-02	2.26E-03	1.02E-03
1266	569676.5	4214902	1.42E-02	2.17E-03	9.79E-04
1267	569675.4	4214893	1.36E-02	2.07E-03	9.36E-04
1268	569674.3	4214883	1.30E-02	1.98E-03	8.94E-04
1269	569673.2	4214874	1.24E-02	1.89E-03	8.54E-04
1270	569672.1	4214864	1.19E-02	1.81E-03	8.18E-04
1271	569671	4214855	1.14E-02	1.73E-03	7.83E-04
1272	569669.8	4214846	1.09E-02	1.66E-03	7.51E-04
1273	569668.7	4214836	1.05E-02	1.60E-03	7.21E-04
1274	569673.4	4214819	9.76E-03	1.49E-03	6.73E-04
1275	569679.1	4214812	9.36E-03	1.43E-03	6.45E-04
1276	569684.9	4214804	9.02E-03	1.38E-03	6.21E-04
1277	569690.6	4214797	8.82E-03	1.35E-03	6.08E-04
1278	569696.4	4214789	8.63E-03	1.32E-03	5.94E-04
1279	569688.8	4215006	2.05E-02	3.13E-03	1.41E-03
1280	569693.5	4215014	2.13E-02	3.25E-03	1.46E-03
1281	569698.2	4215023	2.22E-02	3.38E-03	1.53E-03
1282	569702.8	4215031	2.32E-02	3.54E-03	1.60E-03
1283	569707.5	4215040	2.42E-02	3.69E-03	1.67E-03
1284	569712.2	4215048	2.53E-02	3.87E-03	1.74E-03
1285	569716.9	4215057	2.66E-02	4.06E-03	1.83E-03
1286	569721.5	4215065	2.79E-02	4.27E-03	1.93E-03
1287	569726.2	4215074	2.93E-02	4.48E-03	2.02E-03
1288	569730.9	4215082	3.09E-02	4.72E-03	2.13E-03
1289	569735.6	4215091	3.25E-02	4.97E-03	2.24E-03
1290	569740.2	4215099	3.42E-02	5.23E-03	2.36E-03
1291	569744.9	4215108	3.60E-02	5.50E-03	2.48E-03
1292	569749.6	4215116	3.79E-02	5.79E-03	2.61E-03
1293	569754.3	4215125	3.99E-02	6.09E-03	2.75E-03
1294	569787	4215184	6.56E-02	1.00E-02	4.52E-03

1295	569791.6	4215193	7.28E-02	1.11E-02	5.02E-03
1296	569796.3	4215201	7.79E-02	1.19E-02	5.37E-03
1297	569801	4215210	8.12E-02	1.24E-02	5.60E-03
1298	569805.7	4215218	8.41E-02	1.28E-02	5.79E-03
1299	569810.3	4215227	8.62E-02	1.32E-02	5.94E-03
1300	569678.9	4215001	2.00E-02	3.06E-03	1.38E-03
1301	569677.8	4214992	1.94E-02	2.97E-03	1.34E-03
1302	569676.7	4214983	1.89E-02	2.88E-03	1.30E-03
1303	569675.6	4214973	1.84E-02	2.80E-03	1.27E-03
1304	569674.5	4214964	1.79E-02	2.73E-03	1.23E-03
1305	569673.4	4214955	1.74E-02	2.66E-03	1.20E-03
1306	569672.3	4214945	1.69E-02	2.57E-03	1.16E-03
1307	569671.2	4214936	1.63E-02	2.49E-03	1.12E-03
1308	569670.1	4214927	1.57E-02	2.40E-03	1.08E-03
1309	569669	4214917	1.51E-02	2.30E-03	1.04E-03
1310	569667.9	4214908	1.45E-02	2.21E-03	9.98E-04
1311	569666.8	4214899	1.39E-02	2.12E-03	9.59E-04
1312	569665.7	4214889	1.33E-02	2.04E-03	9.19E-04
1313	569664.6	4214880	1.28E-02	1.95E-03	8.81E-04
1314	569663.5	4214871	1.23E-02	1.87E-03	8.45E-04
1315	569662.4	4214861	1.18E-02	1.80E-03	8.12E-04
1316	569661.3	4214852	1.13E-02	1.73E-03	7.81E-04
1317	569660.2	4214843	1.09E-02	1.67E-03	7.53E-04
1318	569659.1	4214833	1.06E-02	1.61E-03	7.28E-04
1319	569680	4215011	2.07E-02	3.16E-03	1.43E-03
1320	569684.7	4215019	2.15E-02	3.28E-03	1.48E-03
1321	569689.4	4215028	2.24E-02	3.42E-03	1.54E-03
1322	569694.1	4215036	2.34E-02	3.57E-03	1.61E-03
1323	569698.7	4215045	2.44E-02	3.72E-03	1.68E-03
1324	569703.4	4215053	2.55E-02	3.90E-03	1.76E-03
1325	569708.1	4215062	2.68E-02	4.09E-03	1.85E-03
1326	569712.8	4215070	2.81E-02	4.29E-03	1.94E-03
1327	569717.4	4215079	2.95E-02	4.50E-03	2.03E-03
1328	569722.1	4215087	3.10E-02	4.73E-03	2.14E-03
1329	569726.8	4215096	3.26E-02	4.98E-03	2.25E-03
1330	569731.5	4215104	3.43E-02	5.24E-03	2.36E-03
1331	569736.1	4215113	3.61E-02	5.52E-03	2.49E-03
1332	569740.8	4215121	3.81E-02	5.81E-03	2.62E-03
1333	569773.5	4215181	6.04E-02	9.22E-03	4.16E-03
1334	569778.2	4215189	6.55E-02	1.00E-02	4.51E-03
1335	569782.9	4215198	7.06E-02	1.08E-02	4.87E-03
1336	569787.6	4215206	7.40E-02	1.13E-02	5.10E-03
1337	569792.2	4215215	7.73E-02	1.18E-02	5.33E-03
1338	569796.9	4215223	8.02E-02	1.22E-02	5.52E-03
1339	569801.6	4215232	7.95E-02	1.21E-02	5.48E-03
1340	569670.2	4215006	2.03E-02	3.10E-03	1.40E-03
1341	569669.1	4214997	1.97E-02	3.01E-03	1.36E-03
1342	569668	4214988	1.92E-02	2.93E-03	1.32E-03
1343	569666.9	4214978	1.87E-02	2.85E-03	1.29E-03
1344	569665.8	4214969	1.82E-02	2.78E-03	1.25E-03
1345	569664.7	4214960	1.77E-02	2.71E-03	1.22E-03
1346	569663.6	4214951	1.72E-02	2.62E-03	1.18E-03

1347	569662.5	4214941	1.65E-02	2.52E-03	1.14E-03
1348	569661.4	4214932	1.59E-02	2.43E-03	1.10E-03
1349	569660.4	4214923	1.53E-02	2.34E-03	1.06E-03
1350	569659.3	4214914	1.47E-02	2.25E-03	1.02E-03
1351	569658.2	4214905	1.42E-02	2.17E-03	9.77E-04
1352	569657.1	4214895	1.36E-02	2.08E-03	9.41E-04
1353	569656	4214886	1.31E-02	2.00E-03	9.04E-04
1354	569654.9	4214877	1.26E-02	1.93E-03	8.70E-04
1355	569653.8	4214868	1.22E-02	1.86E-03	8.38E-04
1356	569652.7	4214858	1.17E-02	1.79E-03	8.09E-04
1357	569651.6	4214849	1.14E-02	1.73E-03	7.82E-04
1358	569650.5	4214840	1.10E-02	1.68E-03	7.58E-04
1359	569671.3	4215015	2.09E-02	3.19E-03	1.44E-03
1360	569676	4215024	2.17E-02	3.32E-03	1.50E-03
1361	569680.6	4215032	2.26E-02	3.45E-03	1.56E-03
1362	569685.3	4215041	2.35E-02	3.59E-03	1.62E-03
1363	569690	4215049	2.46E-02	3.75E-03	1.69E-03
1364	569694.7	4215058	2.57E-02	3.93E-03	1.77E-03
1365	569699.3	4215066	2.69E-02	4.11E-03	1.86E-03
1366	569704	4215075	2.82E-02	4.31E-03	1.94E-03
1367	569708.7	4215083	2.96E-02	4.52E-03	2.04E-03
1368	569713.4	4215092	3.11E-02	4.75E-03	2.14E-03
1369	569718	4215100	3.27E-02	4.99E-03	2.25E-03
1370	569722.7	4215109	3.44E-02	5.26E-03	2.37E-03
1371	569727.4	4215117	3.64E-02	5.55E-03	2.51E-03
1372	569764.8	4215185	6.10E-02	9.31E-03	4.20E-03
1373	569769.4	4215194	6.60E-02	1.01E-02	4.55E-03
1374	569774.1	4215202	6.88E-02	1.05E-02	4.74E-03
1375	569778.8	4215211	7.11E-02	1.09E-02	4.90E-03
1376	569783.5	4215219	7.39E-02	1.13E-02	5.10E-03
1377	569788.1	4215228	7.58E-02	1.16E-02	5.22E-03
1378	569792.8	4215236	7.31E-02	1.12E-02	5.04E-03
1379	569661.4	4215011	2.04E-02	3.12E-03	1.41E-03
1380	569660.2	4215001	1.98E-02	3.03E-03	1.37E-03
1381	569659.1	4214991	1.93E-02	2.95E-03	1.33E-03
1382	569658	4214982	1.88E-02	2.87E-03	1.30E-03
1383	569656.8	4214972	1.82E-02	2.78E-03	1.26E-03
1384	569655.7	4214963	1.76E-02	2.69E-03	1.22E-03
1385	569654.6	4214953	1.71E-02	2.60E-03	1.18E-03
1386	569653.4	4214943	1.64E-02	2.51E-03	1.13E-03
1387	569652.3	4214934	1.58E-02	2.42E-03	1.09E-03
1388	569651.2	4214924	1.53E-02	2.33E-03	1.05E-03
1389	569650	4214915	1.47E-02	2.24E-03	1.01E-03
1390	569648.9	4214905	1.41E-02	2.16E-03	9.73E-04
1391	569647.8	4214896	1.36E-02	2.08E-03	9.37E-04
1392	569646.6	4214886	1.31E-02	2.00E-03	9.02E-04
1393	569645.5	4214876	1.26E-02	1.93E-03	8.69E-04
1394	569644.4	4214867	1.22E-02	1.86E-03	8.39E-04
1395	569643.2	4214857	1.18E-02	1.80E-03	8.12E-04
1396	569662.5	4215020	2.11E-02	3.22E-03	1.46E-03
1397	569667.2	4215029	2.19E-02	3.35E-03	1.51E-03
1398	569671.9	4215037	2.28E-02	3.48E-03	1.57E-03

1399	569676.5	4215046	2.37E-02	3.61E-03	1.63E-03
1400	569681.2	4215054	2.47E-02	3.78E-03	1.70E-03
1401	569685.9	4215063	2.59E-02	3.95E-03	1.78E-03
1402	569690.6	4215071	2.70E-02	4.13E-03	1.86E-03
1403	569695.2	4215080	2.83E-02	4.33E-03	1.95E-03
1404	569699.9	4215088	2.98E-02	4.54E-03	2.05E-03
1405	569704.6	4215097	3.13E-02	4.77E-03	2.15E-03
1406	569709.3	4215105	3.28E-02	5.01E-03	2.26E-03
1407	569713.9	4215114	3.46E-02	5.28E-03	2.38E-03
1408	569718.6	4215122	3.66E-02	5.59E-03	2.52E-03
1409	569751.3	4215182	5.71E-02	8.72E-03	3.93E-03
1410	569756	4215190	6.14E-02	9.37E-03	4.23E-03
1411	569760.7	4215199	6.51E-02	9.94E-03	4.48E-03
1412	569765.4	4215207	6.66E-02	1.02E-02	4.59E-03
1413	569770	4215216	6.85E-02	1.05E-02	4.72E-03
1414	569774.7	4215224	7.08E-02	1.08E-02	4.88E-03
1415	569779.4	4215233	6.96E-02	1.06E-02	4.80E-03
1416	569784.1	4215241	6.69E-02	1.02E-02	4.61E-03
1417	569652.6	4215015	2.06E-02	3.14E-03	1.42E-03
1418	569651.5	4215006	2.00E-02	3.05E-03	1.38E-03
1419	569650.4	4214997	1.95E-02	2.97E-03	1.34E-03
1420	569649.3	4214987	1.90E-02	2.90E-03	1.31E-03
1421	569648.1	4214978	1.84E-02	2.80E-03	1.27E-03
1422	569647	4214968	1.77E-02	2.71E-03	1.22E-03
1423	569645.9	4214959	1.71E-02	2.62E-03	1.18E-03
1424	569644.8	4214949	1.65E-02	2.53E-03	1.14E-03
1425	569643.6	4214940	1.60E-02	2.44E-03	1.10E-03
1426	569642.5	4214930	1.54E-02	2.35E-03	1.06E-03
1427	569641.4	4214921	1.49E-02	2.27E-03	1.03E-03
1428	569640.3	4214911	1.43E-02	2.19E-03	9.88E-04
1429	569639.1	4214902	1.38E-02	2.11E-03	9.53E-04
1430	569638	4214892	1.34E-02	2.04E-03	9.20E-04
1431	569636.9	4214883	1.29E-02	1.97E-03	8.89E-04
1432	569635.8	4214873	1.25E-02	1.91E-03	8.60E-04
1433	569634.7	4214864	1.21E-02	1.85E-03	8.35E-04
1434	569653.8	4215025	2.13E-02	3.25E-03	1.47E-03
1435	569658.4	4215033	2.21E-02	3.37E-03	1.52E-03
1436	569663.1	4215042	2.29E-02	3.50E-03	1.58E-03
1437	569667.8	4215050	2.38E-02	3.64E-03	1.64E-03
1438	569672.5	4215059	2.48E-02	3.79E-03	1.71E-03
1439	569677.1	4215067	2.59E-02	3.96E-03	1.79E-03
1440	569681.8	4215076	2.71E-02	4.13E-03	1.86E-03
1441	569686.5	4215084	2.84E-02	4.34E-03	1.96E-03
1442	569691.2	4215093	2.99E-02	4.56E-03	2.06E-03
1443	569695.8	4215101	3.14E-02	4.80E-03	2.16E-03
1444	569700.5	4215110	3.30E-02	5.03E-03	2.27E-03
1445	569737.9	4215178	5.37E-02	8.20E-03	3.70E-03
1446	569742.6	4215187	5.75E-02	8.77E-03	3.96E-03
1447	569747.2	4215195	6.16E-02	9.41E-03	4.25E-03
1448	569751.9	4215204	6.29E-02	9.61E-03	4.34E-03
1449	569756.6	4215212	6.40E-02	9.77E-03	4.41E-03
1450	569761.3	4215221	6.55E-02	1.00E-02	4.51E-03

1451	569765.9	4215229	6.60E-02	1.01E-02	4.55E-03
1452	569770.6	4215238	6.37E-02	9.73E-03	4.39E-03
1453	569775.3	4215246	6.14E-02	9.37E-03	4.23E-03
1454	569643.9	4215020	2.07E-02	3.16E-03	1.43E-03
1455	569642.8	4215011	2.01E-02	3.07E-03	1.39E-03
1456	569641.7	4215002	1.96E-02	2.99E-03	1.35E-03
1457	569640.5	4214992	1.91E-02	2.91E-03	1.32E-03
1458	569639.4	4214983	1.86E-02	2.83E-03	1.28E-03
1459	569638.3	4214973	1.79E-02	2.73E-03	1.23E-03
1460	569637.2	4214964	1.73E-02	2.64E-03	1.19E-03
1461	569636.1	4214955	1.66E-02	2.54E-03	1.15E-03
1462	569635	4214945	1.61E-02	2.46E-03	1.11E-03
1463	569633.9	4214936	1.56E-02	2.37E-03	1.07E-03
1464	569632.7	4214926	1.51E-02	2.30E-03	1.04E-03
1465	569631.6	4214917	1.45E-02	2.22E-03	1.00E-03
1466	569630.5	4214908	1.41E-02	2.15E-03	9.69E-04
1467	569629.4	4214898	1.36E-02	2.08E-03	9.37E-04
1468	569628.3	4214889	1.32E-02	2.01E-03	9.09E-04
1469	569627.2	4214879	1.28E-02	1.95E-03	8.82E-04
1470	569626.1	4214870	1.24E-02	1.90E-03	8.57E-04
1471	569645	4215030	2.14E-02	3.27E-03	1.48E-03
1472	569649.7	4215038	2.22E-02	3.39E-03	1.53E-03
1473	569654.3	4215047	2.30E-02	3.51E-03	1.58E-03
1474	569659	4215055	2.39E-02	3.65E-03	1.65E-03
1475	569663.7	4215064	2.49E-02	3.80E-03	1.72E-03
1476	569668.4	4215072	2.59E-02	3.96E-03	1.79E-03
1477	569673	4215081	2.71E-02	4.14E-03	1.87E-03
1478	569677.7	4215089	2.84E-02	4.34E-03	1.96E-03
1479	569682.4	4215098	2.99E-02	4.56E-03	2.06E-03
1480	569687.1	4215106	3.14E-02	4.80E-03	2.17E-03
1481	569691.7	4215115	3.30E-02	5.04E-03	2.27E-03
1482	569724.5	4215174	5.08E-02	7.75E-03	3.50E-03
1483	569729.1	4215183	5.41E-02	8.25E-03	3.72E-03
1484	569733.8	4215191	5.76E-02	8.80E-03	3.97E-03
1485	569738.5	4215200	6.01E-02	9.18E-03	4.14E-03
1486	569743.2	4215208	6.08E-02	9.28E-03	4.19E-03
1487	569747.8	4215217	6.15E-02	9.40E-03	4.24E-03
1488	569752.5	4215225	6.23E-02	9.52E-03	4.30E-03
1489	569757.2	4215234	6.06E-02	9.26E-03	4.18E-03
1490	569761.9	4215242	5.87E-02	8.96E-03	4.04E-03
1491	569766.5	4215251	5.67E-02	8.66E-03	3.91E-03
1492	569635.1	4215025	2.09E-02	3.19E-03	1.44E-03
1493	569634	4215016	2.02E-02	3.09E-03	1.39E-03
1494	569632.9	4215007	1.97E-02	3.01E-03	1.36E-03
1495	569631.8	4214997	1.92E-02	2.93E-03	1.32E-03
1496	569630.7	4214988	1.87E-02	2.85E-03	1.29E-03
1497	569629.6	4214979	1.80E-02	2.75E-03	1.24E-03
1498	569628.5	4214969	1.74E-02	2.66E-03	1.20E-03
1499	569627.4	4214960	1.68E-02	2.56E-03	1.16E-03
1500	569626.3	4214951	1.62E-02	2.48E-03	1.12E-03
1501	569625.2	4214941	1.57E-02	2.40E-03	1.08E-03
1502	569624.1	4214932	1.52E-02	2.33E-03	1.05E-03

1503	569623	4214923	1.48E-02	2.25E-03	1.02E-03
1504	569621.9	4214913	1.43E-02	2.18E-03	9.85E-04
1505	569620.8	4214904	1.38E-02	2.11E-03	9.54E-04
1506	569619.7	4214895	1.34E-02	2.05E-03	9.26E-04
1507	569618.6	4214885	1.31E-02	2.00E-03	9.01E-04
1508	569636.2	4215035	2.15E-02	3.28E-03	1.48E-03
1509	569640.9	4215043	2.22E-02	3.39E-03	1.53E-03
1510	569645.6	4215052	2.31E-02	3.52E-03	1.59E-03
1511	569650.3	4215060	2.40E-02	3.66E-03	1.65E-03
1512	569654.9	4215069	2.49E-02	3.81E-03	1.72E-03
1513	569659.6	4215077	2.59E-02	3.96E-03	1.79E-03
1514	569664.3	4215086	2.71E-02	4.14E-03	1.87E-03
1515	569669	4215094	2.84E-02	4.34E-03	1.96E-03
1516	569673.6	4215103	2.98E-02	4.55E-03	2.05E-03
1517	569678.3	4215111	3.13E-02	4.77E-03	2.15E-03
1518	569683	4215120	3.28E-02	5.00E-03	2.26E-03
1519	569711	4215171	4.60E-02	7.02E-03	3.17E-03
1520	569715.7	4215179	4.97E-02	7.59E-03	3.43E-03
1521	569720.4	4215188	5.37E-02	8.20E-03	3.70E-03
1522	569725	4215196	5.76E-02	8.80E-03	3.97E-03
1523	569729.7	4215205	5.81E-02	8.87E-03	4.00E-03
1524	569734.4	4215213	5.86E-02	8.95E-03	4.04E-03
1525	569739.1	4215222	5.92E-02	9.04E-03	4.08E-03
1526	569743.7	4215230	5.84E-02	8.92E-03	4.02E-03
1527	569748.4	4215239	5.63E-02	8.59E-03	3.88E-03
1528	569753.1	4215247	5.43E-02	8.30E-03	3.75E-03
1529	569757.8	4215256	5.28E-02	8.06E-03	3.64E-03
1530	569626.3	4215030	2.09E-02	3.19E-03	1.44E-03
1531	569625.2	4215020	2.02E-02	3.09E-03	1.39E-03
1532	569624	4215011	1.96E-02	3.00E-03	1.35E-03
1533	569622.9	4215001	1.91E-02	2.91E-03	1.31E-03
1534	569621.8	4214991	1.85E-02	2.83E-03	1.28E-03
1535	569620.6	4214982	1.80E-02	2.74E-03	1.24E-03
1536	569619.5	4214972	1.73E-02	2.64E-03	1.19E-03
1537	569618.3	4214962	1.67E-02	2.55E-03	1.15E-03
1538	569617.2	4214953	1.61E-02	2.46E-03	1.11E-03
1539	569616.1	4214943	1.56E-02	2.39E-03	1.08E-03
1540	569614.9	4214933	1.52E-02	2.32E-03	1.05E-03
1541	569613.8	4214924	1.47E-02	2.25E-03	1.01E-03
1542	569612.6	4214914	1.43E-02	2.18E-03	9.82E-04
1543	569611.5	4214905	1.38E-02	2.11E-03	9.52E-04
1544	569610.4	4214895	1.34E-02	2.05E-03	9.25E-04
1545	569627.5	4215039	2.15E-02	3.28E-03	1.48E-03
1546	569632.1	4215048	2.23E-02	3.40E-03	1.53E-03
1547	569636.8	4215056	2.31E-02	3.53E-03	1.59E-03
1548	569641.5	4215065	2.40E-02	3.66E-03	1.65E-03
1549	569646.2	4215073	2.49E-02	3.80E-03	1.71E-03
1550	569650.8	4215082	2.59E-02	3.96E-03	1.79E-03
1551	569655.5	4215090	2.71E-02	4.14E-03	1.87E-03
1552	569660.2	4215099	2.84E-02	4.33E-03	1.95E-03
1553	569664.9	4215107	2.97E-02	4.54E-03	2.05E-03
1554	569669.5	4215116	3.11E-02	4.74E-03	2.14E-03

1555	569674.2	4215124	3.25E-02	4.96E-03	2.24E-03
1556	569688.2	4215150	3.75E-02	5.73E-03	2.59E-03
1557	569692.9	4215158	3.94E-02	6.02E-03	2.72E-03
1558	569697.6	4215167	4.17E-02	6.37E-03	2.88E-03
1559	569702.3	4215175	4.50E-02	6.87E-03	3.10E-03
1560	569706.9	4215184	4.86E-02	7.43E-03	3.35E-03
1561	569711.6	4215192	5.25E-02	8.02E-03	3.62E-03
1562	569716.3	4215201	5.50E-02	8.40E-03	3.79E-03
1563	569721	4215209	5.59E-02	8.54E-03	3.85E-03
1564	569725.6	4215218	5.64E-02	8.61E-03	3.89E-03
1565	569730.3	4215226	5.67E-02	8.67E-03	3.91E-03
1566	569735	4215235	5.44E-02	8.31E-03	3.75E-03
1567	569739.7	4215243	5.24E-02	8.01E-03	3.61E-03
1568	569744.3	4215252	5.07E-02	7.74E-03	3.49E-03
1569	569749	4215260	4.93E-02	7.53E-03	3.40E-03
1570	569984.8	4215238	2.71E-01	4.13E-02	1.87E-02
1571	569985.1	4215248	2.49E-01	3.80E-02	1.72E-02
1572	569985.4	4215257	2.27E-01	3.46E-02	1.56E-02
1573	569985.7	4215267	2.04E-01	3.11E-02	1.40E-02
1574	569986	4215277	1.83E-01	2.80E-02	1.26E-02
1575	569986.3	4215287	1.67E-01	2.54E-02	1.15E-02
1576	569986.7	4215296	1.63E-01	2.48E-02	1.12E-02
1577	569987	4215306	1.61E-01	2.45E-02	1.11E-02
1578	569987.3	4215316	1.60E-01	2.45E-02	1.11E-02
1579	569987.6	4215325	1.66E-01	2.53E-02	1.14E-02
1580	569987.9	4215335	1.73E-01	2.64E-02	1.19E-02
1581	569988.2	4215345	1.84E-01	2.81E-02	1.27E-02
1582	569988.6	4215354	1.83E-01	2.79E-02	1.26E-02
1583	569988.9	4215364	1.78E-01	2.72E-02	1.23E-02
1584	569989.2	4215374	1.78E-01	2.72E-02	1.23E-02
1585	569973.5	4215200	2.94E-01	4.49E-02	2.02E-02
1586	569973.8	4215209	2.83E-01	4.33E-02	1.95E-02
1587	569974.1	4215219	2.67E-01	4.08E-02	1.84E-02
1588	569974.5	4215229	2.50E-01	3.81E-02	1.72E-02
1589	569974.8	4215238	2.34E-01	3.57E-02	1.61E-02
1590	569975.1	4215248	2.17E-01	3.31E-02	1.49E-02
1591	569975.4	4215258	1.99E-01	3.04E-02	1.37E-02
1592	569975.7	4215267	1.81E-01	2.76E-02	1.25E-02
1593	569976	4215277	1.64E-01	2.51E-02	1.13E-02
1594	569976.4	4215287	1.52E-01	2.31E-02	1.04E-02
1595	569976.7	4215297	1.49E-01	2.28E-02	1.03E-02
1596	569977	4215306	1.48E-01	2.26E-02	1.02E-02
1597	569977.3	4215316	1.48E-01	2.26E-02	1.02E-02
1598	569977.6	4215326	1.54E-01	2.34E-02	1.06E-02
1599	569977.9	4215335	1.60E-01	2.45E-02	1.10E-02
1600	569978.2	4215345	1.72E-01	2.62E-02	1.18E-02
1601	569978.6	4215355	1.71E-01	2.61E-02	1.18E-02
1602	569978.9	4215364	1.69E-01	2.58E-02	1.16E-02
1603	569979.2	4215374	1.75E-01	2.68E-02	1.21E-02
1604	569962.6	4215171	2.68E-01	4.09E-02	1.85E-02
1605	569962.9	4215181	2.71E-01	4.13E-02	1.87E-02
1606	569963.2	4215190	2.67E-01	4.08E-02	1.84E-02

1607	569963.5	4215200	2.60E-01	3.97E-02	1.79E-02
1608	569963.8	4215210	2.47E-01	3.77E-02	1.70E-02
1609	569964.2	4215219	2.30E-01	3.52E-02	1.59E-02
1610	569964.5	4215229	2.14E-01	3.27E-02	1.48E-02
1611	569964.8	4215239	2.02E-01	3.09E-02	1.39E-02
1612	569965.1	4215248	1.90E-01	2.90E-02	1.31E-02
1613	569965.4	4215258	1.77E-01	2.70E-02	1.22E-02
1614	569965.7	4215268	1.62E-01	2.47E-02	1.11E-02
1615	569966	4215277	1.48E-01	2.27E-02	1.02E-02
1616	569966.4	4215287	1.38E-01	2.11E-02	9.54E-03
1617	569966.7	4215297	1.37E-01	2.09E-02	9.44E-03
1618	569967	4215307	1.36E-01	2.08E-02	9.40E-03
1619	569967.3	4215316	1.37E-01	2.09E-02	9.43E-03
1620	569967.6	4215326	1.43E-01	2.18E-02	9.83E-03
1621	569967.9	4215336	1.49E-01	2.28E-02	1.03E-02
1622	569968.2	4215345	1.57E-01	2.40E-02	1.08E-02
1623	569968.6	4215355	1.57E-01	2.40E-02	1.08E-02
1624	569968.9	4215365	1.61E-01	2.46E-02	1.11E-02
1625	569969.2	4215374	1.74E-01	2.66E-02	1.20E-02
1626	569952.3	4215162	2.34E-01	3.57E-02	1.61E-02
1627	569952.6	4215171	2.41E-01	3.68E-02	1.66E-02
1628	569952.9	4215181	2.43E-01	3.71E-02	1.67E-02
1629	569953.2	4215191	2.39E-01	3.65E-02	1.65E-02
1630	569953.5	4215200	2.33E-01	3.55E-02	1.60E-02
1631	569953.8	4215210	2.20E-01	3.35E-02	1.51E-02
1632	569954.2	4215220	2.03E-01	3.11E-02	1.40E-02
1633	569954.5	4215229	1.88E-01	2.88E-02	1.30E-02
1634	569954.8	4215239	1.78E-01	2.72E-02	1.23E-02
1635	569955.1	4215249	1.68E-01	2.56E-02	1.15E-02
1636	569955.4	4215258	1.57E-01	2.40E-02	1.08E-02
1637	569955.7	4215268	1.46E-01	2.23E-02	1.01E-02
1638	569956	4215278	1.36E-01	2.08E-02	9.40E-03
1639	569956.4	4215287	1.29E-01	1.97E-02	8.90E-03
1640	569956.7	4215297	1.28E-01	1.95E-02	8.81E-03
1641	569957	4215307	1.27E-01	1.94E-02	8.77E-03
1642	569957.3	4215317	1.28E-01	1.95E-02	8.79E-03
1643	569957.6	4215326	1.32E-01	2.02E-02	9.12E-03
1644	569957.9	4215336	1.38E-01	2.10E-02	9.49E-03
1645	569958.3	4215346	1.44E-01	2.20E-02	9.94E-03
1646	569958.6	4215355	1.46E-01	2.23E-02	1.00E-02
1647	569958.9	4215365	1.53E-01	2.33E-02	1.05E-02
1648	569959.2	4215375	1.72E-01	2.63E-02	1.19E-02
1649	569942.6	4215172	2.19E-01	3.34E-02	1.51E-02
1650	569942.9	4215181	2.20E-01	3.36E-02	1.52E-02
1651	569943.2	4215191	2.19E-01	3.35E-02	1.51E-02
1652	569943.5	4215201	2.10E-01	3.20E-02	1.44E-02
1653	569943.8	4215210	1.96E-01	3.00E-02	1.35E-02
1654	569944.2	4215220	1.81E-01	2.76E-02	1.25E-02
1655	569944.5	4215230	1.67E-01	2.55E-02	1.15E-02
1656	569944.8	4215239	1.58E-01	2.41E-02	1.09E-02
1657	569945.1	4215249	1.49E-01	2.27E-02	1.02E-02
1658	569945.4	4215259	1.40E-01	2.14E-02	9.66E-03

1659	569945.7	4215268	1.33E-01	2.03E-02	9.15E-03
1660	569946.1	4215278	1.26E-01	1.93E-02	8.71E-03
1661	569946.4	4215288	1.21E-01	1.85E-02	8.37E-03
1662	569946.7	4215297	1.20E-01	1.83E-02	8.27E-03
1663	569947	4215307	1.19E-01	1.82E-02	8.22E-03
1664	569947.3	4215317	1.19E-01	1.82E-02	8.22E-03
1665	569947.6	4215327	1.23E-01	1.88E-02	8.46E-03
1666	569947.9	4215336	1.27E-01	1.94E-02	8.74E-03
1667	569948.3	4215346	1.32E-01	2.01E-02	9.08E-03
1668	569948.6	4215356	1.35E-01	2.06E-02	9.30E-03
1669	569948.9	4215365	1.45E-01	2.21E-02	1.00E-02
1670	569949.2	4215375	1.72E-01	2.62E-02	1.18E-02
1671	569932.6	4215172	2.00E-01	3.06E-02	1.38E-02
1672	569932.9	4215182	2.01E-01	3.06E-02	1.38E-02
1673	569933.2	4215191	2.00E-01	3.05E-02	1.38E-02
1674	569933.5	4215201	1.90E-01	2.90E-02	1.31E-02
1675	569933.9	4215211	1.77E-01	2.70E-02	1.22E-02
1676	569934.2	4215220	1.61E-01	2.47E-02	1.11E-02
1677	569934.5	4215230	1.49E-01	2.27E-02	1.03E-02
1678	569934.8	4215240	1.41E-01	2.15E-02	9.69E-03
1679	569935.1	4215249	1.33E-01	2.03E-02	9.15E-03
1680	569935.4	4215259	1.26E-01	1.93E-02	8.69E-03
1681	569935.7	4215269	1.22E-01	1.86E-02	8.38E-03
1682	569936.1	4215278	1.18E-01	1.79E-02	8.10E-03
1683	569936.4	4215288	1.14E-01	1.75E-02	7.88E-03
1684	569936.7	4215298	1.13E-01	1.72E-02	7.78E-03
1685	569937	4215307	1.12E-01	1.71E-02	7.71E-03
1686	569937.3	4215317	1.12E-01	1.71E-02	7.70E-03
1687	569937.6	4215327	1.14E-01	1.74E-02	7.87E-03
1688	569937.9	4215336	1.17E-01	1.79E-02	8.09E-03
1689	569938.3	4215346	1.22E-01	1.86E-02	8.40E-03
1690	569938.6	4215356	1.27E-01	1.94E-02	8.75E-03
1691	569938.9	4215366	1.40E-01	2.14E-02	9.67E-03
1692	569939.2	4215375	1.73E-01	2.65E-02	1.19E-02
1693	569922.9	4215182	1.84E-01	2.81E-02	1.27E-02
1694	569923.2	4215192	1.85E-01	2.82E-02	1.27E-02
1695	569923.5	4215201	1.76E-01	2.69E-02	1.22E-02
1696	569923.9	4215211	1.64E-01	2.50E-02	1.13E-02
1697	569924.2	4215221	1.48E-01	2.27E-02	1.02E-02
1698	569924.5	4215230	1.36E-01	2.08E-02	9.39E-03
1699	569924.8	4215240	1.28E-01	1.96E-02	8.84E-03
1700	569925.1	4215250	1.21E-01	1.85E-02	8.33E-03
1701	569925.4	4215259	1.15E-01	1.76E-02	7.93E-03
1702	569925.7	4215269	1.12E-01	1.71E-02	7.70E-03
1703	569926.1	4215279	1.09E-01	1.66E-02	7.49E-03
1704	569926.4	4215288	1.06E-01	1.62E-02	7.33E-03
1705	569926.7	4215298	1.05E-01	1.60E-02	7.24E-03
1706	569927	4215308	1.04E-01	1.59E-02	7.17E-03
1707	569927.3	4215317	1.04E-01	1.59E-02	7.16E-03
1708	569927.6	4215327	1.06E-01	1.62E-02	7.33E-03
1709	569928	4215337	1.10E-01	1.67E-02	7.55E-03
1710	569928.3	4215346	1.15E-01	1.75E-02	7.89E-03

1711	569928.6	4215356	1.21E-01	1.85E-02	8.35E-03
1712	569928.9	4215366	1.37E-01	2.09E-02	9.42E-03
1713	569929.2	4215376	1.73E-01	2.64E-02	1.19E-02
1714	569912.9	4215182	1.70E-01	2.60E-02	1.17E-02
1715	569913.2	4215192	1.72E-01	2.62E-02	1.18E-02
1716	569913.5	4215202	1.64E-01	2.51E-02	1.13E-02
1717	569913.9	4215211	1.52E-01	2.32E-02	1.05E-02
1718	569914.2	4215221	1.37E-01	2.09E-02	9.45E-03
1719	569914.5	4215231	1.25E-01	1.92E-02	8.65E-03
1720	569914.8	4215240	1.18E-01	1.80E-02	8.12E-03
1721	569915.1	4215250	1.11E-01	1.69E-02	7.64E-03
1722	569915.4	4215260	1.06E-01	1.61E-02	7.27E-03
1723	569915.8	4215269	1.03E-01	1.57E-02	7.09E-03
1724	569916.1	4215279	1.00E-01	1.53E-02	6.92E-03
1725	569916.4	4215289	9.84E-02	1.50E-02	6.78E-03
1726	569916.7	4215298	9.69E-02	1.48E-02	6.68E-03
1727	569917	4215308	9.67E-02	1.48E-02	6.66E-03
1728	569917.3	4215318	9.66E-02	1.48E-02	6.66E-03
1729	569917.6	4215327	9.93E-02	1.52E-02	6.84E-03
1730	569918	4215337	1.03E-01	1.57E-02	7.10E-03
1731	569918.3	4215347	1.09E-01	1.66E-02	7.49E-03
1732	569918.6	4215356	1.15E-01	1.76E-02	7.96E-03
1733	569918.9	4215366	1.30E-01	1.99E-02	8.99E-03
1734	569919.2	4215376	1.62E-01	2.47E-02	1.12E-02
1735	569903.2	4215192	1.60E-01	2.44E-02	1.10E-02
1736	569903.6	4215202	1.54E-01	2.35E-02	1.06E-02
1737	569903.9	4215212	1.42E-01	2.16E-02	9.77E-03
1738	569904.2	4215221	1.27E-01	1.94E-02	8.75E-03
1739	569904.5	4215231	1.16E-01	1.77E-02	7.99E-03
1740	569904.8	4215241	1.09E-01	1.66E-02	7.49E-03
1741	569905.1	4215250	1.02E-01	1.56E-02	7.02E-03
1742	569905.4	4215260	9.75E-02	1.49E-02	6.72E-03
1743	569905.8	4215270	9.53E-02	1.45E-02	6.56E-03
1744	569906.1	4215279	9.33E-02	1.42E-02	6.43E-03
1745	569906.4	4215289	9.15E-02	1.40E-02	6.31E-03
1746	569906.7	4215299	9.01E-02	1.38E-02	6.21E-03
1747	569907	4215308	8.90E-02	1.36E-02	6.13E-03
1748	569907.3	4215318	8.88E-02	1.36E-02	6.12E-03
1749	569907.6	4215328	9.31E-02	1.42E-02	6.42E-03
1750	569908	4215337	9.71E-02	1.48E-02	6.69E-03
1751	569908.3	4215347	1.03E-01	1.57E-02	7.08E-03
1752	569908.6	4215357	1.09E-01	1.66E-02	7.51E-03
1753	569908.9	4215366	1.21E-01	1.85E-02	8.35E-03
1754	569909.2	4215376	1.42E-01	2.17E-02	9.81E-03
1755	569893.2	4215193	1.50E-01	2.29E-02	1.03E-02
1756	569893.6	4215202	1.46E-01	2.22E-02	1.00E-02
1757	569893.9	4215212	1.35E-01	2.06E-02	9.30E-03
1758	569894.2	4215222	1.21E-01	1.85E-02	8.36E-03
1759	569894.5	4215231	1.11E-01	1.69E-02	7.63E-03
1760	569894.8	4215241	1.03E-01	1.57E-02	7.10E-03
1761	569895.1	4215251	9.64E-02	1.47E-02	6.65E-03
1762	569895.4	4215260	9.18E-02	1.40E-02	6.33E-03

1763	569895.8	4215270	8.90E-02	1.36E-02	6.13E-03
1764	569896.1	4215280	8.65E-02	1.32E-02	5.96E-03
1765	569896.4	4215289	8.47E-02	1.29E-02	5.84E-03
1766	569896.7	4215299	8.37E-02	1.28E-02	5.77E-03
1767	569897	4215309	8.29E-02	1.27E-02	5.71E-03
1768	569897.3	4215318	8.29E-02	1.27E-02	5.72E-03
1769	569897.7	4215328	8.57E-02	1.31E-02	5.91E-03
1770	569898	4215338	9.12E-02	1.39E-02	6.28E-03
1771	569898.3	4215347	9.63E-02	1.47E-02	6.64E-03
1772	569898.6	4215357	1.02E-01	1.55E-02	6.99E-03
1773	569898.9	4215367	1.10E-01	1.68E-02	7.60E-03
1774	569883.6	4215203	1.38E-01	2.11E-02	9.51E-03
1775	569883.9	4215212	1.29E-01	1.96E-02	8.87E-03
1776	569884.2	4215222	1.16E-01	1.77E-02	8.01E-03
1777	569884.5	4215232	1.06E-01	1.62E-02	7.31E-03
1778	569884.8	4215241	9.84E-02	1.50E-02	6.78E-03
1779	569885.1	4215251	9.18E-02	1.40E-02	6.32E-03
1780	569885.5	4215261	8.69E-02	1.33E-02	5.99E-03
1781	569885.8	4215270	8.34E-02	1.27E-02	5.75E-03
1782	569886.1	4215280	8.04E-02	1.23E-02	5.54E-03
1783	569886.4	4215290	7.85E-02	1.20E-02	5.41E-03
1784	569886.7	4215299	7.80E-02	1.19E-02	5.38E-03
1785	569887	4215309	7.76E-02	1.18E-02	5.35E-03
1786	569887.3	4215319	7.78E-02	1.19E-02	5.36E-03
1787	569887.7	4215328	8.00E-02	1.22E-02	5.52E-03
1788	569888	4215338	8.34E-02	1.27E-02	5.75E-03
1789	569888.3	4215348	8.94E-02	1.36E-02	6.16E-03
1790	569888.6	4215357	9.35E-02	1.43E-02	6.44E-03
1791	569888.9	4215367	9.95E-02	1.52E-02	6.86E-03
1792	569873.6	4215203	1.31E-01	2.00E-02	9.02E-03
1793	569873.9	4215213	1.23E-01	1.87E-02	8.46E-03
1794	569874.2	4215222	1.11E-01	1.70E-02	7.68E-03
1795	569874.5	4215232	1.02E-01	1.55E-02	7.01E-03
1796	569874.8	4215242	9.40E-02	1.44E-02	6.48E-03
1797	569875.1	4215251	8.74E-02	1.33E-02	6.02E-03
1798	569875.5	4215261	8.23E-02	1.26E-02	5.67E-03
1799	569875.8	4215271	7.84E-02	1.20E-02	5.40E-03
1800	569876.1	4215280	7.51E-02	1.15E-02	5.17E-03
1801	569876.4	4215290	7.33E-02	1.12E-02	5.05E-03
1802	569876.7	4215300	7.30E-02	1.11E-02	5.03E-03
1803	569877	4215309	7.28E-02	1.11E-02	5.02E-03
1804	569877.3	4215319	7.32E-02	1.12E-02	5.04E-03
1805	569877.7	4215329	7.49E-02	1.14E-02	5.16E-03
1806	569878	4215338	7.75E-02	1.18E-02	5.34E-03
1807	569878.3	4215348	8.11E-02	1.24E-02	5.59E-03
1808	569878.6	4215358	8.46E-02	1.29E-02	5.83E-03
1809	569878.9	4215367	8.93E-02	1.36E-02	6.15E-03
1810	569863.9	4215213	1.17E-01	1.79E-02	8.08E-03
1811	569864.2	4215223	1.09E-01	1.66E-02	7.51E-03
1812	569864.5	4215232	1.00E-01	1.53E-02	6.92E-03
1813	569864.8	4215242	9.25E-02	1.41E-02	6.38E-03
1814	569865.1	4215252	8.53E-02	1.30E-02	5.88E-03

1815	569865.5	4215261	7.99E-02	1.22E-02	5.51E-03
1816	569865.8	4215271	7.58E-02	1.16E-02	5.23E-03
1817	569866.1	4215281	7.24E-02	1.11E-02	4.99E-03
1818	569866.4	4215290	7.04E-02	1.08E-02	4.85E-03
1819	569866.7	4215300	6.98E-02	1.07E-02	4.81E-03
1820	569867	4215310	6.92E-02	1.06E-02	4.77E-03
1821	569867.4	4215319	6.92E-02	1.06E-02	4.77E-03
1822	569867.7	4215329	7.02E-02	1.07E-02	4.84E-03
1823	569868	4215339	7.20E-02	1.10E-02	4.96E-03
1824	569868.3	4215348	7.45E-02	1.14E-02	5.13E-03
1825	569868.6	4215358	7.73E-02	1.18E-02	5.32E-03
1826	569868.9	4215368	8.06E-02	1.23E-02	5.55E-03
1827	569853.9	4215213	1.12E-01	1.71E-02	7.73E-03
1828	569854.2	4215223	1.07E-01	1.63E-02	7.34E-03
1829	569854.5	4215233	9.91E-02	1.51E-02	6.83E-03
1830	569854.8	4215242	9.12E-02	1.39E-02	6.28E-03
1831	569855.2	4215252	8.36E-02	1.28E-02	5.76E-03
1832	569855.5	4215262	7.82E-02	1.19E-02	5.39E-03
1833	569855.8	4215271	7.41E-02	1.13E-02	5.11E-03
1834	569856.1	4215281	7.07E-02	1.08E-02	4.87E-03
1835	569856.4	4215291	6.85E-02	1.05E-02	4.72E-03
1836	569856.7	4215300	6.72E-02	1.03E-02	4.63E-03
1837	569857	4215310	6.61E-02	1.01E-02	4.56E-03
1838	569857.4	4215320	6.55E-02	1.00E-02	4.51E-03
1839	569857.7	4215329	6.59E-02	1.01E-02	4.54E-03
1840	569858	4215339	6.68E-02	1.02E-02	4.60E-03
1841	569858.3	4215349	6.82E-02	1.04E-02	4.70E-03
1842	569858.6	4215358	7.02E-02	1.07E-02	4.84E-03
1843	569858.9	4215368	7.25E-02	1.11E-02	5.00E-03
1844	569844.2	4215223	1.04E-01	1.59E-02	7.17E-03
1845	569844.5	4215233	9.77E-02	1.49E-02	6.73E-03
1846	569844.8	4215243	8.98E-02	1.37E-02	6.19E-03
1847	569845.2	4215252	8.20E-02	1.25E-02	5.65E-03
1848	569845.5	4215262	7.65E-02	1.17E-02	5.27E-03
1849	569845.8	4215272	7.25E-02	1.11E-02	5.00E-03
1850	569846.1	4215281	6.91E-02	1.05E-02	4.76E-03
1851	569846.4	4215291	6.66E-02	1.02E-02	4.59E-03
1852	569846.7	4215301	6.48E-02	9.90E-03	4.47E-03
1853	569847.1	4215310	6.31E-02	9.64E-03	4.35E-03
1854	569847.4	4215320	6.21E-02	9.48E-03	4.28E-03
1855	569847.7	4215330	6.20E-02	9.46E-03	4.27E-03
1856	569848	4215339	6.21E-02	9.48E-03	4.28E-03
1857	569848.3	4215349	6.27E-02	9.58E-03	4.32E-03
1858	569848.6	4215359	6.41E-02	9.78E-03	4.41E-03
1859	569848.9	4215368	6.55E-02	1.00E-02	4.51E-03
1860	569834.2	4215224	9.85E-02	1.50E-02	6.79E-03
1861	569834.5	4215233	9.30E-02	1.42E-02	6.41E-03
1862	569834.9	4215243	8.60E-02	1.31E-02	5.93E-03
1863	569835.2	4215253	7.89E-02	1.21E-02	5.44E-03
1864	569835.5	4215262	7.40E-02	1.13E-02	5.10E-03
1865	569835.8	4215272	7.01E-02	1.07E-02	4.83E-03
1866	569836.1	4215282	6.69E-02	1.02E-02	4.61E-03

1867	569836.4	4215291	6.43E-02	9.83E-03	4.43E-03
1868	569836.7	4215301	6.23E-02	9.51E-03	4.29E-03
1869	569837.1	4215311	6.04E-02	9.22E-03	4.16E-03
1870	569837.4	4215320	5.91E-02	9.03E-03	4.08E-03
1871	569837.7	4215330	5.87E-02	8.96E-03	4.05E-03
1872	569838	4215340	5.84E-02	8.92E-03	4.02E-03
1873	569838.3	4215349	5.85E-02	8.93E-03	4.03E-03
1874	569838.6	4215359	5.92E-02	9.03E-03	4.08E-03
1875	569838.9	4215369	5.98E-02	9.13E-03	4.12E-03
1876	569824.5	4215234	8.84E-02	1.35E-02	6.09E-03
1877	569824.9	4215243	8.21E-02	1.25E-02	5.66E-03
1878	569825.2	4215253	7.58E-02	1.16E-02	5.23E-03
1879	569825.5	4215263	7.13E-02	1.09E-02	4.91E-03
1880	569825.8	4215272	6.77E-02	1.03E-02	4.66E-03
1881	569826.1	4215282	6.46E-02	9.86E-03	4.45E-03
1882	569826.4	4215292	6.20E-02	9.47E-03	4.27E-03
1883	569826.7	4215301	5.98E-02	9.14E-03	4.12E-03
1884	569827.1	4215311	5.78E-02	8.83E-03	3.98E-03
1885	569827.4	4215321	5.65E-02	8.63E-03	3.89E-03
1886	569827.7	4215330	5.59E-02	8.53E-03	3.85E-03
1887	569828	4215340	5.53E-02	8.45E-03	3.81E-03
1888	569828.3	4215350	5.51E-02	8.41E-03	3.79E-03
1889	569828.6	4215359	5.52E-02	8.43E-03	3.80E-03
1890	569829	4215369	5.52E-02	8.43E-03	3.81E-03
1891	569814.9	4215244	7.86E-02	1.20E-02	5.42E-03
1892	569815.2	4215253	7.29E-02	1.11E-02	5.02E-03
1893	569815.5	4215263	6.87E-02	1.05E-02	4.74E-03
1894	569815.8	4215273	6.53E-02	9.98E-03	4.50E-03
1895	569816.1	4215282	6.24E-02	9.52E-03	4.30E-03
1896	569816.4	4215292	5.98E-02	9.13E-03	4.12E-03
1897	569816.8	4215302	5.75E-02	8.78E-03	3.96E-03
1898	569817.1	4215311	5.53E-02	8.45E-03	3.81E-03
1899	569817.4	4215321	5.40E-02	8.24E-03	3.72E-03
1900	569817.7	4215331	5.32E-02	8.13E-03	3.67E-03
1901	569818	4215340	5.25E-02	8.01E-03	3.62E-03
1902	569818.3	4215350	5.19E-02	7.93E-03	3.58E-03
1903	569818.6	4215360	5.17E-02	7.89E-03	3.56E-03
1904	569819	4215369	5.12E-02	7.82E-03	3.53E-03
1905	569804.9	4215244	7.40E-02	1.13E-02	5.10E-03
1906	569805.2	4215254	6.87E-02	1.05E-02	4.73E-03
1907	569805.5	4215263	6.49E-02	9.91E-03	4.47E-03
1908	569805.8	4215273	6.18E-02	9.43E-03	4.26E-03
1909	569806.1	4215283	5.91E-02	9.02E-03	4.07E-03
1910	569806.4	4215292	5.68E-02	8.67E-03	3.91E-03
1911	569806.8	4215302	5.47E-02	8.35E-03	3.77E-03
1912	569807.1	4215312	5.27E-02	8.05E-03	3.63E-03
1913	569807.4	4215321	5.14E-02	7.85E-03	3.54E-03
1914	569807.7	4215331	5.06E-02	7.73E-03	3.49E-03
1915	569808	4215341	4.98E-02	7.60E-03	3.43E-03
1916	569808.3	4215350	4.91E-02	7.50E-03	3.38E-03
1917	569808.6	4215360	4.86E-02	7.42E-03	3.35E-03
1918	569809	4215370	4.80E-02	7.32E-03	3.30E-03

1919	569795.2	4215254	6.46E-02	9.86E-03	4.45E-03
1920	569795.5	4215264	6.10E-02	9.32E-03	4.21E-03
1921	569795.8	4215273	5.82E-02	8.89E-03	4.01E-03
1922	569796.1	4215283	5.57E-02	8.51E-03	3.84E-03
1923	569796.4	4215293	5.37E-02	8.20E-03	3.70E-03
1924	569796.8	4215302	5.19E-02	7.92E-03	3.58E-03
1925	569797.1	4215312	5.02E-02	7.66E-03	3.46E-03
1926	569797.4	4215322	4.90E-02	7.48E-03	3.38E-03
1927	569797.7	4215331	4.82E-02	7.36E-03	3.32E-03
1928	569798	4215341	4.73E-02	7.22E-03	3.26E-03
1929	569798.3	4215351	4.65E-02	7.11E-03	3.21E-03
1930	569798.7	4215360	4.60E-02	7.02E-03	3.17E-03
1931	569785.2	4215254	6.08E-02	9.28E-03	4.19E-03
1932	569785.5	4215264	5.76E-02	8.79E-03	3.97E-03
1933	569785.8	4215274	5.49E-02	8.39E-03	3.78E-03
1934	569786.1	4215283	5.26E-02	8.03E-03	3.63E-03
1935	569786.5	4215293	5.09E-02	7.77E-03	3.51E-03
1936	569786.8	4215303	4.93E-02	7.53E-03	3.40E-03
1937	569787.1	4215312	4.78E-02	7.30E-03	3.29E-03
1938	569787.4	4215322	4.67E-02	7.13E-03	3.22E-03
1939	569787.7	4215332	4.59E-02	7.01E-03	3.16E-03
1940	569788	4215341	4.49E-02	6.86E-03	3.10E-03
1941	569788.3	4215351	4.42E-02	6.75E-03	3.05E-03
1942	569788.7	4215361	4.36E-02	6.66E-03	3.00E-03
1943	569775.5	4215264	5.47E-02	8.35E-03	3.77E-03
1944	569775.8	4215274	5.22E-02	7.97E-03	3.59E-03
1945	569776.1	4215284	5.00E-02	7.63E-03	3.44E-03
1946	569776.5	4215293	4.83E-02	7.38E-03	3.33E-03
1947	569776.8	4215303	4.68E-02	7.15E-03	3.23E-03
1948	569777.1	4215313	4.54E-02	6.93E-03	3.13E-03
1949	569777.4	4215322	4.44E-02	6.77E-03	3.06E-03
1950	569777.7	4215332	4.35E-02	6.65E-03	3.00E-03
1951	569778	4215342	4.26E-02	6.50E-03	2.94E-03
1952	569778.3	4215351	4.18E-02	6.39E-03	2.88E-03
1953	569778.7	4215361	4.13E-02	6.30E-03	2.84E-03
1954	569765.5	4215265	5.20E-02	7.95E-03	3.59E-03
1955	569765.8	4215274	4.97E-02	7.58E-03	3.42E-03
1956	569766.1	4215284	4.76E-02	7.27E-03	3.28E-03
1957	569766.5	4215294	4.60E-02	7.02E-03	3.17E-03
1958	569766.8	4215303	4.45E-02	6.79E-03	3.07E-03
1959	569767.1	4215313	4.31E-02	6.58E-03	2.97E-03
1960	569767.4	4215323	4.21E-02	6.43E-03	2.90E-03
1961	569767.7	4215332	4.13E-02	6.30E-03	2.84E-03
1962	569768	4215342	4.03E-02	6.16E-03	2.78E-03
1963	569768.4	4215352	3.96E-02	6.05E-03	2.73E-03
1964	569768.7	4215361	3.90E-02	5.96E-03	2.69E-03
1965	569755.8	4215275	4.73E-02	7.23E-03	3.26E-03
1966	569756.2	4215284	4.54E-02	6.93E-03	3.13E-03
1967	569756.5	4215294	4.38E-02	6.69E-03	3.02E-03
1968	569756.8	4215304	4.23E-02	6.46E-03	2.92E-03
1969	569757.1	4215313	4.10E-02	6.26E-03	2.82E-03
1970	569757.4	4215323	4.01E-02	6.12E-03	2.76E-03

1971	569757.7	4215333	3.92E-02	5.99E-03	2.70E-03
1972	569758	4215342	3.83E-02	5.85E-03	2.64E-03
1973	569758.4	4215352	3.76E-02	5.74E-03	2.59E-03
1974	569758.7	4215362	3.70E-02	5.65E-03	2.55E-03
1975	569745.8	4215275	4.51E-02	6.89E-03	3.11E-03
1976	569746.2	4215285	4.33E-02	6.61E-03	2.98E-03
1977	569746.5	4215294	4.18E-02	6.39E-03	2.88E-03
1978	569746.8	4215304	4.05E-02	6.18E-03	2.79E-03
1979	569747.1	4215314	3.92E-02	5.99E-03	2.70E-03
1980	569747.4	4215323	3.84E-02	5.86E-03	2.64E-03
1981	569747.7	4215333	3.75E-02	5.73E-03	2.58E-03
1982	569748	4215343	3.66E-02	5.58E-03	2.52E-03
1983	569748.4	4215352	3.58E-02	5.47E-03	2.47E-03
1984	569735.2	4215256	4.75E-02	7.26E-03	3.28E-03
1985	569735.5	4215266	4.51E-02	6.89E-03	3.11E-03
1986	569735.8	4215275	4.31E-02	6.58E-03	2.97E-03
1987	569736.2	4215285	4.13E-02	6.31E-03	2.85E-03
1988	569736.5	4215295	4.01E-02	6.12E-03	2.76E-03
1989	569736.8	4215304	3.89E-02	5.93E-03	2.68E-03
1990	569737.1	4215314	3.77E-02	5.76E-03	2.60E-03
1991	569737.4	4215324	3.68E-02	5.63E-03	2.54E-03
1992	569737.7	4215333	3.60E-02	5.50E-03	2.48E-03
1993	569738.1	4215343	3.50E-02	5.35E-03	2.41E-03
1994	569738.4	4215353	3.43E-02	5.24E-03	2.37E-03
1995	569724.6	4215237	5.14E-02	7.85E-03	3.54E-03
1996	569724.9	4215247	4.82E-02	7.36E-03	3.32E-03
1997	569725.2	4215256	4.54E-02	6.94E-03	3.13E-03
1998	569725.5	4215266	4.31E-02	6.58E-03	2.97E-03
1999	569725.9	4215276	4.12E-02	6.29E-03	2.84E-03
2000	569726.2	4215285	3.95E-02	6.03E-03	2.72E-03
2001	569726.5	4215295	3.84E-02	5.86E-03	2.64E-03
2002	569726.8	4215305	3.73E-02	5.70E-03	2.57E-03
2003	569727.1	4215314	3.62E-02	5.53E-03	2.50E-03
2004	569727.4	4215324	3.54E-02	5.41E-03	2.44E-03
2005	569727.7	4215334	3.46E-02	5.28E-03	2.38E-03
2006	569728.1	4215343	3.36E-02	5.13E-03	2.32E-03
2007	569728.4	4215353	3.29E-02	5.03E-03	2.27E-03
2008	569728.7	4215363	3.24E-02	4.95E-03	2.23E-03
2009	569714	4215218	5.39E-02	8.22E-03	3.71E-03
2010	569714.3	4215228	5.31E-02	8.11E-03	3.66E-03
2011	569714.6	4215237	4.98E-02	7.61E-03	3.43E-03
2012	569714.9	4215247	4.68E-02	7.14E-03	3.22E-03
2013	569715.2	4215257	4.41E-02	6.74E-03	3.04E-03
2014	569715.5	4215266	4.18E-02	6.39E-03	2.88E-03
2015	569715.9	4215276	3.99E-02	6.09E-03	2.75E-03
2016	569716.2	4215286	3.82E-02	5.84E-03	2.63E-03
2017	569716.5	4215295	3.71E-02	5.66E-03	2.56E-03
2018	569716.8	4215305	3.60E-02	5.50E-03	2.48E-03
2019	569717.1	4215315	3.50E-02	5.34E-03	2.41E-03
2020	569717.4	4215324	3.41E-02	5.21E-03	2.35E-03
2021	569717.7	4215334	3.33E-02	5.08E-03	2.29E-03
2022	569718.1	4215344	3.23E-02	4.93E-03	2.23E-03

2023	569718.4	4215353	3.16E-02	4.83E-03	2.18E-03
2024	569718.7	4215363	3.11E-02	4.75E-03	2.15E-03
2025	569719	4215373	3.06E-02	4.68E-03	2.11E-03
2026	569719.3	4215382	3.04E-02	4.65E-03	2.10E-03
2027	569709.1	4215385	2.91E-02	4.45E-03	2.01E-03
2028	569699.1	4215385	2.79E-02	4.26E-03	1.92E-03
2029	569702.4	4215377	2.84E-02	4.34E-03	1.96E-03
2030	569705.6	4215368	2.93E-02	4.47E-03	2.02E-03
2031	569708.9	4215360	3.02E-02	4.60E-03	2.08E-03
2032	569689.3	4215385	2.69E-02	4.10E-03	1.85E-03
2033	569692.7	4215376	2.74E-02	4.18E-03	1.89E-03
2034	569696.1	4215367	2.83E-02	4.32E-03	1.95E-03
2035	569699.6	4215358	2.92E-02	4.46E-03	2.01E-03
2036	569703	4215349	3.01E-02	4.60E-03	2.08E-03
2037	569706.5	4215340	3.13E-02	4.78E-03	2.16E-03
2038	569679.2	4215386	2.59E-02	3.96E-03	1.79E-03
2039	569682.6	4215377	2.65E-02	4.05E-03	1.83E-03
2040	569686	4215368	2.73E-02	4.18E-03	1.88E-03
2041	569689.4	4215359	2.82E-02	4.30E-03	1.94E-03
2042	569692.8	4215350	2.90E-02	4.43E-03	2.00E-03
2043	569696.2	4215341	3.01E-02	4.59E-03	2.07E-03
2044	569699.6	4215332	3.13E-02	4.79E-03	2.16E-03
2045	569703	4215324	3.26E-02	4.97E-03	2.24E-03
2046	569706.4	4215315	3.38E-02	5.16E-03	2.33E-03
2047	569669.2	4215386	2.50E-02	3.82E-03	1.72E-03
2048	569672.6	4215377	2.57E-02	3.92E-03	1.77E-03
2049	569675.9	4215368	2.65E-02	4.05E-03	1.83E-03
2050	569679.3	4215360	2.74E-02	4.18E-03	1.88E-03
2051	569682.7	4215351	2.82E-02	4.30E-03	1.94E-03
2052	569686.1	4215342	2.91E-02	4.45E-03	2.01E-03
2053	569689.4	4215333	3.03E-02	4.62E-03	2.09E-03
2054	569692.8	4215325	3.14E-02	4.79E-03	2.16E-03
2055	569696.2	4215316	3.25E-02	4.97E-03	2.24E-03
2056	569699.5	4215307	3.39E-02	5.18E-03	2.34E-03
2057	569702.9	4215298	3.53E-02	5.39E-03	2.43E-03
2058	569706.3	4215290	3.67E-02	5.60E-03	2.53E-03
2059	569659.2	4215386	2.41E-02	3.68E-03	1.66E-03
2060	569662.5	4215378	2.48E-02	3.79E-03	1.71E-03
2061	569665.9	4215369	2.57E-02	3.93E-03	1.77E-03
2062	569669.2	4215360	2.66E-02	4.06E-03	1.83E-03
2063	569672.5	4215352	2.74E-02	4.18E-03	1.89E-03
2064	569675.9	4215343	2.83E-02	4.32E-03	1.95E-03
2065	569679.2	4215334	2.93E-02	4.48E-03	2.02E-03
2066	569682.6	4215326	3.04E-02	4.64E-03	2.10E-03
2067	569685.9	4215317	3.15E-02	4.81E-03	2.17E-03
2068	569689.2	4215308	3.28E-02	5.01E-03	2.26E-03
2069	569692.6	4215299	3.41E-02	5.21E-03	2.35E-03
2070	569695.9	4215291	3.55E-02	5.42E-03	2.45E-03
2071	569699.2	4215282	3.71E-02	5.66E-03	2.56E-03
2072	569702.6	4215273	3.90E-02	5.96E-03	2.69E-03
2073	569705.9	4215265	4.12E-02	6.29E-03	2.84E-03
2074	569649.2	4215387	2.31E-02	3.53E-03	1.60E-03

2075	569652.5	4215378	2.39E-02	3.65E-03	1.65E-03
2076	569655.8	4215369	2.48E-02	3.79E-03	1.71E-03
2077	569659.1	4215361	2.58E-02	3.93E-03	1.78E-03
2078	569662.4	4215352	2.66E-02	4.07E-03	1.83E-03
2079	569665.7	4215344	2.75E-02	4.20E-03	1.89E-03
2080	569669	4215335	2.85E-02	4.35E-03	1.96E-03
2081	569672.3	4215326	2.95E-02	4.50E-03	2.03E-03
2082	569675.7	4215318	3.05E-02	4.66E-03	2.10E-03
2083	569679	4215309	3.18E-02	4.85E-03	2.19E-03
2084	569682.3	4215301	3.32E-02	5.07E-03	2.29E-03
2085	569685.6	4215292	3.46E-02	5.28E-03	2.38E-03
2086	569688.9	4215283	3.61E-02	5.51E-03	2.48E-03
2087	569692.2	4215275	3.78E-02	5.78E-03	2.61E-03
2088	569695.5	4215266	3.99E-02	6.09E-03	2.75E-03
2089	569698.8	4215257	4.23E-02	6.45E-03	2.91E-03
2090	569702.2	4215249	4.48E-02	6.84E-03	3.09E-03
2091	569705.5	4215240	4.77E-02	7.28E-03	3.29E-03
2092	569639.3	4215387	2.23E-02	3.41E-03	1.54E-03
2093	569642.7	4215378	2.31E-02	3.53E-03	1.59E-03
2094	569646.2	4215369	2.41E-02	3.68E-03	1.66E-03
2095	569649.6	4215360	2.51E-02	3.83E-03	1.73E-03
2096	569653.1	4215351	2.60E-02	3.98E-03	1.79E-03
2097	569656.5	4215342	2.70E-02	4.12E-03	1.86E-03
2098	569660	4215333	2.81E-02	4.28E-03	1.93E-03
2099	569663.4	4215324	2.90E-02	4.43E-03	2.00E-03
2100	569666.9	4215315	3.01E-02	4.59E-03	2.07E-03
2101	569670.3	4215306	3.15E-02	4.81E-03	2.17E-03
2102	569673.7	4215297	3.30E-02	5.05E-03	2.28E-03
2103	569677.2	4215288	3.46E-02	5.29E-03	2.39E-03
2104	569680.6	4215279	3.63E-02	5.54E-03	2.50E-03
2105	569684.1	4215270	3.82E-02	5.83E-03	2.63E-03
2106	569687.5	4215261	4.03E-02	6.16E-03	2.78E-03
2107	569691	4215252	4.28E-02	6.53E-03	2.95E-03
2108	569694.4	4215243	4.55E-02	6.94E-03	3.13E-03
2109	569697.9	4215234	4.85E-02	7.40E-03	3.34E-03
2110	569701.3	4215225	5.15E-02	7.87E-03	3.55E-03
2111	569704.7	4215216	5.20E-02	7.94E-03	3.58E-03
2112	569629.3	4215387	2.15E-02	3.29E-03	1.48E-03
2113	569632.7	4215378	2.23E-02	3.41E-03	1.54E-03
2114	569636.1	4215369	2.33E-02	3.56E-03	1.61E-03
2115	569639.5	4215360	2.43E-02	3.71E-03	1.67E-03
2116	569642.9	4215352	2.53E-02	3.86E-03	1.74E-03
2117	569646.3	4215343	2.63E-02	4.01E-03	1.81E-03
2118	569649.8	4215334	2.73E-02	4.17E-03	1.88E-03
2119	569653.2	4215325	2.83E-02	4.33E-03	1.95E-03
2120	569656.6	4215316	2.93E-02	4.47E-03	2.02E-03
2121	569660	4215307	3.07E-02	4.69E-03	2.11E-03
2122	569663.4	4215298	3.22E-02	4.91E-03	2.22E-03
2123	569666.8	4215289	3.38E-02	5.17E-03	2.33E-03
2124	569670.2	4215280	3.55E-02	5.42E-03	2.44E-03
2125	569673.7	4215272	3.72E-02	5.68E-03	2.56E-03
2126	569677.1	4215263	3.92E-02	5.98E-03	2.70E-03

2127	569680.5	4215254	4.14E-02	6.32E-03	2.85E-03
2128	569683.9	4215245	4.36E-02	6.66E-03	3.01E-03
2129	569687.3	4215236	4.63E-02	7.07E-03	3.19E-03
2130	569690.7	4215227	4.94E-02	7.54E-03	3.40E-03
2131	569694.1	4215218	5.01E-02	7.64E-03	3.45E-03
2132	569697.6	4215209	5.03E-02	7.69E-03	3.47E-03
2133	569625.9	4215396	2.07E-02	3.16E-03	1.43E-03
2134	569619.3	4215387	2.08E-02	3.18E-03	1.43E-03
2135	569622.6	4215379	2.16E-02	3.30E-03	1.49E-03
2136	569626	4215370	2.25E-02	3.44E-03	1.55E-03
2137	569629.4	4215361	2.35E-02	3.59E-03	1.62E-03
2138	569632.8	4215352	2.45E-02	3.74E-03	1.69E-03
2139	569636.2	4215343	2.55E-02	3.90E-03	1.76E-03
2140	569639.6	4215335	2.66E-02	4.07E-03	1.84E-03
2141	569643	4215326	2.77E-02	4.23E-03	1.91E-03
2142	569646.3	4215317	2.87E-02	4.39E-03	1.98E-03
2143	569649.7	4215308	3.01E-02	4.59E-03	2.07E-03
2144	569653.1	4215299	3.16E-02	4.82E-03	2.17E-03
2145	569656.5	4215291	3.32E-02	5.06E-03	2.29E-03
2146	569659.9	4215282	3.48E-02	5.31E-03	2.40E-03
2147	569663.3	4215273	3.63E-02	5.55E-03	2.50E-03
2148	569666.7	4215264	3.81E-02	5.82E-03	2.63E-03
2149	569670.1	4215255	4.01E-02	6.13E-03	2.77E-03
2150	569673.4	4215246	4.20E-02	6.42E-03	2.90E-03
2151	569676.8	4215238	4.42E-02	6.75E-03	3.05E-03
2152	569680.2	4215229	4.68E-02	7.14E-03	3.22E-03
2153	569683.6	4215220	4.76E-02	7.27E-03	3.28E-03
2154	569687	4215211	4.78E-02	7.29E-03	3.29E-03
2155	569690.4	4215202	4.81E-02	7.34E-03	3.31E-03
2156	569615.9	4215396	2.00E-02	3.06E-03	1.38E-03
2157	569616.2	4215406	1.94E-02	2.96E-03	1.34E-03
2158	569616.5	4215416	1.89E-02	2.88E-03	1.30E-03
2159	569609.2	4215388	2.01E-02	3.08E-03	1.39E-03
2160	569612.6	4215379	2.09E-02	3.20E-03	1.44E-03
2161	569616	4215370	2.18E-02	3.33E-03	1.50E-03
2162	569619.3	4215362	2.28E-02	3.48E-03	1.57E-03
2163	569622.7	4215353	2.38E-02	3.63E-03	1.64E-03
2164	569626	4215344	2.48E-02	3.78E-03	1.71E-03
2165	569629.4	4215335	2.59E-02	3.96E-03	1.79E-03
2166	569632.8	4215327	2.71E-02	4.14E-03	1.87E-03
2167	569636.1	4215318	2.83E-02	4.31E-03	1.95E-03
2168	569639.5	4215309	2.96E-02	4.51E-03	2.04E-03
2169	569642.8	4215300	3.10E-02	4.73E-03	2.14E-03
2170	569646.2	4215292	3.26E-02	4.97E-03	2.24E-03
2171	569649.6	4215283	3.41E-02	5.21E-03	2.35E-03
2172	569652.9	4215274	3.56E-02	5.43E-03	2.45E-03
2173	569656.3	4215265	3.72E-02	5.68E-03	2.56E-03
2174	569659.7	4215257	3.90E-02	5.96E-03	2.69E-03
2175	569663	4215248	4.06E-02	6.20E-03	2.80E-03
2176	569666.4	4215239	4.24E-02	6.47E-03	2.92E-03
2177	569669.7	4215230	4.45E-02	6.79E-03	3.06E-03
2178	569673.1	4215222	4.54E-02	6.93E-03	3.13E-03

2179	569676.5	4215213	4.52E-02	6.90E-03	3.12E-03
2180	569679.8	4215204	4.52E-02	6.90E-03	3.11E-03
2181	569683.2	4215195	4.52E-02	6.90E-03	3.11E-03
2182	569695.1	4215183	4.53E-02	6.92E-03	3.12E-03
2183	569605.9	4215397	1.93E-02	2.95E-03	1.33E-03
2184	569606.2	4215406	1.87E-02	2.86E-03	1.29E-03
2185	569606.5	4215416	1.83E-02	2.79E-03	1.26E-03
2186	569606.8	4215426	1.78E-02	2.72E-03	1.23E-03
2187	569599.2	4215388	1.95E-02	2.98E-03	1.34E-03
2188	569602.6	4215379	2.03E-02	3.10E-03	1.40E-03
2189	569605.9	4215371	2.12E-02	3.23E-03	1.46E-03
2190	569609.2	4215362	2.21E-02	3.37E-03	1.52E-03
2191	569612.6	4215353	2.30E-02	3.52E-03	1.59E-03
2192	569615.9	4215345	2.40E-02	3.67E-03	1.66E-03
2193	569619.2	4215336	2.52E-02	3.85E-03	1.74E-03
2194	569622.6	4215327	2.64E-02	4.03E-03	1.82E-03
2195	569625.9	4215319	2.76E-02	4.22E-03	1.90E-03
2196	569629.3	4215310	2.90E-02	4.42E-03	2.00E-03
2197	569632.6	4215301	3.05E-02	4.65E-03	2.10E-03
2198	569635.9	4215293	3.20E-02	4.89E-03	2.21E-03
2199	569639.3	4215284	3.36E-02	5.13E-03	2.32E-03
2200	569642.6	4215275	3.49E-02	5.33E-03	2.41E-03
2201	569646	4215267	3.64E-02	5.55E-03	2.51E-03
2202	569649.3	4215258	3.80E-02	5.80E-03	2.62E-03
2203	569652.6	4215249	3.92E-02	5.98E-03	2.70E-03
2204	569656	4215241	4.05E-02	6.19E-03	2.79E-03
2205	569659.3	4215232	4.22E-02	6.44E-03	2.91E-03
2206	569662.6	4215223	4.34E-02	6.63E-03	2.99E-03
2207	569666	4215214	4.30E-02	6.56E-03	2.96E-03
2208	569669.3	4215206	4.26E-02	6.51E-03	2.94E-03
2209	569672.7	4215197	4.24E-02	6.48E-03	2.92E-03
2210	569676	4215188	4.18E-02	6.38E-03	2.88E-03
2211	569687.9	4215176	4.19E-02	6.39E-03	2.89E-03
2212	569595.9	4215397	1.87E-02	2.86E-03	1.29E-03
2213	569596.2	4215407	1.81E-02	2.77E-03	1.25E-03
2214	569596.5	4215416	1.77E-02	2.70E-03	1.22E-03
2215	569596.8	4215426	1.73E-02	2.64E-03	1.19E-03
2216	569597.1	4215435	1.68E-02	2.57E-03	1.16E-03
2217	569589.3	4215388	1.89E-02	2.89E-03	1.31E-03
2218	569592.8	4215379	1.97E-02	3.01E-03	1.36E-03
2219	569596.2	4215370	2.06E-02	3.15E-03	1.42E-03
2220	569599.7	4215361	2.16E-02	3.29E-03	1.49E-03
2221	569603.1	4215352	2.25E-02	3.44E-03	1.55E-03
2222	569606.6	4215343	2.36E-02	3.60E-03	1.63E-03
2223	569610	4215334	2.48E-02	3.79E-03	1.71E-03
2224	569613.5	4215325	2.61E-02	3.99E-03	1.80E-03
2225	569616.9	4215316	2.74E-02	4.19E-03	1.89E-03
2226	569620.4	4215307	2.89E-02	4.41E-03	1.99E-03
2227	569623.8	4215298	3.04E-02	4.64E-03	2.10E-03
2228	569627.3	4215289	3.21E-02	4.90E-03	2.21E-03
2229	569630.7	4215281	3.35E-02	5.12E-03	2.31E-03
2230	569634.2	4215272	3.50E-02	5.35E-03	2.41E-03

2231	569637.6	4215263	3.64E-02	5.56E-03	2.51E-03
2232	569641.1	4215254	3.77E-02	5.76E-03	2.60E-03
2233	569644.5	4215245	3.85E-02	5.89E-03	2.66E-03
2234	569648	4215236	3.96E-02	6.05E-03	2.73E-03
2235	569651.4	4215227	4.10E-02	6.26E-03	2.83E-03
2236	569654.9	4215218	4.10E-02	6.26E-03	2.83E-03
2237	569658.3	4215209	4.07E-02	6.21E-03	2.80E-03
2238	569661.8	4215200	4.02E-02	6.13E-03	2.77E-03
2239	569665.2	4215191	3.96E-02	6.05E-03	2.73E-03
2240	569668.7	4215182	3.91E-02	5.97E-03	2.69E-03
2241	569680.9	4215169	3.92E-02	5.98E-03	2.70E-03
2242	569585.9	4215397	1.82E-02	2.78E-03	1.25E-03
2243	569586.2	4215407	1.76E-02	2.69E-03	1.21E-03
2244	569586.5	4215416	1.72E-02	2.62E-03	1.18E-03
2245	569586.8	4215426	1.68E-02	2.56E-03	1.15E-03
2246	569587.1	4215436	1.63E-02	2.50E-03	1.13E-03
2247	569918.2	4215544	2.77E-02	4.23E-03	1.91E-03
2248	569927.5	4215543	2.82E-02	4.31E-03	1.94E-03
2249	569936.8	4215541	2.87E-02	4.39E-03	1.98E-03
2250	569946.1	4215539	2.93E-02	4.47E-03	2.02E-03
2251	569955.4	4215538	2.99E-02	4.57E-03	2.06E-03
2252	569964.8	4215536	3.06E-02	4.67E-03	2.11E-03
2253	569974.1	4215534	3.14E-02	4.79E-03	2.16E-03
2254	569983.4	4215533	3.23E-02	4.93E-03	2.22E-03
2255	569992.7	4215531	3.32E-02	5.07E-03	2.29E-03
2256	570002	4215529	3.42E-02	5.23E-03	2.36E-03
2257	570011.3	4215527	3.53E-02	5.39E-03	2.43E-03
2258	570020.6	4215526	3.63E-02	5.55E-03	2.50E-03
2259	569911.2	4215552	2.60E-02	3.96E-03	1.79E-03
2260	569902.5	4215550	2.64E-02	4.03E-03	1.82E-03
2261	569929.3	4215552	2.59E-02	3.96E-03	1.79E-03
2262	569938.6	4215551	2.63E-02	4.02E-03	1.81E-03
2263	569947.9	4215549	2.68E-02	4.09E-03	1.85E-03
2264	569957.2	4215547	2.73E-02	4.17E-03	1.88E-03
2265	569966.5	4215546	2.79E-02	4.26E-03	1.92E-03
2266	569975.8	4215544	2.85E-02	4.35E-03	1.96E-03
2267	569985.2	4215542	2.92E-02	4.46E-03	2.01E-03
2268	569994.5	4215541	3.00E-02	4.58E-03	2.07E-03
2269	570003.8	4215539	3.08E-02	4.70E-03	2.12E-03
2270	570013.1	4215537	3.16E-02	4.83E-03	2.18E-03
2271	570022.4	4215536	3.25E-02	4.96E-03	2.24E-03
2272	569913	4215562	2.39E-02	3.66E-03	1.65E-03
2273	569895.7	4215557	2.48E-02	3.78E-03	1.71E-03
2274	569878.3	4215553	2.56E-02	3.91E-03	1.76E-03
2275	569921.7	4215564	2.35E-02	3.59E-03	1.62E-03
2276	569931	4215562	2.39E-02	3.64E-03	1.64E-03
2277	569940.3	4215561	2.42E-02	3.70E-03	1.67E-03
2278	569949.7	4215559	2.46E-02	3.75E-03	1.69E-03
2279	569959	4215557	2.50E-02	3.82E-03	1.72E-03
2280	569968.3	4215556	2.55E-02	3.89E-03	1.76E-03
2281	569977.6	4215554	2.60E-02	3.97E-03	1.79E-03
2282	569986.9	4215552	2.66E-02	4.06E-03	1.83E-03

2283	569996.2	4215551	2.72E-02	4.15E-03	1.87E-03
2284	570005.6	4215549	2.78E-02	4.24E-03	1.92E-03
2285	570014.9	4215547	2.85E-02	4.35E-03	1.96E-03
2286	570024.2	4215546	2.91E-02	4.45E-03	2.01E-03
2287	570033.5	4215544	2.97E-02	4.54E-03	2.05E-03
2288	569914.8	4215572	2.21E-02	3.38E-03	1.52E-03
2289	569897.6	4215567	2.29E-02	3.50E-03	1.58E-03
2290	569880.3	4215563	2.37E-02	3.62E-03	1.63E-03
2291	569863	4215558	2.44E-02	3.73E-03	1.68E-03
2292	569923.5	4215574	2.17E-02	3.32E-03	1.50E-03
2293	569932.8	4215572	2.20E-02	3.36E-03	1.52E-03
2294	569942.1	4215570	2.23E-02	3.41E-03	1.54E-03
2295	569951.4	4215569	2.26E-02	3.46E-03	1.56E-03
2296	569960.7	4215567	2.30E-02	3.51E-03	1.58E-03
2297	569970.1	4215565	2.34E-02	3.57E-03	1.61E-03
2298	569979.4	4215564	2.38E-02	3.63E-03	1.64E-03
2299	569988.7	4215562	2.42E-02	3.70E-03	1.67E-03
2300	569998	4215560	2.47E-02	3.77E-03	1.70E-03
2301	570007.3	4215559	2.52E-02	3.85E-03	1.74E-03
2302	570016.6	4215557	2.58E-02	3.93E-03	1.78E-03
2303	570026	4215555	2.63E-02	4.02E-03	1.81E-03
2304	569916.7	4215581	2.05E-02	3.13E-03	1.41E-03
2305	569899.4	4215577	2.12E-02	3.24E-03	1.46E-03
2306	569882.2	4215573	2.20E-02	3.35E-03	1.51E-03
2307	569865	4215568	2.27E-02	3.46E-03	1.56E-03
2308	569847.8	4215564	2.33E-02	3.56E-03	1.61E-03
2309	569830.6	4215559	2.30E-02	3.51E-03	1.59E-03
2310	569934.6	4215582	2.04E-02	3.11E-03	1.40E-03
2311	569943.9	4215580	2.06E-02	3.15E-03	1.42E-03
2312	569953.2	4215579	2.09E-02	3.19E-03	1.44E-03
2313	569962.5	4215577	2.12E-02	3.24E-03	1.46E-03
2314	569971.8	4215575	2.15E-02	3.29E-03	1.48E-03
2315	569981.1	4215574	2.18E-02	3.33E-03	1.50E-03
2316	569990.5	4215572	2.22E-02	3.39E-03	1.53E-03
2317	569999.8	4215570	2.26E-02	3.45E-03	1.56E-03
2318	570009.1	4215569	2.30E-02	3.52E-03	1.59E-03
2319	570065	4215558	2.60E-02	3.96E-03	1.79E-03
2320	570074.3	4215557	2.67E-02	4.07E-03	1.84E-03
2321	570083.6	4215555	2.74E-02	4.19E-03	1.89E-03
2322	569917.9	4215591	1.90E-02	2.91E-03	1.31E-03
2323	569908.7	4215589	1.94E-02	2.96E-03	1.34E-03
2324	569899.6	4215586	1.98E-02	3.02E-03	1.36E-03
2325	569890.5	4215584	2.02E-02	3.08E-03	1.39E-03
2326	569881.3	4215582	2.05E-02	3.13E-03	1.41E-03
2327	569872.2	4215579	2.09E-02	3.19E-03	1.44E-03
2328	569863	4215577	2.12E-02	3.24E-03	1.46E-03
2329	569853.9	4215575	2.16E-02	3.29E-03	1.49E-03
2330	569844.8	4215572	2.19E-02	3.35E-03	1.51E-03
2331	569835.6	4215570	2.14E-02	3.27E-03	1.48E-03
2332	569826.5	4215568	2.16E-02	3.30E-03	1.49E-03
2333	569817.3	4215565	2.18E-02	3.34E-03	1.51E-03
2334	569808.2	4215563	2.20E-02	3.37E-03	1.52E-03

2335	569927	4215593	1.87E-02	2.85E-03	1.29E-03
2336	569936.3	4215592	1.89E-02	2.88E-03	1.30E-03
2337	569945.7	4215590	1.91E-02	2.92E-03	1.32E-03
2338	569955	4215588	1.94E-02	2.95E-03	1.33E-03
2339	569964.3	4215587	1.96E-02	2.99E-03	1.35E-03
2340	569973.6	4215585	1.99E-02	3.03E-03	1.37E-03
2341	569982.9	4215583	2.01E-02	3.07E-03	1.39E-03
2342	569992.2	4215582	2.04E-02	3.12E-03	1.41E-03
2343	570048.1	4215572	2.28E-02	3.48E-03	1.57E-03
2344	570057.4	4215570	2.32E-02	3.55E-03	1.60E-03
2345	570066.8	4215568	2.38E-02	3.64E-03	1.64E-03
2346	570076.1	4215567	2.45E-02	3.74E-03	1.69E-03
2347	570085.4	4215565	2.52E-02	3.84E-03	1.73E-03
2348	569919.7	4215601	1.77E-02	2.71E-03	1.22E-03
2349	569910.6	4215599	1.81E-02	2.76E-03	1.24E-03
2350	569901.6	4215596	1.84E-02	2.81E-03	1.27E-03
2351	569892.5	4215594	1.88E-02	2.86E-03	1.29E-03
2352	569883.4	4215592	1.91E-02	2.92E-03	1.32E-03
2353	569874.4	4215589	1.94E-02	2.97E-03	1.34E-03
2354	569865.3	4215587	1.98E-02	3.02E-03	1.36E-03
2355	569856.2	4215585	2.01E-02	3.07E-03	1.39E-03
2356	569847.1	4215582	2.04E-02	3.12E-03	1.41E-03
2357	569838.1	4215580	2.07E-02	3.17E-03	1.43E-03
2358	569829	4215578	2.02E-02	3.09E-03	1.39E-03
2359	569819.9	4215575	2.04E-02	3.12E-03	1.41E-03
2360	569810.8	4215573	2.06E-02	3.15E-03	1.42E-03
2361	569801.8	4215571	2.08E-02	3.17E-03	1.43E-03
2362	569792.7	4215568	2.10E-02	3.20E-03	1.45E-03
2363	569928.8	4215603	1.74E-02	2.66E-03	1.20E-03
2364	569938.1	4215602	1.76E-02	2.68E-03	1.21E-03
2365	569947.4	4215600	1.78E-02	2.71E-03	1.22E-03
2366	569956.7	4215598	1.80E-02	2.75E-03	1.24E-03
2367	569966.1	4215597	1.82E-02	2.78E-03	1.25E-03
2368	569975.4	4215595	1.84E-02	2.81E-03	1.27E-03
2369	570031.3	4215585	2.02E-02	3.08E-03	1.39E-03
2370	570040.6	4215583	2.06E-02	3.14E-03	1.42E-03
2371	570049.9	4215582	2.10E-02	3.21E-03	1.45E-03
2372	570059.2	4215580	2.15E-02	3.28E-03	1.48E-03
2373	570068.5	4215578	2.20E-02	3.36E-03	1.52E-03
2374	570077.8	4215576	2.26E-02	3.45E-03	1.56E-03
2375	570087.2	4215575	2.32E-02	3.54E-03	1.60E-03
2376	569921.6	4215611	1.66E-02	2.53E-03	1.14E-03
2377	569912.5	4215609	1.69E-02	2.57E-03	1.16E-03
2378	569903.5	4215606	1.72E-02	2.62E-03	1.18E-03
2379	569894.5	4215604	1.75E-02	2.67E-03	1.20E-03
2380	569885.5	4215602	1.78E-02	2.72E-03	1.23E-03
2381	569876.5	4215599	1.81E-02	2.77E-03	1.25E-03
2382	569867.5	4215597	1.84E-02	2.82E-03	1.27E-03
2383	569858.5	4215595	1.88E-02	2.86E-03	1.29E-03
2384	569849.4	4215592	1.91E-02	2.91E-03	1.31E-03
2385	569840.4	4215590	1.94E-02	2.96E-03	1.33E-03
2386	569831.4	4215588	1.97E-02	3.00E-03	1.35E-03

2387	569822.4	4215585	1.91E-02	2.92E-03	1.32E-03
2388	569813.4	4215583	1.93E-02	2.94E-03	1.33E-03
2389	569804.4	4215581	1.95E-02	2.97E-03	1.34E-03
2390	569795.4	4215578	1.97E-02	3.00E-03	1.35E-03
2391	569786.3	4215576	1.98E-02	3.03E-03	1.37E-03
2392	569930.6	4215613	1.62E-02	2.48E-03	1.12E-03
2393	569939.9	4215611	1.64E-02	2.51E-03	1.13E-03
2394	569949.2	4215610	1.66E-02	2.53E-03	1.14E-03
2395	570005.1	4215600	1.78E-02	2.72E-03	1.23E-03
2396	570014.4	4215598	1.81E-02	2.76E-03	1.25E-03
2397	570023.7	4215596	1.84E-02	2.81E-03	1.27E-03
2398	570033	4215595	1.87E-02	2.86E-03	1.29E-03
2399	570042.3	4215593	1.91E-02	2.92E-03	1.32E-03
2400	570051.7	4215591	1.95E-02	2.98E-03	1.34E-03
2401	570061	4215590	1.99E-02	3.04E-03	1.37E-03
2402	570070.3	4215588	2.04E-02	3.11E-03	1.41E-03
2403	570079.6	4215586	2.09E-02	3.19E-03	1.44E-03
2404	570088.9	4215585	2.15E-02	3.28E-03	1.48E-03
2405	569923.4	4215621	1.55E-02	2.37E-03	1.07E-03
2406	569914.4	4215618	1.58E-02	2.41E-03	1.09E-03
2407	569905.5	4215616	1.61E-02	2.45E-03	1.11E-03
2408	569896.5	4215614	1.63E-02	2.50E-03	1.13E-03
2409	569887.5	4215611	1.66E-02	2.54E-03	1.15E-03
2410	569878.6	4215609	1.69E-02	2.59E-03	1.17E-03
2411	569869.6	4215607	1.72E-02	2.63E-03	1.19E-03
2412	569860.6	4215605	1.75E-02	2.68E-03	1.21E-03
2413	569851.7	4215602	1.78E-02	2.72E-03	1.23E-03
2414	569842.7	4215600	1.81E-02	2.76E-03	1.25E-03
2415	569833.8	4215598	1.84E-02	2.81E-03	1.27E-03
2416	569824.8	4215595	1.87E-02	2.85E-03	1.29E-03
2417	569815.8	4215593	1.81E-02	2.77E-03	1.25E-03
2418	569806.9	4215591	1.83E-02	2.79E-03	1.26E-03
2419	569797.9	4215588	1.85E-02	2.82E-03	1.27E-03
2420	569789	4215586	1.86E-02	2.85E-03	1.28E-03
2421	569932.3	4215623	1.52E-02	2.33E-03	1.05E-03
2422	569988.2	4215613	1.62E-02	2.48E-03	1.12E-03
2423	569997.5	4215611	1.64E-02	2.51E-03	1.13E-03
2424	570006.9	4215610	1.66E-02	2.54E-03	1.15E-03
2425	570016.2	4215608	1.69E-02	2.57E-03	1.16E-03
2426	570025.5	4215606	1.71E-02	2.61E-03	1.18E-03
2427	570034.8	4215605	1.74E-02	2.66E-03	1.20E-03
2428	570044.1	4215603	1.78E-02	2.72E-03	1.23E-03
2429	570053.4	4215601	1.82E-02	2.78E-03	1.25E-03
2430	570062.7	4215600	1.86E-02	2.84E-03	1.28E-03
2431	570072.1	4215598	1.90E-02	2.91E-03	1.31E-03
2432	570081.4	4215596	1.95E-02	2.98E-03	1.34E-03
2433	570090.7	4215595	2.00E-02	3.06E-03	1.38E-03
2434	569925.2	4215631	1.46E-02	2.22E-03	1.00E-03
2435	569916.3	4215628	1.48E-02	2.26E-03	1.02E-03
2436	569907.4	4215626	1.51E-02	2.30E-03	1.04E-03
2437	569898.5	4215624	1.53E-02	2.34E-03	1.06E-03
2438	569889.5	4215621	1.56E-02	2.38E-03	1.07E-03

2439	569880.6	4215619	1.58E-02	2.42E-03	1.09E-03
2440	569871.7	4215617	1.61E-02	2.46E-03	1.11E-03
2441	569862.8	4215615	1.64E-02	2.51E-03	1.13E-03
2442	569853.9	4215612	1.67E-02	2.55E-03	1.15E-03
2443	569845	4215610	1.70E-02	2.59E-03	1.17E-03
2444	569836.1	4215608	1.72E-02	2.63E-03	1.19E-03
2445	569827.1	4215605	1.75E-02	2.67E-03	1.21E-03
2446	569818.2	4215603	1.71E-02	2.61E-03	1.18E-03
2447	569809.3	4215601	1.72E-02	2.63E-03	1.19E-03
2448	569800.4	4215598	1.74E-02	2.65E-03	1.20E-03
2449	569791.5	4215596	1.75E-02	2.68E-03	1.21E-03
2450	569971.4	4215626	1.49E-02	2.27E-03	1.02E-03
2451	569980.7	4215624	1.50E-02	2.29E-03	1.04E-03
2452	569990	4215623	1.52E-02	2.32E-03	1.05E-03
2453	569999.3	4215621	1.54E-02	2.35E-03	1.06E-03
2454	570008.6	4215619	1.56E-02	2.38E-03	1.07E-03
2455	570017.9	4215618	1.58E-02	2.41E-03	1.09E-03
2456	570027.3	4215616	1.60E-02	2.44E-03	1.10E-03
2457	570036.6	4215614	1.63E-02	2.49E-03	1.12E-03
2458	570045.9	4215613	1.67E-02	2.55E-03	1.15E-03
2459	570055.2	4215611	1.70E-02	2.60E-03	1.17E-03
2460	570064.5	4215609	1.74E-02	2.66E-03	1.20E-03
2461	570073.8	4215608	1.78E-02	2.72E-03	1.23E-03
2462	570083.2	4215606	1.83E-02	2.79E-03	1.26E-03
2463	570092.5	4215604	1.88E-02	2.87E-03	1.29E-03
2464	569909.3	4215636	1.42E-02	2.16E-03	9.77E-04
2465	569900.4	4215634	1.44E-02	2.20E-03	9.93E-04
2466	569891.5	4215631	1.47E-02	2.24E-03	1.01E-03
2467	569882.6	4215629	1.49E-02	2.27E-03	1.03E-03
2468	569873.8	4215627	1.51E-02	2.31E-03	1.04E-03
2469	569864.9	4215624	1.54E-02	2.35E-03	1.06E-03
2470	569856	4215622	1.57E-02	2.39E-03	1.08E-03
2471	569847.2	4215620	1.59E-02	2.43E-03	1.10E-03
2472	569838.3	4215618	1.62E-02	2.47E-03	1.11E-03
2473	569829.4	4215615	1.64E-02	2.51E-03	1.13E-03
2474	569820.5	4215613	1.67E-02	2.54E-03	1.15E-03
2475	569811.7	4215611	1.62E-02	2.48E-03	1.12E-03
2476	569802.8	4215608	1.64E-02	2.50E-03	1.13E-03
2477	569945.2	4215641	1.36E-02	2.08E-03	9.38E-04
2478	569954.5	4215639	1.37E-02	2.09E-03	9.45E-04
2479	569963.8	4215638	1.38E-02	2.11E-03	9.53E-04
2480	569973.1	4215636	1.40E-02	2.13E-03	9.62E-04
2481	569982.5	4215634	1.41E-02	2.16E-03	9.73E-04
2482	569991.8	4215633	1.43E-02	2.18E-03	9.84E-04
2483	570001.1	4215631	1.45E-02	2.21E-03	9.96E-04
2484	570010.4	4215629	1.46E-02	2.24E-03	1.01E-03
2485	570019.7	4215628	1.48E-02	2.27E-03	1.02E-03
2486	570029	4215626	1.51E-02	2.30E-03	1.04E-03
2487	570038.3	4215624	1.54E-02	2.35E-03	1.06E-03
2488	570047.7	4215623	1.57E-02	2.39E-03	1.08E-03
2489	570057	4215621	1.60E-02	2.44E-03	1.10E-03
2490	570066.3	4215619	1.64E-02	2.50E-03	1.13E-03

2491	570075.6	4215618	1.67E-02	2.56E-03	1.15E-03
2492	570084.9	4215616	1.72E-02	2.62E-03	1.18E-03
2493	570094.2	4215614	1.76E-02	2.69E-03	1.22E-03
2494	569902.3	4215643	1.36E-02	2.07E-03	9.36E-04
2495	569893.5	4215641	1.38E-02	2.11E-03	9.51E-04
2496	569884.6	4215639	1.40E-02	2.14E-03	9.66E-04
2497	569875.8	4215637	1.42E-02	2.18E-03	9.82E-04
2498	569867	4215634	1.45E-02	2.21E-03	9.98E-04
2499	569858.1	4215632	1.47E-02	2.25E-03	1.01E-03
2500	569849.3	4215630	1.49E-02	2.28E-03	1.03E-03
2501	569840.5	4215628	1.52E-02	2.32E-03	1.05E-03
2502	569831.6	4215625	1.54E-02	2.35E-03	1.06E-03
2503	569822.8	4215623	1.57E-02	2.39E-03	1.08E-03
2504	569814	4215621	1.59E-02	2.43E-03	1.09E-03
2505	569937.6	4215653	1.28E-02	1.95E-03	8.79E-04
2506	569947	4215651	1.28E-02	1.96E-03	8.85E-04
2507	569956.3	4215649	1.29E-02	1.98E-03	8.91E-04
2508	569965.6	4215647	1.30E-02	1.99E-03	8.98E-04
2509	569974.9	4215646	1.32E-02	2.01E-03	9.07E-04
2510	569984.2	4215644	1.33E-02	2.03E-03	9.16E-04
2511	569993.5	4215642	1.35E-02	2.05E-03	9.27E-04
2512	570002.9	4215641	1.36E-02	2.08E-03	9.39E-04
2513	570012.2	4215639	1.38E-02	2.11E-03	9.52E-04
2514	570021.5	4215637	1.40E-02	2.14E-03	9.66E-04
2515	570030.8	4215636	1.42E-02	2.18E-03	9.82E-04
2516	570040.1	4215634	1.45E-02	2.21E-03	9.99E-04
2517	570049.4	4215632	1.48E-02	2.26E-03	1.02E-03
2518	570058.7	4215631	1.51E-02	2.30E-03	1.04E-03
2519	570068.1	4215629	1.54E-02	2.35E-03	1.06E-03
2520	570077.4	4215627	1.58E-02	2.41E-03	1.09E-03
2521	570086.7	4215626	1.62E-02	2.47E-03	1.11E-03
2522	570096	4215624	1.66E-02	2.54E-03	1.14E-03
2523	569930.6	4215660	1.23E-02	1.87E-03	8.44E-04
2524	569921.8	4215658	1.24E-02	1.90E-03	8.57E-04
2525	569895.4	4215651	1.30E-02	1.99E-03	8.97E-04
2526	569886.6	4215649	1.32E-02	2.02E-03	9.11E-04
2527	569877.8	4215647	1.34E-02	2.05E-03	9.25E-04
2528	569869	4215644	1.36E-02	2.08E-03	9.40E-04
2529	569860.2	4215642	1.39E-02	2.12E-03	9.55E-04
2530	569851.4	4215640	1.41E-02	2.15E-03	9.70E-04
2531	569842.6	4215637	1.43E-02	2.18E-03	9.85E-04
2532	569833.8	4215635	1.45E-02	2.22E-03	1.00E-03
2533	569816.2	4215631	1.49E-02	2.28E-03	1.03E-03
2534	569939.4	4215662	1.21E-02	1.84E-03	8.32E-04
2535	569948.7	4215661	1.22E-02	1.86E-03	8.37E-04
2536	569958	4215659	1.22E-02	1.87E-03	8.43E-04
2537	569967.4	4215657	1.23E-02	1.88E-03	8.50E-04
2538	569976.7	4215656	1.24E-02	1.90E-03	8.58E-04
2539	569986	4215654	1.26E-02	1.92E-03	8.67E-04
2540	569995.3	4215652	1.27E-02	1.94E-03	8.76E-04
2541	570004.6	4215651	1.29E-02	1.97E-03	8.88E-04
2542	570013.9	4215649	1.31E-02	2.00E-03	9.01E-04

2543	570023.3	4215647	1.33E-02	2.03E-03	9.15E-04
2544	570032.6	4215646	1.35E-02	2.06E-03	9.30E-04
2545	570041.9	4215644	1.37E-02	2.10E-03	9.46E-04
2546	570051.2	4215642	1.40E-02	2.13E-03	9.63E-04
2547	570060.5	4215641	1.43E-02	2.18E-03	9.83E-04
2548	570069.8	4215639	1.46E-02	2.22E-03	1.00E-03
2549	570079.1	4215637	1.49E-02	2.27E-03	1.03E-03
2550	570088.5	4215636	1.53E-02	2.33E-03	1.05E-03
2551	570097.8	4215634	1.57E-02	2.39E-03	1.08E-03
2552	569932	4215670	1.16E-02	1.77E-03	8.00E-04
2553	569922.9	4215667	1.18E-02	1.80E-03	8.12E-04
2554	569913.7	4215665	1.20E-02	1.83E-03	8.25E-04
2555	569877	4215656	1.27E-02	1.95E-03	8.78E-04
2556	569867.9	4215653	1.29E-02	1.98E-03	8.92E-04
2557	569858.7	4215651	1.32E-02	2.01E-03	9.07E-04
2558	569849.5	4215649	1.34E-02	2.04E-03	9.21E-04
2559	569840.4	4215646	1.36E-02	2.07E-03	9.36E-04
2560	569831.2	4215644	1.38E-02	2.11E-03	9.51E-04
2561	569941.2	4215672	1.14E-02	1.75E-03	7.89E-04
2562	569950.5	4215671	1.15E-02	1.76E-03	7.94E-04
2563	569959.8	4215669	1.16E-02	1.77E-03	8.00E-04
2564	569969.1	4215667	1.17E-02	1.79E-03	8.06E-04
2565	569978.4	4215665	1.18E-02	1.80E-03	8.13E-04
2566	569987.8	4215664	1.19E-02	1.82E-03	8.21E-04
2567	569997.1	4215662	1.21E-02	1.84E-03	8.30E-04
2568	570006.4	4215660	1.22E-02	1.86E-03	8.41E-04
2569	570015.7	4215659	1.24E-02	1.89E-03	8.52E-04
2570	570025	4215657	1.26E-02	1.92E-03	8.66E-04
2571	570034.3	4215655	1.28E-02	1.95E-03	8.80E-04
2572	570043.7	4215654	1.30E-02	1.98E-03	8.95E-04
2573	570053	4215652	1.32E-02	2.02E-03	9.12E-04
2574	570062.3	4215650	1.35E-02	2.06E-03	9.30E-04
2575	570071.6	4215649	1.38E-02	2.10E-03	9.50E-04
2576	570080.9	4215647	1.41E-02	2.15E-03	9.71E-04
2577	570090.2	4215645	1.44E-02	2.20E-03	9.94E-04
2578	570099.5	4215644	1.48E-02	2.26E-03	1.02E-03
2579	569933.8	4215680	1.10E-02	1.68E-03	7.60E-04
2580	569924.7	4215677	1.12E-02	1.71E-03	7.71E-04
2581	569915.6	4215675	1.13E-02	1.73E-03	7.82E-04
2582	569906.5	4215673	1.15E-02	1.76E-03	7.93E-04
2583	569870	4215663	1.22E-02	1.87E-03	8.44E-04
2584	569860.9	4215661	1.24E-02	1.90E-03	8.57E-04
2585	569851.8	4215659	1.26E-02	1.93E-03	8.70E-04
2586	569842.7	4215656	1.28E-02	1.96E-03	8.84E-04
2587	569833.6	4215654	1.30E-02	1.99E-03	8.97E-04
2588	569943	4215682	1.09E-02	1.66E-03	7.50E-04
2589	569952.3	4215680	1.09E-02	1.67E-03	7.54E-04
2590	569961.6	4215679	1.10E-02	1.68E-03	7.60E-04
2591	569970.9	4215677	1.11E-02	1.70E-03	7.66E-04
2592	569980.2	4215675	1.12E-02	1.71E-03	7.73E-04
2593	569989.5	4215674	1.13E-02	1.73E-03	7.80E-04
2594	569998.8	4215672	1.14E-02	1.75E-03	7.89E-04

2595	570008.2	4215670	1.16E-02	1.77E-03	7.98E-04
2596	570017.5	4215669	1.17E-02	1.79E-03	8.09E-04
2597	570026.8	4215667	1.19E-02	1.82E-03	8.20E-04
2598	570036.1	4215665	1.21E-02	1.85E-03	8.34E-04
2599	570045.4	4215664	1.23E-02	1.88E-03	8.49E-04
2600	570054.7	4215662	1.25E-02	1.92E-03	8.65E-04
2601	570064.1	4215660	1.28E-02	1.95E-03	8.81E-04
2602	570073.4	4215659	1.31E-02	1.99E-03	9.00E-04
2603	570082.7	4215657	1.33E-02	2.04E-03	9.20E-04
2604	570092	4215655	1.37E-02	2.09E-03	9.41E-04
2605	570101.3	4215654	1.40E-02	2.14E-03	9.65E-04
2606	569935.7	4215690	1.05E-02	1.60E-03	7.23E-04
2607	569926.6	4215687	1.06E-02	1.62E-03	7.33E-04
2608	569917.5	4215685	1.08E-02	1.65E-03	7.43E-04
2609	569908.4	4215683	1.09E-02	1.67E-03	7.53E-04
2610	569899.4	4215680	1.11E-02	1.69E-03	7.64E-04
2611	569863.1	4215671	1.18E-02	1.80E-03	8.11E-04
2612	569854	4215669	1.20E-02	1.82E-03	8.24E-04
2613	569844.9	4215666	1.21E-02	1.85E-03	8.36E-04
2614	569944.7	4215692	1.04E-02	1.58E-03	7.14E-04
2615	569954	4215690	1.04E-02	1.59E-03	7.19E-04
2616	569963.4	4215689	1.05E-02	1.60E-03	7.24E-04
2617	569972.7	4215687	1.06E-02	1.62E-03	7.30E-04
2618	569982	4215685	1.07E-02	1.63E-03	7.36E-04
2619	569991.3	4215684	1.08E-02	1.65E-03	7.43E-04
2620	570000.6	4215682	1.09E-02	1.66E-03	7.51E-04
2621	570009.9	4215680	1.10E-02	1.68E-03	7.59E-04
2622	570019.2	4215678	1.12E-02	1.70E-03	7.69E-04
2623	570028.6	4215677	1.13E-02	1.73E-03	7.80E-04
2624	570037.9	4215675	1.15E-02	1.76E-03	7.92E-04
2625	570047.2	4215673	1.17E-02	1.79E-03	8.06E-04
2626	570056.5	4215672	1.19E-02	1.82E-03	8.21E-04
2627	570065.8	4215670	1.21E-02	1.85E-03	8.37E-04
2628	570075.1	4215668	1.24E-02	1.89E-03	8.54E-04
2629	570084.5	4215667	1.27E-02	1.93E-03	8.73E-04
2630	570093.8	4215665	1.30E-02	1.98E-03	8.93E-04
2631	570103.1	4215663	1.33E-02	2.03E-03	9.15E-04
2632	569937.5	4215699	1.00E-02	1.53E-03	6.89E-04
2633	569928.4	4215697	1.01E-02	1.55E-03	6.98E-04
2634	569919.4	4215695	1.03E-02	1.57E-03	7.07E-04
2635	569910.4	4215692	1.04E-02	1.59E-03	7.16E-04
2636	569901.3	4215690	1.05E-02	1.61E-03	7.26E-04
2637	569892.3	4215688	1.07E-02	1.63E-03	7.37E-04
2638	569946.5	4215702	9.88E-03	1.51E-03	6.81E-04
2639	569955.8	4215700	9.95E-03	1.52E-03	6.86E-04
2640	569965.1	4215698	1.00E-02	1.53E-03	6.91E-04
2641	569974.4	4215697	1.01E-02	1.54E-03	6.97E-04
2642	569983.8	4215695	1.02E-02	1.56E-03	7.03E-04
2643	569993.1	4215693	1.03E-02	1.57E-03	7.09E-04
2644	570002.4	4215692	1.04E-02	1.59E-03	7.16E-04
2645	570011.7	4215690	1.05E-02	1.60E-03	7.24E-04
2646	570021	4215688	1.06E-02	1.62E-03	7.32E-04

2647	570030.3	4215687	1.08E-02	1.65E-03	7.43E-04
2648	570039.6	4215685	1.09E-02	1.67E-03	7.54E-04
2649	570049	4215683	1.11E-02	1.70E-03	7.67E-04
2650	570058.3	4215682	1.13E-02	1.73E-03	7.81E-04
2651	570067.6	4215680	1.16E-02	1.76E-03	7.96E-04
2652	570076.9	4215678	1.18E-02	1.80E-03	8.12E-04
2653	570086.2	4215677	1.20E-02	1.84E-03	8.30E-04
2654	570095.5	4215675	1.23E-02	1.88E-03	8.49E-04
2655	570104.9	4215673	1.26E-02	1.93E-03	8.69E-04
2656	569939.3	4215709	9.55E-03	1.46E-03	6.58E-04
2657	569930.3	4215707	9.66E-03	1.47E-03	6.66E-04
2658	569921.3	4215705	9.78E-03	1.49E-03	6.74E-04
2659	569912.3	4215702	9.90E-03	1.51E-03	6.82E-04
2660	569903.3	4215700	1.00E-02	1.53E-03	6.91E-04
2661	569894.3	4215698	1.02E-02	1.55E-03	7.01E-04
2662	569885.3	4215695	1.03E-02	1.57E-03	7.11E-04
2663	569876.3	4215693	1.00E-02	1.53E-03	6.90E-04
2664	569948.3	4215712	9.44E-03	1.44E-03	6.51E-04
2665	569957.6	4215710	9.51E-03	1.45E-03	6.55E-04
2666	569966.9	4215708	9.58E-03	1.46E-03	6.60E-04
2667	569976.2	4215707	9.66E-03	1.48E-03	6.66E-04
2668	569985.5	4215705	9.75E-03	1.49E-03	6.72E-04
2669	569994.8	4215703	9.84E-03	1.50E-03	6.78E-04
2670	570004.2	4215702	9.93E-03	1.52E-03	6.84E-04
2671	570013.5	4215700	1.00E-02	1.53E-03	6.91E-04
2672	570022.8	4215698	1.01E-02	1.55E-03	6.99E-04
2673	570032.1	4215696	1.03E-02	1.57E-03	7.09E-04
2674	570041.4	4215695	1.04E-02	1.59E-03	7.19E-04
2675	570050.7	4215693	1.06E-02	1.62E-03	7.31E-04
2676	570060	4215691	1.08E-02	1.65E-03	7.44E-04
2677	570069.4	4215690	1.10E-02	1.68E-03	7.58E-04
2678	570078.7	4215688	1.12E-02	1.71E-03	7.73E-04
2679	570088	4215686	1.15E-02	1.75E-03	7.89E-04
2680	570097.3	4215685	1.17E-02	1.79E-03	8.07E-04
2681	569941.1	4215719	9.13E-03	1.39E-03	6.29E-04
2682	569932.1	4215717	9.24E-03	1.41E-03	6.36E-04
2683	569923.2	4215715	9.34E-03	1.43E-03	6.44E-04
2684	569914.2	4215712	9.45E-03	1.44E-03	6.52E-04
2685	569905.2	4215710	9.57E-03	1.46E-03	6.59E-04
2686	569896.3	4215708	9.69E-03	1.48E-03	6.68E-04
2687	569887.3	4215705	9.82E-03	1.50E-03	6.77E-04
2688	569878.3	4215703	9.96E-03	1.52E-03	6.86E-04
2689	569869.4	4215701	9.62E-03	1.47E-03	6.63E-04
2690	569950	4215721	9.03E-03	1.38E-03	6.23E-04
2691	569959.4	4215720	9.10E-03	1.39E-03	6.27E-04
2692	569968.7	4215718	9.17E-03	1.40E-03	6.32E-04
2693	569978	4215716	9.24E-03	1.41E-03	6.37E-04
2694	569987.3	4215715	9.32E-03	1.42E-03	6.43E-04
2695	569996.6	4215713	9.41E-03	1.44E-03	6.48E-04
2696	570005.9	4215711	9.50E-03	1.45E-03	6.55E-04
2697	570015.2	4215710	9.59E-03	1.46E-03	6.61E-04
2698	570024.6	4215708	9.70E-03	1.48E-03	6.68E-04

2699	570033.9	4215706	9.83E-03	1.50E-03	6.77E-04
2700	570043.2	4215705	9.97E-03	1.52E-03	6.87E-04
2701	570052.5	4215703	1.01E-02	1.55E-03	6.98E-04
2702	570061.8	4215701	1.03E-02	1.57E-03	7.10E-04
2703	570071.1	4215700	1.05E-02	1.60E-03	7.23E-04
2704	570080.5	4215698	1.07E-02	1.63E-03	7.37E-04
2705	570089.8	4215696	1.09E-02	1.67E-03	7.52E-04
2706	570099.1	4215695	1.12E-02	1.71E-03	7.70E-04
2707	570108.4	4215693	1.14E-02	1.75E-03	7.88E-04
2708	569942.9	4215729	8.75E-03	1.34E-03	6.03E-04
2709	569933.9	4215727	8.84E-03	1.35E-03	6.09E-04
2710	569925	4215724	8.94E-03	1.37E-03	6.16E-04
2711	569916.1	4215722	9.04E-03	1.38E-03	6.23E-04
2712	569907.2	4215720	9.15E-03	1.40E-03	6.30E-04
2713	569898.2	4215717	9.26E-03	1.41E-03	6.38E-04
2714	569889.3	4215715	9.38E-03	1.43E-03	6.46E-04
2715	569880.4	4215713	9.50E-03	1.45E-03	6.54E-04
2716	569871.4	4215711	9.19E-03	1.40E-03	6.33E-04
2717	569862.5	4215708	9.25E-03	1.41E-03	6.37E-04
2718	569591.2	4215444	1.63E-02	2.48E-03	1.12E-03
2719	569951.8	4215731	8.66E-03	1.32E-03	5.96E-04
2720	569961.1	4215730	8.71E-03	1.33E-03	6.00E-04
2721	569970.4	4215728	8.78E-03	1.34E-03	6.05E-04
2722	569979.8	4215726	8.85E-03	1.35E-03	6.10E-04
2723	569989.1	4215725	8.93E-03	1.36E-03	6.15E-04
2724	569998.4	4215723	9.01E-03	1.38E-03	6.21E-04
2725	570007.7	4215721	9.09E-03	1.39E-03	6.27E-04
2726	570017	4215720	9.18E-03	1.40E-03	6.33E-04
2727	570026.3	4215718	9.29E-03	1.42E-03	6.40E-04
2728	570035.6	4215716	9.40E-03	1.44E-03	6.48E-04
2729	570045	4215714	9.53E-03	1.46E-03	6.57E-04
2730	570054.3	4215713	9.68E-03	1.48E-03	6.67E-04
2731	570063.6	4215711	9.84E-03	1.50E-03	6.78E-04
2732	570072.9	4215709	1.00E-02	1.53E-03	6.90E-04
2733	570082.2	4215708	1.02E-02	1.56E-03	7.03E-04
2734	570091.5	4215706	1.04E-02	1.59E-03	7.18E-04
2735	570134.3	4215513	4.66E-02	7.11E-03	3.21E-03
2736	570122.9	4215521	4.07E-02	6.22E-03	2.81E-03
2737	570111.5	4215529	3.62E-02	5.53E-03	2.50E-03
2738	570121.1	4215531	3.65E-02	5.57E-03	2.51E-03
2739	570100.1	4215538	3.28E-02	5.02E-03	2.26E-03
2740	570109.8	4215539	3.28E-02	5.01E-03	2.26E-03
2741	570119.4	4215541	3.30E-02	5.04E-03	2.27E-03
2742	570129	4215543	3.34E-02	5.10E-03	2.30E-03
2743	570098.4	4215547	2.99E-02	4.57E-03	2.06E-03
2744	570108	4215549	2.99E-02	4.56E-03	2.06E-03
2745	570117.7	4215551	3.00E-02	4.58E-03	2.07E-03
2746	570096.7	4215557	2.73E-02	4.17E-03	1.88E-03
2747	570106.3	4215559	2.73E-02	4.17E-03	1.88E-03
2748	570115.9	4215561	2.74E-02	4.19E-03	1.89E-03
2749	570094.9	4215567	2.50E-02	3.82E-03	1.72E-03
2750	570104.6	4215569	2.50E-02	3.82E-03	1.73E-03

2751	570114.2	4215571	2.51E-02	3.84E-03	1.73E-03
2752	570123.8	4215572	2.54E-02	3.88E-03	1.75E-03
2753	570102.8	4215579	2.30E-02	3.52E-03	1.59E-03
2754	570112.5	4215580	2.31E-02	3.53E-03	1.59E-03
2755	570122.1	4215582	2.34E-02	3.57E-03	1.61E-03
2756	570101.1	4215589	2.13E-02	3.25E-03	1.47E-03
2757	570110.7	4215590	2.14E-02	3.27E-03	1.48E-03
2758	570099.3	4215598	1.98E-02	3.02E-03	1.36E-03
2759	570109	4215600	1.99E-02	3.05E-03	1.37E-03
2760	570118.6	4215602	2.01E-02	3.07E-03	1.39E-03
2761	570107.2	4215610	1.86E-02	2.84E-03	1.28E-03
2762	570105.5	4215620	1.74E-02	2.66E-03	1.20E-03
2763	570113.4	4215631	1.64E-02	2.50E-03	1.13E-03
2764	570111.7	4215641	1.54E-02	2.34E-03	1.06E-03
2765	570088.1	4215718	9.78E-03	1.49E-03	6.74E-04
2766	570097.7	4215720	9.84E-03	1.50E-03	6.78E-04

			T2		289	T2L3			T4f		
					2.90E-06			4.42E-07			1.93E-07
					4215444.01						
			Yr 1	Yr 2	Total	Yr 1	Yr 2	Total	Yr 1	Yr 2	Total
1	570176.21	4215488.81	2.00E-06	1.13E-06	3.14E-06	3.06E-07	1.72E-07	4.78E-07	1.38E-07	7.10E-08	2.09E-07
2	570192.16	4215484.24	2.26E-06	1.28E-06	3.55E-06	3.46E-07	1.95E-07	5.41E-07	1.56E-07	8.03E-08	2.36E-07
3	570208.67	4215476.96	2.64E-06	1.49E-06	4.13E-06	4.03E-07	2.27E-07	6.30E-07	1.82E-07	9.35E-08	2.75E-07
4	570225.19	4215469.68	3.03E-06	1.72E-06	4.75E-06	4.63E-07	2.61E-07	7.25E-07	2.09E-07	1.08E-07	3.17E-07
5	570241.7	4215462.41	3.36E-06	1.90E-06	5.26E-06	5.13E-07	2.90E-07	8.03E-07	2.32E-07	1.19E-07	3.51E-07
6	570258.22	4215455.13	3.57E-06	2.02E-06	5.59E-06	5.44E-07	3.07E-07	8.52E-07	2.46E-07	1.26E-07	3.72E-07
7	570179.28	4215498.07	1.77E-06	1.00E-06	2.77E-06	2.70E-07	1.52E-07	4.22E-07	1.22E-07	6.27E-08	1.85E-07
8	570161.96	4215500.16	1.60E-06	9.04E-07	2.50E-06	2.44E-07	1.38E-07	3.81E-07	1.10E-07	5.66E-08	1.67E-07
9	570196.19	4215493.39	2.01E-06	1.14E-06	3.15E-06	3.07E-07	1.73E-07	4.80E-07	1.39E-07	7.13E-08	2.10E-07
10	570212.71	4215486.11	2.36E-06	1.34E-06	3.69E-06	3.60E-07	2.03E-07	5.63E-07	1.62E-07	8.36E-08	2.46E-07
11	570229.22	4215478.83	2.72E-06	1.54E-06	4.26E-06	4.15E-07	2.34E-07	6.50E-07	1.88E-07	9.65E-08	2.84E-07
12	570237.48	4215475.19	2.88E-06	1.63E-06	4.52E-06	4.40E-07	2.48E-07	6.89E-07	1.99E-07	1.02E-07	3.01E-07
13	570253.99	4215467.92	3.15E-06	1.78E-06	4.93E-06	4.81E-07	2.71E-07	7.52E-07	2.17E-07	1.12E-07	3.29E-07
14	570183.72	4215507.17	1.60E-06	9.05E-07	2.50E-06	2.44E-07	1.38E-07	3.82E-07	1.10E-07	5.67E-08	1.67E-07
15	570167.23	4215509.17	1.45E-06	8.19E-07	2.26E-06	2.21E-07	1.25E-07	3.45E-07	9.96E-08	5.13E-08	1.51E-07
16	570150.74	4215511.16	1.32E-06	7.45E-07	2.06E-06	2.01E-07	1.13E-07	3.14E-07	9.07E-08	4.67E-08	1.37E-07
17	570200.22	4215502.54	1.81E-06	1.03E-06	2.84E-06	2.77E-07	1.56E-07	4.33E-07	1.25E-07	6.44E-08	1.89E-07
18	570216.74	4215495.26	2.13E-06	1.20E-06	3.33E-06	3.25E-07	1.83E-07	5.08E-07	1.47E-07	7.54E-08	2.22E-07
19	570225	4215491.62	2.30E-06	1.30E-06	3.60E-06	3.50E-07	1.98E-07	5.48E-07	1.58E-07	8.14E-08	2.40E-07
20	570241.51	4215484.35	2.60E-06	1.47E-06	4.08E-06	3.97E-07	2.24E-07	6.22E-07	1.79E-07	9.23E-08	2.72E-07
21	570249.77	4215480.71	2.74E-06	1.55E-06	4.29E-06	4.18E-07	2.36E-07	6.53E-07	1.89E-07	9.70E-08	2.86E-07
22	570266.28	4215473.43	2.95E-06	1.67E-06	4.62E-06	4.50E-07	2.54E-07	7.05E-07	2.03E-07	1.05E-07	3.08E-07
23	570188.06	4215516.29	1.46E-06	8.26E-07	2.28E-06	2.23E-07	1.26E-07	3.48E-07	1.00E-07	5.17E-08	1.52E-07
24	570172.19	4215518.2	1.32E-06	7.45E-07	2.06E-06	2.01E-07	1.13E-07	3.14E-07	9.07E-08	4.67E-08	1.37E-07
25	570156.32	4215520.12	1.20E-06	6.83E-07	1.89E-06	1.84E-07	1.04E-07	2.88E-07	8.30E-08	4.27E-08	1.26E-07
26	570140.45	4215522.04	1.11E-06	6.28E-07	1.74E-06	1.69E-07	9.55E-08	2.65E-07	7.64E-08	3.93E-08	1.16E-07
27	570204.25	4215511.69	1.66E-06	9.39E-07	2.60E-06	2.53E-07	1.43E-07	3.96E-07	1.14E-07	5.88E-08	1.73E-07
28	570220.77	4215504.41	1.94E-06	1.10E-06	3.04E-06	2.96E-07	1.67E-07	4.63E-07	1.34E-07	6.88E-08	2.02E-07
29	570237.29	4215497.14	2.23E-06	1.26E-06	3.49E-06	3.41E-07	1.92E-07	5.33E-07	1.54E-07	7.91E-08	2.33E-07
30	570253.8	4215489.86	2.48E-06	1.41E-06	3.89E-06	3.79E-07	2.14E-07	5.93E-07	1.71E-07	8.81E-08	2.59E-07
31	570262.06	4215486.22	2.60E-06	1.47E-06	4.07E-06	3.96E-07	2.24E-07	6.20E-07	1.79E-07	9.21E-08	2.71E-07
32	570191.37	4215525.53	1.33E-06	7.55E-07	2.09E-06	2.04E-07	1.15E-07	3.18E-07	9.19E-08	4.73E-08	1.39E-07
33	570174.06	4215527.62	1.19E-06	6.72E-07	1.86E-06	1.81E-07	1.02E-07	2.83E-07	8.17E-08	4.21E-08	1.24E-07
34	570156.75	4215529.71	1.08E-06	6.14E-07	1.70E-06	1.65E-07	9.33E-08	2.59E-07	7.46E-08	3.84E-08	1.13E-07
35	570139.43	4215531.8	9.95E-07	5.63E-07	1.56E-06	1.52E-07	8.57E-08	2.38E-07	6.85E-08	3.53E-08	1.04E-07
36	570208.29	4215520.84	1.53E-06	8.65E-07	2.39E-06	2.33E-07	1.32E-07	3.65E-07	1.05E-07	5.42E-08	1.59E-07
37	570216.55	4215517.2	1.65E-06	9.34E-07	2.58E-06	2.52E-07	1.42E-07	3.94E-07	1.14E-07	5.85E-08	1.72E-07
38	570233.06	4215509.93	1.91E-06	1.08E-06	2.99E-06	2.91E-07	1.64E-07	4.56E-07	1.31E-07	6.77E-08	1.99E-07
39	570249.58	4215502.65	2.16E-06	1.22E-06	3.38E-06	3.29E-07	1.86E-07	5.15E-07	1.49E-07	7.65E-08	2.25E-07
40	570266.09	4215495.37	2.37E-06	1.34E-06	3.71E-06	3.62E-07	2.04E-07	5.66E-07	1.63E-07	8.40E-08	2.47E-07
41	570274.35	4215491.73	2.46E-06	1.39E-06	3.85E-06	3.76E-07	2.12E-07	5.88E-07	1.70E-07	8.73E-08	2.57E-07
42	570195.73	4215534.64	1.24E-06	7.01E-07	1.94E-06	1.89E-07	1.07E-07	2.95E-07	8.52E-08	4.39E-08	1.29E-07
43	570179.05	4215536.65	1.11E-06	6.29E-07	1.74E-06	1.69E-07	9.56E-08	2.65E-07	7.65E-08	3.94E-08	1.16E-07
44	570162.38	4215538.66	1.01E-06	5.73E-07	1.58E-06	1.54E-07	8.71E-08	2.41E-07	6.97E-08	3.59E-08	1.06E-07
45	570145.71	4215540.68	9.32E-07	5.28E-07	1.46E-06	1.42E-07	8.03E-08	2.23E-07	6.42E-08	3.31E-08	9.73E-08
46	570212.32	4215529.99	1.41E-06	7.99E-07	2.21E-06	2.15E-07	1.21E-07	3.37E-07	9.72E-08	5.00E-08	1.47E-07
47	570228.84	4215522.72	1.63E-06	9.24E-07	2.56E-06	2.49E-07	1.41E-07	3.90E-07	1.12E-07	5.79E-08	1.70E-07
48	570245.35	4215515.44	1.87E-06	1.06E-06	2.93E-06	2.85E-07	1.61E-07	4.46E-07	1.29E-07	6.63E-08	1.95E-07
49	570261.87	4215508.16	2.09E-06	1.18E-06	3.27E-06	3.19E-07	1.80E-07	4.99E-07	1.44E-07	7.41E-08	2.18E-07
50	570278.38	4215500.88	2.27E-06	1.28E-06	3.55E-06	3.46E-07	1.95E-07	5.41E-07	1.56E-07	8.04E-08	2.37E-07
51	570200.02	4215543.76	1.15E-06	6.52E-07	1.80E-06	1.76E-07	9.92E-08	2.75E-07	7.93E-08	4.08E-08	1.20E-07
52	570183.86	4215545.71	1.04E-06	5.89E-07	1.63E-06	1.59E-07	8.96E-08	2.48E-07	7.16E-08	3.69E-08	1.09E-07
53	570167.7	4215547.66	9.46E-07	5.36E-07	1.48E-06	1.44E-07	8.15E-08	2.26E-07	6.52E-08	3.36E-08	9.88E-08
54	570151.54	4215549.61	8.75E-07	4.95E-07	1.37E-06	1.34E-07	7.54E-08	2.09E-07	6.03E-08	3.10E-08	9.13E-08
55	570135.38	4215551.56	8.13E-07	4.60E-07	1.27E-06	1.24E-07	7.00E-08	1.94E-07	5.60E-08	2.88E-08	8.48E-08
56	570216.35	4215539.14	1.31E-06	7.41E-07	2.05E-06	2.00E-07	1.13E-07	3.13E-07	9.02E-08	4.64E-08	1.37E-07
57	570232.87	4215531.87	1.51E-06	8.56E-07	2.37E-06	2.31E-07	1.30E-07	3.61E-07	1.04E-07	5.36E-08	1.58E-07
58	570241.13	4215528.23	1.62E-06	9.15E-07	2.53E-06	2.47E-07	1.39E-07	3.86E-07	1.11E-07	5.73E-08	1.69E-07

59	570257.64	4215520.95	1.83E-06	1.04E-06	2.86E-06	2.79E-07	1.58E-07	4.37E-07	1.26E-07	6.49E-08	1.91E-07
60	570274.16	4215513.67	2.02E-06	1.14E-06	3.16E-06	3.08E-07	1.74E-07	4.82E-07	1.39E-07	7.15E-08	2.10E-07
61	570203.47	4215552.98	1.07E-06	6.05E-07	1.67E-06	1.63E-07	9.21E-08	2.55E-07	7.36E-08	3.79E-08	1.12E-07
62	570186.16	4215555.07	9.62E-07	5.45E-07	1.51E-06	1.47E-07	8.29E-08	2.30E-07	6.63E-08	3.41E-08	1.00E-07
63	570168.84	4215557.16	8.71E-07	4.93E-07	1.36E-06	1.33E-07	7.50E-08	2.08E-07	6.00E-08	3.09E-08	9.09E-08
64	570151.53	4215559.25	8.02E-07	4.54E-07	1.26E-06	1.22E-07	6.91E-08	1.91E-07	5.52E-08	2.84E-08	8.37E-08
65	570134.22	4215561.34	7.42E-07	4.21E-07	1.16E-06	1.13E-07	6.40E-08	1.77E-07	5.12E-08	2.63E-08	7.75E-08
66	570220.38	4215548.29	1.22E-06	6.91E-07	1.91E-06	1.86E-07	1.05E-07	2.91E-07	8.41E-08	4.33E-08	1.27E-07
67	570228.64	4215544.66	1.31E-06	7.44E-07	2.06E-06	2.00E-07	1.13E-07	3.14E-07	9.05E-08	4.66E-08	1.37E-07
68	570245.16	4215537.38	1.50E-06	8.52E-07	2.36E-06	2.30E-07	1.30E-07	3.59E-07	1.04E-07	5.34E-08	1.57E-07
69	570253.42	4215533.74	1.60E-06	9.07E-07	2.51E-06	2.45E-07	1.38E-07	3.82E-07	1.10E-07	5.68E-08	1.67E-07
70	570269.93	4215526.46	1.78E-06	1.01E-06	2.79E-06	2.72E-07	1.54E-07	4.26E-07	1.23E-07	6.32E-08	1.86E-07
71	570286.45	4215519.18	1.94E-06	1.10E-06	3.04E-06	2.96E-07	1.67E-07	4.64E-07	1.34E-07	6.89E-08	2.03E-07
72	570207.77	4215562.1	1.01E-06	5.70E-07	1.58E-06	1.54E-07	8.66E-08	2.40E-07	6.93E-08	3.57E-08	1.05E-07
73	570190.98	4215564.13	9.08E-07	5.15E-07	1.42E-06	1.39E-07	7.83E-08	2.17E-07	6.26E-08	3.22E-08	9.48E-08
74	570174.19	4215566.15	8.22E-07	4.66E-07	1.29E-06	1.25E-07	7.08E-08	1.96E-07	5.66E-08	2.91E-08	8.58E-08
75	570157.4	4215568.18	7.57E-07	4.29E-07	1.19E-06	1.16E-07	6.52E-08	1.81E-07	5.22E-08	2.69E-08	7.90E-08
76	570140.61	4215570.21	7.02E-07	3.98E-07	1.10E-06	1.07E-07	6.05E-08	1.68E-07	4.84E-08	2.49E-08	7.33E-08
77	570224.42	4215557.45	1.14E-06	6.46E-07	1.79E-06	1.74E-07	9.83E-08	2.72E-07	7.86E-08	4.05E-08	1.19E-07
78	570240.93	4215550.17	1.31E-06	7.44E-07	2.06E-06	2.00E-07	1.13E-07	3.14E-07	9.05E-08	4.66E-08	1.37E-07
79	570257.45	4215542.89	1.49E-06	8.45E-07	2.34E-06	2.28E-07	1.28E-07	3.56E-07	1.03E-07	5.29E-08	1.56E-07
80	570273.96	4215535.61	1.66E-06	9.40E-07	2.60E-06	2.53E-07	1.43E-07	3.96E-07	1.14E-07	5.88E-08	1.73E-07
81	570282.22	4215531.97	1.73E-06	9.83E-07	2.72E-06	2.65E-07	1.49E-07	4.14E-07	1.20E-07	6.15E-08	1.81E-07
82	570211.27	4215571.31	9.44E-07	5.35E-07	1.48E-06	1.44E-07	8.14E-08	2.26E-07	6.51E-08	3.35E-08	9.86E-08
83	570193.44	4215573.47	8.49E-07	4.81E-07	1.33E-06	1.30E-07	7.31E-08	2.03E-07	5.85E-08	3.01E-08	8.86E-08
84	570175.6	4215575.62	7.64E-07	4.33E-07	1.20E-06	1.17E-07	6.58E-08	1.82E-07	5.26E-08	2.71E-08	7.97E-08
85	570157.76	4215577.77	7.00E-07	3.96E-07	1.10E-06	1.07E-07	6.03E-08	1.67E-07	4.82E-08	2.48E-08	7.30E-08
86	570139.92	4215579.93	6.47E-07	3.66E-07	1.01E-06	9.87E-08	5.57E-08	1.54E-07	4.46E-08	2.29E-08	6.75E-08
87	570220.19	4215570.24	9.96E-07	5.64E-07	1.56E-06	1.52E-07	8.58E-08	2.38E-07	6.86E-08	3.53E-08	1.04E-07
88	570236.71	4215562.96	1.15E-06	6.49E-07	1.80E-06	1.75E-07	9.87E-08	2.74E-07	7.90E-08	4.06E-08	1.20E-07
89	570253.22	4215555.68	1.31E-06	7.40E-07	2.04E-06	1.99E-07	1.12E-07	3.12E-07	9.00E-08	4.63E-08	1.36E-07
90	570269.74	4215548.4	1.47E-06	8.31E-07	2.30E-06	2.24E-07	1.26E-07	3.50E-07	1.01E-07	5.20E-08	1.53E-07
91	570286.25	4215541.12	1.62E-06	9.16E-07	2.53E-06	2.47E-07	1.39E-07	3.86E-07	1.11E-07	5.74E-08	1.69E-07
92	570215.57	4215580.43	8.91E-07	5.05E-07	1.40E-06	1.36E-07	7.68E-08	2.13E-07	6.14E-08	3.16E-08	9.30E-08
93	570198.25	4215582.52	8.06E-07	4.56E-07	1.26E-06	1.23E-07	6.94E-08	1.92E-07	5.55E-08	2.86E-08	8.41E-08
94	570180.94	4215584.61	7.29E-07	4.13E-07	1.14E-06	1.11E-07	6.28E-08	1.74E-07	5.02E-08	2.59E-08	7.61E-08
95	570163.63	4215586.7	6.66E-07	3.77E-07	1.04E-06	1.02E-07	5.74E-08	1.59E-07	4.59E-08	2.36E-08	6.95E-08
96	570146.32	4215588.79	6.16E-07	3.49E-07	9.64E-07	9.40E-08	5.30E-08	1.47E-07	4.24E-08	2.18E-08	6.42E-08
97	570129	4215590.88	5.76E-07	3.26E-07	9.03E-07	8.80E-08	4.96E-08	1.38E-07	3.97E-08	2.04E-08	6.01E-08
98	570232.48	4215575.75	1.00E-06	5.67E-07	1.57E-06	1.53E-07	8.63E-08	2.39E-07	6.90E-08	3.55E-08	1.05E-07
99	570249	4215568.47	1.14E-06	6.46E-07	1.79E-06	1.74E-07	9.83E-08	2.73E-07	7.86E-08	4.05E-08	1.19E-07
100	570265.51	4215561.19	1.29E-06	7.29E-07	2.02E-06	1.97E-07	1.11E-07	3.08E-07	8.87E-08	4.57E-08	1.34E-07
101	570282.03	4215553.91	1.44E-06	8.13E-07	2.25E-06	2.19E-07	1.24E-07	3.43E-07	9.89E-08	5.09E-08	1.50E-07
102	570290.29	4215550.28	1.51E-06	8.53E-07	2.36E-06	2.30E-07	1.30E-07	3.60E-07	1.04E-07	5.34E-08	1.57E-07
103	570298.54	4215546.64	1.57E-06	8.90E-07	2.46E-06	2.40E-07	1.35E-07	3.75E-07	1.08E-07	5.57E-08	1.64E-07
104	570219.82	4215589.56	8.40E-07	4.76E-07	1.32E-06	1.28E-07	7.23E-08	2.01E-07	5.79E-08	2.98E-08	8.76E-08
105	570202.95	4215591.59	7.64E-07	4.33E-07	1.20E-06	1.17E-07	6.58E-08	1.82E-07	5.26E-08	2.71E-08	7.97E-08
106	570186.08	4215593.63	6.94E-07	3.93E-07	1.09E-06	1.06E-07	5.98E-08	1.66E-07	4.78E-08	2.46E-08	7.25E-08
107	570169.21	4215595.67	6.34E-07	3.59E-07	9.93E-07	9.68E-08	5.46E-08	1.51E-07	4.37E-08	2.25E-08	6.62E-08
108	570152.35	4215597.7	5.88E-07	3.33E-07	9.21E-07	8.97E-08	5.06E-08	1.40E-07	4.05E-08	2.08E-08	6.13E-08
109	570135.48	4215599.74	5.50E-07	3.12E-07	8.62E-07	8.40E-08	4.74E-08	1.31E-07	3.79E-08	1.95E-08	5.74E-08
110	570236.51	4215584.9	9.31E-07	5.27E-07	1.46E-06	1.42E-07	8.02E-08	2.22E-07	6.41E-08	3.30E-08	9.71E-08
111	570253.03	4215577.62	1.05E-06	5.96E-07	1.65E-06	1.61E-07	9.07E-08	2.51E-07	7.25E-08	3.73E-08	1.10E-07
112	570261.29	4215573.98	1.12E-06	6.33E-07	1.75E-06	1.71E-07	9.63E-08	2.67E-07	7.70E-08	3.97E-08	1.17E-07
113	570277.8	4215566.7	1.26E-06	7.12E-07	1.97E-06	1.92E-07	1.08E-07	3.00E-07	8.66E-08	4.46E-08	1.31E-07
114	570294.32	4215559.43	1.40E-06	7.91E-07	2.19E-06	2.13E-07	1.20E-07	3.33E-07	9.62E-08	4.95E-08	1.46E-07
115	570223.41	4215598.76	7.86E-07	4.45E-07	1.23E-06	1.20E-07	6.77E-08	1.88E-07	5.42E-08	2.79E-08	8.21E-08
116	570205.65	4215600.9	7.16E-07	4.06E-07	1.12E-06	1.09E-07	6.17E-08	1.71E-07	4.94E-08	2.54E-08	7.48E-08
117	570187.9	4215603.05	6.50E-07	3.68E-07	1.02E-06	9.93E-08	5.60E-08	1.55E-07	4.48E-08	2.31E-08	6.79E-08
118	570170.14	4215605.19	5.92E-07	3.35E-07	9.27E-07	9.04E-08	5.10E-08	1.41E-07	4.08E-08	2.10E-08	6.18E-08
119	570161.26	4215606.26	5.69E-07	3.22E-07	8.92E-07	8.69E-08	4.90E-08	1.36E-07	3.92E-08	2.02E-08	5.94E-08
120	570143.5	4215608.41	5.29E-07	3.00E-07	8.29E-07	8.08E-08	4.56E-08	1.26E-07	3.64E-08	1.88E-08	5.52E-08

121	570125.75	4215610.55	4.99E-07	2.83E-07	7.81E-07	7.62E-08	4.30E-08	1.19E-07	3.44E-08	1.77E-08	5.21E-08
122	570232.29	4215597.69	8.17E-07	4.63E-07	1.28E-06	1.25E-07	7.04E-08	1.95E-07	5.63E-08	2.90E-08	8.52E-08
123	570248.8	4215590.41	9.20E-07	5.21E-07	1.44E-06	1.40E-07	7.93E-08	2.20E-07	6.34E-08	3.26E-08	9.60E-08
124	570265.32	4215583.13	9.68E-07	5.48E-07	1.52E-06	1.48E-07	8.34E-08	2.31E-07	6.67E-08	3.43E-08	1.01E-07
125	570281.84	4215575.85	1.16E-06	6.59E-07	1.82E-06	1.78E-07	1.00E-07	2.78E-07	8.01E-08	4.12E-08	1.21E-07
126	570290.09	4215572.22	1.23E-06	6.95E-07	1.92E-06	1.87E-07	1.06E-07	2.93E-07	8.46E-08	4.35E-08	1.28E-07
127	570298.35	4215568.58	1.29E-06	7.32E-07	2.02E-06	1.97E-07	1.11E-07	3.09E-07	8.90E-08	4.58E-08	1.35E-07
128	570227.67	4215607.88	7.36E-07	4.17E-07	1.15E-06	1.12E-07	6.34E-08	1.76E-07	5.07E-08	2.61E-08	7.68E-08
129	570210.35	4215609.97	6.80E-07	3.85E-07	1.07E-06	1.04E-07	5.86E-08	1.62E-07	4.69E-08	2.41E-08	7.10E-08
130	570193.04	4215612.07	6.21E-07	3.52E-07	9.73E-07	9.48E-08	5.35E-08	1.48E-07	4.28E-08	2.20E-08	6.48E-08
131	570175.73	4215614.16	5.66E-07	3.21E-07	8.87E-07	8.65E-08	4.88E-08	1.35E-07	3.90E-08	2.01E-08	5.91E-08
132	570158.41	4215616.25	5.25E-07	2.98E-07	8.23E-07	8.02E-08	4.52E-08	1.25E-07	3.62E-08	1.86E-08	5.48E-08
133	570141.1	4215618.34	4.91E-07	2.78E-07	7.69E-07	7.50E-08	4.23E-08	1.17E-07	3.38E-08	1.74E-08	5.13E-08
134	570123.79	4215620.43	4.65E-07	2.63E-07	7.28E-07	7.10E-08	4.01E-08	1.11E-07	3.20E-08	1.65E-08	4.85E-08
135	570244.58	4215603.2	8.10E-07	4.59E-07	1.27E-06	1.24E-07	6.98E-08	1.94E-07	5.58E-08	2.87E-08	8.46E-08
136	570261.1	4215595.92	8.43E-07	4.77E-07	1.32E-06	1.29E-07	7.26E-08	2.01E-07	5.81E-08	2.99E-08	8.80E-08
137	570277.61	4215588.64	9.45E-07	5.36E-07	1.48E-06	1.44E-07	8.15E-08	2.26E-07	6.51E-08	3.35E-08	9.87E-08
138	570294.13	4215581.37	1.07E-06	6.07E-07	1.68E-06	1.64E-07	9.23E-08	2.56E-07	7.38E-08	3.80E-08	1.12E-07
139	570302.38	4215577.73	1.15E-06	6.51E-07	1.80E-06	1.75E-07	9.90E-08	2.74E-07	7.92E-08	4.07E-08	1.20E-07
140	570231.89	4215617.01	6.92E-07	3.92E-07	1.08E-06	1.06E-07	5.96E-08	1.65E-07	4.77E-08	2.46E-08	7.22E-08
141	570214.96	4215619.06	6.45E-07	3.65E-07	1.01E-06	9.85E-08	5.56E-08	1.54E-07	4.44E-08	2.29E-08	6.73E-08
142	570198.03	4215621.1	5.92E-07	3.35E-07	9.27E-07	9.03E-08	5.10E-08	1.41E-07	4.08E-08	2.10E-08	6.17E-08
143	570181.11	4215623.14	5.42E-07	3.07E-07	8.49E-07	8.28E-08	4.67E-08	1.29E-07	3.74E-08	1.92E-08	5.66E-08
144	570164.18	4215625.19	5.02E-07	2.84E-07	7.86E-07	7.66E-08	4.32E-08	1.20E-07	3.46E-08	1.78E-08	5.24E-08
145	570147.25	4215627.23	4.70E-07	2.66E-07	7.36E-07	7.18E-08	4.05E-08	1.12E-07	3.24E-08	1.67E-08	4.91E-08
146	570130.32	4215629.28	4.45E-07	2.52E-07	6.97E-07	6.79E-08	3.83E-08	1.06E-07	3.07E-08	1.58E-08	4.64E-08
147	570248.61	4215612.35	7.11E-07	4.03E-07	1.11E-06	1.09E-07	6.12E-08	1.70E-07	4.90E-08	2.52E-08	7.42E-08
148	570256.87	4215608.71	7.45E-07	4.22E-07	1.17E-06	1.14E-07	6.42E-08	1.78E-07	5.13E-08	2.64E-08	7.77E-08
149	570273.39	4215601.43	8.30E-07	4.70E-07	1.30E-06	1.27E-07	7.16E-08	1.98E-07	5.72E-08	2.95E-08	8.67E-08
150	570289.9	4215594.16	9.32E-07	5.28E-07	1.46E-06	1.42E-07	8.03E-08	2.23E-07	6.42E-08	3.31E-08	9.73E-08
151	570298.16	4215590.52	9.89E-07	5.60E-07	1.55E-06	1.51E-07	8.52E-08	2.36E-07	6.82E-08	3.51E-08	1.03E-07
152	570314.67	4215583.24	1.12E-06	6.35E-07	1.76E-06	1.71E-07	9.66E-08	2.68E-07	7.72E-08	3.98E-08	1.17E-07
153	570235.54	4215626.21	6.52E-07	3.69E-07	1.02E-06	9.95E-08	5.62E-08	1.56E-07	4.49E-08	2.31E-08	6.80E-08
154	570226.69	4215627.28	6.28E-07	3.56E-07	9.84E-07	9.60E-08	5.41E-08	1.50E-07	4.33E-08	2.23E-08	6.56E-08
155	570208.99	4215629.41	5.80E-07	3.29E-07	9.09E-07	8.86E-08	5.00E-08	1.39E-07	4.00E-08	2.06E-08	6.05E-08
156	570191.29	4215631.55	5.31E-07	3.01E-07	8.32E-07	8.11E-08	4.57E-08	1.27E-07	3.66E-08	1.88E-08	5.54E-08
157	570173.6	4215633.69	4.87E-07	2.76E-07	7.62E-07	7.43E-08	4.19E-08	1.16E-07	3.35E-08	1.73E-08	5.08E-08
158	570164.75	4215634.76	4.70E-07	2.66E-07	7.36E-07	7.18E-08	4.05E-08	1.12E-07	3.24E-08	1.67E-08	4.91E-08
159	570147.05	4215636.89	4.41E-07	2.50E-07	6.90E-07	6.73E-08	3.80E-08	1.05E-07	3.04E-08	1.56E-08	4.60E-08
160	570129.35	4215639.03	4.17E-07	2.36E-07	6.53E-07	6.37E-08	3.59E-08	9.96E-08	2.87E-08	1.48E-08	4.35E-08
161	570252.64	4215621.5	6.68E-07	3.78E-07	1.05E-06	1.02E-07	5.75E-08	1.60E-07	4.60E-08	2.37E-08	6.97E-08
162	570269.16	4215614.22	7.32E-07	4.15E-07	1.15E-06	1.12E-07	6.31E-08	1.75E-07	5.04E-08	2.60E-08	7.64E-08
163	570285.68	4215606.95	8.23E-07	4.66E-07	1.29E-06	1.26E-07	7.09E-08	1.97E-07	5.67E-08	2.92E-08	8.59E-08
164	570302.19	4215599.67	9.28E-07	5.26E-07	1.45E-06	1.42E-07	8.00E-08	2.22E-07	6.40E-08	3.29E-08	9.69E-08
165	570318.71	4215592.39	1.04E-06	5.92E-07	1.64E-06	1.59E-07	9.00E-08	2.49E-07	7.20E-08	3.70E-08	1.09E-07
166	570239.76	4215635.34	6.17E-07	3.49E-07	9.66E-07	9.42E-08	5.31E-08	1.47E-07	4.25E-08	2.19E-08	6.44E-08
167	570222.45	4215637.43	5.75E-07	3.26E-07	9.01E-07	8.78E-08	4.95E-08	1.37E-07	3.96E-08	2.04E-08	6.00E-08
168	570205.14	4215639.52	5.29E-07	3.00E-07	8.28E-07	8.08E-08	4.56E-08	1.26E-07	3.64E-08	1.88E-08	5.52E-08
169	570187.82	4215641.61	4.87E-07	2.76E-07	7.62E-07	7.43E-08	4.19E-08	1.16E-07	3.35E-08	1.73E-08	5.08E-08
170	570170.51	4215643.7	4.50E-07	2.55E-07	7.05E-07	6.87E-08	3.88E-08	1.07E-07	3.10E-08	1.60E-08	4.70E-08
171	570153.2	4215645.79	4.23E-07	2.40E-07	6.62E-07	6.46E-08	3.64E-08	1.01E-07	2.91E-08	1.50E-08	4.41E-08
172	570135.88	4215647.88	4.00E-07	2.27E-07	6.27E-07	6.11E-08	3.45E-08	9.56E-08	2.76E-08	1.42E-08	4.18E-08
173	570118.57	4215649.97	3.81E-07	2.16E-07	5.98E-07	5.82E-08	3.29E-08	9.11E-08	2.63E-08	1.35E-08	3.98E-08
174	570256.68	4215630.65	6.75E-07	3.82E-07	1.06E-06	1.03E-07	5.81E-08	1.61E-07	4.65E-08	2.39E-08	7.04E-08
175	570273.19	4215623.38	6.96E-07	3.94E-07	1.09E-06	1.06E-07	6.00E-08	1.66E-07	4.80E-08	2.47E-08	7.27E-08
176	570281.45	4215619.74	7.33E-07	4.15E-07	1.15E-06	1.12E-07	6.32E-08	1.75E-07	5.05E-08	2.60E-08	7.65E-08
177	570297.97	4215612.46	8.20E-07	4.65E-07	1.28E-06	1.25E-07	7.07E-08	1.96E-07	5.65E-08	2.91E-08	8.56E-08
178	570306.22	4215608.82	8.73E-07	4.95E-07	1.37E-06	1.33E-07	7.53E-08	2.09E-07	6.02E-08	3.10E-08	9.12E-08
179	570314.48	4215605.18	9.28E-07	5.26E-07	1.45E-06	1.42E-07	7.99E-08	2.22E-07	6.39E-08	3.29E-08	9.68E-08
180	570243.96	4215644.47	5.84E-07	3.31E-07	9.15E-07	8.92E-08	5.04E-08	1.40E-07	4.03E-08	2.07E-08	6.10E-08
181	570226.99	4215646.52	5.46E-07	3.10E-07	8.56E-07	8.34E-08	4.71E-08	1.31E-07	3.76E-08	1.94E-08	5.70E-08
182	570210.02	4215648.57	5.04E-07	2.86E-07	7.90E-07	7.70E-08	4.35E-08	1.20E-07	3.48E-08	1.79E-08	5.26E-08

183	570193.04	4215650.62	4.66E-07	2.64E-07	7.30E-07	7.11E-08	4.01E-08	1.11E-07	3.21E-08	1.65E-08	4.86E-08
184	570176.07	4215652.67	4.31E-07	2.44E-07	6.76E-07	6.59E-08	3.72E-08	1.03E-07	2.97E-08	1.53E-08	4.50E-08
185	570159.1	4215654.71	4.06E-07	2.30E-07	6.36E-07	6.20E-08	3.50E-08	9.70E-08	2.80E-08	1.44E-08	4.24E-08
186	570142.12	4215656.76	3.85E-07	2.18E-07	6.02E-07	5.87E-08	3.31E-08	9.19E-08	2.65E-08	1.36E-08	4.01E-08
187	570125.15	4215658.81	3.67E-07	2.08E-07	5.75E-07	5.60E-08	3.16E-08	8.76E-08	2.53E-08	1.30E-08	3.83E-08
188	570260.71	4215639.8	6.38E-07	3.61E-07	9.99E-07	9.74E-08	5.50E-08	1.52E-07	4.40E-08	2.26E-08	6.66E-08
189	570268.97	4215636.17	6.73E-07	3.81E-07	1.05E-06	1.03E-07	5.80E-08	1.61E-07	4.64E-08	2.39E-08	7.02E-08
190	570277.22	4215632.53	6.66E-07	3.77E-07	1.04E-06	1.02E-07	5.74E-08	1.59E-07	4.59E-08	2.36E-08	6.95E-08
191	570293.74	4215625.25	7.36E-07	4.17E-07	1.15E-06	1.12E-07	6.34E-08	1.76E-07	5.07E-08	2.61E-08	7.68E-08
192	570310.26	4215617.97	8.26E-07	4.68E-07	1.29E-06	1.26E-07	7.12E-08	1.97E-07	5.69E-08	2.93E-08	8.62E-08
193	570326.77	4215610.69	9.60E-07	5.44E-07	1.50E-06	1.47E-07	8.27E-08	2.29E-07	6.61E-08	3.40E-08	1.00E-07
194	570247.66	4215653.66	5.55E-07	3.14E-07	8.69E-07	8.47E-08	4.78E-08	1.32E-07	3.82E-08	1.97E-08	5.79E-08
195	570230.01	4215655.79	5.15E-07	2.92E-07	8.07E-07	7.86E-08	4.44E-08	1.23E-07	3.55E-08	1.83E-08	5.37E-08
196	570212.35	4215657.92	4.75E-07	2.69E-07	7.44E-07	7.25E-08	4.09E-08	1.13E-07	3.27E-08	1.68E-08	4.96E-08
197	570194.7	4215660.05	4.39E-07	2.49E-07	6.87E-07	6.70E-08	3.78E-08	1.05E-07	3.02E-08	1.56E-08	4.58E-08
198	570177.05	4215662.19	4.07E-07	2.31E-07	6.37E-07	6.21E-08	3.51E-08	9.72E-08	2.80E-08	1.44E-08	4.25E-08
199	570159.4	4215664.32	3.83E-07	2.17E-07	6.00E-07	5.85E-08	3.30E-08	9.15E-08	2.64E-08	1.36E-08	4.00E-08
200	570141.74	4215666.45	3.63E-07	2.06E-07	5.69E-07	5.54E-08	3.13E-08	8.67E-08	2.50E-08	1.29E-08	3.79E-08
201	570124.09	4215668.58	3.46E-07	1.96E-07	5.42E-07	5.29E-08	2.98E-08	8.27E-08	2.39E-08	1.23E-08	3.61E-08
202	570264.74	4215648.95	6.04E-07	3.42E-07	9.46E-07	9.23E-08	5.21E-08	1.44E-07	4.16E-08	2.14E-08	6.31E-08
203	570281.26	4215641.68	6.71E-07	3.80E-07	1.05E-06	1.02E-07	5.78E-08	1.60E-07	4.62E-08	2.38E-08	7.00E-08
204	570297.77	4215634.4	7.43E-07	4.21E-07	1.16E-06	1.14E-07	6.41E-08	1.78E-07	5.12E-08	2.64E-08	7.76E-08
205	570314.29	4215627.12	8.22E-07	4.65E-07	1.29E-06	1.25E-07	7.08E-08	1.96E-07	5.66E-08	2.91E-08	8.58E-08
206	570330.8	4215619.84	9.02E-07	5.11E-07	1.41E-06	1.38E-07	7.78E-08	2.16E-07	6.22E-08	3.20E-08	9.42E-08
207	570251.86	4215662.79	5.26E-07	2.98E-07	8.24E-07	8.03E-08	4.53E-08	1.26E-07	3.63E-08	1.87E-08	5.49E-08
208	570234.55	4215664.88	4.89E-07	2.77E-07	7.65E-07	7.46E-08	4.21E-08	1.17E-07	3.37E-08	1.73E-08	5.10E-08
209	570217.23	4215666.97	4.53E-07	2.56E-07	7.09E-07	6.91E-08	3.90E-08	1.08E-07	3.12E-08	1.61E-08	4.72E-08
210	570199.92	4215669.06	4.20E-07	2.38E-07	6.58E-07	6.41E-08	3.62E-08	1.00E-07	2.89E-08	1.49E-08	4.38E-08
211	570182.61	4215671.15	3.91E-07	2.22E-07	6.13E-07	5.98E-08	3.37E-08	9.35E-08	2.70E-08	1.39E-08	4.09E-08
212	570165.29	4215673.24	3.68E-07	2.09E-07	5.77E-07	5.62E-08	3.17E-08	8.79E-08	2.54E-08	1.31E-08	3.84E-08
213	570147.98	4215675.33	3.50E-07	1.98E-07	5.48E-07	5.34E-08	3.01E-08	8.35E-08	2.41E-08	1.24E-08	3.65E-08
214	570130.67	4215677.42	3.34E-07	1.89E-07	5.23E-07	5.10E-08	2.88E-08	7.97E-08	2.30E-08	1.18E-08	3.48E-08
215	570113.36	4215679.51	3.20E-07	1.81E-07	5.01E-07	4.88E-08	2.76E-08	7.64E-08	2.20E-08	1.13E-08	3.34E-08
216	570268.77	4215658.11	5.74E-07	3.25E-07	8.99E-07	8.76E-08	4.95E-08	1.37E-07	3.96E-08	2.04E-08	5.99E-08
217	570277.03	4215654.47	6.04E-07	3.42E-07	9.46E-07	9.22E-08	5.20E-08	1.44E-07	4.16E-08	2.14E-08	6.30E-08
218	570293.55	4215647.19	6.68E-07	3.78E-07	1.05E-06	1.02E-07	5.75E-08	1.60E-07	4.60E-08	2.37E-08	6.97E-08
219	570310.06	4215639.91	7.38E-07	4.18E-07	1.16E-06	1.13E-07	6.36E-08	1.76E-07	5.09E-08	2.62E-08	7.71E-08
220	570326.58	4215632.63	8.12E-07	4.60E-07	1.27E-06	1.24E-07	7.00E-08	1.94E-07	5.60E-08	2.88E-08	8.48E-08
221	570256.04	4215671.92	4.98E-07	2.82E-07	7.80E-07	7.61E-08	4.29E-08	1.19E-07	3.43E-08	1.77E-08	5.20E-08
222	570239.03	4215673.98	4.63E-07	2.62E-07	7.26E-07	7.08E-08	3.99E-08	1.11E-07	3.19E-08	1.64E-08	4.84E-08
223	570222.03	4215676.03	4.31E-07	2.44E-07	6.75E-07	6.58E-08	3.71E-08	1.03E-07	2.97E-08	1.53E-08	4.50E-08
224	570205.02	4215678.08	4.02E-07	2.28E-07	6.29E-07	6.13E-08	3.46E-08	9.60E-08	2.77E-08	1.43E-08	4.19E-08
225	570188.01	4215680.14	3.76E-07	2.13E-07	5.89E-07	5.74E-08	3.24E-08	8.98E-08	2.59E-08	1.33E-08	3.92E-08
226	570171	4215682.19	3.54E-07	2.00E-07	5.54E-07	5.40E-08	3.05E-08	8.45E-08	2.44E-08	1.26E-08	3.69E-08
227	570153.99	4215684.24	3.37E-07	1.91E-07	5.27E-07	5.14E-08	2.90E-08	8.04E-08	2.32E-08	1.19E-08	3.51E-08
228	570136.98	4215686.3	3.22E-07	1.82E-07	5.04E-07	4.91E-08	2.77E-08	7.68E-08	2.22E-08	1.14E-08	3.36E-08
229	570119.97	4215688.35	3.09E-07	1.75E-07	4.83E-07	4.71E-08	2.66E-08	7.37E-08	2.13E-08	1.09E-08	3.22E-08
230	570272.81	4215667.26	5.44E-07	3.08E-07	8.52E-07	8.31E-08	4.69E-08	1.30E-07	3.75E-08	1.93E-08	5.68E-08
231	570281.06	4215663.62	5.73E-07	3.25E-07	8.98E-07	8.75E-08	4.94E-08	1.37E-07	3.95E-08	2.03E-08	5.98E-08
232	570297.58	4215656.34	6.33E-07	3.59E-07	9.92E-07	9.67E-08	5.46E-08	1.51E-07	4.36E-08	2.25E-08	6.61E-08
233	570305.84	4215652.7	6.65E-07	3.77E-07	1.04E-06	1.02E-07	5.73E-08	1.59E-07	4.58E-08	2.36E-08	6.94E-08
234	570314.1	4215649.06	6.98E-07	3.95E-07	1.09E-06	1.07E-07	6.02E-08	1.67E-07	4.81E-08	2.48E-08	7.29E-08
235	570330.61	4215641.78	7.67E-07	4.34E-07	1.20E-06	1.17E-07	6.61E-08	1.83E-07	5.28E-08	2.72E-08	8.00E-08
236	570338.87	4215638.15	8.02E-07	4.54E-07	1.26E-06	1.22E-07	6.91E-08	1.92E-07	5.53E-08	2.84E-08	8.37E-08
237	570259.77	4215681.11	4.70E-07	2.66E-07	7.36E-07	7.18E-08	4.05E-08	1.12E-07	3.24E-08	1.67E-08	4.91E-08
238	570242.16	4215683.24	4.36E-07	2.47E-07	6.83E-07	6.66E-08	3.76E-08	1.04E-07	3.01E-08	1.55E-08	4.55E-08
239	570224.54	4215685.36	4.05E-07	2.30E-07	6.35E-07	6.19E-08	3.49E-08	9.68E-08	2.79E-08	1.44E-08	4.23E-08
240	570206.92	4215687.49	3.78E-07	2.14E-07	5.93E-07	5.78E-08	3.26E-08	9.04E-08	2.61E-08	1.34E-08	3.95E-08
241	570189.31	4215689.62	3.55E-07	2.01E-07	5.56E-07	5.42E-08	3.06E-08	8.48E-08	2.45E-08	1.26E-08	3.71E-08
242	570171.69	4215691.75	3.35E-07	1.90E-07	5.25E-07	5.12E-08	2.89E-08	8.01E-08	2.31E-08	1.19E-08	3.50E-08
243	570154.07	4215693.87	3.19E-07	1.81E-07	5.00E-07	4.87E-08	2.75E-08	7.62E-08	2.20E-08	1.13E-08	3.33E-08
244	570136.46	4215696	3.05E-07	1.73E-07	4.78E-07	4.66E-08	2.63E-08	7.28E-08	2.10E-08	1.08E-08	3.18E-08

245	570118.84	4215698.13	2.93E-07	1.66E-07	4.59E-07	4.47E-08	2.52E-08	7.00E-08	2.02E-08	1.04E-08	3.06E-08
246	570276.84	4215676.41	5.14E-07	2.91E-07	8.05E-07	7.85E-08	4.43E-08	1.23E-07	3.54E-08	1.82E-08	5.37E-08
247	570285.1	4215672.77	5.41E-07	3.07E-07	8.48E-07	8.27E-08	4.67E-08	1.29E-07	3.73E-08	1.92E-08	5.65E-08
248	570293.35	4215669.13	5.70E-07	3.23E-07	8.93E-07	8.71E-08	4.91E-08	1.36E-07	3.93E-08	2.02E-08	5.95E-08
249	570309.87	4215661.85	6.30E-07	3.57E-07	9.87E-07	9.62E-08	5.43E-08	1.50E-07	4.34E-08	2.23E-08	6.58E-08
250	570318.13	4215658.21	6.61E-07	3.75E-07	1.04E-06	1.01E-07	5.70E-08	1.58E-07	4.56E-08	2.34E-08	6.90E-08
251	570334.64	4215650.94	7.24E-07	4.10E-07	1.13E-06	1.11E-07	6.24E-08	1.73E-07	4.99E-08	2.57E-08	7.56E-08
252	570263.96	4215690.24	4.43E-07	2.51E-07	6.95E-07	6.77E-08	3.82E-08	1.06E-07	3.06E-08	1.57E-08	4.63E-08
253	570246.64	4215692.33	4.12E-07	2.34E-07	6.46E-07	6.30E-08	3.55E-08	9.85E-08	2.84E-08	1.46E-08	4.30E-08
254	570229.33	4215694.42	3.85E-07	2.18E-07	6.02E-07	5.87E-08	3.31E-08	9.18E-08	2.65E-08	1.36E-08	4.01E-08
255	570212.02	4215696.51	3.61E-07	2.04E-07	5.65E-07	5.51E-08	3.11E-08	8.62E-08	2.49E-08	1.28E-08	3.76E-08
256	570194.71	4215698.6	3.40E-07	1.93E-07	5.33E-07	5.20E-08	2.93E-08	8.13E-08	2.34E-08	1.21E-08	3.55E-08
257	570177.39	4215700.69	3.23E-07	1.83E-07	5.06E-07	4.93E-08	2.78E-08	7.71E-08	2.23E-08	1.15E-08	3.37E-08
258	570160.08	4215702.79	3.08E-07	1.74E-07	4.82E-07	4.70E-08	2.65E-08	7.35E-08	2.12E-08	1.09E-08	3.21E-08
259	570142.77	4215704.88	2.94E-07	1.67E-07	4.61E-07	4.49E-08	2.53E-08	7.03E-08	2.03E-08	1.04E-08	3.07E-08
260	570125.45	4215706.97	2.83E-07	1.60E-07	4.43E-07	4.32E-08	2.44E-08	6.76E-08	1.95E-08	1.00E-08	2.95E-08
261	570108.14	4215709.06	2.73E-07	1.54E-07	4.27E-07	4.16E-08	2.35E-08	6.51E-08	1.88E-08	9.67E-09	2.85E-08
262	570280.87	4215685.56	4.84E-07	2.74E-07	7.59E-07	7.39E-08	4.17E-08	1.16E-07	3.34E-08	1.72E-08	5.05E-08
263	570297.39	4215678.28	5.38E-07	3.05E-07	8.43E-07	8.22E-08	4.64E-08	1.29E-07	3.71E-08	1.91E-08	5.62E-08
264	570305.64	4215674.64	5.66E-07	3.21E-07	8.87E-07	8.64E-08	4.88E-08	1.35E-07	3.90E-08	2.01E-08	5.91E-08
265	570322.16	4215667.36	6.24E-07	3.53E-07	9.77E-07	9.53E-08	5.38E-08	1.49E-07	4.30E-08	2.21E-08	6.51E-08
266	570330.42	4215663.73	6.53E-07	3.70E-07	1.02E-06	9.97E-08	5.63E-08	1.56E-07	4.50E-08	2.32E-08	6.82E-08
267	570346.93	4215656.45	7.12E-07	4.03E-07	1.12E-06	1.09E-07	6.13E-08	1.70E-07	4.91E-08	2.53E-08	7.43E-08
268	570267.7	4215699.43	4.17E-07	2.36E-07	6.54E-07	6.37E-08	3.59E-08	9.96E-08	2.87E-08	1.48E-08	4.35E-08
269	570249.81	4215701.59	3.88E-07	2.20E-07	6.08E-07	5.92E-08	3.34E-08	9.27E-08	2.67E-08	1.38E-08	4.05E-08
270	570231.92	4215703.75	3.61E-07	2.05E-07	5.66E-07	5.52E-08	3.11E-08	8.63E-08	2.49E-08	1.28E-08	3.77E-08
271	570222.98	4215704.83	3.50E-07	1.98E-07	5.49E-07	5.35E-08	3.02E-08	8.37E-08	2.41E-08	1.24E-08	3.66E-08
272	570214.03	4215705.91	3.40E-07	1.93E-07	5.33E-07	5.19E-08	2.93E-08	8.12E-08	2.34E-08	1.21E-08	3.55E-08
273	570196.14	4215708.07	3.22E-07	1.83E-07	5.05E-07	4.92E-08	2.78E-08	7.70E-08	2.22E-08	1.14E-08	3.36E-08
274	570178.25	4215710.23	3.07E-07	1.74E-07	4.81E-07	4.69E-08	2.65E-08	7.34E-08	2.12E-08	1.09E-08	3.21E-08
275	570169.31	4215711.31	3.00E-07	1.70E-07	4.70E-07	4.58E-08	2.59E-08	7.17E-08	2.07E-08	1.06E-08	3.13E-08
276	570151.42	4215713.47	2.86E-07	1.62E-07	4.49E-07	4.37E-08	2.47E-08	6.84E-08	1.97E-08	1.02E-08	2.99E-08
277	570133.53	4215715.63	2.75E-07	1.56E-07	4.30E-07	4.19E-08	2.37E-08	6.56E-08	1.89E-08	9.74E-09	2.87E-08
278	570115.63	4215717.79	2.64E-07	1.50E-07	4.14E-07	4.04E-08	2.28E-08	6.32E-08	1.82E-08	9.38E-09	2.76E-08
279	570284.9	4215694.71	4.56E-07	2.58E-07	7.15E-07	6.97E-08	3.93E-08	1.09E-07	3.14E-08	1.62E-08	4.76E-08
280	570293.16	4215691.07	4.81E-07	2.73E-07	7.54E-07	7.35E-08	4.15E-08	1.15E-07	3.32E-08	1.71E-08	5.02E-08
281	570309.68	4215683.79	5.34E-07	3.02E-07	8.36E-07	8.15E-08	4.60E-08	1.27E-07	3.68E-08	1.89E-08	5.57E-08
282	570317.94	4215680.15	5.61E-07	3.18E-07	8.79E-07	8.57E-08	4.84E-08	1.34E-07	3.87E-08	1.99E-08	5.86E-08
283	570334.45	4215672.88	6.16E-07	3.49E-07	9.66E-07	9.41E-08	5.31E-08	1.47E-07	4.25E-08	2.19E-08	6.43E-08
284	570342.71	4215669.24	6.44E-07	3.65E-07	1.01E-06	9.83E-08	5.55E-08	1.54E-07	4.44E-08	2.28E-08	6.72E-08
285	570282.22	4215444.01	3.63E-06	2.06E-06	5.69E-06	5.55E-07	3.13E-07	8.68E-07	2.50E-07	1.29E-07	3.79E-07
286	570275.56	4215450.77	3.54E-06	2.00E-06	5.54E-06	5.40E-07	3.05E-07	8.44E-07	2.44E-07	1.25E-07	3.69E-07
287	570268.91	4215457.52	3.40E-06	1.93E-06	5.33E-06	5.20E-07	2.93E-07	8.13E-07	2.35E-07	1.21E-07	3.55E-07
288	570298.64	4215440.59	3.47E-06	1.96E-06	5.43E-06	5.30E-07	2.99E-07	8.28E-07	2.39E-07	1.23E-07	3.62E-07
289	570292.17	4215447.16	3.41E-06	1.93E-06	5.35E-06	5.21E-07	2.94E-07	8.15E-07	2.35E-07	1.21E-07	3.56E-07
290	570285.7	4215453.73	3.34E-06	1.89E-06	5.23E-06	5.10E-07	2.88E-07	7.98E-07	2.30E-07	1.18E-07	3.49E-07
291	570279.23	4215460.29	3.24E-06	1.84E-06	5.07E-06	4.95E-07	2.79E-07	7.74E-07	2.23E-07	1.15E-07	3.38E-07
292	570272.76	4215466.86	3.11E-06	1.76E-06	4.87E-06	4.75E-07	2.68E-07	7.43E-07	2.14E-07	1.10E-07	3.25E-07
293	570308.28	4215444.05	3.27E-06	1.85E-06	5.13E-06	5.00E-07	2.82E-07	7.82E-07	2.25E-07	1.16E-07	3.42E-07
294	570301.95	4215450.47	3.23E-06	1.83E-06	5.06E-06	4.93E-07	2.78E-07	7.71E-07	2.22E-07	1.14E-07	3.37E-07
295	570295.63	4215456.89	3.16E-06	1.79E-06	4.95E-06	4.83E-07	2.72E-07	7.55E-07	2.18E-07	1.12E-07	3.30E-07
296	570289.3	4215463.31	3.08E-06	1.74E-06	4.82E-06	4.70E-07	2.65E-07	7.36E-07	2.12E-07	1.09E-07	3.21E-07
297	570276.64	4215476.16	2.84E-06	1.61E-06	4.45E-06	4.34E-07	2.45E-07	6.78E-07	1.96E-07	1.01E-07	2.96E-07
298	570322.67	4215442.69	3.11E-06	1.76E-06	4.87E-06	4.75E-07	2.68E-07	7.42E-07	2.14E-07	1.10E-07	3.24E-07
299	570315.77	4215449.7	3.08E-06	1.75E-06	4.83E-06	4.71E-07	2.66E-07	7.36E-07	2.12E-07	1.09E-07	3.22E-07
300	570308.86	4215456.7	3.04E-06	1.72E-06	4.76E-06	4.64E-07	2.62E-07	7.25E-07	2.09E-07	1.08E-07	3.17E-07
301	570301.96	4215463.71	2.97E-06	1.68E-06	4.65E-06	4.53E-07	2.56E-07	7.08E-07	2.04E-07	1.05E-07	3.10E-07
302	570295.06	4215470.71	2.87E-06	1.63E-06	4.50E-06	4.38E-07	2.47E-07	6.86E-07	1.98E-07	1.02E-07	3.00E-07
303	570288.15	4215477.72	2.75E-06	1.56E-06	4.31E-06	4.20E-07	2.37E-07	6.58E-07	1.90E-07	9.77E-08	2.87E-07
304	570281.25	4215484.73	2.62E-06	1.48E-06	4.10E-06	3.99E-07	2.25E-07	6.25E-07	1.80E-07	9.28E-08	2.73E-07
305	570338.95	4215439.41	2.91E-06	1.65E-06	4.56E-06	4.44E-07	2.51E-07	6.95E-07	2.01E-07	1.03E-07	3.04E-07
306	570332.22	4215446.24	2.93E-06	1.66E-06	4.59E-06	4.47E-07	2.52E-07	6.99E-07	2.02E-07	1.04E-07	3.06E-07

307	570325.49	4215453.07	2.92E-06	1.65E-06	4.57E-06	4.46E-07	2.52E-07	6.98E-07	2.01E-07	1.04E-07	3.05E-07
308	570318.76	4215459.9	2.88E-06	1.63E-06	4.52E-06	4.40E-07	2.48E-07	6.89E-07	1.99E-07	1.02E-07	3.01E-07
309	570312.03	4215466.73	2.83E-06	1.60E-06	4.43E-06	4.32E-07	2.44E-07	6.75E-07	1.95E-07	1.00E-07	2.95E-07
310	570305.3	4215473.56	2.75E-06	1.56E-06	4.31E-06	4.20E-07	2.37E-07	6.57E-07	1.90E-07	9.76E-08	2.87E-07
311	570298.57	4215480.39	2.65E-06	1.50E-06	4.15E-06	4.05E-07	2.28E-07	6.33E-07	1.83E-07	9.41E-08	2.77E-07
312	570291.84	4215487.22	2.53E-06	1.44E-06	3.97E-06	3.87E-07	2.18E-07	6.05E-07	1.75E-07	8.99E-08	2.64E-07
313	570285.11	4215494.05	2.40E-06	1.36E-06	3.77E-06	3.67E-07	2.07E-07	5.74E-07	1.66E-07	8.53E-08	2.51E-07
314	570355.74	4215398.93	2.92E-06	1.66E-06	4.58E-06	4.46E-07	2.52E-07	6.98E-07	2.01E-07	1.04E-07	3.05E-07
315	570355.53	4215408.32	2.87E-06	1.62E-06	4.49E-06	4.38E-07	2.47E-07	6.85E-07	1.97E-07	1.02E-07	2.99E-07
316	570355.32	4215417.7	2.82E-06	1.60E-06	4.42E-06	4.31E-07	2.43E-07	6.74E-07	1.94E-07	1.00E-07	2.94E-07
317	570348.3	4215443.16	2.75E-06	1.56E-06	4.30E-06	4.20E-07	2.37E-07	6.56E-07	1.89E-07	9.75E-08	2.87E-07
318	570341.72	4215449.85	2.77E-06	1.57E-06	4.34E-06	4.23E-07	2.39E-07	6.62E-07	1.91E-07	9.82E-08	2.89E-07
319	570335.13	4215456.54	2.77E-06	1.57E-06	4.34E-06	4.23E-07	2.39E-07	6.61E-07	1.91E-07	9.82E-08	2.89E-07
320	570328.54	4215463.22	2.74E-06	1.55E-06	4.30E-06	4.19E-07	2.36E-07	6.55E-07	1.89E-07	9.73E-08	2.86E-07
321	570321.95	4215469.91	2.70E-06	1.53E-06	4.22E-06	4.12E-07	2.32E-07	6.44E-07	1.86E-07	9.57E-08	2.82E-07
322	570315.36	4215476.6	2.64E-06	1.49E-06	4.13E-06	4.03E-07	2.27E-07	6.30E-07	1.82E-07	9.35E-08	2.75E-07
323	570308.77	4215483.28	2.55E-06	1.45E-06	4.00E-06	3.90E-07	2.20E-07	6.10E-07	1.76E-07	9.06E-08	2.67E-07
324	570302.18	4215489.97	2.46E-06	1.39E-06	3.85E-06	3.75E-07	2.12E-07	5.86E-07	1.69E-07	8.71E-08	2.56E-07
325	570295.59	4215496.66	2.34E-06	1.33E-06	3.67E-06	3.57E-07	2.02E-07	5.59E-07	1.61E-07	8.30E-08	2.44E-07
326	570289	4215503.35	2.22E-06	1.26E-06	3.48E-06	3.39E-07	1.91E-07	5.31E-07	1.53E-07	7.88E-08	2.32E-07
327	570365.14	4215394.28	2.80E-06	1.58E-06	4.38E-06	4.27E-07	2.41E-07	6.68E-07	1.93E-07	9.92E-08	2.92E-07
328	570364.93	4215403.5	2.75E-06	1.56E-06	4.31E-06	4.20E-07	2.37E-07	6.57E-07	1.89E-07	9.75E-08	2.87E-07
329	570364.73	4215412.72	2.71E-06	1.53E-06	4.24E-06	4.14E-07	2.33E-07	6.47E-07	1.87E-07	9.61E-08	2.83E-07
330	570357.63	4215446.94	2.61E-06	1.48E-06	4.08E-06	3.98E-07	2.25E-07	6.23E-07	1.80E-07	9.24E-08	2.72E-07
331	570351.16	4215453.51	2.63E-06	1.49E-06	4.12E-06	4.02E-07	2.27E-07	6.28E-07	1.81E-07	9.33E-08	2.75E-07
332	570344.69	4215460.07	2.64E-06	1.49E-06	4.13E-06	4.03E-07	2.27E-07	6.30E-07	1.82E-07	9.35E-08	2.75E-07
333	570338.22	4215466.64	2.62E-06	1.48E-06	4.10E-06	4.00E-07	2.26E-07	6.26E-07	1.81E-07	9.29E-08	2.73E-07
334	570331.75	4215473.21	2.58E-06	1.46E-06	4.04E-06	3.94E-07	2.22E-07	6.17E-07	1.78E-07	9.16E-08	2.69E-07
335	570325.27	4215479.78	2.53E-06	1.43E-06	3.96E-06	3.86E-07	2.18E-07	6.04E-07	1.74E-07	8.97E-08	2.64E-07
336	570318.8	4215486.35	2.46E-06	1.39E-06	3.85E-06	3.76E-07	2.12E-07	5.88E-07	1.70E-07	8.73E-08	2.57E-07
337	570312.33	4215492.91	2.38E-06	1.35E-06	3.72E-06	3.63E-07	2.05E-07	5.68E-07	1.64E-07	8.43E-08	2.48E-07
338	570305.86	4215499.48	2.28E-06	1.29E-06	3.57E-06	3.48E-07	1.96E-07	5.44E-07	1.57E-07	8.08E-08	2.38E-07
339	570299.39	4215506.05	2.17E-06	1.23E-06	3.40E-06	3.32E-07	1.87E-07	5.19E-07	1.50E-07	7.70E-08	2.27E-07
340	570292.92	4215512.62	2.06E-06	1.17E-06	3.22E-06	3.14E-07	1.77E-07	4.92E-07	1.42E-07	7.30E-08	2.15E-07
341	570374.42	4215395.11	2.65E-06	1.50E-06	4.15E-06	4.05E-07	2.28E-07	6.33E-07	1.83E-07	9.40E-08	2.77E-07
342	570374.2	4215404.94	2.61E-06	1.48E-06	4.09E-06	3.99E-07	2.25E-07	6.23E-07	1.80E-07	9.26E-08	2.72E-07
343	570373.98	4215414.77	2.58E-06	1.46E-06	4.03E-06	3.93E-07	2.22E-07	6.15E-07	1.77E-07	9.13E-08	2.69E-07
344	570366.41	4215451.27	2.48E-06	1.41E-06	3.89E-06	3.79E-07	2.14E-07	5.93E-07	1.71E-07	8.80E-08	2.59E-07
345	570359.51	4215458.28	2.51E-06	1.42E-06	3.93E-06	3.83E-07	2.16E-07	5.99E-07	1.73E-07	8.89E-08	2.62E-07
346	570352.6	4215465.29	2.52E-06	1.43E-06	3.94E-06	3.85E-07	2.17E-07	6.02E-07	1.74E-07	8.93E-08	2.63E-07
347	570345.7	4215472.29	2.50E-06	1.41E-06	3.91E-06	3.81E-07	2.15E-07	5.96E-07	1.72E-07	8.85E-08	2.61E-07
348	570338.8	4215479.3	2.46E-06	1.39E-06	3.85E-06	3.75E-07	2.12E-07	5.87E-07	1.69E-07	8.71E-08	2.56E-07
349	570331.9	4215486.3	2.40E-06	1.36E-06	3.76E-06	3.67E-07	2.07E-07	5.74E-07	1.65E-07	8.52E-08	2.51E-07
350	570324.99	4215493.31	2.33E-06	1.32E-06	3.65E-06	3.56E-07	2.01E-07	5.56E-07	1.61E-07	8.26E-08	2.43E-07
351	570318.09	4215500.31	2.24E-06	1.27E-06	3.51E-06	3.42E-07	1.93E-07	5.35E-07	1.54E-07	7.95E-08	2.34E-07
352	570311.19	4215507.32	2.14E-06	1.21E-06	3.35E-06	3.27E-07	1.85E-07	5.12E-07	1.48E-07	7.60E-08	2.24E-07
353	570304.28	4215514.32	2.03E-06	1.15E-06	3.19E-06	3.10E-07	1.75E-07	4.86E-07	1.40E-07	7.21E-08	2.12E-07
354	570297.38	4215521.33	1.92E-06	1.09E-06	3.01E-06	2.93E-07	1.65E-07	4.58E-07	1.32E-07	6.81E-08	2.00E-07
355	570383.83	4215390.31	2.53E-06	1.43E-06	3.97E-06	3.87E-07	2.18E-07	6.05E-07	1.75E-07	8.98E-08	2.64E-07
356	570383.61	4215399.95	2.51E-06	1.42E-06	3.93E-06	3.83E-07	2.16E-07	5.99E-07	1.73E-07	8.89E-08	2.62E-07
357	570383.39	4215409.59	2.47E-06	1.40E-06	3.88E-06	3.78E-07	2.13E-07	5.91E-07	1.71E-07	8.78E-08	2.58E-07
358	570382.74	4215438.52	2.37E-06	1.34E-06	3.71E-06	3.61E-07	2.04E-07	5.65E-07	1.63E-07	8.39E-08	2.47E-07
359	570375.75	4215455.04	2.36E-06	1.34E-06	3.70E-06	3.61E-07	2.04E-07	5.65E-07	1.63E-07	8.38E-08	2.47E-07
360	570368.98	4215461.91	2.39E-06	1.35E-06	3.74E-06	3.65E-07	2.06E-07	5.70E-07	1.65E-07	8.47E-08	2.49E-07
361	570362.21	4215468.78	2.40E-06	1.36E-06	3.76E-06	3.66E-07	2.07E-07	5.73E-07	1.65E-07	8.51E-08	2.50E-07
362	570355.44	4215475.65	2.39E-06	1.35E-06	3.74E-06	3.65E-07	2.06E-07	5.71E-07	1.65E-07	8.47E-08	2.49E-07
363	570348.67	4215482.52	2.36E-06	1.34E-06	3.69E-06	3.60E-07	2.03E-07	5.63E-07	1.63E-07	8.37E-08	2.46E-07
364	570341.9	4215489.39	2.31E-06	1.31E-06	3.62E-06	3.53E-07	1.99E-07	5.52E-07	1.59E-07	8.20E-08	2.41E-07
365	570335.13	4215496.26	2.25E-06	1.28E-06	3.53E-06	3.44E-07	1.94E-07	5.38E-07	1.55E-07	7.99E-08	2.35E-07
366	570328.36	4215503.13	2.17E-06	1.23E-06	3.41E-06	3.32E-07	1.87E-07	5.19E-07	1.50E-07	7.71E-08	2.27E-07
367	570321.59	4215510	2.09E-06	1.18E-06	3.27E-06	3.18E-07	1.80E-07	4.98E-07	1.44E-07	7.40E-08	2.18E-07
368	570314.82	4215516.87	1.99E-06	1.13E-06	3.12E-06	3.04E-07	1.71E-07	4.75E-07	1.37E-07	7.06E-08	2.08E-07

369	570308.05	4215523.74	1.89E-06	1.07E-06	2.96E-06	2.88E-07	1.63E-07	4.51E-07	1.30E-07	6.70E-08	1.97E-07
370	570301.28	4215530.61	1.79E-06	1.01E-06	2.80E-06	2.73E-07	1.54E-07	4.27E-07	1.23E-07	6.34E-08	1.87E-07
371	570393.01	4215395.17	2.40E-06	1.36E-06	3.76E-06	3.66E-07	2.07E-07	5.73E-07	1.65E-07	8.51E-08	2.50E-07
372	570392.8	4215404.66	2.37E-06	1.34E-06	3.72E-06	3.62E-07	2.04E-07	5.67E-07	1.64E-07	8.42E-08	2.48E-07
373	570392.59	4215414.14	2.35E-06	1.33E-06	3.68E-06	3.59E-07	2.02E-07	5.61E-07	1.62E-07	8.33E-08	2.45E-07
374	570391.95	4215442.58	2.26E-06	1.28E-06	3.53E-06	3.44E-07	1.94E-07	5.39E-07	1.55E-07	8.00E-08	2.35E-07
375	570385.08	4215458.82	2.25E-06	1.28E-06	3.53E-06	3.44E-07	1.94E-07	5.39E-07	1.55E-07	8.00E-08	2.35E-07
376	570378.42	4215465.57	2.28E-06	1.29E-06	3.57E-06	3.48E-07	1.96E-07	5.44E-07	1.57E-07	8.08E-08	2.38E-07
377	570371.76	4215472.33	2.29E-06	1.30E-06	3.58E-06	3.49E-07	1.97E-07	5.46E-07	1.58E-07	8.11E-08	2.39E-07
378	570365.11	4215479.08	2.28E-06	1.29E-06	3.57E-06	3.48E-07	1.97E-07	5.45E-07	1.57E-07	8.09E-08	2.38E-07
379	570358.45	4215485.84	2.26E-06	1.28E-06	3.54E-06	3.45E-07	1.95E-07	5.40E-07	1.56E-07	8.02E-08	2.36E-07
380	570351.79	4215492.59	2.23E-06	1.26E-06	3.49E-06	3.40E-07	1.92E-07	5.32E-07	1.53E-07	7.89E-08	2.32E-07
381	570345.14	4215499.35	2.17E-06	1.23E-06	3.40E-06	3.32E-07	1.87E-07	5.19E-07	1.50E-07	7.71E-08	2.27E-07
382	570338.48	4215506.1	2.11E-06	1.19E-06	3.30E-06	3.22E-07	1.82E-07	5.03E-07	1.45E-07	7.47E-08	2.20E-07
383	570331.83	4215512.86	2.03E-06	1.15E-06	3.18E-06	3.10E-07	1.75E-07	4.85E-07	1.40E-07	7.20E-08	2.12E-07
384	570325.17	4215519.62	1.94E-06	1.10E-06	3.04E-06	2.96E-07	1.67E-07	4.64E-07	1.34E-07	6.88E-08	2.03E-07
385	570318.51	4215526.37	1.85E-06	1.05E-06	2.90E-06	2.82E-07	1.59E-07	4.42E-07	1.27E-07	6.56E-08	1.93E-07
386	570311.86	4215533.13	1.76E-06	9.98E-07	2.76E-06	2.69E-07	1.52E-07	4.21E-07	1.21E-07	6.25E-08	1.84E-07
387	570305.2	4215539.88	1.67E-06	9.45E-07	2.61E-06	2.55E-07	1.44E-07	3.98E-07	1.15E-07	5.92E-08	1.74E-07
388	570402.42	4215390.57	2.29E-06	1.30E-06	3.59E-06	3.50E-07	1.98E-07	5.48E-07	1.58E-07	8.14E-08	2.40E-07
389	570402.21	4215399.91	2.28E-06	1.29E-06	3.57E-06	3.48E-07	1.96E-07	5.44E-07	1.57E-07	8.07E-08	2.38E-07
390	570401.99	4215409.25	2.25E-06	1.28E-06	3.53E-06	3.44E-07	1.94E-07	5.39E-07	1.55E-07	8.00E-08	2.35E-07
391	570401.15	4215446.62	2.15E-06	1.22E-06	3.37E-06	3.29E-07	1.85E-07	5.14E-07	1.48E-07	7.63E-08	2.25E-07
392	570394.38	4215462.61	2.15E-06	1.22E-06	3.37E-06	3.28E-07	1.85E-07	5.14E-07	1.48E-07	7.63E-08	2.24E-07
393	570387.83	4215469.27	2.17E-06	1.23E-06	3.40E-06	3.32E-07	1.87E-07	5.19E-07	1.50E-07	7.71E-08	2.27E-07
394	570381.27	4215475.92	2.18E-06	1.24E-06	3.42E-06	3.34E-07	1.88E-07	5.22E-07	1.51E-07	7.75E-08	2.28E-07
395	570374.71	4215482.58	2.18E-06	1.24E-06	3.42E-06	3.33E-07	1.88E-07	5.21E-07	1.50E-07	7.74E-08	2.28E-07
396	570368.15	4215489.24	2.17E-06	1.23E-06	3.39E-06	3.31E-07	1.87E-07	5.17E-07	1.49E-07	7.68E-08	2.26E-07
397	570361.6	4215495.89	2.14E-06	1.21E-06	3.35E-06	3.26E-07	1.84E-07	5.11E-07	1.47E-07	7.58E-08	2.23E-07
398	570355.04	4215502.55	2.10E-06	1.19E-06	3.28E-06	3.20E-07	1.81E-07	5.01E-07	1.44E-07	7.44E-08	2.19E-07
399	570348.48	4215509.2	2.04E-06	1.16E-06	3.20E-06	3.12E-07	1.76E-07	4.87E-07	1.41E-07	7.24E-08	2.13E-07
400	570341.92	4215515.86	1.97E-06	1.12E-06	3.09E-06	3.01E-07	1.70E-07	4.71E-07	1.36E-07	7.00E-08	2.06E-07
401	570335.36	4215522.51	1.90E-06	1.07E-06	2.97E-06	2.89E-07	1.63E-07	4.53E-07	1.31E-07	6.72E-08	1.98E-07
402	570328.81	4215529.17	1.81E-06	1.03E-06	2.84E-06	2.77E-07	1.56E-07	4.33E-07	1.25E-07	6.43E-08	1.89E-07
403	570322.25	4215535.82	1.73E-06	9.80E-07	2.71E-06	2.64E-07	1.49E-07	4.13E-07	1.19E-07	6.14E-08	1.81E-07
404	570315.69	4215542.48	1.64E-06	9.32E-07	2.58E-06	2.51E-07	1.42E-07	3.93E-07	1.13E-07	5.83E-08	1.72E-07
405	570309.13	4215549.13	1.56E-06	8.81E-07	2.44E-06	2.37E-07	1.34E-07	3.71E-07	1.07E-07	5.52E-08	1.62E-07
406	570411.7	4215391.03	2.19E-06	1.24E-06	3.43E-06	3.34E-07	1.89E-07	5.23E-07	1.51E-07	7.76E-08	2.28E-07
407	570411.48	4215400.86	2.17E-06	1.23E-06	3.40E-06	3.32E-07	1.87E-07	5.19E-07	1.50E-07	7.70E-08	2.27E-07
408	570411.26	4215410.69	2.15E-06	1.22E-06	3.37E-06	3.29E-07	1.85E-07	5.14E-07	1.48E-07	7.64E-08	2.25E-07
409	570410.59	4215440.19	2.08E-06	1.18E-06	3.27E-06	3.18E-07	1.80E-07	4.98E-07	1.44E-07	7.39E-08	2.18E-07
410	570410.37	4215450.02	2.06E-06	1.17E-06	3.22E-06	3.14E-07	1.77E-07	4.91E-07	1.42E-07	7.30E-08	2.15E-07
411	570403.25	4215466.86	2.05E-06	1.16E-06	3.22E-06	3.14E-07	1.77E-07	4.90E-07	1.41E-07	7.28E-08	2.14E-07
412	570396.34	4215473.87	2.07E-06	1.17E-06	3.25E-06	3.17E-07	1.79E-07	4.95E-07	1.43E-07	7.35E-08	2.16E-07
413	570389.44	4215480.87	2.09E-06	1.18E-06	3.27E-06	3.18E-07	1.80E-07	4.98E-07	1.44E-07	7.40E-08	2.18E-07
414	570382.54	4215487.88	2.09E-06	1.18E-06	3.27E-06	3.19E-07	1.80E-07	4.99E-07	1.44E-07	7.41E-08	2.18E-07
415	570375.64	4215494.88	2.07E-06	1.17E-06	3.25E-06	3.16E-07	1.79E-07	4.95E-07	1.43E-07	7.35E-08	2.16E-07
416	570368.73	4215501.89	2.04E-06	1.16E-06	3.19E-06	3.11E-07	1.76E-07	4.87E-07	1.41E-07	7.23E-08	2.13E-07
417	570361.83	4215508.89	2.00E-06	1.13E-06	3.13E-06	3.05E-07	1.72E-07	4.77E-07	1.38E-07	7.08E-08	2.08E-07
418	570354.93	4215515.9	1.94E-06	1.10E-06	3.04E-06	2.97E-07	1.67E-07	4.64E-07	1.34E-07	6.89E-08	2.03E-07
419	570348.03	4215522.91	1.88E-06	1.06E-06	2.94E-06	2.86E-07	1.62E-07	4.48E-07	1.29E-07	6.65E-08	1.96E-07
420	570341.12	4215529.91	1.80E-06	1.02E-06	2.82E-06	2.75E-07	1.55E-07	4.30E-07	1.24E-07	6.38E-08	1.88E-07
421	570334.22	4215536.92	1.72E-06	9.73E-07	2.69E-06	2.62E-07	1.48E-07	4.10E-07	1.18E-07	6.09E-08	1.79E-07
422	570327.32	4215543.92	1.63E-06	9.25E-07	2.56E-06	2.49E-07	1.41E-07	3.90E-07	1.13E-07	5.79E-08	1.70E-07
423	570320.41	4215550.93	1.55E-06	8.75E-07	2.42E-06	2.36E-07	1.33E-07	3.69E-07	1.06E-07	5.48E-08	1.61E-07
424	570313.51	4215557.93	1.45E-06	8.24E-07	2.28E-06	2.22E-07	1.25E-07	3.47E-07	1.00E-07	5.16E-08	1.52E-07
425	570421.11	4215386.32	2.09E-06	1.19E-06	3.28E-06	3.20E-07	1.80E-07	5.00E-07	1.44E-07	7.43E-08	2.19E-07
426	570420.89	4215396	2.08E-06	1.18E-06	3.27E-06	3.18E-07	1.80E-07	4.98E-07	1.44E-07	7.39E-08	2.18E-07
427	570420.67	4215405.68	2.07E-06	1.17E-06	3.24E-06	3.16E-07	1.78E-07	4.94E-07	1.43E-07	7.34E-08	2.16E-07
428	570420.45	4215415.36	2.05E-06	1.16E-06	3.22E-06	3.14E-07	1.77E-07	4.91E-07	1.42E-07	7.29E-08	2.14E-07
429	570419.8	4215444.39	1.99E-06	1.13E-06	3.12E-06	3.04E-07	1.71E-07	4.75E-07	1.37E-07	7.06E-08	2.08E-07
430	570419.58	4215454.07	1.96E-06	1.11E-06	3.07E-06	3.00E-07	1.69E-07	4.69E-07	1.35E-07	6.96E-08	2.05E-07

431	570412.56	4215470.65	1.96E-06	1.11E-06	3.07E-06	2.99E-07	1.69E-07	4.68E-07	1.35E-07	6.95E-08	2.04E-07
432	570405.77	4215477.54	1.98E-06	1.12E-06	3.10E-06	3.02E-07	1.70E-07	4.72E-07	1.36E-07	7.01E-08	2.06E-07
433	570398.98	4215484.44	1.99E-06	1.13E-06	3.12E-06	3.04E-07	1.71E-07	4.75E-07	1.37E-07	7.05E-08	2.08E-07
434	570392.18	4215491.34	1.99E-06	1.13E-06	3.12E-06	3.04E-07	1.72E-07	4.76E-07	1.37E-07	7.07E-08	2.08E-07
435	570385.39	4215498.23	1.99E-06	1.13E-06	3.11E-06	3.03E-07	1.71E-07	4.75E-07	1.37E-07	7.05E-08	2.07E-07
436	570378.59	4215505.13	1.96E-06	1.11E-06	3.07E-06	2.99E-07	1.69E-07	4.68E-07	1.35E-07	6.95E-08	2.05E-07
437	570371.8	4215512.02	1.92E-06	1.09E-06	3.01E-06	2.94E-07	1.66E-07	4.59E-07	1.32E-07	6.82E-08	2.01E-07
438	570365	4215518.92	1.88E-06	1.06E-06	2.94E-06	2.86E-07	1.62E-07	4.48E-07	1.29E-07	6.65E-08	1.96E-07
439	570358.21	4215525.82	1.82E-06	1.03E-06	2.85E-06	2.78E-07	1.57E-07	4.35E-07	1.26E-07	6.46E-08	1.90E-07
440	570351.41	4215532.71	1.76E-06	9.95E-07	2.75E-06	2.68E-07	1.51E-07	4.20E-07	1.21E-07	6.23E-08	1.83E-07
441	570344.62	4215539.61	1.68E-06	9.54E-07	2.64E-06	2.57E-07	1.45E-07	4.02E-07	1.16E-07	5.97E-08	1.76E-07
442	570337.82	4215546.51	1.61E-06	9.10E-07	2.52E-06	2.45E-07	1.38E-07	3.84E-07	1.11E-07	5.70E-08	1.68E-07
443	570331.03	4215553.4	1.52E-06	8.64E-07	2.39E-06	2.33E-07	1.31E-07	3.64E-07	1.05E-07	5.41E-08	1.59E-07
444	570324.23	4215560.3	1.44E-06	8.16E-07	2.26E-06	2.20E-07	1.24E-07	3.44E-07	9.92E-08	5.11E-08	1.50E-07
445	570317.44	4215567.19	1.35E-06	7.65E-07	2.11E-06	2.06E-07	1.16E-07	3.22E-07	9.30E-08	4.79E-08	1.41E-07
446	570430.51	4215381.76	2.00E-06	1.13E-06	3.14E-06	3.06E-07	1.73E-07	4.78E-07	1.38E-07	7.10E-08	2.09E-07
447	570430.29	4215391.3	2.00E-06	1.13E-06	3.13E-06	3.05E-07	1.72E-07	4.77E-07	1.38E-07	7.09E-08	2.09E-07
448	570430.08	4215400.85	1.99E-06	1.13E-06	3.12E-06	3.04E-07	1.72E-07	4.75E-07	1.37E-07	7.06E-08	2.08E-07
449	570429.86	4215410.39	1.98E-06	1.12E-06	3.10E-06	3.02E-07	1.71E-07	4.73E-07	1.36E-07	7.02E-08	2.07E-07
450	570429.22	4215439.02	1.92E-06	1.09E-06	3.01E-06	2.93E-07	1.65E-07	4.59E-07	1.32E-07	6.81E-08	2.00E-07
451	570429	4215448.56	1.90E-06	1.08E-06	2.97E-06	2.90E-07	1.64E-07	4.54E-07	1.31E-07	6.73E-08	1.98E-07
452	570428.78	4215458.11	1.87E-06	1.06E-06	2.93E-06	2.86E-07	1.61E-07	4.47E-07	1.29E-07	6.64E-08	1.96E-07
453	570421.87	4215474.45	1.87E-06	1.06E-06	2.92E-06	2.85E-07	1.61E-07	4.46E-07	1.29E-07	6.62E-08	1.95E-07
454	570415.17	4215481.25	1.89E-06	1.07E-06	2.95E-06	2.88E-07	1.62E-07	4.50E-07	1.30E-07	6.69E-08	1.97E-07
455	570408.47	4215488.05	1.90E-06	1.08E-06	2.97E-06	2.90E-07	1.64E-07	4.53E-07	1.31E-07	6.73E-08	1.98E-07
456	570401.77	4215494.85	1.90E-06	1.08E-06	2.98E-06	2.91E-07	1.64E-07	4.54E-07	1.31E-07	6.75E-08	1.99E-07
457	570395.07	4215501.65	1.90E-06	1.07E-06	2.97E-06	2.89E-07	1.63E-07	4.53E-07	1.31E-07	6.72E-08	1.98E-07
458	570388.37	4215508.45	1.88E-06	1.06E-06	2.94E-06	2.87E-07	1.62E-07	4.49E-07	1.29E-07	6.66E-08	1.96E-07
459	570381.67	4215515.25	1.85E-06	1.05E-06	2.90E-06	2.83E-07	1.59E-07	4.42E-07	1.28E-07	6.56E-08	1.93E-07
460	570374.97	4215522.04	1.81E-06	1.03E-06	2.84E-06	2.76E-07	1.56E-07	4.32E-07	1.25E-07	6.42E-08	1.89E-07
461	570368.27	4215528.84	1.76E-06	9.98E-07	2.76E-06	2.69E-07	1.52E-07	4.21E-07	1.21E-07	6.25E-08	1.84E-07
462	570361.57	4215535.64	1.71E-06	9.66E-07	2.67E-06	2.60E-07	1.47E-07	4.07E-07	1.18E-07	6.05E-08	1.78E-07
463	570354.87	4215542.44	1.64E-06	9.31E-07	2.58E-06	2.51E-07	1.42E-07	3.93E-07	1.13E-07	5.83E-08	1.72E-07
464	570348.17	4215549.24	1.57E-06	8.92E-07	2.47E-06	2.40E-07	1.36E-07	3.76E-07	1.08E-07	5.58E-08	1.64E-07
465	570341.47	4215556.04	1.50E-06	8.49E-07	2.35E-06	2.29E-07	1.29E-07	3.58E-07	1.03E-07	5.32E-08	1.56E-07
466	570334.77	4215562.84	1.42E-06	8.05E-07	2.23E-06	2.17E-07	1.22E-07	3.39E-07	9.79E-08	5.04E-08	1.48E-07
467	570328.07	4215569.64	1.34E-06	7.58E-07	2.10E-06	2.04E-07	1.15E-07	3.20E-07	9.22E-08	4.75E-08	1.40E-07
468	570321.37	4215576.44	1.25E-06	7.10E-07	1.96E-06	1.91E-07	1.08E-07	3.00E-07	8.64E-08	4.45E-08	1.31E-07
469	570439.69	4215386.74	1.91E-06	1.08E-06	3.00E-06	2.92E-07	1.65E-07	4.57E-07	1.32E-07	6.79E-08	2.00E-07
470	570439.48	4215396.16	1.91E-06	1.08E-06	2.99E-06	2.92E-07	1.65E-07	4.57E-07	1.32E-07	6.78E-08	2.00E-07
471	570439.27	4215405.59	1.91E-06	1.08E-06	2.99E-06	2.91E-07	1.64E-07	4.55E-07	1.31E-07	6.76E-08	1.99E-07
472	570439.05	4215415.01	1.89E-06	1.07E-06	2.96E-06	2.89E-07	1.63E-07	4.52E-07	1.30E-07	6.71E-08	1.98E-07
473	570438.42	4215443.28	1.83E-06	1.04E-06	2.87E-06	2.80E-07	1.58E-07	4.38E-07	1.26E-07	6.51E-08	1.91E-07
474	570438.2	4215452.7	1.81E-06	1.03E-06	2.84E-06	2.77E-07	1.56E-07	4.33E-07	1.25E-07	6.43E-08	1.89E-07
475	570437.99	4215462.12	1.79E-06	1.01E-06	2.80E-06	2.73E-07	1.54E-07	4.27E-07	1.23E-07	6.35E-08	1.87E-07
476	570431.16	4215478.26	1.78E-06	1.01E-06	2.78E-06	2.71E-07	1.53E-07	4.24E-07	1.22E-07	6.30E-08	1.85E-07
477	570424.55	4215484.97	1.79E-06	1.02E-06	2.81E-06	2.74E-07	1.55E-07	4.29E-07	1.24E-07	6.37E-08	1.87E-07
478	570417.93	4215491.69	1.81E-06	1.02E-06	2.83E-06	2.76E-07	1.56E-07	4.32E-07	1.25E-07	6.42E-08	1.89E-07
479	570411.32	4215498.4	1.82E-06	1.03E-06	2.85E-06	2.77E-07	1.56E-07	4.34E-07	1.25E-07	6.44E-08	1.90E-07
480	570404.7	4215505.11	1.81E-06	1.03E-06	2.84E-06	2.76E-07	1.56E-07	4.33E-07	1.25E-07	6.42E-08	1.89E-07
481	570398.09	4215511.83	1.80E-06	1.02E-06	2.82E-06	2.74E-07	1.55E-07	4.29E-07	1.24E-07	6.37E-08	1.88E-07
482	570391.47	4215518.54	1.78E-06	1.01E-06	2.78E-06	2.71E-07	1.53E-07	4.24E-07	1.22E-07	6.30E-08	1.85E-07
483	570384.86	4215525.25	1.74E-06	9.88E-07	2.73E-06	2.66E-07	1.50E-07	4.17E-07	1.20E-07	6.19E-08	1.82E-07
484	570378.24	4215531.97	1.70E-06	9.64E-07	2.66E-06	2.60E-07	1.47E-07	4.06E-07	1.17E-07	6.03E-08	1.78E-07
485	570371.63	4215538.68	1.65E-06	9.36E-07	2.59E-06	2.52E-07	1.42E-07	3.94E-07	1.14E-07	5.86E-08	1.72E-07
486	570365.01	4215545.4	1.60E-06	9.04E-07	2.50E-06	2.44E-07	1.38E-07	3.81E-07	1.10E-07	5.66E-08	1.67E-07
487	570358.4	4215552.11	1.54E-06	8.70E-07	2.41E-06	2.35E-07	1.32E-07	3.67E-07	1.06E-07	5.45E-08	1.60E-07
488	570351.78	4215558.82	1.47E-06	8.33E-07	2.30E-06	2.24E-07	1.27E-07	3.51E-07	1.01E-07	5.21E-08	1.53E-07
489	570345.17	4215565.54	1.40E-06	7.92E-07	2.19E-06	2.13E-07	1.20E-07	3.34E-07	9.63E-08	4.96E-08	1.46E-07
490	570338.55	4215572.25	1.32E-06	7.50E-07	2.07E-06	2.02E-07	1.14E-07	3.16E-07	9.12E-08	4.69E-08	1.38E-07
491	570331.94	4215578.96	1.25E-06	7.06E-07	1.95E-06	1.90E-07	1.07E-07	2.98E-07	8.59E-08	4.42E-08	1.30E-07
492	570325.32	4215585.68	1.13E-06	6.38E-07	1.76E-06	1.72E-07	9.70E-08	2.69E-07	7.76E-08	3.99E-08	1.18E-07

493	570449.21	4215377.12	1.83E-06	1.04E-06	2.87E-06	2.80E-07	1.58E-07	4.38E-07	1.26E-07	6.50E-08	1.91E-07
494	570448.98	4215386.95	1.83E-06	1.04E-06	2.87E-06	2.80E-07	1.58E-07	4.38E-07	1.26E-07	6.50E-08	1.91E-07
495	570448.76	4215396.78	1.83E-06	1.04E-06	2.87E-06	2.79E-07	1.58E-07	4.37E-07	1.26E-07	6.49E-08	1.91E-07
496	570448.54	4215406.62	1.82E-06	1.03E-06	2.86E-06	2.79E-07	1.57E-07	4.36E-07	1.26E-07	6.47E-08	1.90E-07
497	570448.32	4215416.45	1.81E-06	1.03E-06	2.84E-06	2.77E-07	1.56E-07	4.33E-07	1.25E-07	6.42E-08	1.89E-07
498	570447.65	4215445.95	1.76E-06	9.94E-07	2.75E-06	2.68E-07	1.51E-07	4.19E-07	1.21E-07	6.23E-08	1.83E-07
499	570447.43	4215455.78	1.73E-06	9.82E-07	2.72E-06	2.65E-07	1.49E-07	4.14E-07	1.19E-07	6.15E-08	1.81E-07
500	570447.21	4215465.61	1.71E-06	9.68E-07	2.68E-06	2.61E-07	1.47E-07	4.08E-07	1.18E-07	6.06E-08	1.78E-07
501	570440.09	4215482.45	1.69E-06	9.59E-07	2.65E-06	2.59E-07	1.46E-07	4.05E-07	1.17E-07	6.01E-08	1.77E-07
502	570433.18	4215489.45	1.71E-06	9.69E-07	2.68E-06	2.61E-07	1.47E-07	4.08E-07	1.18E-07	6.06E-08	1.78E-07
503	570426.28	4215496.46	1.72E-06	9.76E-07	2.70E-06	2.63E-07	1.48E-07	4.12E-07	1.19E-07	6.11E-08	1.80E-07
504	570419.38	4215503.46	1.73E-06	9.80E-07	2.71E-06	2.64E-07	1.49E-07	4.13E-07	1.19E-07	6.14E-08	1.81E-07
505	570412.47	4215510.47	1.73E-06	9.80E-07	2.71E-06	2.64E-07	1.49E-07	4.13E-07	1.19E-07	6.13E-08	1.80E-07
506	570405.57	4215517.48	1.72E-06	9.72E-07	2.69E-06	2.62E-07	1.48E-07	4.10E-07	1.18E-07	6.08E-08	1.79E-07
507	570398.67	4215524.48	1.69E-06	9.59E-07	2.65E-06	2.59E-07	1.46E-07	4.04E-07	1.17E-07	6.01E-08	1.77E-07
508	570391.77	4215531.49	1.66E-06	9.41E-07	2.60E-06	2.54E-07	1.43E-07	3.97E-07	1.14E-07	5.89E-08	1.73E-07
509	570384.86	4215538.49	1.62E-06	9.18E-07	2.54E-06	2.47E-07	1.40E-07	3.87E-07	1.12E-07	5.75E-08	1.69E-07
510	570377.96	4215545.5	1.57E-06	8.90E-07	2.46E-06	2.40E-07	1.35E-07	3.75E-07	1.08E-07	5.57E-08	1.64E-07
511	570371.06	4215552.5	1.52E-06	8.59E-07	2.38E-06	2.32E-07	1.31E-07	3.62E-07	1.04E-07	5.38E-08	1.58E-07
512	570364.16	4215559.51	1.46E-06	8.25E-07	2.28E-06	2.22E-07	1.25E-07	3.48E-07	1.00E-07	5.16E-08	1.52E-07
513	570357.25	4215566.51	1.39E-06	7.87E-07	2.18E-06	2.12E-07	1.20E-07	3.32E-07	9.58E-08	4.93E-08	1.45E-07
514	570350.35	4215573.52	1.32E-06	7.47E-07	2.07E-06	2.01E-07	1.14E-07	3.15E-07	9.09E-08	4.68E-08	1.38E-07
515	570343.45	4215580.53	1.25E-06	7.06E-07	1.95E-06	1.90E-07	1.07E-07	2.98E-07	8.58E-08	4.42E-08	1.30E-07
516	570336.54	4215587.53	1.17E-06	6.63E-07	1.83E-06	1.79E-07	1.01E-07	2.80E-07	8.07E-08	4.15E-08	1.22E-07
517	570329.64	4215594.54	1.10E-06	6.21E-07	1.72E-06	1.67E-07	9.44E-08	2.62E-07	7.55E-08	3.89E-08	1.14E-07
518	570458.61	4215372.61	1.76E-06	9.99E-07	2.76E-06	2.69E-07	1.52E-07	4.21E-07	1.22E-07	6.26E-08	1.84E-07
519	570458.39	4215382.31	1.76E-06	9.97E-07	2.76E-06	2.69E-07	1.52E-07	4.20E-07	1.21E-07	6.24E-08	1.84E-07
520	570458.17	4215392.01	1.76E-06	9.94E-07	2.75E-06	2.68E-07	1.51E-07	4.19E-07	1.21E-07	6.23E-08	1.83E-07
521	570457.95	4215401.72	1.75E-06	9.90E-07	2.74E-06	2.67E-07	1.51E-07	4.17E-07	1.20E-07	6.20E-08	1.82E-07
522	570457.73	4215411.42	1.74E-06	9.84E-07	2.72E-06	2.65E-07	1.50E-07	4.15E-07	1.20E-07	6.16E-08	1.81E-07
523	570457.07	4215440.53	1.69E-06	9.59E-07	2.65E-06	2.59E-07	1.46E-07	4.04E-07	1.17E-07	6.01E-08	1.77E-07
524	570456.85	4215450.23	1.67E-06	9.48E-07	2.62E-06	2.56E-07	1.44E-07	4.00E-07	1.15E-07	5.94E-08	1.75E-07
525	570456.64	4215459.93	1.65E-06	9.36E-07	2.59E-06	2.52E-07	1.42E-07	3.95E-07	1.14E-07	5.86E-08	1.72E-07
526	570456.42	4215469.64	1.62E-06	9.20E-07	2.54E-06	2.48E-07	1.40E-07	3.88E-07	1.12E-07	5.76E-08	1.70E-07
527	570449.39	4215486.25	1.61E-06	9.13E-07	2.52E-06	2.46E-07	1.39E-07	3.85E-07	1.11E-07	5.71E-08	1.68E-07
528	570442.57	4215493.17	1.63E-06	9.22E-07	2.55E-06	2.49E-07	1.40E-07	3.89E-07	1.12E-07	5.77E-08	1.70E-07
529	570435.76	4215500.08	1.64E-06	9.29E-07	2.57E-06	2.50E-07	1.41E-07	3.92E-07	1.13E-07	5.81E-08	1.71E-07
530	570428.95	4215506.99	1.65E-06	9.32E-07	2.58E-06	2.51E-07	1.42E-07	3.93E-07	1.13E-07	5.84E-08	1.72E-07
531	570422.14	4215513.91	1.65E-06	9.33E-07	2.58E-06	2.52E-07	1.42E-07	3.94E-07	1.14E-07	5.84E-08	1.72E-07
532	570415.33	4215520.82	1.64E-06	9.31E-07	2.57E-06	2.51E-07	1.42E-07	3.92E-07	1.13E-07	5.83E-08	1.71E-07
533	570408.51	4215527.73	1.63E-06	9.21E-07	2.55E-06	2.48E-07	1.40E-07	3.88E-07	1.12E-07	5.77E-08	1.70E-07
534	570401.7	4215534.65	1.60E-06	9.05E-07	2.50E-06	2.44E-07	1.38E-07	3.82E-07	1.10E-07	5.67E-08	1.67E-07
535	570394.89	4215541.56	1.56E-06	8.85E-07	2.45E-06	2.39E-07	1.35E-07	3.73E-07	1.08E-07	5.54E-08	1.63E-07
536	570388.08	4215548.47	1.52E-06	8.62E-07	2.38E-06	2.32E-07	1.31E-07	3.63E-07	1.05E-07	5.39E-08	1.59E-07
537	570381.27	4215555.39	1.47E-06	8.34E-07	2.31E-06	2.25E-07	1.27E-07	3.52E-07	1.01E-07	5.22E-08	1.54E-07
538	570374.45	4215562.3	1.42E-06	8.04E-07	2.22E-06	2.17E-07	1.22E-07	3.39E-07	9.77E-08	5.03E-08	1.48E-07
539	570367.64	4215569.21	1.36E-06	7.70E-07	2.13E-06	2.08E-07	1.17E-07	3.25E-07	9.37E-08	4.82E-08	1.42E-07
540	570360.83	4215576.13	1.30E-06	7.35E-07	2.03E-06	1.98E-07	1.12E-07	3.10E-07	8.94E-08	4.60E-08	1.35E-07
541	570354.02	4215583.04	1.23E-06	6.98E-07	1.93E-06	1.88E-07	1.06E-07	2.94E-07	8.49E-08	4.37E-08	1.29E-07
542	570347.21	4215589.95	1.16E-06	6.59E-07	1.82E-06	1.78E-07	1.00E-07	2.78E-07	8.02E-08	4.13E-08	1.21E-07
543	570340.4	4215596.87	1.09E-06	6.20E-07	1.71E-06	1.67E-07	9.43E-08	2.61E-07	7.54E-08	3.88E-08	1.14E-07
544	570333.58	4215603.78	1.03E-06	5.81E-07	1.61E-06	1.57E-07	8.84E-08	2.45E-07	7.07E-08	3.64E-08	1.07E-07
545	570468	4215368.2	1.70E-06	9.62E-07	2.66E-06	2.59E-07	1.46E-07	4.06E-07	1.17E-07	6.03E-08	1.77E-07
546	570467.79	4215377.78	1.69E-06	9.60E-07	2.65E-06	2.59E-07	1.46E-07	4.05E-07	1.17E-07	6.01E-08	1.77E-07
547	570467.57	4215387.37	1.69E-06	9.56E-07	2.64E-06	2.58E-07	1.45E-07	4.03E-07	1.16E-07	5.99E-08	1.76E-07
548	570467.35	4215396.96	1.68E-06	9.51E-07	2.63E-06	2.56E-07	1.45E-07	4.01E-07	1.16E-07	5.95E-08	1.75E-07
549	570467.14	4215406.54	1.67E-06	9.44E-07	2.61E-06	2.54E-07	1.44E-07	3.98E-07	1.15E-07	5.91E-08	1.74E-07
550	570466.92	4215416.13	1.66E-06	9.39E-07	2.60E-06	2.53E-07	1.43E-07	3.96E-07	1.14E-07	5.88E-08	1.73E-07
551	570466.27	4215444.89	1.62E-06	9.16E-07	2.53E-06	2.47E-07	1.39E-07	3.86E-07	1.11E-07	5.74E-08	1.69E-07
552	570466.06	4215454.48	1.60E-06	9.05E-07	2.50E-06	2.44E-07	1.38E-07	3.82E-07	1.10E-07	5.67E-08	1.67E-07
553	570465.84	4215464.06	1.57E-06	8.92E-07	2.47E-06	2.40E-07	1.36E-07	3.76E-07	1.09E-07	5.59E-08	1.64E-07
554	570465.62	4215473.65	1.55E-06	8.76E-07	2.42E-06	2.36E-07	1.33E-07	3.69E-07	1.07E-07	5.48E-08	1.61E-07

555	570458.68	4215490.07	1.53E-06	8.68E-07	2.40E-06	2.34E-07	1.32E-07	3.66E-07	1.06E-07	5.43E-08	1.60E-07
556	570451.95	4215496.9	1.55E-06	8.77E-07	2.42E-06	2.36E-07	1.33E-07	3.70E-07	1.07E-07	5.49E-08	1.62E-07
557	570445.22	4215503.73	1.56E-06	8.84E-07	2.44E-06	2.38E-07	1.34E-07	3.73E-07	1.08E-07	5.53E-08	1.63E-07
558	570438.49	4215510.56	1.57E-06	8.88E-07	2.46E-06	2.39E-07	1.35E-07	3.74E-07	1.08E-07	5.56E-08	1.64E-07
559	570431.76	4215517.39	1.57E-06	8.89E-07	2.46E-06	2.40E-07	1.35E-07	3.75E-07	1.08E-07	5.57E-08	1.64E-07
560	570425.03	4215524.22	1.57E-06	8.88E-07	2.45E-06	2.39E-07	1.35E-07	3.74E-07	1.08E-07	5.56E-08	1.64E-07
561	570418.3	4215531.05	1.56E-06	8.82E-07	2.44E-06	2.38E-07	1.34E-07	3.72E-07	1.07E-07	5.52E-08	1.62E-07
562	570411.57	4215537.88	1.54E-06	8.71E-07	2.41E-06	2.35E-07	1.32E-07	3.67E-07	1.06E-07	5.45E-08	1.60E-07
563	570404.84	4215544.71	1.51E-06	8.54E-07	2.36E-06	2.30E-07	1.30E-07	3.60E-07	1.04E-07	5.35E-08	1.57E-07
564	570398.11	4215551.54	1.47E-06	8.33E-07	2.30E-06	2.25E-07	1.27E-07	3.51E-07	1.01E-07	5.22E-08	1.54E-07
565	570391.38	4215558.37	1.43E-06	8.09E-07	2.24E-06	2.18E-07	1.23E-07	3.41E-07	9.84E-08	5.07E-08	1.49E-07
566	570384.65	4215565.2	1.38E-06	7.82E-07	2.16E-06	2.11E-07	1.19E-07	3.30E-07	9.51E-08	4.89E-08	1.44E-07
567	570377.92	4215572.03	1.33E-06	7.52E-07	2.08E-06	2.03E-07	1.14E-07	3.17E-07	9.15E-08	4.71E-08	1.39E-07
568	570371.18	4215578.86	1.27E-06	7.21E-07	1.99E-06	1.94E-07	1.10E-07	3.04E-07	8.77E-08	4.51E-08	1.33E-07
569	570364.45	4215585.69	1.21E-06	6.88E-07	1.90E-06	1.85E-07	1.05E-07	2.90E-07	8.36E-08	4.31E-08	1.27E-07
570	570357.72	4215592.52	1.15E-06	6.52E-07	1.80E-06	1.76E-07	9.92E-08	2.75E-07	7.94E-08	4.09E-08	1.20E-07
571	570350.99	4215599.35	1.09E-06	6.17E-07	1.71E-06	1.66E-07	9.38E-08	2.60E-07	7.50E-08	3.86E-08	1.14E-07
572	570344.26	4215606.18	1.03E-06	5.81E-07	1.61E-06	1.57E-07	8.83E-08	2.45E-07	7.06E-08	3.64E-08	1.07E-07
573	570337.53	4215613.01	9.63E-07	5.45E-07	1.51E-06	1.47E-07	8.30E-08	2.30E-07	6.64E-08	3.42E-08	1.01E-07
574	570477.4	4215363.88	1.64E-06	9.26E-07	2.56E-06	2.50E-07	1.41E-07	3.91E-07	1.13E-07	5.80E-08	1.71E-07
575	570477.18	4215373.36	1.63E-06	9.25E-07	2.56E-06	2.49E-07	1.41E-07	3.90E-07	1.13E-07	5.79E-08	1.70E-07
576	570476.97	4215382.84	1.63E-06	9.22E-07	2.55E-06	2.48E-07	1.40E-07	3.89E-07	1.12E-07	5.77E-08	1.70E-07
577	570476.76	4215392.32	1.62E-06	9.16E-07	2.53E-06	2.47E-07	1.39E-07	3.86E-07	1.11E-07	5.74E-08	1.69E-07
578	570476.54	4215401.8	1.61E-06	9.09E-07	2.51E-06	2.45E-07	1.38E-07	3.83E-07	1.11E-07	5.69E-08	1.68E-07
579	570476.33	4215411.28	1.60E-06	9.04E-07	2.50E-06	2.44E-07	1.37E-07	3.81E-07	1.10E-07	5.66E-08	1.67E-07
580	570475.69	4215439.73	1.56E-06	8.86E-07	2.45E-06	2.39E-07	1.35E-07	3.73E-07	1.08E-07	5.55E-08	1.63E-07
581	570475.47	4215449.21	1.55E-06	8.76E-07	2.42E-06	2.36E-07	1.33E-07	3.69E-07	1.07E-07	5.48E-08	1.61E-07
582	570475.26	4215458.69	1.53E-06	8.64E-07	2.39E-06	2.33E-07	1.31E-07	3.64E-07	1.05E-07	5.41E-08	1.59E-07
583	570475.04	4215468.17	1.50E-06	8.51E-07	2.35E-06	2.29E-07	1.29E-07	3.59E-07	1.03E-07	5.33E-08	1.57E-07
584	570474.83	4215477.65	1.47E-06	8.35E-07	2.31E-06	2.25E-07	1.27E-07	3.52E-07	1.02E-07	5.23E-08	1.54E-07
585	570467.96	4215493.89	1.46E-06	8.26E-07	2.28E-06	2.23E-07	1.26E-07	3.48E-07	1.01E-07	5.17E-08	1.52E-07
586	570461.3	4215500.64	1.47E-06	8.34E-07	2.31E-06	2.25E-07	1.27E-07	3.52E-07	1.01E-07	5.22E-08	1.54E-07
587	570454.65	4215507.4	1.48E-06	8.40E-07	2.32E-06	2.26E-07	1.28E-07	3.54E-07	1.02E-07	5.26E-08	1.55E-07
588	570447.99	4215514.15	1.49E-06	8.45E-07	2.34E-06	2.28E-07	1.29E-07	3.56E-07	1.03E-07	5.29E-08	1.56E-07
589	570441.34	4215520.91	1.50E-06	8.48E-07	2.34E-06	2.28E-07	1.29E-07	3.57E-07	1.03E-07	5.31E-08	1.56E-07
590	570434.68	4215527.66	1.49E-06	8.47E-07	2.34E-06	2.28E-07	1.29E-07	3.57E-07	1.03E-07	5.30E-08	1.56E-07
591	570428.02	4215534.42	1.49E-06	8.42E-07	2.33E-06	2.27E-07	1.28E-07	3.55E-07	1.02E-07	5.27E-08	1.55E-07
592	570421.37	4215541.18	1.47E-06	8.34E-07	2.31E-06	2.25E-07	1.27E-07	3.52E-07	1.01E-07	5.22E-08	1.54E-07
593	570414.71	4215547.93	1.45E-06	8.23E-07	2.28E-06	2.22E-07	1.25E-07	3.47E-07	1.00E-07	5.15E-08	1.52E-07
594	570408.05	4215554.69	1.42E-06	8.06E-07	2.23E-06	2.17E-07	1.23E-07	3.40E-07	9.80E-08	5.04E-08	1.48E-07
595	570401.4	4215561.44	1.38E-06	7.84E-07	2.17E-06	2.11E-07	1.19E-07	3.30E-07	9.53E-08	4.91E-08	1.44E-07
596	570394.74	4215568.2	1.34E-06	7.59E-07	2.10E-06	2.05E-07	1.15E-07	3.20E-07	9.23E-08	4.75E-08	1.40E-07
597	570388.09	4215574.95	1.29E-06	7.33E-07	2.03E-06	1.98E-07	1.11E-07	3.09E-07	8.91E-08	4.59E-08	1.35E-07
598	570381.43	4215581.71	1.24E-06	7.05E-07	1.95E-06	1.90E-07	1.07E-07	2.97E-07	8.57E-08	4.41E-08	1.30E-07
599	570374.77	4215588.46	1.19E-06	6.75E-07	1.87E-06	1.82E-07	1.03E-07	2.84E-07	8.21E-08	4.22E-08	1.24E-07
600	570368.12	4215595.22	1.14E-06	6.43E-07	1.78E-06	1.73E-07	9.78E-08	2.71E-07	7.82E-08	4.03E-08	1.19E-07
601	570361.46	4215601.97	1.08E-06	6.11E-07	1.69E-06	1.65E-07	9.29E-08	2.58E-07	7.43E-08	3.82E-08	1.13E-07
602	570354.81	4215608.73	1.02E-06	5.78E-07	1.60E-06	1.56E-07	8.79E-08	2.44E-07	7.03E-08	3.62E-08	1.07E-07
603	570348.15	4215615.48	9.62E-07	5.45E-07	1.51E-06	1.47E-07	8.29E-08	2.30E-07	6.63E-08	3.41E-08	1.00E-07
604	570341.49	4215622.24	9.05E-07	5.13E-07	1.42E-06	1.38E-07	7.80E-08	2.16E-07	6.24E-08	3.21E-08	9.45E-08
605	570486.71	4215363.21	1.57E-06	8.91E-07	2.46E-06	2.40E-07	1.36E-07	3.76E-07	1.08E-07	5.58E-08	1.64E-07
606	570486.49	4215373.04	1.57E-06	8.91E-07	2.46E-06	2.40E-07	1.35E-07	3.76E-07	1.08E-07	5.58E-08	1.64E-07
607	570486.27	4215382.87	1.57E-06	8.88E-07	2.46E-06	2.39E-07	1.35E-07	3.74E-07	1.08E-07	5.56E-08	1.64E-07
608	570486.04	4215392.71	1.56E-06	8.83E-07	2.44E-06	2.38E-07	1.34E-07	3.72E-07	1.07E-07	5.53E-08	1.63E-07
609	570485.82	4215402.54	1.55E-06	8.77E-07	2.43E-06	2.36E-07	1.33E-07	3.70E-07	1.07E-07	5.49E-08	1.62E-07
610	570485.6	4215412.37	1.54E-06	8.72E-07	2.41E-06	2.35E-07	1.33E-07	3.68E-07	1.06E-07	5.46E-08	1.61E-07
611	570484.94	4215441.87	1.50E-06	8.51E-07	2.35E-06	2.29E-07	1.29E-07	3.59E-07	1.04E-07	5.33E-08	1.57E-07
612	570484.71	4215451.7	1.48E-06	8.41E-07	2.33E-06	2.27E-07	1.28E-07	3.55E-07	1.02E-07	5.27E-08	1.55E-07
613	570484.49	4215461.53	1.46E-06	8.29E-07	2.29E-06	2.24E-07	1.26E-07	3.50E-07	1.01E-07	5.19E-08	1.53E-07
614	570484.27	4215471.37	1.44E-06	8.16E-07	2.26E-06	2.20E-07	1.24E-07	3.44E-07	9.92E-08	5.11E-08	1.50E-07
615	570484.05	4215481.2	1.41E-06	8.00E-07	2.21E-06	2.16E-07	1.22E-07	3.37E-07	9.73E-08	5.01E-08	1.47E-07
616	570476.92	4215498.04	1.39E-06	7.89E-07	2.18E-06	2.13E-07	1.20E-07	3.33E-07	9.59E-08	4.94E-08	1.45E-07

617	570470.02	4215505.04	1.40E-06	7.94E-07	2.19E-06	2.14E-07	1.21E-07	3.35E-07	9.66E-08	4.97E-08	1.46E-07
618	570463.12	4215512.05	1.41E-06	7.99E-07	2.21E-06	2.15E-07	1.22E-07	3.37E-07	9.72E-08	5.00E-08	1.47E-07
619	570456.22	4215519.05	1.42E-06	8.04E-07	2.22E-06	2.17E-07	1.22E-07	3.39E-07	9.77E-08	5.03E-08	1.48E-07
620	570449.31	4215526.06	1.42E-06	8.07E-07	2.23E-06	2.17E-07	1.23E-07	3.40E-07	9.81E-08	5.05E-08	1.49E-07
621	570442.41	4215533.06	1.42E-06	8.06E-07	2.23E-06	2.17E-07	1.23E-07	3.40E-07	9.81E-08	5.05E-08	1.49E-07
622	570435.51	4215540.07	1.41E-06	8.02E-07	2.22E-06	2.16E-07	1.22E-07	3.38E-07	9.75E-08	5.02E-08	1.48E-07
623	570428.6	4215547.07	1.40E-06	7.94E-07	2.20E-06	2.14E-07	1.21E-07	3.35E-07	9.66E-08	4.97E-08	1.46E-07
624	570421.7	4215554.08	1.38E-06	7.84E-07	2.17E-06	2.11E-07	1.19E-07	3.30E-07	9.53E-08	4.91E-08	1.44E-07
625	570414.8	4215561.08	1.36E-06	7.69E-07	2.13E-06	2.07E-07	1.17E-07	3.24E-07	9.35E-08	4.81E-08	1.42E-07
626	570407.9	4215568.09	1.32E-06	7.47E-07	2.07E-06	2.01E-07	1.14E-07	3.15E-07	9.09E-08	4.68E-08	1.38E-07
627	570400.99	4215575.1	1.28E-06	7.23E-07	2.00E-06	1.95E-07	1.10E-07	3.05E-07	8.80E-08	4.53E-08	1.33E-07
628	570394.09	4215582.1	1.23E-06	6.97E-07	1.93E-06	1.88E-07	1.06E-07	2.94E-07	8.48E-08	4.37E-08	1.28E-07
629	570387.19	4215589.11	1.18E-06	6.70E-07	1.85E-06	1.81E-07	1.02E-07	2.82E-07	8.15E-08	4.19E-08	1.23E-07
630	570380.29	4215596.11	1.13E-06	6.40E-07	1.77E-06	1.73E-07	9.74E-08	2.70E-07	7.79E-08	4.01E-08	1.18E-07
631	570373.38	4215603.12	1.08E-06	6.10E-07	1.69E-06	1.64E-07	9.27E-08	2.57E-07	7.42E-08	3.82E-08	1.12E-07
632	570366.48	4215610.12	1.02E-06	5.78E-07	1.60E-06	1.56E-07	8.80E-08	2.44E-07	7.03E-08	3.62E-08	1.07E-07
633	570359.58	4215617.13	9.65E-07	5.47E-07	1.51E-06	1.47E-07	8.32E-08	2.31E-07	6.65E-08	3.42E-08	1.01E-07
634	570352.67	4215624.13	9.09E-07	5.15E-07	1.42E-06	1.39E-07	7.84E-08	2.17E-07	6.27E-08	3.23E-08	9.49E-08
635	570345.77	4215631.14	8.55E-07	4.84E-07	1.34E-06	1.31E-07	7.37E-08	2.04E-07	5.89E-08	3.03E-08	8.92E-08
636	570496.11	4215358.84	1.51E-06	8.58E-07	2.37E-06	2.31E-07	1.30E-07	3.62E-07	1.04E-07	5.37E-08	1.58E-07
637	570495.89	4215368.56	1.51E-06	8.58E-07	2.37E-06	2.31E-07	1.31E-07	3.62E-07	1.04E-07	5.37E-08	1.58E-07
638	570495.67	4215378.28	1.51E-06	8.57E-07	2.37E-06	2.31E-07	1.30E-07	3.61E-07	1.04E-07	5.37E-08	1.58E-07
639	570495.45	4215388	1.51E-06	8.54E-07	2.36E-06	2.30E-07	1.30E-07	3.60E-07	1.04E-07	5.35E-08	1.57E-07
640	570495.23	4215397.72	1.50E-06	8.50E-07	2.35E-06	2.29E-07	1.29E-07	3.58E-07	1.03E-07	5.32E-08	1.57E-07
641	570495.01	4215407.44	1.49E-06	8.45E-07	2.34E-06	2.28E-07	1.28E-07	3.56E-07	1.03E-07	5.29E-08	1.56E-07
642	570494.79	4215417.16	1.48E-06	8.39E-07	2.32E-06	2.26E-07	1.28E-07	3.54E-07	1.02E-07	5.26E-08	1.55E-07
643	570494.13	4215446.32	1.44E-06	8.16E-07	2.26E-06	2.20E-07	1.24E-07	3.44E-07	9.93E-08	5.11E-08	1.50E-07
644	570493.91	4215456.04	1.42E-06	8.06E-07	2.23E-06	2.17E-07	1.23E-07	3.40E-07	9.81E-08	5.05E-08	1.49E-07
645	570493.69	4215465.76	1.40E-06	7.95E-07	2.20E-06	2.14E-07	1.21E-07	3.35E-07	9.67E-08	4.98E-08	1.46E-07
646	570493.47	4215475.49	1.38E-06	7.81E-07	2.16E-06	2.11E-07	1.19E-07	3.29E-07	9.50E-08	4.89E-08	1.44E-07
647	570493.26	4215485.21	1.35E-06	7.66E-07	2.12E-06	2.06E-07	1.16E-07	3.23E-07	9.32E-08	4.80E-08	1.41E-07
648	570486.21	4215501.85	1.33E-06	7.55E-07	2.09E-06	2.03E-07	1.15E-07	3.18E-07	9.18E-08	4.73E-08	1.39E-07
649	570479.39	4215508.78	1.34E-06	7.58E-07	2.10E-06	2.04E-07	1.15E-07	3.20E-07	9.22E-08	4.75E-08	1.40E-07
650	570472.56	4215515.7	1.34E-06	7.60E-07	2.10E-06	2.05E-07	1.16E-07	3.21E-07	9.25E-08	4.76E-08	1.40E-07
651	570465.74	4215522.63	1.35E-06	7.64E-07	2.11E-06	2.06E-07	1.16E-07	3.22E-07	9.29E-08	4.78E-08	1.41E-07
652	570458.91	4215529.56	1.35E-06	7.66E-07	2.12E-06	2.07E-07	1.17E-07	3.23E-07	9.32E-08	4.80E-08	1.41E-07
653	570452.09	4215536.48	1.35E-06	7.67E-07	2.12E-06	2.07E-07	1.17E-07	3.23E-07	9.33E-08	4.80E-08	1.41E-07
654	570445.27	4215543.41	1.35E-06	7.65E-07	2.12E-06	2.06E-07	1.16E-07	3.23E-07	9.31E-08	4.79E-08	1.41E-07
655	570438.44	4215550.33	1.34E-06	7.59E-07	2.10E-06	2.05E-07	1.16E-07	3.20E-07	9.24E-08	4.76E-08	1.40E-07
656	570431.62	4215557.26	1.32E-06	7.51E-07	2.08E-06	2.02E-07	1.14E-07	3.16E-07	9.13E-08	4.70E-08	1.38E-07
657	570424.79	4215564.19	1.30E-06	7.38E-07	2.04E-06	1.99E-07	1.12E-07	3.11E-07	8.97E-08	4.62E-08	1.36E-07
658	570417.97	4215571.11	1.27E-06	7.22E-07	2.00E-06	1.95E-07	1.10E-07	3.04E-07	8.78E-08	4.52E-08	1.33E-07
659	570411.14	4215578.04	1.24E-06	7.02E-07	1.94E-06	1.89E-07	1.07E-07	2.96E-07	8.54E-08	4.40E-08	1.29E-07
660	570404.32	4215584.96	1.20E-06	6.79E-07	1.88E-06	1.83E-07	1.03E-07	2.86E-07	8.26E-08	4.25E-08	1.25E-07
661	570397.5	4215591.89	1.15E-06	6.54E-07	1.81E-06	1.76E-07	9.95E-08	2.76E-07	7.96E-08	4.10E-08	1.21E-07
662	570390.67	4215598.82	1.11E-06	6.28E-07	1.74E-06	1.69E-07	9.55E-08	2.65E-07	7.64E-08	3.93E-08	1.16E-07
663	570383.85	4215605.74	1.06E-06	6.00E-07	1.66E-06	1.62E-07	9.13E-08	2.53E-07	7.30E-08	3.76E-08	1.11E-07
664	570377.02	4215612.67	1.01E-06	5.72E-07	1.58E-06	1.54E-07	8.70E-08	2.41E-07	6.96E-08	3.58E-08	1.05E-07
665	570370.2	4215619.59	9.57E-07	5.42E-07	1.50E-06	1.46E-07	8.25E-08	2.29E-07	6.60E-08	3.40E-08	9.99E-08
666	570363.37	4215626.52	9.05E-07	5.13E-07	1.42E-06	1.38E-07	7.80E-08	2.16E-07	6.24E-08	3.21E-08	9.45E-08
667	570356.55	4215633.44	8.54E-07	4.84E-07	1.34E-06	1.30E-07	7.36E-08	2.04E-07	5.89E-08	3.03E-08	8.92E-08
668	570349.73	4215640.37	8.04E-07	4.56E-07	1.26E-06	1.23E-07	6.93E-08	1.92E-07	5.54E-08	2.85E-08	8.39E-08
669	570505.5	4215354.54	1.46E-06	8.26E-07	2.28E-06	2.23E-07	1.26E-07	3.48E-07	1.01E-07	5.17E-08	1.52E-07
670	570505.28	4215364.16	1.46E-06	8.27E-07	2.29E-06	2.23E-07	1.26E-07	3.49E-07	1.01E-07	5.18E-08	1.52E-07
671	570505.07	4215373.78	1.46E-06	8.27E-07	2.29E-06	2.23E-07	1.26E-07	3.49E-07	1.01E-07	5.18E-08	1.52E-07
672	570504.85	4215383.4	1.46E-06	8.26E-07	2.28E-06	2.23E-07	1.26E-07	3.48E-07	1.00E-07	5.17E-08	1.52E-07
673	570504.63	4215393.02	1.45E-06	8.23E-07	2.28E-06	2.22E-07	1.25E-07	3.47E-07	1.00E-07	5.15E-08	1.52E-07
674	570504.42	4215402.64	1.45E-06	8.19E-07	2.26E-06	2.21E-07	1.25E-07	3.45E-07	9.96E-08	5.13E-08	1.51E-07
675	570504.2	4215412.26	1.44E-06	8.14E-07	2.25E-06	2.19E-07	1.24E-07	3.43E-07	9.90E-08	5.10E-08	1.50E-07
676	570503.55	4215441.11	1.40E-06	7.92E-07	2.19E-06	2.13E-07	1.20E-07	3.34E-07	9.63E-08	4.96E-08	1.46E-07
677	570503.33	4215450.73	1.38E-06	7.83E-07	2.17E-06	2.11E-07	1.19E-07	3.30E-07	9.53E-08	4.90E-08	1.44E-07
678	570503.11	4215460.35	1.37E-06	7.73E-07	2.14E-06	2.08E-07	1.18E-07	3.26E-07	9.41E-08	4.84E-08	1.42E-07

679	570502.9	4215469.97	1.34E-06	7.62E-07	2.11E-06	2.05E-07	1.16E-07	3.21E-07	9.27E-08	4.77E-08	1.40E-07
680	570502.68	4215479.59	1.32E-06	7.48E-07	2.07E-06	2.02E-07	1.14E-07	3.16E-07	9.10E-08	4.69E-08	1.38E-07
681	570502.46	4215489.2	1.30E-06	7.34E-07	2.03E-06	1.98E-07	1.12E-07	3.09E-07	8.93E-08	4.60E-08	1.35E-07
682	570495.49	4215505.68	1.28E-06	7.23E-07	2.00E-06	1.95E-07	1.10E-07	3.05E-07	8.80E-08	4.53E-08	1.33E-07
683	570488.74	4215512.53	1.28E-06	7.26E-07	2.01E-06	1.96E-07	1.10E-07	3.06E-07	8.84E-08	4.55E-08	1.34E-07
684	570481.99	4215519.38	1.28E-06	7.28E-07	2.01E-06	1.96E-07	1.11E-07	3.07E-07	8.85E-08	4.56E-08	1.34E-07
685	570475.23	4215526.24	1.28E-06	7.28E-07	2.01E-06	1.96E-07	1.11E-07	3.07E-07	8.85E-08	4.56E-08	1.34E-07
686	570468.48	4215533.09	1.29E-06	7.28E-07	2.01E-06	1.96E-07	1.11E-07	3.07E-07	8.86E-08	4.56E-08	1.34E-07
687	570461.73	4215539.94	1.29E-06	7.29E-07	2.02E-06	1.96E-07	1.11E-07	3.07E-07	8.87E-08	4.56E-08	1.34E-07
688	570454.98	4215546.8	1.28E-06	7.28E-07	2.01E-06	1.96E-07	1.11E-07	3.07E-07	8.85E-08	4.56E-08	1.34E-07
689	570448.22	4215553.65	1.28E-06	7.25E-07	2.00E-06	1.95E-07	1.10E-07	3.06E-07	8.82E-08	4.54E-08	1.34E-07
690	570441.47	4215560.5	1.27E-06	7.18E-07	1.99E-06	1.94E-07	1.09E-07	3.03E-07	8.74E-08	4.50E-08	1.32E-07
691	570434.72	4215567.36	1.25E-06	7.08E-07	1.96E-06	1.91E-07	1.08E-07	2.98E-07	8.61E-08	4.43E-08	1.30E-07
692	570427.97	4215574.21	1.23E-06	6.94E-07	1.92E-06	1.87E-07	1.06E-07	2.93E-07	8.45E-08	4.35E-08	1.28E-07
693	570421.21	4215581.06	1.20E-06	6.79E-07	1.88E-06	1.83E-07	1.03E-07	2.86E-07	8.25E-08	4.25E-08	1.25E-07
694	570414.46	4215587.92	1.17E-06	6.60E-07	1.83E-06	1.78E-07	1.00E-07	2.78E-07	8.03E-08	4.13E-08	1.22E-07
695	570407.71	4215594.77	1.13E-06	6.38E-07	1.76E-06	1.72E-07	9.70E-08	2.69E-07	7.76E-08	3.99E-08	1.17E-07
696	570400.96	4215601.62	1.08E-06	6.14E-07	1.70E-06	1.65E-07	9.34E-08	2.59E-07	7.47E-08	3.84E-08	1.13E-07
697	570394.2	4215608.47	1.04E-06	5.89E-07	1.63E-06	1.59E-07	8.96E-08	2.48E-07	7.17E-08	3.69E-08	1.09E-07
698	570387.45	4215615.33	9.95E-07	5.64E-07	1.56E-06	1.52E-07	8.57E-08	2.38E-07	6.86E-08	3.53E-08	1.04E-07
699	570380.7	4215622.18	9.47E-07	5.37E-07	1.48E-06	1.45E-07	8.16E-08	2.26E-07	6.53E-08	3.36E-08	9.89E-08
700	570373.94	4215629.03	8.99E-07	5.09E-07	1.41E-06	1.37E-07	7.74E-08	2.15E-07	6.19E-08	3.19E-08	9.38E-08
701	570367.19	4215635.89	8.50E-07	4.82E-07	1.33E-06	1.30E-07	7.33E-08	2.03E-07	5.86E-08	3.02E-08	8.88E-08
702	570360.44	4215642.74	8.03E-07	4.55E-07	1.26E-06	1.23E-07	6.92E-08	1.92E-07	5.53E-08	2.85E-08	8.38E-08
703	570353.69	4215649.59	7.57E-07	4.29E-07	1.19E-06	1.16E-07	6.52E-08	1.81E-07	5.22E-08	2.68E-08	7.90E-08
704	570514.89	4215350.32	1.41E-06	7.96E-07	2.20E-06	2.15E-07	1.21E-07	3.36E-07	9.68E-08	4.98E-08	1.47E-07
705	570514.68	4215359.84	1.41E-06	7.97E-07	2.21E-06	2.15E-07	1.21E-07	3.36E-07	9.70E-08	4.99E-08	1.47E-07
706	570514.46	4215369.37	1.41E-06	7.98E-07	2.21E-06	2.15E-07	1.21E-07	3.36E-07	9.71E-08	5.00E-08	1.47E-07
707	570514.25	4215378.89	1.41E-06	7.97E-07	2.20E-06	2.15E-07	1.21E-07	3.36E-07	9.70E-08	4.99E-08	1.47E-07
708	570514.03	4215388.42	1.40E-06	7.96E-07	2.20E-06	2.14E-07	1.21E-07	3.36E-07	9.68E-08	4.98E-08	1.47E-07
709	570513.82	4215397.94	1.40E-06	7.93E-07	2.19E-06	2.14E-07	1.21E-07	3.34E-07	9.64E-08	4.96E-08	1.46E-07
710	570513.6	4215407.47	1.39E-06	7.89E-07	2.18E-06	2.13E-07	1.20E-07	3.33E-07	9.60E-08	4.94E-08	1.45E-07
711	570513.39	4215416.99	1.38E-06	7.84E-07	2.17E-06	2.11E-07	1.19E-07	3.31E-07	9.54E-08	4.91E-08	1.44E-07
712	570512.74	4215445.57	1.35E-06	7.63E-07	2.11E-06	2.06E-07	1.16E-07	3.22E-07	9.28E-08	4.78E-08	1.41E-07
713	570512.53	4215455.09	1.33E-06	7.54E-07	2.09E-06	2.03E-07	1.15E-07	3.18E-07	9.17E-08	4.72E-08	1.39E-07
714	570512.31	4215464.62	1.31E-06	7.45E-07	2.06E-06	2.01E-07	1.13E-07	3.14E-07	9.06E-08	4.66E-08	1.37E-07
715	570512.1	4215474.14	1.29E-06	7.33E-07	2.03E-06	1.98E-07	1.12E-07	3.09E-07	8.92E-08	4.59E-08	1.35E-07
716	570511.88	4215483.67	1.27E-06	7.21E-07	1.99E-06	1.94E-07	1.10E-07	3.04E-07	8.77E-08	4.51E-08	1.33E-07
717	570511.67	4215493.2	1.25E-06	7.08E-07	1.96E-06	1.91E-07	1.08E-07	2.98E-07	8.61E-08	4.43E-08	1.30E-07
718	570504.77	4215509.51	1.23E-06	6.94E-07	1.92E-06	1.87E-07	1.06E-07	2.93E-07	8.45E-08	4.35E-08	1.28E-07
719	570498.08	4215516.29	1.23E-06	6.97E-07	1.93E-06	1.88E-07	1.06E-07	2.94E-07	8.48E-08	4.36E-08	1.28E-07
720	570491.39	4215523.08	1.23E-06	6.98E-07	1.93E-06	1.88E-07	1.06E-07	2.94E-07	8.49E-08	4.37E-08	1.29E-07
721	570484.71	4215529.87	1.23E-06	6.98E-07	1.93E-06	1.88E-07	1.06E-07	2.94E-07	8.49E-08	4.37E-08	1.29E-07
722	570478.02	4215536.65	1.23E-06	6.96E-07	1.93E-06	1.88E-07	1.06E-07	2.94E-07	8.47E-08	4.36E-08	1.28E-07
723	570471.33	4215543.44	1.22E-06	6.94E-07	1.92E-06	1.87E-07	1.06E-07	2.93E-07	8.44E-08	4.34E-08	1.28E-07
724	570464.65	4215550.23	1.22E-06	6.93E-07	1.92E-06	1.87E-07	1.05E-07	2.92E-07	8.43E-08	4.34E-08	1.28E-07
725	570457.96	4215557.01	1.22E-06	6.90E-07	1.91E-06	1.86E-07	1.05E-07	2.91E-07	8.40E-08	4.32E-08	1.27E-07
726	570451.27	4215563.8	1.21E-06	6.86E-07	1.90E-06	1.85E-07	1.04E-07	2.89E-07	8.34E-08	4.29E-08	1.26E-07
727	570444.58	4215570.59	1.20E-06	6.78E-07	1.88E-06	1.83E-07	1.03E-07	2.86E-07	8.25E-08	4.25E-08	1.25E-07
728	570437.9	4215577.37	1.18E-06	6.67E-07	1.85E-06	1.80E-07	1.02E-07	2.81E-07	8.12E-08	4.18E-08	1.23E-07
729	570431.21	4215584.16	1.15E-06	6.54E-07	1.81E-06	1.76E-07	9.95E-08	2.76E-07	7.95E-08	4.09E-08	1.20E-07
730	570424.52	4215590.95	1.13E-06	6.38E-07	1.76E-06	1.72E-07	9.70E-08	2.69E-07	7.76E-08	3.99E-08	1.18E-07
731	570417.84	4215597.73	1.09E-06	6.19E-07	1.71E-06	1.67E-07	9.42E-08	2.61E-07	7.54E-08	3.88E-08	1.14E-07
732	570411.15	4215604.52	1.06E-06	5.99E-07	1.66E-06	1.61E-07	9.11E-08	2.53E-07	7.29E-08	3.75E-08	1.10E-07
733	570404.46	4215611.31	1.02E-06	5.76E-07	1.59E-06	1.55E-07	8.77E-08	2.43E-07	7.01E-08	3.61E-08	1.06E-07
734	570397.78	4215618.09	9.76E-07	5.53E-07	1.53E-06	1.49E-07	8.41E-08	2.33E-07	6.73E-08	3.46E-08	1.02E-07
735	570391.09	4215624.88	9.33E-07	5.29E-07	1.46E-06	1.42E-07	8.04E-08	2.23E-07	6.43E-08	3.31E-08	9.74E-08
736	570384.4	4215631.67	8.89E-07	5.04E-07	1.39E-06	1.36E-07	7.66E-08	2.12E-07	6.13E-08	3.15E-08	9.28E-08
737	570377.71	4215638.45	8.44E-07	4.78E-07	1.32E-06	1.29E-07	7.28E-08	2.02E-07	5.82E-08	2.99E-08	8.81E-08
738	570371.03	4215645.24	8.00E-07	4.53E-07	1.25E-06	1.22E-07	6.89E-08	1.91E-07	5.51E-08	2.84E-08	8.35E-08
739	570364.34	4215652.03	7.56E-07	4.28E-07	1.18E-06	1.15E-07	6.51E-08	1.81E-07	5.21E-08	2.68E-08	7.89E-08
740	570357.65	4215658.81	7.13E-07	4.04E-07	1.12E-06	1.09E-07	6.14E-08	1.70E-07	4.91E-08	2.53E-08	7.44E-08

741	569937.09	4214979.91	5.03E-07	2.85E-07	7.87E-07	7.68E-08	4.33E-08	1.20E-07	3.46E-08	1.78E-08	5.25E-08
742	569941.77	4214988.41	5.39E-07	3.05E-07	8.44E-07	8.23E-08	4.64E-08	1.29E-07	3.71E-08	1.91E-08	5.62E-08
743	569895.61	4214925.21	3.63E-07	2.06E-07	5.69E-07	5.55E-08	3.13E-08	8.68E-08	2.50E-08	1.29E-08	3.79E-08
744	569900.28	4214933.71	3.76E-07	2.13E-07	5.89E-07	5.74E-08	3.24E-08	8.98E-08	2.59E-08	1.33E-08	3.92E-08
745	569904.96	4214942.22	3.91E-07	2.22E-07	6.13E-07	5.97E-08	3.37E-08	9.34E-08	2.70E-08	1.39E-08	4.08E-08
746	569909.63	4214950.72	4.09E-07	2.32E-07	6.40E-07	6.24E-08	3.52E-08	9.76E-08	2.82E-08	1.45E-08	4.27E-08
747	569914.31	4214959.22	4.30E-07	2.44E-07	6.74E-07	6.57E-08	3.71E-08	1.03E-07	2.97E-08	1.53E-08	4.49E-08
748	569918.98	4214967.72	4.57E-07	2.59E-07	7.15E-07	6.97E-08	3.93E-08	1.09E-07	3.15E-08	1.62E-08	4.77E-08
749	569923.66	4214976.22	4.86E-07	2.75E-07	7.61E-07	7.42E-08	4.19E-08	1.16E-07	3.35E-08	1.72E-08	5.07E-08
750	569928.33	4214984.73	5.19E-07	2.94E-07	8.13E-07	7.93E-08	4.47E-08	1.24E-07	3.58E-08	1.84E-08	5.42E-08
751	569933.01	4214993.23	5.57E-07	3.16E-07	8.73E-07	8.51E-08	4.80E-08	1.33E-07	3.84E-08	1.98E-08	5.82E-08
752	569877.5	4214913.03	3.50E-07	1.98E-07	5.48E-07	5.34E-08	3.01E-08	8.35E-08	2.41E-08	1.24E-08	3.65E-08
753	569882.17	4214921.53	3.59E-07	2.04E-07	5.63E-07	5.49E-08	3.10E-08	8.58E-08	2.48E-08	1.27E-08	3.75E-08
754	569886.85	4214930.03	3.71E-07	2.10E-07	5.81E-07	5.66E-08	3.20E-08	8.86E-08	2.56E-08	1.32E-08	3.87E-08
755	569891.52	4214938.53	3.84E-07	2.18E-07	6.02E-07	5.87E-08	3.31E-08	9.18E-08	2.65E-08	1.36E-08	4.01E-08
756	569896.19	4214947.03	4.00E-07	2.27E-07	6.27E-07	6.11E-08	3.45E-08	9.56E-08	2.76E-08	1.42E-08	4.18E-08
757	569900.87	4214955.54	4.19E-07	2.37E-07	6.57E-07	6.40E-08	3.61E-08	1.00E-07	2.89E-08	1.49E-08	4.38E-08
758	569905.54	4214964.04	4.44E-07	2.51E-07	6.95E-07	6.78E-08	3.82E-08	1.06E-07	3.06E-08	1.57E-08	4.63E-08
759	569910.22	4214972.54	4.71E-07	2.67E-07	7.38E-07	7.20E-08	4.06E-08	1.13E-07	3.25E-08	1.67E-08	4.92E-08
760	569914.89	4214981.04	5.02E-07	2.84E-07	7.87E-07	7.67E-08	4.33E-08	1.20E-07	3.46E-08	1.78E-08	5.24E-08
761	569919.57	4214989.54	5.38E-07	3.05E-07	8.42E-07	8.21E-08	4.63E-08	1.28E-07	3.70E-08	1.91E-08	5.61E-08
762	569924.24	4214998.05	5.79E-07	3.28E-07	9.07E-07	8.84E-08	4.99E-08	1.38E-07	3.99E-08	2.05E-08	6.04E-08
763	569928.92	4215006.55	6.25E-07	3.54E-07	9.79E-07	9.55E-08	5.39E-08	1.49E-07	4.31E-08	2.22E-08	6.53E-08
764	569868.73	4214917.84	3.57E-07	2.02E-07	5.59E-07	5.44E-08	3.07E-08	8.52E-08	2.46E-08	1.26E-08	3.72E-08
765	569873.41	4214926.35	3.67E-07	2.08E-07	5.75E-07	5.60E-08	3.16E-08	8.76E-08	2.53E-08	1.30E-08	3.83E-08
766	569878.08	4214934.85	3.79E-07	2.14E-07	5.93E-07	5.78E-08	3.26E-08	9.04E-08	2.61E-08	1.34E-08	3.95E-08
767	569882.76	4214943.35	3.93E-07	2.23E-07	6.16E-07	6.00E-08	3.39E-08	9.39E-08	2.71E-08	1.39E-08	4.10E-08
768	569887.43	4214951.85	4.10E-07	2.32E-07	6.43E-07	6.27E-08	3.54E-08	9.80E-08	2.83E-08	1.46E-08	4.28E-08
769	569892.11	4214960.35	4.32E-07	2.45E-07	6.77E-07	6.60E-08	3.72E-08	1.03E-07	2.98E-08	1.53E-08	4.51E-08
770	569896.78	4214968.86	4.58E-07	2.60E-07	7.18E-07	7.00E-08	3.95E-08	1.09E-07	3.16E-08	1.63E-08	4.78E-08
771	569901.46	4214977.36	4.87E-07	2.76E-07	7.63E-07	7.44E-08	4.20E-08	1.16E-07	3.36E-08	1.73E-08	5.09E-08
772	569906.13	4214985.86	5.19E-07	2.94E-07	8.13E-07	7.93E-08	4.47E-08	1.24E-07	3.58E-08	1.84E-08	5.42E-08
773	569910.81	4214994.36	5.58E-07	3.16E-07	8.74E-07	8.52E-08	4.81E-08	1.33E-07	3.84E-08	1.98E-08	5.82E-08
774	569915.48	4215002.86	6.01E-07	3.41E-07	9.42E-07	9.18E-08	5.18E-08	1.44E-07	4.14E-08	2.13E-08	6.28E-08
775	569920.15	4215011.37	6.51E-07	3.69E-07	1.02E-06	9.94E-08	5.61E-08	1.56E-07	4.49E-08	2.31E-08	6.80E-08
776	569859.97	4214922.66	3.64E-07	2.06E-07	5.71E-07	5.57E-08	3.14E-08	8.71E-08	2.51E-08	1.29E-08	3.80E-08
777	569864.65	4214931.16	3.75E-07	2.12E-07	5.87E-07	5.72E-08	3.23E-08	8.95E-08	2.58E-08	1.33E-08	3.91E-08
778	569869.32	4214939.67	3.87E-07	2.19E-07	6.06E-07	5.91E-08	3.34E-08	9.25E-08	2.67E-08	1.37E-08	4.04E-08
779	569873.99	4214948.17	4.03E-07	2.28E-07	6.31E-07	6.15E-08	3.47E-08	9.62E-08	2.77E-08	1.43E-08	4.20E-08
780	569878.67	4214956.67	4.21E-07	2.39E-07	6.60E-07	6.44E-08	3.63E-08	1.01E-07	2.90E-08	1.49E-08	4.40E-08
781	569883.34	4214965.17	4.46E-07	2.53E-07	6.99E-07	6.81E-08	3.84E-08	1.07E-07	3.07E-08	1.58E-08	4.66E-08
782	569888.02	4214973.67	4.74E-07	2.68E-07	7.42E-07	7.23E-08	4.08E-08	1.13E-07	3.26E-08	1.68E-08	4.94E-08
783	569892.69	4214982.18	5.04E-07	2.86E-07	7.89E-07	7.70E-08	4.34E-08	1.20E-07	3.47E-08	1.79E-08	5.26E-08
784	569897.37	4214990.68	5.39E-07	3.05E-07	8.44E-07	8.22E-08	4.64E-08	1.29E-07	3.71E-08	1.91E-08	5.62E-08
785	569902.04	4214999.18	5.79E-07	3.28E-07	9.08E-07	8.85E-08	4.99E-08	1.38E-07	3.99E-08	2.06E-08	6.05E-08
786	569906.72	4215007.68	6.26E-07	3.54E-07	9.80E-07	9.55E-08	5.39E-08	1.49E-07	4.31E-08	2.22E-08	6.53E-08
787	569911.39	4215016.18	6.78E-07	3.84E-07	1.06E-06	1.04E-07	5.85E-08	1.62E-07	4.68E-08	2.41E-08	7.08E-08
788	569851.21	4214927.48	3.72E-07	2.11E-07	5.83E-07	5.69E-08	3.21E-08	8.90E-08	2.57E-08	1.32E-08	3.89E-08
789	569855.88	4214935.98	3.83E-07	2.17E-07	6.00E-07	5.85E-08	3.30E-08	9.14E-08	2.64E-08	1.36E-08	4.00E-08
790	569860.56	4214944.48	3.96E-07	2.25E-07	6.21E-07	6.05E-08	3.42E-08	9.47E-08	2.73E-08	1.41E-08	4.14E-08
791	569865.23	4214952.99	4.13E-07	2.34E-07	6.47E-07	6.31E-08	3.56E-08	9.87E-08	2.85E-08	1.47E-08	4.31E-08
792	569869.91	4214961.49	4.35E-07	2.46E-07	6.81E-07	6.64E-08	3.75E-08	1.04E-07	3.00E-08	1.54E-08	4.54E-08
793	569874.58	4214969.99	4.61E-07	2.61E-07	7.22E-07	7.03E-08	3.97E-08	1.10E-07	3.17E-08	1.63E-08	4.81E-08
794	569879.26	4214978.49	4.89E-07	2.77E-07	7.67E-07	7.47E-08	4.22E-08	1.17E-07	3.37E-08	1.74E-08	5.11E-08
795	569883.93	4214986.99	5.21E-07	2.95E-07	8.16E-07	7.96E-08	4.49E-08	1.24E-07	3.59E-08	1.85E-08	5.44E-08
796	569888.6	4214995.5	5.59E-07	3.17E-07	8.76E-07	8.54E-08	4.82E-08	1.34E-07	3.86E-08	1.98E-08	5.84E-08
797	569893.28	4215004	6.03E-07	3.41E-07	9.44E-07	9.20E-08	5.19E-08	1.44E-07	4.15E-08	2.14E-08	6.29E-08
798	569897.95	4215012.5	6.52E-07	3.69E-07	1.02E-06	9.95E-08	5.61E-08	1.56E-07	4.49E-08	2.31E-08	6.80E-08
799	569902.63	4215021	7.07E-07	4.01E-07	1.11E-06	1.08E-07	6.09E-08	1.69E-07	4.87E-08	2.51E-08	7.38E-08
800	569842.45	4214932.3	3.80E-07	2.15E-07	5.95E-07	5.80E-08	3.27E-08	9.07E-08	2.62E-08	1.35E-08	3.96E-08
801	569847.12	4214940.8	3.91E-07	2.22E-07	6.13E-07	5.97E-08	3.37E-08	9.35E-08	2.70E-08	1.39E-08	4.08E-08
802	569851.79	4214949.3	4.06E-07	2.30E-07	6.36E-07	6.20E-08	3.50E-08	9.70E-08	2.80E-08	1.44E-08	4.24E-08

803	569856.47	4214957.8	4.25E-07	2.41E-07	6.66E-07	6.49E-08	3.66E-08	1.01E-07	2.93E-08	1.51E-08	4.43E-08
804	569861.14	4214966.31	4.49E-07	2.54E-07	7.03E-07	6.86E-08	3.87E-08	1.07E-07	3.09E-08	1.59E-08	4.69E-08
805	569865.82	4214974.81	4.76E-07	2.70E-07	7.45E-07	7.27E-08	4.10E-08	1.14E-07	3.28E-08	1.69E-08	4.97E-08
806	569870.49	4214983.31	5.06E-07	2.86E-07	7.92E-07	7.72E-08	4.36E-08	1.21E-07	3.48E-08	1.79E-08	5.28E-08
807	569875.17	4214991.81	5.40E-07	3.06E-07	8.47E-07	8.25E-08	4.66E-08	1.29E-07	3.72E-08	1.92E-08	5.64E-08
808	569879.84	4215000.31	5.81E-07	3.29E-07	9.10E-07	8.87E-08	5.01E-08	1.39E-07	4.00E-08	2.06E-08	6.06E-08
809	569884.52	4215008.82	6.27E-07	3.55E-07	9.82E-07	9.57E-08	5.40E-08	1.50E-07	4.32E-08	2.22E-08	6.54E-08
810	569889.19	4215017.32	6.79E-07	3.84E-07	1.06E-06	1.04E-07	5.85E-08	1.62E-07	4.68E-08	2.41E-08	7.08E-08
811	569893.87	4215025.82	7.37E-07	4.18E-07	1.15E-06	1.13E-07	6.35E-08	1.76E-07	5.08E-08	2.61E-08	7.70E-08
812	569833.68	4214937.12	3.88E-07	2.20E-07	6.08E-07	5.92E-08	3.34E-08	9.26E-08	2.67E-08	1.38E-08	4.05E-08
813	569838.36	4214945.62	4.00E-07	2.27E-07	6.27E-07	6.11E-08	3.45E-08	9.57E-08	2.76E-08	1.42E-08	4.18E-08
814	569843.03	4214954.12	4.16E-07	2.36E-07	6.52E-07	6.36E-08	3.59E-08	9.94E-08	2.87E-08	1.48E-08	4.35E-08
815	569847.71	4214962.62	4.38E-07	2.48E-07	6.86E-07	6.69E-08	3.77E-08	1.05E-07	3.02E-08	1.55E-08	4.57E-08
816	569852.38	4214971.12	4.63E-07	2.62E-07	7.26E-07	7.07E-08	3.99E-08	1.11E-07	3.19E-08	1.64E-08	4.83E-08
817	569857.06	4214979.63	4.91E-07	2.78E-07	7.69E-07	7.50E-08	4.23E-08	1.17E-07	3.38E-08	1.74E-08	5.13E-08
818	569861.73	4214988.13	5.23E-07	2.96E-07	8.19E-07	7.98E-08	4.50E-08	1.25E-07	3.60E-08	1.85E-08	5.45E-08
819	569866.4	4214996.63	5.6E-07	3.18E-07	8.78E-07	8.56E-08	4.83E-08	1.34E-07	3.86E-08	1.99E-08	5.85E-08
820	569871.08	4215005.13	6.03E-07	3.42E-07	9.45E-07	9.21E-08	5.20E-08	1.44E-07	4.16E-08	2.14E-08	6.30E-08
821	569875.75	4215013.63	6.52E-07	3.69E-07	1.02E-06	9.95E-08	5.61E-08	1.56E-07	4.49E-08	2.31E-08	6.80E-08
822	569880.43	4215022.14	7.06E-07	4.00E-07	1.11E-06	1.08E-07	6.08E-08	1.69E-07	4.86E-08	2.50E-08	7.37E-08
823	569885.1	4215030.64	7.67E-07	4.35E-07	1.20E-06	1.17E-07	6.61E-08	1.83E-07	5.29E-08	2.72E-08	8.01E-08
824	569941.2	4215132.66	4.62E-06	2.62E-06	7.23E-06	7.05E-07	3.98E-07	1.10E-06	3.18E-07	1.64E-07	4.82E-07
825	569945.87	4215141.16	5.15E-06	2.92E-06	8.07E-06	7.86E-07	4.44E-07	1.23E-06	3.55E-07	1.83E-07	5.38E-07
826	569950.55	4215149.66	5.67E-06	3.21E-06	8.88E-06	8.65E-07	4.88E-07	1.35E-06	3.91E-07	2.01E-07	5.92E-07
827	569824.92	4214941.93	3.96E-07	2.25E-07	6.21E-07	6.05E-08	3.41E-08	9.47E-08	2.73E-08	1.41E-08	4.14E-08
828	569829.59	4214950.44	4.1E-07	2.32E-07	6.43E-07	6.26E-08	3.53E-08	9.80E-08	2.83E-08	1.46E-08	4.28E-08
829	569834.27	4214958.94	4.29E-07	2.43E-07	6.71E-07	6.54E-08	3.69E-08	1.02E-07	2.95E-08	1.52E-08	4.47E-08
830	569838.94	4214967.44	4.52E-07	2.56E-07	7.08E-07	6.90E-08	3.89E-08	1.08E-07	3.11E-08	1.60E-08	4.71E-08
831	569843.62	4214975.94	4.77E-07	2.70E-07	7.48E-07	7.29E-08	4.11E-08	1.14E-07	3.29E-08	1.69E-08	4.98E-08
832	569848.29	4214984.44	5.06E-07	2.87E-07	7.93E-07	7.73E-08	4.36E-08	1.21E-07	3.49E-08	1.80E-08	5.28E-08
833	569852.97	4214992.95	5.41E-07	3.06E-07	8.47E-07	8.26E-08	4.66E-08	1.29E-07	3.73E-08	1.92E-08	5.65E-08
834	569857.64	4215001.45	5.81E-07	3.29E-07	9.10E-07	8.87E-08	5.01E-08	1.39E-07	4.00E-08	2.06E-08	6.06E-08
835	569862.32	4215009.95	6.26E-07	3.55E-07	9.81E-07	9.56E-08	5.39E-08	1.50E-07	4.31E-08	2.22E-08	6.53E-08
836	569866.99	4215018.45	6.77E-07	3.83E-07	1.06E-06	1.03E-07	5.83E-08	1.62E-07	4.66E-08	2.40E-08	7.06E-08
837	569871.67	4215026.95	7.33E-07	4.15E-07	1.15E-06	1.12E-07	6.32E-08	1.75E-07	5.05E-08	2.60E-08	7.65E-08
838	569876.34	4215035.46	7.97E-07	4.52E-07	1.25E-06	1.22E-07	6.87E-08	1.90E-07	5.49E-08	2.83E-08	8.32E-08
839	569927.76	4215128.98	3.99E-06	2.26E-06	6.25E-06	6.09E-07	3.44E-07	9.53E-07	2.75E-07	1.41E-07	4.16E-07
840	569932.44	4215137.48	4.45E-06	2.52E-06	6.97E-06	6.79E-07	3.83E-07	1.06E-06	3.06E-07	1.58E-07	4.64E-07
841	569937.11	4215145.98	4.9E-06	2.77E-06	7.67E-06	7.48E-07	4.22E-07	1.17E-06	3.38E-07	1.74E-07	5.11E-07
842	569941.78	4215154.48	5.34E-06	3.03E-06	8.37E-06	8.15E-07	4.60E-07	1.28E-06	3.68E-07	1.89E-07	5.57E-07
843	569816.16	4214946.75	4.05E-07	2.30E-07	6.35E-07	6.19E-08	3.49E-08	9.68E-08	2.79E-08	1.44E-08	4.23E-08
844	569820.83	4214955.25	4.2E-07	2.38E-07	6.58E-07	6.42E-08	3.62E-08	1.00E-07	2.90E-08	1.49E-08	4.39E-08
845	569825.51	4214963.76	4.41E-07	2.50E-07	6.91E-07	6.74E-08	3.80E-08	1.05E-07	3.04E-08	1.57E-08	4.61E-08
846	569830.18	4214972.26	4.65E-07	2.63E-07	7.29E-07	7.10E-08	4.01E-08	1.11E-07	3.20E-08	1.65E-08	4.85E-08
847	569834.86	4214980.76	4.92E-07	2.79E-07	7.71E-07	7.51E-08	4.24E-08	1.18E-07	3.39E-08	1.75E-08	5.14E-08
848	569839.53	4214989.26	5.23E-07	2.96E-07	8.19E-07	7.98E-08	4.51E-08	1.25E-07	3.60E-08	1.85E-08	5.46E-08
849	569844.2	4214997.76	5.6E-07	3.17E-07	8.77E-07	8.55E-08	4.82E-08	1.34E-07	3.86E-08	1.99E-08	5.84E-08
850	569848.88	4215006.27	6.02E-07	3.41E-07	9.43E-07	9.19E-08	5.19E-08	1.44E-07	4.15E-08	2.13E-08	6.28E-08
851	569853.55	4215014.77	6.49E-07	3.68E-07	1.02E-06	9.91E-08	5.59E-08	1.55E-07	4.47E-08	2.30E-08	6.77E-08
852	569858.23	4215023.27	7.01E-07	3.97E-07	1.10E-06	1.07E-07	6.04E-08	1.67E-07	4.83E-08	2.49E-08	7.32E-08
853	569862.9	4215031.77	7.6E-07	4.30E-07	1.19E-06	1.16E-07	6.55E-08	1.81E-07	5.24E-08	2.69E-08	7.93E-08
854	569914.32	4215125.29	3.32E-06	1.88E-06	5.20E-06	5.07E-07	2.86E-07	7.92E-07	2.29E-07	1.18E-07	3.46E-07
855	569919	4215133.79	3.91E-06	2.21E-06	6.12E-06	5.96E-07	3.37E-07	9.33E-07	2.69E-07	1.39E-07	4.08E-07
856	569923.67	4215142.3	4.26E-06	2.41E-06	6.67E-06	6.51E-07	3.67E-07	1.02E-06	2.94E-07	1.51E-07	4.45E-07
857	569928.35	4215150.8	4.66E-06	2.64E-06	7.30E-06	7.11E-07	4.01E-07	1.11E-06	3.21E-07	1.65E-07	4.86E-07
858	569933.02	4215159.3	5.03E-06	2.85E-06	7.88E-06	7.69E-07	4.34E-07	1.20E-06	3.47E-07	1.79E-07	5.25E-07
859	569802.72	4214943.07	4.02E-07	2.28E-07	6.30E-07	6.14E-08	3.47E-08	9.61E-08	2.77E-08	1.43E-08	4.20E-08
860	569807.39	4214951.57	4.15E-07	2.35E-07	6.50E-07	6.34E-08	3.58E-08	9.91E-08	2.86E-08	1.47E-08	4.33E-08
861	569812.07	4214960.07	4.32E-07	2.45E-07	6.77E-07	6.60E-08	3.72E-08	1.03E-07	2.98E-08	1.53E-08	4.51E-08
862	569816.74	4214968.57	4.54E-07	2.57E-07	7.11E-07	6.93E-08	3.91E-08	1.08E-07	3.13E-08	1.61E-08	4.74E-08
863	569821.42	4214977.08	4.79E-07	2.71E-07	7.50E-07	7.31E-08	4.12E-08	1.14E-07	3.30E-08	1.70E-08	5.00E-08
864	569826.09	4214985.58	5.06E-07	2.87E-07	7.93E-07	7.73E-08	4.36E-08	1.21E-07	3.49E-08	1.80E-08	5.28E-08

865	569830.77	4214994.08	5.4E-07	3.06E-07	8.46E-07	8.25E-08	4.65E-08	1.29E-07	3.72E-08	1.92E-08	5.64E-08
866	569835.44	4215002.58	5.79E-07	3.28E-07	9.07E-07	8.84E-08	4.99E-08	1.38E-07	3.99E-08	2.05E-08	6.04E-08
867	569840.12	4215011.08	6.22E-07	3.53E-07	9.75E-07	9.51E-08	5.36E-08	1.49E-07	4.29E-08	2.21E-08	6.50E-08
868	569844.79	4215019.59	6.71E-07	3.80E-07	1.05E-06	1.03E-07	5.78E-08	1.60E-07	4.63E-08	2.38E-08	7.01E-08
869	569849.47	4215028.09	7.25E-07	4.11E-07	1.14E-06	1.11E-07	6.25E-08	1.73E-07	5.00E-08	2.57E-08	7.57E-08
870	569854.14	4215036.59	7.86E-07	4.45E-07	1.23E-06	1.20E-07	6.77E-08	1.88E-07	5.41E-08	2.79E-08	8.20E-08
871	569905.56	4215130.11	3.28E-06	1.86E-06	5.14E-06	5.01E-07	2.83E-07	7.84E-07	2.26E-07	1.16E-07	3.43E-07
872	569910.24	4215138.61	3.79E-06	2.15E-06	5.94E-06	5.79E-07	3.27E-07	9.06E-07	2.61E-07	1.35E-07	3.96E-07
873	569914.91	4215147.11	4.08E-06	2.31E-06	6.39E-06	6.23E-07	3.52E-07	9.75E-07	2.81E-07	1.45E-07	4.26E-07
874	569919.58	4215155.62	4.43E-06	2.51E-06	6.94E-06	6.76E-07	3.82E-07	1.06E-06	3.05E-07	1.57E-07	4.62E-07
875	569924.26	4215164.12	4.75E-06	2.69E-06	7.44E-06	7.25E-07	4.09E-07	1.13E-06	3.27E-07	1.68E-07	4.96E-07
876	569792.9	4214938.94	3.99E-07	2.26E-07	6.25E-07	6.10E-08	3.44E-08	9.54E-08	2.75E-08	1.42E-08	4.17E-08
877	569793.96	4214947.89	4.12E-07	2.33E-07	6.45E-07	6.28E-08	3.55E-08	9.83E-08	2.84E-08	1.46E-08	4.30E-08
878	569798.63	4214956.39	4.25E-07	2.41E-07	6.67E-07	6.50E-08	3.67E-08	1.02E-07	2.93E-08	1.51E-08	4.44E-08
879	569803.31	4214964.89	4.45E-07	2.52E-07	6.97E-07	6.79E-08	3.83E-08	1.06E-07	3.07E-08	1.58E-08	4.64E-08
880	569807.98	4214973.39	4.67E-07	2.65E-07	7.31E-07	7.13E-08	4.02E-08	1.12E-07	3.22E-08	1.66E-08	4.87E-08
881	569812.66	4214981.89	4.92E-07	2.79E-07	7.70E-07	7.51E-08	4.24E-08	1.17E-07	3.39E-08	1.74E-08	5.13E-08
882	569817.33	4214990.4	5.22E-07	2.96E-07	8.17E-07	7.97E-08	4.50E-08	1.25E-07	3.60E-08	1.85E-08	5.45E-08
883	569822	4214998.9	5.57E-07	3.16E-07	8.73E-07	8.51E-08	4.80E-08	1.33E-07	3.84E-08	1.98E-08	5.82E-08
884	569826.68	4215007.4	5.97E-07	3.38E-07	9.36E-07	9.12E-08	5.15E-08	1.43E-07	4.12E-08	2.12E-08	6.24E-08
885	569831.35	4215015.9	6.43E-07	3.64E-07	1.01E-06	9.81E-08	5.54E-08	1.53E-07	4.43E-08	2.28E-08	6.71E-08
886	569836.03	4215024.4	6.92E-07	3.92E-07	1.08E-06	1.06E-07	5.96E-08	1.65E-07	4.77E-08	2.45E-08	7.22E-08
887	569840.7	4215032.91	7.48E-07	4.24E-07	1.17E-06	1.14E-07	6.44E-08	1.79E-07	5.15E-08	2.65E-08	7.80E-08
888	569896.8	4215134.93	3.25E-06	1.84E-06	5.09E-06	4.96E-07	2.80E-07	7.76E-07	2.24E-07	1.15E-07	3.39E-07
889	569901.47	4215143.43	3.67E-06	2.08E-06	5.75E-06	5.60E-07	3.16E-07	8.76E-07	2.53E-07	1.30E-07	3.83E-07
890	569906.15	4215151.93	3.91E-06	2.22E-06	6.13E-06	5.97E-07	3.37E-07	9.34E-07	2.69E-07	1.39E-07	4.08E-07
891	569910.82	4215160.43	4.22E-06	2.39E-06	6.61E-06	6.44E-07	3.63E-07	1.01E-06	2.91E-07	1.50E-07	4.40E-07
892	569915.5	4215168.94	4.48E-06	2.54E-06	7.02E-06	6.84E-07	3.86E-07	1.07E-06	3.09E-07	1.59E-07	4.68E-07
893	569784.15	4214943.89	4.08E-07	2.31E-07	6.39E-07	6.23E-08	3.51E-08	9.74E-08	2.81E-08	1.45E-08	4.26E-08
894	569783.11	4214935.08	3.98E-07	2.25E-07	6.23E-07	6.07E-08	3.43E-08	9.50E-08	2.74E-08	1.41E-08	4.15E-08
895	569789.87	4214961.21	4.37E-07	2.48E-07	6.85E-07	6.68E-08	3.77E-08	1.04E-07	3.01E-08	1.55E-08	4.56E-08
896	569794.54	4214969.71	4.57E-07	2.59E-07	7.16E-07	6.98E-08	3.94E-08	1.09E-07	3.15E-08	1.62E-08	4.77E-08
897	569799.22	4214978.21	4.8E-07	2.72E-07	7.52E-07	7.33E-08	4.14E-08	1.15E-07	3.31E-08	1.70E-08	5.01E-08
898	569803.89	4214986.71	5.06E-07	2.87E-07	7.92E-07	7.72E-08	4.36E-08	1.21E-07	3.49E-08	1.79E-08	5.28E-08
899	569808.57	4214995.21	5.38E-07	3.05E-07	8.42E-07	8.21E-08	4.63E-08	1.28E-07	3.71E-08	1.91E-08	5.61E-08
900	569813.24	4215003.72	5.74E-07	3.25E-07	9.00E-07	8.77E-08	4.95E-08	1.37E-07	3.96E-08	2.04E-08	5.99E-08
901	569817.92	4215012.22	6.15E-07	3.49E-07	9.64E-07	9.40E-08	5.30E-08	1.47E-07	4.24E-08	2.18E-08	6.42E-08
902	569822.59	4215020.72	6.61E-07	3.74E-07	1.04E-06	1.01E-07	5.70E-08	1.58E-07	4.55E-08	2.34E-08	6.90E-08
903	569827.27	4215029.22	7.11E-07	4.03E-07	1.11E-06	1.09E-07	6.13E-08	1.70E-07	4.90E-08	2.52E-08	7.42E-08
904	569831.94	4215037.72	7.68E-07	4.35E-07	1.20E-06	1.17E-07	6.61E-08	1.83E-07	5.29E-08	2.72E-08	8.01E-08
905	569888.04	4215139.75	3.17E-06	1.80E-06	4.97E-06	4.84E-07	2.73E-07	7.58E-07	2.19E-07	1.13E-07	3.31E-07
906	569892.71	4215148.25	3.53E-06	2.00E-06	5.53E-06	5.39E-07	3.04E-07	8.43E-07	2.43E-07	1.25E-07	3.69E-07
907	569897.38	4215156.75	3.74E-06	2.12E-06	5.85E-06	5.70E-07	3.22E-07	8.92E-07	2.57E-07	1.33E-07	3.90E-07
908	569902.06	4215165.25	4.02E-06	2.28E-06	6.30E-06	6.14E-07	3.46E-07	9.60E-07	2.77E-07	1.43E-07	4.19E-07
909	569906.73	4215173.75	4.21E-06	2.38E-06	6.59E-06	6.42E-07	3.62E-07	1.00E-06	2.90E-07	1.49E-07	4.39E-07
910	569775.31	4214948.03	4.16E-07	2.36E-07	6.52E-07	6.36E-08	3.59E-08	9.94E-08	2.87E-08	1.48E-08	4.34E-08
911	569774.18	4214938.54	4.04E-07	2.29E-07	6.33E-07	6.17E-08	3.48E-08	9.66E-08	2.79E-08	1.43E-08	4.22E-08
912	569773.06	4214929.05	3.96E-07	2.24E-07	6.20E-07	6.04E-08	3.41E-08	9.45E-08	2.73E-08	1.40E-08	4.13E-08
913	569776.43	4214957.52	4.32E-07	2.44E-07	6.76E-07	6.59E-08	3.72E-08	1.03E-07	2.97E-08	1.53E-08	4.50E-08
914	569781.11	4214966.02	4.49E-07	2.54E-07	7.03E-07	6.85E-08	3.87E-08	1.07E-07	3.09E-08	1.59E-08	4.69E-08
915	569785.78	4214974.53	4.69E-07	2.66E-07	7.35E-07	7.16E-08	4.04E-08	1.12E-07	3.23E-08	1.66E-08	4.90E-08
916	569790.45	4214983.03	4.93E-07	2.79E-07	7.72E-07	7.52E-08	4.24E-08	1.18E-07	3.39E-08	1.75E-08	5.14E-08
917	569795.13	4214991.53	5.2E-07	2.95E-07	8.15E-07	7.95E-08	4.48E-08	1.24E-07	3.59E-08	1.85E-08	5.43E-08
918	569799.8	4215000.03	5.53E-07	3.13E-07	8.66E-07	8.44E-08	4.76E-08	1.32E-07	3.81E-08	1.96E-08	5.77E-08
919	569804.48	4215008.53	5.89E-07	3.34E-07	9.23E-07	9.00E-08	5.08E-08	1.41E-07	4.06E-08	2.09E-08	6.15E-08
920	569809.15	4215017.04	6.31E-07	3.58E-07	9.89E-07	9.64E-08	5.44E-08	1.51E-07	4.35E-08	2.24E-08	6.59E-08
921	569813.83	4215025.54	6.78E-07	3.84E-07	1.06E-06	1.04E-07	5.84E-08	1.62E-07	4.67E-08	2.41E-08	7.08E-08
922	569818.5	4215034.04	7.29E-07	4.13E-07	1.14E-06	1.11E-07	6.28E-08	1.74E-07	5.02E-08	2.59E-08	7.61E-08
923	569823.18	4215042.54	7.86E-07	4.45E-07	1.23E-06	1.20E-07	6.77E-08	1.88E-07	5.41E-08	2.79E-08	8.20E-08
924	569879.27	4215144.56	3.06E-06	1.73E-06	4.80E-06	4.68E-07	2.64E-07	7.31E-07	2.11E-07	1.09E-07	3.20E-07
925	569883.95	4215153.07	3.38E-06	1.92E-06	5.30E-06	5.16E-07	2.91E-07	8.08E-07	2.33E-07	1.20E-07	3.53E-07
926	569888.62	4215161.57	3.56E-06	2.02E-06	5.57E-06	5.43E-07	3.06E-07	8.50E-07	2.45E-07	1.26E-07	3.71E-07

927	569893.3	4215170.07	3.78E-06	2.14E-06	5.92E-06	5.77E-07	3.26E-07	9.03E-07	2.60E-07	1.34E-07	3.94E-07
928	569897.97	4215178.57	3.94E-06	2.23E-06	6.17E-06	6.02E-07	3.40E-07	9.41E-07	2.72E-07	1.40E-07	4.11E-07
929	569766.56	4214953.02	4.26E-07	2.41E-07	6.68E-07	6.51E-08	3.67E-08	1.02E-07	2.94E-08	1.51E-08	4.45E-08
930	569765.46	4214943.7	4.13E-07	2.34E-07	6.48E-07	6.31E-08	3.56E-08	9.87E-08	2.85E-08	1.47E-08	4.31E-08
931	569764.36	4214934.38	4.03E-07	2.29E-07	6.32E-07	6.16E-08	3.48E-08	9.64E-08	2.78E-08	1.43E-08	4.21E-08
932	569763.25	4214925.06	3.97E-07	2.25E-07	6.21E-07	6.06E-08	3.42E-08	9.47E-08	2.73E-08	1.41E-08	4.14E-08
933	569777.2	4214820.65	2.36E-07	1.33E-07	3.69E-07	3.60E-08	2.03E-08	5.63E-08	1.62E-08	8.35E-09	2.46E-08
934	569782.9	4214813.19	2.25E-07	1.28E-07	3.53E-07	3.44E-08	1.94E-08	5.38E-08	1.55E-08	7.99E-09	2.35E-08
935	569767.67	4214962.34	4.43E-07	2.51E-07	6.94E-07	6.76E-08	3.82E-08	1.06E-07	3.05E-08	1.57E-08	4.62E-08
936	569772.34	4214970.84	4.61E-07	2.61E-07	7.22E-07	7.03E-08	3.97E-08	1.10E-07	3.17E-08	1.63E-08	4.81E-08
937	569777.02	4214979.34	4.81E-07	2.73E-07	7.54E-07	7.35E-08	4.15E-08	1.15E-07	3.32E-08	1.71E-08	5.02E-08
938	569781.69	4214987.85	5.05E-07	2.86E-07	7.91E-07	7.71E-08	4.35E-08	1.21E-07	3.48E-08	1.79E-08	5.27E-08
939	569786.37	4214996.35	5.34E-07	3.02E-07	8.36E-07	8.15E-08	4.60E-08	1.28E-07	3.68E-08	1.89E-08	5.57E-08
940	569791.04	4215004.85	5.66E-07	3.21E-07	8.87E-07	8.64E-08	4.88E-08	1.35E-07	3.90E-08	2.01E-08	5.91E-08
941	569795.72	4215013.35	6.02E-07	3.41E-07	9.44E-07	9.20E-08	5.19E-08	1.44E-07	4.15E-08	2.14E-08	6.29E-08
942	569800.39	4215021.85	6.44E-07	3.65E-07	1.01E-06	9.84E-08	5.55E-08	1.54E-07	4.44E-08	2.29E-08	6.72E-08
943	569805.07	4215030.36	6.91E-07	3.91E-07	1.08E-06	1.06E-07	5.95E-08	1.65E-07	4.76E-08	2.45E-08	7.21E-08
944	569809.74	4215038.86	7.43E-07	4.21E-07	1.16E-06	1.13E-07	6.40E-08	1.78E-07	5.12E-08	2.64E-08	7.76E-08
945	569814.41	4215047.36	8.01E-07	4.54E-07	1.25E-06	1.22E-07	6.90E-08	1.91E-07	5.52E-08	2.84E-08	8.36E-08
946	569819.09	4215055.86	8.63E-07	4.89E-07	1.35E-06	1.32E-07	7.44E-08	2.06E-07	5.95E-08	3.06E-08	9.01E-08
947	569870.51	4215149.38	2.9E-06	1.64E-06	4.54E-06	4.43E-07	2.50E-07	6.92E-07	2.00E-07	1.03E-07	3.03E-07
948	569875.18	4215157.88	3.22E-06	1.82E-06	5.04E-06	4.92E-07	2.77E-07	7.69E-07	2.22E-07	1.14E-07	3.36E-07
949	569879.86	4215166.39	3.47E-06	1.97E-06	5.43E-06	5.30E-07	2.99E-07	8.29E-07	2.39E-07	1.23E-07	3.62E-07
950	569884.53	4215174.89	3.55E-06	2.01E-06	5.57E-06	5.43E-07	3.06E-07	8.49E-07	2.45E-07	1.26E-07	3.71E-07
951	569889.21	4215183.39	3.7E-06	2.10E-06	5.80E-06	5.65E-07	3.19E-07	8.84E-07	2.55E-07	1.31E-07	3.86E-07
952	569757.82	4214957.98	4.37E-07	2.47E-07	6.84E-07	6.67E-08	3.76E-08	1.04E-07	3.01E-08	1.55E-08	4.56E-08
953	569756.73	4214948.8	4.23E-07	2.40E-07	6.62E-07	6.46E-08	3.64E-08	1.01E-07	2.91E-08	1.50E-08	4.41E-08
954	569755.65	4214939.63	4.12E-07	2.33E-07	6.45E-07	6.29E-08	3.55E-08	9.84E-08	2.84E-08	1.46E-08	4.30E-08
955	569754.56	4214930.45	4.04E-07	2.29E-07	6.32E-07	6.16E-08	3.48E-08	9.64E-08	2.78E-08	1.43E-08	4.21E-08
956	569753.47	4214921.27	3.99E-07	2.26E-07	6.24E-07	6.09E-08	3.43E-08	9.52E-08	2.75E-08	1.41E-08	4.16E-08
957	569750.39	4214840.51	2.58E-07	1.46E-07	4.05E-07	3.94E-08	2.23E-08	6.17E-08	1.78E-08	9.16E-09	2.70E-08
958	569755.99	4214833.16	2.48E-07	1.40E-07	3.88E-07	3.78E-08	2.13E-08	5.91E-08	1.71E-08	8.78E-09	2.58E-08
959	569767.21	4214818.47	2.3E-07	1.30E-07	3.60E-07	3.51E-08	1.98E-08	5.49E-08	1.58E-08	8.15E-09	2.40E-08
960	569772.81	4214811.12	2.21E-07	1.25E-07	3.46E-07	3.37E-08	1.90E-08	5.27E-08	1.52E-08	7.83E-09	2.30E-08
961	569784.02	4214796.43	2.06E-07	1.17E-07	3.23E-07	3.15E-08	1.78E-08	4.93E-08	1.42E-08	7.32E-09	2.16E-08
962	569758.91	4214967.16	4.54E-07	2.57E-07	7.11E-07	6.93E-08	3.91E-08	1.08E-07	3.13E-08	1.61E-08	4.74E-08
963	569763.58	4214975.66	4.72E-07	2.67E-07	7.39E-07	7.21E-08	4.07E-08	1.13E-07	3.25E-08	1.67E-08	4.93E-08
964	569768.25	4214984.16	4.93E-07	2.79E-07	7.72E-07	7.53E-08	4.25E-08	1.18E-07	3.40E-08	1.75E-08	5.15E-08
965	569772.93	4214992.66	5.18E-07	2.94E-07	8.12E-07	7.92E-08	4.47E-08	1.24E-07	3.57E-08	1.84E-08	5.41E-08
966	569777.6	4215001.17	5.47E-07	3.10E-07	8.57E-07	8.35E-08	4.71E-08	1.31E-07	3.77E-08	1.94E-08	5.71E-08
967	569782.28	4215009.67	5.78E-07	3.28E-07	9.06E-07	8.83E-08	4.98E-08	1.38E-07	3.99E-08	2.05E-08	6.04E-08
968	569786.95	4215018.17	6.14E-07	3.48E-07	9.62E-07	9.38E-08	5.29E-08	1.47E-07	4.23E-08	2.18E-08	6.41E-08
969	569791.63	4215026.67	6.56E-07	3.72E-07	1.03E-06	1.00E-07	5.65E-08	1.57E-07	4.52E-08	2.33E-08	6.85E-08
970	569796.3	4215035.17	7.02E-07	3.98E-07	1.10E-06	1.07E-07	6.05E-08	1.68E-07	4.84E-08	2.49E-08	7.33E-08
971	569800.98	4215043.68	7.54E-07	4.27E-07	1.18E-06	1.15E-07	6.50E-08	1.80E-07	5.19E-08	2.67E-08	7.87E-08
972	569805.65	4215052.18	8.1E-07	4.59E-07	1.27E-06	1.24E-07	6.98E-08	1.94E-07	5.58E-08	2.87E-08	8.46E-08
973	569810.33	4215060.68	8.72E-07	4.94E-07	1.37E-06	1.33E-07	7.52E-08	2.08E-07	6.01E-08	3.09E-08	9.11E-08
974	569861.75	4215154.2	2.67E-06	1.51E-06	4.18E-06	4.07E-07	2.30E-07	6.37E-07	1.84E-07	9.46E-08	2.78E-07
975	569866.42	4215162.7	3E-06	1.70E-06	4.70E-06	4.58E-07	2.58E-07	7.16E-07	2.07E-07	1.06E-07	3.13E-07
976	569871.1	4215171.2	3.26E-06	1.85E-06	5.11E-06	4.98E-07	2.81E-07	7.80E-07	2.25E-07	1.16E-07	3.41E-07
977	569875.77	4215179.71	3.44E-06	1.95E-06	5.40E-06	5.26E-07	2.97E-07	8.23E-07	2.37E-07	1.22E-07	3.60E-07
978	569880.45	4215188.21	3.5E-06	1.98E-06	5.49E-06	5.35E-07	3.02E-07	8.37E-07	2.41E-07	1.24E-07	3.66E-07
979	569749.07	4214962.92	4.47E-07	2.54E-07	7.01E-07	6.83E-08	3.86E-08	1.07E-07	3.08E-08	1.59E-08	4.67E-08
980	569748	4214953.87	4.33E-07	2.45E-07	6.78E-07	6.61E-08	3.73E-08	1.03E-07	2.98E-08	1.54E-08	4.52E-08
981	569746.93	4214944.81	4.21E-07	2.39E-07	6.60E-07	6.43E-08	3.63E-08	1.01E-07	2.90E-08	1.49E-08	4.39E-08
982	569745.85	4214935.76	4.12E-07	2.33E-07	6.45E-07	6.28E-08	3.55E-08	9.83E-08	2.84E-08	1.46E-08	4.30E-08
983	569744.78	4214926.71	4.04E-07	2.29E-07	6.33E-07	6.17E-08	3.48E-08	9.66E-08	2.79E-08	1.43E-08	4.22E-08
984	569743.71	4214917.65	3.99E-07	2.26E-07	6.25E-07	6.09E-08	3.44E-08	9.53E-08	2.75E-08	1.41E-08	4.16E-08
985	569736.21	4214854.27	2.82E-07	1.60E-07	4.42E-07	4.31E-08	2.43E-08	6.74E-08	1.95E-08	1.00E-08	2.95E-08
986	569740.67	4214837.97	2.54E-07	1.44E-07	3.98E-07	3.88E-08	2.19E-08	6.07E-08	1.75E-08	9.02E-09	2.65E-08
987	569746.2	4214830.72	2.44E-07	1.38E-07	3.82E-07	3.72E-08	2.10E-08	5.82E-08	1.68E-08	8.64E-09	2.54E-08
988	569757.26	4214816.22	2.25E-07	1.27E-07	3.52E-07	3.44E-08	1.94E-08	5.37E-08	1.55E-08	7.98E-09	2.35E-08

989	569768.32	4214801.73	2.1E-07	1.19E-07	3.29E-07	3.21E-08	1.81E-08	5.02E-08	1.45E-08	7.46E-09	2.20E-08
990	569779.39	4214787.23	1.99E-07	1.12E-07	3.11E-07	3.03E-08	1.71E-08	4.74E-08	1.37E-08	7.04E-09	2.07E-08
991	569750.14	4214971.98	4.65E-07	2.63E-07	7.28E-07	7.09E-08	4.00E-08	1.11E-07	3.20E-08	1.65E-08	4.85E-08
992	569754.82	4214980.48	4.83E-07	2.74E-07	7.56E-07	7.37E-08	4.16E-08	1.15E-07	3.33E-08	1.71E-08	5.04E-08
993	569759.49	4214988.98	5.05E-07	2.86E-07	7.91E-07	7.71E-08	4.35E-08	1.21E-07	3.48E-08	1.79E-08	5.27E-08
994	569764.17	4214997.48	5.31E-07	3.01E-07	8.32E-07	8.11E-08	4.58E-08	1.27E-07	3.66E-08	1.88E-08	5.54E-08
995	569768.84	4215005.98	5.6E-07	3.17E-07	8.77E-07	8.55E-08	4.82E-08	1.34E-07	3.86E-08	1.99E-08	5.84E-08
996	569773.52	4215014.49	5.91E-07	3.35E-07	9.26E-07	9.03E-08	5.10E-08	1.41E-07	4.08E-08	2.10E-08	6.17E-08
997	569778.19	4215022.99	6.27E-07	3.55E-07	9.83E-07	9.58E-08	5.40E-08	1.50E-07	4.32E-08	2.22E-08	6.55E-08
998	569782.86	4215031.49	6.67E-07	3.78E-07	1.05E-06	1.02E-07	5.75E-08	1.59E-07	4.60E-08	2.37E-08	6.96E-08
999	569787.54	4215039.99	7.12E-07	4.04E-07	1.12E-06	1.09E-07	6.14E-08	1.70E-07	4.91E-08	2.53E-08	7.44E-08
1000	569792.21	4215048.49	7.63E-07	4.32E-07	1.19E-06	1.16E-07	6.57E-08	1.82E-07	5.26E-08	2.71E-08	7.96E-08
1001	569796.89	4215057	8.18E-07	4.63E-07	1.28E-06	1.25E-07	7.05E-08	1.95E-07	5.64E-08	2.90E-08	8.54E-08
1002	569801.56	4215065.5	8.78E-07	4.97E-07	1.38E-06	1.34E-07	7.57E-08	2.10E-07	6.05E-08	3.11E-08	9.17E-08
1003	569806.24	4215074	9.43E-07	5.34E-07	1.48E-06	1.44E-07	8.12E-08	2.25E-07	6.50E-08	3.34E-08	9.84E-08
1004	569852.98	4215159.02	2.44E-06	1.38E-06	3.82E-06	3.72E-07	2.10E-07	5.82E-07	1.68E-07	8.65E-08	2.55E-07
1005	569857.66	4215167.52	2.76E-06	1.56E-06	4.33E-06	4.22E-07	2.38E-07	6.60E-07	1.90E-07	9.79E-08	2.88E-07
1006	569862.33	4215176.02	3.05E-06	1.73E-06	4.78E-06	4.66E-07	2.63E-07	7.29E-07	2.10E-07	1.08E-07	3.18E-07
1007	569867.01	4215184.52	3.26E-06	1.85E-06	5.10E-06	4.97E-07	2.81E-07	7.78E-07	2.25E-07	1.16E-07	3.40E-07
1008	569871.68	4215193.03	3.34E-06	1.89E-06	5.23E-06	5.09E-07	2.87E-07	7.97E-07	2.30E-07	1.18E-07	3.48E-07
1009	569740.24	4214967.21	4.57E-07	2.59E-07	7.16E-07	6.98E-08	3.94E-08	1.09E-07	3.15E-08	1.62E-08	4.77E-08
1010	569739.11	4214957.62	4.41E-07	2.50E-07	6.91E-07	6.74E-08	3.80E-08	1.05E-07	3.04E-08	1.57E-08	4.61E-08
1011	569737.97	4214948.03	4.28E-07	2.43E-07	6.71E-07	6.54E-08	3.69E-08	1.02E-07	2.95E-08	1.52E-08	4.47E-08
1012	569736.84	4214938.45	4.18E-07	2.37E-07	6.54E-07	6.38E-08	3.60E-08	9.98E-08	2.88E-08	1.48E-08	4.36E-08
1013	569735.7	4214928.86	4.09E-07	2.32E-07	6.41E-07	6.25E-08	3.53E-08	9.78E-08	2.82E-08	1.45E-08	4.27E-08
1014	569734.57	4214919.27	4.01E-07	2.27E-07	6.29E-07	6.13E-08	3.46E-08	9.59E-08	2.77E-08	1.42E-08	4.19E-08
1015	569727.76	4214861.75	2.95E-07	1.67E-07	4.63E-07	4.51E-08	2.55E-08	7.06E-08	2.04E-08	1.05E-08	3.08E-08
1016	569726.62	4214852.16	2.77E-07	1.57E-07	4.34E-07	4.23E-08	2.39E-08	6.62E-08	1.91E-08	9.84E-09	2.89E-08
1017	569731.35	4214834.9	2.5E-07	1.42E-07	3.91E-07	3.81E-08	2.15E-08	5.97E-08	1.72E-08	8.86E-09	2.61E-08
1018	569737.2	4214827.23	2.4E-07	1.36E-07	3.75E-07	3.66E-08	2.06E-08	5.72E-08	1.65E-08	8.50E-09	2.50E-08
1019	569743.06	4214819.55	2.29E-07	1.30E-07	3.59E-07	3.50E-08	1.98E-08	5.48E-08	1.58E-08	8.14E-09	2.40E-08
1020	569748.92	4214811.88	2.2E-07	1.25E-07	3.44E-07	3.36E-08	1.89E-08	5.25E-08	1.52E-08	7.80E-09	2.29E-08
1021	569754.77	4214804.21	2.12E-07	1.20E-07	3.31E-07	3.23E-08	1.82E-08	5.05E-08	1.46E-08	7.50E-09	2.21E-08
1022	569760.63	4214796.53	2.06E-07	1.17E-07	3.23E-07	3.14E-08	1.77E-08	4.92E-08	1.42E-08	7.31E-09	2.15E-08
1023	569766.49	4214788.86	2E-07	1.13E-07	3.14E-07	3.06E-08	1.72E-08	4.78E-08	1.38E-08	7.10E-09	2.09E-08
1024	569772.34	4214781.18	1.94E-07	1.10E-07	3.04E-07	2.96E-08	1.67E-08	4.64E-08	1.34E-08	6.89E-09	2.03E-08
1025	569741.38	4214976.79	4.75E-07	2.69E-07	7.44E-07	7.26E-08	4.09E-08	1.13E-07	3.27E-08	1.69E-08	4.96E-08
1026	569746.05	4214985.3	4.94E-07	2.80E-07	7.73E-07	7.54E-08	4.25E-08	1.18E-07	3.40E-08	1.75E-08	5.15E-08
1027	569750.73	4214993.8	5.17E-07	2.93E-07	8.09E-07	7.89E-08	4.45E-08	1.23E-07	3.56E-08	1.83E-08	5.39E-08
1028	569755.4	4215002.3	5.43E-07	3.08E-07	8.51E-07	8.29E-08	4.68E-08	1.30E-07	3.74E-08	1.93E-08	5.67E-08
1029	569760.08	4215010.8	5.72E-07	3.24E-07	8.96E-07	8.73E-08	4.93E-08	1.37E-07	3.94E-08	2.03E-08	5.97E-08
1030	569764.75	4215019.3	6.04E-07	3.42E-07	9.46E-07	9.22E-08	5.20E-08	1.44E-07	4.16E-08	2.14E-08	6.30E-08
1031	569769.43	4215027.81	6.4E-07	3.62E-07	1.00E-06	9.77E-08	5.51E-08	1.53E-07	4.41E-08	2.27E-08	6.68E-08
1032	569774.1	4215036.31	6.79E-07	3.85E-07	1.06E-06	1.04E-07	5.85E-08	1.62E-07	4.68E-08	2.41E-08	7.09E-08
1033	569778.78	4215044.81	7.22E-07	4.09E-07	1.13E-06	1.10E-07	6.22E-08	1.72E-07	4.97E-08	2.56E-08	7.54E-08
1034	569783.45	4215053.31	7.7E-07	4.36E-07	1.21E-06	1.18E-07	6.64E-08	1.84E-07	5.31E-08	2.73E-08	8.04E-08
1035	569788.13	4215061.81	8.24E-07	4.67E-07	1.29E-06	1.26E-07	7.10E-08	1.97E-07	5.68E-08	2.92E-08	8.60E-08
1036	569792.8	4215070.32	8.82E-07	5.00E-07	1.38E-06	1.35E-07	7.60E-08	2.11E-07	6.08E-08	3.13E-08	9.21E-08
1037	569797.48	4215078.82	9.45E-07	5.35E-07	1.48E-06	1.44E-07	8.14E-08	2.26E-07	6.51E-08	3.35E-08	9.86E-08
1038	569844.22	4215163.84	2.22E-06	1.26E-06	3.48E-06	3.39E-07	1.92E-07	5.31E-07	1.53E-07	7.88E-08	2.32E-07
1039	569848.9	4215172.34	2.57E-06	1.46E-06	4.03E-06	3.93E-07	2.22E-07	6.14E-07	1.77E-07	9.12E-08	2.68E-07
1040	569853.57	4215180.84	2.88E-06	1.63E-06	4.51E-06	4.39E-07	2.48E-07	6.87E-07	1.98E-07	1.02E-07	3.00E-07
1041	569858.25	4215189.34	3.1E-06	1.75E-06	4.85E-06	4.73E-07	2.67E-07	7.39E-07	2.13E-07	1.10E-07	3.23E-07
1042	569862.92	4215197.84	3.23E-06	1.83E-06	5.05E-06	4.92E-07	2.78E-07	7.70E-07	2.22E-07	1.14E-07	3.37E-07
1043	569731.5	4214972.17	4.67E-07	2.65E-07	7.32E-07	7.14E-08	4.03E-08	1.12E-07	3.22E-08	1.66E-08	4.88E-08
1044	569730.38	4214962.72	4.52E-07	2.56E-07	7.08E-07	6.90E-08	3.89E-08	1.08E-07	3.11E-08	1.60E-08	4.72E-08
1045	569729.26	4214953.28	4.39E-07	2.48E-07	6.87E-07	6.70E-08	3.78E-08	1.05E-07	3.02E-08	1.56E-08	4.58E-08
1046	569728.14	4214943.83	4.27E-07	2.42E-07	6.69E-07	6.52E-08	3.68E-08	1.02E-07	2.94E-08	1.51E-08	4.46E-08
1047	569727.03	4214934.39	4.18E-07	2.37E-07	6.54E-07	6.38E-08	3.60E-08	9.98E-08	2.88E-08	1.48E-08	4.36E-08
1048	569725.91	4214924.94	4.1E-07	2.32E-07	6.42E-07	6.25E-08	3.53E-08	9.78E-08	2.82E-08	1.45E-08	4.27E-08
1049	569724.79	4214915.5	3.98E-07	2.26E-07	6.24E-07	6.08E-08	3.43E-08	9.51E-08	2.74E-08	1.41E-08	4.16E-08
1050	569719.2	4214868.27	3.08E-07	1.74E-07	4.82E-07	4.70E-08	2.65E-08	7.35E-08	2.12E-08	1.09E-08	3.21E-08

1051	569718.08	4214858.83	2.9E-07	1.64E-07	4.54E-07	4.42E-08	2.50E-08	6.92E-08	2.00E-08	1.03E-08	3.02E-08
1052	569716.96	4214849.38	2.74E-07	1.55E-07	4.29E-07	4.18E-08	2.36E-08	6.53E-08	1.89E-08	9.70E-09	2.86E-08
1053	569721.61	4214832.38	2.47E-07	1.40E-07	3.87E-07	3.78E-08	2.13E-08	5.91E-08	1.70E-08	8.77E-09	2.58E-08
1054	569727.38	4214824.82	2.37E-07	1.34E-07	3.72E-07	3.62E-08	2.04E-08	5.67E-08	1.63E-08	8.41E-09	2.48E-08
1055	569733.15	4214817.26	2.28E-07	1.29E-07	3.57E-07	3.48E-08	1.96E-08	5.44E-08	1.57E-08	8.08E-09	2.38E-08
1056	569738.92	4214809.7	2.19E-07	1.24E-07	3.43E-07	3.34E-08	1.88E-08	5.22E-08	1.51E-08	7.76E-09	2.28E-08
1057	569744.69	4214802.14	2.11E-07	1.20E-07	3.31E-07	3.23E-08	1.82E-08	5.05E-08	1.46E-08	7.49E-09	2.21E-08
1058	569750.46	4214794.57	2.05E-07	1.16E-07	3.21E-07	3.13E-08	1.77E-08	4.90E-08	1.41E-08	7.28E-09	2.14E-08
1059	569756.23	4214787.01	1.99E-07	1.13E-07	3.12E-07	3.04E-08	1.72E-08	4.76E-08	1.37E-08	7.07E-09	2.08E-08
1060	569762	4214779.45	1.94E-07	1.10E-07	3.03E-07	2.96E-08	1.67E-08	4.63E-08	1.33E-08	6.87E-09	2.02E-08
1061	569767.77	4214771.89	1.89E-07	1.07E-07	2.97E-07	2.89E-08	1.63E-08	4.53E-08	1.31E-08	6.72E-09	1.98E-08
1062	569732.62	4214981.61	4.85E-07	2.75E-07	7.60E-07	7.41E-08	4.18E-08	1.16E-07	3.34E-08	1.72E-08	5.07E-08
1063	569737.29	4214990.11	5.05E-07	2.86E-07	7.91E-07	7.71E-08	4.35E-08	1.21E-07	3.48E-08	1.79E-08	5.27E-08
1064	569741.97	4214998.62	5.28E-07	2.99E-07	8.28E-07	8.07E-08	4.55E-08	1.26E-07	3.64E-08	1.87E-08	5.51E-08
1065	569746.64	4215007.12	5.54E-07	3.14E-07	8.68E-07	8.46E-08	4.78E-08	1.32E-07	3.82E-08	1.97E-08	5.78E-08
1066	569751.32	4215015.62	5.83E-07	3.30E-07	9.13E-07	8.90E-08	5.02E-08	1.39E-07	4.01E-08	2.07E-08	6.08E-08
1067	569755.99	4215024.12	6.15E-07	3.48E-07	9.63E-07	9.39E-08	5.30E-08	1.47E-07	4.24E-08	2.18E-08	6.42E-08
1068	569760.66	4215032.62	6.5E-07	3.68E-07	1.02E-06	9.93E-08	5.60E-08	1.55E-07	4.48E-08	2.31E-08	6.79E-08
1069	569765.34	4215041.13	6.88E-07	3.90E-07	1.08E-06	1.05E-07	5.93E-08	1.64E-07	4.74E-08	2.44E-08	7.19E-08
1070	569770.01	4215049.63	7.31E-07	4.14E-07	1.14E-06	1.12E-07	6.30E-08	1.75E-07	5.04E-08	2.59E-08	7.63E-08
1071	569774.69	4215058.13	7.78E-07	4.41E-07	1.22E-06	1.19E-07	6.71E-08	1.86E-07	5.36E-08	2.76E-08	8.13E-08
1072	569779.36	4215066.63	8.3E-07	4.70E-07	1.30E-06	1.27E-07	7.15E-08	1.98E-07	5.72E-08	2.94E-08	8.66E-08
1073	569784.04	4215075.13	8.84E-07	5.01E-07	1.39E-06	1.35E-07	7.62E-08	2.11E-07	6.09E-08	3.14E-08	9.23E-08
1074	569788.71	4215083.64	9.44E-07	5.35E-07	1.48E-06	1.44E-07	8.13E-08	2.25E-07	6.50E-08	3.35E-08	9.85E-08
1075	569793.39	4215092.14	1.01E-06	5.71E-07	1.58E-06	1.54E-07	8.68E-08	2.41E-07	6.94E-08	3.57E-08	1.05E-07
1076	569835.46	4215168.66	2.14E-06	1.21E-06	3.35E-06	3.26E-07	1.84E-07	5.11E-07	1.47E-07	7.58E-08	2.23E-07
1077	569840.13	4215177.16	2.45E-06	1.39E-06	3.84E-06	3.75E-07	2.11E-07	5.86E-07	1.69E-07	8.70E-08	2.56E-07
1078	569844.81	4215185.66	2.75E-06	1.56E-06	4.31E-06	4.20E-07	2.37E-07	6.58E-07	1.90E-07	9.77E-08	2.87E-07
1079	569849.48	4215194.16	2.97E-06	1.68E-06	4.65E-06	4.53E-07	2.56E-07	7.09E-07	2.05E-07	1.05E-07	3.10E-07
1080	569854.16	4215202.66	3.03E-06	1.72E-06	4.74E-06	4.62E-07	2.61E-07	7.23E-07	2.09E-07	1.07E-07	3.16E-07
1081	569722.75	4214977.11	4.77E-07	2.70E-07	7.48E-07	7.29E-08	4.11E-08	1.14E-07	3.29E-08	1.69E-08	4.98E-08
1082	569721.65	4214967.79	4.62E-07	2.62E-07	7.23E-07	7.05E-08	3.98E-08	1.10E-07	3.18E-08	1.64E-08	4.82E-08
1083	569720.54	4214958.47	4.49E-07	2.54E-07	7.03E-07	6.85E-08	3.86E-08	1.07E-07	3.09E-08	1.59E-08	4.68E-08
1084	569719.44	4214949.15	4.36E-07	2.47E-07	6.84E-07	6.66E-08	3.76E-08	1.04E-07	3.01E-08	1.55E-08	4.56E-08
1085	569718.34	4214939.83	4.26E-07	2.41E-07	6.67E-07	6.50E-08	3.67E-08	1.02E-07	2.93E-08	1.51E-08	4.45E-08
1086	569717.23	4214930.51	4.17E-07	2.36E-07	6.53E-07	6.37E-08	3.59E-08	9.96E-08	2.87E-08	1.48E-08	4.35E-08
1087	569716.13	4214921.19	4.06E-07	2.30E-07	6.36E-07	6.20E-08	3.50E-08	9.70E-08	2.80E-08	1.44E-08	4.24E-08
1088	569715.03	4214911.87	3.92E-07	2.22E-07	6.15E-07	5.99E-08	3.38E-08	9.38E-08	2.70E-08	1.39E-08	4.10E-08
1089	569711.71	4214883.9	3.4E-07	1.93E-07	5.33E-07	5.20E-08	2.93E-08	8.13E-08	2.35E-08	1.21E-08	3.55E-08
1090	569710.61	4214874.58	3.21E-07	1.82E-07	5.02E-07	4.90E-08	2.76E-08	7.66E-08	2.21E-08	1.14E-08	3.35E-08
1091	569709.51	4214865.26	3.03E-07	1.71E-07	4.74E-07	4.62E-08	2.61E-08	7.23E-08	2.09E-08	1.07E-08	3.16E-08
1092	569708.4	4214855.94	2.86E-07	1.62E-07	4.48E-07	4.37E-08	2.47E-08	6.83E-08	1.97E-08	1.01E-08	2.99E-08
1093	569707.3	4214846.62	2.71E-07	1.54E-07	4.25E-07	4.14E-08	2.34E-08	6.48E-08	1.87E-08	9.62E-09	2.83E-08
1094	569711.89	4214829.84	2.47E-07	1.40E-07	3.87E-07	3.77E-08	2.13E-08	5.90E-08	1.70E-08	8.75E-09	2.58E-08
1095	569717.59	4214822.38	2.36E-07	1.34E-07	3.70E-07	3.61E-08	2.04E-08	5.65E-08	1.63E-08	8.39E-09	2.47E-08
1096	569723.28	4214814.92	2.26E-07	1.28E-07	3.54E-07	3.45E-08	1.95E-08	5.40E-08	1.56E-08	8.03E-09	2.36E-08
1097	569728.97	4214807.46	2.17E-07	1.23E-07	3.41E-07	3.32E-08	1.87E-08	5.19E-08	1.50E-08	7.71E-09	2.27E-08
1098	569734.67	4214799.99	2.12E-07	1.20E-07	3.31E-07	3.23E-08	1.82E-08	5.05E-08	1.46E-08	7.50E-09	2.21E-08
1099	569740.36	4214792.53	2.06E-07	1.17E-07	3.23E-07	3.14E-08	1.77E-08	4.92E-08	1.42E-08	7.31E-09	2.15E-08
1100	569746.06	4214785.07	2E-07	1.13E-07	3.13E-07	3.05E-08	1.72E-08	4.78E-08	1.38E-08	7.09E-09	2.09E-08
1101	569751.75	4214777.61	1.94E-07	1.10E-07	3.04E-07	2.96E-08	1.67E-08	4.63E-08	1.34E-08	6.87E-09	2.02E-08
1102	569757.44	4214770.15	1.9E-07	1.08E-07	2.98E-07	2.91E-08	1.64E-08	4.54E-08	1.31E-08	6.75E-09	1.99E-08
1103	569763.14	4214762.69	1.88E-07	1.06E-07	2.94E-07	2.86E-08	1.62E-08	4.48E-08	1.29E-08	6.65E-09	1.96E-08
1104	569723.85	4214986.43	4.95E-07	2.81E-07	7.76E-07	7.56E-08	4.27E-08	1.18E-07	3.41E-08	1.76E-08	5.17E-08
1105	569728.53	4214994.93	5.16E-07	2.92E-07	8.08E-07	7.88E-08	4.45E-08	1.23E-07	3.56E-08	1.83E-08	5.39E-08
1106	569733.2	4215003.43	5.39E-07	3.05E-07	8.45E-07	8.23E-08	4.65E-08	1.29E-07	3.72E-08	1.91E-08	5.63E-08
1107	569737.88	4215011.94	5.65E-07	3.20E-07	8.85E-07	8.63E-08	4.87E-08	1.35E-07	3.89E-08	2.00E-08	5.90E-08
1108	569742.55	4215020.44	5.94E-07	3.36E-07	9.30E-07	9.07E-08	5.12E-08	1.42E-07	4.09E-08	2.11E-08	6.20E-08
1109	569747.23	4215028.94	6.25E-07	3.54E-07	9.79E-07	9.54E-08	5.39E-08	1.49E-07	4.31E-08	2.22E-08	6.52E-08
1110	569751.9	4215037.44	6.59E-07	3.73E-07	1.03E-06	1.01E-07	5.68E-08	1.57E-07	4.54E-08	2.34E-08	6.88E-08
1111	569756.58	4215045.94	6.96E-07	3.94E-07	1.09E-06	1.06E-07	5.99E-08	1.66E-07	4.79E-08	2.47E-08	7.26E-08
1112	569761.25	4215054.45	7.38E-07	4.18E-07	1.16E-06	1.13E-07	6.36E-08	1.76E-07	5.09E-08	2.62E-08	7.71E-08

1113	569765.93	4215062.95	7.84E-07	4.44E-07	1.23E-06	1.20E-07	6.76E-08	1.87E-07	5.41E-08	2.78E-08	8.19E-08
1114	569770.6	4215071.45	8.34E-07	4.72E-07	1.31E-06	1.27E-07	7.18E-08	1.99E-07	5.74E-08	2.96E-08	8.70E-08
1115	569775.28	4215079.95	8.86E-07	5.02E-07	1.39E-06	1.35E-07	7.64E-08	2.12E-07	6.11E-08	3.14E-08	9.25E-08
1116	569779.95	4215088.45	9.42E-07	5.34E-07	1.48E-06	1.44E-07	8.12E-08	2.25E-07	6.49E-08	3.34E-08	9.83E-08
1117	569784.62	4215096.96	1E-06	5.67E-07	1.57E-06	1.53E-07	8.62E-08	2.39E-07	6.89E-08	3.55E-08	1.04E-07
1118	569789.3	4215105.46	1.06E-06	6.03E-07	1.67E-06	1.62E-07	9.17E-08	2.54E-07	7.33E-08	3.77E-08	1.11E-07
1119	569826.7	4215173.47	2.08E-06	1.18E-06	3.26E-06	3.17E-07	1.79E-07	4.97E-07	1.43E-07	7.37E-08	2.17E-07
1120	569831.37	4215181.98	2.37E-06	1.34E-06	3.71E-06	3.62E-07	2.04E-07	5.66E-07	1.63E-07	8.40E-08	2.47E-07
1121	569836.05	4215190.48	2.64E-06	1.50E-06	4.14E-06	4.04E-07	2.28E-07	6.31E-07	1.82E-07	9.38E-08	2.76E-07
1122	569840.72	4215198.98	2.82E-06	1.60E-06	4.41E-06	4.30E-07	2.43E-07	6.73E-07	1.94E-07	9.99E-08	2.94E-07
1123	569845.39	4215207.48	2.85E-06	1.62E-06	4.47E-06	4.36E-07	2.46E-07	6.81E-07	1.97E-07	1.01E-07	2.98E-07
1124	569714	4214982.04	4.86E-07	2.75E-07	7.61E-07	7.42E-08	4.19E-08	1.16E-07	3.35E-08	1.72E-08	5.07E-08
1125	569712.91	4214972.83	4.7E-07	2.67E-07	7.37E-07	7.18E-08	4.05E-08	1.12E-07	3.24E-08	1.67E-08	4.91E-08
1126	569711.82	4214963.62	4.57E-07	2.59E-07	7.16E-07	6.98E-08	3.94E-08	1.09E-07	3.15E-08	1.62E-08	4.77E-08
1127	569710.73	4214954.41	4.46E-07	2.53E-07	6.99E-07	6.81E-08	3.84E-08	1.07E-07	3.07E-08	1.58E-08	4.65E-08
1128	569709.64	4214945.19	4.34E-07	2.46E-07	6.80E-07	6.63E-08	3.74E-08	1.04E-07	2.99E-08	1.54E-08	4.53E-08
1129	569708.55	4214935.98	4.24E-07	2.40E-07	6.65E-07	6.48E-08	3.66E-08	1.01E-07	2.92E-08	1.50E-08	4.43E-08
1130	569707.46	4214926.77	4.15E-07	2.35E-07	6.51E-07	6.34E-08	3.58E-08	9.92E-08	2.86E-08	1.47E-08	4.34E-08
1131	569706.37	4214917.56	4E-07	2.27E-07	6.27E-07	6.11E-08	3.45E-08	9.56E-08	2.76E-08	1.42E-08	4.18E-08
1132	569705.28	4214908.35	3.85E-07	2.18E-07	6.03E-07	5.88E-08	3.32E-08	9.20E-08	2.65E-08	1.37E-08	4.02E-08
1133	569704.19	4214899.14	3.7E-07	2.10E-07	5.80E-07	5.66E-08	3.19E-08	8.85E-08	2.55E-08	1.31E-08	3.87E-08
1134	569703.09	4214889.93	3.51E-07	1.99E-07	5.50E-07	5.36E-08	3.03E-08	8.39E-08	2.42E-08	1.25E-08	3.67E-08
1135	569702	4214880.72	3.32E-07	1.88E-07	5.20E-07	5.07E-08	2.86E-08	7.93E-08	2.29E-08	1.18E-08	3.46E-08
1136	569700.91	4214871.51	3.14E-07	1.78E-07	4.93E-07	4.80E-08	2.71E-08	7.51E-08	2.17E-08	1.12E-08	3.28E-08
1137	569699.82	4214862.3	2.98E-07	1.69E-07	4.67E-07	4.55E-08	2.57E-08	7.12E-08	2.05E-08	1.06E-08	3.11E-08
1138	569698.73	4214853.08	2.83E-07	1.60E-07	4.43E-07	4.32E-08	2.44E-08	6.76E-08	1.95E-08	1.00E-08	2.95E-08
1139	569697.64	4214843.87	2.69E-07	1.52E-07	4.21E-07	4.11E-08	2.32E-08	6.42E-08	1.85E-08	9.54E-09	2.81E-08
1140	569702.18	4214827.29	2.47E-07	1.40E-07	3.87E-07	3.77E-08	2.13E-08	5.89E-08	1.70E-08	8.75E-09	2.58E-08
1141	569707.81	4214819.92	2.37E-07	1.34E-07	3.71E-07	3.62E-08	2.04E-08	5.66E-08	1.63E-08	8.40E-09	2.47E-08
1142	569713.43	4214812.54	2.27E-07	1.29E-07	3.56E-07	3.47E-08	1.96E-08	5.42E-08	1.56E-08	8.05E-09	2.37E-08
1143	569719.06	4214805.17	2.18E-07	1.23E-07	3.41E-07	3.33E-08	1.88E-08	5.21E-08	1.50E-08	7.73E-09	2.27E-08
1144	569730.31	4214790.42	2.07E-07	1.17E-07	3.24E-07	3.16E-08	1.78E-08	4.95E-08	1.43E-08	7.35E-09	2.16E-08
1145	569735.94	4214783.05	2.02E-07	1.14E-07	3.16E-07	3.08E-08	1.74E-08	4.82E-08	1.39E-08	7.15E-09	2.10E-08
1146	569741.57	4214775.67	1.96E-07	1.11E-07	3.07E-07	2.99E-08	1.69E-08	4.68E-08	1.35E-08	6.96E-09	2.05E-08
1147	569752.82	4214760.93	1.89E-07	1.07E-07	2.97E-07	2.89E-08	1.63E-08	4.52E-08	1.30E-08	6.72E-09	1.98E-08
1148	569715.09	4214991.25	5.05E-07	2.86E-07	7.91E-07	7.71E-08	4.35E-08	1.21E-07	3.48E-08	1.79E-08	5.27E-08
1149	569719.77	4214999.75	5.26E-07	2.98E-07	8.24E-07	8.03E-08	4.53E-08	1.26E-07	3.62E-08	1.87E-08	5.49E-08
1150	569724.44	4215008.25	5.49E-07	3.11E-07	8.60E-07	8.39E-08	4.73E-08	1.31E-07	3.78E-08	1.95E-08	5.73E-08
1151	569729.12	4215016.75	5.75E-07	3.26E-07	9.01E-07	8.78E-08	4.95E-08	1.37E-07	3.96E-08	2.04E-08	6.00E-08
1152	569733.79	4215025.26	6.04E-07	3.42E-07	9.46E-07	9.22E-08	5.20E-08	1.44E-07	4.16E-08	2.14E-08	6.30E-08
1153	569738.46	4215033.76	6.34E-07	3.59E-07	9.94E-07	9.69E-08	5.47E-08	1.52E-07	4.37E-08	2.25E-08	6.62E-08
1154	569743.14	4215042.26	6.67E-07	3.78E-07	1.05E-06	1.02E-07	5.75E-08	1.59E-07	4.60E-08	2.37E-08	6.97E-08
1155	569747.81	4215050.76	7.04E-07	3.99E-07	1.10E-06	1.07E-07	6.06E-08	1.68E-07	4.85E-08	2.50E-08	7.35E-08
1156	569752.49	4215059.26	7.44E-07	4.22E-07	1.17E-06	1.14E-07	6.41E-08	1.78E-07	5.13E-08	2.64E-08	7.77E-08
1157	569757.16	4215067.77	7.88E-07	4.47E-07	1.23E-06	1.20E-07	6.79E-08	1.88E-07	5.43E-08	2.80E-08	8.23E-08
1158	569761.84	4215076.27	8.35E-07	4.73E-07	1.31E-06	1.28E-07	7.20E-08	2.00E-07	5.76E-08	2.96E-08	8.72E-08
1159	569766.51	4215084.77	8.86E-07	5.02E-07	1.39E-06	1.35E-07	7.64E-08	2.12E-07	6.11E-08	3.14E-08	9.25E-08
1160	569771.19	4215093.27	9.4E-07	5.32E-07	1.47E-06	1.43E-07	8.10E-08	2.24E-07	6.48E-08	3.33E-08	9.81E-08
1161	569775.86	4215101.77	9.95E-07	5.64E-07	1.56E-06	1.52E-07	8.57E-08	2.38E-07	6.86E-08	3.53E-08	1.04E-07
1162	569780.54	4215110.28	1.05E-06	5.97E-07	1.65E-06	1.61E-07	9.08E-08	2.52E-07	7.26E-08	3.74E-08	1.10E-07
1163	569817.93	4215178.29	2.02E-06	1.14E-06	3.16E-06	3.08E-07	1.74E-07	4.81E-07	1.39E-07	7.15E-08	2.10E-07
1164	569822.61	4215186.79	2.28E-06	1.29E-06	3.58E-06	3.49E-07	1.97E-07	5.45E-07	1.57E-07	8.10E-08	2.38E-07
1165	569827.28	4215195.3	2.53E-06	1.44E-06	3.97E-06	3.87E-07	2.18E-07	6.05E-07	1.75E-07	8.99E-08	2.64E-07
1166	569831.96	4215203.8	2.62E-06	1.48E-06	4.10E-06	4.00E-07	2.26E-07	6.25E-07	1.80E-07	9.29E-08	2.73E-07
1167	569836.63	4215212.3	2.66E-06	1.51E-06	4.17E-06	4.06E-07	2.29E-07	6.36E-07	1.83E-07	9.44E-08	2.78E-07
1168	569705.25	4214986.95	4.95E-07	2.80E-07	7.75E-07	7.55E-08	4.26E-08	1.18E-07	3.41E-08	1.75E-08	5.16E-08
1169	569704.17	4214977.84	4.79E-07	2.71E-07	7.50E-07	7.31E-08	4.13E-08	1.14E-07	3.30E-08	1.70E-08	5.00E-08
1170	569703.09	4214968.73	4.66E-07	2.64E-07	7.29E-07	7.11E-08	4.01E-08	1.11E-07	3.21E-08	1.65E-08	4.86E-08
1171	569702.01	4214959.61	4.55E-07	2.58E-07	7.12E-07	6.94E-08	3.92E-08	1.09E-07	3.13E-08	1.61E-08	4.75E-08
1172	569700.93	4214950.5	4.44E-07	2.51E-07	6.95E-07	6.77E-08	3.82E-08	1.06E-07	3.06E-08	1.57E-08	4.63E-08
1173	569699.85	4214941.39	4.33E-07	2.45E-07	6.78E-07	6.61E-08	3.73E-08	1.03E-07	2.98E-08	1.53E-08	4.52E-08
1174	569698.78	4214932.27	4.23E-07	2.39E-07	6.62E-07	6.45E-08	3.64E-08	1.01E-07	2.91E-08	1.50E-08	4.41E-08

1175	569697.7	4214923.16	4.11E-07	2.33E-07	6.43E-07	6.27E-08	3.54E-08	9.81E-08	2.83E-08	1.46E-08	4.29E-08
1176	569696.62	4214914.05	3.93E-07	2.23E-07	6.16E-07	6.01E-08	3.39E-08	9.40E-08	2.71E-08	1.40E-08	4.11E-08
1177	569695.54	4214904.93	3.77E-07	2.13E-07	5.90E-07	5.75E-08	3.25E-08	9.00E-08	2.60E-08	1.34E-08	3.93E-08
1178	569694.46	4214895.82	3.6E-07	2.04E-07	5.64E-07	5.50E-08	3.10E-08	8.60E-08	2.48E-08	1.28E-08	3.76E-08
1179	569693.38	4214886.7	3.42E-07	1.94E-07	5.35E-07	5.22E-08	2.94E-08	8.16E-08	2.35E-08	1.21E-08	3.57E-08
1180	569692.3	4214877.59	3.25E-07	1.84E-07	5.09E-07	4.96E-08	2.80E-08	7.76E-08	2.24E-08	1.15E-08	3.39E-08
1181	569691.22	4214868.48	3.1E-07	1.75E-07	4.85E-07	4.73E-08	2.67E-08	7.40E-08	2.13E-08	1.10E-08	3.23E-08
1182	569690.14	4214859.36	2.95E-07	1.67E-07	4.62E-07	4.50E-08	2.54E-08	7.04E-08	2.03E-08	1.05E-08	3.08E-08
1183	569689.06	4214850.25	2.81E-07	1.59E-07	4.40E-07	4.29E-08	2.42E-08	6.71E-08	1.94E-08	9.96E-09	2.93E-08
1184	569687.98	4214841.14	2.68E-07	1.52E-07	4.20E-07	4.10E-08	2.31E-08	6.41E-08	1.85E-08	9.51E-09	2.80E-08
1185	569692.47	4214824.73	2.47E-07	1.40E-07	3.88E-07	3.78E-08	2.13E-08	5.91E-08	1.70E-08	8.78E-09	2.58E-08
1186	569703.61	4214810.14	2.28E-07	1.29E-07	3.58E-07	3.49E-08	1.97E-08	5.45E-08	1.57E-08	8.10E-09	2.38E-08
1187	569714.74	4214795.55	2.15E-07	1.22E-07	3.37E-07	3.29E-08	1.85E-08	5.14E-08	1.48E-08	7.63E-09	2.25E-08
1188	569725.88	4214780.96	2.04E-07	1.16E-07	3.20E-07	3.12E-08	1.76E-08	4.87E-08	1.41E-08	7.24E-09	2.13E-08
1189	569731.45	4214773.66	2E-07	1.13E-07	3.13E-07	3.05E-08	1.72E-08	4.77E-08	1.38E-08	7.08E-09	2.08E-08
1190	569742.58	4214759.07	1.94E-07	1.10E-07	3.04E-07	2.96E-08	1.67E-08	4.63E-08	1.34E-08	6.88E-09	2.02E-08
1191	569706.33	4214996.07	5.14E-07	2.91E-07	8.05E-07	7.85E-08	4.43E-08	1.23E-07	3.54E-08	1.82E-08	5.36E-08
1192	569711	4215004.57	5.35E-07	3.03E-07	8.38E-07	8.17E-08	4.61E-08	1.28E-07	3.69E-08	1.90E-08	5.58E-08
1193	569715.68	4215013.07	5.58E-07	3.16E-07	8.74E-07	8.52E-08	4.81E-08	1.33E-07	3.84E-08	1.98E-08	5.82E-08
1194	569720.35	4215021.57	5.84E-07	3.31E-07	9.15E-07	8.92E-08	5.03E-08	1.40E-07	4.03E-08	2.07E-08	6.10E-08
1195	569725.03	4215030.07	6.12E-07	3.47E-07	9.59E-07	9.35E-08	5.28E-08	1.46E-07	4.22E-08	2.17E-08	6.39E-08
1196	569729.7	4215038.58	6.42E-07	3.64E-07	1.01E-06	9.81E-08	5.53E-08	1.53E-07	4.43E-08	2.28E-08	6.70E-08
1197	569734.38	4215047.08	6.75E-07	3.82E-07	1.06E-06	1.03E-07	5.81E-08	1.61E-07	4.65E-08	2.39E-08	7.04E-08
1198	569739.05	4215055.58	7.11E-07	4.03E-07	1.11E-06	1.09E-07	6.13E-08	1.70E-07	4.90E-08	2.52E-08	7.43E-08
1199	569743.73	4215064.08	7.51E-07	4.25E-07	1.18E-06	1.15E-07	6.47E-08	1.79E-07	5.17E-08	2.66E-08	7.84E-08
1200	569748.4	4215072.58	7.92E-07	4.49E-07	1.24E-06	1.21E-07	6.82E-08	1.89E-07	5.46E-08	2.81E-08	8.27E-08
1201	569753.07	4215081.09	8.36E-07	4.74E-07	1.31E-06	1.28E-07	7.20E-08	2.00E-07	5.76E-08	2.97E-08	8.73E-08
1202	569757.75	4215089.59	8.85E-07	5.01E-07	1.39E-06	1.35E-07	7.62E-08	2.11E-07	6.10E-08	3.14E-08	9.23E-08
1203	569762.42	4215098.09	9.36E-07	5.30E-07	1.47E-06	1.43E-07	8.06E-08	2.24E-07	6.45E-08	3.32E-08	9.77E-08
1204	569767.1	4215106.59	9.89E-07	5.60E-07	1.55E-06	1.51E-07	8.52E-08	2.36E-07	6.82E-08	3.51E-08	1.03E-07
1205	569771.77	4215115.09	1.05E-06	5.93E-07	1.64E-06	1.60E-07	9.01E-08	2.50E-07	7.21E-08	3.71E-08	1.09E-07
1206	569809.17	4215183.11	1.97E-06	1.11E-06	3.08E-06	3.00E-07	1.70E-07	4.70E-07	1.36E-07	6.98E-08	2.05E-07
1207	569813.84	4215191.61	2.19E-06	1.24E-06	3.44E-06	3.35E-07	1.89E-07	5.24E-07	1.51E-07	7.78E-08	2.29E-07
1208	569818.52	4215200.11	2.37E-06	1.34E-06	3.71E-06	3.61E-07	2.04E-07	5.65E-07	1.63E-07	8.39E-08	2.47E-07
1209	569823.19	4215208.62	2.44E-06	1.38E-06	3.82E-06	3.73E-07	2.10E-07	5.83E-07	1.68E-07	8.66E-08	2.55E-07
1210	569827.87	4215217.12	2.49E-06	1.41E-06	3.90E-06	3.80E-07	2.14E-07	5.95E-07	1.72E-07	8.83E-08	2.60E-07
1211	569696.44	4214991.36	5.02E-07	2.85E-07	7.87E-07	7.67E-08	4.33E-08	1.20E-07	3.46E-08	1.78E-08	5.24E-08
1212	569695.31	4214981.83	4.85E-07	2.75E-07	7.60E-07	7.41E-08	4.18E-08	1.16E-07	3.34E-08	1.72E-08	5.07E-08
1213	569694.18	4214972.3	4.72E-07	2.67E-07	7.39E-07	7.20E-08	4.06E-08	1.13E-07	3.25E-08	1.67E-08	4.92E-08
1214	569693.05	4214962.77	4.6E-07	2.61E-07	7.21E-07	7.03E-08	3.97E-08	1.10E-07	3.17E-08	1.63E-08	4.81E-08
1215	569691.93	4214953.25	4.5E-07	2.55E-07	7.04E-07	6.87E-08	3.87E-08	1.07E-07	3.10E-08	1.60E-08	4.69E-08
1216	569690.8	4214943.72	4.37E-07	2.47E-07	6.84E-07	6.67E-08	3.76E-08	1.04E-07	3.01E-08	1.55E-08	4.56E-08
1217	569689.67	4214934.19	4.25E-07	2.41E-07	6.65E-07	6.48E-08	3.66E-08	1.01E-07	2.93E-08	1.51E-08	4.43E-08
1218	569688.54	4214924.66	4.12E-07	2.33E-07	6.45E-07	6.29E-08	3.55E-08	9.84E-08	2.84E-08	1.46E-08	4.30E-08
1219	569687.41	4214915.14	3.93E-07	2.23E-07	6.16E-07	6.00E-08	3.39E-08	9.39E-08	2.71E-08	1.39E-08	4.10E-08
1220	569686.28	4214905.61	3.75E-07	2.13E-07	5.88E-07	5.73E-08	3.23E-08	8.97E-08	2.59E-08	1.33E-08	3.92E-08
1221	569685.16	4214896.08	3.59E-07	2.03E-07	5.62E-07	5.48E-08	3.09E-08	8.58E-08	2.47E-08	1.27E-08	3.75E-08
1222	569684.03	4214886.55	3.41E-07	1.93E-07	5.34E-07	5.21E-08	2.94E-08	8.15E-08	2.35E-08	1.21E-08	3.56E-08
1223	569682.9	4214877.02	3.25E-07	1.84E-07	5.09E-07	4.96E-08	2.80E-08	7.76E-08	2.24E-08	1.15E-08	3.39E-08
1224	569681.77	4214867.5	3.1E-07	1.75E-07	4.85E-07	4.73E-08	2.67E-08	7.40E-08	2.13E-08	1.10E-08	3.23E-08
1225	569680.64	4214857.97	2.95E-07	1.67E-07	4.62E-07	4.51E-08	2.54E-08	7.05E-08	2.03E-08	1.05E-08	3.08E-08
1226	569679.52	4214848.44	2.82E-07	1.60E-07	4.41E-07	4.30E-08	2.43E-08	6.73E-08	1.94E-08	9.99E-09	2.94E-08
1227	569678.39	4214838.91	2.69E-07	1.53E-07	4.22E-07	4.11E-08	2.32E-08	6.43E-08	1.86E-08	9.56E-09	2.81E-08
1228	569683.08	4214821.76	2.49E-07	1.41E-07	3.90E-07	3.81E-08	2.15E-08	5.95E-08	1.72E-08	8.84E-09	2.60E-08
1229	569688.9	4214814.13	2.39E-07	1.35E-07	3.74E-07	3.65E-08	2.06E-08	5.70E-08	1.65E-08	8.47E-09	2.49E-08
1230	569694.72	4214806.5	2.29E-07	1.30E-07	3.58E-07	3.49E-08	1.97E-08	5.46E-08	1.58E-08	8.11E-09	2.39E-08
1231	569700.54	4214798.88	2.23E-07	1.26E-07	3.50E-07	3.41E-08	1.92E-08	5.33E-08	1.54E-08	7.92E-09	2.33E-08
1232	569706.36	4214791.25	2.18E-07	1.23E-07	3.41E-07	3.33E-08	1.88E-08	5.20E-08	1.50E-08	7.72E-09	2.27E-08
1233	569712.18	4214783.62	2.12E-07	1.20E-07	3.32E-07	3.24E-08	1.83E-08	5.07E-08	1.46E-08	7.52E-09	2.21E-08
1234	569718	4214776	2.06E-07	1.17E-07	3.23E-07	3.15E-08	1.78E-08	4.93E-08	1.42E-08	7.32E-09	2.15E-08
1235	569723.82	4214768.37	2.03E-07	1.15E-07	3.18E-07	3.10E-08	1.75E-08	4.85E-08	1.40E-08	7.21E-09	2.12E-08
1236	569697.57	4215000.89	5.22E-07	2.96E-07	8.18E-07	7.97E-08	4.50E-08	1.25E-07	3.60E-08	1.85E-08	5.45E-08

1237	569702.24	4215009.39	5.43E-07	3.07E-07	8.50E-07	8.28E-08	4.67E-08	1.30E-07	3.74E-08	1.92E-08	5.66E-08
1238	569706.92	4215017.89	5.66E-07	3.21E-07	8.86E-07	8.64E-08	4.88E-08	1.35E-07	3.90E-08	2.01E-08	5.91E-08
1239	569711.59	4215026.39	5.92E-07	3.35E-07	9.27E-07	9.04E-08	5.10E-08	1.41E-07	4.08E-08	2.10E-08	6.18E-08
1240	569716.26	4215034.89	6.2E-07	3.51E-07	9.71E-07	9.46E-08	5.34E-08	1.48E-07	4.27E-08	2.20E-08	6.47E-08
1241	569720.94	4215043.39	6.49E-07	3.68E-07	1.02E-06	9.91E-08	5.59E-08	1.55E-07	4.47E-08	2.30E-08	6.77E-08
1242	569725.61	4215051.9	6.82E-07	3.86E-07	1.07E-06	1.04E-07	5.88E-08	1.63E-07	4.70E-08	2.42E-08	7.12E-08
1243	569730.29	4215060.4	7.18E-07	4.07E-07	1.12E-06	1.10E-07	6.18E-08	1.71E-07	4.95E-08	2.55E-08	7.49E-08
1244	569734.96	4215068.9	7.56E-07	4.28E-07	1.18E-06	1.15E-07	6.51E-08	1.80E-07	5.21E-08	2.68E-08	7.89E-08
1245	569739.64	4215077.4	7.95E-07	4.51E-07	1.25E-06	1.21E-07	6.85E-08	1.90E-07	5.48E-08	2.82E-08	8.30E-08
1246	569744.31	4215085.9	8.39E-07	4.75E-07	1.31E-06	1.28E-07	7.23E-08	2.00E-07	5.78E-08	2.98E-08	8.76E-08
1247	569748.99	4215094.41	8.84E-07	5.01E-07	1.38E-06	1.35E-07	7.62E-08	2.11E-07	6.09E-08	3.14E-08	9.23E-08
1248	569753.66	4215102.91	9.31E-07	5.27E-07	1.46E-06	1.42E-07	8.02E-08	2.22E-07	6.41E-08	3.30E-08	9.71E-08
1249	569758.34	4215111.41	9.83E-07	5.57E-07	1.54E-06	1.50E-07	8.47E-08	2.35E-07	6.77E-08	3.49E-08	1.03E-07
1250	569763.01	4215119.91	1.04E-06	5.88E-07	1.63E-06	1.59E-07	8.95E-08	2.48E-07	7.16E-08	3.68E-08	1.08E-07
1251	569800.41	4215187.93	1.93E-06	1.09E-06	3.02E-06	2.94E-07	1.66E-07	4.61E-07	1.33E-07	6.84E-08	2.01E-07
1252	569805.08	4215196.43	2.13E-06	1.21E-06	3.34E-06	3.26E-07	1.84E-07	5.09E-07	1.47E-07	7.56E-08	2.23E-07
1253	569809.76	4215204.93	2.22E-06	1.26E-06	3.47E-06	3.39E-07	1.91E-07	5.30E-07	1.53E-07	7.87E-08	2.32E-07
1254	569814.43	4215213.43	2.29E-06	1.30E-06	3.59E-06	3.50E-07	1.98E-07	5.48E-07	1.58E-07	8.13E-08	2.39E-07
1255	569819.11	4215221.94	2.35E-06	1.33E-06	3.68E-06	3.59E-07	2.02E-07	5.61E-07	1.62E-07	8.34E-08	2.45E-07
1256	569687.69	4214996.28	5.11E-07	2.89E-07	8.00E-07	7.80E-08	4.40E-08	1.22E-07	3.52E-08	1.81E-08	5.33E-08
1257	569686.57	4214986.87	4.94E-07	2.80E-07	7.74E-07	7.54E-08	4.25E-08	1.18E-07	3.40E-08	1.75E-08	5.15E-08
1258	569685.46	4214977.45	4.8E-07	2.72E-07	7.51E-07	7.32E-08	4.13E-08	1.15E-07	3.30E-08	1.70E-08	5.01E-08
1259	569684.34	4214968.03	4.67E-07	2.65E-07	7.32E-07	7.13E-08	4.02E-08	1.12E-07	3.22E-08	1.66E-08	4.87E-08
1260	569683.23	4214958.61	4.56E-07	2.58E-07	7.15E-07	6.97E-08	3.93E-08	1.09E-07	3.14E-08	1.62E-08	4.76E-08
1261	569682.11	4214949.19	4.43E-07	2.51E-07	6.94E-07	6.77E-08	3.82E-08	1.06E-07	3.05E-08	1.57E-08	4.63E-08
1262	569681	4214939.77	4.29E-07	2.43E-07	6.73E-07	6.56E-08	3.70E-08	1.03E-07	2.96E-08	1.52E-08	4.48E-08
1263	569679.88	4214930.35	4.16E-07	2.36E-07	6.52E-07	6.36E-08	3.59E-08	9.94E-08	2.87E-08	1.48E-08	4.34E-08
1264	569678.77	4214920.93	4E-07	2.27E-07	6.27E-07	6.11E-08	3.45E-08	9.57E-08	2.76E-08	1.42E-08	4.18E-08
1265	569677.65	4214911.52	3.83E-07	2.17E-07	6.00E-07	5.85E-08	3.30E-08	9.16E-08	2.64E-08	1.36E-08	4.00E-08
1266	569676.54	4214902.1	3.67E-07	2.08E-07	5.75E-07	5.61E-08	3.16E-08	8.77E-08	2.53E-08	1.30E-08	3.83E-08
1267	569675.42	4214892.68	3.51E-07	1.99E-07	5.50E-07	5.37E-08	3.03E-08	8.39E-08	2.42E-08	1.25E-08	3.67E-08
1268	569674.31	4214883.26	3.35E-07	1.90E-07	5.25E-07	5.12E-08	2.89E-08	8.01E-08	2.31E-08	1.19E-08	3.50E-08
1269	569673.19	4214873.84	3.21E-07	1.82E-07	5.02E-07	4.90E-08	2.76E-08	7.66E-08	2.21E-08	1.14E-08	3.35E-08
1270	569672.08	4214864.42	3.07E-07	1.74E-07	4.81E-07	4.68E-08	2.64E-08	7.33E-08	2.11E-08	1.09E-08	3.20E-08
1271	569670.96	4214855	2.94E-07	1.66E-07	4.60E-07	4.49E-08	2.53E-08	7.02E-08	2.02E-08	1.04E-08	3.07E-08
1272	569669.84	4214845.58	2.82E-07	1.60E-07	4.41E-07	4.30E-08	2.43E-08	6.73E-08	1.94E-08	9.99E-09	2.94E-08
1273	569668.73	4214836.17	2.71E-07	1.53E-07	4.24E-07	4.13E-08	2.33E-08	6.46E-08	1.86E-08	9.60E-09	2.82E-08
1274	569673.37	4214819.21	2.52E-07	1.43E-07	3.95E-07	3.85E-08	2.17E-08	6.03E-08	1.74E-08	8.95E-09	2.63E-08
1275	569679.12	4214811.67	2.42E-07	1.37E-07	3.79E-07	3.70E-08	2.09E-08	5.78E-08	1.67E-08	8.59E-09	2.53E-08
1276	569684.88	4214804.13	2.33E-07	1.32E-07	3.65E-07	3.56E-08	2.01E-08	5.57E-08	1.61E-08	8.27E-09	2.43E-08
1277	569690.63	4214796.59	2.28E-07	1.29E-07	3.57E-07	3.48E-08	1.96E-08	5.45E-08	1.57E-08	8.09E-09	2.38E-08
1278	569696.38	4214789.05	2.23E-07	1.26E-07	3.49E-07	3.41E-08	1.92E-08	5.33E-08	1.54E-08	7.91E-09	2.33E-08
1279	569688.8	4215005.7	5.29E-07	3.00E-07	8.29E-07	8.08E-08	4.56E-08	1.26E-07	3.65E-08	1.88E-08	5.52E-08
1280	569693.48	4215014.21	5.5E-07	3.11E-07	8.61E-07	8.39E-08	4.74E-08	1.31E-07	3.79E-08	1.95E-08	5.74E-08
1281	569698.15	4215022.71	5.73E-07	3.25E-07	8.98E-07	8.75E-08	4.94E-08	1.37E-07	3.95E-08	2.03E-08	5.98E-08
1282	569702.83	4215031.21	5.99E-07	3.39E-07	9.38E-07	9.14E-08	5.16E-08	1.43E-07	4.13E-08	2.12E-08	6.25E-08
1283	569707.5	4215039.71	6.25E-07	3.54E-07	9.80E-07	9.55E-08	5.39E-08	1.49E-07	4.31E-08	2.22E-08	6.53E-08
1284	569712.18	4215048.21	6.55E-07	3.71E-07	1.03E-06	1.00E-07	5.64E-08	1.56E-07	4.51E-08	2.32E-08	6.83E-08
1285	569716.85	4215056.71	6.88E-07	3.90E-07	1.08E-06	1.05E-07	5.92E-08	1.64E-07	4.74E-08	2.44E-08	7.18E-08
1286	569721.53	4215065.22	7.23E-07	4.09E-07	1.13E-06	1.10E-07	6.23E-08	1.73E-07	4.98E-08	2.56E-08	7.54E-08
1287	569726.2	4215073.72	7.59E-07	4.30E-07	1.19E-06	1.16E-07	6.54E-08	1.81E-07	5.23E-08	2.69E-08	7.92E-08
1288	569730.87	4215082.22	7.99E-07	4.53E-07	1.25E-06	1.22E-07	6.88E-08	1.91E-07	5.50E-08	2.83E-08	8.34E-08
1289	569735.55	4215090.72	8.41E-07	4.77E-07	1.32E-06	1.28E-07	7.25E-08	2.01E-07	5.80E-08	2.98E-08	8.78E-08
1290	569740.22	4215099.22	8.85E-07	5.01E-07	1.39E-06	1.35E-07	7.63E-08	2.11E-07	6.10E-08	3.14E-08	9.24E-08
1291	569744.9	4215107.73	9.31E-07	5.27E-07	1.46E-06	1.42E-07	8.02E-08	2.22E-07	6.42E-08	3.30E-08	9.72E-08
1292	569749.57	4215116.23	9.8E-07	5.55E-07	1.54E-06	1.50E-07	8.45E-08	2.34E-07	6.76E-08	3.48E-08	1.02E-07
1293	569754.25	4215124.73	1.03E-06	5.84E-07	1.62E-06	1.58E-07	8.89E-08	2.46E-07	7.11E-08	3.66E-08	1.08E-07
1294	569786.97	4215184.24	1.7E-06	9.61E-07	2.66E-06	2.59E-07	1.46E-07	4.05E-07	1.17E-07	6.02E-08	1.77E-07
1295	569791.64	4215192.75	1.88E-06	1.07E-06	2.95E-06	2.88E-07	1.62E-07	4.50E-07	1.30E-07	6.68E-08	1.97E-07
1296	569796.32	4215201.25	2.02E-06	1.14E-06	3.16E-06	3.08E-07	1.74E-07	4.81E-07	1.39E-07	7.15E-08	2.10E-07
1297	569800.99	4215209.75	2.1E-06	1.19E-06	3.29E-06	3.21E-07	1.81E-07	5.02E-07	1.45E-07	7.45E-08	2.19E-07
1298	569805.67	4215218.25	2.17E-06	1.23E-06	3.41E-06	3.32E-07	1.87E-07	5.19E-07	1.50E-07	7.71E-08	2.27E-07

1299	569810.34	4215226.75	2.23E-06	1.26E-06	3.49E-06	3.40E-07	1.92E-07	5.33E-07	1.54E-07	7.91E-08	2.33E-07
1300	569678.94	4215001.2	5.18E-07	2.94E-07	8.12E-07	7.91E-08	4.46E-08	1.24E-07	3.57E-08	1.84E-08	5.41E-08
1301	569677.83	4214991.88	5.02E-07	2.85E-07	7.87E-07	7.67E-08	4.33E-08	1.20E-07	3.46E-08	1.78E-08	5.24E-08
1302	569676.73	4214982.56	4.88E-07	2.76E-07	7.65E-07	7.45E-08	4.21E-08	1.17E-07	3.36E-08	1.73E-08	5.09E-08
1303	569675.63	4214973.24	4.75E-07	2.69E-07	7.44E-07	7.25E-08	4.09E-08	1.13E-07	3.27E-08	1.68E-08	4.96E-08
1304	569674.52	4214963.92	4.63E-07	2.62E-07	7.25E-07	7.07E-08	3.99E-08	1.11E-07	3.19E-08	1.64E-08	4.83E-08
1305	569673.42	4214954.6	4.51E-07	2.56E-07	7.07E-07	6.89E-08	3.89E-08	1.08E-07	3.11E-08	1.60E-08	4.71E-08
1306	569672.32	4214945.28	4.36E-07	2.47E-07	6.83E-07	6.65E-08	3.76E-08	1.04E-07	3.00E-08	1.55E-08	4.55E-08
1307	569671.21	4214935.96	4.21E-07	2.39E-07	6.60E-07	6.43E-08	3.63E-08	1.01E-07	2.90E-08	1.49E-08	4.40E-08
1308	569670.11	4214926.64	4.07E-07	2.30E-07	6.37E-07	6.21E-08	3.51E-08	9.72E-08	2.80E-08	1.44E-08	4.25E-08
1309	569669	4214917.31	3.9E-07	2.21E-07	6.11E-07	5.96E-08	3.36E-08	9.32E-08	2.69E-08	1.38E-08	4.07E-08
1310	569667.9	4214907.99	3.75E-07	2.12E-07	5.87E-07	5.72E-08	3.23E-08	8.95E-08	2.58E-08	1.33E-08	3.91E-08
1311	569666.8	4214898.67	3.6E-07	2.04E-07	5.64E-07	5.49E-08	3.10E-08	8.59E-08	2.48E-08	1.28E-08	3.76E-08
1312	569665.69	4214889.35	3.45E-07	1.95E-07	5.40E-07	5.27E-08	2.97E-08	8.24E-08	2.38E-08	1.22E-08	3.60E-08
1313	569664.59	4214880.03	3.3E-07	1.87E-07	5.18E-07	5.05E-08	2.85E-08	7.89E-08	2.28E-08	1.17E-08	3.45E-08
1314	569663.49	4214870.71	3.17E-07	1.80E-07	4.97E-07	4.84E-08	2.73E-08	7.57E-08	2.19E-08	1.12E-08	3.31E-08
1315	569662.38	4214861.39	3.05E-07	1.73E-07	4.77E-07	4.65E-08	2.63E-08	7.28E-08	2.10E-08	1.08E-08	3.18E-08
1316	569661.28	4214852.07	2.93E-07	1.66E-07	4.59E-07	4.48E-08	2.53E-08	7.00E-08	2.02E-08	1.04E-08	3.06E-08
1317	569660.18	4214842.75	2.83E-07	1.60E-07	4.43E-07	4.31E-08	2.43E-08	6.75E-08	1.95E-08	1.00E-08	2.95E-08
1318	569659.07	4214833.43	2.73E-07	1.55E-07	4.28E-07	4.17E-08	2.35E-08	6.53E-08	1.88E-08	9.69E-09	2.85E-08
1319	569680.04	4215010.52	5.35E-07	3.03E-07	8.39E-07	8.18E-08	4.61E-08	1.28E-07	3.69E-08	1.90E-08	5.59E-08
1320	569684.71	4215019.02	5.56E-07	3.15E-07	8.71E-07	8.49E-08	4.79E-08	1.33E-07	3.83E-08	1.97E-08	5.80E-08
1321	569689.39	4215027.52	5.79E-07	3.28E-07	9.08E-07	8.85E-08	4.99E-08	1.38E-07	3.99E-08	2.06E-08	6.05E-08
1322	569694.06	4215036.03	6.04E-07	3.42E-07	9.46E-07	9.23E-08	5.21E-08	1.44E-07	4.16E-08	2.14E-08	6.31E-08
1323	569698.74	4215044.53	6.3E-07	3.57E-07	9.87E-07	9.62E-08	5.43E-08	1.51E-07	4.34E-08	2.24E-08	6.58E-08
1324	569703.41	4215053.03	6.6E-07	3.74E-07	1.03E-06	1.01E-07	5.69E-08	1.58E-07	4.55E-08	2.34E-08	6.89E-08
1325	569708.09	4215061.53	6.93E-07	3.92E-07	1.09E-06	1.06E-07	5.97E-08	1.65E-07	4.77E-08	2.46E-08	7.23E-08
1326	569712.76	4215070.03	7.26E-07	4.12E-07	1.14E-06	1.11E-07	6.26E-08	1.74E-07	5.01E-08	2.58E-08	7.58E-08
1327	569717.44	4215078.54	7.62E-07	4.32E-07	1.19E-06	1.16E-07	6.57E-08	1.82E-07	5.25E-08	2.70E-08	7.95E-08
1328	569722.11	4215087.04	8.02E-07	4.54E-07	1.26E-06	1.22E-07	6.91E-08	1.91E-07	5.52E-08	2.84E-08	8.37E-08
1329	569726.79	4215095.54	8.43E-07	4.78E-07	1.32E-06	1.29E-07	7.27E-08	2.01E-07	5.81E-08	2.99E-08	8.80E-08
1330	569731.46	4215104.04	8.87E-07	5.02E-07	1.39E-06	1.35E-07	7.64E-08	2.12E-07	6.11E-08	3.14E-08	9.25E-08
1331	569736.14	4215112.54	9.34E-07	5.29E-07	1.46E-06	1.43E-07	8.05E-08	2.23E-07	6.44E-08	3.31E-08	9.75E-08
1332	569740.81	4215121.05	9.85E-07	5.58E-07	1.54E-06	1.50E-07	8.48E-08	2.35E-07	6.79E-08	3.49E-08	1.03E-07
1333	569773.53	4215180.56	1.56E-06	8.84E-07	2.45E-06	2.38E-07	1.35E-07	3.73E-07	1.08E-07	5.54E-08	1.63E-07
1334	569778.21	4215189.06	1.69E-06	9.59E-07	2.65E-06	2.59E-07	1.46E-07	4.04E-07	1.17E-07	6.01E-08	1.77E-07
1335	569782.88	4215197.56	1.83E-06	1.03E-06	2.86E-06	2.79E-07	1.57E-07	4.36E-07	1.26E-07	6.48E-08	1.91E-07
1336	569787.56	4215206.07	1.91E-06	1.08E-06	3.00E-06	2.92E-07	1.65E-07	4.57E-07	1.32E-07	6.79E-08	2.00E-07
1337	569792.23	4215214.57	2E-06	1.13E-06	3.13E-06	3.05E-07	1.72E-07	4.77E-07	1.38E-07	7.09E-08	2.09E-07
1338	569796.91	4215223.07	2.07E-06	1.17E-06	3.25E-06	3.16E-07	1.79E-07	4.95E-07	1.43E-07	7.35E-08	2.16E-07
1339	569801.58	4215231.57	2.06E-06	1.17E-06	3.22E-06	3.14E-07	1.77E-07	4.91E-07	1.42E-07	7.29E-08	2.15E-07
1340	569670.18	4215006.11	5.24E-07	2.97E-07	8.21E-07	8.00E-08	4.52E-08	1.25E-07	3.61E-08	1.86E-08	5.47E-08
1341	569669.09	4214996.88	5.1E-07	2.89E-07	7.98E-07	7.78E-08	4.39E-08	1.22E-07	3.51E-08	1.81E-08	5.32E-08
1342	569668	4214987.64	4.97E-07	2.81E-07	7.78E-07	7.59E-08	4.28E-08	1.19E-07	3.42E-08	1.76E-08	5.19E-08
1343	569666.91	4214978.41	4.83E-07	2.74E-07	7.57E-07	7.38E-08	4.16E-08	1.15E-07	3.33E-08	1.71E-08	5.04E-08
1344	569665.81	4214969.18	4.7E-07	2.66E-07	7.37E-07	7.18E-08	4.05E-08	1.12E-07	3.24E-08	1.67E-08	4.91E-08
1345	569664.72	4214959.95	4.58E-07	2.60E-07	7.18E-07	7.00E-08	3.95E-08	1.09E-07	3.16E-08	1.63E-08	4.78E-08
1346	569663.63	4214950.72	4.44E-07	2.51E-07	6.95E-07	6.77E-08	3.82E-08	1.06E-07	3.06E-08	1.57E-08	4.63E-08
1347	569662.53	4214941.48	4.27E-07	2.42E-07	6.69E-07	6.52E-08	3.68E-08	1.02E-07	2.94E-08	1.52E-08	4.46E-08
1348	569661.44	4214932.25	4.12E-07	2.33E-07	6.45E-07	6.28E-08	3.55E-08	9.83E-08	2.84E-08	1.46E-08	4.30E-08
1349	569660.35	4214923.02	3.96E-07	2.25E-07	6.21E-07	6.05E-08	3.42E-08	9.47E-08	2.73E-08	1.41E-08	4.14E-08
1350	569659.25	4214913.79	3.81E-07	2.16E-07	5.97E-07	5.82E-08	3.28E-08	9.10E-08	2.63E-08	1.35E-08	3.98E-08
1351	569658.16	4214904.56	3.67E-07	2.08E-07	5.74E-07	5.60E-08	3.16E-08	8.76E-08	2.53E-08	1.30E-08	3.83E-08
1352	569657.07	4214895.32	3.53E-07	2.00E-07	5.53E-07	5.39E-08	3.04E-08	8.43E-08	2.43E-08	1.25E-08	3.68E-08
1353	569655.97	4214886.09	3.39E-07	1.92E-07	5.31E-07	5.18E-08	2.92E-08	8.10E-08	2.34E-08	1.20E-08	3.54E-08
1354	569654.88	4214876.86	3.26E-07	1.85E-07	5.11E-07	4.98E-08	2.81E-08	7.79E-08	2.25E-08	1.16E-08	3.41E-08
1355	569653.79	4214867.63	3.14E-07	1.78E-07	4.92E-07	4.80E-08	2.71E-08	7.51E-08	2.17E-08	1.11E-08	3.28E-08
1356	569652.7	4214858.4	3.03E-07	1.72E-07	4.75E-07	4.63E-08	2.61E-08	7.25E-08	2.09E-08	1.08E-08	3.17E-08
1357	569651.6	4214849.17	2.94E-07	1.66E-07	4.60E-07	4.48E-08	2.53E-08	7.01E-08	2.02E-08	1.04E-08	3.06E-08
1358	569650.51	4214839.93	2.84E-07	1.61E-07	4.45E-07	4.34E-08	2.45E-08	6.79E-08	1.96E-08	1.01E-08	2.97E-08
1359	569671.28	4215015.34	5.41E-07	3.06E-07	8.47E-07	8.26E-08	4.66E-08	1.29E-07	3.73E-08	1.92E-08	5.64E-08
1360	569675.95	4215023.84	5.62E-07	3.18E-07	8.80E-07	8.58E-08	4.84E-08	1.34E-07	3.87E-08	1.99E-08	5.87E-08

1361	569680.63	4215032.34	5.85E-07	3.31E-07	9.16E-07	8.93E-08	5.04E-08	1.40E-07	4.03E-08	2.07E-08	6.10E-08
1362	569685.3	4215040.84	6.09E-07	3.45E-07	9.53E-07	9.29E-08	5.24E-08	1.45E-07	4.19E-08	2.16E-08	6.35E-08
1363	569689.98	4215049.35	6.35E-07	3.60E-07	9.95E-07	9.70E-08	5.47E-08	1.52E-07	4.38E-08	2.25E-08	6.63E-08
1364	569694.65	4215057.85	6.65E-07	3.77E-07	1.04E-06	1.02E-07	5.73E-08	1.59E-07	4.58E-08	2.36E-08	6.94E-08
1365	569699.33	4215066.35	6.97E-07	3.95E-07	1.09E-06	1.06E-07	6.00E-08	1.66E-07	4.80E-08	2.47E-08	7.27E-08
1366	569704	4215074.85	7.29E-07	4.13E-07	1.14E-06	1.11E-07	6.28E-08	1.74E-07	5.03E-08	2.59E-08	7.61E-08
1367	569708.67	4215083.35	7.66E-07	4.34E-07	1.20E-06	1.17E-07	6.60E-08	1.83E-07	5.28E-08	2.72E-08	7.99E-08
1368	569713.35	4215091.86	8.05E-07	4.56E-07	1.26E-06	1.23E-07	6.93E-08	1.92E-07	5.55E-08	2.85E-08	8.40E-08
1369	569718.02	4215100.36	8.46E-07	4.79E-07	1.32E-06	1.29E-07	7.29E-08	2.02E-07	5.83E-08	3.00E-08	8.83E-08
1370	569722.7	4215108.86	8.9E-07	5.04E-07	1.39E-06	1.36E-07	7.67E-08	2.13E-07	6.13E-08	3.16E-08	9.29E-08
1371	569727.37	4215117.36	9.41E-07	5.33E-07	1.47E-06	1.44E-07	8.10E-08	2.25E-07	6.48E-08	3.34E-08	9.82E-08
1372	569764.77	4215185.38	1.58E-06	8.93E-07	2.47E-06	2.41E-07	1.36E-07	3.77E-07	1.09E-07	5.59E-08	1.65E-07
1373	569769.44	4215193.88	1.71E-06	9.67E-07	2.67E-06	2.61E-07	1.47E-07	4.08E-07	1.18E-07	6.05E-08	1.78E-07
1374	569774.12	4215202.38	1.78E-06	1.01E-06	2.79E-06	2.72E-07	1.53E-07	4.25E-07	1.23E-07	6.31E-08	1.86E-07
1375	569778.79	4215210.88	1.84E-06	1.04E-06	2.88E-06	2.81E-07	1.59E-07	4.39E-07	1.27E-07	6.53E-08	1.92E-07
1376	569783.47	4215219.39	1.91E-06	1.08E-06	3.00E-06	2.92E-07	1.65E-07	4.57E-07	1.32E-07	6.78E-08	2.00E-07
1377	569788.14	4215227.89	1.96E-06	1.11E-06	3.07E-06	2.99E-07	1.69E-07	4.68E-07	1.35E-07	6.95E-08	2.04E-07
1378	569792.82	4215236.39	1.89E-06	1.07E-06	2.96E-06	2.89E-07	1.63E-07	4.51E-07	1.30E-07	6.70E-08	1.97E-07
1379	569661.38	4215010.57	5.28E-07	2.99E-07	8.27E-07	8.06E-08	4.55E-08	1.26E-07	3.64E-08	1.87E-08	5.51E-08
1380	569660.24	4215000.98	5.13E-07	2.91E-07	8.04E-07	7.84E-08	4.42E-08	1.23E-07	3.54E-08	1.82E-08	5.36E-08
1381	569659.11	4214991.4	5E-07	2.83E-07	7.83E-07	7.64E-08	4.31E-08	1.19E-07	3.45E-08	1.77E-08	5.22E-08
1382	569657.97	4214981.81	4.86E-07	2.76E-07	7.62E-07	7.43E-08	4.19E-08	1.16E-07	3.35E-08	1.73E-08	5.08E-08
1383	569656.84	4214972.22	4.71E-07	2.67E-07	7.38E-07	7.19E-08	4.06E-08	1.13E-07	3.25E-08	1.67E-08	4.92E-08
1384	569655.7	4214962.64	4.56E-07	2.58E-07	7.15E-07	6.97E-08	3.93E-08	1.09E-07	3.14E-08	1.62E-08	4.76E-08
1385	569654.57	4214953.05	4.41E-07	2.50E-07	6.91E-07	6.74E-08	3.80E-08	1.05E-07	3.04E-08	1.56E-08	4.60E-08
1386	569653.43	4214943.46	4.25E-07	2.41E-07	6.65E-07	6.48E-08	3.66E-08	1.01E-07	2.93E-08	1.51E-08	4.43E-08
1387	569652.3	4214933.87	4.09E-07	2.32E-07	6.41E-07	6.25E-08	3.53E-08	9.78E-08	2.82E-08	1.45E-08	4.27E-08
1388	569651.16	4214924.29	3.94E-07	2.23E-07	6.18E-07	6.02E-08	3.40E-08	9.42E-08	2.72E-08	1.40E-08	4.12E-08
1389	569650.03	4214914.7	3.79E-07	2.15E-07	5.94E-07	5.79E-08	3.27E-08	9.06E-08	2.61E-08	1.35E-08	3.96E-08
1390	569648.89	4214905.11	3.65E-07	2.07E-07	5.72E-07	5.57E-08	3.14E-08	8.72E-08	2.52E-08	1.29E-08	3.81E-08
1391	569647.76	4214895.53	3.52E-07	1.99E-07	5.51E-07	5.37E-08	3.03E-08	8.40E-08	2.42E-08	1.25E-08	3.67E-08
1392	569646.62	4214885.94	3.38E-07	1.92E-07	5.30E-07	5.17E-08	2.92E-08	8.08E-08	2.33E-08	1.20E-08	3.53E-08
1393	569645.49	4214876.35	3.26E-07	1.85E-07	5.11E-07	4.98E-08	2.81E-08	7.79E-08	2.25E-08	1.16E-08	3.40E-08
1394	569644.35	4214866.77	3.15E-07	1.78E-07	4.93E-07	4.80E-08	2.71E-08	7.52E-08	2.17E-08	1.12E-08	3.28E-08
1395	569643.22	4214857.18	3.05E-07	1.73E-07	4.78E-07	4.65E-08	2.63E-08	7.28E-08	2.10E-08	1.08E-08	3.18E-08
1396	569662.51	4215020.16	5.46E-07	3.09E-07	8.55E-07	8.34E-08	4.70E-08	1.30E-07	3.76E-08	1.94E-08	5.70E-08
1397	569667.19	4215028.66	5.67E-07	3.21E-07	8.88E-07	8.66E-08	4.89E-08	1.35E-07	3.91E-08	2.01E-08	5.92E-08
1398	569671.86	4215037.16	5.89E-07	3.34E-07	9.23E-07	8.99E-08	5.07E-08	1.41E-07	4.06E-08	2.09E-08	6.15E-08
1399	569676.54	4215045.66	6.12E-07	3.47E-07	9.59E-07	9.34E-08	5.27E-08	1.46E-07	4.22E-08	2.17E-08	6.39E-08
1400	569681.21	4215054.16	6.39E-07	3.62E-07	1.00E-06	9.76E-08	5.51E-08	1.53E-07	4.41E-08	2.27E-08	6.67E-08
1401	569685.89	4215062.67	6.69E-07	3.79E-07	1.05E-06	1.02E-07	5.76E-08	1.60E-07	4.61E-08	2.37E-08	6.98E-08
1402	569690.56	4215071.17	6.99E-07	3.96E-07	1.10E-06	1.07E-07	6.03E-08	1.67E-07	4.82E-08	2.48E-08	7.30E-08
1403	569695.24	4215079.67	7.33E-07	4.15E-07	1.15E-06	1.12E-07	6.31E-08	1.75E-07	5.05E-08	2.60E-08	7.65E-08
1404	569699.91	4215088.17	7.69E-07	4.36E-07	1.21E-06	1.17E-07	6.63E-08	1.84E-07	5.30E-08	2.73E-08	8.03E-08
1405	569704.59	4215096.67	8.08E-07	4.58E-07	1.27E-06	1.23E-07	6.96E-08	1.93E-07	5.57E-08	2.87E-08	8.43E-08
1406	569709.26	4215105.18	8.49E-07	4.81E-07	1.33E-06	1.30E-07	7.32E-08	2.03E-07	5.85E-08	3.01E-08	8.86E-08
1407	569713.94	4215113.68	8.94E-07	5.07E-07	1.40E-06	1.37E-07	7.70E-08	2.14E-07	6.16E-08	3.17E-08	9.33E-08
1408	569718.61	4215122.18	9.47E-07	5.37E-07	1.48E-06	1.45E-07	8.16E-08	2.26E-07	6.53E-08	3.36E-08	9.89E-08
1409	569751.33	4215181.69	1.48E-06	8.36E-07	2.31E-06	2.25E-07	1.27E-07	3.53E-07	1.02E-07	5.24E-08	1.54E-07
1410	569756.01	4215190.2	1.59E-06	8.99E-07	2.49E-06	2.42E-07	1.37E-07	3.79E-07	1.09E-07	5.63E-08	1.66E-07
1411	569760.68	4215198.7	1.68E-06	9.53E-07	2.64E-06	2.57E-07	1.45E-07	4.02E-07	1.16E-07	5.97E-08	1.76E-07
1412	569765.36	4215207.2	1.72E-06	9.75E-07	2.70E-06	2.63E-07	1.48E-07	4.11E-07	1.19E-07	6.11E-08	1.80E-07
1413	569770.03	4215215.7	1.77E-06	1.00E-06	2.77E-06	2.70E-07	1.53E-07	4.23E-07	1.22E-07	6.28E-08	1.85E-07
1414	569774.71	4215224.2	1.83E-06	1.04E-06	2.87E-06	2.79E-07	1.58E-07	4.37E-07	1.26E-07	6.49E-08	1.91E-07
1415	569779.38	4215232.71	1.8E-06	1.02E-06	2.82E-06	2.75E-07	1.55E-07	4.30E-07	1.24E-07	6.39E-08	1.88E-07
1416	569784.05	4215241.21	1.73E-06	9.79E-07	2.71E-06	2.64E-07	1.49E-07	4.13E-07	1.19E-07	6.13E-08	1.80E-07
1417	569652.63	4215015.49	5.32E-07	3.01E-07	8.33E-07	8.12E-08	4.58E-08	1.27E-07	3.66E-08	1.89E-08	5.55E-08
1418	569651.5	4215006	5.17E-07	2.93E-07	8.09E-07	7.89E-08	4.45E-08	1.23E-07	3.56E-08	1.83E-08	5.39E-08
1419	569650.38	4214996.5	5.03E-07	2.85E-07	7.88E-07	7.68E-08	4.33E-08	1.20E-07	3.47E-08	1.78E-08	5.25E-08
1420	569649.26	4214987.01	4.91E-07	2.78E-07	7.69E-07	7.49E-08	4.23E-08	1.17E-07	3.38E-08	1.74E-08	5.12E-08
1421	569648.13	4214977.52	4.75E-07	2.69E-07	7.44E-07	7.25E-08	4.09E-08	1.13E-07	3.27E-08	1.68E-08	4.96E-08
1422	569647.01	4214968.03	4.59E-07	2.60E-07	7.19E-07	7.01E-08	3.95E-08	1.10E-07	3.16E-08	1.63E-08	4.79E-08

1423	569645.89	4214958.54	4.43E-07	2.51E-07	6.95E-07	6.77E-08	3.82E-08	1.06E-07	3.06E-08	1.57E-08	4.63E-08
1424	569644.76	4214949.05	4.28E-07	2.42E-07	6.70E-07	6.53E-08	3.69E-08	1.02E-07	2.95E-08	1.52E-08	4.47E-08
1425	569643.64	4214939.56	4.13E-07	2.34E-07	6.47E-07	6.30E-08	3.56E-08	9.86E-08	2.84E-08	1.46E-08	4.31E-08
1426	569642.52	4214930.07	3.99E-07	2.26E-07	6.25E-07	6.09E-08	3.44E-08	9.53E-08	2.75E-08	1.41E-08	4.16E-08
1427	569641.39	4214920.58	3.85E-07	2.18E-07	6.03E-07	5.87E-08	3.31E-08	9.19E-08	2.65E-08	1.36E-08	4.02E-08
1428	569640.27	4214911.09	3.71E-07	2.10E-07	5.81E-07	5.66E-08	3.19E-08	8.86E-08	2.55E-08	1.32E-08	3.87E-08
1429	569639.14	4214901.6	3.58E-07	2.03E-07	5.60E-07	5.46E-08	3.08E-08	8.54E-08	2.46E-08	1.27E-08	3.73E-08
1430	569638.02	4214892.11	3.45E-07	1.96E-07	5.41E-07	5.27E-08	2.98E-08	8.25E-08	2.38E-08	1.23E-08	3.60E-08
1431	569636.9	4214882.62	3.34E-07	1.89E-07	5.23E-07	5.10E-08	2.88E-08	7.97E-08	2.30E-08	1.18E-08	3.48E-08
1432	569635.77	4214873.13	3.23E-07	1.83E-07	5.06E-07	4.93E-08	2.78E-08	7.71E-08	2.22E-08	1.15E-08	3.37E-08
1433	569634.65	4214863.64	3.13E-07	1.77E-07	4.91E-07	4.78E-08	2.70E-08	7.48E-08	2.16E-08	1.11E-08	3.27E-08
1434	569653.75	4215024.98	5.51E-07	3.12E-07	8.63E-07	8.41E-08	4.74E-08	1.32E-07	3.79E-08	1.95E-08	5.75E-08
1435	569658.43	4215033.48	5.71E-07	3.23E-07	8.94E-07	8.72E-08	4.92E-08	1.36E-07	3.93E-08	2.02E-08	5.96E-08
1436	569663.1	4215041.98	5.92E-07	3.35E-07	9.28E-07	9.04E-08	5.10E-08	1.41E-07	4.08E-08	2.10E-08	6.18E-08
1437	569667.78	4215050.48	6.16E-07	3.49E-07	9.65E-07	9.41E-08	5.31E-08	1.47E-07	4.25E-08	2.19E-08	6.43E-08
1438	569672.45	4215058.98	6.42E-07	3.64E-07	1.01E-06	9.81E-08	5.54E-08	1.53E-07	4.43E-08	2.28E-08	6.71E-08
1439	569677.13	4215067.48	6.7E-07	3.80E-07	1.05E-06	1.02E-07	5.78E-08	1.60E-07	4.62E-08	2.38E-08	7.00E-08
1440	569681.8	4215075.99	7E-07	3.96E-07	1.10E-06	1.07E-07	6.03E-08	1.67E-07	4.82E-08	2.48E-08	7.30E-08
1441	569686.47	4215084.49	7.35E-07	4.16E-07	1.15E-06	1.12E-07	6.33E-08	1.75E-07	5.06E-08	2.61E-08	7.67E-08
1442	569691.15	4215092.99	7.72E-07	4.38E-07	1.21E-06	1.18E-07	6.65E-08	1.84E-07	5.32E-08	2.74E-08	8.06E-08
1443	569695.82	4215101.49	8.12E-07	4.60E-07	1.27E-06	1.24E-07	7.00E-08	1.94E-07	5.60E-08	2.88E-08	8.48E-08
1444	569700.5	4215109.99	8.53E-07	4.83E-07	1.34E-06	1.30E-07	7.35E-08	2.04E-07	5.87E-08	3.02E-08	8.90E-08
1445	569737.9	4215178.01	1.39E-06	7.87E-07	2.18E-06	2.12E-07	1.20E-07	3.32E-07	9.57E-08	4.93E-08	1.45E-07
1446	569742.57	4215186.51	1.49E-06	8.42E-07	2.33E-06	2.27E-07	1.28E-07	3.55E-07	1.02E-07	5.27E-08	1.55E-07
1447	569747.24	4215195.01	1.59E-06	9.03E-07	2.50E-06	2.43E-07	1.37E-07	3.81E-07	1.10E-07	5.65E-08	1.66E-07
1448	569751.92	4215203.52	1.63E-06	9.22E-07	2.55E-06	2.48E-07	1.40E-07	3.89E-07	1.12E-07	5.77E-08	1.70E-07
1449	569756.59	4215212.02	1.65E-06	9.37E-07	2.59E-06	2.53E-07	1.43E-07	3.95E-07	1.14E-07	5.87E-08	1.73E-07
1450	569761.27	4215220.52	1.69E-06	9.59E-07	2.65E-06	2.59E-07	1.46E-07	4.04E-07	1.17E-07	6.01E-08	1.77E-07
1451	569765.94	4215229.02	1.71E-06	9.67E-07	2.67E-06	2.61E-07	1.47E-07	4.08E-07	1.18E-07	6.05E-08	1.78E-07
1452	569770.62	4215237.52	1.65E-06	9.34E-07	2.58E-06	2.52E-07	1.42E-07	3.94E-07	1.14E-07	5.85E-08	1.72E-07
1453	569775.29	4215246.03	1.59E-06	8.99E-07	2.49E-06	2.42E-07	1.37E-07	3.79E-07	1.09E-07	5.63E-08	1.66E-07
1454	569643.88	4215020.39	5.36E-07	3.04E-07	8.39E-07	8.18E-08	4.62E-08	1.28E-07	3.69E-08	1.90E-08	5.59E-08
1455	569642.76	4215010.99	5.2E-07	2.95E-07	8.15E-07	7.94E-08	4.48E-08	1.24E-07	3.58E-08	1.84E-08	5.43E-08
1456	569641.65	4215001.59	5.06E-07	2.87E-07	7.93E-07	7.73E-08	4.36E-08	1.21E-07	3.49E-08	1.80E-08	5.28E-08
1457	569640.54	4214992.19	4.94E-07	2.80E-07	7.73E-07	7.54E-08	4.25E-08	1.18E-07	3.40E-08	1.75E-08	5.15E-08
1458	569639.42	4214982.78	4.8E-07	2.72E-07	7.51E-07	7.32E-08	4.13E-08	1.15E-07	3.31E-08	1.70E-08	5.01E-08
1459	569638.31	4214973.38	4.63E-07	2.62E-07	7.25E-07	7.07E-08	3.99E-08	1.11E-07	3.19E-08	1.64E-08	4.83E-08
1460	569637.2	4214963.98	4.46E-07	2.53E-07	6.99E-07	6.81E-08	3.85E-08	1.07E-07	3.08E-08	1.58E-08	4.66E-08
1461	569636.08	4214954.58	4.3E-07	2.44E-07	6.74E-07	6.57E-08	3.71E-08	1.03E-07	2.96E-08	1.53E-08	4.49E-08
1462	569634.97	4214945.18	4.16E-07	2.36E-07	6.51E-07	6.35E-08	3.58E-08	9.93E-08	2.87E-08	1.47E-08	4.34E-08
1463	569633.86	4214935.78	4.02E-07	2.28E-07	6.30E-07	6.14E-08	3.46E-08	9.61E-08	2.77E-08	1.43E-08	4.20E-08
1464	569632.74	4214926.37	3.89E-07	2.21E-07	6.10E-07	5.95E-08	3.36E-08	9.30E-08	2.68E-08	1.38E-08	4.07E-08
1465	569631.63	4214916.97	3.76E-07	2.13E-07	5.89E-07	5.74E-08	3.24E-08	8.98E-08	2.59E-08	1.33E-08	3.93E-08
1466	569630.52	4214907.57	3.64E-07	2.06E-07	5.70E-07	5.55E-08	3.13E-08	8.68E-08	2.51E-08	1.29E-08	3.80E-08
1467	569629.4	4214898.17	3.52E-07	1.99E-07	5.51E-07	5.37E-08	3.03E-08	8.40E-08	2.42E-08	1.25E-08	3.67E-08
1468	569628.29	4214888.77	3.41E-07	1.93E-07	5.34E-07	5.21E-08	2.94E-08	8.14E-08	2.35E-08	1.21E-08	3.56E-08
1469	569627.18	4214879.37	3.31E-07	1.87E-07	5.18E-07	5.05E-08	2.85E-08	7.90E-08	2.28E-08	1.17E-08	3.45E-08
1470	569626.07	4214869.96	3.22E-07	1.82E-07	5.04E-07	4.91E-08	2.77E-08	7.68E-08	2.22E-08	1.14E-08	3.36E-08
1471	569644.99	4215029.79	5.54E-07	3.14E-07	8.68E-07	8.46E-08	4.77E-08	1.32E-07	3.82E-08	1.96E-08	5.78E-08
1472	569649.66	4215038.3	5.73E-07	3.25E-07	8.98E-07	8.75E-08	4.94E-08	1.37E-07	3.95E-08	2.03E-08	5.98E-08
1473	569654.34	4215046.8	5.94E-07	3.36E-07	9.30E-07	9.07E-08	5.12E-08	1.42E-07	4.09E-08	2.11E-08	6.20E-08
1474	569659.01	4215055.3	6.19E-07	3.51E-07	9.69E-07	9.45E-08	5.33E-08	1.48E-07	4.26E-08	2.20E-08	6.46E-08
1475	569663.69	4215063.8	6.44E-07	3.65E-07	1.01E-06	9.84E-08	5.55E-08	1.54E-07	4.44E-08	2.29E-08	6.72E-08
1476	569668.36	4215072.3	6.71E-07	3.80E-07	1.05E-06	1.02E-07	5.78E-08	1.60E-07	4.62E-08	2.38E-08	7.00E-08
1477	569673.04	4215080.8	7.01E-07	3.97E-07	1.10E-06	1.07E-07	6.04E-08	1.67E-07	4.83E-08	2.49E-08	7.32E-08
1478	569677.71	4215089.31	7.35E-07	4.16E-07	1.15E-06	1.12E-07	6.33E-08	1.76E-07	5.07E-08	2.61E-08	7.67E-08
1479	569682.39	4215097.81	7.72E-07	4.37E-07	1.21E-06	1.18E-07	6.65E-08	1.84E-07	5.32E-08	2.74E-08	8.06E-08
1480	569687.06	4215106.31	8.13E-07	4.60E-07	1.27E-06	1.24E-07	7.00E-08	1.94E-07	5.60E-08	2.88E-08	8.48E-08
1481	569691.74	4215114.81	8.53E-07	4.83E-07	1.34E-06	1.30E-07	7.35E-08	2.04E-07	5.88E-08	3.03E-08	8.90E-08
1482	569724.46	4215174.33	1.31E-06	7.44E-07	2.06E-06	2.00E-07	1.13E-07	3.14E-07	9.04E-08	4.66E-08	1.37E-07
1483	569729.13	4215182.83	1.4E-06	7.92E-07	2.19E-06	2.13E-07	1.20E-07	3.34E-07	9.63E-08	4.96E-08	1.46E-07
1484	569733.81	4215191.33	1.49E-06	8.44E-07	2.33E-06	2.27E-07	1.28E-07	3.56E-07	1.03E-07	5.28E-08	1.55E-07

1485	569738.48	4215199.83	1.55E-06	8.81E-07	2.44E-06	2.37E-07	1.34E-07	3.71E-07	1.07E-07	5.51E-08	1.62E-07
1486	569743.16	4215208.33	1.57E-06	8.90E-07	2.46E-06	2.40E-07	1.35E-07	3.75E-07	1.08E-07	5.58E-08	1.64E-07
1487	569747.83	4215216.84	1.59E-06	9.01E-07	2.49E-06	2.43E-07	1.37E-07	3.80E-07	1.10E-07	5.64E-08	1.66E-07
1488	569752.51	4215225.34	1.61E-06	9.13E-07	2.52E-06	2.46E-07	1.39E-07	3.85E-07	1.11E-07	5.72E-08	1.68E-07
1489	569757.18	4215233.84	1.57E-06	8.88E-07	2.46E-06	2.39E-07	1.35E-07	3.74E-07	1.08E-07	5.56E-08	1.64E-07
1490	569761.85	4215242.34	1.52E-06	8.60E-07	2.38E-06	2.32E-07	1.31E-07	3.62E-07	1.05E-07	5.38E-08	1.58E-07
1491	569766.53	4215250.84	1.47E-06	8.31E-07	2.30E-06	2.24E-07	1.26E-07	3.50E-07	1.01E-07	5.20E-08	1.53E-07
1492	569635.12	4215025.29	5.39E-07	3.06E-07	8.45E-07	8.24E-08	4.65E-08	1.29E-07	3.72E-08	1.91E-08	5.63E-08
1493	569634.02	4215015.97	5.23E-07	2.96E-07	8.20E-07	7.99E-08	4.51E-08	1.25E-07	3.61E-08	1.86E-08	5.46E-08
1494	569632.92	4215006.65	5.09E-07	2.88E-07	7.98E-07	7.78E-08	4.39E-08	1.22E-07	3.51E-08	1.81E-08	5.32E-08
1495	569631.81	4214997.33	4.96E-07	2.81E-07	7.77E-07	7.57E-08	4.27E-08	1.18E-07	3.42E-08	1.76E-08	5.17E-08
1496	569630.71	4214988.01	4.83E-07	2.74E-07	7.56E-07	7.37E-08	4.16E-08	1.15E-07	3.33E-08	1.71E-08	5.04E-08
1497	569629.6	4214978.69	4.66E-07	2.64E-07	7.31E-07	7.12E-08	4.02E-08	1.11E-07	3.21E-08	1.65E-08	4.87E-08
1498	569628.5	4214969.37	4.5E-07	2.55E-07	7.04E-07	6.87E-08	3.87E-08	1.07E-07	3.10E-08	1.60E-08	4.69E-08
1499	569627.4	4214960.05	4.34E-07	2.46E-07	6.79E-07	6.62E-08	3.74E-08	1.04E-07	2.99E-08	1.54E-08	4.53E-08
1500	569626.29	4214950.73	4.19E-07	2.37E-07	6.57E-07	6.40E-08	3.61E-08	1.00E-07	2.89E-08	1.49E-08	4.38E-08
1501	569625.19	4214941.4	4.06E-07	2.30E-07	6.36E-07	6.20E-08	3.50E-08	9.70E-08	2.80E-08	1.44E-08	4.24E-08
1502	569624.09	4214932.08	3.94E-07	2.23E-07	6.17E-07	6.01E-08	3.39E-08	9.41E-08	2.71E-08	1.40E-08	4.11E-08
1503	569622.98	4214922.76	3.82E-07	2.16E-07	5.98E-07	5.83E-08	3.29E-08	9.12E-08	2.63E-08	1.35E-08	3.98E-08
1504	569621.88	4214913.44	3.7E-07	2.09E-07	5.79E-07	5.64E-08	3.18E-08	8.83E-08	2.55E-08	1.31E-08	3.86E-08
1505	569620.78	4214904.12	3.58E-07	2.03E-07	5.61E-07	5.47E-08	3.09E-08	8.55E-08	2.47E-08	1.27E-08	3.74E-08
1506	569619.67	4214894.8	3.47E-07	1.97E-07	5.44E-07	5.30E-08	2.99E-08	8.30E-08	2.39E-08	1.23E-08	3.63E-08
1507	569618.57	4214885.48	3.38E-07	1.91E-07	5.30E-07	5.16E-08	2.91E-08	8.07E-08	2.33E-08	1.20E-08	3.53E-08
1508	569636.23	4215034.61	5.56E-07	3.15E-07	8.71E-07	8.49E-08	4.79E-08	1.33E-07	3.83E-08	1.97E-08	5.81E-08
1509	569640.9	4215043.11	5.75E-07	3.26E-07	9.00E-07	8.77E-08	4.95E-08	1.37E-07	3.96E-08	2.04E-08	6.00E-08
1510	569645.58	4215051.62	5.96E-07	3.38E-07	9.34E-07	9.11E-08	5.14E-08	1.42E-07	4.11E-08	2.12E-08	6.22E-08
1511	569650.25	4215060.12	6.2E-07	3.51E-07	9.71E-07	9.47E-08	5.34E-08	1.48E-07	4.27E-08	2.20E-08	6.47E-08
1512	569654.92	4215068.62	6.45E-07	3.65E-07	1.01E-06	9.84E-08	5.55E-08	1.54E-07	4.44E-08	2.29E-08	6.73E-08
1513	569659.6	4215077.12	6.7E-07	3.80E-07	1.05E-06	1.02E-07	5.77E-08	1.60E-07	4.62E-08	2.38E-08	6.99E-08
1514	569664.27	4215085.62	7.01E-07	3.97E-07	1.10E-06	1.07E-07	6.04E-08	1.67E-07	4.83E-08	2.49E-08	7.32E-08
1515	569668.95	4215094.12	7.35E-07	4.16E-07	1.15E-06	1.12E-07	6.33E-08	1.75E-07	5.06E-08	2.61E-08	7.67E-08
1516	569673.62	4215102.63	7.71E-07	4.37E-07	1.21E-06	1.18E-07	6.64E-08	1.84E-07	5.31E-08	2.73E-08	8.05E-08
1517	569678.3	4215111.13	8.08E-07	4.58E-07	1.27E-06	1.23E-07	6.97E-08	1.93E-07	5.57E-08	2.87E-08	8.44E-08
1518	569682.97	4215119.63	8.48E-07	4.80E-07	1.33E-06	1.29E-07	7.30E-08	2.02E-07	5.84E-08	3.01E-08	8.85E-08
1519	569711.02	4215170.64	1.19E-06	6.74E-07	1.86E-06	1.82E-07	1.02E-07	2.84E-07	8.20E-08	4.22E-08	1.24E-07
1520	569715.69	4215179.14	1.29E-06	7.28E-07	2.01E-06	1.96E-07	1.11E-07	3.07E-07	8.86E-08	4.56E-08	1.34E-07
1521	569720.37	4215187.65	1.39E-06	7.86E-07	2.17E-06	2.12E-07	1.20E-07	3.32E-07	9.57E-08	4.92E-08	1.45E-07
1522	569725.04	4215196.15	1.49E-06	8.44E-07	2.33E-06	2.28E-07	1.28E-07	3.56E-07	1.03E-07	5.29E-08	1.56E-07
1523	569729.72	4215204.65	1.5E-06	8.51E-07	2.35E-06	2.29E-07	1.29E-07	3.59E-07	1.04E-07	5.33E-08	1.57E-07
1524	569734.39	4215213.15	1.52E-06	8.59E-07	2.37E-06	2.31E-07	1.31E-07	3.62E-07	1.04E-07	5.38E-08	1.58E-07
1525	569739.07	4215221.65	1.53E-06	8.67E-07	2.40E-06	2.34E-07	1.32E-07	3.66E-07	1.05E-07	5.43E-08	1.60E-07
1526	569743.74	4215230.16	1.51E-06	8.55E-07	2.36E-06	2.31E-07	1.30E-07	3.61E-07	1.04E-07	5.36E-08	1.58E-07
1527	569748.42	4215238.66	1.45E-06	8.24E-07	2.28E-06	2.22E-07	1.25E-07	3.47E-07	1.00E-07	5.16E-08	1.52E-07
1528	569753.09	4215247.16	1.41E-06	7.96E-07	2.20E-06	2.15E-07	1.21E-07	3.36E-07	9.68E-08	4.98E-08	1.47E-07
1529	569757.77	4215255.66	1.36E-06	7.73E-07	2.14E-06	2.08E-07	1.18E-07	3.26E-07	9.40E-08	4.84E-08	1.42E-07
1530	569626.32	4215029.8	5.4E-07	3.06E-07	8.45E-07	8.24E-08	4.65E-08	1.29E-07	3.72E-08	1.91E-08	5.63E-08
1531	569625.18	4215020.17	5.23E-07	2.96E-07	8.19E-07	7.99E-08	4.51E-08	1.25E-07	3.60E-08	1.86E-08	5.46E-08
1532	569624.04	4215010.54	5.08E-07	2.88E-07	7.95E-07	7.75E-08	4.37E-08	1.21E-07	3.50E-08	1.80E-08	5.30E-08
1533	569622.9	4215000.9	4.93E-07	2.79E-07	7.73E-07	7.53E-08	4.25E-08	1.18E-07	3.40E-08	1.75E-08	5.15E-08
1534	569621.76	4214991.27	4.79E-07	2.72E-07	7.51E-07	7.32E-08	4.13E-08	1.15E-07	3.30E-08	1.70E-08	5.00E-08
1535	569620.62	4214981.64	4.64E-07	2.63E-07	7.27E-07	7.09E-08	4.00E-08	1.11E-07	3.20E-08	1.65E-08	4.85E-08
1536	569619.48	4214972.01	4.48E-07	2.54E-07	7.01E-07	6.84E-08	3.86E-08	1.07E-07	3.09E-08	1.59E-08	4.67E-08
1537	569618.34	4214962.38	4.32E-07	2.45E-07	6.77E-07	6.59E-08	3.72E-08	1.03E-07	2.98E-08	1.53E-08	4.51E-08
1538	569617.2	4214952.75	4.17E-07	2.36E-07	6.54E-07	6.37E-08	3.60E-08	9.97E-08	2.88E-08	1.48E-08	4.36E-08
1539	569616.06	4214943.12	4.04E-07	2.29E-07	6.33E-07	6.17E-08	3.48E-08	9.66E-08	2.79E-08	1.43E-08	4.22E-08
1540	569614.92	4214933.48	3.92E-07	2.22E-07	6.14E-07	5.99E-08	3.38E-08	9.37E-08	2.70E-08	1.39E-08	4.09E-08
1541	569613.78	4214923.85	3.81E-07	2.16E-07	5.96E-07	5.81E-08	3.28E-08	9.09E-08	2.62E-08	1.35E-08	3.97E-08
1542	569612.64	4214914.22	3.69E-07	2.09E-07	5.77E-07	5.63E-08	3.18E-08	8.81E-08	2.54E-08	1.31E-08	3.85E-08
1543	569611.5	4214904.59	3.57E-07	2.02E-07	5.60E-07	5.46E-08	3.08E-08	8.54E-08	2.46E-08	1.27E-08	3.73E-08
1544	569610.36	4214894.96	3.47E-07	1.97E-07	5.44E-07	5.30E-08	2.99E-08	8.29E-08	2.39E-08	1.23E-08	3.62E-08
1545	569627.46	4215039.43	5.56E-07	3.15E-07	8.71E-07	8.49E-08	4.79E-08	1.33E-07	3.83E-08	1.97E-08	5.80E-08
1546	569632.14	4215047.93	5.75E-07	3.26E-07	9.01E-07	8.79E-08	4.96E-08	1.37E-07	3.97E-08	2.04E-08	6.01E-08

1547	569636.81	4215056.43	5.97E-07	3.38E-07	9.36E-07	9.12E-08	5.15E-08	1.43E-07	4.12E-08	2.12E-08	6.24E-08
1548	569641.49	4215064.94	6.2E-07	3.51E-07	9.72E-07	9.47E-08	5.34E-08	1.48E-07	4.27E-08	2.20E-08	6.47E-08
1549	569646.16	4215073.44	6.43E-07	3.65E-07	1.01E-06	9.83E-08	5.54E-08	1.54E-07	4.43E-08	2.28E-08	6.72E-08
1550	569650.84	4215081.94	6.7E-07	3.80E-07	1.05E-06	1.02E-07	5.77E-08	1.60E-07	4.62E-08	2.38E-08	7.00E-08
1551	569655.51	4215090.44	7.01E-07	3.97E-07	1.10E-06	1.07E-07	6.04E-08	1.67E-07	4.83E-08	2.48E-08	7.31E-08
1552	569660.19	4215098.94	7.33E-07	4.15E-07	1.15E-06	1.12E-07	6.32E-08	1.75E-07	5.05E-08	2.60E-08	7.65E-08
1553	569664.86	4215107.44	7.68E-07	4.35E-07	1.20E-06	1.17E-07	6.62E-08	1.83E-07	5.29E-08	2.72E-08	8.02E-08
1554	569669.54	4215115.95	8.03E-07	4.55E-07	1.26E-06	1.23E-07	6.92E-08	1.92E-07	5.53E-08	2.85E-08	8.38E-08
1555	569674.21	4215124.45	8.41E-07	4.76E-07	1.32E-06	1.28E-07	7.24E-08	2.01E-07	5.79E-08	2.98E-08	8.78E-08
1556	569688.23	4215149.95	9.71E-07	5.50E-07	1.52E-06	1.48E-07	8.37E-08	2.32E-07	6.69E-08	3.44E-08	1.01E-07
1557	569692.91	4215158.46	1.02E-06	5.78E-07	1.60E-06	1.56E-07	8.78E-08	2.44E-07	7.02E-08	3.62E-08	1.06E-07
1558	569697.58	4215166.96	1.08E-06	6.11E-07	1.69E-06	1.65E-07	9.30E-08	2.58E-07	7.44E-08	3.83E-08	1.13E-07
1559	569702.26	4215175.46	1.16E-06	6.59E-07	1.82E-06	1.78E-07	1.00E-07	2.78E-07	8.02E-08	4.13E-08	1.22E-07
1560	569706.93	4215183.96	1.26E-06	7.13E-07	1.97E-06	1.92E-07	1.08E-07	3.00E-07	8.67E-08	4.46E-08	1.31E-07
1561	569711.61	4215192.46	1.36E-06	7.69E-07	2.13E-06	2.07E-07	1.17E-07	3.24E-07	9.36E-08	4.82E-08	1.42E-07
1562	569716.28	4215200.97	1.42E-06	8.06E-07	2.23E-06	2.17E-07	1.23E-07	3.40E-07	9.80E-08	5.04E-08	1.48E-07
1563	569720.96	4215209.47	1.45E-06	8.19E-07	2.26E-06	2.21E-07	1.25E-07	3.45E-07	9.96E-08	5.13E-08	1.51E-07
1564	569725.63	4215217.97	1.46E-06	8.26E-07	2.28E-06	2.23E-07	1.26E-07	3.48E-07	1.01E-07	5.17E-08	1.52E-07
1565	569730.31	4215226.47	1.47E-06	8.31E-07	2.30E-06	2.24E-07	1.26E-07	3.50E-07	1.01E-07	5.20E-08	1.53E-07
1566	569734.98	4215234.97	1.41E-06	7.97E-07	2.21E-06	2.15E-07	1.21E-07	3.36E-07	9.70E-08	4.99E-08	1.47E-07
1567	569739.65	4215243.48	1.36E-06	7.68E-07	2.12E-06	2.07E-07	1.17E-07	3.24E-07	9.34E-08	4.81E-08	1.42E-07
1568	569744.33	4215251.98	1.31E-06	7.43E-07	2.05E-06	2.00E-07	1.13E-07	3.13E-07	9.04E-08	4.65E-08	1.37E-07
1569	569749	4215260.48	1.27E-06	7.22E-07	2.00E-06	1.95E-07	1.10E-07	3.04E-07	8.78E-08	4.52E-08	1.33E-07
1570	569984.77	4215238.15	7E-06	3.97E-06	1.10E-05	1.07E-06	6.03E-07	1.67E-06	4.83E-07	2.48E-07	7.31E-07
1571	569985.08	4215247.82	6.44E-06	3.65E-06	1.01E-05	9.83E-07	5.55E-07	1.54E-06	4.44E-07	2.28E-07	6.72E-07
1572	569985.4	4215257.49	5.86E-06	3.32E-06	9.18E-06	8.95E-07	5.05E-07	1.40E-06	4.04E-07	2.08E-07	6.12E-07
1573	569985.71	4215267.16	5.27E-06	2.98E-06	8.25E-06	8.04E-07	4.54E-07	1.26E-06	3.63E-07	1.87E-07	5.50E-07
1574	569986.03	4215276.84	4.74E-06	2.68E-06	7.42E-06	7.24E-07	4.08E-07	1.13E-06	3.27E-07	1.68E-07	4.95E-07
1575	569986.34	4215286.51	4.31E-06	2.44E-06	6.75E-06	6.58E-07	3.71E-07	1.03E-06	2.97E-07	1.53E-07	4.50E-07
1576	569986.66	4215296.18	4.21E-06	2.38E-06	6.59E-06	6.42E-07	3.62E-07	1.00E-06	2.90E-07	1.49E-07	4.39E-07
1577	569986.97	4215305.85	4.15E-06	2.35E-06	6.50E-06	6.34E-07	3.58E-07	9.92E-07	2.86E-07	1.47E-07	4.33E-07
1578	569987.29	4215315.52	4.15E-06	2.35E-06	6.50E-06	6.33E-07	3.57E-07	9.91E-07	2.86E-07	1.47E-07	4.33E-07
1579	569987.6	4215325.19	4.28E-06	2.43E-06	6.71E-06	6.54E-07	3.69E-07	1.02E-06	2.95E-07	1.52E-07	4.47E-07
1580	569987.92	4215334.86	4.47E-06	2.53E-06	7.00E-06	6.82E-07	3.85E-07	1.07E-06	3.08E-07	1.58E-07	4.66E-07
1581	569988.23	4215344.54	4.76E-06	2.70E-06	7.46E-06	7.27E-07	4.10E-07	1.14E-06	3.28E-07	1.69E-07	4.97E-07
1582	569988.55	4215354.21	4.73E-06	2.68E-06	7.40E-06	7.22E-07	4.07E-07	1.13E-06	3.26E-07	1.68E-07	4.93E-07
1583	569988.86	4215363.88	4.6E-06	2.61E-06	7.21E-06	7.02E-07	3.96E-07	1.10E-06	3.17E-07	1.63E-07	4.80E-07
1584	569989.18	4215373.55	4.61E-06	2.61E-06	7.22E-06	7.04E-07	3.97E-07	1.10E-06	3.18E-07	1.63E-07	4.81E-07
1585	569973.51	4215199.79	7.6E-06	4.30E-06	1.19E-05	1.16E-06	6.55E-07	1.81E-06	5.24E-07	2.70E-07	7.93E-07
1586	569973.83	4215209.46	7.33E-06	4.15E-06	1.15E-05	1.12E-06	6.31E-07	1.75E-06	5.05E-07	2.60E-07	7.65E-07
1587	569974.14	4215219.13	6.91E-06	3.91E-06	1.08E-05	1.06E-06	5.95E-07	1.65E-06	4.76E-07	2.45E-07	7.21E-07
1588	569974.46	4215228.8	6.46E-06	3.66E-06	1.01E-05	9.86E-07	5.56E-07	1.54E-06	4.45E-07	2.29E-07	6.74E-07
1589	569974.77	4215238.48	6.04E-06	3.42E-06	9.46E-06	9.22E-07	5.20E-07	1.44E-06	4.16E-07	2.14E-07	6.30E-07
1590	569975.09	4215248.15	5.6E-06	3.17E-06	8.78E-06	8.56E-07	4.83E-07	1.34E-06	3.86E-07	1.99E-07	5.85E-07
1591	569975.4	4215257.82	5.16E-06	2.92E-06	8.08E-06	7.87E-07	4.44E-07	1.23E-06	3.55E-07	1.83E-07	5.38E-07
1592	569975.72	4215267.49	4.67E-06	2.65E-06	7.32E-06	7.14E-07	4.03E-07	1.12E-06	3.22E-07	1.66E-07	4.88E-07
1593	569976.03	4215277.16	4.25E-06	2.41E-06	6.66E-06	6.49E-07	3.66E-07	1.02E-06	2.93E-07	1.51E-07	4.44E-07
1594	569976.35	4215286.83	3.92E-06	2.22E-06	6.14E-06	5.98E-07	3.38E-07	9.36E-07	2.70E-07	1.39E-07	4.09E-07
1595	569976.66	4215296.5	3.85E-06	2.18E-06	6.04E-06	5.88E-07	3.32E-07	9.20E-07	2.66E-07	1.37E-07	4.02E-07
1596	569976.98	4215306.18	3.82E-06	2.17E-06	5.99E-06	5.84E-07	3.29E-07	9.13E-07	2.63E-07	1.36E-07	3.99E-07
1597	569977.29	4215315.85	3.83E-06	2.17E-06	5.99E-06	5.84E-07	3.30E-07	9.14E-07	2.64E-07	1.36E-07	3.99E-07
1598	569977.61	4215325.52	3.97E-06	2.25E-06	6.22E-06	6.06E-07	3.42E-07	9.48E-07	2.74E-07	1.41E-07	4.14E-07
1599	569977.92	4215335.19	4.14E-06	2.35E-06	6.49E-06	6.33E-07	3.57E-07	9.90E-07	2.86E-07	1.47E-07	4.33E-07
1600	569978.24	4215344.86	4.44E-06	2.51E-06	6.95E-06	6.78E-07	3.82E-07	1.06E-06	3.06E-07	1.57E-07	4.63E-07
1601	569978.55	4215354.53	4.43E-06	2.51E-06	6.93E-06	6.76E-07	3.81E-07	1.06E-06	3.05E-07	1.57E-07	4.62E-07
1602	569978.87	4215364.2	4.37E-06	2.47E-06	6.84E-06	6.67E-07	3.76E-07	1.04E-06	3.01E-07	1.55E-07	4.56E-07
1603	569979.18	4215373.88	4.53E-06	2.57E-06	7.10E-06	6.92E-07	3.90E-07	1.08E-06	3.12E-07	1.61E-07	4.73E-07
1604	569962.57	4215171.1	6.93E-06	3.93E-06	1.09E-05	1.06E-06	5.97E-07	1.66E-06	4.77E-07	2.46E-07	7.23E-07
1605	569962.89	4215180.77	7E-06	3.97E-06	1.10E-05	1.07E-06	6.03E-07	1.67E-06	4.83E-07	2.48E-07	7.31E-07
1606	569963.2	4215190.44	6.9E-06	3.91E-06	1.08E-05	1.05E-06	5.95E-07	1.65E-06	4.76E-07	2.45E-07	7.20E-07
1607	569963.52	4215200.12	6.72E-06	3.81E-06	1.05E-05	1.03E-06	5.79E-07	1.61E-06	4.63E-07	2.38E-07	7.02E-07
1608	569963.83	4215209.79	6.38E-06	3.62E-06	1.00E-05	9.75E-07	5.50E-07	1.52E-06	4.40E-07	2.26E-07	6.66E-07

1609	569964.15	4215219.46	5.96E-06	3.37E-06	9.33E-06	9.10E-07	5.13E-07	1.42E-06	4.10E-07	2.11E-07	6.22E-07
1610	569964.46	4215229.13	5.54E-06	3.14E-06	8.68E-06	8.46E-07	4.77E-07	1.32E-06	3.82E-07	1.97E-07	5.78E-07
1611	569964.78	4215238.8	5.23E-06	2.96E-06	8.20E-06	7.99E-07	4.51E-07	1.25E-06	3.61E-07	1.86E-07	5.46E-07
1612	569965.09	4215248.47	4.91E-06	2.78E-06	7.70E-06	7.50E-07	4.23E-07	1.17E-06	3.39E-07	1.74E-07	5.13E-07
1613	569965.41	4215258.14	4.58E-06	2.59E-06	7.17E-06	6.99E-07	3.94E-07	1.09E-06	3.15E-07	1.62E-07	4.78E-07
1614	569965.72	4215267.82	4.18E-06	2.37E-06	6.55E-06	6.39E-07	3.60E-07	9.99E-07	2.88E-07	1.48E-07	4.37E-07
1615	569966.04	4215277.49	3.84E-06	2.18E-06	6.01E-06	5.86E-07	3.31E-07	9.17E-07	2.65E-07	1.36E-07	4.01E-07
1616	569966.35	4215287.16	3.58E-06	2.03E-06	5.61E-06	5.47E-07	3.09E-07	8.55E-07	2.47E-07	1.27E-07	3.74E-07
1617	569966.67	4215296.83	3.54E-06	2.01E-06	5.55E-06	5.41E-07	3.05E-07	8.46E-07	2.44E-07	1.26E-07	3.70E-07
1618	569966.98	4215306.5	3.53E-06	2.00E-06	5.53E-06	5.39E-07	3.04E-07	8.43E-07	2.43E-07	1.25E-07	3.68E-07
1619	569967.3	4215316.17	3.54E-06	2.00E-06	5.54E-06	5.40E-07	3.05E-07	8.45E-07	2.44E-07	1.25E-07	3.69E-07
1620	569967.61	4215325.84	3.69E-06	2.09E-06	5.78E-06	5.63E-07	3.18E-07	8.81E-07	2.54E-07	1.31E-07	3.85E-07
1621	569967.93	4215335.52	3.86E-06	2.19E-06	6.04E-06	5.89E-07	3.32E-07	9.21E-07	2.66E-07	1.37E-07	4.03E-07
1622	569968.24	4215345.19	4.06E-06	2.30E-06	6.36E-06	6.20E-07	3.50E-07	9.70E-07	2.80E-07	1.44E-07	4.24E-07
1623	569968.56	4215354.86	4.07E-06	2.30E-06	6.37E-06	6.21E-07	3.50E-07	9.71E-07	2.80E-07	1.44E-07	4.25E-07
1624	569968.87	4215364.53	4.17E-06	2.36E-06	6.53E-06	6.36E-07	3.59E-07	9.95E-07	2.87E-07	1.48E-07	4.35E-07
1625	569969.19	4215374.2	4.5E-06	2.55E-06	7.05E-06	6.87E-07	3.88E-07	1.08E-06	3.10E-07	1.60E-07	4.70E-07
1626	569952.26	4215161.76	6.04E-06	3.42E-06	9.47E-06	9.23E-07	5.21E-07	1.44E-06	4.17E-07	2.14E-07	6.31E-07
1627	569952.58	4215171.43	6.24E-06	3.53E-06	9.77E-06	9.52E-07	5.37E-07	1.49E-06	4.30E-07	2.21E-07	6.51E-07
1628	569952.89	4215181.1	6.28E-06	3.56E-06	9.84E-06	9.59E-07	5.41E-07	1.50E-06	4.33E-07	2.23E-07	6.56E-07
1629	569953.21	4215190.77	6.19E-06	3.50E-06	9.69E-06	9.45E-07	5.33E-07	1.48E-06	4.26E-07	2.19E-07	6.46E-07
1630	569953.52	4215200.44	6.02E-06	3.41E-06	9.42E-06	9.19E-07	5.18E-07	1.44E-06	4.15E-07	2.13E-07	6.28E-07
1631	569953.84	4215210.11	5.68E-06	3.22E-06	8.90E-06	8.67E-07	4.89E-07	1.36E-06	3.91E-07	2.01E-07	5.93E-07
1632	569954.15	4215219.78	5.26E-06	2.98E-06	8.24E-06	8.03E-07	4.53E-07	1.26E-06	3.62E-07	1.87E-07	5.49E-07
1633	569954.47	4215229.46	4.87E-06	2.76E-06	7.63E-06	7.44E-07	4.20E-07	1.16E-06	3.36E-07	1.73E-07	5.09E-07
1634	569954.78	4215239.13	4.6E-06	2.61E-06	7.21E-06	7.03E-07	3.97E-07	1.10E-06	3.17E-07	1.63E-07	4.81E-07
1635	569955.1	4215248.8	4.33E-06	2.45E-06	6.79E-06	6.62E-07	3.73E-07	1.03E-06	2.99E-07	1.54E-07	4.52E-07
1636	569955.41	4215258.47	4.06E-06	2.30E-06	6.36E-06	6.20E-07	3.50E-07	9.70E-07	2.80E-07	1.44E-07	4.24E-07
1637	569955.73	4215268.14	3.78E-06	2.14E-06	5.92E-06	5.77E-07	3.25E-07	9.02E-07	2.60E-07	1.34E-07	3.94E-07
1638	569956.04	4215277.81	3.53E-06	2.00E-06	5.53E-06	5.39E-07	3.04E-07	8.43E-07	2.43E-07	1.25E-07	3.68E-07
1639	569956.36	4215287.48	3.34E-06	1.89E-06	5.23E-06	5.10E-07	2.88E-07	7.98E-07	2.30E-07	1.18E-07	3.49E-07
1640	569956.67	4215297.16	3.3E-06	1.87E-06	5.18E-06	5.05E-07	2.85E-07	7.89E-07	2.28E-07	1.17E-07	3.45E-07
1641	569956.99	4215306.83	3.29E-06	1.86E-06	5.15E-06	5.02E-07	2.83E-07	7.86E-07	2.27E-07	1.17E-07	3.43E-07
1642	569957.3	4215316.5	3.3E-06	1.87E-06	5.17E-06	5.04E-07	2.84E-07	7.88E-07	2.27E-07	1.17E-07	3.44E-07
1643	569957.62	4215326.17	3.42E-06	1.94E-06	5.36E-06	5.22E-07	2.95E-07	8.17E-07	2.36E-07	1.21E-07	3.57E-07
1644	569957.93	4215335.84	3.56E-06	2.02E-06	5.58E-06	5.44E-07	3.07E-07	8.50E-07	2.45E-07	1.26E-07	3.72E-07
1645	569958.25	4215345.51	3.73E-06	2.11E-06	5.84E-06	5.69E-07	3.21E-07	8.91E-07	2.57E-07	1.32E-07	3.89E-07
1646	569958.56	4215355.18	3.77E-06	2.14E-06	5.90E-06	5.76E-07	3.25E-07	9.00E-07	2.60E-07	1.34E-07	3.93E-07
1647	569958.88	4215364.86	3.95E-06	2.24E-06	6.19E-06	6.03E-07	3.40E-07	9.43E-07	2.72E-07	1.40E-07	4.12E-07
1648	569959.19	4215374.53	4.46E-06	2.53E-06	6.99E-06	6.81E-07	3.84E-07	1.07E-06	3.07E-07	1.58E-07	4.66E-07
1649	569942.58	4215171.75	5.66E-06	3.21E-06	8.87E-06	8.65E-07	4.88E-07	1.35E-06	3.90E-07	2.01E-07	5.91E-07
1650	569942.9	4215181.42	5.69E-06	3.22E-06	8.91E-06	8.68E-07	4.90E-07	1.36E-06	3.92E-07	2.02E-07	5.94E-07
1651	569943.21	4215191.1	5.67E-06	3.21E-06	8.89E-06	8.67E-07	4.89E-07	1.36E-06	3.91E-07	2.01E-07	5.92E-07
1652	569943.53	4215200.77	5.42E-06	3.07E-06	8.49E-06	8.27E-07	4.67E-07	1.29E-06	3.73E-07	1.92E-07	5.65E-07
1653	569943.84	4215210.44	5.08E-06	2.88E-06	7.96E-06	7.76E-07	4.38E-07	1.21E-06	3.50E-07	1.80E-07	5.30E-07
1654	569944.16	4215220.11	4.67E-06	2.65E-06	7.32E-06	7.14E-07	4.03E-07	1.12E-06	3.22E-07	1.66E-07	4.88E-07
1655	569944.47	4215229.78	4.32E-06	2.45E-06	6.76E-06	6.59E-07	3.72E-07	1.03E-06	2.98E-07	1.53E-07	4.51E-07
1656	569944.79	4215239.45	4.08E-06	2.31E-06	6.39E-06	6.23E-07	3.51E-07	9.74E-07	2.81E-07	1.45E-07	4.26E-07
1657	569945.1	4215249.12	3.84E-06	2.18E-06	6.02E-06	5.87E-07	3.31E-07	9.18E-07	2.65E-07	1.36E-07	4.01E-07
1658	569945.42	4215258.8	3.62E-06	2.05E-06	5.68E-06	5.53E-07	3.12E-07	8.66E-07	2.50E-07	1.29E-07	3.78E-07
1659	569945.73	4215268.47	3.43E-06	1.95E-06	5.38E-06	5.24E-07	2.96E-07	8.20E-07	2.37E-07	1.22E-07	3.59E-07
1660	569946.05	4215278.14	3.27E-06	1.85E-06	5.12E-06	4.99E-07	2.82E-07	7.80E-07	2.25E-07	1.16E-07	3.41E-07
1661	569946.36	4215287.81	3.14E-06	1.78E-06	4.92E-06	4.79E-07	2.70E-07	7.50E-07	2.16E-07	1.11E-07	3.28E-07
1662	569946.68	4215297.48	3.1E-06	1.76E-06	4.86E-06	4.74E-07	2.67E-07	7.41E-07	2.14E-07	1.10E-07	3.24E-07
1663	569946.99	4215307.15	3.08E-06	1.75E-06	4.83E-06	4.71E-07	2.66E-07	7.36E-07	2.12E-07	1.09E-07	3.22E-07
1664	569947.31	4215316.82	3.09E-06	1.75E-06	4.83E-06	4.71E-07	2.66E-07	7.37E-07	2.13E-07	1.09E-07	3.22E-07
1665	569947.62	4215326.5	3.18E-06	1.80E-06	4.97E-06	4.85E-07	2.74E-07	7.59E-07	2.19E-07	1.13E-07	3.31E-07
1666	569947.94	4215336.17	3.28E-06	1.86E-06	5.14E-06	5.01E-07	2.83E-07	7.83E-07	2.26E-07	1.16E-07	3.42E-07
1667	569948.25	4215345.84	3.41E-06	1.93E-06	5.34E-06	5.20E-07	2.94E-07	8.14E-07	2.35E-07	1.21E-07	3.56E-07
1668	569948.57	4215355.51	3.49E-06	1.98E-06	5.47E-06	5.33E-07	3.01E-07	8.34E-07	2.40E-07	1.24E-07	3.64E-07
1669	569948.88	4215365.18	3.75E-06	2.12E-06	5.88E-06	5.73E-07	3.23E-07	8.96E-07	2.58E-07	1.33E-07	3.91E-07
1670	569949.2	4215374.85	4.44E-06	2.51E-06	6.95E-06	6.77E-07	3.82E-07	1.06E-06	3.06E-07	1.57E-07	4.63E-07

1671	569932.59	4215172.08	5.18E-06	2.93E-06	8.11E-06	7.91E-07	4.46E-07	1.24E-06	3.57E-07	1.84E-07	5.41E-07
1672	569932.9	4215181.75	5.18E-06	2.94E-06	8.12E-06	7.92E-07	4.47E-07	1.24E-06	3.57E-07	1.84E-07	5.41E-07
1673	569933.22	4215191.42	5.17E-06	2.93E-06	8.10E-06	7.89E-07	4.46E-07	1.24E-06	3.56E-07	1.83E-07	5.40E-07
1674	569933.53	4215201.09	4.9E-06	2.78E-06	7.68E-06	7.49E-07	4.23E-07	1.17E-06	3.38E-07	1.74E-07	5.12E-07
1675	569933.85	4215210.76	4.57E-06	2.59E-06	7.15E-06	6.97E-07	3.93E-07	1.09E-06	3.15E-07	1.62E-07	4.77E-07
1676	569934.16	4215220.44	4.17E-06	2.37E-06	6.54E-06	6.37E-07	3.60E-07	9.97E-07	2.88E-07	1.48E-07	4.36E-07
1677	569934.48	4215230.11	3.85E-06	2.18E-06	6.03E-06	5.88E-07	3.32E-07	9.20E-07	2.65E-07	1.37E-07	4.02E-07
1678	569934.79	4215239.78	3.64E-06	2.06E-06	5.70E-06	5.55E-07	3.13E-07	8.69E-07	2.51E-07	1.29E-07	3.80E-07
1679	569935.11	4215249.45	3.43E-06	1.94E-06	5.38E-06	5.24E-07	2.96E-07	8.20E-07	2.37E-07	1.22E-07	3.58E-07
1680	569935.42	4215259.12	3.26E-06	1.85E-06	5.11E-06	4.98E-07	2.81E-07	7.79E-07	2.25E-07	1.16E-07	3.40E-07
1681	569935.74	4215268.79	3.14E-06	1.78E-06	4.93E-06	4.80E-07	2.71E-07	7.51E-07	2.17E-07	1.12E-07	3.28E-07
1682	569936.05	4215278.46	3.04E-06	1.72E-06	4.76E-06	4.64E-07	2.62E-07	7.26E-07	2.09E-07	1.08E-07	3.17E-07
1683	569936.37	4215288.14	2.96E-06	1.67E-06	4.63E-06	4.51E-07	2.55E-07	7.06E-07	2.04E-07	1.05E-07	3.09E-07
1684	569936.68	4215297.81	2.92E-06	1.65E-06	4.57E-06	4.46E-07	2.51E-07	6.97E-07	2.01E-07	1.04E-07	3.05E-07
1685	569937	4215307.48	2.89E-06	1.64E-06	4.53E-06	4.42E-07	2.49E-07	6.91E-07	1.99E-07	1.03E-07	3.02E-07
1686	569937.31	4215317.15	2.89E-06	1.64E-06	4.53E-06	4.41E-07	2.49E-07	6.90E-07	1.99E-07	1.03E-07	3.02E-07
1687	569937.63	4215326.82	2.95E-06	1.67E-06	4.63E-06	4.51E-07	2.54E-07	7.05E-07	2.03E-07	1.05E-07	3.08E-07
1688	569937.94	4215336.49	3.04E-06	1.72E-06	4.75E-06	4.63E-07	2.62E-07	7.25E-07	2.09E-07	1.08E-07	3.17E-07
1689	569938.26	4215346.16	3.15E-06	1.78E-06	4.93E-06	4.81E-07	2.71E-07	7.52E-07	2.17E-07	1.12E-07	3.29E-07
1690	569938.57	4215355.84	3.28E-06	1.86E-06	5.14E-06	5.01E-07	2.83E-07	7.84E-07	2.26E-07	1.16E-07	3.43E-07
1691	569938.89	4215365.51	3.63E-06	2.06E-06	5.69E-06	5.54E-07	3.13E-07	8.67E-07	2.50E-07	1.29E-07	3.79E-07
1692	569939.2	4215375.18	4.48E-06	2.54E-06	7.02E-06	6.84E-07	3.86E-07	1.07E-06	3.09E-07	1.59E-07	4.68E-07
1693	569922.91	4215182.08	4.76E-06	2.70E-06	7.46E-06	7.28E-07	4.11E-07	1.14E-06	3.28E-07	1.69E-07	4.97E-07
1694	569923.22	4215191.75	4.78E-06	2.71E-06	7.49E-06	7.30E-07	4.12E-07	1.14E-06	3.29E-07	1.70E-07	4.99E-07
1695	569923.54	4215201.42	4.56E-06	2.58E-06	7.14E-06	6.96E-07	3.93E-07	1.09E-06	3.14E-07	1.62E-07	4.76E-07
1696	569923.85	4215211.09	4.23E-06	2.40E-06	6.62E-06	6.46E-07	3.64E-07	1.01E-06	2.91E-07	1.50E-07	4.41E-07
1697	569924.17	4215220.76	3.84E-06	2.17E-06	6.01E-06	5.86E-07	3.31E-07	9.17E-07	2.65E-07	1.36E-07	4.01E-07
1698	569924.48	4215230.43	3.52E-06	2.00E-06	5.52E-06	5.38E-07	3.04E-07	8.42E-07	2.43E-07	1.25E-07	3.68E-07
1699	569924.8	4215240.1	3.32E-06	1.88E-06	5.20E-06	5.07E-07	2.86E-07	7.93E-07	2.29E-07	1.18E-07	3.46E-07
1700	569925.11	4215249.78	3.12E-06	1.77E-06	4.90E-06	4.77E-07	2.69E-07	7.46E-07	2.15E-07	1.11E-07	3.26E-07
1701	569925.43	4215259.45	2.98E-06	1.69E-06	4.66E-06	4.54E-07	2.56E-07	7.11E-07	2.05E-07	1.06E-07	3.11E-07
1702	569925.74	4215269.12	2.89E-06	1.64E-06	4.53E-06	4.41E-07	2.49E-07	6.90E-07	1.99E-07	1.02E-07	3.02E-07
1703	569926.06	4215278.79	2.81E-06	1.59E-06	4.41E-06	4.29E-07	2.42E-07	6.72E-07	1.94E-07	9.98E-08	2.94E-07
1704	569926.37	4215288.46	2.75E-06	1.56E-06	4.31E-06	4.20E-07	2.37E-07	6.57E-07	1.90E-07	9.76E-08	2.87E-07
1705	569926.69	4215298.13	2.72E-06	1.54E-06	4.25E-06	4.15E-07	2.34E-07	6.49E-07	1.87E-07	9.63E-08	2.83E-07
1706	569927	4215307.8	2.69E-06	1.52E-06	4.22E-06	4.11E-07	2.32E-07	6.43E-07	1.85E-07	9.55E-08	2.81E-07
1707	569927.32	4215317.48	2.69E-06	1.52E-06	4.21E-06	4.11E-07	2.32E-07	6.42E-07	1.85E-07	9.54E-08	2.81E-07
1708	569927.63	4215327.15	2.75E-06	1.56E-06	4.31E-06	4.20E-07	2.37E-07	6.57E-07	1.89E-07	9.75E-08	2.87E-07
1709	569927.95	4215336.82	2.83E-06	1.61E-06	4.44E-06	4.33E-07	2.44E-07	6.77E-07	1.95E-07	1.01E-07	2.96E-07
1710	569928.26	4215346.49	2.96E-06	1.68E-06	4.64E-06	4.52E-07	2.55E-07	7.07E-07	2.04E-07	1.05E-07	3.09E-07
1711	569928.58	4215356.16	3.13E-06	1.77E-06	4.91E-06	4.78E-07	2.70E-07	7.48E-07	2.16E-07	1.11E-07	3.27E-07
1712	569928.89	4215365.83	3.54E-06	2.00E-06	5.54E-06	5.40E-07	3.05E-07	8.45E-07	2.44E-07	1.25E-07	3.69E-07
1713	569929.21	4215375.5	4.47E-06	2.53E-06	7.00E-06	6.82E-07	3.85E-07	1.07E-06	3.08E-07	1.59E-07	4.66E-07
1714	569912.91	4215182.4	4.4E-06	2.49E-06	6.90E-06	6.72E-07	3.79E-07	1.05E-06	3.03E-07	1.56E-07	4.60E-07
1715	569913.23	4215192.07	4.44E-06	2.51E-06	6.95E-06	6.78E-07	3.82E-07	1.06E-06	3.06E-07	1.57E-07	4.63E-07
1716	569913.54	4215201.74	4.25E-06	2.41E-06	6.66E-06	6.49E-07	3.66E-07	1.02E-06	2.93E-07	1.51E-07	4.44E-07
1717	569913.86	4215211.42	3.93E-06	2.23E-06	6.16E-06	6.00E-07	3.39E-07	9.39E-07	2.71E-07	1.39E-07	4.10E-07
1718	569914.17	4215221.09	3.55E-06	2.01E-06	5.55E-06	5.41E-07	3.06E-07	8.47E-07	2.44E-07	1.26E-07	3.70E-07
1719	569914.49	4215230.76	3.24E-06	1.84E-06	5.08E-06	4.95E-07	2.80E-07	7.75E-07	2.24E-07	1.15E-07	3.39E-07
1720	569914.8	4215240.43	3.05E-06	1.73E-06	4.77E-06	4.65E-07	2.63E-07	7.28E-07	2.10E-07	1.08E-07	3.18E-07
1721	569915.12	4215250.1	2.87E-06	1.62E-06	4.49E-06	4.38E-07	2.47E-07	6.85E-07	1.98E-07	1.02E-07	2.99E-07
1722	569915.43	4215259.77	2.73E-06	1.55E-06	4.28E-06	4.17E-07	2.35E-07	6.52E-07	1.88E-07	9.68E-08	2.85E-07
1723	569915.75	4215269.44	2.66E-06	1.51E-06	4.16E-06	4.06E-07	2.29E-07	6.35E-07	1.83E-07	9.43E-08	2.78E-07
1724	569916.06	4215279.12	2.6E-06	1.47E-06	4.07E-06	3.96E-07	2.24E-07	6.20E-07	1.79E-07	9.21E-08	2.71E-07
1725	569916.38	4215288.79	2.54E-06	1.44E-06	3.98E-06	3.88E-07	2.19E-07	6.08E-07	1.75E-07	9.02E-08	2.65E-07
1726	569916.69	4215298.46	2.51E-06	1.42E-06	3.93E-06	3.83E-07	2.16E-07	5.99E-07	1.73E-07	8.89E-08	2.62E-07
1727	569917.01	4215308.13	2.5E-06	1.42E-06	3.92E-06	3.82E-07	2.15E-07	5.97E-07	1.72E-07	8.86E-08	2.61E-07
1728	569917.32	4215317.8	2.5E-06	1.42E-06	3.91E-06	3.81E-07	2.15E-07	5.97E-07	1.72E-07	8.86E-08	2.61E-07
1729	569917.64	4215327.47	2.57E-06	1.45E-06	4.02E-06	3.92E-07	2.21E-07	6.13E-07	1.77E-07	9.11E-08	2.68E-07
1730	569917.95	4215337.14	2.66E-06	1.51E-06	4.17E-06	4.07E-07	2.30E-07	6.36E-07	1.84E-07	9.45E-08	2.78E-07
1731	569918.27	4215346.82	2.81E-06	1.59E-06	4.40E-06	4.29E-07	2.42E-07	6.71E-07	1.94E-07	9.96E-08	2.93E-07
1732	569918.58	4215356.49	2.99E-06	1.69E-06	4.68E-06	4.56E-07	2.57E-07	7.13E-07	2.06E-07	1.06E-07	3.12E-07

1733	569918.9	4215366.16	3.37E-06	1.91E-06	5.29E-06	5.15E-07	2.91E-07	8.06E-07	2.33E-07	1.20E-07	3.52E-07
1734	569919.21	4215375.83	4.19E-06	2.37E-06	6.56E-06	6.39E-07	3.61E-07	1.00E-06	2.88E-07	1.48E-07	4.37E-07
1735	569903.23	4215192.4	4.14E-06	2.35E-06	6.48E-06	6.32E-07	3.57E-07	9.89E-07	2.85E-07	1.47E-07	4.32E-07
1736	569903.55	4215202.07	3.98E-06	2.25E-06	6.23E-06	6.08E-07	3.43E-07	9.51E-07	2.74E-07	1.41E-07	4.15E-07
1737	569903.86	4215211.74	3.66E-06	2.08E-06	5.74E-06	5.60E-07	3.16E-07	8.75E-07	2.53E-07	1.30E-07	3.83E-07
1738	569904.18	4215221.41	3.28E-06	1.86E-06	5.14E-06	5.01E-07	2.83E-07	7.84E-07	2.26E-07	1.16E-07	3.43E-07
1739	569904.49	4215231.08	3E-06	1.70E-06	4.70E-06	4.58E-07	2.58E-07	7.16E-07	2.07E-07	1.06E-07	3.13E-07
1740	569904.81	4215240.75	2.81E-06	1.59E-06	4.40E-06	4.29E-07	2.42E-07	6.71E-07	1.94E-07	9.97E-08	2.93E-07
1741	569905.12	4215250.43	2.63E-06	1.49E-06	4.13E-06	4.02E-07	2.27E-07	6.29E-07	1.82E-07	9.34E-08	2.75E-07
1742	569905.44	4215260.1	2.52E-06	1.43E-06	3.95E-06	3.85E-07	2.17E-07	6.02E-07	1.74E-07	8.94E-08	2.63E-07
1743	569905.75	4215269.77	2.46E-06	1.40E-06	3.86E-06	3.76E-07	2.12E-07	5.88E-07	1.70E-07	8.74E-08	2.57E-07
1744	569906.07	4215279.44	2.41E-06	1.37E-06	3.78E-06	3.68E-07	2.08E-07	5.76E-07	1.66E-07	8.55E-08	2.52E-07
1745	569906.38	4215289.11	2.37E-06	1.34E-06	3.71E-06	3.61E-07	2.04E-07	5.65E-07	1.63E-07	8.40E-08	2.47E-07
1746	569906.7	4215298.78	2.33E-06	1.32E-06	3.65E-06	3.56E-07	2.01E-07	5.57E-07	1.61E-07	8.27E-08	2.43E-07
1747	569907.01	4215308.45	2.3E-06	1.30E-06	3.60E-06	3.51E-07	1.98E-07	5.49E-07	1.59E-07	8.16E-08	2.40E-07
1748	569907.33	4215318.13	2.3E-06	1.30E-06	3.60E-06	3.51E-07	1.98E-07	5.48E-07	1.58E-07	8.14E-08	2.40E-07
1749	569907.64	4215327.8	2.41E-06	1.36E-06	3.77E-06	3.68E-07	2.07E-07	5.75E-07	1.66E-07	8.54E-08	2.51E-07
1750	569907.96	4215337.47	2.51E-06	1.42E-06	3.93E-06	3.84E-07	2.16E-07	6.00E-07	1.73E-07	8.91E-08	2.62E-07
1751	569908.27	4215347.14	2.66E-06	1.51E-06	4.16E-06	4.06E-07	2.29E-07	6.35E-07	1.83E-07	9.43E-08	2.77E-07
1752	569908.59	4215356.81	2.82E-06	1.60E-06	4.41E-06	4.30E-07	2.43E-07	6.73E-07	1.94E-07	1.00E-07	2.94E-07
1753	569908.9	4215366.48	3.13E-06	1.77E-06	4.91E-06	4.78E-07	2.70E-07	7.48E-07	2.16E-07	1.11E-07	3.27E-07
1754	569909.22	4215376.15	3.68E-06	2.09E-06	5.77E-06	5.62E-07	3.17E-07	8.80E-07	2.54E-07	1.31E-07	3.84E-07
1755	569893.24	4215192.72	3.88E-06	2.20E-06	6.08E-06	5.92E-07	3.34E-07	9.27E-07	2.67E-07	1.38E-07	4.05E-07
1756	569893.55	4215202.39	3.77E-06	2.13E-06	5.90E-06	5.75E-07	3.24E-07	8.99E-07	2.59E-07	1.34E-07	3.93E-07
1757	569893.87	4215212.07	3.49E-06	1.98E-06	5.47E-06	5.33E-07	3.01E-07	8.33E-07	2.40E-07	1.24E-07	3.64E-07
1758	569894.18	4215221.74	3.14E-06	1.78E-06	4.91E-06	4.79E-07	2.70E-07	7.49E-07	2.16E-07	1.11E-07	3.27E-07
1759	569894.5	4215231.41	2.86E-06	1.62E-06	4.48E-06	4.37E-07	2.47E-07	6.83E-07	1.97E-07	1.01E-07	2.99E-07
1760	569894.81	4215241.08	2.66E-06	1.51E-06	4.17E-06	4.07E-07	2.30E-07	6.37E-07	1.84E-07	9.45E-08	2.78E-07
1761	569895.13	4215250.75	2.49E-06	1.41E-06	3.91E-06	3.81E-07	2.15E-07	5.96E-07	1.72E-07	8.85E-08	2.60E-07
1762	569895.44	4215260.42	2.37E-06	1.34E-06	3.72E-06	3.62E-07	2.05E-07	5.67E-07	1.64E-07	8.42E-08	2.48E-07
1763	569895.76	4215270.09	2.3E-06	1.30E-06	3.61E-06	3.51E-07	1.98E-07	5.50E-07	1.59E-07	8.16E-08	2.40E-07
1764	569896.07	4215279.77	2.24E-06	1.27E-06	3.50E-06	3.42E-07	1.93E-07	5.34E-07	1.54E-07	7.93E-08	2.33E-07
1765	569896.39	4215289.44	2.19E-06	1.24E-06	3.43E-06	3.34E-07	1.89E-07	5.23E-07	1.51E-07	7.77E-08	2.29E-07
1766	569896.7	4215299.11	2.16E-06	1.23E-06	3.39E-06	3.31E-07	1.87E-07	5.17E-07	1.49E-07	7.68E-08	2.26E-07
1767	569897.02	4215308.78	2.14E-06	1.21E-06	3.36E-06	3.27E-07	1.85E-07	5.12E-07	1.48E-07	7.60E-08	2.24E-07
1768	569897.33	4215318.45	2.14E-06	1.22E-06	3.36E-06	3.27E-07	1.85E-07	5.12E-07	1.48E-07	7.61E-08	2.24E-07
1769	569897.65	4215328.12	2.22E-06	1.26E-06	3.47E-06	3.38E-07	1.91E-07	5.29E-07	1.53E-07	7.86E-08	2.31E-07
1770	569897.96	4215337.79	2.36E-06	1.34E-06	3.69E-06	3.60E-07	2.03E-07	5.63E-07	1.62E-07	8.36E-08	2.46E-07
1771	569898.28	4215347.47	2.49E-06	1.41E-06	3.90E-06	3.80E-07	2.15E-07	5.95E-07	1.72E-07	8.83E-08	2.60E-07
1772	569898.59	4215357.14	2.62E-06	1.49E-06	4.11E-06	4.01E-07	2.26E-07	6.27E-07	1.81E-07	9.31E-08	2.74E-07
1773	569898.91	4215366.81	2.85E-06	1.62E-06	4.47E-06	4.36E-07	2.46E-07	6.81E-07	1.97E-07	1.01E-07	2.98E-07
1774	569883.56	4215202.72	3.57E-06	2.02E-06	5.59E-06	5.45E-07	3.07E-07	8.52E-07	2.46E-07	1.27E-07	3.72E-07
1775	569883.87	4215212.39	3.33E-06	1.88E-06	5.21E-06	5.08E-07	2.87E-07	7.95E-07	2.29E-07	1.18E-07	3.47E-07
1776	569884.19	4215222.06	3E-06	1.70E-06	4.71E-06	4.59E-07	2.59E-07	7.18E-07	2.07E-07	1.07E-07	3.14E-07
1777	569884.5	4215231.73	2.74E-06	1.55E-06	4.30E-06	4.19E-07	2.36E-07	6.55E-07	1.89E-07	9.73E-08	2.86E-07
1778	569884.82	4215241.41	2.54E-06	1.44E-06	3.99E-06	3.89E-07	2.19E-07	6.08E-07	1.75E-07	9.03E-08	2.66E-07
1779	569885.13	4215251.08	2.37E-06	1.34E-06	3.72E-06	3.62E-07	2.04E-07	5.67E-07	1.64E-07	8.42E-08	2.48E-07
1780	569885.45	4215260.75	2.25E-06	1.27E-06	3.52E-06	3.43E-07	1.94E-07	5.37E-07	1.55E-07	7.97E-08	2.34E-07
1781	569885.76	4215270.42	2.16E-06	1.22E-06	3.38E-06	3.29E-07	1.86E-07	5.15E-07	1.49E-07	7.65E-08	2.25E-07
1782	569886.08	4215280.09	2.08E-06	1.18E-06	3.26E-06	3.18E-07	1.79E-07	4.97E-07	1.43E-07	7.38E-08	2.17E-07
1783	569886.39	4215289.76	2.03E-06	1.15E-06	3.18E-06	3.10E-07	1.75E-07	4.85E-07	1.40E-07	7.20E-08	2.12E-07
1784	569886.71	4215299.43	2.02E-06	1.14E-06	3.16E-06	3.08E-07	1.74E-07	4.82E-07	1.39E-07	7.15E-08	2.11E-07
1785	569887.02	4215309.11	2.01E-06	1.14E-06	3.14E-06	3.06E-07	1.73E-07	4.79E-07	1.38E-07	7.11E-08	2.09E-07
1786	569887.34	4215318.78	2.01E-06	1.14E-06	3.15E-06	3.07E-07	1.73E-07	4.81E-07	1.39E-07	7.14E-08	2.10E-07
1787	569887.65	4215328.45	2.07E-06	1.17E-06	3.24E-06	3.16E-07	1.78E-07	4.94E-07	1.43E-07	7.34E-08	2.16E-07
1788	569887.97	4215338.12	2.16E-06	1.22E-06	3.38E-06	3.29E-07	1.86E-07	5.15E-07	1.49E-07	7.65E-08	2.25E-07
1789	569888.28	4215347.79	2.31E-06	1.31E-06	3.62E-06	3.53E-07	1.99E-07	5.52E-07	1.59E-07	8.20E-08	2.41E-07
1790	569888.6	4215357.46	2.42E-06	1.37E-06	3.79E-06	3.69E-07	2.08E-07	5.77E-07	1.67E-07	8.57E-08	2.52E-07
1791	569888.91	4215367.13	2.57E-06	1.46E-06	4.03E-06	3.93E-07	2.22E-07	6.14E-07	1.77E-07	9.13E-08	2.69E-07
1792	569873.56	4215203.05	3.38E-06	1.92E-06	5.30E-06	5.17E-07	2.92E-07	8.08E-07	2.33E-07	1.20E-07	3.53E-07
1793	569873.88	4215212.72	3.18E-06	1.80E-06	4.97E-06	4.85E-07	2.74E-07	7.58E-07	2.19E-07	1.13E-07	3.31E-07
1794	569874.19	4215222.39	2.88E-06	1.63E-06	4.51E-06	4.40E-07	2.48E-07	6.88E-07	1.98E-07	1.02E-07	3.01E-07

1795	569874.51	4215232.06	2.63E-06	1.49E-06	4.12E-06	4.02E-07	2.27E-07	6.28E-07	1.81E-07	9.33E-08	2.75E-07
1796	569874.82	4215241.73	2.43E-06	1.38E-06	3.81E-06	3.71E-07	2.10E-07	5.81E-07	1.68E-07	8.62E-08	2.54E-07
1797	569875.14	4215251.4	2.26E-06	1.28E-06	3.54E-06	3.45E-07	1.95E-07	5.40E-07	1.56E-07	8.02E-08	2.36E-07
1798	569875.45	4215261.07	2.13E-06	1.21E-06	3.33E-06	3.25E-07	1.83E-07	5.08E-07	1.47E-07	7.55E-08	2.22E-07
1799	569875.77	4215270.75	2.03E-06	1.15E-06	3.17E-06	3.09E-07	1.75E-07	4.84E-07	1.40E-07	7.19E-08	2.11E-07
1800	569876.08	4215280.42	1.94E-06	1.10E-06	3.04E-06	2.96E-07	1.67E-07	4.64E-07	1.34E-07	6.89E-08	2.03E-07
1801	569876.4	4215290.09	1.89E-06	1.07E-06	2.97E-06	2.89E-07	1.63E-07	4.52E-07	1.31E-07	6.72E-08	1.98E-07
1802	569876.71	4215299.76	1.89E-06	1.07E-06	2.96E-06	2.88E-07	1.63E-07	4.51E-07	1.30E-07	6.69E-08	1.97E-07
1803	569877.03	4215309.43	1.88E-06	1.07E-06	2.95E-06	2.88E-07	1.62E-07	4.50E-07	1.30E-07	6.68E-08	1.97E-07
1804	569877.34	4215319.1	1.89E-06	1.07E-06	2.96E-06	2.89E-07	1.63E-07	4.52E-07	1.30E-07	6.71E-08	1.98E-07
1805	569877.66	4215328.77	1.94E-06	1.10E-06	3.03E-06	2.96E-07	1.67E-07	4.62E-07	1.33E-07	6.87E-08	2.02E-07
1806	569877.97	4215338.45	2E-06	1.14E-06	3.14E-06	3.06E-07	1.73E-07	4.79E-07	1.38E-07	7.11E-08	2.09E-07
1807	569878.29	4215348.12	2.1E-06	1.19E-06	3.28E-06	3.20E-07	1.81E-07	5.01E-07	1.44E-07	7.44E-08	2.19E-07
1808	569878.6	4215357.79	2.19E-06	1.24E-06	3.43E-06	3.34E-07	1.89E-07	5.23E-07	1.51E-07	7.76E-08	2.28E-07
1809	569878.92	4215367.46	2.31E-06	1.31E-06	3.62E-06	3.53E-07	1.99E-07	5.52E-07	1.59E-07	8.19E-08	2.41E-07
1810	569863.88	4215213.04	3.03E-06	1.72E-06	4.75E-06	4.63E-07	2.61E-07	7.24E-07	2.09E-07	1.08E-07	3.17E-07
1811	569864.2	4215222.71	2.82E-06	1.60E-06	4.41E-06	4.30E-07	2.43E-07	6.73E-07	1.94E-07	9.99E-08	2.94E-07
1812	569864.51	4215232.39	2.6E-06	1.47E-06	4.07E-06	3.96E-07	2.24E-07	6.20E-07	1.79E-07	9.21E-08	2.71E-07
1813	569864.83	4215242.06	2.39E-06	1.36E-06	3.75E-06	3.65E-07	2.06E-07	5.72E-07	1.65E-07	8.49E-08	2.50E-07
1814	569865.14	4215251.73	2.2E-06	1.25E-06	3.45E-06	3.37E-07	1.90E-07	5.27E-07	1.52E-07	7.82E-08	2.30E-07
1815	569865.46	4215261.4	2.07E-06	1.17E-06	3.24E-06	3.16E-07	1.78E-07	4.94E-07	1.42E-07	7.33E-08	2.16E-07
1816	569865.77	4215271.07	1.96E-06	1.11E-06	3.07E-06	2.99E-07	1.69E-07	4.68E-07	1.35E-07	6.96E-08	2.05E-07
1817	569866.09	4215280.74	1.87E-06	1.06E-06	2.93E-06	2.86E-07	1.61E-07	4.47E-07	1.29E-07	6.64E-08	1.96E-07
1818	569866.4	4215290.41	1.82E-06	1.03E-06	2.85E-06	2.78E-07	1.57E-07	4.35E-07	1.26E-07	6.46E-08	1.90E-07
1819	569866.72	4215300.09	1.8E-06	1.02E-06	2.83E-06	2.75E-07	1.55E-07	4.31E-07	1.24E-07	6.40E-08	1.88E-07
1820	569867.03	4215309.76	1.79E-06	1.01E-06	2.80E-06	2.73E-07	1.54E-07	4.27E-07	1.23E-07	6.35E-08	1.87E-07
1821	569867.35	4215319.43	1.79E-06	1.01E-06	2.80E-06	2.73E-07	1.54E-07	4.27E-07	1.23E-07	6.34E-08	1.87E-07
1822	569867.66	4215329.1	1.82E-06	1.03E-06	2.84E-06	2.77E-07	1.56E-07	4.34E-07	1.25E-07	6.44E-08	1.89E-07
1823	569867.98	4215338.77	1.86E-06	1.05E-06	2.92E-06	2.84E-07	1.60E-07	4.45E-07	1.28E-07	6.60E-08	1.94E-07
1824	569868.29	4215348.44	1.93E-06	1.09E-06	3.02E-06	2.94E-07	1.66E-07	4.60E-07	1.33E-07	6.83E-08	2.01E-07
1825	569868.61	4215358.11	2E-06	1.13E-06	3.13E-06	3.05E-07	1.72E-07	4.77E-07	1.38E-07	7.09E-08	2.09E-07
1826	569868.92	4215367.79	2.08E-06	1.18E-06	3.27E-06	3.18E-07	1.80E-07	4.98E-07	1.44E-07	7.39E-08	2.18E-07
1827	569853.89	4215213.37	2.9E-06	1.64E-06	4.55E-06	4.43E-07	2.50E-07	6.93E-07	2.00E-07	1.03E-07	3.03E-07
1828	569854.21	4215223.04	2.75E-06	1.56E-06	4.32E-06	4.21E-07	2.37E-07	6.58E-07	1.90E-07	9.77E-08	2.88E-07
1829	569854.52	4215232.71	2.56E-06	1.45E-06	4.02E-06	3.91E-07	2.21E-07	6.12E-07	1.77E-07	9.09E-08	2.68E-07
1830	569854.84	4215242.38	2.36E-06	1.34E-06	3.69E-06	3.60E-07	2.03E-07	5.63E-07	1.62E-07	8.36E-08	2.46E-07
1831	569855.15	4215252.05	2.16E-06	1.22E-06	3.39E-06	3.30E-07	1.86E-07	5.16E-07	1.49E-07	7.67E-08	2.26E-07
1832	569855.47	4215261.73	2.02E-06	1.14E-06	3.17E-06	3.09E-07	1.74E-07	4.83E-07	1.39E-07	7.17E-08	2.11E-07
1833	569855.78	4215271.4	1.92E-06	1.09E-06	3.00E-06	2.93E-07	1.65E-07	4.58E-07	1.32E-07	6.80E-08	2.00E-07
1834	569856.1	4215281.07	1.83E-06	1.04E-06	2.86E-06	2.79E-07	1.57E-07	4.37E-07	1.26E-07	6.48E-08	1.91E-07
1835	569856.41	4215290.74	1.77E-06	1.00E-06	2.77E-06	2.70E-07	1.53E-07	4.23E-07	1.22E-07	6.28E-08	1.85E-07
1836	569856.73	4215300.41	1.74E-06	9.85E-07	2.72E-06	2.66E-07	1.50E-07	4.15E-07	1.20E-07	6.17E-08	1.82E-07
1837	569857.04	4215310.08	1.71E-06	9.68E-07	2.68E-06	2.61E-07	1.47E-07	4.08E-07	1.18E-07	6.06E-08	1.78E-07
1838	569857.36	4215319.75	1.69E-06	9.60E-07	2.65E-06	2.59E-07	1.46E-07	4.05E-07	1.17E-07	6.01E-08	1.77E-07
1839	569857.67	4215329.43	1.7E-06	9.66E-07	2.67E-06	2.60E-07	1.47E-07	4.07E-07	1.17E-07	6.05E-08	1.78E-07
1840	569857.99	4215339.1	1.73E-06	9.78E-07	2.71E-06	2.64E-07	1.49E-07	4.13E-07	1.19E-07	6.13E-08	1.80E-07
1841	569858.3	4215348.77	1.76E-06	1.00E-06	2.76E-06	2.69E-07	1.52E-07	4.21E-07	1.22E-07	6.26E-08	1.84E-07
1842	569858.62	4215358.44	1.82E-06	1.03E-06	2.85E-06	2.77E-07	1.56E-07	4.34E-07	1.25E-07	6.44E-08	1.90E-07
1843	569858.93	4215368.11	1.87E-06	1.06E-06	2.94E-06	2.86E-07	1.62E-07	4.48E-07	1.29E-07	6.65E-08	1.96E-07
1844	569844.21	4215223.37	2.69E-06	1.52E-06	4.21E-06	4.11E-07	2.32E-07	6.43E-07	1.85E-07	9.54E-08	2.81E-07
1845	569844.53	4215233.04	2.53E-06	1.43E-06	3.96E-06	3.86E-07	2.18E-07	6.03E-07	1.74E-07	8.96E-08	2.64E-07
1846	569844.84	4215242.71	2.32E-06	1.32E-06	3.64E-06	3.54E-07	2.00E-07	5.54E-07	1.60E-07	8.23E-08	2.42E-07
1847	569845.16	4215252.38	2.12E-06	1.20E-06	3.32E-06	3.24E-07	1.83E-07	5.07E-07	1.46E-07	7.52E-08	2.21E-07
1848	569845.47	4215262.05	1.98E-06	1.12E-06	3.10E-06	3.02E-07	1.71E-07	4.73E-07	1.36E-07	7.02E-08	2.07E-07
1849	569845.79	4215271.72	1.87E-06	1.06E-06	2.94E-06	2.86E-07	1.62E-07	4.48E-07	1.29E-07	6.65E-08	1.96E-07
1850	569846.1	4215281.39	1.79E-06	1.01E-06	2.80E-06	2.73E-07	1.54E-07	4.27E-07	1.23E-07	6.33E-08	1.86E-07
1851	569846.42	4215291.07	1.72E-06	9.76E-07	2.70E-06	2.63E-07	1.48E-07	4.11E-07	1.19E-07	6.11E-08	1.80E-07
1852	569846.73	4215300.74	1.68E-06	9.49E-07	2.63E-06	2.56E-07	1.44E-07	4.00E-07	1.15E-07	5.94E-08	1.75E-07
1853	569847.05	4215310.41	1.63E-06	9.25E-07	2.56E-06	2.49E-07	1.41E-07	3.90E-07	1.13E-07	5.79E-08	1.70E-07
1854	569847.36	4215320.08	1.61E-06	9.10E-07	2.52E-06	2.45E-07	1.38E-07	3.84E-07	1.11E-07	5.70E-08	1.68E-07
1855	569847.68	4215329.75	1.6E-06	9.08E-07	2.51E-06	2.45E-07	1.38E-07	3.83E-07	1.10E-07	5.68E-08	1.67E-07
1856	569847.99	4215339.42	1.61E-06	9.10E-07	2.52E-06	2.45E-07	1.38E-07	3.84E-07	1.11E-07	5.70E-08	1.68E-07

1857	569848.31	4215349.09	1.62E-06	9.19E-07	2.54E-06	2.48E-07	1.40E-07	3.87E-07	1.12E-07	5.75E-08	1.69E-07
1858	569848.62	4215358.77	1.66E-06	9.38E-07	2.59E-06	2.53E-07	1.43E-07	3.96E-07	1.14E-07	5.88E-08	1.73E-07
1859	569848.94	4215368.44	1.69E-06	9.59E-07	2.65E-06	2.59E-07	1.46E-07	4.04E-07	1.17E-07	6.01E-08	1.77E-07
1860	569834.22	4215223.69	2.55E-06	1.44E-06	3.99E-06	3.89E-07	2.19E-07	6.08E-07	1.75E-07	9.03E-08	2.66E-07
1861	569834.53	4215233.36	2.4E-06	1.36E-06	3.77E-06	3.67E-07	2.07E-07	5.74E-07	1.66E-07	8.53E-08	2.51E-07
1862	569834.85	4215243.03	2.22E-06	1.26E-06	3.48E-06	3.39E-07	1.92E-07	5.31E-07	1.53E-07	7.89E-08	2.32E-07
1863	569835.16	4215252.71	2.04E-06	1.16E-06	3.20E-06	3.12E-07	1.76E-07	4.88E-07	1.41E-07	7.24E-08	2.13E-07
1864	569835.48	4215262.38	1.91E-06	1.08E-06	3.00E-06	2.92E-07	1.65E-07	4.57E-07	1.32E-07	6.78E-08	2.00E-07
1865	569835.79	4215272.05	1.81E-06	1.03E-06	2.84E-06	2.77E-07	1.56E-07	4.33E-07	1.25E-07	6.43E-08	1.89E-07
1866	569836.11	4215281.72	1.73E-06	9.80E-07	2.71E-06	2.64E-07	1.49E-07	4.13E-07	1.19E-07	6.13E-08	1.81E-07
1867	569836.42	4215291.39	1.66E-06	9.43E-07	2.61E-06	2.54E-07	1.43E-07	3.97E-07	1.15E-07	5.90E-08	1.74E-07
1868	569836.74	4215301.06	1.61E-06	9.13E-07	2.52E-06	2.46E-07	1.39E-07	3.85E-07	1.11E-07	5.71E-08	1.68E-07
1869	569837.05	4215310.73	1.56E-06	8.85E-07	2.45E-06	2.38E-07	1.35E-07	3.73E-07	1.08E-07	5.54E-08	1.63E-07
1870	569837.37	4215320.41	1.53E-06	8.66E-07	2.40E-06	2.34E-07	1.32E-07	3.65E-07	1.05E-07	5.42E-08	1.60E-07
1871	569837.68	4215330.08	1.52E-06	8.60E-07	2.38E-06	2.32E-07	1.31E-07	3.63E-07	1.05E-07	5.38E-08	1.58E-07
1872	569838	4215339.75	1.51E-06	8.55E-07	2.37E-06	2.31E-07	1.30E-07	3.61E-07	1.04E-07	5.36E-08	1.58E-07
1873	569838.31	4215349.42	1.51E-06	8.56E-07	2.37E-06	2.31E-07	1.30E-07	3.61E-07	1.04E-07	5.36E-08	1.58E-07
1874	569838.63	4215359.09	1.53E-06	8.67E-07	2.40E-06	2.34E-07	1.32E-07	3.65E-07	1.05E-07	5.43E-08	1.60E-07
1875	569838.94	4215368.76	1.55E-06	8.76E-07	2.42E-06	2.36E-07	1.33E-07	3.69E-07	1.07E-07	5.49E-08	1.61E-07
1876	569824.54	4215233.69	2.29E-06	1.29E-06	3.58E-06	3.49E-07	1.97E-07	5.46E-07	1.58E-07	8.11E-08	2.39E-07
1877	569824.85	4215243.36	2.12E-06	1.20E-06	3.33E-06	3.24E-07	1.83E-07	5.07E-07	1.46E-07	7.53E-08	2.22E-07
1878	569825.17	4215253.03	1.96E-06	1.11E-06	3.07E-06	2.99E-07	1.69E-07	4.68E-07	1.35E-07	6.96E-08	2.05E-07
1879	569825.48	4215262.7	1.84E-06	1.04E-06	2.89E-06	2.81E-07	1.59E-07	4.40E-07	1.27E-07	6.54E-08	1.92E-07
1880	569825.8	4215272.37	1.75E-06	9.92E-07	2.74E-06	2.67E-07	1.51E-07	4.18E-07	1.21E-07	6.21E-08	1.83E-07
1881	569826.11	4215282.04	1.67E-06	9.46E-07	2.62E-06	2.55E-07	1.44E-07	3.99E-07	1.15E-07	5.92E-08	1.74E-07
1882	569826.43	4215291.72	1.6E-06	9.09E-07	2.51E-06	2.45E-07	1.38E-07	3.83E-07	1.11E-07	5.69E-08	1.67E-07
1883	569826.74	4215301.39	1.55E-06	8.77E-07	2.42E-06	2.36E-07	1.33E-07	3.70E-07	1.07E-07	5.49E-08	1.62E-07
1884	569827.06	4215311.06	1.49E-06	8.47E-07	2.34E-06	2.28E-07	1.29E-07	3.57E-07	1.03E-07	5.30E-08	1.56E-07
1885	569827.37	4215320.73	1.46E-06	8.27E-07	2.29E-06	2.23E-07	1.26E-07	3.49E-07	1.01E-07	5.18E-08	1.52E-07
1886	569827.69	4215330.4	1.45E-06	8.19E-07	2.26E-06	2.21E-07	1.25E-07	3.45E-07	9.96E-08	5.13E-08	1.51E-07
1887	569828	4215340.07	1.43E-06	8.11E-07	2.24E-06	2.18E-07	1.23E-07	3.42E-07	9.86E-08	5.08E-08	1.49E-07
1888	569828.32	4215349.74	1.42E-06	8.06E-07	2.23E-06	2.17E-07	1.23E-07	3.40E-07	9.81E-08	5.05E-08	1.49E-07
1889	569828.63	4215359.42	1.43E-06	8.09E-07	2.24E-06	2.18E-07	1.23E-07	3.41E-07	9.84E-08	5.06E-08	1.49E-07
1890	569828.95	4215369.09	1.43E-06	8.09E-07	2.24E-06	2.18E-07	1.23E-07	3.41E-07	9.84E-08	5.07E-08	1.49E-07
1891	569814.86	4215243.68	2.03E-06	1.15E-06	3.18E-06	3.10E-07	1.75E-07	4.85E-07	1.40E-07	7.21E-08	2.12E-07
1892	569815.17	4215253.36	1.89E-06	1.07E-06	2.95E-06	2.88E-07	1.62E-07	4.50E-07	1.30E-07	6.69E-08	1.97E-07
1893	569815.49	4215263.03	1.78E-06	1.01E-06	2.78E-06	2.71E-07	1.53E-07	4.25E-07	1.22E-07	6.30E-08	1.86E-07
1894	569815.8	4215272.7	1.69E-06	9.57E-07	2.65E-06	2.58E-07	1.46E-07	4.04E-07	1.16E-07	5.99E-08	1.76E-07
1895	569816.12	4215282.37	1.61E-06	9.13E-07	2.53E-06	2.46E-07	1.39E-07	3.85E-07	1.11E-07	5.72E-08	1.68E-07
1896	569816.43	4215292.04	1.55E-06	8.76E-07	2.42E-06	2.36E-07	1.33E-07	3.69E-07	1.07E-07	5.48E-08	1.61E-07
1897	569816.75	4215301.71	1.49E-06	8.42E-07	2.33E-06	2.27E-07	1.28E-07	3.55E-07	1.02E-07	5.27E-08	1.55E-07
1898	569817.06	4215311.38	1.43E-06	8.11E-07	2.24E-06	2.19E-07	1.23E-07	3.42E-07	9.86E-08	5.08E-08	1.49E-07
1899	569817.38	4215321.06	1.4E-06	7.91E-07	2.19E-06	2.13E-07	1.20E-07	3.33E-07	9.62E-08	4.95E-08	1.46E-07
1900	569817.69	4215330.73	1.38E-06	7.80E-07	2.16E-06	2.10E-07	1.19E-07	3.29E-07	9.48E-08	4.88E-08	1.44E-07
1901	569818.01	4215340.4	1.36E-06	7.69E-07	2.13E-06	2.07E-07	1.17E-07	3.24E-07	9.35E-08	4.81E-08	1.42E-07
1902	569818.32	4215350.07	1.34E-06	7.61E-07	2.10E-06	2.05E-07	1.16E-07	3.21E-07	9.25E-08	4.76E-08	1.40E-07
1903	569818.64	4215359.74	1.34E-06	7.57E-07	2.09E-06	2.04E-07	1.15E-07	3.19E-07	9.21E-08	4.74E-08	1.39E-07
1904	569818.95	4215369.41	1.32E-06	7.50E-07	2.08E-06	2.02E-07	1.14E-07	3.16E-07	9.13E-08	4.70E-08	1.38E-07
1905	569804.86	4215244.01	1.91E-06	1.08E-06	3.00E-06	2.92E-07	1.65E-07	4.57E-07	1.32E-07	6.79E-08	2.00E-07
1906	569805.18	4215253.68	1.78E-06	1.01E-06	2.78E-06	2.71E-07	1.53E-07	4.24E-07	1.22E-07	6.30E-08	1.85E-07
1907	569805.49	4215263.35	1.68E-06	9.50E-07	2.63E-06	2.56E-07	1.45E-07	4.01E-07	1.16E-07	5.95E-08	1.75E-07
1908	569805.81	4215273.02	1.6E-06	9.05E-07	2.50E-06	2.44E-07	1.38E-07	3.82E-07	1.10E-07	5.67E-08	1.67E-07
1909	569806.12	4215282.7	1.53E-06	8.65E-07	2.39E-06	2.33E-07	1.32E-07	3.65E-07	1.05E-07	5.42E-08	1.59E-07
1910	569806.44	4215292.37	1.47E-06	8.32E-07	2.30E-06	2.24E-07	1.26E-07	3.51E-07	1.01E-07	5.21E-08	1.53E-07
1911	569806.75	4215302.04	1.41E-06	8.01E-07	2.22E-06	2.16E-07	1.22E-07	3.38E-07	9.75E-08	5.02E-08	1.48E-07
1912	569807.07	4215311.71	1.36E-06	7.72E-07	2.14E-06	2.08E-07	1.17E-07	3.26E-07	9.40E-08	4.84E-08	1.42E-07
1913	569807.38	4215321.38	1.33E-06	7.54E-07	2.08E-06	2.03E-07	1.15E-07	3.18E-07	9.17E-08	4.72E-08	1.39E-07
1914	569807.7	4215331.05	1.31E-06	7.42E-07	2.05E-06	2.00E-07	1.13E-07	3.13E-07	9.02E-08	4.64E-08	1.37E-07
1915	569808.01	4215340.72	1.29E-06	7.29E-07	2.02E-06	1.97E-07	1.11E-07	3.08E-07	8.87E-08	4.57E-08	1.34E-07
1916	569808.33	4215350.4	1.27E-06	7.19E-07	1.99E-06	1.94E-07	1.09E-07	3.03E-07	8.75E-08	4.50E-08	1.33E-07
1917	569808.64	4215360.07	1.26E-06	7.12E-07	1.97E-06	1.92E-07	1.08E-07	3.00E-07	8.66E-08	4.46E-08	1.31E-07
1918	569808.96	4215369.74	1.24E-06	7.02E-07	1.94E-06	1.89E-07	1.07E-07	2.96E-07	8.54E-08	4.40E-08	1.29E-07

1919	569795.18	4215254.01	1.67E-06	9.46E-07	2.61E-06	2.55E-07	1.44E-07	3.99E-07	1.15E-07	5.92E-08	1.74E-07
1920	569795.5	4215263.68	1.58E-06	8.94E-07	2.47E-06	2.41E-07	1.36E-07	3.77E-07	1.09E-07	5.60E-08	1.65E-07
1921	569795.81	4215273.35	1.5E-06	8.52E-07	2.36E-06	2.30E-07	1.30E-07	3.59E-07	1.04E-07	5.34E-08	1.57E-07
1922	569796.13	4215283.02	1.44E-06	8.16E-07	2.26E-06	2.20E-07	1.24E-07	3.44E-07	9.93E-08	5.11E-08	1.50E-07
1923	569796.44	4215292.69	1.39E-06	7.86E-07	2.17E-06	2.12E-07	1.20E-07	3.32E-07	9.57E-08	4.92E-08	1.45E-07
1924	569796.76	4215302.36	1.34E-06	7.60E-07	2.10E-06	2.05E-07	1.16E-07	3.21E-07	9.25E-08	4.76E-08	1.40E-07
1925	569797.07	4215312.04	1.3E-06	7.35E-07	2.03E-06	1.98E-07	1.12E-07	3.10E-07	8.94E-08	4.60E-08	1.35E-07
1926	569797.39	4215321.71	1.27E-06	7.18E-07	1.98E-06	1.93E-07	1.09E-07	3.03E-07	8.73E-08	4.49E-08	1.32E-07
1927	569797.7	4215331.38	1.25E-06	7.06E-07	1.95E-06	1.90E-07	1.07E-07	2.98E-07	8.58E-08	4.42E-08	1.30E-07
1928	569798.02	4215341.05	1.22E-06	6.93E-07	1.92E-06	1.87E-07	1.05E-07	2.92E-07	8.43E-08	4.34E-08	1.28E-07
1929	569798.33	4215350.72	1.2E-06	6.82E-07	1.89E-06	1.84E-07	1.04E-07	2.87E-07	8.29E-08	4.27E-08	1.26E-07
1930	569798.65	4215360.39	1.19E-06	6.74E-07	1.86E-06	1.82E-07	1.02E-07	2.84E-07	8.19E-08	4.22E-08	1.24E-07
1931	569785.19	4215254.33	1.57E-06	8.90E-07	2.46E-06	2.40E-07	1.35E-07	3.75E-07	1.08E-07	5.58E-08	1.64E-07
1932	569785.5	4215264	1.49E-06	8.43E-07	2.33E-06	2.27E-07	1.28E-07	3.55E-07	1.03E-07	5.28E-08	1.55E-07
1933	569785.82	4215273.68	1.42E-06	8.05E-07	2.22E-06	2.17E-07	1.22E-07	3.39E-07	9.79E-08	5.04E-08	1.48E-07
1934	569786.13	4215283.35	1.36E-06	7.71E-07	2.13E-06	2.08E-07	1.17E-07	3.25E-07	9.38E-08	4.83E-08	1.42E-07
1935	569786.45	4215293.02	1.32E-06	7.45E-07	2.06E-06	2.01E-07	1.13E-07	3.14E-07	9.06E-08	4.67E-08	1.37E-07
1936	569786.76	4215302.69	1.28E-06	7.22E-07	2.00E-06	1.95E-07	1.10E-07	3.05E-07	8.79E-08	4.52E-08	1.33E-07
1937	569787.08	4215312.36	1.24E-06	7.00E-07	1.94E-06	1.89E-07	1.06E-07	2.95E-07	8.51E-08	4.38E-08	1.29E-07
1938	569787.39	4215322.03	1.21E-06	6.84E-07	1.89E-06	1.84E-07	1.04E-07	2.89E-07	8.32E-08	4.28E-08	1.26E-07
1939	569787.71	4215331.7	1.19E-06	6.72E-07	1.86E-06	1.81E-07	1.02E-07	2.83E-07	8.17E-08	4.21E-08	1.24E-07
1940	569788.02	4215341.38	1.16E-06	6.58E-07	1.82E-06	1.77E-07	1.00E-07	2.78E-07	8.01E-08	4.12E-08	1.21E-07
1941	569788.34	4215351.05	1.14E-06	6.47E-07	1.79E-06	1.74E-07	9.85E-08	2.73E-07	7.87E-08	4.05E-08	1.19E-07
1942	569788.65	4215360.72	1.13E-06	6.39E-07	1.77E-06	1.72E-07	9.71E-08	2.69E-07	7.77E-08	4.00E-08	1.18E-07
1943	569775.51	4215264.33	1.41E-06	8.01E-07	2.21E-06	2.16E-07	1.22E-07	3.38E-07	9.74E-08	5.01E-08	1.48E-07
1944	569775.82	4215274	1.35E-06	7.64E-07	2.11E-06	2.06E-07	1.16E-07	3.22E-07	9.30E-08	4.78E-08	1.41E-07
1945	569776.14	4215283.67	1.29E-06	7.32E-07	2.02E-06	1.97E-07	1.11E-07	3.09E-07	8.91E-08	4.58E-08	1.35E-07
1946	569776.45	4215293.34	1.25E-06	7.08E-07	1.96E-06	1.91E-07	1.08E-07	2.98E-07	8.61E-08	4.43E-08	1.30E-07
1947	569776.77	4215303.02	1.21E-06	6.86E-07	1.90E-06	1.85E-07	1.04E-07	2.89E-07	8.34E-08	4.30E-08	1.26E-07
1948	569777.08	4215312.69	1.17E-06	6.65E-07	1.84E-06	1.79E-07	1.01E-07	2.80E-07	8.08E-08	4.16E-08	1.22E-07
1949	569777.4	4215322.36	1.15E-06	6.50E-07	1.80E-06	1.75E-07	9.88E-08	2.74E-07	7.91E-08	4.07E-08	1.20E-07
1950	569777.71	4215332.03	1.13E-06	6.38E-07	1.76E-06	1.72E-07	9.70E-08	2.69E-07	7.76E-08	3.99E-08	1.17E-07
1951	569778.03	4215341.7	1.1E-06	6.24E-07	1.73E-06	1.68E-07	9.49E-08	2.63E-07	7.59E-08	3.91E-08	1.15E-07
1952	569778.34	4215351.37	1.08E-06	6.13E-07	1.69E-06	1.65E-07	9.32E-08	2.58E-07	7.46E-08	3.84E-08	1.13E-07
1953	569778.66	4215361.04	1.07E-06	6.05E-07	1.67E-06	1.63E-07	9.19E-08	2.55E-07	7.35E-08	3.79E-08	1.11E-07
1954	569765.51	4215264.66	1.35E-06	7.62E-07	2.11E-06	2.05E-07	1.16E-07	3.21E-07	9.27E-08	4.77E-08	1.40E-07
1955	569765.83	4215274.33	1.28E-06	7.27E-07	2.01E-06	1.96E-07	1.11E-07	3.07E-07	8.85E-08	4.55E-08	1.34E-07
1956	569766.14	4215284	1.23E-06	6.97E-07	1.93E-06	1.88E-07	1.06E-07	2.94E-07	8.48E-08	4.36E-08	1.28E-07
1957	569766.46	4215293.67	1.19E-06	6.73E-07	1.86E-06	1.81E-07	1.02E-07	2.84E-07	8.19E-08	4.22E-08	1.24E-07
1958	569766.77	4215303.34	1.15E-06	6.52E-07	1.80E-06	1.76E-07	9.91E-08	2.75E-07	7.93E-08	4.08E-08	1.20E-07
1959	569767.09	4215313.01	1.11E-06	6.31E-07	1.74E-06	1.70E-07	9.60E-08	2.66E-07	7.67E-08	3.95E-08	1.16E-07
1960	569767.4	4215322.68	1.09E-06	6.17E-07	1.71E-06	1.66E-07	9.38E-08	2.60E-07	7.50E-08	3.86E-08	1.14E-07
1961	569767.72	4215332.36	1.07E-06	6.04E-07	1.67E-06	1.63E-07	9.19E-08	2.55E-07	7.35E-08	3.78E-08	1.11E-07
1962	569768.03	4215342.03	1.04E-06	5.91E-07	1.63E-06	1.59E-07	8.98E-08	2.49E-07	7.18E-08	3.70E-08	1.09E-07
1963	569768.35	4215351.7	1.02E-06	5.80E-07	1.60E-06	1.56E-07	8.82E-08	2.45E-07	7.05E-08	3.63E-08	1.07E-07
1964	569768.66	4215361.37	1.01E-06	5.72E-07	1.58E-06	1.54E-07	8.70E-08	2.41E-07	6.95E-08	3.58E-08	1.05E-07
1965	569755.83	4215274.65	1.22E-06	6.93E-07	1.92E-06	1.87E-07	1.05E-07	2.92E-07	8.43E-08	4.34E-08	1.28E-07
1966	569756.15	4215284.32	1.17E-06	6.65E-07	1.84E-06	1.79E-07	1.01E-07	2.80E-07	8.08E-08	4.16E-08	1.22E-07
1967	569756.46	4215293.99	1.13E-06	6.41E-07	1.77E-06	1.73E-07	9.75E-08	2.70E-07	7.80E-08	4.02E-08	1.18E-07
1968	569756.78	4215303.67	1.09E-06	6.20E-07	1.71E-06	1.67E-07	9.43E-08	2.61E-07	7.54E-08	3.88E-08	1.14E-07
1969	569757.09	4215313.34	1.06E-06	6.00E-07	1.66E-06	1.62E-07	9.13E-08	2.53E-07	7.30E-08	3.76E-08	1.11E-07
1970	569757.41	4215323.01	1.04E-06	5.87E-07	1.62E-06	1.58E-07	8.93E-08	2.47E-07	7.14E-08	3.67E-08	1.08E-07
1971	569757.72	4215332.68	1.01E-06	5.74E-07	1.59E-06	1.55E-07	8.74E-08	2.42E-07	6.99E-08	3.60E-08	1.06E-07
1972	569758.04	4215342.35	9.9E-07	5.61E-07	1.55E-06	1.51E-07	8.53E-08	2.36E-07	6.82E-08	3.51E-08	1.03E-07
1973	569758.35	4215352.02	9.71E-07	5.50E-07	1.52E-06	1.48E-07	8.37E-08	2.32E-07	6.69E-08	3.45E-08	1.01E-07
1974	569758.67	4215361.69	9.57E-07	5.42E-07	1.50E-06	1.46E-07	8.25E-08	2.29E-07	6.60E-08	3.40E-08	9.99E-08
1975	569745.84	4215274.98	1.17E-06	6.61E-07	1.83E-06	1.78E-07	1.01E-07	2.79E-07	8.04E-08	4.14E-08	1.22E-07
1976	569746.15	4215284.65	1.12E-06	6.34E-07	1.75E-06	1.71E-07	9.64E-08	2.67E-07	7.71E-08	3.97E-08	1.17E-07
1977	569746.47	4215294.32	1.08E-06	6.13E-07	1.69E-06	1.65E-07	9.32E-08	2.58E-07	7.46E-08	3.84E-08	1.13E-07
1978	569746.78	4215303.99	1.05E-06	5.93E-07	1.64E-06	1.60E-07	9.02E-08	2.50E-07	7.22E-08	3.71E-08	1.09E-07
1979	569747.1	4215313.66	1.01E-06	5.75E-07	1.59E-06	1.55E-07	8.74E-08	2.42E-07	6.99E-08	3.60E-08	1.06E-07
1980	569747.41	4215323.33	9.92E-07	5.62E-07	1.55E-06	1.51E-07	8.54E-08	2.37E-07	6.83E-08	3.52E-08	1.04E-07

1981	569747.73	4215333.01	9.7E-07	5.49E-07	1.52E-06	1.48E-07	8.36E-08	2.32E-07	6.68E-08	3.44E-08	1.01E-07
1982	569748.04	4215342.68	9.46E-07	5.36E-07	1.48E-06	1.44E-07	8.15E-08	2.26E-07	6.52E-08	3.35E-08	9.87E-08
1983	569748.36	4215352.35	9.27E-07	5.25E-07	1.45E-06	1.42E-07	7.99E-08	2.21E-07	6.39E-08	3.29E-08	9.67E-08
1984	569735.21	4215255.96	1.23E-06	6.96E-07	1.93E-06	1.88E-07	1.06E-07	2.94E-07	8.47E-08	4.36E-08	1.28E-07
1985	569735.53	4215265.63	1.17E-06	6.61E-07	1.83E-06	1.78E-07	1.01E-07	2.79E-07	8.04E-08	4.14E-08	1.22E-07
1986	569735.84	4215275.3	1.11E-06	6.31E-07	1.75E-06	1.70E-07	9.60E-08	2.66E-07	7.68E-08	3.95E-08	1.16E-07
1987	569736.16	4215284.97	1.07E-06	6.05E-07	1.67E-06	1.63E-07	9.21E-08	2.55E-07	7.37E-08	3.79E-08	1.12E-07
1988	569736.47	4215294.65	1.04E-06	5.87E-07	1.62E-06	1.58E-07	8.92E-08	2.47E-07	7.14E-08	3.67E-08	1.08E-07
1989	569736.79	4215304.32	1E-06	5.69E-07	1.57E-06	1.53E-07	8.66E-08	2.40E-07	6.92E-08	3.56E-08	1.05E-07
1990	569737.1	4215313.99	9.75E-07	5.52E-07	1.53E-06	1.49E-07	8.40E-08	2.33E-07	6.72E-08	3.46E-08	1.02E-07
1991	569737.42	4215323.66	9.53E-07	5.40E-07	1.49E-06	1.45E-07	8.21E-08	2.28E-07	6.56E-08	3.38E-08	9.94E-08
1992	569737.73	4215333.33	9.31E-07	5.27E-07	1.46E-06	1.42E-07	8.02E-08	2.22E-07	6.41E-08	3.30E-08	9.71E-08
1993	569738.05	4215343	9.06E-07	5.13E-07	1.42E-06	1.38E-07	7.81E-08	2.16E-07	6.24E-08	3.21E-08	9.46E-08
1994	569738.36	4215352.67	8.88E-07	5.03E-07	1.39E-06	1.36E-07	7.65E-08	2.12E-07	6.12E-08	3.15E-08	9.27E-08
1995	569724.59	4215236.94	1.33E-06	7.53E-07	2.08E-06	2.03E-07	1.15E-07	3.18E-07	9.16E-08	4.72E-08	1.39E-07
1996	569724.9	4215246.61	1.25E-06	7.06E-07	1.95E-06	1.90E-07	1.07E-07	2.98E-07	8.59E-08	4.42E-08	1.30E-07
1997	569725.22	4215256.29	1.17E-06	6.65E-07	1.84E-06	1.79E-07	1.01E-07	2.81E-07	8.09E-08	4.17E-08	1.23E-07
1998	569725.53	4215265.96	1.11E-06	6.31E-07	1.75E-06	1.70E-07	9.60E-08	2.66E-07	7.68E-08	3.95E-08	1.16E-07
1999	569725.85	4215275.63	1.06E-06	6.03E-07	1.67E-06	1.63E-07	9.17E-08	2.54E-07	7.33E-08	3.78E-08	1.11E-07
2000	569726.16	4215285.3	1.02E-06	5.79E-07	1.60E-06	1.56E-07	8.80E-08	2.44E-07	7.04E-08	3.62E-08	1.07E-07
2001	569726.48	4215294.97	9.92E-07	5.62E-07	1.55E-06	1.52E-07	8.55E-08	2.37E-07	6.84E-08	3.52E-08	1.04E-07
2002	569726.79	4215304.64	9.64E-07	5.46E-07	1.51E-06	1.47E-07	8.31E-08	2.30E-07	6.65E-08	3.42E-08	1.01E-07
2003	569727.11	4215314.31	9.37E-07	5.31E-07	1.47E-06	1.43E-07	8.07E-08	2.24E-07	6.46E-08	3.32E-08	9.78E-08
2004	569727.42	4215323.99	9.15E-07	5.19E-07	1.43E-06	1.40E-07	7.89E-08	2.19E-07	6.31E-08	3.25E-08	9.56E-08
2005	569727.74	4215333.66	8.93E-07	5.06E-07	1.40E-06	1.36E-07	7.70E-08	2.13E-07	6.16E-08	3.17E-08	9.33E-08
2006	569728.05	4215343.33	8.69E-07	4.92E-07	1.36E-06	1.33E-07	7.49E-08	2.08E-07	5.99E-08	3.08E-08	9.07E-08
2007	569728.37	4215353	8.52E-07	4.82E-07	1.33E-06	1.30E-07	7.34E-08	2.03E-07	5.87E-08	3.02E-08	8.89E-08
2008	569728.68	4215362.67	8.38E-07	4.75E-07	1.31E-06	1.28E-07	7.22E-08	2.00E-07	5.78E-08	2.97E-08	8.75E-08
2009	569713.96	4215217.93	1.39E-06	7.89E-07	2.18E-06	2.13E-07	1.20E-07	3.33E-07	9.60E-08	4.94E-08	1.45E-07
2010	569714.28	4215227.6	1.37E-06	7.78E-07	2.15E-06	2.10E-07	1.18E-07	3.28E-07	9.47E-08	4.87E-08	1.43E-07
2011	569714.59	4215237.27	1.29E-06	7.30E-07	2.02E-06	1.97E-07	1.11E-07	3.08E-07	8.88E-08	4.57E-08	1.34E-07
2012	569714.91	4215246.94	1.21E-06	6.85E-07	1.89E-06	1.85E-07	1.04E-07	2.89E-07	8.34E-08	4.29E-08	1.26E-07
2013	569715.22	4215256.61	1.14E-06	6.47E-07	1.79E-06	1.74E-07	9.83E-08	2.73E-07	7.86E-08	4.05E-08	1.19E-07
2014	569715.54	4215266.28	1.08E-06	6.13E-07	1.69E-06	1.65E-07	9.32E-08	2.58E-07	7.45E-08	3.84E-08	1.13E-07
2015	569715.85	4215275.95	1.03E-06	5.84E-07	1.62E-06	1.57E-07	8.89E-08	2.46E-07	7.11E-08	3.66E-08	1.08E-07
2016	569716.17	4215285.63	9.88E-07	5.60E-07	1.55E-06	1.51E-07	8.52E-08	2.36E-07	6.81E-08	3.51E-08	1.03E-07
2017	569716.48	4215295.3	9.59E-07	5.43E-07	1.50E-06	1.46E-07	8.26E-08	2.29E-07	6.61E-08	3.40E-08	1.00E-07
2018	569716.8	4215304.97	9.31E-07	5.28E-07	1.46E-06	1.42E-07	8.02E-08	2.22E-07	6.42E-08	3.30E-08	9.72E-08
2019	569717.11	4215314.64	9.04E-07	5.12E-07	1.42E-06	1.38E-07	7.79E-08	2.16E-07	6.23E-08	3.21E-08	9.44E-08
2020	569717.43	4215324.31	8.82E-07	5.00E-07	1.38E-06	1.35E-07	7.60E-08	2.11E-07	6.08E-08	3.13E-08	9.21E-08
2021	569717.74	4215333.98	8.6E-07	4.87E-07	1.35E-06	1.31E-07	7.41E-08	2.05E-07	5.93E-08	3.05E-08	8.98E-08
2022	569718.06	4215343.65	8.35E-07	4.73E-07	1.31E-06	1.28E-07	7.20E-08	2.00E-07	5.76E-08	2.96E-08	8.72E-08
2023	569718.37	4215353.33	8.18E-07	4.64E-07	1.28E-06	1.25E-07	7.05E-08	1.95E-07	5.64E-08	2.90E-08	8.54E-08
2024	569718.69	4215363	8.05E-07	4.56E-07	1.26E-06	1.23E-07	6.94E-08	1.92E-07	5.55E-08	2.86E-08	8.40E-08
2025	569719	4215372.67	7.92E-07	4.49E-07	1.24E-06	1.21E-07	6.82E-08	1.89E-07	5.46E-08	2.81E-08	8.27E-08
2026	569719.32	4215382.34	7.87E-07	4.46E-07	1.23E-06	1.20E-07	6.78E-08	1.88E-07	5.42E-08	2.79E-08	8.21E-08
2027	569709.13	4215384.84	7.53E-07	4.26E-07	1.18E-06	1.15E-07	6.49E-08	1.80E-07	5.19E-08	2.67E-08	7.86E-08
2028	569699.1	4215385.23	7.22E-07	4.09E-07	1.13E-06	1.10E-07	6.22E-08	1.72E-07	4.97E-08	2.56E-08	7.54E-08
2029	569702.37	4215376.72	7.35E-07	4.16E-07	1.15E-06	1.12E-07	6.33E-08	1.75E-07	5.06E-08	2.61E-08	7.67E-08
2030	569705.64	4215368.2	7.57E-07	4.29E-07	1.19E-06	1.16E-07	6.52E-08	1.81E-07	5.22E-08	2.68E-08	7.90E-08
2031	569708.92	4215359.69	7.8E-07	4.42E-07	1.22E-06	1.19E-07	6.72E-08	1.86E-07	5.37E-08	2.77E-08	8.14E-08
2032	569689.27	4215385.11	6.95E-07	3.94E-07	1.09E-06	1.06E-07	5.99E-08	1.66E-07	4.79E-08	2.47E-08	7.25E-08
2033	569692.7	4215376.18	7.08E-07	4.01E-07	1.11E-06	1.08E-07	6.10E-08	1.69E-07	4.88E-08	2.51E-08	7.39E-08
2034	569696.14	4215367.24	7.31E-07	4.14E-07	1.15E-06	1.12E-07	6.30E-08	1.75E-07	5.04E-08	2.59E-08	7.63E-08
2035	569699.58	4215358.3	7.55E-07	4.28E-07	1.18E-06	1.15E-07	6.51E-08	1.80E-07	5.20E-08	2.68E-08	7.88E-08
2036	569703.01	4215349.36	7.79E-07	4.41E-07	1.22E-06	1.19E-07	6.71E-08	1.86E-07	5.37E-08	2.76E-08	8.13E-08
2037	569706.45	4215340.42	8.09E-07	4.59E-07	1.27E-06	1.24E-07	6.97E-08	1.93E-07	5.58E-08	2.87E-08	8.45E-08
2038	569679.24	4215385.52	6.7E-07	3.80E-07	1.05E-06	1.02E-07	5.77E-08	1.60E-07	4.62E-08	2.38E-08	7.00E-08
2039	569682.64	4215376.68	6.85E-07	3.88E-07	1.07E-06	1.05E-07	5.91E-08	1.64E-07	4.72E-08	2.43E-08	7.15E-08
2040	569686.04	4215367.83	7.07E-07	4.01E-07	1.11E-06	1.08E-07	6.09E-08	1.69E-07	4.87E-08	2.51E-08	7.38E-08
2041	569689.44	4215358.99	7.29E-07	4.13E-07	1.14E-06	1.11E-07	6.28E-08	1.74E-07	5.02E-08	2.59E-08	7.61E-08
2042	569692.84	4215350.14	7.5E-07	4.25E-07	1.17E-06	1.15E-07	6.46E-08	1.79E-07	5.17E-08	2.66E-08	7.83E-08

2043	569696.24	4215341.3	7.78E-07	4.41E-07	1.22E-06	1.19E-07	6.70E-08	1.86E-07	5.36E-08	2.76E-08	8.12E-08
2044	569699.64	4215332.45	8.11E-07	4.59E-07	1.27E-06	1.24E-07	6.98E-08	1.94E-07	5.59E-08	2.88E-08	8.46E-08
2045	569703.04	4215323.61	8.42E-07	4.77E-07	1.32E-06	1.29E-07	7.26E-08	2.01E-07	5.80E-08	2.99E-08	8.79E-08
2046	569706.44	4215314.76	8.73E-07	4.95E-07	1.37E-06	1.33E-07	7.52E-08	2.09E-07	6.02E-08	3.10E-08	9.11E-08
2047	569669.21	4215385.91	6.47E-07	3.66E-07	1.01E-06	9.87E-08	5.57E-08	1.54E-07	4.46E-08	2.29E-08	6.75E-08
2048	569672.58	4215377.15	6.64E-07	3.76E-07	1.04E-06	1.01E-07	5.72E-08	1.59E-07	4.57E-08	2.35E-08	6.93E-08
2049	569675.94	4215368.4	6.85E-07	3.88E-07	1.07E-06	1.05E-07	5.91E-08	1.64E-07	4.72E-08	2.43E-08	7.15E-08
2050	569679.31	4215359.64	7.07E-07	4.01E-07	1.11E-06	1.08E-07	6.09E-08	1.69E-07	4.87E-08	2.51E-08	7.38E-08
2051	569682.68	4215350.88	7.28E-07	4.13E-07	1.14E-06	1.11E-07	6.28E-08	1.74E-07	5.02E-08	2.58E-08	7.60E-08
2052	569686.05	4215342.12	7.53E-07	4.27E-07	1.18E-06	1.15E-07	6.49E-08	1.80E-07	5.19E-08	2.67E-08	7.86E-08
2053	569689.41	4215333.36	7.82E-07	4.43E-07	1.23E-06	1.19E-07	6.74E-08	1.87E-07	5.39E-08	2.78E-08	8.17E-08
2054	569692.78	4215324.6	8.12E-07	4.60E-07	1.27E-06	1.24E-07	6.99E-08	1.94E-07	5.59E-08	2.88E-08	8.47E-08
2055	569696.15	4215315.84	8.41E-07	4.77E-07	1.32E-06	1.28E-07	7.25E-08	2.01E-07	5.80E-08	2.98E-08	8.78E-08
2056	569699.52	4215307.08	8.77E-07	4.97E-07	1.37E-06	1.34E-07	7.55E-08	2.09E-07	6.04E-08	3.11E-08	9.15E-08
2057	569702.88	4215298.32	9.12E-07	5.17E-07	1.43E-06	1.39E-07	7.86E-08	2.18E-07	6.29E-08	3.24E-08	9.52E-08
2058	569706.25	4215289.56	9.49E-07	5.37E-07	1.49E-06	1.45E-07	8.18E-08	2.27E-07	6.54E-08	3.37E-08	9.90E-08
2059	569659.18	4215386.3	6.23E-07	3.53E-07	9.76E-07	9.51E-08	5.37E-08	1.49E-07	4.29E-08	2.21E-08	6.50E-08
2060	569662.52	4215377.62	6.42E-07	3.64E-07	1.01E-06	9.81E-08	5.53E-08	1.53E-07	4.43E-08	2.28E-08	6.70E-08
2061	569665.86	4215368.93	6.65E-07	3.77E-07	1.04E-06	1.02E-07	5.73E-08	1.59E-07	4.58E-08	2.36E-08	6.94E-08
2062	569669.2	4215360.25	6.87E-07	3.89E-07	1.08E-06	1.05E-07	5.92E-08	1.64E-07	4.73E-08	2.44E-08	7.17E-08
2063	569672.54	4215351.57	7.08E-07	4.01E-07	1.11E-06	1.08E-07	6.10E-08	1.69E-07	4.88E-08	2.51E-08	7.39E-08
2064	569675.87	4215342.88	7.31E-07	4.14E-07	1.15E-06	1.12E-07	6.30E-08	1.75E-07	5.04E-08	2.59E-08	7.63E-08
2065	569679.21	4215334.2	7.59E-07	4.30E-07	1.19E-06	1.16E-07	6.54E-08	1.81E-07	5.23E-08	2.69E-08	7.92E-08
2066	569682.55	4215325.52	7.86E-07	4.46E-07	1.23E-06	1.20E-07	6.78E-08	1.88E-07	5.42E-08	2.79E-08	8.21E-08
2067	569685.89	4215316.83	8.14E-07	4.61E-07	1.27E-06	1.24E-07	7.01E-08	1.94E-07	5.61E-08	2.89E-08	8.49E-08
2068	569689.23	4215308.15	8.48E-07	4.80E-07	1.33E-06	1.29E-07	7.30E-08	2.02E-07	5.84E-08	3.01E-08	8.85E-08
2069	569692.57	4215299.46	8.82E-07	5.00E-07	1.38E-06	1.35E-07	7.60E-08	2.11E-07	6.08E-08	3.13E-08	9.21E-08
2070	569695.9	4215290.78	9.18E-07	5.20E-07	1.44E-06	1.40E-07	7.91E-08	2.19E-07	6.33E-08	3.26E-08	9.58E-08
2071	569699.24	4215282.1	9.59E-07	5.43E-07	1.50E-06	1.46E-07	8.27E-08	2.29E-07	6.61E-08	3.40E-08	1.00E-07
2072	569702.58	4215273.41	1.01E-06	5.72E-07	1.58E-06	1.54E-07	8.70E-08	2.41E-07	6.95E-08	3.58E-08	1.05E-07
2073	569705.92	4215264.73	1.07E-06	6.03E-07	1.67E-06	1.63E-07	9.18E-08	2.54E-07	7.34E-08	3.78E-08	1.11E-07
2074	569649.16	4215386.68	5.99E-07	3.39E-07	9.38E-07	9.14E-08	5.16E-08	1.43E-07	4.12E-08	2.12E-08	6.25E-08
2075	569652.47	4215378.07	6.19E-07	3.50E-07	9.69E-07	9.45E-08	5.33E-08	1.48E-07	4.26E-08	2.19E-08	6.46E-08
2076	569655.79	4215369.45	6.42E-07	3.64E-07	1.01E-06	9.81E-08	5.53E-08	1.53E-07	4.43E-08	2.28E-08	6.70E-08
2077	569659.1	4215360.84	6.66E-07	3.77E-07	1.04E-06	1.02E-07	5.74E-08	1.59E-07	4.59E-08	2.36E-08	6.95E-08
2078	569662.41	4215352.22	6.88E-07	3.90E-07	1.08E-06	1.05E-07	5.93E-08	1.64E-07	4.74E-08	2.44E-08	7.19E-08
2079	569665.72	4215343.61	7.11E-07	4.03E-07	1.11E-06	1.09E-07	6.12E-08	1.70E-07	4.90E-08	2.52E-08	7.42E-08
2080	569669.03	4215334.99	7.37E-07	4.18E-07	1.15E-06	1.13E-07	6.35E-08	1.76E-07	5.08E-08	2.61E-08	7.69E-08
2081	569672.34	4215326.38	7.63E-07	4.32E-07	1.19E-06	1.16E-07	6.57E-08	1.82E-07	5.26E-08	2.71E-08	7.96E-08
2082	569675.66	4215317.76	7.89E-07	4.47E-07	1.24E-06	1.20E-07	6.80E-08	1.88E-07	5.43E-08	2.80E-08	8.23E-08
2083	569678.97	4215309.15	8.22E-07	4.66E-07	1.29E-06	1.26E-07	7.08E-08	1.96E-07	5.66E-08	2.92E-08	8.58E-08
2084	569682.28	4215300.53	8.58E-07	4.86E-07	1.34E-06	1.31E-07	7.39E-08	2.05E-07	5.91E-08	3.04E-08	8.95E-08
2085	569685.59	4215291.92	8.94E-07	5.07E-07	1.40E-06	1.37E-07	7.70E-08	2.14E-07	6.16E-08	3.17E-08	9.33E-08
2086	569688.9	4215283.3	9.32E-07	5.28E-07	1.46E-06	1.42E-07	8.03E-08	2.23E-07	6.43E-08	3.31E-08	9.73E-08
2087	569692.21	4215274.69	9.78E-07	5.54E-07	1.53E-06	1.49E-07	8.43E-08	2.34E-07	6.74E-08	3.47E-08	1.02E-07
2088	569695.53	4215266.07	1.03E-06	5.84E-07	1.62E-06	1.57E-07	8.89E-08	2.46E-07	7.11E-08	3.66E-08	1.08E-07
2089	569698.84	4215257.46	1.09E-06	6.19E-07	1.71E-06	1.67E-07	9.42E-08	2.61E-07	7.53E-08	3.88E-08	1.14E-07
2090	569702.15	4215248.84	1.16E-06	6.56E-07	1.82E-06	1.77E-07	9.98E-08	2.77E-07	7.99E-08	4.11E-08	1.21E-07
2091	569705.46	4215240.23	1.23E-06	6.98E-07	1.93E-06	1.88E-07	1.06E-07	2.94E-07	8.50E-08	4.37E-08	1.29E-07
2092	569639.3	4215386.65	5.77E-07	3.27E-07	9.04E-07	8.81E-08	4.97E-08	1.38E-07	3.98E-08	2.05E-08	6.02E-08
2093	569642.74	4215377.69	5.98E-07	3.39E-07	9.37E-07	9.14E-08	5.16E-08	1.43E-07	4.12E-08	2.12E-08	6.25E-08
2094	569646.19	4215368.73	6.24E-07	3.53E-07	9.77E-07	9.52E-08	5.37E-08	1.49E-07	4.30E-08	2.21E-08	6.51E-08
2095	569649.63	4215359.77	6.49E-07	3.68E-07	1.02E-06	9.91E-08	5.59E-08	1.55E-07	4.47E-08	2.30E-08	6.78E-08
2096	569653.08	4215350.81	6.73E-07	3.81E-07	1.05E-06	1.03E-07	5.80E-08	1.61E-07	4.64E-08	2.39E-08	7.03E-08
2097	569656.52	4215341.85	6.98E-07	3.96E-07	1.09E-06	1.07E-07	6.02E-08	1.67E-07	4.81E-08	2.48E-08	7.29E-08
2098	569659.96	4215332.89	7.25E-07	4.11E-07	1.14E-06	1.11E-07	6.25E-08	1.73E-07	5.00E-08	2.57E-08	7.57E-08
2099	569663.41	4215323.93	7.51E-07	4.25E-07	1.18E-06	1.15E-07	6.47E-08	1.79E-07	5.17E-08	2.66E-08	7.84E-08
2100	569666.85	4215314.97	7.77E-07	4.40E-07	1.22E-06	1.19E-07	6.70E-08	1.86E-07	5.36E-08	2.76E-08	8.11E-08
2101	569670.3	4215306.01	8.15E-07	4.62E-07	1.28E-06	1.24E-07	7.02E-08	1.95E-07	5.62E-08	2.89E-08	8.51E-08
2102	569673.74	4215297.05	8.54E-07	4.84E-07	1.34E-06	1.30E-07	7.36E-08	2.04E-07	5.89E-08	3.03E-08	8.92E-08
2103	569677.19	4215288.09	8.95E-07	5.07E-07	1.40E-06	1.37E-07	7.71E-08	2.14E-07	6.17E-08	3.17E-08	9.34E-08
2104	569680.63	4215279.13	9.38E-07	5.31E-07	1.47E-06	1.43E-07	8.08E-08	2.24E-07	6.46E-08	3.33E-08	9.79E-08

2105	569684.07	4215270.17	9.86E-07	5.59E-07	1.55E-06	1.51E-07	8.50E-08	2.36E-07	6.80E-08	3.50E-08	1.03E-07
2106	569687.52	4215261.21	1.04E-06	5.91E-07	1.63E-06	1.59E-07	8.99E-08	2.49E-07	7.19E-08	3.70E-08	1.09E-07
2107	569690.96	4215252.26	1.11E-06	6.26E-07	1.73E-06	1.69E-07	9.53E-08	2.64E-07	7.62E-08	3.92E-08	1.15E-07
2108	569694.41	4215243.3	1.18E-06	6.66E-07	1.84E-06	1.80E-07	1.01E-07	2.81E-07	8.10E-08	4.17E-08	1.23E-07
2109	569697.85	4215234.34	1.25E-06	7.10E-07	1.96E-06	1.91E-07	1.08E-07	2.99E-07	8.64E-08	4.45E-08	1.31E-07
2110	569701.29	4215225.38	1.33E-06	7.55E-07	2.09E-06	2.03E-07	1.15E-07	3.18E-07	9.18E-08	4.72E-08	1.39E-07
2111	569704.74	4215216.42	1.34E-06	7.62E-07	2.11E-06	2.05E-07	1.16E-07	3.21E-07	9.27E-08	4.77E-08	1.40E-07
2112	569629.27	4215387.04	5.57E-07	3.15E-07	8.72E-07	8.50E-08	4.80E-08	1.33E-07	3.84E-08	1.97E-08	5.81E-08
2113	569632.69	4215378.16	5.77E-07	3.27E-07	9.05E-07	8.82E-08	4.98E-08	1.38E-07	3.98E-08	2.05E-08	6.03E-08
2114	569636.1	4215369.27	6.02E-07	3.41E-07	9.44E-07	9.20E-08	5.19E-08	1.44E-07	4.15E-08	2.14E-08	6.29E-08
2115	569639.52	4215360.39	6.28E-07	3.56E-07	9.84E-07	9.59E-08	5.41E-08	1.50E-07	4.33E-08	2.23E-08	6.56E-08
2116	569642.93	4215351.51	6.53E-07	3.70E-07	1.02E-06	9.97E-08	5.63E-08	1.56E-07	4.50E-08	2.32E-08	6.82E-08
2117	569646.34	4215342.63	6.79E-07	3.85E-07	1.06E-06	1.04E-07	5.85E-08	1.62E-07	4.68E-08	2.41E-08	7.09E-08
2118	569649.76	4215333.75	7.06E-07	4.00E-07	1.11E-06	1.08E-07	6.09E-08	1.69E-07	4.87E-08	2.51E-08	7.37E-08
2119	569653.17	4215324.87	7.33E-07	4.15E-07	1.15E-06	1.12E-07	6.32E-08	1.75E-07	5.05E-08	2.60E-08	7.65E-08
2120	569656.59	4215315.99	7.58E-07	4.29E-07	1.19E-06	1.16E-07	6.53E-08	1.81E-07	5.22E-08	2.69E-08	7.91E-08
2121	569660	4215307.11	7.94E-07	4.50E-07	1.24E-06	1.21E-07	6.84E-08	1.90E-07	5.47E-08	2.81E-08	8.28E-08
2122	569663.41	4215298.22	8.32E-07	4.71E-07	1.30E-06	1.27E-07	7.17E-08	1.99E-07	5.74E-08	2.95E-08	8.69E-08
2123	569666.83	4215289.34	8.75E-07	4.96E-07	1.37E-06	1.34E-07	7.54E-08	2.09E-07	6.03E-08	3.10E-08	9.13E-08
2124	569670.24	4215280.46	9.17E-07	5.20E-07	1.44E-06	1.40E-07	7.90E-08	2.19E-07	6.32E-08	3.25E-08	9.57E-08
2125	569673.66	4215271.58	9.62E-07	5.45E-07	1.51E-06	1.47E-07	8.29E-08	2.30E-07	6.63E-08	3.41E-08	1.00E-07
2126	569677.07	4215262.7	1.01E-06	5.74E-07	1.59E-06	1.55E-07	8.73E-08	2.42E-07	6.98E-08	3.59E-08	1.06E-07
2127	569680.49	4215253.82	1.07E-06	6.06E-07	1.68E-06	1.63E-07	9.22E-08	2.56E-07	7.37E-08	3.79E-08	1.12E-07
2128	569683.9	4215244.94	1.13E-06	6.39E-07	1.77E-06	1.72E-07	9.72E-08	2.70E-07	7.78E-08	4.00E-08	1.18E-07
2129	569687.31	4215236.06	1.2E-06	6.78E-07	1.88E-06	1.83E-07	1.03E-07	2.86E-07	8.25E-08	4.25E-08	1.25E-07
2130	569690.73	4215227.18	1.28E-06	7.23E-07	2.00E-06	1.95E-07	1.10E-07	3.05E-07	8.80E-08	4.53E-08	1.33E-07
2131	569694.14	4215218.29	1.29E-06	7.33E-07	2.03E-06	1.98E-07	1.12E-07	3.09E-07	8.92E-08	4.59E-08	1.35E-07
2132	569697.56	4215209.41	1.3E-06	7.37E-07	2.04E-06	1.99E-07	1.12E-07	3.11E-07	8.97E-08	4.62E-08	1.36E-07
2133	569625.86	4215395.92	5.36E-07	3.03E-07	8.39E-07	8.18E-08	4.61E-08	1.28E-07	3.69E-08	1.90E-08	5.59E-08
2134	569619.25	4215387.42	5.38E-07	3.05E-07	8.43E-07	8.22E-08	4.64E-08	1.29E-07	3.71E-08	1.91E-08	5.62E-08
2135	569622.64	4215378.61	5.59E-07	3.17E-07	8.76E-07	8.54E-08	4.82E-08	1.34E-07	3.85E-08	1.98E-08	5.83E-08
2136	569626.02	4215369.8	5.83E-07	3.30E-07	9.13E-07	8.90E-08	5.02E-08	1.39E-07	4.02E-08	2.07E-08	6.08E-08
2137	569629.41	4215360.99	6.08E-07	3.45E-07	9.53E-07	9.29E-08	5.24E-08	1.45E-07	4.19E-08	2.16E-08	6.35E-08
2138	569632.8	4215352.18	6.34E-07	3.59E-07	9.93E-07	9.68E-08	5.46E-08	1.51E-07	4.37E-08	2.25E-08	6.62E-08
2139	569636.18	4215343.37	6.6E-07	3.74E-07	1.03E-06	1.01E-07	5.69E-08	1.58E-07	4.55E-08	2.34E-08	6.89E-08
2140	569639.57	4215334.56	6.89E-07	3.90E-07	1.08E-06	1.05E-07	5.94E-08	1.65E-07	4.75E-08	2.44E-08	7.19E-08
2141	569642.96	4215325.75	7.17E-07	4.06E-07	1.12E-06	1.09E-07	6.18E-08	1.71E-07	4.94E-08	2.54E-08	7.48E-08
2142	569646.34	4215316.94	7.43E-07	4.21E-07	1.16E-06	1.13E-07	6.40E-08	1.78E-07	5.12E-08	2.64E-08	7.76E-08
2143	569649.73	4215308.13	7.78E-07	4.41E-07	1.22E-06	1.19E-07	6.70E-08	1.86E-07	5.36E-08	2.76E-08	8.12E-08
2144	569653.12	4215299.32	8.16E-07	4.62E-07	1.28E-06	1.25E-07	7.03E-08	1.95E-07	5.62E-08	2.89E-08	8.52E-08
2145	569656.5	4215290.51	8.57E-07	4.86E-07	1.34E-06	1.31E-07	7.39E-08	2.05E-07	5.91E-08	3.04E-08	8.95E-08
2146	569659.89	4215281.7	8.99E-07	5.09E-07	1.41E-06	1.37E-07	7.74E-08	2.15E-07	6.19E-08	3.19E-08	9.38E-08
2147	569663.28	4215272.89	9.4E-07	5.32E-07	1.47E-06	1.44E-07	8.10E-08	2.24E-07	6.48E-08	3.33E-08	9.81E-08
2148	569666.66	4215264.08	9.86E-07	5.59E-07	1.54E-06	1.51E-07	8.50E-08	2.36E-07	6.80E-08	3.50E-08	1.03E-07
2149	569670.05	4215255.27	1.04E-06	5.88E-07	1.63E-06	1.58E-07	8.94E-08	2.48E-07	7.15E-08	3.68E-08	1.08E-07
2150	569673.44	4215246.46	1.09E-06	6.16E-07	1.70E-06	1.66E-07	9.36E-08	2.60E-07	7.49E-08	3.85E-08	1.13E-07
2151	569676.82	4215237.65	1.14E-06	6.48E-07	1.79E-06	1.75E-07	9.85E-08	2.73E-07	7.88E-08	4.06E-08	1.19E-07
2152	569680.21	4215228.84	1.21E-06	6.85E-07	1.89E-06	1.85E-07	1.04E-07	2.89E-07	8.33E-08	4.29E-08	1.26E-07
2153	569683.6	4215220.03	1.23E-06	6.97E-07	1.93E-06	1.88E-07	1.06E-07	2.94E-07	8.48E-08	4.37E-08	1.28E-07
2154	569686.98	4215211.23	1.24E-06	7.00E-07	1.93E-06	1.89E-07	1.06E-07	2.95E-07	8.51E-08	4.38E-08	1.29E-07
2155	569690.37	4215202.42	1.24E-06	7.04E-07	1.95E-06	1.90E-07	1.07E-07	2.97E-07	8.57E-08	4.41E-08	1.30E-07
2156	569615.87	4215396.23	5.17E-07	2.93E-07	8.10E-07	7.90E-08	4.46E-08	1.24E-07	3.56E-08	1.84E-08	5.40E-08
2157	569616.17	4215405.88	5.01E-07	2.84E-07	7.86E-07	7.66E-08	4.32E-08	1.20E-07	3.46E-08	1.78E-08	5.23E-08
2158	569616.47	4215415.53	4.88E-07	2.76E-07	7.64E-07	7.45E-08	4.20E-08	1.17E-07	3.36E-08	1.73E-08	5.09E-08
2159	569609.23	4215387.79	5.21E-07	2.95E-07	8.16E-07	7.95E-08	4.49E-08	1.24E-07	3.59E-08	1.85E-08	5.44E-08
2160	569612.59	4215379.05	5.41E-07	3.07E-07	8.48E-07	8.27E-08	4.66E-08	1.29E-07	3.73E-08	1.92E-08	5.65E-08
2161	569615.95	4215370.31	5.64E-07	3.20E-07	8.84E-07	8.62E-08	4.86E-08	1.35E-07	3.89E-08	2.00E-08	5.89E-08
2162	569619.32	4215361.56	5.89E-07	3.34E-07	9.23E-07	9.00E-08	5.08E-08	1.41E-07	4.06E-08	2.09E-08	6.15E-08
2163	569622.68	4215352.82	6.14E-07	3.48E-07	9.62E-07	9.38E-08	5.29E-08	1.47E-07	4.23E-08	2.18E-08	6.41E-08
2164	569626.04	4215344.07	6.41E-07	3.63E-07	1.00E-06	9.78E-08	5.52E-08	1.53E-07	4.41E-08	2.27E-08	6.69E-08
2165	569629.4	4215335.33	6.71E-07	3.80E-07	1.05E-06	1.02E-07	5.78E-08	1.60E-07	4.62E-08	2.38E-08	7.00E-08
2166	569632.76	4215326.59	7.01E-07	3.97E-07	1.10E-06	1.07E-07	6.04E-08	1.68E-07	4.83E-08	2.49E-08	7.32E-08

2167	569636.12	4215317.84	7.31E-07	4.14E-07	1.14E-06	1.12E-07	6.29E-08	1.75E-07	5.03E-08	2.59E-08	7.63E-08
2168	569639.48	4215309.1	7.64E-07	4.33E-07	1.20E-06	1.17E-07	6.58E-08	1.83E-07	5.27E-08	2.71E-08	7.98E-08
2169	569642.84	4215300.35	8.02E-07	4.54E-07	1.26E-06	1.22E-07	6.91E-08	1.91E-07	5.52E-08	2.84E-08	8.37E-08
2170	569646.21	4215291.61	8.42E-07	4.77E-07	1.32E-06	1.29E-07	7.26E-08	2.01E-07	5.80E-08	2.99E-08	8.79E-08
2171	569649.57	4215282.87	8.83E-07	5.00E-07	1.38E-06	1.35E-07	7.61E-08	2.11E-07	6.08E-08	3.13E-08	9.22E-08
2172	569652.93	4215274.12	9.2E-07	5.21E-07	1.44E-06	1.41E-07	7.93E-08	2.20E-07	6.34E-08	3.26E-08	9.61E-08
2173	569656.29	4215265.38	9.62E-07	5.45E-07	1.51E-06	1.47E-07	8.29E-08	2.30E-07	6.63E-08	3.41E-08	1.00E-07
2174	569659.65	4215256.63	1.01E-06	5.72E-07	1.58E-06	1.54E-07	8.70E-08	2.41E-07	6.95E-08	3.58E-08	1.05E-07
2175	569663.01	4215247.89	1.05E-06	5.95E-07	1.64E-06	1.60E-07	9.04E-08	2.51E-07	7.23E-08	3.72E-08	1.10E-07
2176	569666.37	4215239.14	1.1E-06	6.21E-07	1.72E-06	1.67E-07	9.44E-08	2.62E-07	7.55E-08	3.89E-08	1.14E-07
2177	569669.74	4215230.4	1.15E-06	6.51E-07	1.80E-06	1.76E-07	9.91E-08	2.75E-07	7.92E-08	4.08E-08	1.20E-07
2178	569673.1	4215221.66	1.17E-06	6.65E-07	1.84E-06	1.79E-07	1.01E-07	2.80E-07	8.09E-08	4.16E-08	1.23E-07
2179	569676.46	4215212.91	1.17E-06	6.62E-07	1.83E-06	1.79E-07	1.01E-07	2.79E-07	8.06E-08	4.15E-08	1.22E-07
2180	569679.82	4215204.17	1.17E-06	6.62E-07	1.83E-06	1.78E-07	1.01E-07	2.79E-07	8.05E-08	4.14E-08	1.22E-07
2181	569683.18	4215195.42	1.17E-06	6.62E-07	1.83E-06	1.78E-07	1.01E-07	2.79E-07	8.05E-08	4.14E-08	1.22E-07
2182	569695.14	4215182.97	1.17E-06	6.63E-07	1.83E-06	1.79E-07	1.01E-07	2.80E-07	8.07E-08	4.15E-08	1.22E-07
2183	569605.87	4215396.54	5E-07	2.83E-07	7.84E-07	7.64E-08	4.31E-08	1.19E-07	3.45E-08	1.77E-08	5.22E-08
2184	569606.17	4215406.19	4.84E-07	2.74E-07	7.59E-07	7.40E-08	4.17E-08	1.16E-07	3.34E-08	1.72E-08	5.06E-08
2185	569606.47	4215415.84	4.72E-07	2.67E-07	7.40E-07	7.21E-08	4.07E-08	1.13E-07	3.25E-08	1.67E-08	4.93E-08
2186	569606.77	4215425.5	4.6E-07	2.61E-07	7.21E-07	7.03E-08	3.96E-08	1.10E-07	3.17E-08	1.63E-08	4.80E-08
2187	569599.21	4215388.17	5.04E-07	2.86E-07	7.90E-07	7.70E-08	4.35E-08	1.20E-07	3.48E-08	1.79E-08	5.26E-08
2188	569602.55	4215379.48	5.25E-07	2.97E-07	8.22E-07	8.01E-08	4.52E-08	1.25E-07	3.61E-08	1.86E-08	5.48E-08
2189	569605.89	4215370.8	5.47E-07	3.10E-07	8.57E-07	8.35E-08	4.71E-08	1.31E-07	3.77E-08	1.94E-08	5.71E-08
2190	569609.23	4215362.11	5.71E-07	3.24E-07	8.95E-07	8.72E-08	4.92E-08	1.36E-07	3.94E-08	2.03E-08	5.96E-08
2191	569612.57	4215353.43	5.96E-07	3.38E-07	9.33E-07	9.10E-08	5.13E-08	1.42E-07	4.11E-08	2.11E-08	6.22E-08
2192	569615.9	4215344.75	6.21E-07	3.52E-07	9.73E-07	9.49E-08	5.35E-08	1.48E-07	4.28E-08	2.20E-08	6.49E-08
2193	569619.24	4215336.06	6.52E-07	3.69E-07	1.02E-06	9.95E-08	5.62E-08	1.56E-07	4.49E-08	2.31E-08	6.80E-08
2194	569622.58	4215327.38	6.83E-07	3.87E-07	1.07E-06	1.04E-07	5.88E-08	1.63E-07	4.71E-08	2.42E-08	7.13E-08
2195	569625.92	4215318.7	7.14E-07	4.05E-07	1.12E-06	1.09E-07	6.16E-08	1.71E-07	4.92E-08	2.53E-08	7.46E-08
2196	569629.26	4215310.01	7.49E-07	4.24E-07	1.17E-06	1.14E-07	6.46E-08	1.79E-07	5.16E-08	2.66E-08	7.82E-08
2197	569632.59	4215301.33	7.88E-07	4.47E-07	1.23E-06	1.20E-07	6.79E-08	1.88E-07	5.43E-08	2.80E-08	8.23E-08
2198	569635.93	4215292.64	8.29E-07	4.69E-07	1.30E-06	1.27E-07	7.14E-08	1.98E-07	5.71E-08	2.94E-08	8.65E-08
2199	569639.27	4215283.96	8.69E-07	4.92E-07	1.36E-06	1.33E-07	7.49E-08	2.08E-07	5.99E-08	3.08E-08	9.07E-08
2200	569642.61	4215275.28	9.03E-07	5.11E-07	1.41E-06	1.38E-07	7.78E-08	2.16E-07	6.22E-08	3.20E-08	9.42E-08
2201	569645.95	4215266.59	9.4E-07	5.33E-07	1.47E-06	1.44E-07	8.10E-08	2.25E-07	6.48E-08	3.34E-08	9.82E-08
2202	569649.29	4215257.91	9.82E-07	5.56E-07	1.54E-06	1.50E-07	8.46E-08	2.35E-07	6.77E-08	3.48E-08	1.03E-07
2203	569652.62	4215249.22	1.01E-06	5.74E-07	1.59E-06	1.55E-07	8.73E-08	2.42E-07	6.98E-08	3.59E-08	1.06E-07
2204	569655.96	4215240.54	1.05E-06	5.94E-07	1.64E-06	1.60E-07	9.03E-08	2.50E-07	7.22E-08	3.72E-08	1.09E-07
2205	569659.3	4215231.86	1.09E-06	6.18E-07	1.71E-06	1.67E-07	9.40E-08	2.61E-07	7.52E-08	3.87E-08	1.14E-07
2206	569662.64	4215223.17	1.12E-06	6.36E-07	1.76E-06	1.71E-07	9.67E-08	2.68E-07	7.73E-08	3.98E-08	1.17E-07
2207	569665.98	4215214.49	1.11E-06	6.29E-07	1.74E-06	1.70E-07	9.57E-08	2.65E-07	7.66E-08	3.94E-08	1.16E-07
2208	569669.31	4215205.81	1.1E-06	6.24E-07	1.73E-06	1.68E-07	9.50E-08	2.63E-07	7.60E-08	3.91E-08	1.15E-07
2209	569672.65	4215197.12	1.1E-06	6.22E-07	1.72E-06	1.68E-07	9.45E-08	2.62E-07	7.56E-08	3.89E-08	1.15E-07
2210	569675.99	4215188.44	1.08E-06	6.12E-07	1.69E-06	1.65E-07	9.31E-08	2.58E-07	7.45E-08	3.83E-08	1.13E-07
2211	569687.87	4215176.07	1.08E-06	6.13E-07	1.70E-06	1.65E-07	9.33E-08	2.59E-07	7.46E-08	3.84E-08	1.13E-07
2212	569595.87	4215396.85	4.85E-07	2.75E-07	7.59E-07	7.40E-08	4.18E-08	1.16E-07	3.34E-08	1.72E-08	5.06E-08
2213	569596.17	4215406.5	4.69E-07	2.66E-07	7.35E-07	7.16E-08	4.04E-08	1.12E-07	3.23E-08	1.66E-08	4.90E-08
2214	569596.47	4215416.15	4.58E-07	2.59E-07	7.17E-07	6.99E-08	3.94E-08	1.09E-07	3.15E-08	1.62E-08	4.78E-08
2215	569596.77	4215425.81	4.46E-07	2.53E-07	6.99E-07	6.81E-08	3.85E-08	1.07E-07	3.08E-08	1.58E-08	4.66E-08
2216	569597.07	4215435.46	4.35E-07	2.47E-07	6.82E-07	6.65E-08	3.75E-08	1.04E-07	3.00E-08	1.54E-08	4.54E-08
2217	569589.33	4215388.19	4.9E-07	2.78E-07	7.67E-07	7.48E-08	4.22E-08	1.17E-07	3.38E-08	1.74E-08	5.11E-08
2218	569592.78	4215379.21	5.1E-07	2.89E-07	7.99E-07	7.79E-08	4.40E-08	1.22E-07	3.52E-08	1.81E-08	5.33E-08
2219	569596.23	4215370.24	5.33E-07	3.02E-07	8.35E-07	8.14E-08	4.59E-08	1.27E-07	3.67E-08	1.89E-08	5.56E-08
2220	569599.68	4215361.27	5.58E-07	3.16E-07	8.73E-07	8.51E-08	4.80E-08	1.33E-07	3.84E-08	1.98E-08	5.82E-08
2221	569603.13	4215352.29	5.83E-07	3.30E-07	9.13E-07	8.90E-08	5.02E-08	1.39E-07	4.02E-08	2.07E-08	6.09E-08
2222	569606.58	4215343.32	6.1E-07	3.46E-07	9.56E-07	9.32E-08	5.26E-08	1.46E-07	4.21E-08	2.16E-08	6.37E-08
2223	569610.03	4215334.35	6.42E-07	3.64E-07	1.01E-06	9.81E-08	5.53E-08	1.53E-07	4.43E-08	2.28E-08	6.70E-08
2224	569613.48	4215325.37	6.75E-07	3.83E-07	1.06E-06	1.03E-07	5.82E-08	1.61E-07	4.65E-08	2.40E-08	7.05E-08
2225	569616.92	4215316.4	7.09E-07	4.02E-07	1.11E-06	1.08E-07	6.11E-08	1.69E-07	4.89E-08	2.52E-08	7.41E-08
2226	569620.37	4215307.43	7.46E-07	4.23E-07	1.17E-06	1.14E-07	6.43E-08	1.78E-07	5.14E-08	2.65E-08	7.79E-08
2227	569623.82	4215298.45	7.86E-07	4.45E-07	1.23E-06	1.20E-07	6.77E-08	1.88E-07	5.42E-08	2.79E-08	8.21E-08
2228	569627.27	4215289.48	8.3E-07	4.70E-07	1.30E-06	1.27E-07	7.15E-08	1.98E-07	5.72E-08	2.94E-08	8.67E-08

2229	569630.72	4215280.51	8.67E-07	4.91E-07	1.36E-06	1.32E-07	7.47E-08	2.07E-07	5.98E-08	3.08E-08	9.05E-08
2230	569634.17	4215271.53	9.06E-07	5.13E-07	1.42E-06	1.38E-07	7.80E-08	2.16E-07	6.24E-08	3.21E-08	9.45E-08
2231	569637.62	4215262.56	9.42E-07	5.34E-07	1.48E-06	1.44E-07	8.12E-08	2.25E-07	6.49E-08	3.34E-08	9.84E-08
2232	569641.07	4215253.59	9.76E-07	5.53E-07	1.53E-06	1.49E-07	8.41E-08	2.33E-07	6.72E-08	3.46E-08	1.02E-07
2233	569644.52	4215244.61	9.97E-07	5.65E-07	1.56E-06	1.52E-07	8.59E-08	2.38E-07	6.87E-08	3.54E-08	1.04E-07
2234	569647.97	4215235.64	1.02E-06	5.80E-07	1.60E-06	1.56E-07	8.83E-08	2.45E-07	7.06E-08	3.63E-08	1.07E-07
2235	569651.42	4215226.67	1.06E-06	6.01E-07	1.66E-06	1.62E-07	9.14E-08	2.53E-07	7.31E-08	3.76E-08	1.11E-07
2236	569654.87	4215217.69	1.06E-06	6.01E-07	1.66E-06	1.62E-07	9.14E-08	2.53E-07	7.31E-08	3.76E-08	1.11E-07
2237	569658.32	4215208.72	1.05E-06	5.96E-07	1.65E-06	1.61E-07	9.07E-08	2.51E-07	7.25E-08	3.73E-08	1.10E-07
2238	569661.77	4215199.75	1.04E-06	5.88E-07	1.63E-06	1.59E-07	8.95E-08	2.48E-07	7.16E-08	3.68E-08	1.08E-07
2239	569665.22	4215190.77	1.02E-06	5.80E-07	1.60E-06	1.56E-07	8.82E-08	2.45E-07	7.06E-08	3.63E-08	1.07E-07
2240	569668.67	4215181.8	1.01E-06	5.72E-07	1.58E-06	1.54E-07	8.70E-08	2.41E-07	6.96E-08	3.58E-08	1.05E-07
2241	569680.94	4215169.02	1.01E-06	5.74E-07	1.59E-06	1.55E-07	8.73E-08	2.42E-07	6.98E-08	3.59E-08	1.06E-07
2242	569585.88	4215397.16	4.7E-07	2.66E-07	7.36E-07	7.18E-08	4.05E-08	1.12E-07	3.24E-08	1.67E-08	4.91E-08
2243	569586.18	4215406.81	4.55E-07	2.58E-07	7.13E-07	6.95E-08	3.92E-08	1.09E-07	3.14E-08	1.61E-08	4.75E-08
2244	569586.48	4215416.47	4.44E-07	2.52E-07	6.96E-07	6.78E-08	3.83E-08	1.06E-07	3.06E-08	1.58E-08	4.64E-08
2245	569586.78	4215426.12	4.33E-07	2.45E-07	6.79E-07	6.62E-08	3.73E-08	1.03E-07	2.99E-08	1.54E-08	4.52E-08
2246	569587.08	4215435.77	4.23E-07	2.39E-07	6.62E-07	6.45E-08	3.64E-08	1.01E-07	2.91E-08	1.50E-08	4.41E-08
2247	569918.17	4215544.25	7.17E-07	4.06E-07	1.12E-06	1.09E-07	6.18E-08	1.71E-07	4.94E-08	2.54E-08	7.48E-08
2248	569927.49	4215542.57	7.29E-07	4.13E-07	1.14E-06	1.11E-07	6.29E-08	1.74E-07	5.03E-08	2.59E-08	7.61E-08
2249	569936.8	4215540.89	7.43E-07	4.21E-07	1.16E-06	1.13E-07	6.40E-08	1.77E-07	5.12E-08	2.64E-08	7.75E-08
2250	569946.12	4215539.22	7.57E-07	4.29E-07	1.19E-06	1.16E-07	6.53E-08	1.81E-07	5.22E-08	2.69E-08	7.91E-08
2251	569955.43	4215537.54	7.74E-07	4.38E-07	1.21E-06	1.18E-07	6.67E-08	1.85E-07	5.33E-08	2.74E-08	8.07E-08
2252	569964.75	4215535.87	7.92E-07	4.48E-07	1.24E-06	1.21E-07	6.82E-08	1.89E-07	5.45E-08	2.81E-08	8.26E-08
2253	569974.06	4215534.19	8.12E-07	4.60E-07	1.27E-06	1.24E-07	7.00E-08	1.94E-07	5.60E-08	2.88E-08	8.48E-08
2254	569983.38	4215532.52	8.35E-07	4.73E-07	1.31E-06	1.27E-07	7.19E-08	1.99E-07	5.75E-08	2.96E-08	8.71E-08
2255	569992.69	4215530.84	8.59E-07	4.87E-07	1.35E-06	1.31E-07	7.40E-08	2.05E-07	5.92E-08	3.05E-08	8.97E-08
2256	570002.01	4215529.17	8.85E-07	5.02E-07	1.39E-06	1.35E-07	7.63E-08	2.11E-07	6.10E-08	3.14E-08	9.24E-08
2257	570011.32	4215527.49	9.12E-07	5.17E-07	1.43E-06	1.39E-07	7.86E-08	2.18E-07	6.29E-08	3.24E-08	9.52E-08
2258	570020.64	4215525.82	9.39E-07	5.32E-07	1.47E-06	1.43E-07	8.09E-08	2.24E-07	6.47E-08	3.33E-08	9.80E-08
2259	569911.2	4215551.84	6.71E-07	3.80E-07	1.05E-06	1.02E-07	5.78E-08	1.60E-07	4.62E-08	2.38E-08	7.00E-08
2260	569902.47	4215549.6	6.83E-07	3.87E-07	1.07E-06	1.04E-07	5.88E-08	1.63E-07	4.70E-08	2.42E-08	7.12E-08
2261	569929.26	4215552.41	6.7E-07	3.79E-07	1.05E-06	1.02E-07	5.77E-08	1.60E-07	4.62E-08	2.38E-08	6.99E-08
2262	569938.57	4215550.74	6.81E-07	3.86E-07	1.07E-06	1.04E-07	5.87E-08	1.63E-07	4.69E-08	2.42E-08	7.11E-08
2263	569947.89	4215549.06	6.93E-07	3.93E-07	1.09E-06	1.06E-07	5.97E-08	1.65E-07	4.77E-08	2.46E-08	7.23E-08
2264	569957.2	4215547.39	7.06E-07	4.00E-07	1.11E-06	1.08E-07	6.08E-08	1.69E-07	4.86E-08	2.50E-08	7.37E-08
2265	569966.52	4215545.71	7.21E-07	4.08E-07	1.13E-06	1.10E-07	6.21E-08	1.72E-07	4.97E-08	2.56E-08	7.52E-08
2266	569975.83	4215544.04	7.37E-07	4.17E-07	1.15E-06	1.13E-07	6.35E-08	1.76E-07	5.08E-08	2.61E-08	7.69E-08
2267	569985.15	4215542.36	7.55E-07	4.28E-07	1.18E-06	1.15E-07	6.51E-08	1.80E-07	5.20E-08	2.68E-08	7.88E-08
2268	569994.46	4215540.68	7.75E-07	4.39E-07	1.21E-06	1.18E-07	6.68E-08	1.85E-07	5.34E-08	2.75E-08	8.09E-08
2269	570003.78	4215539.01	7.96E-07	4.51E-07	1.25E-06	1.22E-07	6.86E-08	1.90E-07	5.49E-08	2.82E-08	8.31E-08
2270	570013.09	4215537.33	8.18E-07	4.63E-07	1.28E-06	1.25E-07	7.05E-08	1.95E-07	5.64E-08	2.90E-08	8.54E-08
2271	570022.41	4215535.66	8.39E-07	4.75E-07	1.31E-06	1.28E-07	7.23E-08	2.00E-07	5.78E-08	2.98E-08	8.76E-08
2272	569913.03	4215561.7	6.19E-07	3.51E-07	9.70E-07	9.45E-08	5.33E-08	1.48E-07	4.27E-08	2.20E-08	6.46E-08
2273	569895.65	4215557.24	6.41E-07	3.63E-07	1.00E-06	9.78E-08	5.52E-08	1.53E-07	4.41E-08	2.27E-08	6.69E-08
2274	569878.28	4215552.77	6.61E-07	3.75E-07	1.04E-06	1.01E-07	5.70E-08	1.58E-07	4.56E-08	2.35E-08	6.90E-08
2275	569921.71	4215563.93	6.08E-07	3.44E-07	9.53E-07	9.29E-08	5.24E-08	1.45E-07	4.19E-08	2.16E-08	6.35E-08
2276	569931.03	4215562.25	6.17E-07	3.49E-07	9.66E-07	9.42E-08	5.31E-08	1.47E-07	4.25E-08	2.19E-08	6.44E-08
2277	569940.34	4215560.58	6.26E-07	3.55E-07	9.81E-07	9.56E-08	5.39E-08	1.50E-07	4.31E-08	2.22E-08	6.53E-08
2278	569949.66	4215558.9	6.36E-07	3.60E-07	9.96E-07	9.71E-08	5.48E-08	1.52E-07	4.38E-08	2.26E-08	6.64E-08
2279	569958.97	4215557.23	6.47E-07	3.66E-07	1.01E-06	9.87E-08	5.57E-08	1.54E-07	4.46E-08	2.29E-08	6.75E-08
2280	569968.29	4215555.55	6.59E-07	3.73E-07	1.03E-06	1.01E-07	5.68E-08	1.57E-07	4.54E-08	2.34E-08	6.88E-08
2281	569977.6	4215553.88	6.72E-07	3.81E-07	1.05E-06	1.03E-07	5.79E-08	1.61E-07	4.63E-08	2.38E-08	7.02E-08
2282	569986.92	4215552.2	6.87E-07	3.89E-07	1.08E-06	1.05E-07	5.92E-08	1.64E-07	4.73E-08	2.44E-08	7.17E-08
2283	569996.23	4215550.53	7.02E-07	3.98E-07	1.10E-06	1.07E-07	6.05E-08	1.68E-07	4.84E-08	2.49E-08	7.33E-08
2284	570005.55	4215548.85	7.19E-07	4.07E-07	1.13E-06	1.10E-07	6.19E-08	1.72E-07	4.95E-08	2.55E-08	7.50E-08
2285	570014.86	4215547.18	7.36E-07	4.17E-07	1.15E-06	1.12E-07	6.34E-08	1.76E-07	5.07E-08	2.61E-08	7.68E-08
2286	570024.18	4215545.5	7.54E-07	4.27E-07	1.18E-06	1.15E-07	6.49E-08	1.80E-07	5.19E-08	2.67E-08	7.87E-08
2287	570033.49	4215543.83	7.69E-07	4.36E-07	1.20E-06	1.17E-07	6.62E-08	1.84E-07	5.30E-08	2.73E-08	8.03E-08
2288	569914.84	4215571.55	5.72E-07	3.24E-07	8.96E-07	8.74E-08	4.93E-08	1.37E-07	3.94E-08	2.03E-08	5.97E-08
2289	569897.56	4215567.11	5.92E-07	3.36E-07	9.28E-07	9.05E-08	5.11E-08	1.42E-07	4.08E-08	2.10E-08	6.18E-08
2290	569880.28	4215562.67	6.12E-07	3.47E-07	9.59E-07	9.35E-08	5.28E-08	1.46E-07	4.22E-08	2.17E-08	6.39E-08

2291	569862.99	4215558.23	6.31E-07	3.58E-07	9.89E-07	9.64E-08	5.44E-08	1.51E-07	4.35E-08	2.24E-08	6.59E-08
2292	569923.48	4215573.77	5.62E-07	3.18E-07	8.81E-07	8.58E-08	4.84E-08	1.34E-07	3.87E-08	1.99E-08	5.87E-08
2293	569932.8	4215572.1	5.69E-07	3.23E-07	8.92E-07	8.70E-08	4.91E-08	1.36E-07	3.92E-08	2.02E-08	5.94E-08
2294	569942.11	4215570.42	5.77E-07	3.27E-07	9.04E-07	8.81E-08	4.97E-08	1.38E-07	3.98E-08	2.05E-08	6.03E-08
2295	569951.43	4215568.75	5.86E-07	3.32E-07	9.17E-07	8.94E-08	5.05E-08	1.40E-07	4.03E-08	2.08E-08	6.11E-08
2296	569960.74	4215567.07	5.95E-07	3.37E-07	9.31E-07	9.08E-08	5.12E-08	1.42E-07	4.10E-08	2.11E-08	6.21E-08
2297	569970.06	4215565.4	6.05E-07	3.43E-07	9.47E-07	9.23E-08	5.21E-08	1.44E-07	4.17E-08	2.14E-08	6.31E-08
2298	569979.37	4215563.72	6.15E-07	3.49E-07	9.64E-07	9.39E-08	5.30E-08	1.47E-07	4.24E-08	2.18E-08	6.42E-08
2299	569988.69	4215562.04	6.26E-07	3.55E-07	9.81E-07	9.57E-08	5.40E-08	1.50E-07	4.32E-08	2.22E-08	6.54E-08
2300	569998	4215560.37	6.39E-07	3.62E-07	1.00E-06	9.75E-08	5.50E-08	1.53E-07	4.40E-08	2.27E-08	6.67E-08
2301	570007.32	4215558.69	6.52E-07	3.69E-07	1.02E-06	9.96E-08	5.62E-08	1.56E-07	4.49E-08	2.31E-08	6.81E-08
2302	570016.63	4215557.02	6.66E-07	3.77E-07	1.04E-06	1.02E-07	5.74E-08	1.59E-07	4.59E-08	2.36E-08	6.95E-08
2303	570025.95	4215555.34	6.8E-07	3.85E-07	1.07E-06	1.04E-07	5.86E-08	1.63E-07	4.69E-08	2.41E-08	7.10E-08
2304	569916.65	4215581.4	5.3E-07	3.00E-07	8.30E-07	8.09E-08	4.57E-08	1.27E-07	3.65E-08	1.88E-08	5.53E-08
2305	569899.44	4215576.98	5.49E-07	3.11E-07	8.60E-07	8.39E-08	4.73E-08	1.31E-07	3.78E-08	1.95E-08	5.73E-08
2306	569882.24	4215572.56	5.68E-07	3.22E-07	8.90E-07	8.67E-08	4.89E-08	1.36E-07	3.91E-08	2.01E-08	5.93E-08
2307	569865.03	4215568.14	5.86E-07	3.32E-07	9.18E-07	8.95E-08	5.05E-08	1.40E-07	4.04E-08	2.08E-08	6.12E-08
2308	569847.83	4215563.72	6.03E-07	3.42E-07	9.45E-07	9.21E-08	5.20E-08	1.44E-07	4.16E-08	2.14E-08	6.30E-08
2309	569830.62	4215559.3	5.95E-07	3.37E-07	9.32E-07	9.08E-08	5.12E-08	1.42E-07	4.10E-08	2.11E-08	6.21E-08
2310	569934.57	4215581.94	5.27E-07	2.98E-07	8.25E-07	8.04E-08	4.54E-08	1.26E-07	3.63E-08	1.87E-08	5.50E-08
2311	569943.88	4215580.26	5.34E-07	3.02E-07	8.36E-07	8.15E-08	4.60E-08	1.27E-07	3.68E-08	1.89E-08	5.57E-08
2312	569953.2	4215578.59	5.41E-07	3.06E-07	8.47E-07	8.26E-08	4.66E-08	1.29E-07	3.73E-08	1.92E-08	5.64E-08
2313	569962.51	4215576.91	5.48E-07	3.11E-07	8.59E-07	8.38E-08	4.73E-08	1.31E-07	3.78E-08	1.95E-08	5.73E-08
2314	569971.83	4215575.24	5.56E-07	3.15E-07	8.71E-07	8.49E-08	4.79E-08	1.33E-07	3.83E-08	1.97E-08	5.81E-08
2315	569981.14	4215573.56	5.65E-07	3.20E-07	8.85E-07	8.62E-08	4.87E-08	1.35E-07	3.89E-08	2.00E-08	5.89E-08
2316	569990.46	4215571.89	5.74E-07	3.25E-07	8.99E-07	8.76E-08	4.95E-08	1.37E-07	3.96E-08	2.04E-08	5.99E-08
2317	569999.77	4215570.21	5.84E-07	3.31E-07	9.15E-07	8.92E-08	5.03E-08	1.40E-07	4.03E-08	2.07E-08	6.10E-08
2318	570009.09	4215568.54	5.95E-07	3.37E-07	9.32E-07	9.09E-08	5.13E-08	1.42E-07	4.10E-08	2.11E-08	6.21E-08
2319	570064.98	4215558.48	6.71E-07	3.80E-07	1.05E-06	1.02E-07	5.78E-08	1.60E-07	4.62E-08	2.38E-08	7.01E-08
2320	570074.3	4215556.81	6.89E-07	3.91E-07	1.08E-06	1.05E-07	5.94E-08	1.65E-07	4.75E-08	2.45E-08	7.20E-08
2321	570083.61	4215555.13	7.09E-07	4.02E-07	1.11E-06	1.08E-07	6.11E-08	1.69E-07	4.89E-08	2.52E-08	7.40E-08
2322	569917.88	4215591.11	4.92E-07	2.79E-07	7.71E-07	7.52E-08	4.24E-08	1.18E-07	3.39E-08	1.75E-08	5.14E-08
2323	569908.74	4215588.76	5.02E-07	2.84E-07	7.86E-07	7.66E-08	4.32E-08	1.20E-07	3.46E-08	1.78E-08	5.24E-08
2324	569899.6	4215586.41	5.11E-07	2.90E-07	8.01E-07	7.81E-08	4.40E-08	1.22E-07	3.52E-08	1.81E-08	5.34E-08
2325	569890.46	4215584.06	5.21E-07	2.95E-07	8.17E-07	7.96E-08	4.49E-08	1.25E-07	3.59E-08	1.85E-08	5.44E-08
2326	569881.32	4215581.71	5.31E-07	3.01E-07	8.31E-07	8.10E-08	4.57E-08	1.27E-07	3.66E-08	1.88E-08	5.54E-08
2327	569872.18	4215579.37	5.4E-07	3.06E-07	8.46E-07	8.24E-08	4.65E-08	1.29E-07	3.72E-08	1.92E-08	5.64E-08
2328	569863.04	4215577.02	5.49E-07	3.11E-07	8.60E-07	8.38E-08	4.73E-08	1.31E-07	3.78E-08	1.95E-08	5.73E-08
2329	569853.9	4215574.67	5.58E-07	3.16E-07	8.74E-07	8.52E-08	4.81E-08	1.33E-07	3.84E-08	1.98E-08	5.82E-08
2330	569844.76	4215572.32	5.66E-07	3.21E-07	8.87E-07	8.65E-08	4.88E-08	1.35E-07	3.90E-08	2.01E-08	5.91E-08
2331	569835.62	4215569.97	5.54E-07	3.14E-07	8.68E-07	8.46E-08	4.77E-08	1.32E-07	3.82E-08	1.97E-08	5.78E-08
2332	569826.48	4215567.62	5.59E-07	3.17E-07	8.76E-07	8.54E-08	4.82E-08	1.34E-07	3.85E-08	1.98E-08	5.84E-08
2333	569817.34	4215565.28	5.65E-07	3.20E-07	8.85E-07	8.62E-08	4.87E-08	1.35E-07	3.89E-08	2.00E-08	5.90E-08
2334	569808.2	4215562.93	5.7E-07	3.23E-07	8.93E-07	8.70E-08	4.91E-08	1.36E-07	3.93E-08	2.02E-08	5.95E-08
2335	569927.02	4215593.46	4.83E-07	2.74E-07	7.57E-07	7.38E-08	4.16E-08	1.15E-07	3.33E-08	1.71E-08	5.04E-08
2336	569936.34	4215591.78	4.88E-07	2.77E-07	7.65E-07	7.46E-08	4.21E-08	1.17E-07	3.37E-08	1.73E-08	5.10E-08
2337	569945.65	4215590.11	4.94E-07	2.80E-07	7.74E-07	7.55E-08	4.26E-08	1.18E-07	3.41E-08	1.75E-08	5.16E-08
2338	569954.97	4215588.43	5E-07	2.83E-07	7.84E-07	7.64E-08	4.31E-08	1.20E-07	3.45E-08	1.77E-08	5.22E-08
2339	569964.28	4215586.75	5.07E-07	2.87E-07	7.94E-07	7.74E-08	4.37E-08	1.21E-07	3.49E-08	1.80E-08	5.29E-08
2340	569973.6	4215585.08	5.13E-07	2.91E-07	8.04E-07	7.84E-08	4.42E-08	1.23E-07	3.54E-08	1.82E-08	5.36E-08
2341	569982.91	4215583.4	5.2E-07	2.95E-07	8.15E-07	7.95E-08	4.48E-08	1.24E-07	3.59E-08	1.85E-08	5.43E-08
2342	569992.23	4215581.73	5.28E-07	2.99E-07	8.27E-07	8.07E-08	4.55E-08	1.26E-07	3.64E-08	1.87E-08	5.51E-08
2343	570048.12	4215571.68	5.89E-07	3.34E-07	9.22E-07	8.99E-08	5.07E-08	1.41E-07	4.06E-08	2.09E-08	6.15E-08
2344	570057.43	4215570	6.01E-07	3.41E-07	9.42E-07	9.18E-08	5.18E-08	1.44E-07	4.14E-08	2.13E-08	6.28E-08
2345	570066.75	4215568.33	6.17E-07	3.49E-07	9.66E-07	9.41E-08	5.31E-08	1.47E-07	4.25E-08	2.19E-08	6.44E-08
2346	570076.07	4215566.65	6.33E-07	3.59E-07	9.92E-07	9.67E-08	5.46E-08	1.51E-07	4.36E-08	2.25E-08	6.61E-08
2347	570085.38	4215564.98	6.51E-07	3.69E-07	1.02E-06	9.94E-08	5.61E-08	1.55E-07	4.48E-08	2.31E-08	6.79E-08
2348	569919.72	4215600.97	4.58E-07	2.60E-07	7.18E-07	7.00E-08	3.95E-08	1.09E-07	3.16E-08	1.63E-08	4.78E-08
2349	569910.64	4215598.64	4.67E-07	2.65E-07	7.32E-07	7.13E-08	4.02E-08	1.12E-07	3.22E-08	1.66E-08	4.87E-08
2350	569901.57	4215596.3	4.76E-07	2.70E-07	7.45E-07	7.27E-08	4.10E-08	1.14E-07	3.28E-08	1.69E-08	4.97E-08
2351	569892.5	4215593.97	4.85E-07	2.75E-07	7.60E-07	7.40E-08	4.18E-08	1.16E-07	3.34E-08	1.72E-08	5.06E-08
2352	569883.43	4215591.64	4.94E-07	2.80E-07	7.74E-07	7.54E-08	4.26E-08	1.18E-07	3.40E-08	1.75E-08	5.16E-08

2353	569874.35	4215589.31	5.03E-07	2.85E-07	7.87E-07	7.67E-08	4.33E-08	1.20E-07	3.46E-08	1.78E-08	5.25E-08
2354	569865.28	4215586.98	5.11E-07	2.90E-07	8.01E-07	7.81E-08	4.41E-08	1.22E-07	3.52E-08	1.81E-08	5.34E-08
2355	569856.21	4215584.65	5.2E-07	2.94E-07	8.14E-07	7.94E-08	4.48E-08	1.24E-07	3.58E-08	1.84E-08	5.43E-08
2356	569847.13	4215582.32	5.28E-07	2.99E-07	8.27E-07	8.06E-08	4.55E-08	1.26E-07	3.64E-08	1.87E-08	5.51E-08
2357	569838.06	4215579.99	5.36E-07	3.04E-07	8.40E-07	8.19E-08	4.62E-08	1.28E-07	3.69E-08	1.90E-08	5.60E-08
2358	569828.99	4215577.66	5.23E-07	2.96E-07	8.20E-07	7.99E-08	4.51E-08	1.25E-07	3.61E-08	1.86E-08	5.46E-08
2359	569819.91	4215575.33	5.28E-07	2.99E-07	8.27E-07	8.06E-08	4.55E-08	1.26E-07	3.64E-08	1.87E-08	5.51E-08
2360	569810.84	4215572.99	5.33E-07	3.02E-07	8.34E-07	8.13E-08	4.59E-08	1.27E-07	3.67E-08	1.89E-08	5.56E-08
2361	569801.77	4215570.66	5.38E-07	3.05E-07	8.42E-07	8.21E-08	4.63E-08	1.28E-07	3.70E-08	1.91E-08	5.61E-08
2362	569792.7	4215568.33	5.42E-07	3.07E-07	8.49E-07	8.28E-08	4.67E-08	1.30E-07	3.74E-08	1.92E-08	5.66E-08
2363	569928.79	4215603.3	4.5E-07	2.55E-07	7.05E-07	6.87E-08	3.88E-08	1.07E-07	3.10E-08	1.60E-08	4.70E-08
2364	569938.11	4215601.62	4.55E-07	2.58E-07	7.12E-07	6.94E-08	3.92E-08	1.09E-07	3.13E-08	1.61E-08	4.74E-08
2365	569947.42	4215599.95	4.6E-07	2.60E-07	7.20E-07	7.02E-08	3.96E-08	1.10E-07	3.17E-08	1.63E-08	4.80E-08
2366	569956.74	4215598.27	4.65E-07	2.63E-07	7.28E-07	7.10E-08	4.01E-08	1.11E-07	3.20E-08	1.65E-08	4.85E-08
2367	569966.05	4215596.6	4.71E-07	2.67E-07	7.37E-07	7.19E-08	4.06E-08	1.12E-07	3.24E-08	1.67E-08	4.91E-08
2368	569975.37	4215594.92	4.76E-07	2.70E-07	7.46E-07	7.27E-08	4.10E-08	1.14E-07	3.28E-08	1.69E-08	4.97E-08
2369	570031.26	4215584.87	5.22E-07	2.96E-07	8.18E-07	7.97E-08	4.50E-08	1.25E-07	3.60E-08	1.85E-08	5.45E-08
2370	570040.57	4215583.19	5.32E-07	3.02E-07	8.34E-07	8.13E-08	4.59E-08	1.27E-07	3.67E-08	1.89E-08	5.56E-08
2371	570049.89	4215581.52	5.43E-07	3.08E-07	8.51E-07	8.29E-08	4.68E-08	1.30E-07	3.74E-08	1.93E-08	5.67E-08
2372	570059.2	4215579.84	5.55E-07	3.14E-07	8.70E-07	8.48E-08	4.78E-08	1.33E-07	3.83E-08	1.97E-08	5.79E-08
2373	570068.52	4215578.17	5.69E-07	3.22E-07	8.91E-07	8.69E-08	4.90E-08	1.36E-07	3.92E-08	2.02E-08	5.94E-08
2374	570077.84	4215576.49	5.84E-07	3.31E-07	9.15E-07	8.92E-08	5.03E-08	1.39E-07	4.02E-08	2.07E-08	6.10E-08
2375	570087.15	4215574.82	6E-07	3.40E-07	9.40E-07	9.16E-08	5.17E-08	1.43E-07	4.13E-08	2.13E-08	6.26E-08
2376	569921.55	4215610.82	4.28E-07	2.42E-07	6.70E-07	6.53E-08	3.69E-08	1.02E-07	2.95E-08	1.52E-08	4.47E-08
2377	569912.53	4215608.51	4.36E-07	2.47E-07	6.83E-07	6.66E-08	3.76E-08	1.04E-07	3.00E-08	1.55E-08	4.55E-08
2378	569903.52	4215606.19	4.44E-07	2.51E-07	6.95E-07	6.78E-08	3.83E-08	1.06E-07	3.06E-08	1.57E-08	4.63E-08
2379	569894.51	4215603.88	4.52E-07	2.56E-07	7.08E-07	6.90E-08	3.90E-08	1.08E-07	3.12E-08	1.60E-08	4.72E-08
2380	569885.49	4215601.56	4.6E-07	2.61E-07	7.21E-07	7.03E-08	3.97E-08	1.10E-07	3.17E-08	1.63E-08	4.81E-08
2381	569876.48	4215599.25	4.69E-07	2.66E-07	7.34E-07	7.16E-08	4.04E-08	1.12E-07	3.23E-08	1.66E-08	4.89E-08
2382	569867.46	4215596.93	4.77E-07	2.70E-07	7.47E-07	7.28E-08	4.11E-08	1.14E-07	3.29E-08	1.69E-08	4.98E-08
2383	569858.45	4215594.61	4.85E-07	2.75E-07	7.60E-07	7.41E-08	4.18E-08	1.16E-07	3.34E-08	1.72E-08	5.06E-08
2384	569849.44	4215592.3	4.93E-07	2.79E-07	7.72E-07	7.53E-08	4.25E-08	1.18E-07	3.40E-08	1.75E-08	5.14E-08
2385	569840.42	4215589.98	5.01E-07	2.84E-07	7.84E-07	7.64E-08	4.31E-08	1.20E-07	3.45E-08	1.78E-08	5.23E-08
2386	569831.41	4215587.67	5.08E-07	2.88E-07	7.96E-07	7.76E-08	4.38E-08	1.21E-07	3.50E-08	1.80E-08	5.30E-08
2387	569822.4	4215585.35	4.94E-07	2.80E-07	7.75E-07	7.55E-08	4.26E-08	1.18E-07	3.41E-08	1.75E-08	5.16E-08
2388	569813.38	4215583.04	4.98E-07	2.82E-07	7.81E-07	7.61E-08	4.29E-08	1.19E-07	3.43E-08	1.77E-08	5.20E-08
2389	569804.37	4215580.72	5.04E-07	2.85E-07	7.89E-07	7.69E-08	4.34E-08	1.20E-07	3.47E-08	1.79E-08	5.26E-08
2390	569795.35	4215578.4	5.08E-07	2.88E-07	7.96E-07	7.76E-08	4.38E-08	1.21E-07	3.50E-08	1.80E-08	5.31E-08
2391	569786.34	4215576.09	5.13E-07	2.91E-07	8.04E-07	7.83E-08	4.42E-08	1.23E-07	3.54E-08	1.82E-08	5.36E-08
2392	569930.56	4215613.14	4.2E-07	2.38E-07	6.58E-07	6.42E-08	3.62E-08	1.00E-07	2.90E-08	1.49E-08	4.39E-08
2393	569939.88	4215611.46	4.24E-07	2.40E-07	6.65E-07	6.48E-08	3.66E-08	1.01E-07	2.92E-08	1.50E-08	4.43E-08
2394	569949.19	4215609.79	4.29E-07	2.43E-07	6.72E-07	6.55E-08	3.69E-08	1.02E-07	2.95E-08	1.52E-08	4.47E-08
2395	570005.08	4215599.74	4.61E-07	2.61E-07	7.22E-07	7.04E-08	3.97E-08	1.10E-07	3.18E-08	1.64E-08	4.81E-08
2396	570014.4	4215598.06	4.68E-07	2.65E-07	7.33E-07	7.14E-08	4.03E-08	1.12E-07	3.22E-08	1.66E-08	4.88E-08
2397	570023.71	4215596.39	4.75E-07	2.69E-07	7.44E-07	7.26E-08	4.09E-08	1.14E-07	3.27E-08	1.69E-08	4.96E-08
2398	570033.03	4215594.71	4.84E-07	2.74E-07	7.59E-07	7.39E-08	4.17E-08	1.16E-07	3.34E-08	1.72E-08	5.05E-08
2399	570042.34	4215593.04	4.94E-07	2.80E-07	7.74E-07	7.54E-08	4.25E-08	1.18E-07	3.40E-08	1.75E-08	5.15E-08
2400	570051.66	4215591.36	5.04E-07	2.85E-07	7.89E-07	7.69E-08	4.34E-08	1.20E-07	3.47E-08	1.79E-08	5.26E-08
2401	570060.97	4215589.69	5.15E-07	2.92E-07	8.07E-07	7.87E-08	4.44E-08	1.23E-07	3.55E-08	1.83E-08	5.38E-08
2402	570070.29	4215588.01	5.27E-07	2.99E-07	8.26E-07	8.05E-08	4.55E-08	1.26E-07	3.63E-08	1.87E-08	5.51E-08
2403	570079.61	4215586.34	5.41E-07	3.06E-07	8.47E-07	8.26E-08	4.66E-08	1.29E-07	3.73E-08	1.92E-08	5.64E-08
2404	570088.92	4215584.66	5.55E-07	3.15E-07	8.70E-07	8.48E-08	4.79E-08	1.33E-07	3.83E-08	1.97E-08	5.80E-08
2405	569923.37	4215620.68	4.01E-07	2.27E-07	6.28E-07	6.12E-08	3.45E-08	9.57E-08	2.76E-08	1.42E-08	4.18E-08
2406	569914.41	4215618.38	4.08E-07	2.31E-07	6.39E-07	6.23E-08	3.51E-08	9.74E-08	2.81E-08	1.45E-08	4.26E-08
2407	569905.45	4215616.08	4.15E-07	2.35E-07	6.50E-07	6.34E-08	3.58E-08	9.92E-08	2.86E-08	1.47E-08	4.33E-08
2408	569896.49	4215613.77	4.23E-07	2.39E-07	6.62E-07	6.45E-08	3.64E-08	1.01E-07	2.91E-08	1.50E-08	4.41E-08
2409	569887.53	4215611.47	4.3E-07	2.44E-07	6.74E-07	6.57E-08	3.71E-08	1.03E-07	2.96E-08	1.53E-08	4.49E-08
2410	569878.56	4215609.17	4.38E-07	2.48E-07	6.86E-07	6.68E-08	3.77E-08	1.05E-07	3.02E-08	1.55E-08	4.57E-08
2411	569869.6	4215606.87	4.46E-07	2.52E-07	6.98E-07	6.80E-08	3.84E-08	1.06E-07	3.07E-08	1.58E-08	4.65E-08
2412	569860.64	4215604.56	4.53E-07	2.57E-07	7.10E-07	6.92E-08	3.91E-08	1.08E-07	3.12E-08	1.61E-08	4.73E-08
2413	569851.68	4215602.26	4.61E-07	2.61E-07	7.22E-07	7.04E-08	3.97E-08	1.10E-07	3.18E-08	1.63E-08	4.81E-08
2414	569842.72	4215599.96	4.68E-07	2.65E-07	7.33E-07	7.15E-08	4.03E-08	1.12E-07	3.23E-08	1.66E-08	4.89E-08

2415	569833.76	4215597.66	4.75E-07	2.69E-07	7.45E-07	7.26E-08	4.10E-08	1.14E-07	3.28E-08	1.69E-08	4.96E-08
2416	569824.8	4215595.36	4.82E-07	2.73E-07	7.56E-07	7.37E-08	4.16E-08	1.15E-07	3.32E-08	1.71E-08	5.04E-08
2417	569815.84	4215593.05	4.68E-07	2.65E-07	7.34E-07	7.15E-08	4.04E-08	1.12E-07	3.23E-08	1.66E-08	4.89E-08
2418	569806.88	4215590.75	4.73E-07	2.68E-07	7.40E-07	7.22E-08	4.07E-08	1.13E-07	3.26E-08	1.68E-08	4.93E-08
2419	569797.92	4215588.45	4.77E-07	2.70E-07	7.48E-07	7.29E-08	4.11E-08	1.14E-07	3.29E-08	1.69E-08	4.98E-08
2420	569788.95	4215586.15	4.82E-07	2.73E-07	7.55E-07	7.36E-08	4.15E-08	1.15E-07	3.32E-08	1.71E-08	5.03E-08
2421	569932.33	4215622.98	3.94E-07	2.23E-07	6.17E-07	6.02E-08	3.39E-08	9.41E-08	2.71E-08	1.40E-08	4.11E-08
2422	569988.22	4215612.93	4.2E-07	2.38E-07	6.57E-07	6.41E-08	3.62E-08	1.00E-07	2.89E-08	1.49E-08	4.38E-08
2423	569997.54	4215611.25	4.25E-07	2.41E-07	6.65E-07	6.49E-08	3.66E-08	1.01E-07	2.93E-08	1.51E-08	4.43E-08
2424	570006.85	4215609.58	4.3E-07	2.44E-07	6.74E-07	6.57E-08	3.70E-08	1.03E-07	2.96E-08	1.53E-08	4.49E-08
2425	570016.17	4215607.9	4.36E-07	2.47E-07	6.83E-07	6.65E-08	3.76E-08	1.04E-07	3.00E-08	1.55E-08	4.55E-08
2426	570025.48	4215606.23	4.42E-07	2.51E-07	6.93E-07	6.76E-08	3.81E-08	1.06E-07	3.05E-08	1.57E-08	4.62E-08
2427	570034.8	4215604.55	4.51E-07	2.56E-07	7.07E-07	6.89E-08	3.89E-08	1.08E-07	3.11E-08	1.60E-08	4.71E-08
2428	570044.11	4215602.88	4.6E-07	2.61E-07	7.21E-07	7.03E-08	3.97E-08	1.10E-07	3.17E-08	1.63E-08	4.81E-08
2429	570053.43	4215601.2	4.7E-07	2.66E-07	7.37E-07	7.18E-08	4.05E-08	1.12E-07	3.24E-08	1.67E-08	4.91E-08
2430	570062.74	4215599.53	4.81E-07	2.72E-07	7.53E-07	7.34E-08	4.14E-08	1.15E-07	3.31E-08	1.71E-08	5.02E-08
2431	570072.06	4215597.85	4.92E-07	2.79E-07	7.71E-07	7.52E-08	4.24E-08	1.18E-07	3.39E-08	1.75E-08	5.14E-08
2432	570081.38	4215596.18	5.05E-07	2.86E-07	7.90E-07	7.70E-08	4.35E-08	1.21E-07	3.48E-08	1.79E-08	5.27E-08
2433	570090.69	4215594.5	5.18E-07	2.94E-07	8.12E-07	7.91E-08	4.46E-08	1.24E-07	3.57E-08	1.84E-08	5.41E-08
2434	569925.19	4215630.53	3.77E-07	2.13E-07	5.90E-07	5.75E-08	3.25E-08	9.00E-08	2.60E-08	1.34E-08	3.93E-08
2435	569916.27	4215628.24	3.83E-07	2.17E-07	6.00E-07	5.85E-08	3.30E-08	9.15E-08	2.64E-08	1.36E-08	4.00E-08
2436	569907.36	4215625.95	3.9E-07	2.21E-07	6.10E-07	5.95E-08	3.36E-08	9.31E-08	2.69E-08	1.38E-08	4.07E-08
2437	569898.45	4215623.66	3.96E-07	2.25E-07	6.21E-07	6.05E-08	3.42E-08	9.47E-08	2.73E-08	1.41E-08	4.14E-08
2438	569889.53	4215621.37	4.03E-07	2.28E-07	6.31E-07	6.15E-08	3.47E-08	9.63E-08	2.78E-08	1.43E-08	4.21E-08
2439	569880.62	4215619.08	4.1E-07	2.32E-07	6.42E-07	6.26E-08	3.53E-08	9.79E-08	2.82E-08	1.45E-08	4.28E-08
2440	569871.7	4215616.79	4.17E-07	2.36E-07	6.53E-07	6.36E-08	3.59E-08	9.96E-08	2.87E-08	1.48E-08	4.35E-08
2441	569862.79	4215614.5	4.24E-07	2.40E-07	6.65E-07	6.48E-08	3.66E-08	1.01E-07	2.92E-08	1.51E-08	4.43E-08
2442	569853.88	4215612.21	4.31E-07	2.44E-07	6.76E-07	6.59E-08	3.72E-08	1.03E-07	2.97E-08	1.53E-08	4.50E-08
2443	569844.96	4215609.92	4.38E-07	2.48E-07	6.87E-07	6.70E-08	3.78E-08	1.05E-07	3.02E-08	1.56E-08	4.58E-08
2444	569836.05	4215607.63	4.45E-07	2.52E-07	6.98E-07	6.80E-08	3.84E-08	1.06E-07	3.07E-08	1.58E-08	4.65E-08
2445	569827.13	4215605.34	4.52E-07	2.56E-07	7.08E-07	6.90E-08	3.90E-08	1.08E-07	3.12E-08	1.60E-08	4.72E-08
2446	569818.22	4215603.05	4.41E-07	2.50E-07	6.91E-07	6.74E-08	3.80E-08	1.05E-07	3.04E-08	1.57E-08	4.61E-08
2447	569809.31	4215600.76	4.45E-07	2.52E-07	6.97E-07	6.80E-08	3.84E-08	1.06E-07	3.07E-08	1.58E-08	4.65E-08
2448	569800.39	4215598.47	4.49E-07	2.55E-07	7.04E-07	6.86E-08	3.87E-08	1.07E-07	3.10E-08	1.59E-08	4.69E-08
2449	569791.48	4215596.18	4.54E-07	2.57E-07	7.11E-07	6.93E-08	3.91E-08	1.08E-07	3.13E-08	1.61E-08	4.74E-08
2450	569971.36	4215626.12	3.84E-07	2.18E-07	6.02E-07	5.87E-08	3.31E-08	9.18E-08	2.65E-08	1.36E-08	4.01E-08
2451	569980.68	4215624.45	3.88E-07	2.20E-07	6.08E-07	5.93E-08	3.35E-08	9.28E-08	2.68E-08	1.38E-08	4.05E-08
2452	569989.99	4215622.77	3.93E-07	2.23E-07	6.16E-07	6.00E-08	3.39E-08	9.39E-08	2.71E-08	1.39E-08	4.10E-08
2453	569999.31	4215621.1	3.98E-07	2.25E-07	6.23E-07	6.07E-08	3.43E-08	9.50E-08	2.74E-08	1.41E-08	4.15E-08
2454	570008.62	4215619.42	4.03E-07	2.28E-07	6.31E-07	6.15E-08	3.47E-08	9.62E-08	2.77E-08	1.43E-08	4.20E-08
2455	570017.94	4215617.75	4.08E-07	2.31E-07	6.39E-07	6.22E-08	3.51E-08	9.74E-08	2.81E-08	1.45E-08	4.25E-08
2456	570027.25	4215616.07	4.14E-07	2.34E-07	6.48E-07	6.32E-08	3.56E-08	9.88E-08	2.85E-08	1.47E-08	4.32E-08
2457	570036.57	4215614.4	4.22E-07	2.39E-07	6.61E-07	6.44E-08	3.64E-08	1.01E-07	2.91E-08	1.50E-08	4.41E-08
2458	570045.88	4215612.72	4.31E-07	2.44E-07	6.75E-07	6.58E-08	3.71E-08	1.03E-07	2.97E-08	1.53E-08	4.50E-08
2459	570055.2	4215611.05	4.41E-07	2.50E-07	6.90E-07	6.73E-08	3.80E-08	1.05E-07	3.04E-08	1.56E-08	4.60E-08
2460	570064.51	4215609.37	4.5E-07	2.55E-07	7.05E-07	6.88E-08	3.88E-08	1.08E-07	3.10E-08	1.60E-08	4.70E-08
2461	570073.83	4215607.69	4.61E-07	2.61E-07	7.22E-07	7.04E-08	3.97E-08	1.10E-07	3.18E-08	1.64E-08	4.81E-08
2462	570083.15	4215606.02	4.72E-07	2.68E-07	7.40E-07	7.21E-08	4.07E-08	1.13E-07	3.26E-08	1.68E-08	4.93E-08
2463	570092.46	4215604.34	4.85E-07	2.75E-07	7.60E-07	7.41E-08	4.18E-08	1.16E-07	3.35E-08	1.72E-08	5.07E-08
2464	569909.26	4215635.83	3.67E-07	2.08E-07	5.74E-07	5.60E-08	3.16E-08	8.76E-08	2.53E-08	1.30E-08	3.83E-08
2465	569900.39	4215633.55	3.73E-07	2.11E-07	5.84E-07	5.69E-08	3.21E-08	8.90E-08	2.57E-08	1.32E-08	3.89E-08
2466	569891.51	4215631.27	3.79E-07	2.15E-07	5.93E-07	5.79E-08	3.26E-08	9.05E-08	2.61E-08	1.34E-08	3.95E-08
2467	569882.64	4215628.99	3.85E-07	2.18E-07	6.03E-07	5.88E-08	3.32E-08	9.20E-08	2.65E-08	1.37E-08	4.02E-08
2468	569873.77	4215626.71	3.92E-07	2.22E-07	6.13E-07	5.98E-08	3.37E-08	9.35E-08	2.70E-08	1.39E-08	4.09E-08
2469	569864.9	4215624.43	3.98E-07	2.26E-07	6.24E-07	6.08E-08	3.43E-08	9.51E-08	2.74E-08	1.41E-08	4.16E-08
2470	569856.03	4215622.15	4.05E-07	2.29E-07	6.34E-07	6.18E-08	3.49E-08	9.67E-08	2.79E-08	1.44E-08	4.22E-08
2471	569847.16	4215619.87	4.11E-07	2.33E-07	6.44E-07	6.28E-08	3.54E-08	9.83E-08	2.83E-08	1.46E-08	4.29E-08
2472	569838.29	4215617.6	4.18E-07	2.37E-07	6.55E-07	6.38E-08	3.60E-08	9.98E-08	2.88E-08	1.48E-08	4.36E-08
2473	569829.41	4215615.32	4.24E-07	2.40E-07	6.65E-07	6.48E-08	3.66E-08	1.01E-07	2.92E-08	1.50E-08	4.43E-08
2474	569820.54	4215613.04	4.31E-07	2.44E-07	6.75E-07	6.58E-08	3.71E-08	1.03E-07	2.97E-08	1.53E-08	4.49E-08
2475	569811.67	4215610.76	4.2E-07	2.38E-07	6.58E-07	6.42E-08	3.62E-08	1.00E-07	2.90E-08	1.49E-08	4.39E-08
2476	569802.8	4215608.48	4.24E-07	2.40E-07	6.64E-07	6.47E-08	3.65E-08	1.01E-07	2.92E-08	1.50E-08	4.42E-08

2477	569945.19	4215640.99	3.52E-07	1.99E-07	5.51E-07	5.37E-08	3.03E-08	8.40E-08	2.42E-08	1.25E-08	3.67E-08
2478	569954.5	4215639.32	3.55E-07	2.01E-07	5.55E-07	5.41E-08	3.06E-08	8.47E-08	2.44E-08	1.26E-08	3.70E-08
2479	569963.82	4215637.64	3.58E-07	2.03E-07	5.60E-07	5.46E-08	3.08E-08	8.54E-08	2.46E-08	1.27E-08	3.73E-08
2480	569973.13	4215635.97	3.61E-07	2.05E-07	5.66E-07	5.51E-08	3.11E-08	8.63E-08	2.49E-08	1.28E-08	3.77E-08
2481	569982.45	4215634.29	3.65E-07	2.07E-07	5.72E-07	5.57E-08	3.14E-08	8.72E-08	2.52E-08	1.29E-08	3.81E-08
2482	569991.76	4215632.61	3.69E-07	2.09E-07	5.78E-07	5.64E-08	3.18E-08	8.82E-08	2.54E-08	1.31E-08	3.85E-08
2483	570001.08	4215630.94	3.74E-07	2.12E-07	5.86E-07	5.71E-08	3.22E-08	8.93E-08	2.58E-08	1.33E-08	3.90E-08
2484	570010.39	4215629.26	3.79E-07	2.15E-07	5.93E-07	5.78E-08	3.26E-08	9.04E-08	2.61E-08	1.34E-08	3.95E-08
2485	570019.71	4215627.59	3.84E-07	2.17E-07	6.01E-07	5.86E-08	3.31E-08	9.17E-08	2.64E-08	1.36E-08	4.01E-08
2486	570029.02	4215625.91	3.9E-07	2.21E-07	6.11E-07	5.95E-08	3.36E-08	9.31E-08	2.69E-08	1.38E-08	4.07E-08
2487	570038.34	4215624.24	3.97E-07	2.25E-07	6.22E-07	6.07E-08	3.42E-08	9.49E-08	2.74E-08	1.41E-08	4.15E-08
2488	570047.65	4215622.56	4.05E-07	2.30E-07	6.35E-07	6.19E-08	3.49E-08	9.68E-08	2.79E-08	1.44E-08	4.23E-08
2489	570056.97	4215620.89	4.14E-07	2.35E-07	6.48E-07	6.32E-08	3.57E-08	9.89E-08	2.85E-08	1.47E-08	4.32E-08
2490	570066.28	4215619.21	4.23E-07	2.40E-07	6.63E-07	6.46E-08	3.65E-08	1.01E-07	2.92E-08	1.50E-08	4.42E-08
2491	570075.6	4215617.54	4.33E-07	2.45E-07	6.78E-07	6.61E-08	3.73E-08	1.03E-07	2.98E-08	1.54E-08	4.52E-08
2492	570084.92	4215615.86	4.44E-07	2.51E-07	6.95E-07	6.78E-08	3.82E-08	1.06E-07	3.06E-08	1.57E-08	4.63E-08
2493	570094.23	4215614.19	4.56E-07	2.58E-07	7.15E-07	6.97E-08	3.93E-08	1.09E-07	3.14E-08	1.62E-08	4.76E-08
2494	569902.31	4215643.43	3.51E-07	1.99E-07	5.50E-07	5.36E-08	3.03E-08	8.39E-08	2.42E-08	1.25E-08	3.66E-08
2495	569893.48	4215641.16	3.57E-07	2.02E-07	5.59E-07	5.45E-08	3.07E-08	8.52E-08	2.46E-08	1.27E-08	3.72E-08
2496	569884.64	4215638.89	3.62E-07	2.05E-07	5.68E-07	5.53E-08	3.12E-08	8.66E-08	2.50E-08	1.29E-08	3.78E-08
2497	569875.81	4215636.62	3.68E-07	2.09E-07	5.77E-07	5.62E-08	3.17E-08	8.80E-08	2.54E-08	1.31E-08	3.84E-08
2498	569866.98	4215634.35	3.74E-07	2.12E-07	5.86E-07	5.72E-08	3.23E-08	8.94E-08	2.58E-08	1.33E-08	3.91E-08
2499	569858.14	4215632.08	3.8E-07	2.16E-07	5.96E-07	5.81E-08	3.28E-08	9.09E-08	2.62E-08	1.35E-08	3.97E-08
2500	569849.31	4215629.82	3.87E-07	2.19E-07	6.06E-07	5.90E-08	3.33E-08	9.23E-08	2.66E-08	1.37E-08	4.03E-08
2501	569840.48	4215627.55	3.93E-07	2.22E-07	6.15E-07	6.00E-08	3.38E-08	9.38E-08	2.71E-08	1.39E-08	4.10E-08
2502	569831.64	4215625.28	3.99E-07	2.26E-07	6.25E-07	6.09E-08	3.44E-08	9.52E-08	2.75E-08	1.41E-08	4.16E-08
2503	569822.81	4215623.01	4.05E-07	2.29E-07	6.34E-07	6.18E-08	3.49E-08	9.67E-08	2.79E-08	1.44E-08	4.22E-08
2504	569813.98	4215620.74	4.11E-07	2.33E-07	6.43E-07	6.27E-08	3.54E-08	9.81E-08	2.83E-08	1.46E-08	4.29E-08
2505	569937.64	4215652.51	3.3E-07	1.87E-07	5.17E-07	5.04E-08	2.84E-08	7.88E-08	2.27E-08	1.17E-08	3.44E-08
2506	569946.96	4215650.83	3.32E-07	1.88E-07	5.20E-07	5.07E-08	2.86E-08	7.93E-08	2.29E-08	1.18E-08	3.47E-08
2507	569956.27	4215649.16	3.35E-07	1.90E-07	5.24E-07	5.11E-08	2.88E-08	7.99E-08	2.31E-08	1.19E-08	3.49E-08
2508	569965.59	4215647.48	3.37E-07	1.91E-07	5.28E-07	5.15E-08	2.91E-08	8.05E-08	2.32E-08	1.20E-08	3.52E-08
2509	569974.9	4215645.81	3.4E-07	1.93E-07	5.33E-07	5.20E-08	2.93E-08	8.13E-08	2.35E-08	1.21E-08	3.55E-08
2510	569984.22	4215644.13	3.44E-07	1.95E-07	5.39E-07	5.25E-08	2.96E-08	8.21E-08	2.37E-08	1.22E-08	3.59E-08
2511	569993.53	4215642.46	3.48E-07	1.97E-07	5.45E-07	5.31E-08	3.00E-08	8.31E-08	2.40E-08	1.23E-08	3.63E-08
2512	570002.85	4215640.78	3.52E-07	2.00E-07	5.52E-07	5.38E-08	3.04E-08	8.42E-08	2.43E-08	1.25E-08	3.68E-08
2513	570012.16	4215639.11	3.57E-07	2.02E-07	5.60E-07	5.46E-08	3.08E-08	8.53E-08	2.46E-08	1.27E-08	3.73E-08
2514	570021.48	4215637.43	3.63E-07	2.05E-07	5.68E-07	5.54E-08	3.12E-08	8.66E-08	2.50E-08	1.29E-08	3.78E-08
2515	570030.79	4215635.76	3.68E-07	2.09E-07	5.77E-07	5.63E-08	3.17E-08	8.80E-08	2.54E-08	1.31E-08	3.85E-08
2516	570040.11	4215634.08	3.75E-07	2.12E-07	5.87E-07	5.73E-08	3.23E-08	8.96E-08	2.58E-08	1.33E-08	3.91E-08
2517	570049.42	4215632.4	3.82E-07	2.17E-07	5.99E-07	5.84E-08	3.29E-08	9.13E-08	2.63E-08	1.36E-08	3.99E-08
2518	570058.74	4215630.73	3.9E-07	2.21E-07	6.11E-07	5.96E-08	3.36E-08	9.32E-08	2.69E-08	1.38E-08	4.07E-08
2519	570068.05	4215629.05	3.99E-07	2.26E-07	6.24E-07	6.09E-08	3.43E-08	9.52E-08	2.75E-08	1.41E-08	4.16E-08
2520	570077.37	4215627.38	4.08E-07	2.31E-07	6.39E-07	6.23E-08	3.51E-08	9.74E-08	2.81E-08	1.45E-08	4.26E-08
2521	570086.69	4215625.7	4.18E-07	2.37E-07	6.55E-07	6.38E-08	3.60E-08	9.98E-08	2.88E-08	1.48E-08	4.36E-08
2522	570096	4215624.03	4.29E-07	2.43E-07	6.73E-07	6.56E-08	3.70E-08	1.03E-07	2.96E-08	1.52E-08	4.48E-08
2523	569930.61	4215660.09	3.17E-07	1.79E-07	4.96E-07	4.84E-08	2.73E-08	7.57E-08	2.18E-08	1.12E-08	3.31E-08
2524	569921.81	4215657.83	3.21E-07	1.82E-07	5.04E-07	4.91E-08	2.77E-08	7.68E-08	2.22E-08	1.14E-08	3.36E-08
2525	569895.42	4215651.05	3.36E-07	1.91E-07	5.27E-07	5.14E-08	2.90E-08	8.04E-08	2.32E-08	1.19E-08	3.51E-08
2526	569886.62	4215648.79	3.42E-07	1.94E-07	5.35E-07	5.22E-08	2.94E-08	8.16E-08	2.35E-08	1.21E-08	3.57E-08
2527	569877.82	4215646.53	3.47E-07	1.97E-07	5.44E-07	5.30E-08	2.99E-08	8.29E-08	2.39E-08	1.23E-08	3.62E-08
2528	569869.03	4215644.27	3.53E-07	2.00E-07	5.52E-07	5.38E-08	3.04E-08	8.42E-08	2.43E-08	1.25E-08	3.68E-08
2529	569860.23	4215642.01	3.58E-07	2.03E-07	5.61E-07	5.47E-08	3.09E-08	8.56E-08	2.47E-08	1.27E-08	3.74E-08
2530	569851.43	4215639.75	3.64E-07	2.06E-07	5.70E-07	5.56E-08	3.14E-08	8.69E-08	2.51E-08	1.29E-08	3.80E-08
2531	569842.63	4215637.49	3.7E-07	2.09E-07	5.79E-07	5.64E-08	3.18E-08	8.83E-08	2.55E-08	1.31E-08	3.86E-08
2532	569833.83	4215635.23	3.75E-07	2.13E-07	5.88E-07	5.73E-08	3.23E-08	8.96E-08	2.59E-08	1.33E-08	3.92E-08
2533	569816.24	4215630.71	3.87E-07	2.19E-07	6.06E-07	5.90E-08	3.33E-08	9.23E-08	2.66E-08	1.37E-08	4.03E-08
2534	569939.41	4215662.35	3.12E-07	1.77E-07	4.89E-07	4.77E-08	2.69E-08	7.46E-08	2.15E-08	1.11E-08	3.26E-08
2535	569948.73	4215660.68	3.14E-07	1.78E-07	4.92E-07	4.80E-08	2.71E-08	7.51E-08	2.17E-08	1.11E-08	3.28E-08
2536	569958.04	4215659	3.16E-07	1.79E-07	4.96E-07	4.83E-08	2.73E-08	7.56E-08	2.18E-08	1.12E-08	3.30E-08
2537	569967.36	4215657.32	3.19E-07	1.81E-07	5.00E-07	4.87E-08	2.75E-08	7.62E-08	2.20E-08	1.13E-08	3.33E-08
2538	569976.67	4215655.65	3.22E-07	1.82E-07	5.04E-07	4.92E-08	2.77E-08	7.69E-08	2.22E-08	1.14E-08	3.36E-08

2539	569985.99	4215653.97	3.25E-07	1.84E-07	5.09E-07	4.96E-08	2.80E-08	7.77E-08	2.24E-08	1.15E-08	3.39E-08
2540	569995.3	4215652.3	3.29E-07	1.86E-07	5.15E-07	5.02E-08	2.83E-08	7.85E-08	2.27E-08	1.17E-08	3.43E-08
2541	570004.62	4215650.62	3.33E-07	1.89E-07	5.22E-07	5.09E-08	2.87E-08	7.96E-08	2.30E-08	1.18E-08	3.48E-08
2542	570013.93	4215648.95	3.38E-07	1.91E-07	5.29E-07	5.16E-08	2.91E-08	8.07E-08	2.33E-08	1.20E-08	3.53E-08
2543	570023.25	4215647.27	3.43E-07	1.95E-07	5.38E-07	5.24E-08	2.96E-08	8.20E-08	2.37E-08	1.22E-08	3.58E-08
2544	570032.56	4215645.6	3.49E-07	1.98E-07	5.47E-07	5.33E-08	3.01E-08	8.33E-08	2.40E-08	1.24E-08	3.64E-08
2545	570041.88	4215643.92	3.55E-07	2.01E-07	5.56E-07	5.42E-08	3.06E-08	8.48E-08	2.45E-08	1.26E-08	3.70E-08
2546	570051.19	4215642.25	3.61E-07	2.05E-07	5.66E-07	5.52E-08	3.11E-08	8.63E-08	2.49E-08	1.28E-08	3.77E-08
2547	570060.51	4215640.57	3.69E-07	2.09E-07	5.78E-07	5.63E-08	3.18E-08	8.81E-08	2.54E-08	1.31E-08	3.85E-08
2548	570069.83	4215638.9	3.77E-07	2.13E-07	5.90E-07	5.75E-08	3.24E-08	8.99E-08	2.59E-08	1.34E-08	3.93E-08
2549	570079.14	4215637.22	3.85E-07	2.18E-07	6.03E-07	5.88E-08	3.32E-08	9.20E-08	2.65E-08	1.37E-08	4.02E-08
2550	570088.46	4215635.55	3.94E-07	2.23E-07	6.18E-07	6.02E-08	3.40E-08	9.42E-08	2.72E-08	1.40E-08	4.12E-08
2551	570097.77	4215633.87	4.05E-07	2.29E-07	6.34E-07	6.18E-08	3.49E-08	9.67E-08	2.79E-08	1.44E-08	4.23E-08
2552	569932.02	4215669.84	3E-07	1.70E-07	4.71E-07	4.59E-08	2.59E-08	7.17E-08	2.07E-08	1.07E-08	3.14E-08
2553	569922.85	4215667.48	3.05E-07	1.73E-07	4.77E-07	4.65E-08	2.63E-08	7.28E-08	2.10E-08	1.08E-08	3.18E-08
2554	569913.69	4215665.13	3.09E-07	1.75E-07	4.85E-07	4.72E-08	2.67E-08	7.39E-08	2.13E-08	1.10E-08	3.23E-08
2555	569877.03	4215655.71	3.3E-07	1.87E-07	5.16E-07	5.03E-08	2.84E-08	7.87E-08	2.27E-08	1.17E-08	3.44E-08
2556	569867.86	4215653.36	3.35E-07	1.90E-07	5.24E-07	5.11E-08	2.88E-08	8.00E-08	2.31E-08	1.19E-08	3.49E-08
2557	569858.7	4215651	3.4E-07	1.93E-07	5.33E-07	5.19E-08	2.93E-08	8.13E-08	2.34E-08	1.21E-08	3.55E-08
2558	569849.53	4215648.65	3.46E-07	1.96E-07	5.41E-07	5.28E-08	2.98E-08	8.26E-08	2.38E-08	1.23E-08	3.61E-08
2559	569840.37	4215646.29	3.51E-07	1.99E-07	5.50E-07	5.36E-08	3.03E-08	8.39E-08	2.42E-08	1.25E-08	3.67E-08
2560	569831.2	4215643.94	3.57E-07	2.02E-07	5.59E-07	5.45E-08	3.07E-08	8.52E-08	2.46E-08	1.27E-08	3.72E-08
2561	569941.18	4215672.19	2.96E-07	1.68E-07	4.64E-07	4.52E-08	2.55E-08	7.07E-08	2.04E-08	1.05E-08	3.09E-08
2562	569950.5	4215670.52	2.98E-07	1.69E-07	4.67E-07	4.55E-08	2.57E-08	7.12E-08	2.05E-08	1.06E-08	3.11E-08
2563	569959.81	4215668.84	3E-07	1.70E-07	4.70E-07	4.58E-08	2.58E-08	7.17E-08	2.07E-08	1.06E-08	3.13E-08
2564	569969.13	4215667.17	3.02E-07	1.71E-07	4.74E-07	4.62E-08	2.61E-08	7.22E-08	2.08E-08	1.07E-08	3.16E-08
2565	569978.44	4215665.49	3.05E-07	1.73E-07	4.78E-07	4.66E-08	2.63E-08	7.29E-08	2.10E-08	1.08E-08	3.19E-08
2566	569987.76	4215663.82	3.08E-07	1.75E-07	4.83E-07	4.71E-08	2.66E-08	7.36E-08	2.12E-08	1.09E-08	3.22E-08
2567	569997.07	4215662.14	3.12E-07	1.77E-07	4.88E-07	4.76E-08	2.68E-08	7.44E-08	2.15E-08	1.11E-08	3.25E-08
2568	570006.39	4215660.47	3.16E-07	1.79E-07	4.94E-07	4.82E-08	2.72E-08	7.54E-08	2.17E-08	1.12E-08	3.29E-08
2569	570015.7	4215658.79	3.2E-07	1.81E-07	5.01E-07	4.88E-08	2.76E-08	7.64E-08	2.20E-08	1.13E-08	3.34E-08
2570	570025.02	4215657.11	3.25E-07	1.84E-07	5.09E-07	4.96E-08	2.80E-08	7.76E-08	2.24E-08	1.15E-08	3.39E-08
2571	570034.33	4215655.44	3.3E-07	1.87E-07	5.17E-07	5.04E-08	2.84E-08	7.88E-08	2.27E-08	1.17E-08	3.45E-08
2572	570043.65	4215653.76	3.36E-07	1.90E-07	5.26E-07	5.13E-08	2.89E-08	8.02E-08	2.31E-08	1.19E-08	3.51E-08
2573	570052.96	4215652.09	3.42E-07	1.94E-07	5.36E-07	5.22E-08	2.95E-08	8.17E-08	2.36E-08	1.21E-08	3.57E-08
2574	570062.28	4215650.41	3.49E-07	1.98E-07	5.47E-07	5.33E-08	3.01E-08	8.33E-08	2.40E-08	1.24E-08	3.64E-08
2575	570071.6	4215648.74	3.56E-07	2.02E-07	5.58E-07	5.44E-08	3.07E-08	8.51E-08	2.46E-08	1.26E-08	3.72E-08
2576	570080.91	4215647.06	3.64E-07	2.06E-07	5.71E-07	5.56E-08	3.14E-08	8.70E-08	2.51E-08	1.29E-08	3.80E-08
2577	570090.23	4215645.39	3.73E-07	2.11E-07	5.85E-07	5.70E-08	3.22E-08	8.91E-08	2.57E-08	1.32E-08	3.89E-08
2578	570099.54	4215643.71	3.83E-07	2.17E-07	5.99E-07	5.84E-08	3.30E-08	9.14E-08	2.64E-08	1.36E-08	3.99E-08
2579	569933.83	4215679.69	2.85E-07	1.62E-07	4.47E-07	4.36E-08	2.46E-08	6.81E-08	1.97E-08	1.01E-08	2.98E-08
2580	569924.72	4215677.35	2.89E-07	1.64E-07	4.53E-07	4.42E-08	2.49E-08	6.91E-08	1.99E-08	1.03E-08	3.02E-08
2581	569915.6	4215675.01	2.93E-07	1.66E-07	4.59E-07	4.48E-08	2.53E-08	7.01E-08	2.02E-08	1.04E-08	3.06E-08
2582	569906.48	4215672.67	2.98E-07	1.69E-07	4.66E-07	4.54E-08	2.56E-08	7.11E-08	2.05E-08	1.06E-08	3.11E-08
2583	569870.02	4215663.3	3.17E-07	1.79E-07	4.96E-07	4.83E-08	2.73E-08	7.56E-08	2.18E-08	1.12E-08	3.30E-08
2584	569860.9	4215660.95	3.22E-07	1.82E-07	5.04E-07	4.91E-08	2.77E-08	7.68E-08	2.22E-08	1.14E-08	3.36E-08
2585	569851.78	4215658.61	3.27E-07	1.85E-07	5.12E-07	4.99E-08	2.81E-08	7.80E-08	2.25E-08	1.16E-08	3.41E-08
2586	569842.67	4215656.27	3.32E-07	1.88E-07	5.19E-07	5.06E-08	2.86E-08	7.92E-08	2.29E-08	1.18E-08	3.46E-08
2587	569833.55	4215653.93	3.37E-07	1.91E-07	5.28E-07	5.14E-08	2.90E-08	8.04E-08	2.32E-08	1.19E-08	3.51E-08
2588	569942.95	4215682.03	2.81E-07	1.59E-07	4.41E-07	4.29E-08	2.42E-08	6.72E-08	1.94E-08	9.98E-09	2.94E-08
2589	569952.27	4215680.36	2.83E-07	1.60E-07	4.44E-07	4.32E-08	2.44E-08	6.76E-08	1.95E-08	1.00E-08	2.96E-08
2590	569961.58	4215678.68	2.85E-07	1.61E-07	4.47E-07	4.35E-08	2.46E-08	6.81E-08	1.96E-08	1.01E-08	2.98E-08
2591	569970.9	4215677.01	2.87E-07	1.63E-07	4.50E-07	4.39E-08	2.48E-08	6.86E-08	1.98E-08	1.02E-08	3.00E-08
2592	569980.21	4215675.33	2.9E-07	1.64E-07	4.54E-07	4.43E-08	2.50E-08	6.92E-08	2.00E-08	1.03E-08	3.03E-08
2593	569989.53	4215673.66	2.93E-07	1.66E-07	4.59E-07	4.47E-08	2.52E-08	6.99E-08	2.02E-08	1.04E-08	3.06E-08
2594	569998.84	4215671.98	2.96E-07	1.68E-07	4.64E-07	4.52E-08	2.55E-08	7.07E-08	2.04E-08	1.05E-08	3.09E-08
2595	570008.16	4215670.31	2.99E-07	1.70E-07	4.69E-07	4.57E-08	2.58E-08	7.15E-08	2.06E-08	1.06E-08	3.13E-08
2596	570017.47	4215668.63	3.03E-07	1.72E-07	4.75E-07	4.63E-08	2.61E-08	7.25E-08	2.09E-08	1.08E-08	3.17E-08
2597	570026.79	4215666.96	3.08E-07	1.74E-07	4.82E-07	4.70E-08	2.65E-08	7.35E-08	2.12E-08	1.09E-08	3.21E-08
2598	570036.1	4215665.28	3.13E-07	1.77E-07	4.90E-07	4.78E-08	2.70E-08	7.47E-08	2.16E-08	1.11E-08	3.27E-08
2599	570045.42	4215663.61	3.18E-07	1.80E-07	4.99E-07	4.86E-08	2.74E-08	7.61E-08	2.19E-08	1.13E-08	3.32E-08
2600	570054.73	4215661.93	3.24E-07	1.84E-07	5.08E-07	4.95E-08	2.80E-08	7.75E-08	2.24E-08	1.15E-08	3.39E-08

2601	570064.05	4215660.26	3.31E-07	1.87E-07	5.18E-07	5.05E-08	2.85E-08	7.90E-08	2.28E-08	1.17E-08	3.45E-08
2602	570073.37	4215658.58	3.38E-07	1.91E-07	5.29E-07	5.16E-08	2.91E-08	8.06E-08	2.33E-08	1.20E-08	3.52E-08
2603	570082.68	4215656.91	3.45E-07	1.95E-07	5.41E-07	5.27E-08	2.97E-08	8.24E-08	2.38E-08	1.22E-08	3.60E-08
2604	570092	4215655.23	3.53E-07	2.00E-07	5.53E-07	5.39E-08	3.04E-08	8.44E-08	2.43E-08	1.25E-08	3.69E-08
2605	570101.31	4215653.55	3.62E-07	2.05E-07	5.67E-07	5.53E-08	3.12E-08	8.65E-08	2.50E-08	1.28E-08	3.78E-08
2606	569935.65	4215689.55	2.71E-07	1.54E-07	4.25E-07	4.14E-08	2.34E-08	6.48E-08	1.87E-08	9.62E-09	2.83E-08
2607	569926.57	4215687.21	2.75E-07	1.56E-07	4.31E-07	4.20E-08	2.37E-08	6.57E-08	1.89E-08	9.75E-09	2.87E-08
2608	569917.5	4215684.88	2.79E-07	1.58E-07	4.37E-07	4.25E-08	2.40E-08	6.66E-08	1.92E-08	9.88E-09	2.91E-08
2609	569908.43	4215682.55	2.83E-07	1.60E-07	4.43E-07	4.31E-08	2.43E-08	6.75E-08	1.95E-08	1.00E-08	2.95E-08
2610	569899.36	4215680.22	2.87E-07	1.62E-07	4.49E-07	4.38E-08	2.47E-08	6.85E-08	1.98E-08	1.02E-08	2.99E-08
2611	569863.06	4215670.9	3.04E-07	1.72E-07	4.77E-07	4.65E-08	2.62E-08	7.27E-08	2.10E-08	1.08E-08	3.18E-08
2612	569853.99	4215668.57	3.09E-07	1.75E-07	4.84E-07	4.72E-08	2.66E-08	7.38E-08	2.13E-08	1.10E-08	3.23E-08
2613	569844.92	4215666.24	3.14E-07	1.78E-07	4.91E-07	4.79E-08	2.70E-08	7.49E-08	2.16E-08	1.11E-08	3.27E-08
2614	569944.72	4215691.88	2.68E-07	1.52E-07	4.20E-07	4.09E-08	2.31E-08	6.40E-08	1.85E-08	9.50E-09	2.80E-08
2615	569954.04	4215690.2	2.7E-07	1.53E-07	4.22E-07	4.12E-08	2.32E-08	6.44E-08	1.86E-08	9.56E-09	2.81E-08
2616	569963.35	4215688.53	2.72E-07	1.54E-07	4.25E-07	4.15E-08	2.34E-08	6.49E-08	1.87E-08	9.63E-09	2.83E-08
2617	569972.67	4215686.85	2.74E-07	1.55E-07	4.29E-07	4.18E-08	2.36E-08	6.54E-08	1.89E-08	9.71E-09	2.86E-08
2618	569981.98	4215685.18	2.76E-07	1.56E-07	4.33E-07	4.22E-08	2.38E-08	6.60E-08	1.90E-08	9.80E-09	2.88E-08
2619	569991.3	4215683.5	2.79E-07	1.58E-07	4.37E-07	4.26E-08	2.40E-08	6.66E-08	1.92E-08	9.89E-09	2.91E-08
2620	570000.61	4215681.82	2.82E-07	1.60E-07	4.41E-07	4.30E-08	2.43E-08	6.73E-08	1.94E-08	9.99E-09	2.94E-08
2621	570009.93	4215680.15	2.85E-07	1.61E-07	4.46E-07	4.35E-08	2.45E-08	6.80E-08	1.96E-08	1.01E-08	2.97E-08
2622	570019.24	4215678.47	2.88E-07	1.63E-07	4.52E-07	4.40E-08	2.48E-08	6.89E-08	1.99E-08	1.02E-08	3.01E-08
2623	570028.56	4215676.8	2.93E-07	1.66E-07	4.58E-07	4.47E-08	2.52E-08	6.99E-08	2.02E-08	1.04E-08	3.05E-08
2624	570037.87	4215675.12	2.97E-07	1.68E-07	4.66E-07	4.54E-08	2.56E-08	7.10E-08	2.05E-08	1.05E-08	3.10E-08
2625	570047.19	4215673.45	3.03E-07	1.71E-07	4.74E-07	4.62E-08	2.61E-08	7.23E-08	2.09E-08	1.07E-08	3.16E-08
2626	570056.5	4215671.77	3.08E-07	1.75E-07	4.83E-07	4.71E-08	2.66E-08	7.36E-08	2.12E-08	1.09E-08	3.22E-08
2627	570065.82	4215670.1	3.14E-07	1.78E-07	4.92E-07	4.80E-08	2.71E-08	7.50E-08	2.16E-08	1.11E-08	3.28E-08
2628	570075.14	4215668.42	3.21E-07	1.82E-07	5.02E-07	4.89E-08	2.76E-08	7.66E-08	2.21E-08	1.14E-08	3.35E-08
2629	570084.45	4215666.75	3.27E-07	1.86E-07	5.13E-07	5.00E-08	2.82E-08	7.82E-08	2.26E-08	1.16E-08	3.42E-08
2630	570093.77	4215665.07	3.35E-07	1.90E-07	5.25E-07	5.12E-08	2.89E-08	8.00E-08	2.31E-08	1.19E-08	3.50E-08
2631	570103.08	4215663.4	3.43E-07	1.94E-07	5.38E-07	5.24E-08	2.96E-08	8.20E-08	2.37E-08	1.22E-08	3.58E-08
2632	569937.46	4215699.4	2.59E-07	1.46E-07	4.05E-07	3.95E-08	2.23E-08	6.18E-08	1.78E-08	9.17E-09	2.70E-08
2633	569928.43	4215697.08	2.62E-07	1.48E-07	4.10E-07	4.00E-08	2.26E-08	6.25E-08	1.80E-08	9.29E-09	2.73E-08
2634	569919.39	4215694.76	2.65E-07	1.50E-07	4.15E-07	4.05E-08	2.28E-08	6.33E-08	1.83E-08	9.41E-09	2.77E-08
2635	569910.36	4215692.44	2.69E-07	1.52E-07	4.21E-07	4.10E-08	2.32E-08	6.42E-08	1.85E-08	9.53E-09	2.80E-08
2636	569901.33	4215690.12	2.72E-07	1.54E-07	4.27E-07	4.16E-08	2.35E-08	6.51E-08	1.88E-08	9.66E-09	2.84E-08
2637	569892.29	4215687.8	2.76E-07	1.57E-07	4.33E-07	4.22E-08	2.38E-08	6.60E-08	1.90E-08	9.80E-09	2.88E-08
2638	569946.49	4215701.72	2.55E-07	1.45E-07	4.00E-07	3.90E-08	2.20E-08	6.10E-08	1.76E-08	9.06E-09	2.67E-08
2639	569955.81	4215700.04	2.57E-07	1.46E-07	4.03E-07	3.93E-08	2.22E-08	6.15E-08	1.77E-08	9.13E-09	2.69E-08
2640	569965.12	4215698.37	2.59E-07	1.47E-07	4.06E-07	3.96E-08	2.23E-08	6.19E-08	1.79E-08	9.19E-09	2.71E-08
2641	569974.44	4215696.69	2.61E-07	1.48E-07	4.09E-07	3.99E-08	2.25E-08	6.24E-08	1.80E-08	9.27E-09	2.73E-08
2642	569983.75	4215695.02	2.64E-07	1.49E-07	4.13E-07	4.03E-08	2.27E-08	6.30E-08	1.82E-08	9.35E-09	2.75E-08
2643	569993.07	4215693.34	2.66E-07	1.51E-07	4.17E-07	4.06E-08	2.29E-08	6.36E-08	1.83E-08	9.44E-09	2.78E-08
2644	570002.38	4215691.67	2.69E-07	1.52E-07	4.21E-07	4.10E-08	2.32E-08	6.42E-08	1.85E-08	9.53E-09	2.81E-08
2645	570011.7	4215689.99	2.72E-07	1.54E-07	4.26E-07	4.15E-08	2.34E-08	6.49E-08	1.87E-08	9.63E-09	2.84E-08
2646	570021.01	4215688.32	2.75E-07	1.56E-07	4.31E-07	4.20E-08	2.37E-08	6.56E-08	1.89E-08	9.75E-09	2.87E-08
2647	570030.33	4215686.64	2.79E-07	1.58E-07	4.37E-07	4.26E-08	2.40E-08	6.66E-08	1.92E-08	9.89E-09	2.91E-08
2648	570039.64	4215684.97	2.83E-07	1.60E-07	4.43E-07	4.32E-08	2.44E-08	6.76E-08	1.95E-08	1.00E-08	2.95E-08
2649	570048.96	4215683.29	2.88E-07	1.63E-07	4.51E-07	4.40E-08	2.48E-08	6.88E-08	1.98E-08	1.02E-08	3.01E-08
2650	570058.27	4215681.62	2.93E-07	1.66E-07	4.59E-07	4.48E-08	2.53E-08	7.00E-08	2.02E-08	1.04E-08	3.06E-08
2651	570067.59	4215679.94	2.99E-07	1.69E-07	4.68E-07	4.56E-08	2.57E-08	7.14E-08	2.06E-08	1.06E-08	3.12E-08
2652	570076.91	4215678.26	3.05E-07	1.73E-07	4.77E-07	4.65E-08	2.63E-08	7.28E-08	2.10E-08	1.08E-08	3.18E-08
2653	570086.22	4215676.59	3.11E-07	1.76E-07	4.88E-07	4.75E-08	2.68E-08	7.44E-08	2.15E-08	1.10E-08	3.25E-08
2654	570095.54	4215674.91	3.18E-07	1.80E-07	4.99E-07	4.86E-08	2.74E-08	7.61E-08	2.19E-08	1.13E-08	3.32E-08
2655	570104.85	4215673.24	3.26E-07	1.85E-07	5.11E-07	4.98E-08	2.81E-08	7.79E-08	2.25E-08	1.16E-08	3.40E-08
2656	569939.27	4215709.25	2.47E-07	1.40E-07	3.87E-07	3.77E-08	2.13E-08	5.90E-08	1.70E-08	8.76E-09	2.58E-08
2657	569930.27	4215706.94	2.5E-07	1.41E-07	3.91E-07	3.81E-08	2.15E-08	5.97E-08	1.72E-08	8.86E-09	2.61E-08
2658	569921.27	4215704.63	2.53E-07	1.43E-07	3.96E-07	3.86E-08	2.18E-08	6.04E-08	1.74E-08	8.97E-09	2.64E-08
2659	569912.28	4215702.32	2.56E-07	1.45E-07	4.01E-07	3.91E-08	2.21E-08	6.11E-08	1.76E-08	9.08E-09	2.67E-08
2660	569903.28	4215700.01	2.59E-07	1.47E-07	4.06E-07	3.96E-08	2.23E-08	6.19E-08	1.79E-08	9.20E-09	2.71E-08
2661	569894.29	4215697.69	2.63E-07	1.49E-07	4.12E-07	4.02E-08	2.27E-08	6.28E-08	1.81E-08	9.33E-09	2.74E-08
2662	569885.29	4215695.38	2.67E-07	1.51E-07	4.18E-07	4.07E-08	2.30E-08	6.37E-08	1.84E-08	9.46E-09	2.78E-08

2663	569876.3	4215693.07	2.59E-07	1.47E-07	4.06E-07	3.95E-08	2.23E-08	6.19E-08	1.78E-08	9.19E-09	2.70E-08
2664	569948.26	4215711.56	2.44E-07	1.38E-07	3.82E-07	3.73E-08	2.10E-08	5.83E-08	1.68E-08	8.66E-09	2.55E-08
2665	569957.58	4215709.89	2.46E-07	1.39E-07	3.85E-07	3.75E-08	2.12E-08	5.87E-08	1.69E-08	8.72E-09	2.57E-08
2666	569966.89	4215708.21	2.48E-07	1.40E-07	3.88E-07	3.78E-08	2.13E-08	5.92E-08	1.71E-08	8.79E-09	2.59E-08
2667	569976.21	4215706.54	2.5E-07	1.42E-07	3.91E-07	3.81E-08	2.15E-08	5.97E-08	1.72E-08	8.86E-09	2.61E-08
2668	569985.52	4215704.86	2.52E-07	1.43E-07	3.95E-07	3.85E-08	2.17E-08	6.02E-08	1.74E-08	8.94E-09	2.63E-08
2669	569994.84	4215703.18	2.54E-07	1.44E-07	3.99E-07	3.88E-08	2.19E-08	6.08E-08	1.75E-08	9.02E-09	2.66E-08
2670	570004.15	4215701.51	2.57E-07	1.45E-07	4.02E-07	3.92E-08	2.21E-08	6.13E-08	1.77E-08	9.11E-09	2.68E-08
2671	570013.47	4215699.83	2.59E-07	1.47E-07	4.06E-07	3.96E-08	2.24E-08	6.20E-08	1.79E-08	9.20E-09	2.71E-08
2672	570022.78	4215698.16	2.62E-07	1.49E-07	4.11E-07	4.01E-08	2.26E-08	6.27E-08	1.81E-08	9.31E-09	2.74E-08
2673	570032.1	4215696.48	2.66E-07	1.51E-07	4.17E-07	4.06E-08	2.29E-08	6.35E-08	1.83E-08	9.43E-09	2.78E-08
2674	570041.41	4215694.81	2.7E-07	1.53E-07	4.23E-07	4.12E-08	2.33E-08	6.45E-08	1.86E-08	9.57E-09	2.82E-08
2675	570050.73	4215693.13	2.74E-07	1.55E-07	4.30E-07	4.19E-08	2.36E-08	6.55E-08	1.89E-08	9.73E-09	2.86E-08
2676	570060.04	4215691.46	2.79E-07	1.58E-07	4.37E-07	4.26E-08	2.41E-08	6.67E-08	1.92E-08	9.90E-09	2.91E-08
2677	570069.36	4215689.78	2.84E-07	1.61E-07	4.45E-07	4.34E-08	2.45E-08	6.79E-08	1.96E-08	1.01E-08	2.97E-08
2678	570078.68	4215688.11	2.9E-07	1.64E-07	4.54E-07	4.43E-08	2.50E-08	6.93E-08	2.00E-08	1.03E-08	3.03E-08
2679	570087.99	4215686.43	2.96E-07	1.68E-07	4.64E-07	4.52E-08	2.55E-08	7.08E-08	2.04E-08	1.05E-08	3.09E-08
2680	570097.31	4215684.76	3.03E-07	1.72E-07	4.75E-07	4.63E-08	2.61E-08	7.24E-08	2.09E-08	1.07E-08	3.16E-08
2681	569941.07	4215719.1	2.36E-07	1.34E-07	3.70E-07	3.61E-08	2.03E-08	5.64E-08	1.63E-08	8.38E-09	2.46E-08
2682	569932.11	4215716.8	2.39E-07	1.35E-07	3.74E-07	3.65E-08	2.06E-08	5.70E-08	1.65E-08	8.47E-09	2.49E-08
2683	569923.15	4215714.5	2.42E-07	1.37E-07	3.79E-07	3.69E-08	2.08E-08	5.77E-08	1.67E-08	8.57E-09	2.52E-08
2684	569914.19	4215712.19	2.44E-07	1.38E-07	3.83E-07	3.73E-08	2.11E-08	5.84E-08	1.68E-08	8.67E-09	2.55E-08
2685	569905.23	4215709.89	2.47E-07	1.40E-07	3.88E-07	3.78E-08	2.13E-08	5.91E-08	1.70E-08	8.78E-09	2.58E-08
2686	569896.27	4215707.59	2.51E-07	1.42E-07	3.93E-07	3.83E-08	2.16E-08	5.99E-08	1.73E-08	8.89E-09	2.62E-08
2687	569887.3	4215705.29	2.54E-07	1.44E-07	3.98E-07	3.88E-08	2.19E-08	6.07E-08	1.75E-08	9.01E-09	2.65E-08
2688	569878.34	4215702.99	2.57E-07	1.46E-07	4.03E-07	3.93E-08	2.22E-08	6.15E-08	1.77E-08	9.13E-09	2.69E-08
2689	569869.38	4215700.68	2.49E-07	1.41E-07	3.89E-07	3.80E-08	2.14E-08	5.94E-08	1.71E-08	8.82E-09	2.60E-08
2690	569950.03	4215721.4	2.34E-07	1.32E-07	3.66E-07	3.57E-08	2.01E-08	5.58E-08	1.61E-08	8.29E-09	2.44E-08
2691	569959.35	4215719.73	2.35E-07	1.33E-07	3.68E-07	3.59E-08	2.03E-08	5.62E-08	1.62E-08	8.34E-09	2.46E-08
2692	569968.66	4215718.05	2.37E-07	1.34E-07	3.71E-07	3.62E-08	2.04E-08	5.66E-08	1.63E-08	8.41E-09	2.47E-08
2693	569977.98	4215716.38	2.39E-07	1.35E-07	3.74E-07	3.65E-08	2.06E-08	5.71E-08	1.65E-08	8.48E-09	2.49E-08
2694	569987.29	4215714.7	2.41E-07	1.37E-07	3.78E-07	3.68E-08	2.08E-08	5.76E-08	1.66E-08	8.55E-09	2.52E-08
2695	569996.61	4215713.03	2.43E-07	1.38E-07	3.81E-07	3.72E-08	2.10E-08	5.81E-08	1.68E-08	8.63E-09	2.54E-08
2696	570005.92	4215711.35	2.46E-07	1.39E-07	3.85E-07	3.75E-08	2.12E-08	5.87E-08	1.69E-08	8.71E-09	2.56E-08
2697	570015.24	4215709.68	2.48E-07	1.41E-07	3.89E-07	3.79E-08	2.14E-08	5.93E-08	1.71E-08	8.80E-09	2.59E-08
2698	570024.55	4215708	2.51E-07	1.42E-07	3.93E-07	3.83E-08	2.16E-08	5.99E-08	1.73E-08	8.90E-09	2.62E-08
2699	570033.87	4215706.33	2.54E-07	1.44E-07	3.98E-07	3.88E-08	2.19E-08	6.07E-08	1.75E-08	9.01E-09	2.65E-08
2700	570043.18	4215704.65	2.58E-07	1.46E-07	4.04E-07	3.94E-08	2.22E-08	6.16E-08	1.78E-08	9.14E-09	2.69E-08
2701	570052.5	4215702.97	2.62E-07	1.48E-07	4.10E-07	4.00E-08	2.26E-08	6.25E-08	1.80E-08	9.29E-09	2.73E-08
2702	570061.81	4215701.3	2.66E-07	1.51E-07	4.17E-07	4.07E-08	2.29E-08	6.36E-08	1.84E-08	9.45E-09	2.78E-08
2703	570071.13	4215699.62	2.71E-07	1.54E-07	4.25E-07	4.14E-08	2.34E-08	6.48E-08	1.87E-08	9.62E-09	2.83E-08
2704	570080.45	4215697.95	2.76E-07	1.57E-07	4.33E-07	4.22E-08	2.38E-08	6.60E-08	1.90E-08	9.80E-09	2.89E-08
2705	570089.76	4215696.27	2.82E-07	1.60E-07	4.42E-07	4.31E-08	2.43E-08	6.74E-08	1.95E-08	1.00E-08	2.95E-08
2706	570099.08	4215694.6	2.89E-07	1.64E-07	4.52E-07	4.41E-08	2.49E-08	6.90E-08	1.99E-08	1.02E-08	3.01E-08
2707	570108.39	4215692.92	2.96E-07	1.68E-07	4.63E-07	4.51E-08	2.55E-08	7.06E-08	2.04E-08	1.05E-08	3.09E-08
2708	569942.87	4215728.95	2.26E-07	1.28E-07	3.54E-07	3.45E-08	1.95E-08	5.40E-08	1.56E-08	8.02E-09	2.36E-08
2709	569933.94	4215726.66	2.29E-07	1.30E-07	3.58E-07	3.49E-08	1.97E-08	5.46E-08	1.58E-08	8.11E-09	2.39E-08
2710	569925.01	4215724.36	2.31E-07	1.31E-07	3.62E-07	3.53E-08	1.99E-08	5.52E-08	1.59E-08	8.20E-09	2.41E-08
2711	569916.09	4215722.07	2.34E-07	1.32E-07	3.66E-07	3.57E-08	2.01E-08	5.58E-08	1.61E-08	8.29E-09	2.44E-08
2712	569907.16	4215719.78	2.37E-07	1.34E-07	3.70E-07	3.61E-08	2.04E-08	5.65E-08	1.63E-08	8.39E-09	2.47E-08
2713	569898.23	4215717.48	2.39E-07	1.36E-07	3.75E-07	3.66E-08	2.06E-08	5.72E-08	1.65E-08	8.49E-09	2.50E-08
2714	569889.3	4215715.19	2.42E-07	1.37E-07	3.80E-07	3.70E-08	2.09E-08	5.79E-08	1.67E-08	8.60E-09	2.53E-08
2715	569880.37	4215712.89	2.46E-07	1.39E-07	3.85E-07	3.75E-08	2.12E-08	5.87E-08	1.69E-08	8.71E-09	2.56E-08
2716	569871.44	4215710.6	2.38E-07	1.35E-07	3.72E-07	3.63E-08	2.05E-08	5.67E-08	1.64E-08	8.42E-09	2.48E-08
2717	569862.51	4215708.31	2.39E-07	1.35E-07	3.75E-07	3.65E-08	2.06E-08	5.71E-08	1.65E-08	8.48E-09	2.50E-08
2718	569591.18	4215444.03	4.2E-07	2.38E-07	6.58E-07	6.42E-08	3.62E-08	1.00E-07	2.90E-08	1.49E-08	4.39E-08
2719	569951.8	4215731.25	2.24E-07	1.27E-07	3.51E-07	3.42E-08	1.93E-08	5.35E-08	1.54E-08	7.94E-09	2.34E-08
2720	569961.12	4215729.57	2.25E-07	1.28E-07	3.53E-07	3.44E-08	1.94E-08	5.38E-08	1.55E-08	7.99E-09	2.35E-08
2721	569970.43	4215727.89	2.27E-07	1.29E-07	3.56E-07	3.47E-08	1.96E-08	5.42E-08	1.56E-08	8.05E-09	2.37E-08
2722	569979.75	4215726.22	2.29E-07	1.30E-07	3.59E-07	3.49E-08	1.97E-08	5.47E-08	1.58E-08	8.12E-09	2.39E-08
2723	569989.06	4215724.54	2.31E-07	1.31E-07	3.62E-07	3.53E-08	1.99E-08	5.52E-08	1.59E-08	8.19E-09	2.41E-08
2724	569998.38	4215722.87	2.33E-07	1.32E-07	3.65E-07	3.56E-08	2.01E-08	5.57E-08	1.61E-08	8.26E-09	2.43E-08

2725	570007.69	4215721.19	2.35E-07	1.33E-07	3.68E-07	3.59E-08	2.03E-08	5.62E-08	1.62E-08	8.34E-09	2.45E-08
2726	570017.01	4215719.52	2.37E-07	1.35E-07	3.72E-07	3.63E-08	2.05E-08	5.67E-08	1.64E-08	8.42E-09	2.48E-08
2727	570026.32	4215717.84	2.4E-07	1.36E-07	3.76E-07	3.67E-08	2.07E-08	5.74E-08	1.65E-08	8.52E-09	2.51E-08
2728	570035.64	4215716.17	2.43E-07	1.38E-07	3.81E-07	3.71E-08	2.10E-08	5.81E-08	1.68E-08	8.62E-09	2.54E-08
2729	570044.95	4215714.49	2.47E-07	1.40E-07	3.86E-07	3.76E-08	2.12E-08	5.89E-08	1.70E-08	8.74E-09	2.57E-08
2730	570054.27	4215712.82	2.5E-07	1.42E-07	3.92E-07	3.82E-08	2.16E-08	5.98E-08	1.72E-08	8.88E-09	2.61E-08
2731	570063.58	4215711.14	2.54E-07	1.44E-07	3.99E-07	3.88E-08	2.19E-08	6.08E-08	1.75E-08	9.02E-09	2.66E-08
2732	570072.9	4215709.47	2.59E-07	1.47E-07	4.06E-07	3.95E-08	2.23E-08	6.18E-08	1.78E-08	9.18E-09	2.70E-08
2733	570082.22	4215707.79	2.64E-07	1.49E-07	4.13E-07	4.03E-08	2.27E-08	6.30E-08	1.82E-08	9.36E-09	2.75E-08
2734	570091.53	4215706.12	2.7E-07	1.53E-07	4.22E-07	4.12E-08	2.32E-08	6.44E-08	1.86E-08	9.56E-09	2.81E-08
2735	570134.25	4215513.15	1.2E-06	6.82E-07	1.89E-06	1.84E-07	1.04E-07	2.88E-07	8.29E-08	4.27E-08	1.26E-07
2736	570122.88	4215521.29	1.05E-06	5.97E-07	1.65E-06	1.61E-07	9.07E-08	2.52E-07	7.26E-08	3.74E-08	1.10E-07
2737	570111.51	4215529.44	9.37E-07	5.31E-07	1.47E-06	1.43E-07	8.07E-08	2.24E-07	6.46E-08	3.32E-08	9.78E-08
2738	570121.14	4215531.14	9.43E-07	5.34E-07	1.48E-06	1.44E-07	8.13E-08	2.25E-07	6.50E-08	3.35E-08	9.85E-08
2739	570100.13	4215537.59	8.49E-07	4.81E-07	1.33E-06	1.30E-07	7.32E-08	2.03E-07	5.85E-08	3.01E-08	8.87E-08
2740	570109.77	4215539.29	8.49E-07	4.81E-07	1.33E-06	1.30E-07	7.31E-08	2.03E-07	5.85E-08	3.01E-08	8.86E-08
2741	570119.4	4215540.99	8.54E-07	4.84E-07	1.34E-06	1.30E-07	7.35E-08	2.04E-07	5.88E-08	3.03E-08	8.91E-08
2742	570129.04	4215542.69	8.64E-07	4.89E-07	1.35E-06	1.32E-07	7.44E-08	2.06E-07	5.95E-08	3.06E-08	9.02E-08
2743	570098.4	4215547.43	7.73E-07	4.38E-07	1.21E-06	1.18E-07	6.66E-08	1.85E-07	5.33E-08	2.74E-08	8.07E-08
2744	570108.03	4215549.14	7.72E-07	4.38E-07	1.21E-06	1.18E-07	6.66E-08	1.84E-07	5.32E-08	2.74E-08	8.06E-08
2745	570117.67	4215550.84	7.76E-07	4.40E-07	1.22E-06	1.19E-07	6.69E-08	1.85E-07	5.35E-08	2.75E-08	8.10E-08
2746	570096.66	4215557.28	7.06E-07	4.00E-07	1.11E-06	1.08E-07	6.09E-08	1.69E-07	4.87E-08	2.51E-08	7.37E-08
2747	570106.29	4215558.98	7.06E-07	4.00E-07	1.11E-06	1.08E-07	6.08E-08	1.69E-07	4.87E-08	2.50E-08	7.37E-08
2748	570115.93	4215560.68	7.09E-07	4.02E-07	1.11E-06	1.08E-07	6.11E-08	1.69E-07	4.89E-08	2.51E-08	7.40E-08
2749	570094.92	4215567.13	6.47E-07	3.66E-07	1.01E-06	9.88E-08	5.57E-08	1.55E-07	4.46E-08	2.29E-08	6.75E-08
2750	570104.55	4215568.83	6.47E-07	3.67E-07	1.01E-06	9.89E-08	5.58E-08	1.55E-07	4.46E-08	2.30E-08	6.76E-08
2751	570114.19	4215570.53	6.5E-07	3.68E-07	1.02E-06	9.93E-08	5.60E-08	1.55E-07	4.48E-08	2.31E-08	6.78E-08
2752	570123.82	4215572.23	6.57E-07	3.72E-07	1.03E-06	1.00E-07	5.66E-08	1.57E-07	4.53E-08	2.33E-08	6.86E-08
2753	570102.81	4215578.68	5.96E-07	3.37E-07	9.33E-07	9.10E-08	5.13E-08	1.42E-07	4.11E-08	2.11E-08	6.22E-08
2754	570112.45	4215580.38	5.98E-07	3.39E-07	9.38E-07	9.14E-08	5.16E-08	1.43E-07	4.12E-08	2.12E-08	6.25E-08
2755	570122.08	4215582.08	6.04E-07	3.42E-07	9.47E-07	9.23E-08	5.21E-08	1.44E-07	4.16E-08	2.14E-08	6.31E-08
2756	570101.08	4215588.53	5.5E-07	3.12E-07	8.62E-07	8.41E-08	4.74E-08	1.31E-07	3.79E-08	1.95E-08	5.75E-08
2757	570110.71	4215590.23	5.54E-07	3.14E-07	8.68E-07	8.46E-08	4.77E-08	1.32E-07	3.82E-08	1.97E-08	5.78E-08
2758	570099.34	4215598.37	5.12E-07	2.90E-07	8.02E-07	7.82E-08	4.41E-08	1.22E-07	3.53E-08	1.82E-08	5.35E-08
2759	570108.97	4215600.08	5.16E-07	2.92E-07	8.08E-07	7.88E-08	4.44E-08	1.23E-07	3.55E-08	1.83E-08	5.38E-08
2760	570118.61	4215601.78	5.21E-07	2.95E-07	8.16E-07	7.95E-08	4.49E-08	1.24E-07	3.59E-08	1.85E-08	5.43E-08
2761	570107.23	4215609.92	4.81E-07	2.73E-07	7.54E-07	7.35E-08	4.15E-08	1.15E-07	3.32E-08	1.71E-08	5.02E-08
2762	570105.5	4215619.77	4.5E-07	2.55E-07	7.04E-07	6.87E-08	3.87E-08	1.07E-07	3.10E-08	1.59E-08	4.69E-08
2763	570113.39	4215631.32	4.24E-07	2.40E-07	6.64E-07	6.47E-08	3.65E-08	1.01E-07	2.92E-08	1.50E-08	4.42E-08
2764	570111.65	4215641.17	3.97E-07	2.25E-07	6.22E-07	6.06E-08	3.42E-08	9.49E-08	2.74E-08	1.41E-08	4.14E-08
2765	570088.11	4215718.25	2.53E-07	1.43E-07	3.96E-07	3.86E-08	2.18E-08	6.04E-08	1.74E-08	8.97E-09	2.64E-08
2766	570097.74	4215719.95	2.54E-07	1.44E-07	3.99E-07	3.89E-08	2.19E-08	6.08E-08	1.75E-08	9.03E-09	2.66E-08

			T2		T2L3		T4f	
			285	570282.22				
			2.81E-02	1.59E-02	4.29E-03	2.42E-03	1.94E-03	9.97E-04
			Yr 1	Yr 2	Yr 1	Yr 2	Yr 1	Yr 2
1	570176.2	4215489	1.55E-02	8.77E-03	2.36E-03	1.33E-03	1.07E-03	5.49E-04
2	570192.2	4215484	1.75E-02	9.92E-03	2.67E-03	1.51E-03	1.21E-03	6.21E-04
3	570208.7	4215477	2.04E-02	1.16E-02	3.11E-03	1.76E-03	1.41E-03	7.23E-04
4	570225.2	4215470	2.35E-02	1.33E-02	3.58E-03	2.02E-03	1.62E-03	8.33E-04
5	570241.7	4215462	2.60E-02	1.47E-02	3.97E-03	2.24E-03	1.79E-03	9.22E-04
6	570258.2	4215455	2.76E-02	1.56E-02	4.21E-03	2.38E-03	1.90E-03	9.78E-04
7	570179.3	4215498	1.37E-02	7.75E-03	2.09E-03	1.18E-03	9.43E-04	4.85E-04
8	570162	4215500	1.23E-02	7.00E-03	1.89E-03	1.06E-03	8.51E-04	4.38E-04
9	570196.2	4215493	1.56E-02	8.81E-03	2.37E-03	1.34E-03	1.07E-03	5.52E-04
10	570212.7	4215486	1.82E-02	1.03E-02	2.79E-03	1.57E-03	1.26E-03	6.47E-04
11	570229.2	4215479	2.10E-02	1.19E-02	3.21E-03	1.81E-03	1.45E-03	7.47E-04
12	570237.5	4215475	2.23E-02	1.26E-02	3.40E-03	1.92E-03	1.54E-03	7.91E-04
13	570254	4215468	2.44E-02	1.38E-02	3.72E-03	2.10E-03	1.68E-03	8.64E-04
14	570183.7	4215507	1.24E-02	7.00E-03	1.89E-03	1.07E-03	8.52E-04	4.38E-04
15	570167.2	4215509	1.12E-02	6.34E-03	1.71E-03	9.64E-04	7.71E-04	3.97E-04
16	570150.7	4215511	1.02E-02	5.77E-03	1.55E-03	8.77E-04	7.01E-04	3.61E-04
17	570200.2	4215503	1.40E-02	7.95E-03	2.14E-03	1.21E-03	9.67E-04	4.98E-04
18	570216.7	4215495	1.64E-02	9.32E-03	2.51E-03	1.42E-03	1.13E-03	5.83E-04
19	570225	4215492	1.78E-02	1.01E-02	2.71E-03	1.53E-03	1.22E-03	6.30E-04
20	570241.5	4215484	2.01E-02	1.14E-02	3.07E-03	1.73E-03	1.39E-03	7.14E-04
21	570249.8	4215481	2.12E-02	1.20E-02	3.23E-03	1.82E-03	1.46E-03	7.50E-04
22	570266.3	4215473	2.28E-02	1.29E-02	3.48E-03	1.97E-03	1.57E-03	8.09E-04
23	570188.1	4215516	1.13E-02	6.39E-03	1.72E-03	9.72E-04	7.77E-04	4.00E-04
24	570172.2	4215518	1.02E-02	5.76E-03	1.55E-03	8.77E-04	7.01E-04	3.61E-04
25	570156.3	4215520	9.32E-03	5.28E-03	1.42E-03	8.03E-04	6.42E-04	3.31E-04
26	570140.5	4215522	8.58E-03	4.86E-03	1.31E-03	7.39E-04	5.91E-04	3.04E-04
27	570204.3	4215512	1.28E-02	7.27E-03	1.96E-03	1.11E-03	8.84E-04	4.55E-04
28	570220.8	4215504	1.50E-02	8.50E-03	2.29E-03	1.29E-03	1.03E-03	5.32E-04
29	570237.3	4215497	1.73E-02	9.77E-03	2.63E-03	1.49E-03	1.19E-03	6.12E-04
30	570253.8	4215490	1.92E-02	1.09E-02	2.93E-03	1.66E-03	1.32E-03	6.82E-04
31	570262.1	4215486	2.01E-02	1.14E-02	3.07E-03	1.73E-03	1.38E-03	7.12E-04
32	570191.4	4215526	1.03E-02	5.84E-03	1.57E-03	8.88E-04	7.11E-04	3.66E-04
33	570174.1	4215528	9.18E-03	5.20E-03	1.40E-03	7.91E-04	6.32E-04	3.25E-04
34	570156.8	4215530	8.38E-03	4.75E-03	1.28E-03	7.22E-04	5.77E-04	2.97E-04
35	570139.4	4215532	7.69E-03	4.36E-03	1.17E-03	6.63E-04	5.30E-04	2.73E-04
36	570208.3	4215521	1.18E-02	6.69E-03	1.80E-03	1.02E-03	8.14E-04	4.19E-04
37	570216.6	4215517	1.28E-02	7.22E-03	1.95E-03	1.10E-03	8.79E-04	4.52E-04
38	570233.1	4215510	1.48E-02	8.36E-03	2.25E-03	1.27E-03	1.02E-03	5.24E-04
39	570249.6	4215503	1.67E-02	9.45E-03	2.55E-03	1.44E-03	1.15E-03	5.92E-04
40	570266.1	4215495	1.83E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.50E-04
41	570274.4	4215492	1.90E-02	1.08E-02	2.91E-03	1.64E-03	1.31E-03	6.75E-04
42	570195.7	4215535	9.57E-03	5.42E-03	1.46E-03	8.24E-04	6.59E-04	3.39E-04
43	570179.1	4215537	8.58E-03	4.86E-03	1.31E-03	7.39E-04	5.91E-04	3.04E-04
44	570162.4	4215539	7.82E-03	4.43E-03	1.19E-03	6.74E-04	5.39E-04	2.77E-04
45	570145.7	4215541	7.21E-03	4.08E-03	1.10E-03	6.21E-04	4.97E-04	2.56E-04
46	570212.3	4215530	1.09E-02	6.18E-03	1.67E-03	9.40E-04	7.52E-04	3.87E-04
47	570228.8	4215523	1.26E-02	7.15E-03	1.93E-03	1.09E-03	8.70E-04	4.48E-04
48	570245.4	4215515	1.45E-02	8.19E-03	2.21E-03	1.25E-03	9.96E-04	5.13E-04

49	570261.9	4215508	1.62E-02	9.15E-03	2.47E-03	1.39E-03	1.11E-03	5.73E-04
50	570278.4	4215501	1.75E-02	9.93E-03	2.68E-03	1.51E-03	1.21E-03	6.22E-04
51	570200	4215544	8.90E-03	5.04E-03	1.36E-03	7.67E-04	6.14E-04	3.16E-04
52	570183.9	4215546	8.04E-03	4.56E-03	1.23E-03	6.93E-04	5.54E-04	2.85E-04
53	570167.7	4215548	7.32E-03	4.15E-03	1.12E-03	6.31E-04	5.04E-04	2.60E-04
54	570151.5	4215550	6.76E-03	3.83E-03	1.03E-03	5.83E-04	4.66E-04	2.40E-04
55	570135.4	4215552	6.29E-03	3.56E-03	9.60E-04	5.42E-04	4.33E-04	2.23E-04
56	570216.4	4215539	1.01E-02	5.73E-03	1.55E-03	8.72E-04	6.97E-04	3.59E-04
57	570232.9	4215532	1.17E-02	6.62E-03	1.78E-03	1.01E-03	8.05E-04	4.14E-04
58	570241.1	4215528	1.25E-02	7.08E-03	1.91E-03	1.08E-03	8.61E-04	4.43E-04
59	570257.6	4215521	1.41E-02	8.01E-03	2.16E-03	1.22E-03	9.75E-04	5.02E-04
60	570274.2	4215514	1.56E-02	8.83E-03	2.38E-03	1.34E-03	1.07E-03	5.53E-04
61	570203.5	4215553	8.27E-03	4.68E-03	1.26E-03	7.12E-04	5.70E-04	2.93E-04
62	570186.2	4215555	7.44E-03	4.21E-03	1.14E-03	6.41E-04	5.13E-04	2.64E-04
63	570168.8	4215557	6.73E-03	3.82E-03	1.03E-03	5.80E-04	4.64E-04	2.39E-04
64	570151.5	4215559	6.20E-03	3.51E-03	9.47E-04	5.34E-04	4.27E-04	2.20E-04
65	570134.2	4215561	5.74E-03	3.25E-03	8.77E-04	4.95E-04	3.96E-04	2.04E-04
66	570220.4	4215548	9.43E-03	5.34E-03	1.44E-03	8.13E-04	6.50E-04	3.35E-04
67	570228.6	4215545	1.02E-02	5.75E-03	1.55E-03	8.75E-04	7.00E-04	3.60E-04
68	570245.2	4215537	1.16E-02	6.59E-03	1.78E-03	1.00E-03	8.02E-04	4.13E-04
69	570253.4	4215534	1.24E-02	7.02E-03	1.89E-03	1.07E-03	8.53E-04	4.39E-04
70	570269.9	4215526	1.38E-02	7.81E-03	2.11E-03	1.19E-03	9.50E-04	4.89E-04
71	570286.5	4215519	1.50E-02	8.51E-03	2.29E-03	1.29E-03	1.03E-03	5.33E-04
72	570207.8	4215562	7.78E-03	4.41E-03	1.19E-03	6.70E-04	5.36E-04	2.76E-04
73	570191	4215564	7.03E-03	3.98E-03	1.07E-03	6.05E-04	4.84E-04	2.49E-04
74	570174.2	4215566	6.36E-03	3.60E-03	9.71E-04	5.48E-04	4.38E-04	2.25E-04
75	570157.4	4215568	5.86E-03	3.32E-03	8.94E-04	5.05E-04	4.03E-04	2.08E-04
76	570140.6	4215570	5.43E-03	3.08E-03	8.29E-04	4.68E-04	3.74E-04	1.93E-04
77	570224.4	4215557	8.82E-03	5.00E-03	1.35E-03	7.60E-04	6.08E-04	3.13E-04
78	570240.9	4215550	1.02E-02	5.75E-03	1.55E-03	8.75E-04	7.00E-04	3.60E-04
79	570257.5	4215543	1.15E-02	6.53E-03	1.76E-03	9.94E-04	7.95E-04	4.09E-04
80	570274	4215536	1.28E-02	7.27E-03	1.96E-03	1.11E-03	8.84E-04	4.55E-04
81	570282.2	4215532	1.34E-02	7.60E-03	2.05E-03	1.16E-03	9.25E-04	4.76E-04
82	570211.3	4215571	7.30E-03	4.14E-03	1.12E-03	6.29E-04	5.03E-04	2.59E-04
83	570193.4	4215573	6.56E-03	3.72E-03	1.00E-03	5.66E-04	4.52E-04	2.33E-04
84	570175.6	4215576	5.91E-03	3.35E-03	9.02E-04	5.09E-04	4.07E-04	2.10E-04
85	570157.8	4215578	5.41E-03	3.07E-03	8.26E-04	4.66E-04	3.73E-04	1.92E-04
86	570139.9	4215580	5.00E-03	2.83E-03	7.64E-04	4.31E-04	3.45E-04	1.77E-04
87	570220.2	4215570	7.70E-03	4.36E-03	1.18E-03	6.64E-04	5.31E-04	2.73E-04
88	570236.7	4215563	8.86E-03	5.02E-03	1.35E-03	7.64E-04	6.11E-04	3.14E-04
89	570253.2	4215556	1.01E-02	5.72E-03	1.54E-03	8.70E-04	6.96E-04	3.58E-04
90	570269.7	4215548	1.13E-02	6.43E-03	1.73E-03	9.78E-04	7.82E-04	4.03E-04
91	570286.3	4215541	1.25E-02	7.09E-03	1.91E-03	1.08E-03	8.62E-04	4.44E-04
92	570215.6	4215580	6.89E-03	3.91E-03	1.05E-03	5.94E-04	4.75E-04	2.45E-04
93	570198.3	4215583	6.23E-03	3.53E-03	9.52E-04	5.37E-04	4.29E-04	2.21E-04
94	570180.9	4215585	5.64E-03	3.19E-03	8.61E-04	4.86E-04	3.88E-04	2.00E-04
95	570163.6	4215587	5.15E-03	2.92E-03	7.86E-04	4.44E-04	3.55E-04	1.83E-04
96	570146.3	4215589	4.76E-03	2.70E-03	7.27E-04	4.10E-04	3.28E-04	1.69E-04
97	570129	4215591	4.46E-03	2.52E-03	6.81E-04	3.84E-04	3.07E-04	1.58E-04
98	570232.5	4215576	7.75E-03	4.39E-03	1.18E-03	6.68E-04	5.34E-04	2.75E-04
99	570249	4215568	8.83E-03	5.00E-03	1.35E-03	7.61E-04	6.08E-04	3.13E-04
100	570265.5	4215561	9.96E-03	5.64E-03	1.52E-03	8.58E-04	6.86E-04	3.53E-04

101	570282	4215554	1.11E-02	6.29E-03	1.70E-03	9.57E-04	7.65E-04	3.94E-04
102	570290.3	4215550	1.16E-02	6.60E-03	1.78E-03	1.00E-03	8.02E-04	4.13E-04
103	570298.5	4215547	1.21E-02	6.88E-03	1.85E-03	1.05E-03	8.37E-04	4.31E-04
104	570219.8	4215590	6.49E-03	3.68E-03	9.92E-04	5.60E-04	4.48E-04	2.30E-04
105	570203	4215592	5.91E-03	3.35E-03	9.02E-04	5.09E-04	4.07E-04	2.10E-04
106	570186.1	4215594	5.37E-03	3.04E-03	8.20E-04	4.63E-04	3.70E-04	1.90E-04
107	570169.2	4215596	4.90E-03	2.78E-03	7.49E-04	4.22E-04	3.38E-04	1.74E-04
108	570152.4	4215598	4.55E-03	2.58E-03	6.94E-04	3.92E-04	3.13E-04	1.61E-04
109	570135.5	4215600	4.26E-03	2.41E-03	6.50E-04	3.67E-04	2.93E-04	1.51E-04
110	570236.5	4215585	7.20E-03	4.08E-03	1.10E-03	6.20E-04	4.96E-04	2.55E-04
111	570253	4215578	8.14E-03	4.61E-03	1.24E-03	7.01E-04	5.61E-04	2.89E-04
112	570261.3	4215574	8.65E-03	4.90E-03	1.32E-03	7.45E-04	5.96E-04	3.07E-04
113	570277.8	4215567	9.72E-03	5.51E-03	1.48E-03	8.38E-04	6.70E-04	3.45E-04
114	570294.3	4215559	1.08E-02	6.12E-03	1.65E-03	9.30E-04	7.44E-04	3.83E-04
115	570223.4	4215599	6.08E-03	3.44E-03	9.28E-04	5.24E-04	4.19E-04	2.16E-04
116	570205.7	4215601	5.54E-03	3.14E-03	8.46E-04	4.77E-04	3.82E-04	1.97E-04
117	570187.9	4215603	5.03E-03	2.85E-03	7.68E-04	4.33E-04	3.46E-04	1.78E-04
118	570170.1	4215605	4.58E-03	2.59E-03	6.99E-04	3.94E-04	3.15E-04	1.62E-04
119	570161.3	4215606	4.40E-03	2.49E-03	6.72E-04	3.79E-04	3.03E-04	1.56E-04
120	570143.5	4215608	4.09E-03	2.32E-03	6.25E-04	3.53E-04	2.82E-04	1.45E-04
121	570125.8	4215611	3.86E-03	2.19E-03	5.89E-04	3.32E-04	2.66E-04	1.37E-04
122	570232.3	4215598	6.32E-03	3.58E-03	9.64E-04	5.44E-04	4.35E-04	2.24E-04
123	570248.8	4215590	7.12E-03	4.03E-03	1.09E-03	6.13E-04	4.90E-04	2.52E-04
124	570265.3	4215583	7.49E-03	4.24E-03	1.14E-03	6.45E-04	5.16E-04	2.66E-04
125	570281.8	4215576	8.99E-03	5.09E-03	1.37E-03	7.75E-04	6.20E-04	3.19E-04
126	570290.1	4215572	9.49E-03	5.38E-03	1.45E-03	8.18E-04	6.54E-04	3.37E-04
127	570298.4	4215569	9.99E-03	5.66E-03	1.53E-03	8.61E-04	6.89E-04	3.54E-04
128	570227.7	4215608	5.69E-03	3.23E-03	8.70E-04	4.91E-04	3.92E-04	2.02E-04
129	570210.4	4215610	5.26E-03	2.98E-03	8.03E-04	4.53E-04	3.62E-04	1.87E-04
130	570193	4215612	4.80E-03	2.72E-03	7.33E-04	4.14E-04	3.31E-04	1.70E-04
131	570175.7	4215614	4.38E-03	2.48E-03	6.69E-04	3.78E-04	3.02E-04	1.55E-04
132	570158.4	4215616	4.06E-03	2.30E-03	6.20E-04	3.50E-04	2.80E-04	1.44E-04
133	570141.1	4215618	3.80E-03	2.15E-03	5.80E-04	3.27E-04	2.62E-04	1.35E-04
134	570123.8	4215620	3.60E-03	2.04E-03	5.49E-04	3.10E-04	2.48E-04	1.28E-04
135	570244.6	4215603	6.27E-03	3.55E-03	9.57E-04	5.40E-04	4.32E-04	2.22E-04
136	570261.1	4215596	6.52E-03	3.69E-03	9.95E-04	5.62E-04	4.49E-04	2.31E-04
137	570277.6	4215589	7.31E-03	4.14E-03	1.12E-03	6.30E-04	5.04E-04	2.59E-04
138	570294.1	4215581	8.29E-03	4.70E-03	1.27E-03	7.14E-04	5.71E-04	2.94E-04
139	570302.4	4215578	8.89E-03	5.03E-03	1.36E-03	7.66E-04	6.12E-04	3.15E-04
140	570231.9	4215617	5.35E-03	3.03E-03	8.17E-04	4.61E-04	3.69E-04	1.90E-04
141	570215	4215619	4.99E-03	2.83E-03	7.61E-04	4.30E-04	3.44E-04	1.77E-04
142	570198	4215621	4.58E-03	2.59E-03	6.99E-04	3.94E-04	3.15E-04	1.62E-04
143	570181.1	4215623	4.19E-03	2.38E-03	6.40E-04	3.61E-04	2.89E-04	1.49E-04
144	570164.2	4215625	3.88E-03	2.20E-03	5.93E-04	3.34E-04	2.67E-04	1.38E-04
145	570147.3	4215627	3.63E-03	2.06E-03	5.55E-04	3.13E-04	2.50E-04	1.29E-04
146	570130.3	4215629	3.44E-03	1.95E-03	5.25E-04	2.96E-04	2.37E-04	1.22E-04
147	570248.6	4215612	5.50E-03	3.11E-03	8.39E-04	4.74E-04	3.79E-04	1.95E-04
148	570256.9	4215609	5.76E-03	3.26E-03	8.80E-04	4.96E-04	3.97E-04	2.04E-04
149	570273.4	4215601	6.42E-03	3.64E-03	9.81E-04	5.53E-04	4.43E-04	2.28E-04
150	570289.9	4215594	7.21E-03	4.08E-03	1.10E-03	6.21E-04	4.97E-04	2.56E-04
151	570298.2	4215591	7.65E-03	4.34E-03	1.17E-03	6.59E-04	5.27E-04	2.71E-04
152	570314.7	4215583	8.67E-03	4.91E-03	1.32E-03	7.47E-04	5.97E-04	3.08E-04

153	570235.5	4215626	5.04E-03	2.86E-03	7.70E-04	4.34E-04	3.47E-04	1.79E-04
154	570226.7	4215627	4.86E-03	2.75E-03	7.42E-04	4.19E-04	3.35E-04	1.72E-04
155	570209	4215629	4.49E-03	2.54E-03	6.85E-04	3.87E-04	3.09E-04	1.59E-04
156	570191.3	4215632	4.11E-03	2.33E-03	6.27E-04	3.54E-04	2.83E-04	1.46E-04
157	570173.6	4215634	3.76E-03	2.13E-03	5.75E-04	3.24E-04	2.59E-04	1.34E-04
158	570164.8	4215635	3.64E-03	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
159	570147.1	4215637	3.41E-03	1.93E-03	5.20E-04	2.94E-04	2.35E-04	1.21E-04
160	570129.4	4215639	3.23E-03	1.83E-03	4.92E-04	2.78E-04	2.22E-04	1.14E-04
161	570252.6	4215622	5.17E-03	2.93E-03	7.89E-04	4.45E-04	3.56E-04	1.83E-04
162	570269.2	4215614	5.66E-03	3.21E-03	8.65E-04	4.88E-04	3.90E-04	2.01E-04
163	570285.7	4215607	6.36E-03	3.61E-03	9.72E-04	5.48E-04	4.39E-04	2.26E-04
164	570302.2	4215600	7.18E-03	4.07E-03	1.10E-03	6.19E-04	4.95E-04	2.55E-04
165	570318.7	4215592	8.08E-03	4.58E-03	1.23E-03	6.96E-04	5.57E-04	2.86E-04
166	570239.8	4215635	4.77E-03	2.70E-03	7.28E-04	4.11E-04	3.29E-04	1.69E-04
167	570222.5	4215637	4.45E-03	2.52E-03	6.79E-04	3.83E-04	3.06E-04	1.58E-04
168	570205.1	4215640	4.09E-03	2.32E-03	6.25E-04	3.52E-04	2.82E-04	1.45E-04
169	570187.8	4215642	3.76E-03	2.13E-03	5.75E-04	3.24E-04	2.59E-04	1.34E-04
170	570170.5	4215644	3.48E-03	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
171	570153.2	4215646	3.27E-03	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
172	570135.9	4215648	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
173	570118.6	4215650	2.95E-03	1.67E-03	4.51E-04	2.54E-04	2.03E-04	1.05E-04
174	570256.7	4215631	5.22E-03	2.96E-03	7.97E-04	4.50E-04	3.60E-04	1.85E-04
175	570273.2	4215623	5.39E-03	3.05E-03	8.22E-04	4.64E-04	3.71E-04	1.91E-04
176	570281.5	4215620	5.67E-03	3.21E-03	8.66E-04	4.88E-04	3.91E-04	2.01E-04
177	570298	4215612	6.34E-03	3.59E-03	9.68E-04	5.46E-04	4.37E-04	2.25E-04
178	570306.2	4215609	6.76E-03	3.83E-03	1.03E-03	5.82E-04	4.66E-04	2.40E-04
179	570314.5	4215605	7.18E-03	4.06E-03	1.10E-03	6.18E-04	4.94E-04	2.55E-04
180	570244	4215644	4.52E-03	2.56E-03	6.90E-04	3.89E-04	3.11E-04	1.60E-04
181	570227	4215647	4.23E-03	2.39E-03	6.45E-04	3.64E-04	2.91E-04	1.50E-04
182	570210	4215649	3.90E-03	2.21E-03	5.96E-04	3.36E-04	2.69E-04	1.38E-04
183	570193	4215651	3.60E-03	2.04E-03	5.50E-04	3.10E-04	2.48E-04	1.28E-04
184	570176.1	4215653	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.18E-04
185	570159.1	4215655	3.14E-03	1.78E-03	4.79E-04	2.71E-04	2.16E-04	1.11E-04
186	570142.1	4215657	2.97E-03	1.69E-03	4.54E-04	2.56E-04	2.05E-04	1.06E-04
187	570125.2	4215659	2.84E-03	1.61E-03	4.33E-04	2.44E-04	1.95E-04	1.01E-04
188	570260.7	4215640	4.93E-03	2.79E-03	7.53E-04	4.25E-04	3.40E-04	1.75E-04
189	570269	4215636	5.20E-03	2.95E-03	7.94E-04	4.48E-04	3.59E-04	1.85E-04
190	570277.2	4215633	5.15E-03	2.92E-03	7.86E-04	4.44E-04	3.55E-04	1.83E-04
191	570293.7	4215625	5.69E-03	3.22E-03	8.69E-04	4.90E-04	3.92E-04	2.02E-04
192	570310.3	4215618	6.39E-03	3.62E-03	9.75E-04	5.50E-04	4.40E-04	2.27E-04
193	570326.8	4215611	7.42E-03	4.21E-03	1.13E-03	6.40E-04	5.12E-04	2.63E-04
194	570247.7	4215654	4.29E-03	2.43E-03	6.55E-04	3.70E-04	2.96E-04	1.52E-04
195	570230	4215656	3.98E-03	2.26E-03	6.08E-04	3.43E-04	2.74E-04	1.41E-04
196	570212.4	4215658	3.67E-03	2.08E-03	5.61E-04	3.16E-04	2.53E-04	1.30E-04
197	570194.7	4215660	3.39E-03	1.92E-03	5.18E-04	2.92E-04	2.34E-04	1.20E-04
198	570177.1	4215662	3.15E-03	1.78E-03	4.81E-04	2.71E-04	2.17E-04	1.12E-04
199	570159.4	4215664	2.96E-03	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
200	570141.7	4215666	2.81E-03	1.59E-03	4.29E-04	2.42E-04	1.93E-04	9.96E-05
201	570124.1	4215669	2.68E-03	1.52E-03	4.09E-04	2.31E-04	1.84E-04	9.50E-05
202	570264.7	4215649	4.67E-03	2.65E-03	7.14E-04	4.03E-04	3.22E-04	1.66E-04
203	570281.3	4215642	5.19E-03	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
204	570297.8	4215634	5.75E-03	3.26E-03	8.78E-04	4.95E-04	3.96E-04	2.04E-04

205	570314.3	4215627	6.36E-03	3.60E-03	9.70E-04	5.48E-04	4.38E-04	2.25E-04
206	570330.8	4215620	6.98E-03	3.95E-03	1.07E-03	6.01E-04	4.81E-04	2.48E-04
207	570251.9	4215663	4.07E-03	2.31E-03	6.21E-04	3.51E-04	2.80E-04	1.44E-04
208	570234.6	4215665	3.78E-03	2.14E-03	5.77E-04	3.26E-04	2.60E-04	1.34E-04
209	570217.2	4215667	3.50E-03	1.98E-03	5.35E-04	3.02E-04	2.41E-04	1.24E-04
210	570199.9	4215669	3.25E-03	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
211	570182.6	4215671	3.03E-03	1.71E-03	4.62E-04	2.61E-04	2.09E-04	1.07E-04
212	570165.3	4215673	2.85E-03	1.61E-03	4.35E-04	2.45E-04	1.96E-04	1.01E-04
213	570148	4215675	2.71E-03	1.53E-03	4.13E-04	2.33E-04	1.86E-04	9.60E-05
214	570130.7	4215677	2.58E-03	1.46E-03	3.94E-04	2.22E-04	1.78E-04	9.16E-05
215	570113.4	4215680	2.47E-03	1.40E-03	3.78E-04	2.13E-04	1.70E-04	8.77E-05
216	570268.8	4215658	4.44E-03	2.51E-03	6.78E-04	3.83E-04	3.06E-04	1.57E-04
217	570277	4215654	4.67E-03	2.65E-03	7.13E-04	4.02E-04	3.22E-04	1.66E-04
218	570293.6	4215647	5.17E-03	2.93E-03	7.89E-04	4.45E-04	3.56E-04	1.83E-04
219	570310.1	4215640	5.71E-03	3.23E-03	8.72E-04	4.92E-04	3.93E-04	2.03E-04
220	570326.6	4215633	6.28E-03	3.56E-03	9.59E-04	5.41E-04	4.33E-04	2.23E-04
221	570256	4215672	3.85E-03	2.18E-03	5.88E-04	3.32E-04	2.65E-04	1.37E-04
222	570239	4215674	3.58E-03	2.03E-03	5.47E-04	3.09E-04	2.47E-04	1.27E-04
223	570222	4215676	3.33E-03	1.89E-03	5.09E-04	2.87E-04	2.30E-04	1.18E-04
224	570205	4215678	3.11E-03	1.76E-03	4.74E-04	2.68E-04	2.14E-04	1.10E-04
225	570188	4215680	2.91E-03	1.65E-03	4.44E-04	2.50E-04	2.00E-04	1.03E-04
226	570171	4215682	2.74E-03	1.55E-03	4.18E-04	2.36E-04	1.89E-04	9.71E-05
227	570154	4215684	2.60E-03	1.48E-03	3.98E-04	2.24E-04	1.79E-04	9.24E-05
228	570137	4215686	2.49E-03	1.41E-03	3.80E-04	2.14E-04	1.71E-04	8.82E-05
229	570120	4215688	2.39E-03	1.35E-03	3.64E-04	2.06E-04	1.64E-04	8.47E-05
230	570272.8	4215667	4.21E-03	2.38E-03	6.43E-04	3.63E-04	2.90E-04	1.49E-04
231	570281.1	4215664	4.43E-03	2.51E-03	6.77E-04	3.82E-04	3.06E-04	1.57E-04
232	570297.6	4215656	4.90E-03	2.77E-03	7.48E-04	4.22E-04	3.38E-04	1.74E-04
233	570305.8	4215653	5.14E-03	2.91E-03	7.86E-04	4.43E-04	3.55E-04	1.82E-04
234	570314.1	4215649	5.40E-03	3.06E-03	8.24E-04	4.65E-04	3.72E-04	1.92E-04
235	570330.6	4215642	5.93E-03	3.36E-03	9.06E-04	5.11E-04	4.09E-04	2.10E-04
236	570338.9	4215638	6.20E-03	3.51E-03	9.47E-04	5.34E-04	4.27E-04	2.20E-04
237	570259.8	4215681	3.64E-03	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
238	570242.2	4215683	3.37E-03	1.91E-03	5.15E-04	2.91E-04	2.32E-04	1.20E-04
239	570224.5	4215685	3.14E-03	1.78E-03	4.79E-04	2.70E-04	2.16E-04	1.11E-04
240	570206.9	4215687	2.93E-03	1.66E-03	4.47E-04	2.52E-04	2.02E-04	1.04E-04
241	570189.3	4215690	2.75E-03	1.56E-03	4.19E-04	2.37E-04	1.89E-04	9.74E-05
242	570171.7	4215692	2.59E-03	1.47E-03	3.96E-04	2.23E-04	1.79E-04	9.20E-05
243	570154.1	4215694	2.47E-03	1.40E-03	3.77E-04	2.13E-04	1.70E-04	8.75E-05
244	570136.5	4215696	2.36E-03	1.34E-03	3.60E-04	2.03E-04	1.63E-04	8.37E-05
245	570118.8	4215698	2.27E-03	1.28E-03	3.46E-04	1.95E-04	1.56E-04	8.04E-05
246	570276.8	4215676	3.98E-03	2.25E-03	6.07E-04	3.43E-04	2.74E-04	1.41E-04
247	570285.1	4215673	4.19E-03	2.37E-03	6.39E-04	3.61E-04	2.89E-04	1.49E-04
248	570293.4	4215669	4.41E-03	2.50E-03	6.73E-04	3.80E-04	3.04E-04	1.56E-04
249	570309.9	4215662	4.87E-03	2.76E-03	7.44E-04	4.20E-04	3.36E-04	1.73E-04
250	570318.1	4215658	5.11E-03	2.90E-03	7.81E-04	4.41E-04	3.52E-04	1.81E-04
251	570334.6	4215651	5.60E-03	3.17E-03	8.55E-04	4.83E-04	3.86E-04	1.99E-04
252	570264	4215690	3.43E-03	1.94E-03	5.24E-04	2.95E-04	2.36E-04	1.22E-04
253	570246.6	4215692	3.19E-03	1.81E-03	4.87E-04	2.75E-04	2.20E-04	1.13E-04
254	570229.3	4215694	2.97E-03	1.68E-03	4.54E-04	2.56E-04	2.05E-04	1.05E-04
255	570212	4215697	2.79E-03	1.58E-03	4.26E-04	2.40E-04	1.92E-04	9.90E-05
256	570194.7	4215699	2.63E-03	1.49E-03	4.02E-04	2.27E-04	1.81E-04	9.33E-05

257	570177.4	4215701	2.50E-03	1.42E-03	3.81E-04	2.15E-04	1.72E-04	8.86E-05
258	570160.1	4215703	2.38E-03	1.35E-03	3.63E-04	2.05E-04	1.64E-04	8.44E-05
259	570142.8	4215705	2.28E-03	1.29E-03	3.47E-04	1.96E-04	1.57E-04	8.07E-05
260	570125.5	4215707	2.19E-03	1.24E-03	3.34E-04	1.89E-04	1.51E-04	7.77E-05
261	570108.1	4215709	2.11E-03	1.19E-03	3.22E-04	1.82E-04	1.45E-04	7.48E-05
262	570280.9	4215686	3.75E-03	2.12E-03	5.72E-04	3.23E-04	2.58E-04	1.33E-04
263	570297.4	4215678	4.16E-03	2.36E-03	6.35E-04	3.59E-04	2.87E-04	1.48E-04
264	570305.6	4215675	4.38E-03	2.48E-03	6.69E-04	3.77E-04	3.02E-04	1.55E-04
265	570322.2	4215667	4.83E-03	2.73E-03	7.37E-04	4.16E-04	3.33E-04	1.71E-04
266	570330.4	4215664	5.05E-03	2.86E-03	7.71E-04	4.35E-04	3.48E-04	1.79E-04
267	570346.9	4215656	5.51E-03	3.12E-03	8.41E-04	4.74E-04	3.79E-04	1.95E-04
268	570267.7	4215699	3.23E-03	1.83E-03	4.93E-04	2.78E-04	2.22E-04	1.14E-04
269	570249.8	4215702	3.00E-03	1.70E-03	4.58E-04	2.59E-04	2.07E-04	1.06E-04
270	570231.9	4215704	2.80E-03	1.58E-03	4.27E-04	2.41E-04	1.93E-04	9.92E-05
271	570223	4215705	2.71E-03	1.54E-03	4.14E-04	2.33E-04	1.87E-04	9.61E-05
272	570214	4215706	2.63E-03	1.49E-03	4.01E-04	2.27E-04	1.81E-04	9.33E-05
273	570196.1	4215708	2.49E-03	1.41E-03	3.81E-04	2.15E-04	1.72E-04	8.84E-05
274	570178.3	4215710	2.38E-03	1.35E-03	3.63E-04	2.05E-04	1.64E-04	8.43E-05
275	570169.3	4215711	2.32E-03	1.32E-03	3.55E-04	2.00E-04	1.60E-04	8.24E-05
276	570151.4	4215713	2.22E-03	1.26E-03	3.38E-04	1.91E-04	1.53E-04	7.86E-05
277	570133.5	4215716	2.12E-03	1.20E-03	3.24E-04	1.83E-04	1.46E-04	7.53E-05
278	570115.6	4215718	2.05E-03	1.16E-03	3.12E-04	1.76E-04	1.41E-04	7.26E-05
279	570284.9	4215695	3.53E-03	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
280	570293.2	4215691	3.72E-03	2.11E-03	5.68E-04	3.21E-04	2.56E-04	1.32E-04
281	570309.7	4215684	4.13E-03	2.34E-03	6.30E-04	3.56E-04	2.85E-04	1.46E-04
282	570317.9	4215680	4.34E-03	2.46E-03	6.63E-04	3.74E-04	2.99E-04	1.54E-04
283	570334.5	4215673	4.77E-03	2.70E-03	7.28E-04	4.11E-04	3.29E-04	1.69E-04
284	570342.7	4215669	4.98E-03	2.82E-03	7.60E-04	4.29E-04	3.43E-04	1.77E-04
285	570282.2	4215444	2.81E-02	1.59E-02	4.29E-03	2.42E-03	1.94E-03	9.97E-04
286	570275.6	4215451	2.73E-02	1.55E-02	4.18E-03	2.36E-03	1.88E-03	9.70E-04
287	570268.9	4215458	2.63E-02	1.49E-02	4.02E-03	2.27E-03	1.81E-03	9.34E-04
288	570298.6	4215441	2.68E-02	1.52E-02	4.10E-03	2.31E-03	1.85E-03	9.52E-04
289	570292.2	4215447	2.64E-02	1.50E-02	4.03E-03	2.28E-03	1.82E-03	9.37E-04
290	570285.7	4215454	2.58E-02	1.46E-02	3.95E-03	2.23E-03	1.78E-03	9.16E-04
291	570279.2	4215460	2.51E-02	1.42E-02	3.83E-03	2.16E-03	1.73E-03	8.89E-04
292	570272.8	4215467	2.41E-02	1.36E-02	3.68E-03	2.07E-03	1.66E-03	8.54E-04
293	570308.3	4215444	2.53E-02	1.43E-02	3.86E-03	2.18E-03	1.74E-03	8.98E-04
294	570302	4215450	2.50E-02	1.41E-02	3.81E-03	2.15E-03	1.72E-03	8.85E-04
295	570295.6	4215457	2.44E-02	1.39E-02	3.73E-03	2.11E-03	1.68E-03	8.67E-04
296	570289.3	4215463	2.38E-02	1.35E-02	3.64E-03	2.05E-03	1.64E-03	8.45E-04
297	570276.6	4215476	2.20E-02	1.24E-02	3.35E-03	1.89E-03	1.51E-03	7.79E-04
298	570322.7	4215443	2.40E-02	1.36E-02	3.67E-03	2.07E-03	1.66E-03	8.53E-04
299	570315.8	4215450	2.38E-02	1.35E-02	3.64E-03	2.05E-03	1.64E-03	8.46E-04
300	570308.9	4215457	2.35E-02	1.33E-02	3.59E-03	2.02E-03	1.62E-03	8.33E-04
301	570302	4215464	2.29E-02	1.30E-02	3.50E-03	1.98E-03	1.58E-03	8.14E-04
302	570295.1	4215471	2.22E-02	1.26E-02	3.39E-03	1.91E-03	1.53E-03	7.88E-04
303	570288.2	4215478	2.13E-02	1.21E-02	3.25E-03	1.84E-03	1.47E-03	7.55E-04
304	570281.3	4215485	2.02E-02	1.15E-02	3.09E-03	1.74E-03	1.39E-03	7.18E-04
305	570339	4215439	2.25E-02	1.28E-02	3.44E-03	1.94E-03	1.55E-03	7.98E-04
306	570332.2	4215446	2.26E-02	1.28E-02	3.46E-03	1.95E-03	1.56E-03	8.03E-04
307	570325.5	4215453	2.26E-02	1.28E-02	3.45E-03	1.95E-03	1.56E-03	8.01E-04
308	570318.8	4215460	2.23E-02	1.26E-02	3.41E-03	1.92E-03	1.54E-03	7.91E-04

309	570312	4215467	2.19E-02	1.24E-02	3.34E-03	1.88E-03	1.51E-03	7.76E-04
310	570305.3	4215474	2.13E-02	1.21E-02	3.25E-03	1.83E-03	1.47E-03	7.55E-04
311	570298.6	4215480	2.05E-02	1.16E-02	3.13E-03	1.77E-03	1.41E-03	7.27E-04
312	570291.8	4215487	1.96E-02	1.11E-02	2.99E-03	1.69E-03	1.35E-03	6.95E-04
313	570285.1	4215494	1.86E-02	1.05E-02	2.84E-03	1.60E-03	1.28E-03	6.59E-04
314	570355.7	4215399	2.26E-02	1.28E-02	3.45E-03	1.95E-03	1.56E-03	8.02E-04
315	570355.5	4215408	2.22E-02	1.26E-02	3.38E-03	1.91E-03	1.53E-03	7.86E-04
316	570355.3	4215418	2.18E-02	1.24E-02	3.33E-03	1.88E-03	1.50E-03	7.74E-04
317	570348.3	4215443	2.13E-02	1.20E-02	3.25E-03	1.83E-03	1.46E-03	7.54E-04
318	570341.7	4215450	2.14E-02	1.21E-02	3.27E-03	1.85E-03	1.48E-03	7.60E-04
319	570335.1	4215457	2.14E-02	1.21E-02	3.27E-03	1.85E-03	1.48E-03	7.60E-04
320	570328.5	4215463	2.12E-02	1.20E-02	3.24E-03	1.83E-03	1.46E-03	7.53E-04
321	570322	4215470	2.09E-02	1.18E-02	3.19E-03	1.80E-03	1.44E-03	7.40E-04
322	570315.4	4215477	2.04E-02	1.16E-02	3.11E-03	1.76E-03	1.40E-03	7.23E-04
323	570308.8	4215483	1.98E-02	1.12E-02	3.02E-03	1.70E-03	1.36E-03	7.01E-04
324	570302.2	4215490	1.90E-02	1.08E-02	2.90E-03	1.64E-03	1.31E-03	6.74E-04
325	570295.6	4215497	1.81E-02	1.03E-02	2.76E-03	1.56E-03	1.25E-03	6.42E-04
326	570289	4215503	1.72E-02	9.73E-03	2.62E-03	1.48E-03	1.18E-03	6.09E-04
327	570365.1	4215394	2.16E-02	1.23E-02	3.30E-03	1.86E-03	1.49E-03	7.67E-04
328	570364.9	4215404	2.13E-02	1.20E-02	3.25E-03	1.83E-03	1.47E-03	7.54E-04
329	570364.7	4215413	2.10E-02	1.19E-02	3.20E-03	1.81E-03	1.44E-03	7.43E-04
330	570357.6	4215447	2.02E-02	1.14E-02	3.08E-03	1.74E-03	1.39E-03	7.15E-04
331	570351.2	4215454	2.04E-02	1.15E-02	3.11E-03	1.75E-03	1.40E-03	7.22E-04
332	570344.7	4215460	2.04E-02	1.16E-02	3.11E-03	1.76E-03	1.41E-03	7.23E-04
333	570338.2	4215467	2.03E-02	1.15E-02	3.09E-03	1.75E-03	1.40E-03	7.19E-04
334	570331.8	4215473	2.00E-02	1.13E-02	3.05E-03	1.72E-03	1.38E-03	7.08E-04
335	570325.3	4215480	1.96E-02	1.11E-02	2.99E-03	1.68E-03	1.35E-03	6.94E-04
336	570318.8	4215486	1.90E-02	1.08E-02	2.91E-03	1.64E-03	1.31E-03	6.75E-04
337	570312.3	4215493	1.84E-02	1.04E-02	2.81E-03	1.58E-03	1.27E-03	6.52E-04
338	570305.9	4215499	1.76E-02	9.98E-03	2.69E-03	1.52E-03	1.21E-03	6.25E-04
339	570299.4	4215506	1.68E-02	9.52E-03	2.56E-03	1.45E-03	1.16E-03	5.96E-04
340	570292.9	4215513	1.59E-02	9.02E-03	2.43E-03	1.37E-03	1.10E-03	5.65E-04
341	570374.4	4215395	2.05E-02	1.16E-02	3.13E-03	1.77E-03	1.41E-03	7.27E-04
342	570374.2	4215405	2.02E-02	1.14E-02	3.08E-03	1.74E-03	1.39E-03	7.16E-04
343	570374	4215415	1.99E-02	1.13E-02	3.04E-03	1.72E-03	1.37E-03	7.07E-04
344	570366.4	4215451	1.92E-02	1.09E-02	2.93E-03	1.65E-03	1.32E-03	6.81E-04
345	570359.5	4215458	1.94E-02	1.10E-02	2.96E-03	1.67E-03	1.34E-03	6.88E-04
346	570352.6	4215465	1.95E-02	1.10E-02	2.97E-03	1.68E-03	1.34E-03	6.91E-04
347	570345.7	4215472	1.93E-02	1.09E-02	2.95E-03	1.66E-03	1.33E-03	6.85E-04
348	570338.8	4215479	1.90E-02	1.08E-02	2.90E-03	1.64E-03	1.31E-03	6.74E-04
349	570331.9	4215486	1.86E-02	1.05E-02	2.84E-03	1.60E-03	1.28E-03	6.59E-04
350	570325	4215493	1.80E-02	1.02E-02	2.75E-03	1.55E-03	1.24E-03	6.39E-04
351	570318.1	4215500	1.73E-02	9.82E-03	2.65E-03	1.49E-03	1.19E-03	6.15E-04
352	570311.2	4215507	1.66E-02	9.38E-03	2.53E-03	1.43E-03	1.14E-03	5.88E-04
353	570304.3	4215514	1.57E-02	8.91E-03	2.40E-03	1.36E-03	1.08E-03	5.58E-04
354	570297.4	4215521	1.48E-02	8.41E-03	2.27E-03	1.28E-03	1.02E-03	5.27E-04
355	570383.8	4215390	1.96E-02	1.11E-02	2.99E-03	1.69E-03	1.35E-03	6.95E-04
356	570383.6	4215400	1.94E-02	1.10E-02	2.96E-03	1.67E-03	1.34E-03	6.87E-04
357	570383.4	4215410	1.91E-02	1.08E-02	2.92E-03	1.65E-03	1.32E-03	6.79E-04
358	570382.7	4215439	1.83E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.49E-04
359	570375.8	4215455	1.83E-02	1.04E-02	2.79E-03	1.58E-03	1.26E-03	6.48E-04
360	570369	4215462	1.85E-02	1.05E-02	2.82E-03	1.59E-03	1.27E-03	6.55E-04

361	570362.2	4215469	1.86E-02	1.05E-02	2.83E-03	1.60E-03	1.28E-03	6.58E-04
362	570355.4	4215476	1.85E-02	1.05E-02	2.82E-03	1.59E-03	1.27E-03	6.55E-04
363	570348.7	4215483	1.82E-02	1.03E-02	2.79E-03	1.57E-03	1.26E-03	6.47E-04
364	570341.9	4215489	1.79E-02	1.01E-02	2.73E-03	1.54E-03	1.23E-03	6.34E-04
365	570335.1	4215496	1.74E-02	9.86E-03	2.66E-03	1.50E-03	1.20E-03	6.18E-04
366	570328.4	4215503	1.68E-02	9.53E-03	2.57E-03	1.45E-03	1.16E-03	5.96E-04
367	570321.6	4215510	1.61E-02	9.14E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
368	570314.8	4215517	1.54E-02	8.72E-03	2.35E-03	1.33E-03	1.06E-03	5.46E-04
369	570308.1	4215524	1.46E-02	8.27E-03	2.23E-03	1.26E-03	1.01E-03	5.18E-04
370	570301.3	4215531	1.38E-02	7.83E-03	2.11E-03	1.19E-03	9.53E-04	4.90E-04
371	570393	4215395	1.86E-02	1.05E-02	2.83E-03	1.60E-03	1.28E-03	6.58E-04
372	570392.8	4215405	1.84E-02	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.51E-04
373	570392.6	4215414	1.82E-02	1.03E-02	2.77E-03	1.57E-03	1.25E-03	6.44E-04
374	570392	4215443	1.74E-02	9.88E-03	2.66E-03	1.50E-03	1.20E-03	6.19E-04
375	570385.1	4215459	1.74E-02	9.88E-03	2.66E-03	1.50E-03	1.20E-03	6.19E-04
376	570378.4	4215466	1.76E-02	9.99E-03	2.69E-03	1.52E-03	1.21E-03	6.25E-04
377	570371.8	4215472	1.77E-02	1.00E-02	2.70E-03	1.52E-03	1.22E-03	6.27E-04
378	570365.1	4215479	1.76E-02	1.00E-02	2.69E-03	1.52E-03	1.22E-03	6.26E-04
379	570358.5	4215486	1.75E-02	9.91E-03	2.67E-03	1.51E-03	1.21E-03	6.20E-04
380	570351.8	4215493	1.72E-02	9.75E-03	2.63E-03	1.48E-03	1.19E-03	6.11E-04
381	570345.1	4215499	1.68E-02	9.52E-03	2.57E-03	1.45E-03	1.16E-03	5.96E-04
382	570338.5	4215506	1.63E-02	9.23E-03	2.49E-03	1.40E-03	1.12E-03	5.78E-04
383	570331.8	4215513	1.57E-02	8.89E-03	2.40E-03	1.35E-03	1.08E-03	5.57E-04
384	570325.2	4215520	1.50E-02	8.50E-03	2.29E-03	1.29E-03	1.03E-03	5.32E-04
385	570318.5	4215526	1.43E-02	8.10E-03	2.18E-03	1.23E-03	9.86E-04	5.07E-04
386	570311.9	4215533	1.36E-02	7.72E-03	2.08E-03	1.17E-03	9.39E-04	4.83E-04
387	570305.2	4215540	1.29E-02	7.31E-03	1.97E-03	1.11E-03	8.89E-04	4.58E-04
388	570402.4	4215391	1.77E-02	1.01E-02	2.71E-03	1.53E-03	1.22E-03	6.30E-04
389	570402.2	4215400	1.76E-02	9.97E-03	2.69E-03	1.52E-03	1.21E-03	6.24E-04
390	570402	4215409	1.74E-02	9.88E-03	2.66E-03	1.50E-03	1.20E-03	6.19E-04
391	570401.2	4215447	1.66E-02	9.43E-03	2.54E-03	1.43E-03	1.15E-03	5.90E-04
392	570394.4	4215463	1.66E-02	9.42E-03	2.54E-03	1.43E-03	1.15E-03	5.90E-04
393	570387.8	4215469	1.68E-02	9.52E-03	2.57E-03	1.45E-03	1.16E-03	5.96E-04
394	570381.3	4215476	1.69E-02	9.57E-03	2.58E-03	1.46E-03	1.16E-03	5.99E-04
395	570374.7	4215483	1.69E-02	9.56E-03	2.58E-03	1.45E-03	1.16E-03	5.99E-04
396	570368.2	4215489	1.68E-02	9.49E-03	2.56E-03	1.44E-03	1.15E-03	5.94E-04
397	570361.6	4215496	1.65E-02	9.37E-03	2.53E-03	1.42E-03	1.14E-03	5.87E-04
398	570355	4215503	1.62E-02	9.19E-03	2.48E-03	1.40E-03	1.12E-03	5.75E-04
399	570348.5	4215509	1.58E-02	8.94E-03	2.41E-03	1.36E-03	1.09E-03	5.60E-04
400	570341.9	4215516	1.53E-02	8.64E-03	2.33E-03	1.31E-03	1.05E-03	5.41E-04
401	570335.4	4215523	1.47E-02	8.30E-03	2.24E-03	1.26E-03	1.01E-03	5.20E-04
402	570328.8	4215529	1.40E-02	7.94E-03	2.14E-03	1.21E-03	9.66E-04	4.97E-04
403	570322.3	4215536	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.22E-04	4.75E-04
404	570315.7	4215542	1.27E-02	7.21E-03	1.94E-03	1.10E-03	8.77E-04	4.51E-04
405	570309.1	4215549	1.20E-02	6.81E-03	1.84E-03	1.04E-03	8.29E-04	4.27E-04
406	570411.7	4215391	1.69E-02	9.59E-03	2.58E-03	1.46E-03	1.17E-03	6.00E-04
407	570411.5	4215401	1.68E-02	9.51E-03	2.56E-03	1.45E-03	1.16E-03	5.96E-04
408	570411.3	4215411	1.67E-02	9.43E-03	2.54E-03	1.43E-03	1.15E-03	5.91E-04
409	570410.6	4215440	1.61E-02	9.13E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
410	570410.4	4215450	1.59E-02	9.01E-03	2.43E-03	1.37E-03	1.10E-03	5.64E-04
411	570403.3	4215467	1.59E-02	9.00E-03	2.43E-03	1.37E-03	1.09E-03	5.63E-04
412	570396.3	4215474	1.60E-02	9.08E-03	2.45E-03	1.38E-03	1.10E-03	5.69E-04

413	570389.4	4215481	1.61E-02	9.14E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
414	570382.5	4215488	1.62E-02	9.15E-03	2.47E-03	1.39E-03	1.11E-03	5.73E-04
415	570375.6	4215495	1.60E-02	9.08E-03	2.45E-03	1.38E-03	1.10E-03	5.68E-04
416	570368.7	4215502	1.58E-02	8.94E-03	2.41E-03	1.36E-03	1.09E-03	5.59E-04
417	570361.8	4215509	1.54E-02	8.75E-03	2.36E-03	1.33E-03	1.06E-03	5.48E-04
418	570354.9	4215516	1.50E-02	8.52E-03	2.30E-03	1.30E-03	1.04E-03	5.33E-04
419	570348	4215523	1.45E-02	8.22E-03	2.22E-03	1.25E-03	1.00E-03	5.15E-04
420	570341.1	4215530	1.39E-02	7.88E-03	2.12E-03	1.20E-03	9.59E-04	4.94E-04
421	570334.2	4215537	1.33E-02	7.53E-03	2.03E-03	1.15E-03	9.16E-04	4.71E-04
422	570327.3	4215544	1.26E-02	7.16E-03	1.93E-03	1.09E-03	8.70E-04	4.48E-04
423	570320.4	4215551	1.20E-02	6.77E-03	1.82E-03	1.03E-03	8.23E-04	4.24E-04
424	570313.5	4215558	1.12E-02	6.37E-03	1.72E-03	9.69E-04	7.75E-04	3.99E-04
425	570421.1	4215386	1.62E-02	9.18E-03	2.47E-03	1.40E-03	1.12E-03	5.75E-04
426	570420.9	4215396	1.61E-02	9.13E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
427	570420.7	4215406	1.60E-02	9.07E-03	2.44E-03	1.38E-03	1.10E-03	5.68E-04
428	570420.5	4215415	1.59E-02	9.00E-03	2.43E-03	1.37E-03	1.10E-03	5.64E-04
429	570419.8	4215444	1.54E-02	8.72E-03	2.35E-03	1.33E-03	1.06E-03	5.46E-04
430	570419.6	4215454	1.52E-02	8.60E-03	2.32E-03	1.31E-03	1.05E-03	5.39E-04
431	570412.6	4215471	1.52E-02	8.58E-03	2.31E-03	1.31E-03	1.04E-03	5.37E-04
432	570405.8	4215478	1.53E-02	8.66E-03	2.33E-03	1.32E-03	1.05E-03	5.42E-04
433	570399	4215484	1.54E-02	8.71E-03	2.35E-03	1.33E-03	1.06E-03	5.46E-04
434	570392.2	4215491	1.54E-02	8.73E-03	2.35E-03	1.33E-03	1.06E-03	5.47E-04
435	570385.4	4215498	1.54E-02	8.71E-03	2.35E-03	1.32E-03	1.06E-03	5.45E-04
436	570378.6	4215505	1.52E-02	8.59E-03	2.31E-03	1.31E-03	1.04E-03	5.38E-04
437	570371.8	4215512	1.49E-02	8.42E-03	2.27E-03	1.28E-03	1.02E-03	5.27E-04
438	570365	4215519	1.45E-02	8.22E-03	2.22E-03	1.25E-03	1.00E-03	5.15E-04
439	570358.2	4215526	1.41E-02	7.98E-03	2.15E-03	1.21E-03	9.71E-04	5.00E-04
440	570351.4	4215533	1.36E-02	7.70E-03	2.08E-03	1.17E-03	9.37E-04	4.82E-04
441	570344.6	4215540	1.30E-02	7.38E-03	1.99E-03	1.12E-03	8.97E-04	4.62E-04
442	570337.8	4215547	1.24E-02	7.04E-03	1.90E-03	1.07E-03	8.56E-04	4.41E-04
443	570331	4215553	1.18E-02	6.68E-03	1.80E-03	1.02E-03	8.12E-04	4.18E-04
444	570324.2	4215560	1.11E-02	6.31E-03	1.70E-03	9.59E-04	7.67E-04	3.95E-04
445	570317.4	4215567	1.04E-02	5.91E-03	1.59E-03	8.99E-04	7.19E-04	3.70E-04
446	570430.5	4215382	1.55E-02	8.77E-03	2.36E-03	1.33E-03	1.07E-03	5.49E-04
447	570430.3	4215391	1.55E-02	8.76E-03	2.36E-03	1.33E-03	1.07E-03	5.48E-04
448	570430.1	4215401	1.54E-02	8.72E-03	2.35E-03	1.33E-03	1.06E-03	5.46E-04
449	570429.9	4215410	1.53E-02	8.67E-03	2.34E-03	1.32E-03	1.05E-03	5.43E-04
450	570429.2	4215439	1.49E-02	8.41E-03	2.27E-03	1.28E-03	1.02E-03	5.27E-04
451	570429	4215449	1.47E-02	8.32E-03	2.24E-03	1.27E-03	1.01E-03	5.21E-04
452	570428.8	4215458	1.45E-02	8.21E-03	2.21E-03	1.25E-03	9.98E-04	5.14E-04
453	570421.9	4215474	1.44E-02	8.17E-03	2.20E-03	1.24E-03	9.94E-04	5.12E-04
454	570415.2	4215481	1.46E-02	8.26E-03	2.23E-03	1.26E-03	1.01E-03	5.17E-04
455	570408.5	4215488	1.47E-02	8.32E-03	2.24E-03	1.26E-03	1.01E-03	5.21E-04
456	570401.8	4215495	1.47E-02	8.34E-03	2.25E-03	1.27E-03	1.01E-03	5.22E-04
457	570395.1	4215502	1.47E-02	8.31E-03	2.24E-03	1.26E-03	1.01E-03	5.20E-04
458	570388.4	4215508	1.45E-02	8.23E-03	2.22E-03	1.25E-03	1.00E-03	5.15E-04
459	570381.7	4215515	1.43E-02	8.11E-03	2.19E-03	1.23E-03	9.86E-04	5.08E-04
460	570375	4215522	1.40E-02	7.93E-03	2.14E-03	1.21E-03	9.65E-04	4.97E-04
461	570368.3	4215529	1.36E-02	7.72E-03	2.08E-03	1.17E-03	9.39E-04	4.83E-04
462	570361.6	4215536	1.32E-02	7.47E-03	2.01E-03	1.14E-03	9.09E-04	4.68E-04
463	570354.9	4215542	1.27E-02	7.20E-03	1.94E-03	1.10E-03	8.76E-04	4.51E-04
464	570348.2	4215549	1.22E-02	6.90E-03	1.86E-03	1.05E-03	8.39E-04	4.32E-04

465	570341.5	4215556	1.16E-02	6.57E-03	1.77E-03	9.99E-04	7.99E-04	4.11E-04
466	570334.8	4215563	1.10E-02	6.23E-03	1.68E-03	9.47E-04	7.57E-04	3.90E-04
467	570328.1	4215570	1.04E-02	5.86E-03	1.58E-03	8.92E-04	7.13E-04	3.67E-04
468	570321.4	4215576	9.70E-03	5.50E-03	1.48E-03	8.36E-04	6.68E-04	3.44E-04
469	570439.7	4215387	1.48E-02	8.38E-03	2.26E-03	1.28E-03	1.02E-03	5.25E-04
470	570439.5	4215396	1.48E-02	8.38E-03	2.26E-03	1.27E-03	1.02E-03	5.24E-04
471	570439.3	4215406	1.47E-02	8.35E-03	2.25E-03	1.27E-03	1.02E-03	5.23E-04
472	570439.1	4215415	1.46E-02	8.29E-03	2.24E-03	1.26E-03	1.01E-03	5.19E-04
473	570438.4	4215443	1.42E-02	8.04E-03	2.17E-03	1.22E-03	9.78E-04	5.03E-04
474	570438.2	4215453	1.40E-02	7.95E-03	2.14E-03	1.21E-03	9.67E-04	4.98E-04
475	570438	4215462	1.38E-02	7.84E-03	2.11E-03	1.19E-03	9.54E-04	4.91E-04
476	570431.2	4215478	1.37E-02	7.79E-03	2.10E-03	1.18E-03	9.47E-04	4.87E-04
477	570424.6	4215485	1.39E-02	7.86E-03	2.12E-03	1.20E-03	9.56E-04	4.92E-04
478	570417.9	4215492	1.40E-02	7.93E-03	2.14E-03	1.21E-03	9.64E-04	4.96E-04
479	570411.3	4215498	1.40E-02	7.96E-03	2.15E-03	1.21E-03	9.68E-04	4.98E-04
480	570404.7	4215505	1.40E-02	7.93E-03	2.14E-03	1.21E-03	9.65E-04	4.97E-04
481	570398.1	4215512	1.39E-02	7.87E-03	2.12E-03	1.20E-03	9.58E-04	4.93E-04
482	570391.5	4215519	1.37E-02	7.78E-03	2.10E-03	1.18E-03	9.46E-04	4.87E-04
483	570384.9	4215525	1.35E-02	7.64E-03	2.06E-03	1.16E-03	9.30E-04	4.79E-04
484	570378.2	4215532	1.32E-02	7.45E-03	2.01E-03	1.13E-03	9.07E-04	4.67E-04
485	570371.6	4215539	1.28E-02	7.24E-03	1.95E-03	1.10E-03	8.80E-04	4.53E-04
486	570365	4215545	1.23E-02	7.00E-03	1.89E-03	1.06E-03	8.51E-04	4.38E-04
487	570358.4	4215552	1.19E-02	6.73E-03	1.81E-03	1.02E-03	8.19E-04	4.22E-04
488	570351.8	4215559	1.14E-02	6.44E-03	1.74E-03	9.80E-04	7.84E-04	4.03E-04
489	570345.2	4215566	1.08E-02	6.13E-03	1.65E-03	9.32E-04	7.45E-04	3.84E-04
490	570338.6	4215572	1.02E-02	5.80E-03	1.56E-03	8.82E-04	7.05E-04	3.63E-04
491	570331.9	4215579	9.64E-03	5.46E-03	1.47E-03	8.30E-04	6.64E-04	3.42E-04
492	570325.3	4215586	8.71E-03	4.93E-03	1.33E-03	7.50E-04	6.00E-04	3.09E-04
493	570449.2	4215377	1.42E-02	8.03E-03	2.16E-03	1.22E-03	9.77E-04	5.03E-04
494	570449	4215387	1.42E-02	8.03E-03	2.17E-03	1.22E-03	9.77E-04	5.03E-04
495	570448.8	4215397	1.42E-02	8.02E-03	2.16E-03	1.22E-03	9.76E-04	5.02E-04
496	570448.5	4215407	1.41E-02	7.99E-03	2.15E-03	1.22E-03	9.72E-04	5.00E-04
497	570448.3	4215416	1.40E-02	7.93E-03	2.14E-03	1.21E-03	9.65E-04	4.97E-04
498	570447.7	4215446	1.36E-02	7.69E-03	2.07E-03	1.17E-03	9.36E-04	4.82E-04
499	570447.4	4215456	1.34E-02	7.60E-03	2.05E-03	1.16E-03	9.24E-04	4.76E-04
500	570447.2	4215466	1.32E-02	7.49E-03	2.02E-03	1.14E-03	9.11E-04	4.69E-04
501	570440.1	4215482	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.03E-04	4.65E-04
502	570433.2	4215489	1.32E-02	7.49E-03	2.02E-03	1.14E-03	9.11E-04	4.69E-04
503	570426.3	4215496	1.33E-02	7.55E-03	2.03E-03	1.15E-03	9.18E-04	4.73E-04
504	570419.4	4215503	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.22E-04	4.75E-04
505	570412.5	4215510	1.34E-02	7.58E-03	2.04E-03	1.15E-03	9.22E-04	4.74E-04
506	570405.6	4215517	1.33E-02	7.52E-03	2.03E-03	1.14E-03	9.14E-04	4.71E-04
507	570398.7	4215524	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.02E-04	4.65E-04
508	570391.8	4215531	1.28E-02	7.28E-03	1.96E-03	1.11E-03	8.85E-04	4.56E-04
509	570384.9	4215538	1.25E-02	7.10E-03	1.91E-03	1.08E-03	8.63E-04	4.44E-04
510	570378	4215546	1.21E-02	6.88E-03	1.86E-03	1.05E-03	8.37E-04	4.31E-04
511	570371.1	4215553	1.17E-02	6.64E-03	1.79E-03	1.01E-03	8.08E-04	4.16E-04
512	570364.2	4215560	1.13E-02	6.38E-03	1.72E-03	9.70E-04	7.76E-04	3.99E-04
513	570357.3	4215567	1.08E-02	6.09E-03	1.64E-03	9.26E-04	7.41E-04	3.81E-04
514	570350.4	4215574	1.02E-02	5.78E-03	1.56E-03	8.79E-04	7.03E-04	3.62E-04
515	570343.5	4215581	9.64E-03	5.46E-03	1.47E-03	8.30E-04	6.64E-04	3.42E-04
516	570336.5	4215588	9.05E-03	5.13E-03	1.38E-03	7.80E-04	6.24E-04	3.21E-04

517	570329.6	4215595	8.48E-03	4.80E-03	1.29E-03	7.30E-04	5.84E-04	3.01E-04
518	570458.6	4215373	1.36E-02	7.73E-03	2.08E-03	1.18E-03	9.40E-04	4.84E-04
519	570458.4	4215382	1.36E-02	7.71E-03	2.08E-03	1.17E-03	9.38E-04	4.83E-04
520	570458.2	4215392	1.36E-02	7.69E-03	2.07E-03	1.17E-03	9.36E-04	4.82E-04
521	570458	4215402	1.35E-02	7.66E-03	2.06E-03	1.16E-03	9.31E-04	4.79E-04
522	570457.7	4215411	1.34E-02	7.61E-03	2.05E-03	1.16E-03	9.26E-04	4.77E-04
523	570457.1	4215441	1.31E-02	7.42E-03	2.00E-03	1.13E-03	9.03E-04	4.65E-04
524	570456.9	4215450	1.29E-02	7.34E-03	1.98E-03	1.12E-03	8.92E-04	4.59E-04
525	570456.6	4215460	1.28E-02	7.24E-03	1.95E-03	1.10E-03	8.80E-04	4.53E-04
526	570456.4	4215470	1.26E-02	7.12E-03	1.92E-03	1.08E-03	8.66E-04	4.46E-04
527	570449.4	4215486	1.25E-02	7.06E-03	1.90E-03	1.07E-03	8.59E-04	4.42E-04
528	570442.6	4215493	1.26E-02	7.13E-03	1.92E-03	1.09E-03	8.68E-04	4.47E-04
529	570435.8	4215500	1.27E-02	7.18E-03	1.94E-03	1.09E-03	8.74E-04	4.50E-04
530	570429	4215507	1.27E-02	7.21E-03	1.94E-03	1.10E-03	8.77E-04	4.52E-04
531	570422.1	4215514	1.27E-02	7.22E-03	1.95E-03	1.10E-03	8.78E-04	4.52E-04
532	570415.3	4215521	1.27E-02	7.20E-03	1.94E-03	1.09E-03	8.76E-04	4.51E-04
533	570408.5	4215528	1.26E-02	7.12E-03	1.92E-03	1.08E-03	8.66E-04	4.46E-04
534	570401.7	4215535	1.24E-02	7.00E-03	1.89E-03	1.06E-03	8.52E-04	4.38E-04
535	570394.9	4215542	1.21E-02	6.85E-03	1.85E-03	1.04E-03	8.33E-04	4.29E-04
536	570388.1	4215548	1.18E-02	6.66E-03	1.80E-03	1.01E-03	8.11E-04	4.17E-04
537	570381.3	4215555	1.14E-02	6.45E-03	1.74E-03	9.81E-04	7.85E-04	4.04E-04
538	570374.5	4215562	1.10E-02	6.22E-03	1.68E-03	9.45E-04	7.56E-04	3.89E-04
539	570367.6	4215569	1.05E-02	5.96E-03	1.61E-03	9.06E-04	7.25E-04	3.73E-04
540	570360.8	4215576	1.00E-02	5.69E-03	1.53E-03	8.65E-04	6.92E-04	3.56E-04
541	570354	4215583	9.53E-03	5.40E-03	1.45E-03	8.21E-04	6.57E-04	3.38E-04
542	570347.2	4215590	9.00E-03	5.10E-03	1.37E-03	7.75E-04	6.20E-04	3.19E-04
543	570340.4	4215597	8.46E-03	4.80E-03	1.29E-03	7.29E-04	5.83E-04	3.00E-04
544	570333.6	4215604	7.94E-03	4.50E-03	1.21E-03	6.84E-04	5.47E-04	2.82E-04
545	570468	4215368	1.31E-02	7.44E-03	2.01E-03	1.13E-03	9.05E-04	4.66E-04
546	570467.8	4215378	1.31E-02	7.43E-03	2.00E-03	1.13E-03	9.03E-04	4.65E-04
547	570467.6	4215387	1.31E-02	7.40E-03	1.99E-03	1.12E-03	9.00E-04	4.63E-04
548	570467.4	4215397	1.30E-02	7.35E-03	1.98E-03	1.12E-03	8.94E-04	4.60E-04
549	570467.1	4215407	1.29E-02	7.30E-03	1.97E-03	1.11E-03	8.88E-04	4.57E-04
550	570466.9	4215416	1.28E-02	7.27E-03	1.96E-03	1.11E-03	8.84E-04	4.55E-04
551	570466.3	4215445	1.25E-02	7.09E-03	1.91E-03	1.08E-03	8.62E-04	4.44E-04
552	570466.1	4215454	1.24E-02	7.00E-03	1.89E-03	1.06E-03	8.51E-04	4.38E-04
553	570465.8	4215464	1.22E-02	6.90E-03	1.86E-03	1.05E-03	8.39E-04	4.32E-04
554	570465.6	4215474	1.20E-02	6.77E-03	1.83E-03	1.03E-03	8.24E-04	4.24E-04
555	570458.7	4215490	1.19E-02	6.71E-03	1.81E-03	1.02E-03	8.17E-04	4.20E-04
556	570452	4215497	1.20E-02	6.78E-03	1.83E-03	1.03E-03	8.25E-04	4.25E-04
557	570445.2	4215504	1.21E-02	6.84E-03	1.84E-03	1.04E-03	8.32E-04	4.28E-04
558	570438.5	4215511	1.21E-02	6.87E-03	1.85E-03	1.04E-03	8.35E-04	4.30E-04
559	570431.8	4215517	1.21E-02	6.88E-03	1.85E-03	1.05E-03	8.37E-04	4.31E-04
560	570425	4215524	1.21E-02	6.87E-03	1.85E-03	1.04E-03	8.35E-04	4.30E-04
561	570418.3	4215531	1.20E-02	6.82E-03	1.84E-03	1.04E-03	8.30E-04	4.27E-04
562	570411.6	4215538	1.19E-02	6.74E-03	1.82E-03	1.02E-03	8.19E-04	4.22E-04
563	570404.8	4215545	1.17E-02	6.60E-03	1.78E-03	1.00E-03	8.03E-04	4.13E-04
564	570398.1	4215552	1.14E-02	6.44E-03	1.74E-03	9.80E-04	7.84E-04	4.04E-04
565	570391.4	4215558	1.10E-02	6.26E-03	1.69E-03	9.52E-04	7.61E-04	3.92E-04
566	570384.7	4215565	1.07E-02	6.05E-03	1.63E-03	9.19E-04	7.35E-04	3.79E-04
567	570377.9	4215572	1.03E-02	5.82E-03	1.57E-03	8.85E-04	7.08E-04	3.64E-04
568	570371.2	4215579	9.84E-03	5.57E-03	1.50E-03	8.48E-04	6.78E-04	3.49E-04

569	570364.5	4215586	9.39E-03	5.32E-03	1.43E-03	8.09E-04	6.47E-04	3.33E-04
570	570357.7	4215593	8.91E-03	5.05E-03	1.36E-03	7.68E-04	6.14E-04	3.16E-04
571	570351	4215599	8.42E-03	4.77E-03	1.29E-03	7.25E-04	5.80E-04	2.99E-04
572	570344.3	4215606	7.93E-03	4.49E-03	1.21E-03	6.83E-04	5.46E-04	2.81E-04
573	570337.5	4215613	7.45E-03	4.22E-03	1.14E-03	6.42E-04	5.13E-04	2.64E-04
574	570477.4	4215364	1.26E-02	7.16E-03	1.93E-03	1.09E-03	8.72E-04	4.49E-04
575	570477.2	4215373	1.26E-02	7.16E-03	1.93E-03	1.09E-03	8.71E-04	4.48E-04
576	570477	4215383	1.26E-02	7.13E-03	1.92E-03	1.08E-03	8.67E-04	4.46E-04
577	570476.8	4215392	1.25E-02	7.09E-03	1.91E-03	1.08E-03	8.62E-04	4.44E-04
578	570476.5	4215402	1.24E-02	7.03E-03	1.90E-03	1.07E-03	8.56E-04	4.40E-04
579	570476.3	4215411	1.23E-02	6.99E-03	1.88E-03	1.06E-03	8.50E-04	4.38E-04
580	570475.7	4215440	1.21E-02	6.85E-03	1.85E-03	1.04E-03	8.33E-04	4.29E-04
581	570475.5	4215449	1.20E-02	6.77E-03	1.83E-03	1.03E-03	8.24E-04	4.24E-04
582	570475.3	4215459	1.18E-02	6.68E-03	1.80E-03	1.02E-03	8.13E-04	4.18E-04
583	570475	4215468	1.16E-02	6.58E-03	1.77E-03	1.00E-03	8.00E-04	4.12E-04
584	570474.8	4215478	1.14E-02	6.46E-03	1.74E-03	9.82E-04	7.85E-04	4.04E-04
585	570468	4215494	1.13E-02	6.39E-03	1.72E-03	9.72E-04	7.77E-04	4.00E-04
586	570461.3	4215501	1.14E-02	6.45E-03	1.74E-03	9.81E-04	7.84E-04	4.04E-04
587	570454.7	4215507	1.15E-02	6.50E-03	1.75E-03	9.88E-04	7.90E-04	4.07E-04
588	570448	4215514	1.15E-02	6.54E-03	1.76E-03	9.94E-04	7.95E-04	4.09E-04
589	570441.3	4215521	1.16E-02	6.56E-03	1.77E-03	9.97E-04	7.98E-04	4.11E-04
590	570434.7	4215528	1.16E-02	6.55E-03	1.76E-03	9.96E-04	7.96E-04	4.10E-04
591	570428	4215534	1.15E-02	6.51E-03	1.75E-03	9.90E-04	7.92E-04	4.08E-04
592	570421.4	4215541	1.14E-02	6.45E-03	1.74E-03	9.81E-04	7.85E-04	4.04E-04
593	570414.7	4215548	1.12E-02	6.37E-03	1.72E-03	9.68E-04	7.74E-04	3.99E-04
594	570408.1	4215555	1.10E-02	6.23E-03	1.68E-03	9.48E-04	7.58E-04	3.90E-04
595	570401.4	4215561	1.07E-02	6.06E-03	1.63E-03	9.22E-04	7.37E-04	3.80E-04
596	570394.7	4215568	1.04E-02	5.87E-03	1.58E-03	8.93E-04	7.14E-04	3.68E-04
597	570388.1	4215575	1.00E-02	5.67E-03	1.53E-03	8.62E-04	6.89E-04	3.55E-04
598	570381.4	4215582	9.62E-03	5.45E-03	1.47E-03	8.29E-04	6.63E-04	3.41E-04
599	570374.8	4215588	9.21E-03	5.22E-03	1.41E-03	7.94E-04	6.35E-04	3.27E-04
600	570368.1	4215595	8.78E-03	4.97E-03	1.34E-03	7.57E-04	6.05E-04	3.11E-04
601	570361.5	4215602	8.34E-03	4.72E-03	1.27E-03	7.19E-04	5.75E-04	2.96E-04
602	570354.8	4215609	7.89E-03	4.47E-03	1.21E-03	6.80E-04	5.44E-04	2.80E-04
603	570348.2	4215615	7.44E-03	4.22E-03	1.14E-03	6.41E-04	5.13E-04	2.64E-04
604	570341.5	4215622	7.00E-03	3.97E-03	1.07E-03	6.03E-04	4.82E-04	2.48E-04
605	570486.7	4215363	1.22E-02	6.89E-03	1.86E-03	1.05E-03	8.39E-04	4.32E-04
606	570486.5	4215373	1.22E-02	6.89E-03	1.86E-03	1.05E-03	8.38E-04	4.31E-04
607	570486.3	4215383	1.21E-02	6.87E-03	1.85E-03	1.04E-03	8.35E-04	4.30E-04
608	570486	4215393	1.21E-02	6.83E-03	1.84E-03	1.04E-03	8.31E-04	4.28E-04
609	570485.8	4215403	1.20E-02	6.79E-03	1.83E-03	1.03E-03	8.25E-04	4.25E-04
610	570485.6	4215412	1.19E-02	6.74E-03	1.82E-03	1.03E-03	8.20E-04	4.22E-04
611	570484.9	4215442	1.16E-02	6.58E-03	1.77E-03	1.00E-03	8.01E-04	4.12E-04
612	570484.7	4215452	1.15E-02	6.50E-03	1.75E-03	9.89E-04	7.91E-04	4.07E-04
613	570484.5	4215462	1.13E-02	6.42E-03	1.73E-03	9.76E-04	7.80E-04	4.02E-04
614	570484.3	4215471	1.11E-02	6.31E-03	1.70E-03	9.59E-04	7.67E-04	3.95E-04
615	570484.1	4215481	1.09E-02	6.19E-03	1.67E-03	9.41E-04	7.52E-04	3.87E-04
616	570476.9	4215498	1.08E-02	6.10E-03	1.64E-03	9.28E-04	7.42E-04	3.82E-04
617	570470	4215505	1.08E-02	6.14E-03	1.65E-03	9.34E-04	7.47E-04	3.84E-04
618	570463.1	4215512	1.09E-02	6.18E-03	1.67E-03	9.40E-04	7.52E-04	3.87E-04
619	570456.2	4215519	1.10E-02	6.22E-03	1.68E-03	9.45E-04	7.56E-04	3.89E-04
620	570449.3	4215526	1.10E-02	6.24E-03	1.68E-03	9.49E-04	7.59E-04	3.91E-04

621	570442.4	4215533	1.10E-02	6.24E-03	1.68E-03	9.49E-04	7.59E-04	3.91E-04
622	570435.5	4215540	1.09E-02	6.20E-03	1.67E-03	9.43E-04	7.54E-04	3.88E-04
623	570428.6	4215547	1.08E-02	6.14E-03	1.66E-03	9.34E-04	7.47E-04	3.85E-04
624	570421.7	4215554	1.07E-02	6.06E-03	1.63E-03	9.22E-04	7.37E-04	3.79E-04
625	570414.8	4215561	1.05E-02	5.94E-03	1.60E-03	9.04E-04	7.23E-04	3.72E-04
626	570407.9	4215568	1.02E-02	5.78E-03	1.56E-03	8.79E-04	7.03E-04	3.62E-04
627	570401	4215575	9.87E-03	5.59E-03	1.51E-03	8.51E-04	6.80E-04	3.50E-04
628	570394.1	4215582	9.52E-03	5.39E-03	1.45E-03	8.20E-04	6.56E-04	3.38E-04
629	570387.2	4215589	9.14E-03	5.18E-03	1.40E-03	7.88E-04	6.30E-04	3.24E-04
630	570380.3	4215596	8.74E-03	4.95E-03	1.33E-03	7.53E-04	6.02E-04	3.10E-04
631	570373.4	4215603	8.32E-03	4.72E-03	1.27E-03	7.17E-04	5.74E-04	2.95E-04
632	570366.5	4215610	7.90E-03	4.47E-03	1.21E-03	6.80E-04	5.44E-04	2.80E-04
633	570359.6	4215617	7.46E-03	4.23E-03	1.14E-03	6.43E-04	5.14E-04	2.65E-04
634	570352.7	4215624	7.03E-03	3.98E-03	1.07E-03	6.06E-04	4.85E-04	2.49E-04
635	570345.8	4215631	6.61E-03	3.75E-03	1.01E-03	5.70E-04	4.56E-04	2.35E-04
636	570496.1	4215359	1.17E-02	6.64E-03	1.79E-03	1.01E-03	8.07E-04	4.15E-04
637	570495.9	4215369	1.17E-02	6.64E-03	1.79E-03	1.01E-03	8.07E-04	4.16E-04
638	570495.7	4215378	1.17E-02	6.63E-03	1.79E-03	1.01E-03	8.06E-04	4.15E-04
639	570495.5	4215388	1.17E-02	6.61E-03	1.78E-03	1.00E-03	8.04E-04	4.14E-04
640	570495.2	4215398	1.16E-02	6.57E-03	1.77E-03	1.00E-03	8.00E-04	4.12E-04
641	570495	4215407	1.15E-02	6.53E-03	1.76E-03	9.94E-04	7.95E-04	4.09E-04
642	570494.8	4215417	1.15E-02	6.49E-03	1.75E-03	9.87E-04	7.90E-04	4.06E-04
643	570494.1	4215446	1.11E-02	6.31E-03	1.70E-03	9.60E-04	7.68E-04	3.95E-04
644	570493.9	4215456	1.10E-02	6.24E-03	1.68E-03	9.48E-04	7.59E-04	3.90E-04
645	570493.7	4215466	1.09E-02	6.15E-03	1.66E-03	9.35E-04	7.48E-04	3.85E-04
646	570493.5	4215475	1.07E-02	6.04E-03	1.63E-03	9.19E-04	7.35E-04	3.78E-04
647	570493.3	4215485	1.05E-02	5.92E-03	1.60E-03	9.01E-04	7.21E-04	3.71E-04
648	570486.2	4215502	1.03E-02	5.84E-03	1.57E-03	8.88E-04	7.10E-04	3.66E-04
649	570479.4	4215509	1.04E-02	5.86E-03	1.58E-03	8.92E-04	7.13E-04	3.67E-04
650	570472.6	4215516	1.04E-02	5.88E-03	1.58E-03	8.94E-04	7.15E-04	3.68E-04
651	570465.7	4215523	1.04E-02	5.91E-03	1.59E-03	8.99E-04	7.19E-04	3.70E-04
652	570458.9	4215530	1.05E-02	5.93E-03	1.60E-03	9.01E-04	7.21E-04	3.71E-04
653	570452.1	4215536	1.05E-02	5.93E-03	1.60E-03	9.02E-04	7.21E-04	3.71E-04
654	570445.3	4215543	1.04E-02	5.92E-03	1.59E-03	9.00E-04	7.20E-04	3.71E-04
655	570438.4	4215550	1.04E-02	5.87E-03	1.58E-03	8.93E-04	7.15E-04	3.68E-04
656	570431.6	4215557	1.02E-02	5.81E-03	1.56E-03	8.83E-04	7.06E-04	3.63E-04
657	570424.8	4215564	1.01E-02	5.71E-03	1.54E-03	8.68E-04	6.94E-04	3.57E-04
658	570418	4215571	9.86E-03	5.58E-03	1.51E-03	8.49E-04	6.79E-04	3.50E-04
659	570411.1	4215578	9.59E-03	5.43E-03	1.46E-03	8.26E-04	6.61E-04	3.40E-04
660	570404.3	4215585	9.27E-03	5.25E-03	1.42E-03	7.99E-04	6.39E-04	3.29E-04
661	570397.5	4215592	8.93E-03	5.06E-03	1.36E-03	7.70E-04	6.15E-04	3.17E-04
662	570390.7	4215599	8.57E-03	4.86E-03	1.31E-03	7.39E-04	5.91E-04	3.04E-04
663	570383.9	4215606	8.20E-03	4.64E-03	1.25E-03	7.06E-04	5.65E-04	2.91E-04
664	570377	4215613	7.81E-03	4.42E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
665	570370.2	4215620	7.41E-03	4.20E-03	1.13E-03	6.38E-04	5.10E-04	2.63E-04
666	570363.4	4215627	7.00E-03	3.97E-03	1.07E-03	6.03E-04	4.83E-04	2.48E-04
667	570356.6	4215633	6.61E-03	3.74E-03	1.01E-03	5.69E-04	4.55E-04	2.34E-04
668	570349.7	4215640	6.22E-03	3.52E-03	9.50E-04	5.36E-04	4.29E-04	2.21E-04
669	570505.5	4215355	1.13E-02	6.39E-03	1.72E-03	9.72E-04	7.77E-04	4.00E-04
670	570505.3	4215364	1.13E-02	6.40E-03	1.72E-03	9.73E-04	7.78E-04	4.01E-04
671	570505.1	4215374	1.13E-02	6.40E-03	1.72E-03	9.73E-04	7.78E-04	4.00E-04
672	570504.9	4215383	1.13E-02	6.39E-03	1.72E-03	9.71E-04	7.77E-04	4.00E-04

673	570504.6	4215393	1.12E-02	6.36E-03	1.72E-03	9.68E-04	7.74E-04	3.99E-04
674	570504.4	4215403	1.12E-02	6.33E-03	1.71E-03	9.64E-04	7.71E-04	3.97E-04
675	570504.2	4215412	1.11E-02	6.30E-03	1.70E-03	9.57E-04	7.66E-04	3.94E-04
676	570503.6	4215441	1.08E-02	6.12E-03	1.65E-03	9.31E-04	7.45E-04	3.83E-04
677	570503.3	4215451	1.07E-02	6.06E-03	1.63E-03	9.21E-04	7.37E-04	3.79E-04
678	570503.1	4215460	1.06E-02	5.98E-03	1.61E-03	9.10E-04	7.28E-04	3.75E-04
679	570502.9	4215470	1.04E-02	5.89E-03	1.59E-03	8.96E-04	7.17E-04	3.69E-04
680	570502.7	4215480	1.02E-02	5.79E-03	1.56E-03	8.80E-04	7.04E-04	3.62E-04
681	570502.5	4215489	1.00E-02	5.68E-03	1.53E-03	8.63E-04	6.91E-04	3.55E-04
682	570495.5	4215506	9.87E-03	5.59E-03	1.51E-03	8.51E-04	6.80E-04	3.50E-04
683	570488.7	4215513	9.92E-03	5.62E-03	1.51E-03	8.55E-04	6.83E-04	3.52E-04
684	570482	4215519	9.94E-03	5.63E-03	1.52E-03	8.56E-04	6.85E-04	3.53E-04
685	570475.2	4215526	9.93E-03	5.63E-03	1.52E-03	8.56E-04	6.84E-04	3.52E-04
686	570468.5	4215533	9.95E-03	5.63E-03	1.52E-03	8.57E-04	6.85E-04	3.53E-04
687	570461.7	4215540	9.95E-03	5.64E-03	1.52E-03	8.58E-04	6.86E-04	3.53E-04
688	570455	4215547	9.94E-03	5.63E-03	1.52E-03	8.56E-04	6.85E-04	3.52E-04
689	570448.2	4215554	9.90E-03	5.61E-03	1.51E-03	8.53E-04	6.82E-04	3.51E-04
690	570441.5	4215561	9.81E-03	5.56E-03	1.50E-03	8.45E-04	6.76E-04	3.48E-04
691	570434.7	4215567	9.66E-03	5.47E-03	1.48E-03	8.32E-04	6.66E-04	3.43E-04
692	570428	4215574	9.48E-03	5.37E-03	1.45E-03	8.17E-04	6.53E-04	3.36E-04
693	570421.2	4215581	9.27E-03	5.25E-03	1.41E-03	7.98E-04	6.38E-04	3.29E-04
694	570414.5	4215588	9.01E-03	5.11E-03	1.38E-03	7.77E-04	6.21E-04	3.20E-04
695	570407.7	4215595	8.71E-03	4.93E-03	1.33E-03	7.50E-04	6.00E-04	3.09E-04
696	570401	4215602	8.38E-03	4.75E-03	1.28E-03	7.22E-04	5.78E-04	2.97E-04
697	570394.2	4215608	8.04E-03	4.56E-03	1.23E-03	6.93E-04	5.54E-04	2.85E-04
698	570387.5	4215615	7.69E-03	4.36E-03	1.17E-03	6.63E-04	5.30E-04	2.73E-04
699	570380.7	4215622	7.33E-03	4.15E-03	1.12E-03	6.31E-04	5.05E-04	2.60E-04
700	570373.9	4215629	6.95E-03	3.94E-03	1.06E-03	5.99E-04	4.79E-04	2.47E-04
701	570367.2	4215636	6.58E-03	3.73E-03	1.00E-03	5.67E-04	4.53E-04	2.33E-04
702	570360.4	4215643	6.21E-03	3.52E-03	9.49E-04	5.35E-04	4.28E-04	2.20E-04
703	570353.7	4215650	5.85E-03	3.32E-03	8.94E-04	5.04E-04	4.03E-04	2.08E-04
704	570514.9	4215350	1.09E-02	6.16E-03	1.66E-03	9.36E-04	7.49E-04	3.85E-04
705	570514.7	4215360	1.09E-02	6.17E-03	1.66E-03	9.38E-04	7.50E-04	3.86E-04
706	570514.5	4215369	1.09E-02	6.17E-03	1.66E-03	9.39E-04	7.51E-04	3.86E-04
707	570514.3	4215379	1.09E-02	6.17E-03	1.66E-03	9.38E-04	7.50E-04	3.86E-04
708	570514	4215388	1.09E-02	6.15E-03	1.66E-03	9.36E-04	7.49E-04	3.85E-04
709	570513.8	4215398	1.08E-02	6.13E-03	1.65E-03	9.33E-04	7.46E-04	3.84E-04
710	570513.6	4215407	1.08E-02	6.10E-03	1.64E-03	9.28E-04	7.42E-04	3.82E-04
711	570513.4	4215417	1.07E-02	6.06E-03	1.63E-03	9.22E-04	7.38E-04	3.80E-04
712	570512.7	4215446	1.04E-02	5.90E-03	1.59E-03	8.98E-04	7.18E-04	3.69E-04
713	570512.5	4215455	1.03E-02	5.83E-03	1.57E-03	8.87E-04	7.10E-04	3.65E-04
714	570512.3	4215465	1.02E-02	5.76E-03	1.55E-03	8.76E-04	7.01E-04	3.61E-04
715	570512.1	4215474	1.00E-02	5.67E-03	1.53E-03	8.63E-04	6.90E-04	3.55E-04
716	570511.9	4215484	9.85E-03	5.58E-03	1.50E-03	8.48E-04	6.78E-04	3.49E-04
717	570511.7	4215493	9.66E-03	5.47E-03	1.48E-03	8.33E-04	6.66E-04	3.43E-04
718	570504.8	4215510	9.48E-03	5.37E-03	1.45E-03	8.17E-04	6.53E-04	3.36E-04
719	570498.1	4215516	9.51E-03	5.39E-03	1.45E-03	8.20E-04	6.56E-04	3.37E-04
720	570491.4	4215523	9.53E-03	5.40E-03	1.46E-03	8.21E-04	6.57E-04	3.38E-04
721	570484.7	4215530	9.53E-03	5.40E-03	1.46E-03	8.21E-04	6.57E-04	3.38E-04
722	570478	4215537	9.51E-03	5.39E-03	1.45E-03	8.19E-04	6.55E-04	3.37E-04
723	570471.3	4215543	9.47E-03	5.37E-03	1.45E-03	8.16E-04	6.53E-04	3.36E-04
724	570464.7	4215550	9.46E-03	5.36E-03	1.44E-03	8.15E-04	6.52E-04	3.36E-04

725	570458	4215557	9.43E-03	5.34E-03	1.44E-03	8.12E-04	6.50E-04	3.34E-04
726	570451.3	4215564	9.36E-03	5.30E-03	1.43E-03	8.07E-04	6.45E-04	3.32E-04
727	570444.6	4215571	9.26E-03	5.25E-03	1.41E-03	7.98E-04	6.38E-04	3.29E-04
728	570437.9	4215577	9.11E-03	5.16E-03	1.39E-03	7.85E-04	6.28E-04	3.23E-04
729	570431.2	4215584	8.93E-03	5.06E-03	1.36E-03	7.69E-04	6.15E-04	3.17E-04
730	570424.5	4215591	8.71E-03	4.93E-03	1.33E-03	7.50E-04	6.00E-04	3.09E-04
731	570417.8	4215598	8.46E-03	4.79E-03	1.29E-03	7.29E-04	5.83E-04	3.00E-04
732	570411.2	4215605	8.18E-03	4.63E-03	1.25E-03	7.05E-04	5.64E-04	2.90E-04
733	570404.5	4215611	7.87E-03	4.46E-03	1.20E-03	6.78E-04	5.42E-04	2.79E-04
734	570397.8	4215618	7.55E-03	4.28E-03	1.15E-03	6.51E-04	5.20E-04	2.68E-04
735	570391.1	4215625	7.22E-03	4.09E-03	1.10E-03	6.22E-04	4.97E-04	2.56E-04
736	570384.4	4215632	6.88E-03	3.90E-03	1.05E-03	5.93E-04	4.74E-04	2.44E-04
737	570377.7	4215638	6.53E-03	3.70E-03	9.97E-04	5.63E-04	4.50E-04	2.32E-04
738	570371	4215645	6.19E-03	3.50E-03	9.45E-04	5.33E-04	4.26E-04	2.19E-04
739	570364.3	4215652	5.84E-03	3.31E-03	8.92E-04	5.04E-04	4.03E-04	2.07E-04
740	570357.7	4215659	5.51E-03	3.12E-03	8.42E-04	4.75E-04	3.80E-04	1.96E-04
741	569937.1	4214980	3.89E-03	2.20E-03	5.94E-04	3.35E-04	2.68E-04	1.38E-04
742	569941.8	4214988	4.17E-03	2.36E-03	6.36E-04	3.59E-04	2.87E-04	1.48E-04
743	569895.6	4214925	2.81E-03	1.59E-03	4.29E-04	2.42E-04	1.94E-04	9.97E-05
744	569900.3	4214934	2.91E-03	1.65E-03	4.44E-04	2.51E-04	2.00E-04	1.03E-04
745	569905	4214942	3.03E-03	1.71E-03	4.62E-04	2.61E-04	2.08E-04	1.07E-04
746	569909.6	4214951	3.16E-03	1.79E-03	4.83E-04	2.72E-04	2.18E-04	1.12E-04
747	569914.3	4214959	3.33E-03	1.89E-03	5.08E-04	2.87E-04	2.29E-04	1.18E-04
748	569919	4214968	3.53E-03	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
749	569923.7	4214976	3.76E-03	2.13E-03	5.74E-04	3.24E-04	2.59E-04	1.33E-04
750	569928.3	4214985	4.01E-03	2.27E-03	6.13E-04	3.46E-04	2.77E-04	1.42E-04
751	569933	4214993	4.31E-03	2.44E-03	6.58E-04	3.72E-04	2.97E-04	1.53E-04
752	569877.5	4214913	2.70E-03	1.53E-03	4.13E-04	2.33E-04	1.86E-04	9.59E-05
753	569882.2	4214922	2.78E-03	1.57E-03	4.24E-04	2.39E-04	1.92E-04	9.86E-05
754	569886.9	4214930	2.87E-03	1.62E-03	4.38E-04	2.47E-04	1.98E-04	1.02E-04
755	569891.5	4214939	2.97E-03	1.68E-03	4.54E-04	2.56E-04	2.05E-04	1.05E-04
756	569896.2	4214947	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
757	569900.9	4214956	3.24E-03	1.84E-03	4.95E-04	2.79E-04	2.23E-04	1.15E-04
758	569905.5	4214964	3.43E-03	1.94E-03	5.24E-04	2.96E-04	2.37E-04	1.22E-04
759	569910.2	4214973	3.65E-03	2.07E-03	5.57E-04	3.14E-04	2.51E-04	1.29E-04
760	569914.9	4214981	3.88E-03	2.20E-03	5.93E-04	3.35E-04	2.68E-04	1.38E-04
761	569919.6	4214990	4.16E-03	2.36E-03	6.35E-04	3.58E-04	2.86E-04	1.47E-04
762	569924.2	4214998	4.48E-03	2.54E-03	6.83E-04	3.86E-04	3.08E-04	1.59E-04
763	569928.9	4215007	4.84E-03	2.74E-03	7.38E-04	4.17E-04	3.33E-04	1.72E-04
764	569868.7	4214918	2.76E-03	1.56E-03	4.21E-04	2.38E-04	1.90E-04	9.78E-05
765	569873.4	4214926	2.84E-03	1.61E-03	4.33E-04	2.44E-04	1.96E-04	1.01E-04
766	569878.1	4214935	2.93E-03	1.66E-03	4.47E-04	2.52E-04	2.02E-04	1.04E-04
767	569882.8	4214943	3.04E-03	1.72E-03	4.64E-04	2.62E-04	2.10E-04	1.08E-04
768	569887.4	4214952	3.17E-03	1.80E-03	4.85E-04	2.73E-04	2.19E-04	1.13E-04
769	569892.1	4214960	3.34E-03	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.19E-04
770	569896.8	4214969	3.54E-03	2.01E-03	5.41E-04	3.05E-04	2.44E-04	1.26E-04
771	569901.5	4214977	3.77E-03	2.13E-03	5.75E-04	3.25E-04	2.60E-04	1.34E-04
772	569906.1	4214986	4.02E-03	2.27E-03	6.13E-04	3.46E-04	2.77E-04	1.42E-04
773	569910.8	4214994	4.31E-03	2.44E-03	6.59E-04	3.72E-04	2.97E-04	1.53E-04
774	569915.5	4215003	4.65E-03	2.64E-03	7.10E-04	4.01E-04	3.21E-04	1.65E-04
775	569920.2	4215011	5.04E-03	2.85E-03	7.69E-04	4.34E-04	3.47E-04	1.79E-04
776	569860	4214923	2.82E-03	1.60E-03	4.30E-04	2.43E-04	1.94E-04	1.00E-04

777	569864.7	4214931	2.90E-03	1.64E-03	4.42E-04	2.50E-04	2.00E-04	1.03E-04
778	569869.3	4214940	2.99E-03	1.70E-03	4.57E-04	2.58E-04	2.06E-04	1.06E-04
779	569874	4214948	3.11E-03	1.76E-03	4.75E-04	2.68E-04	2.15E-04	1.10E-04
780	569878.7	4214957	3.26E-03	1.85E-03	4.98E-04	2.81E-04	2.25E-04	1.16E-04
781	569883.3	4214965	3.45E-03	1.95E-03	5.27E-04	2.97E-04	2.38E-04	1.22E-04
782	569888	4214974	3.66E-03	2.07E-03	5.59E-04	3.16E-04	2.52E-04	1.30E-04
783	569892.7	4214982	3.90E-03	2.21E-03	5.95E-04	3.36E-04	2.69E-04	1.38E-04
784	569897.4	4214991	4.17E-03	2.36E-03	6.36E-04	3.59E-04	2.87E-04	1.48E-04
785	569902	4214999	4.48E-03	2.54E-03	6.84E-04	3.86E-04	3.09E-04	1.59E-04
786	569906.7	4215008	4.84E-03	2.74E-03	7.39E-04	4.17E-04	3.33E-04	1.72E-04
787	569911.4	4215016	5.25E-03	2.97E-03	8.01E-04	4.52E-04	3.62E-04	1.86E-04
788	569851.2	4214927	2.88E-03	1.63E-03	4.40E-04	2.48E-04	1.98E-04	1.02E-04
789	569855.9	4214936	2.96E-03	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
790	569860.6	4214944	3.07E-03	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04
791	569865.2	4214953	3.20E-03	1.81E-03	4.88E-04	2.75E-04	2.20E-04	1.13E-04
792	569869.9	4214961	3.36E-03	1.91E-03	5.14E-04	2.90E-04	2.32E-04	1.19E-04
793	569874.6	4214970	3.56E-03	2.02E-03	5.44E-04	3.07E-04	2.46E-04	1.26E-04
794	569879.3	4214978	3.79E-03	2.14E-03	5.78E-04	3.26E-04	2.61E-04	1.34E-04
795	569883.9	4214987	4.03E-03	2.28E-03	6.15E-04	3.47E-04	2.78E-04	1.43E-04
796	569888.6	4214996	4.33E-03	2.45E-03	6.61E-04	3.73E-04	2.98E-04	1.53E-04
797	569893.3	4215004	4.66E-03	2.64E-03	7.12E-04	4.02E-04	3.21E-04	1.65E-04
798	569898	4215013	5.04E-03	2.85E-03	7.69E-04	4.34E-04	3.47E-04	1.79E-04
799	569902.6	4215021	5.47E-03	3.10E-03	8.35E-04	4.71E-04	3.77E-04	1.94E-04
800	569842.5	4214932	2.94E-03	1.66E-03	4.49E-04	2.53E-04	2.02E-04	1.04E-04
801	569847.1	4214941	3.03E-03	1.71E-03	4.62E-04	2.61E-04	2.09E-04	1.07E-04
802	569851.8	4214949	3.14E-03	1.78E-03	4.80E-04	2.71E-04	2.16E-04	1.11E-04
803	569856.5	4214958	3.29E-03	1.86E-03	5.02E-04	2.83E-04	2.26E-04	1.17E-04
804	569861.1	4214966	3.47E-03	1.97E-03	5.30E-04	2.99E-04	2.39E-04	1.23E-04
805	569865.8	4214975	3.68E-03	2.08E-03	5.62E-04	3.17E-04	2.54E-04	1.31E-04
806	569870.5	4214983	3.91E-03	2.22E-03	5.97E-04	3.37E-04	2.70E-04	1.39E-04
807	569875.2	4214992	4.18E-03	2.37E-03	6.38E-04	3.60E-04	2.88E-04	1.48E-04
808	569879.8	4215000	4.49E-03	2.55E-03	6.86E-04	3.87E-04	3.10E-04	1.59E-04
809	569884.5	4215009	4.85E-03	2.75E-03	7.40E-04	4.18E-04	3.34E-04	1.72E-04
810	569889.2	4215017	5.25E-03	2.97E-03	8.01E-04	4.52E-04	3.62E-04	1.86E-04
811	569893.9	4215026	5.70E-03	3.23E-03	8.71E-04	4.91E-04	3.93E-04	2.02E-04
812	569833.7	4214937	3.00E-03	1.70E-03	4.58E-04	2.58E-04	2.07E-04	1.06E-04
813	569838.4	4214946	3.10E-03	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
814	569843	4214954	3.22E-03	1.82E-03	4.92E-04	2.77E-04	2.22E-04	1.14E-04
815	569847.7	4214963	0.003388	1.92E-03	5.17E-04	2.92E-04	2.33E-04	1.20E-04
816	569852.4	4214971	0.003582	2.03E-03	5.47E-04	3.09E-04	2.47E-04	1.27E-04
817	569857.1	4214980	0.003798	2.15E-03	5.80E-04	3.27E-04	2.62E-04	1.35E-04
818	569861.7	4214988	0.004041	2.29E-03	6.17E-04	3.48E-04	2.78E-04	1.43E-04
819	569866.4	4214997	0.004335	2.46E-03	6.62E-04	3.74E-04	2.99E-04	1.54E-04
820	569871.1	4215005	0.004666	2.64E-03	7.12E-04	4.02E-04	3.22E-04	1.66E-04
821	569875.8	4215014	0.00504	2.86E-03	7.70E-04	4.34E-04	3.47E-04	1.79E-04
822	569880.4	4215022	0.005459	3.09E-03	8.34E-04	4.70E-04	3.76E-04	1.94E-04
823	569885.1	4215031	0.005936	3.36E-03	9.06E-04	5.11E-04	4.09E-04	2.11E-04
824	569941.2	4215133	0.035708	2.02E-02	5.45E-03	3.08E-03	2.46E-03	1.27E-03
825	569945.9	4215141	0.03983	2.26E-02	6.08E-03	3.43E-03	2.74E-03	1.41E-03
826	569950.6	4215150	0.043832	2.48E-02	6.69E-03	3.78E-03	3.02E-03	1.55E-03
827	569824.9	4214942	0.003065	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04
828	569829.6	4214950	0.003173	1.80E-03	4.85E-04	2.73E-04	2.19E-04	1.13E-04

829	569834.3	4214959	0.003315	1.88E-03	5.06E-04	2.86E-04	2.28E-04	1.18E-04
830	569838.9	4214967	0.003493	1.98E-03	5.33E-04	3.01E-04	2.41E-04	1.24E-04
831	569843.6	4214976	0.003692	2.09E-03	5.64E-04	3.18E-04	2.54E-04	1.31E-04
832	569848.3	4214984	0.003916	2.22E-03	5.98E-04	3.37E-04	2.70E-04	1.39E-04
833	569853	4214993	0.004184	2.37E-03	6.39E-04	3.61E-04	2.88E-04	1.48E-04
834	569857.6	4215001	0.004494	2.55E-03	6.86E-04	3.87E-04	3.10E-04	1.59E-04
835	569862.3	4215010	0.004842	2.74E-03	7.39E-04	4.17E-04	3.34E-04	1.72E-04
836	569867	4215018	0.005233	2.96E-03	7.99E-04	4.51E-04	3.61E-04	1.86E-04
837	569871.7	4215027	0.005669	3.21E-03	8.66E-04	4.88E-04	3.91E-04	2.01E-04
838	569876.3	4215035	0.006167	3.49E-03	9.42E-04	5.31E-04	4.25E-04	2.19E-04
839	569927.8	4215129	0.030849	1.75E-02	4.71E-03	2.66E-03	2.13E-03	1.09E-03
840	569932.4	4215137	0.034401	1.95E-02	5.25E-03	2.96E-03	2.37E-03	1.22E-03
841	569937.1	4215146	0.037885	2.15E-02	5.79E-03	3.26E-03	2.61E-03	1.34E-03
842	569941.8	4215154	0.041307	2.34E-02	6.31E-03	3.56E-03	2.85E-03	1.47E-03
843	569816.2	4214947	0.003134	1.78E-03	4.79E-04	2.70E-04	2.16E-04	1.11E-04
844	569820.8	4214955	0.003251	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
845	569825.5	4214964	0.003413	1.93E-03	5.21E-04	2.94E-04	2.35E-04	1.21E-04
846	569830.2	4214972	0.003597	2.04E-03	5.49E-04	3.10E-04	2.48E-04	1.28E-04
847	569834.9	4214981	0.003805	2.16E-03	5.81E-04	3.28E-04	2.62E-04	1.35E-04
848	569839.5	4214989	0.004045	2.29E-03	6.18E-04	3.49E-04	2.79E-04	1.43E-04
849	569844.2	4214998	0.00433	2.45E-03	6.61E-04	3.73E-04	2.98E-04	1.54E-04
850	569848.9	4215006	0.004655	2.64E-03	7.11E-04	4.01E-04	3.21E-04	1.65E-04
851	569853.6	4215015	0.00502	2.84E-03	7.66E-04	4.33E-04	3.46E-04	1.78E-04
852	569858.2	4215023	0.005423	3.07E-03	8.28E-04	4.67E-04	3.74E-04	1.92E-04
853	569862.9	4215032	0.005876	3.33E-03	8.97E-04	5.06E-04	4.05E-04	2.08E-04
854	569914.3	4215125	0.025657	1.45E-02	3.92E-03	2.21E-03	1.77E-03	9.10E-04
855	569919	4215134	0.030207	1.71E-02	4.61E-03	2.60E-03	2.08E-03	1.07E-03
856	569923.7	4215142	0.032953	1.87E-02	5.03E-03	2.84E-03	2.27E-03	1.17E-03
857	569928.4	4215151	0.036024	2.04E-02	5.50E-03	3.10E-03	2.48E-03	1.28E-03
858	569933	4215159	0.03893	2.21E-02	5.94E-03	3.35E-03	2.68E-03	1.38E-03
859	569802.7	4214943	0.003111	1.76E-03	4.75E-04	2.68E-04	2.14E-04	1.10E-04
860	569807.4	4214952	0.00321	1.82E-03	4.90E-04	2.77E-04	2.21E-04	1.14E-04
861	569812.1	4214960	0.003343	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.19E-04
862	569816.7	4214969	0.003511	1.99E-03	5.36E-04	3.03E-04	2.42E-04	1.25E-04
863	569821.4	4214977	0.003702	2.10E-03	5.65E-04	3.19E-04	2.55E-04	1.31E-04
864	569826.1	4214986	0.003915	2.22E-03	5.98E-04	3.37E-04	2.70E-04	1.39E-04
865	569830.8	4214994	0.004177	2.37E-03	6.38E-04	3.60E-04	2.88E-04	1.48E-04
866	569835.4	4215003	0.004477	2.54E-03	6.84E-04	3.86E-04	3.09E-04	1.59E-04
867	569840.1	4215011	0.004815	2.73E-03	7.35E-04	4.15E-04	3.32E-04	1.71E-04
868	569844.8	4215020	0.005193	2.94E-03	7.93E-04	4.47E-04	3.58E-04	1.84E-04
869	569849.5	4215028	0.005608	3.18E-03	8.56E-04	4.83E-04	3.86E-04	1.99E-04
870	569854.1	4215037	0.006077	3.44E-03	9.28E-04	5.24E-04	4.19E-04	2.16E-04
871	569905.6	4215130	0.025394	1.44E-02	3.88E-03	2.19E-03	1.75E-03	9.01E-04
872	569910.2	4215139	0.029333	1.66E-02	4.48E-03	2.53E-03	2.02E-03	1.04E-03
873	569914.9	4215147	0.031562	1.79E-02	4.82E-03	2.72E-03	2.17E-03	1.12E-03
874	569919.6	4215156	0.034262	1.94E-02	5.23E-03	2.95E-03	2.36E-03	1.22E-03
875	569924.3	4215164	0.03672	2.08E-02	5.61E-03	3.16E-03	2.53E-03	1.30E-03
876	569792.9	4214939	0.003088	1.75E-03	4.71E-04	2.66E-04	2.13E-04	1.10E-04
877	569794	4214948	0.003183	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04
878	569798.6	4214956	0.003291	1.86E-03	5.03E-04	2.84E-04	2.27E-04	1.17E-04
879	569803.3	4214965	0.003441	1.95E-03	5.25E-04	2.96E-04	2.37E-04	1.22E-04
880	569808	4214973	0.003612	2.05E-03	5.51E-04	3.11E-04	2.49E-04	1.28E-04

881	569812.7	4214982	0.003804	2.16E-03	5.81E-04	3.28E-04	2.62E-04	1.35E-04
882	569817.3	4214990	0.004036	2.29E-03	6.16E-04	3.48E-04	2.78E-04	1.43E-04
883	569822	4214999	0.004311	2.44E-03	6.58E-04	3.71E-04	2.97E-04	1.53E-04
884	569826.7	4215007	0.004621	2.62E-03	7.06E-04	3.98E-04	3.18E-04	1.64E-04
885	569831.4	4215016	0.00497	2.82E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
886	569836	4215024	0.005352	3.03E-03	8.17E-04	4.61E-04	3.69E-04	1.90E-04
887	569840.7	4215033	0.005783	3.28E-03	8.83E-04	4.98E-04	3.99E-04	2.05E-04
888	569896.8	4215135	0.025142	1.42E-02	3.84E-03	2.17E-03	1.73E-03	8.92E-04
889	569901.5	4215143	0.02837	1.61E-02	4.33E-03	2.44E-03	1.96E-03	1.01E-03
890	569906.2	4215152	0.030248	1.71E-02	4.62E-03	2.61E-03	2.08E-03	1.07E-03
891	569910.8	4215160	0.032627	1.85E-02	4.98E-03	2.81E-03	2.25E-03	1.16E-03
892	569915.5	4215169	0.03466	1.96E-02	5.29E-03	2.99E-03	2.39E-03	1.23E-03
893	569784.2	4214944	0.003155	1.79E-03	4.82E-04	2.72E-04	2.17E-04	1.12E-04
894	569783.1	4214935	0.003076	1.74E-03	4.70E-04	2.65E-04	2.12E-04	1.09E-04
895	569789.9	4214961	0.003382	1.92E-03	5.16E-04	2.91E-04	2.33E-04	1.20E-04
896	569794.5	4214970	0.003536	2.00E-03	5.40E-04	3.05E-04	2.44E-04	1.25E-04
897	569799.2	4214978	0.003712	2.10E-03	5.67E-04	3.20E-04	2.56E-04	1.32E-04
898	569803.9	4214987	0.003912	2.22E-03	5.97E-04	3.37E-04	2.70E-04	1.39E-04
899	569808.6	4214995	0.004159	2.36E-03	6.35E-04	3.58E-04	2.87E-04	1.48E-04
900	569813.2	4215004	0.004441	2.52E-03	6.78E-04	3.83E-04	3.06E-04	1.58E-04
901	569817.9	4215012	0.00476	2.70E-03	7.27E-04	4.10E-04	3.28E-04	1.69E-04
902	569822.6	4215021	0.005112	2.90E-03	7.81E-04	4.41E-04	3.52E-04	1.81E-04
903	569827.3	4215029	0.005501	3.12E-03	8.40E-04	4.74E-04	3.79E-04	1.95E-04
904	569831.9	4215038	0.005937	3.36E-03	9.07E-04	5.12E-04	4.09E-04	2.11E-04
905	569888	4215140	0.024536	1.39E-02	3.75E-03	2.11E-03	1.69E-03	8.70E-04
906	569892.7	4215148	0.027313	1.55E-02	4.17E-03	2.35E-03	1.88E-03	9.69E-04
907	569897.4	4215157	0.028896	1.64E-02	4.41E-03	2.49E-03	1.99E-03	1.02E-03
908	569902.1	4215165	0.031083	1.76E-02	4.75E-03	2.68E-03	2.14E-03	1.10E-03
909	569906.7	4215174	0.03254	1.84E-02	4.97E-03	2.80E-03	2.24E-03	1.15E-03
910	569775.3	4214948	0.003219	1.82E-03	4.92E-04	2.77E-04	2.22E-04	1.14E-04
911	569774.2	4214939	0.003127	1.77E-03	4.78E-04	2.69E-04	2.16E-04	1.11E-04
912	569773.1	4214929	0.003061	1.73E-03	4.67E-04	2.64E-04	2.11E-04	1.09E-04
913	569776.4	4214958	0.003338	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.18E-04
914	569781.1	4214966	0.003472	1.97E-03	5.30E-04	2.99E-04	2.39E-04	1.23E-04
915	569785.8	4214975	0.003628	2.06E-03	5.54E-04	3.13E-04	2.50E-04	1.29E-04
916	569790.5	4214983	0.003811	2.16E-03	5.82E-04	3.28E-04	2.63E-04	1.35E-04
917	569795.1	4214992	0.004026	2.28E-03	6.15E-04	3.47E-04	2.77E-04	1.43E-04
918	569799.8	4215000	0.004275	2.42E-03	6.53E-04	3.68E-04	2.95E-04	1.52E-04
919	569804.5	4215009	0.004558	2.58E-03	6.96E-04	3.93E-04	3.14E-04	1.62E-04
920	569809.2	4215017	0.004883	2.77E-03	7.46E-04	4.21E-04	3.36E-04	1.73E-04
921	569813.8	4215026	0.005245	2.97E-03	8.01E-04	4.52E-04	3.61E-04	1.86E-04
922	569818.5	4215034	0.005638	3.19E-03	8.61E-04	4.86E-04	3.89E-04	2.00E-04
923	569823.2	4215043	0.006076	3.44E-03	9.28E-04	5.24E-04	4.19E-04	2.16E-04
924	569879.3	4215145	0.02368	1.34E-02	3.62E-03	2.04E-03	1.63E-03	8.40E-04
925	569884	4215153	0.026154	1.48E-02	3.99E-03	2.25E-03	1.80E-03	9.28E-04
926	569888.6	4215162	0.027512	1.56E-02	4.20E-03	2.37E-03	1.90E-03	9.76E-04
927	569893.3	4215170	0.029225	1.66E-02	4.46E-03	2.52E-03	2.01E-03	1.04E-03
928	569898	4215179	0.030481	1.73E-02	4.65E-03	2.63E-03	2.10E-03	1.08E-03
929	569766.6	4214953	0.003296	1.87E-03	5.03E-04	2.84E-04	2.27E-04	1.17E-04
930	569765.5	4214944	0.003197	1.81E-03	4.88E-04	2.75E-04	2.20E-04	1.13E-04
931	569764.4	4214934	0.00312	1.77E-03	4.76E-04	2.69E-04	2.15E-04	1.11E-04
932	569763.3	4214925	0.003068	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04

933	569777.2	4214821	0.001822	1.03E-03	2.78E-04	1.57E-04	1.26E-04	6.46E-05
934	569782.9	4214813	0.001742	9.87E-04	2.66E-04	1.50E-04	1.20E-04	6.18E-05
935	569767.7	4214962	0.003426	1.94E-03	5.23E-04	2.95E-04	2.36E-04	1.22E-04
936	569772.3	4214971	0.003563	2.02E-03	5.44E-04	3.07E-04	2.45E-04	1.26E-04
937	569777	4214979	0.003722	2.11E-03	5.68E-04	3.21E-04	2.56E-04	1.32E-04
938	569781.7	4214988	0.003907	2.21E-03	5.97E-04	3.37E-04	2.69E-04	1.39E-04
939	569786.4	4214996	0.004129	2.34E-03	6.30E-04	3.56E-04	2.85E-04	1.46E-04
940	569791	4215005	0.004378	2.48E-03	6.69E-04	3.77E-04	3.02E-04	1.55E-04
941	569795.7	4215013	0.00466	2.64E-03	7.12E-04	4.02E-04	3.21E-04	1.65E-04
942	569800.4	4215022	0.004983	2.82E-03	7.61E-04	4.29E-04	3.43E-04	1.77E-04
943	569805.1	4215030	0.005345	3.03E-03	8.16E-04	4.61E-04	3.68E-04	1.90E-04
944	569809.7	4215039	0.005749	3.26E-03	8.78E-04	4.95E-04	3.96E-04	2.04E-04
945	569814.4	4215047	0.006196	3.51E-03	9.46E-04	5.34E-04	4.27E-04	2.20E-04
946	569819.1	4215056	0.006674	3.78E-03	1.02E-03	5.75E-04	4.60E-04	2.37E-04
947	569870.5	4215149	0.022417	1.27E-02	3.42E-03	1.93E-03	1.54E-03	7.95E-04
948	569875.2	4215158	0.024897	1.41E-02	3.80E-03	2.15E-03	1.72E-03	8.83E-04
949	569879.9	4215166	0.026829	1.52E-02	4.10E-03	2.31E-03	1.85E-03	9.52E-04
950	569884.5	4215175	0.02748	1.56E-02	4.20E-03	2.37E-03	1.89E-03	9.75E-04
951	569889.2	4215183	0.028631	1.62E-02	4.37E-03	2.47E-03	1.97E-03	1.02E-03
952	569757.8	4214958	0.003378	1.91E-03	5.16E-04	2.91E-04	2.33E-04	1.20E-04
953	569756.7	4214949	0.003271	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
954	569755.7	4214940	0.003186	1.80E-03	4.86E-04	2.75E-04	2.20E-04	1.13E-04
955	569754.6	4214930	0.003121	1.77E-03	4.77E-04	2.69E-04	2.15E-04	1.11E-04
956	569753.5	4214921	0.003083	1.75E-03	4.71E-04	2.66E-04	2.12E-04	1.09E-04
957	569750.4	4214841	0.001998	1.13E-03	3.05E-04	1.72E-04	1.38E-04	7.09E-05
958	569756	4214833	0.001915	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.79E-05
959	569767.2	4214818	0.001777	1.01E-03	2.71E-04	1.53E-04	1.22E-04	6.30E-05
960	569772.8	4214811	0.001707	9.67E-04	2.61E-04	1.47E-04	1.18E-04	6.06E-05
961	569784	4214796	0.001597	9.05E-04	2.44E-04	1.38E-04	1.10E-04	5.66E-05
962	569758.9	4214967	0.003511	1.99E-03	5.36E-04	3.03E-04	2.42E-04	1.25E-04
963	569763.6	4214976	0.00365	2.07E-03	5.57E-04	3.15E-04	2.52E-04	1.29E-04
964	569768.3	4214984	0.003813	2.16E-03	5.82E-04	3.29E-04	2.63E-04	1.35E-04
965	569772.9	4214993	0.00401	2.27E-03	6.12E-04	3.46E-04	2.76E-04	1.42E-04
966	569777.6	4215001	0.004231	2.40E-03	6.46E-04	3.65E-04	2.92E-04	1.50E-04
967	569782.3	4215010	0.004473	2.53E-03	6.83E-04	3.85E-04	3.08E-04	1.59E-04
968	569787	4215018	0.004752	2.69E-03	7.26E-04	4.09E-04	3.27E-04	1.69E-04
969	569791.6	4215027	0.005074	2.87E-03	7.75E-04	4.37E-04	3.50E-04	1.80E-04
970	569796.3	4215035	0.005433	3.08E-03	8.30E-04	4.68E-04	3.74E-04	1.93E-04
971	569801	4215044	0.00583	3.30E-03	8.90E-04	5.02E-04	4.02E-04	2.07E-04
972	569805.7	4215052	0.006268	3.55E-03	9.57E-04	5.40E-04	4.32E-04	2.22E-04
973	569810.3	4215061	0.006747	3.82E-03	1.03E-03	5.81E-04	4.65E-04	2.39E-04
974	569861.8	4215154	0.020621	1.17E-02	3.15E-03	1.78E-03	1.42E-03	7.31E-04
975	569866.4	4215163	0.023184	1.31E-02	3.54E-03	2.00E-03	1.60E-03	8.22E-04
976	569871.1	4215171	0.025244	1.43E-02	3.85E-03	2.18E-03	1.74E-03	8.95E-04
977	569875.8	4215180	0.026641	1.51E-02	4.07E-03	2.30E-03	1.84E-03	9.45E-04
978	569880.5	4215188	0.027094	1.53E-02	4.14E-03	2.33E-03	1.87E-03	9.61E-04
979	569749.1	4214963	0.003461	1.96E-03	5.28E-04	2.98E-04	2.39E-04	1.23E-04
980	569748	4214954	0.003348	1.90E-03	5.11E-04	2.88E-04	2.31E-04	1.19E-04
981	569746.9	4214945	0.003256	1.84E-03	4.97E-04	2.81E-04	2.24E-04	1.16E-04
982	569745.9	4214936	0.003183	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04
983	569744.8	4214927	0.003128	1.77E-03	4.78E-04	2.69E-04	2.16E-04	1.11E-04
984	569743.7	4214918	0.003085	1.75E-03	4.71E-04	2.66E-04	2.13E-04	1.09E-04

985	569736.2	4214854	0.002184	1.24E-03	3.33E-04	1.88E-04	1.50E-04	7.75E-05
986	569740.7	4214838	0.001966	1.11E-03	3.00E-04	1.69E-04	1.35E-04	6.97E-05
987	569746.2	4214831	0.001884	1.07E-03	2.88E-04	1.62E-04	1.30E-04	6.68E-05
988	569757.3	4214816	0.00174	9.86E-04	2.66E-04	1.50E-04	1.20E-04	6.17E-05
989	569768.3	4214802	0.001627	9.22E-04	2.48E-04	1.40E-04	1.12E-04	5.77E-05
990	569779.4	4214787	0.001536	8.70E-04	2.34E-04	1.32E-04	1.06E-04	5.45E-05
991	569750.1	4214972	0.003593	2.04E-03	5.49E-04	3.10E-04	2.48E-04	1.27E-04
992	569754.8	4214980	0.003734	2.12E-03	5.70E-04	3.22E-04	2.57E-04	1.32E-04
993	569759.5	4214989	0.003907	2.21E-03	5.97E-04	3.37E-04	2.69E-04	1.39E-04
994	569764.2	4214997	0.004108	2.33E-03	6.27E-04	3.54E-04	2.83E-04	1.46E-04
995	569768.8	4215006	0.00433	2.45E-03	6.61E-04	3.73E-04	2.98E-04	1.54E-04
996	569773.5	4215014	0.004574	2.59E-03	6.98E-04	3.94E-04	3.15E-04	1.62E-04
997	569778.2	4215023	0.004852	2.75E-03	7.41E-04	4.18E-04	3.34E-04	1.72E-04
998	569782.9	4215031	0.00516	2.92E-03	7.88E-04	4.45E-04	3.56E-04	1.83E-04
999	569787.5	4215040	0.00551	3.12E-03	8.41E-04	4.75E-04	3.80E-04	1.95E-04
1000	569792.2	4215048	0.005899	3.34E-03	9.01E-04	5.08E-04	4.06E-04	2.09E-04
1001	569796.9	4215057	0.006328	3.58E-03	9.66E-04	5.45E-04	4.36E-04	2.24E-04
1002	569801.6	4215066	0.006792	3.85E-03	1.04E-03	5.85E-04	4.68E-04	2.41E-04
1003	569806.2	4215074	0.007293	4.13E-03	1.11E-03	6.28E-04	5.03E-04	2.59E-04
1004	569853	4215159	0.018859	1.07E-02	2.88E-03	1.63E-03	1.30E-03	6.69E-04
1005	569857.7	4215168	0.021356	1.21E-02	3.26E-03	1.84E-03	1.47E-03	7.57E-04
1006	569862.3	4215176	0.023595	1.34E-02	3.60E-03	2.03E-03	1.63E-03	8.37E-04
1007	569867	4215185	0.025199	1.43E-02	3.85E-03	2.17E-03	1.74E-03	8.94E-04
1008	569871.7	4215193	0.025804	1.46E-02	3.94E-03	2.22E-03	1.78E-03	9.15E-04
1009	569740.2	4214967	0.003534	2.00E-03	5.40E-04	3.05E-04	2.44E-04	1.25E-04
1010	569739.1	4214958	0.003413	1.93E-03	5.21E-04	2.94E-04	2.35E-04	1.21E-04
1011	569738	4214948	0.003313	1.88E-03	5.06E-04	2.85E-04	2.28E-04	1.17E-04
1012	569736.8	4214938	0.003231	1.83E-03	4.93E-04	2.78E-04	2.23E-04	1.15E-04
1013	569735.7	4214929	0.003167	1.79E-03	4.84E-04	2.73E-04	2.18E-04	1.12E-04
1014	569734.6	4214919	0.003104	1.76E-03	4.74E-04	2.67E-04	2.14E-04	1.10E-04
1015	569727.8	4214862	0.002285	1.29E-03	3.49E-04	1.97E-04	1.57E-04	8.10E-05
1016	569726.6	4214852	0.002145	1.22E-03	3.28E-04	1.85E-04	1.48E-04	7.61E-05
1017	569731.4	4214835	0.001932	1.09E-03	2.95E-04	1.66E-04	1.33E-04	6.85E-05
1018	569737.2	4214827	0.001853	1.05E-03	2.83E-04	1.60E-04	1.28E-04	6.57E-05
1019	569743.1	4214820	0.001775	1.01E-03	2.71E-04	1.53E-04	1.22E-04	6.30E-05
1020	569748.9	4214812	0.001701	9.63E-04	2.60E-04	1.47E-04	1.17E-04	6.03E-05
1021	569754.8	4214804	0.001636	9.27E-04	2.50E-04	1.41E-04	1.13E-04	5.80E-05
1022	569760.6	4214797	0.001593	9.02E-04	2.43E-04	1.37E-04	1.10E-04	5.65E-05
1023	569766.5	4214789	0.001548	8.77E-04	2.36E-04	1.33E-04	1.07E-04	5.49E-05
1024	569772.3	4214781	0.001502	8.51E-04	2.29E-04	1.29E-04	1.03E-04	5.33E-05
1025	569741.4	4214977	0.003675	2.08E-03	5.61E-04	3.17E-04	2.53E-04	1.30E-04
1026	569746.1	4214985	0.003818	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
1027	569750.7	4214994	0.003996	2.26E-03	6.10E-04	3.44E-04	2.75E-04	1.42E-04
1028	569755.4	4215002	0.004199	2.38E-03	6.41E-04	3.62E-04	2.89E-04	1.49E-04
1029	569760.1	4215011	0.004422	2.51E-03	6.75E-04	3.81E-04	3.05E-04	1.57E-04
1030	569764.8	4215019	0.004669	2.65E-03	7.13E-04	4.02E-04	3.22E-04	1.66E-04
1031	569769.4	4215028	0.004948	2.80E-03	7.56E-04	4.26E-04	3.41E-04	1.76E-04
1032	569774.1	4215036	0.005254	2.98E-03	8.02E-04	4.53E-04	3.62E-04	1.86E-04
1033	569778.8	4215045	0.005584	3.16E-03	8.53E-04	4.81E-04	3.85E-04	1.98E-04
1034	569783.5	4215053	0.005958	3.38E-03	9.10E-04	5.13E-04	4.11E-04	2.11E-04
1035	569788.1	4215062	0.006375	3.61E-03	9.73E-04	5.49E-04	4.39E-04	2.26E-04
1036	569792.8	4215070	0.006824	3.87E-03	1.04E-03	5.88E-04	4.70E-04	2.42E-04

1037	569797.5	4215079	0.007306	4.14E-03	1.12E-03	6.29E-04	5.03E-04	2.59E-04
1038	569844.2	4215164	0.01719	9.74E-03	2.62E-03	1.48E-03	1.18E-03	6.10E-04
1039	569848.9	4215172	0.019885	1.13E-02	3.04E-03	1.71E-03	1.37E-03	7.05E-04
1040	569853.6	4215181	0.022257	1.26E-02	3.40E-03	1.92E-03	1.53E-03	7.89E-04
1041	569858.3	4215189	0.023945	1.36E-02	3.66E-03	2.06E-03	1.65E-03	8.49E-04
1042	569862.9	4215198	0.024945	1.41E-02	3.81E-03	2.15E-03	1.72E-03	8.85E-04
1043	569731.5	4214972	0.003614	2.05E-03	5.52E-04	3.11E-04	2.49E-04	1.28E-04
1044	569730.4	4214963	0.003494	1.98E-03	5.34E-04	3.01E-04	2.41E-04	1.24E-04
1045	569729.3	4214953	0.003392	1.92E-03	5.18E-04	2.92E-04	2.34E-04	1.20E-04
1046	569728.1	4214944	0.003303	1.87E-03	5.04E-04	2.85E-04	2.28E-04	1.17E-04
1047	569727	4214934	0.00323	1.83E-03	4.93E-04	2.78E-04	2.23E-04	1.15E-04
1048	569725.9	4214925	0.003168	1.79E-03	4.84E-04	2.73E-04	2.18E-04	1.12E-04
1049	569724.8	4214916	0.00308	1.74E-03	4.70E-04	2.65E-04	2.12E-04	1.09E-04
1050	569719.2	4214868	0.002381	1.35E-03	3.64E-04	2.05E-04	1.64E-04	8.44E-05
1051	569718.1	4214859	0.002241	1.27E-03	3.42E-04	1.93E-04	1.54E-04	7.95E-05
1052	569717	4214849	0.002116	1.20E-03	3.23E-04	1.82E-04	1.46E-04	7.51E-05
1053	569721.6	4214832	0.001913	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.78E-05
1054	569727.4	4214825	0.001835	1.04E-03	2.80E-04	1.58E-04	1.26E-04	6.51E-05
1055	569733.2	4214817	0.001762	9.98E-04	2.69E-04	1.52E-04	1.21E-04	6.25E-05
1056	569738.9	4214810	0.001691	9.58E-04	2.58E-04	1.46E-04	1.17E-04	6.00E-05
1057	569744.7	4214802	0.001634	9.26E-04	2.50E-04	1.41E-04	1.13E-04	5.80E-05
1058	569750.5	4214795	0.001587	8.99E-04	2.42E-04	1.37E-04	1.09E-04	5.63E-05
1059	569756.2	4214787	0.001541	8.73E-04	2.35E-04	1.33E-04	1.06E-04	5.47E-05
1060	569762	4214779	0.001498	8.49E-04	2.29E-04	1.29E-04	1.03E-04	5.31E-05
1061	569767.8	4214772	0.001466	8.30E-04	2.24E-04	1.26E-04	1.01E-04	5.20E-05
1062	569732.6	4214982	0.003754	2.13E-03	5.73E-04	3.23E-04	2.59E-04	1.33E-04
1063	569737.3	4214990	0.003906	2.21E-03	5.96E-04	3.37E-04	2.69E-04	1.39E-04
1064	569742	4214999	0.004086	2.31E-03	6.24E-04	3.52E-04	2.82E-04	1.45E-04
1065	569746.6	4215007	0.004287	2.43E-03	6.55E-04	3.69E-04	2.95E-04	1.52E-04
1066	569751.3	4215016	0.004506	2.55E-03	6.88E-04	3.88E-04	3.11E-04	1.60E-04
1067	569756	4215024	0.004754	2.69E-03	7.26E-04	4.10E-04	3.28E-04	1.69E-04
1068	569760.7	4215033	0.005028	2.85E-03	7.68E-04	4.33E-04	3.46E-04	1.78E-04
1069	569765.3	4215041	0.005324	3.02E-03	8.13E-04	4.59E-04	3.67E-04	1.89E-04
1070	569770	4215050	0.005653	3.20E-03	8.63E-04	4.87E-04	3.90E-04	2.01E-04
1071	569774.7	4215058	0.006021	3.41E-03	9.19E-04	5.19E-04	4.15E-04	2.14E-04
1072	569779.4	4215067	0.006416	3.63E-03	9.80E-04	5.53E-04	4.42E-04	2.28E-04
1073	569784	4215075	0.00684	3.87E-03	1.04E-03	5.89E-04	4.71E-04	2.43E-04
1074	569788.7	4215084	0.0073	4.14E-03	1.11E-03	6.29E-04	5.03E-04	2.59E-04
1075	569793.4	4215092	0.007792	4.41E-03	1.19E-03	6.71E-04	5.37E-04	2.76E-04
1076	569835.5	4215169	0.016534	9.37E-03	2.52E-03	1.42E-03	1.14E-03	5.86E-04
1077	569840.1	4215177	0.018973	1.07E-02	2.90E-03	1.63E-03	1.31E-03	6.73E-04
1078	569844.8	4215186	0.021293	1.21E-02	3.25E-03	1.83E-03	1.47E-03	7.55E-04
1079	569849.5	4215194	0.02296	1.30E-02	3.51E-03	1.98E-03	1.58E-03	8.14E-04
1080	569854.2	4215203	0.023416	1.33E-02	3.58E-03	2.02E-03	1.61E-03	8.31E-04
1081	569722.8	4214977	0.003692	2.09E-03	5.64E-04	3.18E-04	2.54E-04	1.31E-04
1082	569721.7	4214968	0.003571	2.02E-03	5.45E-04	3.08E-04	2.46E-04	1.27E-04
1083	569720.5	4214958	0.003469	1.97E-03	5.30E-04	2.99E-04	2.39E-04	1.23E-04
1084	569719.4	4214949	0.003376	1.91E-03	5.16E-04	2.91E-04	2.33E-04	1.20E-04
1085	569718.3	4214940	0.003294	1.87E-03	5.03E-04	2.84E-04	2.27E-04	1.17E-04
1086	569717.2	4214931	0.003225	1.83E-03	4.92E-04	2.78E-04	2.22E-04	1.14E-04
1087	569716.1	4214921	0.00314	1.78E-03	4.79E-04	2.71E-04	2.16E-04	1.11E-04
1088	569715	4214912	0.003036	1.72E-03	4.64E-04	2.62E-04	2.09E-04	1.08E-04

1089	569711.7	4214884	0.002634	1.49E-03	4.02E-04	2.27E-04	1.81E-04	9.34E-05
1090	569710.6	4214875	0.00248	1.40E-03	3.79E-04	2.14E-04	1.71E-04	8.80E-05
1091	569709.5	4214865	0.002341	1.33E-03	3.57E-04	2.02E-04	1.61E-04	8.30E-05
1092	569708.4	4214856	0.002213	1.25E-03	3.38E-04	1.91E-04	1.52E-04	7.85E-05
1093	569707.3	4214847	0.002097	1.19E-03	3.20E-04	1.81E-04	1.44E-04	7.44E-05
1094	569711.9	4214830	0.001909	1.08E-03	2.92E-04	1.64E-04	1.32E-04	6.77E-05
1095	569717.6	4214822	0.001829	1.04E-03	2.79E-04	1.58E-04	1.26E-04	6.49E-05
1096	569723.3	4214815	0.00175	9.91E-04	2.67E-04	1.51E-04	1.21E-04	6.21E-05
1097	569729	4214807	0.001682	9.53E-04	2.57E-04	1.45E-04	1.16E-04	5.97E-05
1098	569734.7	4214800	0.001636	9.27E-04	2.50E-04	1.41E-04	1.13E-04	5.80E-05
1099	569740.4	4214793	0.001593	9.02E-04	2.43E-04	1.37E-04	1.10E-04	5.65E-05
1100	569746.1	4214785	0.001547	8.76E-04	2.36E-04	1.33E-04	1.07E-04	5.49E-05
1101	569751.8	4214778	0.001499	8.49E-04	2.29E-04	1.29E-04	1.03E-04	5.32E-05
1102	569757.4	4214770	0.001472	8.34E-04	2.25E-04	1.27E-04	1.01E-04	5.22E-05
1103	569763.1	4214763	0.00145	8.22E-04	2.21E-04	1.25E-04	9.99E-05	5.14E-05
1104	569723.9	4214986	0.003831	2.17E-03	5.85E-04	3.30E-04	2.64E-04	1.36E-04
1105	569728.5	4214995	0.003991	2.26E-03	6.09E-04	3.44E-04	2.75E-04	1.42E-04
1106	569733.2	4215003	0.00417	2.36E-03	6.37E-04	3.59E-04	2.87E-04	1.48E-04
1107	569737.9	4215012	0.004369	2.48E-03	6.67E-04	3.76E-04	3.01E-04	1.55E-04
1108	569742.6	4215020	0.004592	2.60E-03	7.01E-04	3.96E-04	3.16E-04	1.63E-04
1109	569747.2	4215029	0.004834	2.74E-03	7.38E-04	4.17E-04	3.33E-04	1.71E-04
1110	569751.9	4215037	0.005095	2.89E-03	7.78E-04	4.39E-04	3.51E-04	1.81E-04
1111	569756.6	4215046	0.00538	3.05E-03	8.21E-04	4.64E-04	3.71E-04	1.91E-04
1112	569761.3	4215054	0.00571	3.24E-03	8.72E-04	4.92E-04	3.94E-04	2.03E-04
1113	569765.9	4215063	0.006067	3.44E-03	9.26E-04	5.23E-04	4.18E-04	2.15E-04
1114	569770.6	4215071	0.006448	3.65E-03	9.85E-04	5.56E-04	4.44E-04	2.29E-04
1115	569775.3	4215080	0.006855	3.88E-03	1.05E-03	5.91E-04	4.72E-04	2.43E-04
1116	569780	4215088	0.007285	4.13E-03	1.11E-03	6.28E-04	5.02E-04	2.58E-04
1117	569784.6	4215097	0.007738	4.38E-03	1.18E-03	6.67E-04	5.33E-04	2.74E-04
1118	569789.3	4215105	0.008227	4.66E-03	1.26E-03	7.09E-04	5.67E-04	2.92E-04
1119	569826.7	4215173	0.016079	9.11E-03	2.46E-03	1.39E-03	1.11E-03	5.70E-04
1120	569831.4	4215182	0.018323	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.50E-04
1121	569836.1	4215190	0.020446	1.16E-02	3.12E-03	1.76E-03	1.41E-03	7.25E-04
1122	569840.7	4215199	0.021781	1.23E-02	3.33E-03	1.88E-03	1.50E-03	7.73E-04
1123	569845.4	4215207	0.022061	1.25E-02	3.37E-03	1.90E-03	1.52E-03	7.83E-04
1124	569714	4214982	0.003759	2.13E-03	5.74E-04	3.24E-04	2.59E-04	1.33E-04
1125	569712.9	4214973	0.003639	2.06E-03	5.56E-04	3.14E-04	2.51E-04	1.29E-04
1126	569711.8	4214964	0.003537	2.00E-03	5.40E-04	3.05E-04	2.44E-04	1.25E-04
1127	569710.7	4214954	0.003449	1.95E-03	5.27E-04	2.97E-04	2.38E-04	1.22E-04
1128	569709.6	4214945	0.00336	1.90E-03	5.13E-04	2.89E-04	2.32E-04	1.19E-04
1129	569708.6	4214936	0.003281	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
1130	569707.5	4214927	0.003213	1.82E-03	4.91E-04	2.77E-04	2.21E-04	1.14E-04
1131	569706.4	4214918	0.003097	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
1132	569705.3	4214908	0.00298	1.69E-03	4.55E-04	2.57E-04	2.05E-04	1.06E-04
1133	569704.2	4214899	0.002865	1.62E-03	4.37E-04	2.47E-04	1.97E-04	1.02E-04
1134	569703.1	4214890	0.002717	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.64E-05
1135	569702	4214881	0.002568	1.45E-03	3.92E-04	2.21E-04	1.77E-04	9.11E-05
1136	569700.9	4214872	0.002432	1.38E-03	3.71E-04	2.10E-04	1.68E-04	8.63E-05
1137	569699.8	4214862	0.002306	1.31E-03	3.52E-04	1.99E-04	1.59E-04	8.18E-05
1138	569698.7	4214853	0.002188	1.24E-03	3.34E-04	1.89E-04	1.51E-04	7.76E-05
1139	569697.6	4214844	0.00208	1.18E-03	3.18E-04	1.79E-04	1.43E-04	7.38E-05
1140	569702.2	4214827	0.001909	1.08E-03	2.91E-04	1.64E-04	1.32E-04	6.77E-05

1141	569707.8	4214820	0.001832	1.04E-03	2.80E-04	1.58E-04	1.26E-04	6.50E-05
1142	569713.4	4214813	0.001756	9.95E-04	2.68E-04	1.51E-04	1.21E-04	6.23E-05
1143	569719.1	4214805	0.001686	9.55E-04	2.57E-04	1.45E-04	1.16E-04	5.98E-05
1144	569730.3	4214790	0.001602	9.07E-04	2.45E-04	1.38E-04	1.10E-04	5.68E-05
1145	569735.9	4214783	0.00156	8.84E-04	2.38E-04	1.34E-04	1.07E-04	5.53E-05
1146	569741.6	4214776	0.001517	8.59E-04	2.32E-04	1.31E-04	1.05E-04	5.38E-05
1147	569752.8	4214761	0.001465	8.30E-04	2.24E-04	1.26E-04	1.01E-04	5.20E-05
1148	569715.1	4214991	0.003906	2.21E-03	5.96E-04	3.37E-04	2.69E-04	1.39E-04
1149	569719.8	4215000	0.004069	2.30E-03	6.21E-04	3.51E-04	2.80E-04	1.44E-04
1150	569724.4	4215008	0.004248	2.41E-03	6.49E-04	3.66E-04	2.93E-04	1.51E-04
1151	569729.1	4215017	0.004448	2.52E-03	6.79E-04	3.83E-04	3.07E-04	1.58E-04
1152	569733.8	4215025	0.004669	2.65E-03	7.13E-04	4.02E-04	3.22E-04	1.66E-04
1153	569738.5	4215034	0.004907	2.78E-03	7.49E-04	4.23E-04	3.38E-04	1.74E-04
1154	569743.1	4215042	0.005161	2.92E-03	7.88E-04	4.45E-04	3.56E-04	1.83E-04
1155	569747.8	4215051	0.005443	3.08E-03	8.31E-04	4.69E-04	3.75E-04	1.93E-04
1156	569752.5	4215059	0.005755	3.26E-03	8.79E-04	4.96E-04	3.97E-04	2.04E-04
1157	569757.2	4215068	0.006096	3.45E-03	9.31E-04	5.25E-04	4.20E-04	2.16E-04
1158	569761.8	4215076	0.006461	3.66E-03	9.87E-04	5.57E-04	4.45E-04	2.29E-04
1159	569766.5	4215085	0.006855	3.88E-03	1.05E-03	5.91E-04	4.72E-04	2.43E-04
1160	569771.2	4215093	0.007268	4.12E-03	1.11E-03	6.26E-04	5.01E-04	2.58E-04
1161	569775.9	4215102	0.007697	4.36E-03	1.18E-03	6.63E-04	5.30E-04	2.73E-04
1162	569780.5	4215110	0.008148	4.62E-03	1.24E-03	7.02E-04	5.61E-04	2.89E-04
1163	569817.9	4215178	0.015588	8.83E-03	2.38E-03	1.34E-03	1.07E-03	5.53E-04
1164	569822.6	4215187	0.017655	1.00E-02	2.70E-03	1.52E-03	1.22E-03	6.26E-04
1165	569827.3	4215195	0.019599	1.11E-02	2.99E-03	1.69E-03	1.35E-03	6.95E-04
1166	569832	4215204	0.02025	1.15E-02	3.09E-03	1.74E-03	1.40E-03	7.18E-04
1167	569836.6	4215212	0.020586	1.17E-02	3.14E-03	1.77E-03	1.42E-03	7.30E-04
1168	569705.3	4214987	0.003825	2.17E-03	5.84E-04	3.30E-04	2.64E-04	1.36E-04
1169	569704.2	4214978	0.003704	2.10E-03	5.66E-04	3.19E-04	2.55E-04	1.31E-04
1170	569703.1	4214969	0.003602	2.04E-03	5.50E-04	3.10E-04	2.48E-04	1.28E-04
1171	569702	4214960	0.003517	1.99E-03	5.37E-04	3.03E-04	2.42E-04	1.25E-04
1172	569700.9	4214951	0.003432	1.94E-03	5.24E-04	2.96E-04	2.36E-04	1.22E-04
1173	569699.9	4214941	0.003346	1.90E-03	5.11E-04	2.88E-04	2.31E-04	1.19E-04
1174	569698.8	4214932	0.003269	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
1175	569697.7	4214923	0.003177	1.80E-03	4.85E-04	2.74E-04	2.19E-04	1.13E-04
1176	569696.6	4214914	0.003043	1.72E-03	4.65E-04	2.62E-04	2.10E-04	1.08E-04
1177	569695.5	4214905	0.002913	1.65E-03	4.45E-04	2.51E-04	2.01E-04	1.03E-04
1178	569694.5	4214896	0.002786	1.58E-03	4.25E-04	2.40E-04	1.92E-04	9.88E-05
1179	569693.4	4214887	0.002643	1.50E-03	4.04E-04	2.28E-04	1.82E-04	9.38E-05
1180	569692.3	4214878	0.002514	1.42E-03	3.84E-04	2.17E-04	1.73E-04	8.92E-05
1181	569691.2	4214868	0.002395	1.36E-03	3.66E-04	2.06E-04	1.65E-04	8.50E-05
1182	569690.1	4214859	0.00228	1.29E-03	3.48E-04	1.96E-04	1.57E-04	8.09E-05
1183	569689.1	4214850	0.002173	1.23E-03	3.32E-04	1.87E-04	1.50E-04	7.71E-05
1184	569688	4214841	0.002075	1.18E-03	3.17E-04	1.79E-04	1.43E-04	7.36E-05
1185	569692.5	4214825	0.001914	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.79E-05
1186	569703.6	4214810	0.001766	1.00E-03	2.70E-04	1.52E-04	1.22E-04	6.26E-05
1187	569714.7	4214796	0.001664	9.43E-04	2.54E-04	1.43E-04	1.15E-04	5.90E-05
1188	569725.9	4214781	0.001578	8.94E-04	2.41E-04	1.36E-04	1.09E-04	5.60E-05
1189	569731.5	4214774	0.001544	8.75E-04	2.36E-04	1.33E-04	1.06E-04	5.48E-05
1190	569742.6	4214759	0.0015	8.50E-04	2.29E-04	1.29E-04	1.03E-04	5.32E-05
1191	569706.3	4214996	0.003975	2.25E-03	6.07E-04	3.43E-04	2.74E-04	1.41E-04
1192	569711	4215005	0.004136	2.34E-03	6.32E-04	3.56E-04	2.85E-04	1.47E-04

1193	569715.7	4215013	0.004314	2.44E-03	6.59E-04	3.72E-04	2.97E-04	1.53E-04
1194	569720.4	4215022	0.004518	2.56E-03	6.90E-04	3.89E-04	3.11E-04	1.60E-04
1195	569725	4215030	0.004736	2.68E-03	7.23E-04	4.08E-04	3.26E-04	1.68E-04
1196	569729.7	4215039	0.004968	2.81E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
1197	569734.4	4215047	0.005218	2.96E-03	7.97E-04	4.50E-04	3.60E-04	1.85E-04
1198	569739.1	4215056	0.005502	3.12E-03	8.40E-04	4.74E-04	3.79E-04	1.95E-04
1199	569743.7	4215064	0.005806	3.29E-03	8.87E-04	5.00E-04	4.00E-04	2.06E-04
1200	569748.4	4215073	0.006125	3.47E-03	9.35E-04	5.28E-04	4.22E-04	2.17E-04
1201	569753.1	4215081	0.006466	3.66E-03	9.87E-04	5.57E-04	4.46E-04	2.29E-04
1202	569757.8	4215090	0.006843	3.88E-03	1.04E-03	5.90E-04	4.72E-04	2.43E-04
1203	569762.4	4215098	0.007238	4.10E-03	1.11E-03	6.24E-04	4.99E-04	2.57E-04
1204	569767.1	4215107	0.007649	4.33E-03	1.17E-03	6.59E-04	5.27E-04	2.71E-04
1205	569771.8	4215115	0.008089	4.58E-03	1.24E-03	6.97E-04	5.57E-04	2.87E-04
1206	569809.2	4215183	0.01522	8.62E-03	2.32E-03	1.31E-03	1.05E-03	5.40E-04
1207	569813.8	4215192	0.016974	9.62E-03	2.59E-03	1.46E-03	1.17E-03	6.02E-04
1208	569818.5	4215200	0.018302	1.04E-02	2.79E-03	1.58E-03	1.26E-03	6.49E-04
1209	569823.2	4215209	0.018873	1.07E-02	2.88E-03	1.63E-03	1.30E-03	6.69E-04
1210	569827.9	4215217	0.019253	1.09E-02	2.94E-03	1.66E-03	1.33E-03	6.83E-04
1211	569696.4	4214991	0.003885	2.20E-03	5.93E-04	3.35E-04	2.68E-04	1.38E-04
1212	569695.3	4214982	0.003754	2.13E-03	5.73E-04	3.23E-04	2.59E-04	1.33E-04
1213	569694.2	4214972	0.003648	2.07E-03	5.57E-04	3.14E-04	2.51E-04	1.29E-04
1214	569693.1	4214963	0.003561	2.02E-03	5.44E-04	3.07E-04	2.45E-04	1.26E-04
1215	569691.9	4214953	0.003478	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
1216	569690.8	4214944	0.003378	1.91E-03	5.16E-04	2.91E-04	2.33E-04	1.20E-04
1217	569689.7	4214934	0.003284	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
1218	569688.5	4214925	0.003185	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04
1219	569687.4	4214915	0.003039	1.72E-03	4.64E-04	2.62E-04	2.09E-04	1.08E-04
1220	569686.3	4214906	0.002904	1.65E-03	4.43E-04	2.50E-04	2.00E-04	1.03E-04
1221	569685.2	4214896	0.002777	1.57E-03	4.24E-04	2.39E-04	1.91E-04	9.85E-05
1222	569684	4214887	0.002639	1.49E-03	4.03E-04	2.27E-04	1.82E-04	9.36E-05
1223	569682.9	4214877	0.002512	1.42E-03	3.84E-04	2.16E-04	1.73E-04	8.91E-05
1224	569681.8	4214868	0.002395	1.36E-03	3.66E-04	2.06E-04	1.65E-04	8.50E-05
1225	569680.6	4214858	0.002283	1.29E-03	3.49E-04	1.97E-04	1.57E-04	8.10E-05
1226	569679.5	4214848	0.002179	1.23E-03	3.33E-04	1.88E-04	1.50E-04	7.73E-05
1227	569678.4	4214839	0.002084	1.18E-03	3.18E-04	1.80E-04	1.44E-04	7.39E-05
1228	569683.1	4214822	0.001928	1.09E-03	2.94E-04	1.66E-04	1.33E-04	6.84E-05
1229	569688.9	4214814	0.001847	1.05E-03	2.82E-04	1.59E-04	1.27E-04	6.55E-05
1230	569694.7	4214807	0.001768	1.00E-03	2.70E-04	1.52E-04	1.22E-04	6.27E-05
1231	569700.5	4214799	0.001726	9.78E-04	2.64E-04	1.49E-04	1.19E-04	6.12E-05
1232	569706.4	4214791	0.001684	9.54E-04	2.57E-04	1.45E-04	1.16E-04	5.97E-05
1233	569712.2	4214784	0.00164	9.29E-04	2.50E-04	1.41E-04	1.13E-04	5.82E-05
1234	569718	4214776	0.001596	9.04E-04	2.44E-04	1.37E-04	1.10E-04	5.66E-05
1235	569723.8	4214768	0.001571	8.90E-04	2.40E-04	1.35E-04	1.08E-04	5.57E-05
1236	569697.6	4215001	0.004038	2.29E-03	6.17E-04	3.48E-04	2.78E-04	1.43E-04
1237	569702.2	4215009	0.004196	2.38E-03	6.41E-04	3.62E-04	2.89E-04	1.49E-04
1238	569706.9	4215018	0.004377	2.48E-03	6.68E-04	3.77E-04	3.02E-04	1.55E-04
1239	569711.6	4215026	0.004578	2.59E-03	6.99E-04	3.94E-04	3.15E-04	1.62E-04
1240	569716.3	4215035	0.004792	2.71E-03	7.32E-04	4.13E-04	3.30E-04	1.70E-04
1241	569720.9	4215043	0.005018	2.84E-03	7.66E-04	4.32E-04	3.46E-04	1.78E-04
1242	569725.6	4215052	0.005274	2.99E-03	8.05E-04	4.54E-04	3.63E-04	1.87E-04
1243	569730.3	4215060	0.005551	3.14E-03	8.48E-04	4.78E-04	3.83E-04	1.97E-04
1244	569735	4215069	0.005844	3.31E-03	8.92E-04	5.04E-04	4.03E-04	2.07E-04

1245	569739.6	4215077	0.006153	3.49E-03	9.40E-04	5.30E-04	4.24E-04	2.18E-04
1246	569744.3	4215086	0.006489	3.68E-03	9.91E-04	5.59E-04	4.47E-04	2.30E-04
1247	569749	4215094	0.006838	3.87E-03	1.04E-03	5.89E-04	4.71E-04	2.43E-04
1248	569753.7	4215103	0.007198	4.08E-03	1.10E-03	6.20E-04	4.96E-04	2.55E-04
1249	569758.3	4215111	0.007602	4.31E-03	1.16E-03	6.55E-04	5.24E-04	2.70E-04
1250	569763	4215120	0.008032	4.55E-03	1.23E-03	6.92E-04	5.53E-04	2.85E-04
1251	569800.4	4215188	0.014913	8.45E-03	2.28E-03	1.28E-03	1.03E-03	5.29E-04
1252	569805.1	4215196	0.016494	9.34E-03	2.52E-03	1.42E-03	1.14E-03	5.85E-04
1253	569809.8	4215205	0.017157	9.72E-03	2.62E-03	1.48E-03	1.18E-03	6.09E-04
1254	569814.4	4215213	0.017735	1.00E-02	2.71E-03	1.53E-03	1.22E-03	6.29E-04
1255	569819.1	4215222	0.018176	1.03E-02	2.78E-03	1.57E-03	1.25E-03	6.45E-04
1256	569687.7	4214996	0.00395	2.24E-03	6.03E-04	3.40E-04	2.72E-04	1.40E-04
1257	569686.6	4214987	0.003819	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
1258	569685.5	4214977	0.003709	2.10E-03	5.66E-04	3.20E-04	2.56E-04	1.32E-04
1259	569684.3	4214968	0.003612	2.05E-03	5.52E-04	3.11E-04	2.49E-04	1.28E-04
1260	569683.2	4214959	0.003529	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
1261	569682.1	4214949	0.003428	1.94E-03	5.23E-04	2.95E-04	2.36E-04	1.22E-04
1262	569681	4214940	0.003321	1.88E-03	5.07E-04	2.86E-04	2.29E-04	1.18E-04
1263	569679.9	4214930	0.003219	1.82E-03	4.92E-04	2.77E-04	2.22E-04	1.14E-04
1264	569678.8	4214921	0.003097	1.75E-03	4.73E-04	2.67E-04	2.13E-04	1.10E-04
1265	569677.7	4214912	0.002965	1.68E-03	4.53E-04	2.55E-04	2.04E-04	1.05E-04
1266	569676.5	4214902	0.00284	1.61E-03	4.34E-04	2.45E-04	1.96E-04	1.01E-04
1267	569675.4	4214893	0.002718	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.64E-05
1268	569674.3	4214883	0.002594	1.47E-03	3.96E-04	2.24E-04	1.79E-04	9.20E-05
1269	569673.2	4214874	0.00248	1.40E-03	3.79E-04	2.14E-04	1.71E-04	8.80E-05
1270	569672.1	4214864	0.002373	1.34E-03	3.62E-04	2.04E-04	1.64E-04	8.42E-05
1271	569671	4214855	0.002272	1.29E-03	3.47E-04	1.96E-04	1.57E-04	8.06E-05
1272	569669.8	4214846	0.002179	1.23E-03	3.33E-04	1.88E-04	1.50E-04	7.73E-05
1273	569668.7	4214836	0.002093	1.19E-03	3.20E-04	1.80E-04	1.44E-04	7.42E-05
1274	569673.4	4214819	0.001952	1.11E-03	2.98E-04	1.68E-04	1.35E-04	6.92E-05
1275	569679.1	4214812	0.001873	1.06E-03	2.86E-04	1.61E-04	1.29E-04	6.64E-05
1276	569684.9	4214804	0.001804	1.02E-03	2.75E-04	1.55E-04	1.24E-04	6.40E-05
1277	569690.6	4214797	0.001763	9.99E-04	2.69E-04	1.52E-04	1.22E-04	6.26E-05
1278	569696.4	4214789	0.001725	9.77E-04	2.63E-04	1.49E-04	1.19E-04	6.12E-05
1279	569688.8	4215006	0.004094	2.32E-03	6.25E-04	3.53E-04	2.82E-04	1.45E-04
1280	569693.5	4215014	0.004251	2.41E-03	6.49E-04	3.66E-04	2.93E-04	1.51E-04
1281	569698.2	4215023	0.004433	2.51E-03	6.77E-04	3.82E-04	3.06E-04	1.57E-04
1282	569702.8	4215031	0.00463	2.62E-03	7.07E-04	3.99E-04	3.19E-04	1.64E-04
1283	569707.5	4215040	0.004838	2.74E-03	7.39E-04	4.17E-04	3.33E-04	1.72E-04
1284	569712.2	4215048	0.005063	2.87E-03	7.73E-04	4.36E-04	3.49E-04	1.80E-04
1285	569716.9	4215057	0.005319	3.01E-03	8.12E-04	4.58E-04	3.67E-04	1.89E-04
1286	569721.5	4215065	0.005589	3.17E-03	8.53E-04	4.82E-04	3.85E-04	1.98E-04
1287	569726.2	4215074	0.005869	3.33E-03	8.96E-04	5.06E-04	4.04E-04	2.08E-04
1288	569730.9	4215082	0.006178	3.50E-03	9.43E-04	5.32E-04	4.26E-04	2.19E-04
1289	569735.6	4215091	0.006507	3.69E-03	9.94E-04	5.61E-04	4.48E-04	2.31E-04
1290	569740.2	4215099	0.006847	3.88E-03	1.05E-03	5.90E-04	4.72E-04	2.43E-04
1291	569744.9	4215108	0.007202	4.08E-03	1.10E-03	6.21E-04	4.96E-04	2.55E-04
1292	569749.6	4215116	0.007582	4.30E-03	1.16E-03	6.53E-04	5.22E-04	2.69E-04
1293	569754.3	4215125	0.00798	4.52E-03	1.22E-03	6.88E-04	5.50E-04	2.83E-04
1294	569787	4215184	0.01312	7.43E-03	2.00E-03	1.13E-03	9.04E-04	4.65E-04
1295	569791.6	4215193	0.014567	8.25E-03	2.22E-03	1.26E-03	1.00E-03	5.17E-04
1296	569796.3	4215201	0.015587	8.83E-03	2.38E-03	1.34E-03	1.07E-03	5.53E-04

1297	569801	4215210	0.016244	9.20E-03	2.48E-03	1.40E-03	1.12E-03	5.76E-04
1298	569805.7	4215218	0.016816	9.53E-03	2.57E-03	1.45E-03	1.16E-03	5.96E-04
1299	569810.3	4215227	0.017243	9.77E-03	2.63E-03	1.49E-03	1.19E-03	6.12E-04
1300	569678.9	4215001	0.004007	2.27E-03	6.12E-04	3.45E-04	2.76E-04	1.42E-04
1301	569677.8	4214992	0.003885	2.20E-03	5.93E-04	3.35E-04	2.68E-04	1.38E-04
1302	569676.7	4214983	0.003775	2.14E-03	5.76E-04	3.25E-04	2.60E-04	1.34E-04
1303	569675.6	4214973	0.003672	2.08E-03	5.61E-04	3.16E-04	2.53E-04	1.30E-04
1304	569674.5	4214964	0.003579	2.03E-03	5.46E-04	3.08E-04	2.47E-04	1.27E-04
1305	569673.4	4214955	0.003489	1.98E-03	5.33E-04	3.01E-04	2.40E-04	1.24E-04
1306	569672.3	4214945	0.003371	1.91E-03	5.15E-04	2.90E-04	2.32E-04	1.20E-04
1307	569671.2	4214936	0.003257	1.85E-03	4.97E-04	2.81E-04	2.24E-04	1.16E-04
1308	569670.1	4214927	0.003147	1.78E-03	4.81E-04	2.71E-04	2.17E-04	1.12E-04
1309	569669	4214917	0.003018	1.71E-03	4.61E-04	2.60E-04	2.08E-04	1.07E-04
1310	569667.9	4214908	0.002897	1.64E-03	4.42E-04	2.50E-04	2.00E-04	1.03E-04
1311	569666.8	4214899	0.002783	1.58E-03	4.25E-04	2.40E-04	1.92E-04	9.87E-05
1312	569665.7	4214889	0.002667	1.51E-03	4.07E-04	2.30E-04	1.84E-04	9.46E-05
1313	569664.6	4214880	0.002556	1.45E-03	3.90E-04	2.20E-04	1.76E-04	9.07E-05
1314	569663.5	4214871	0.002453	1.39E-03	3.75E-04	2.11E-04	1.69E-04	8.70E-05
1315	569662.4	4214861	0.002356	1.33E-03	3.60E-04	2.03E-04	1.62E-04	8.36E-05
1316	569661.3	4214852	0.002268	1.28E-03	3.46E-04	1.95E-04	1.56E-04	8.04E-05
1317	569660.2	4214843	0.002186	1.24E-03	3.34E-04	1.88E-04	1.51E-04	7.75E-05
1318	569659.1	4214833	0.002114	1.20E-03	3.23E-04	1.82E-04	1.46E-04	7.50E-05
1319	569680	4215011	0.004142	2.35E-03	6.32E-04	3.57E-04	2.85E-04	1.47E-04
1320	569684.7	4215019	0.004301	2.44E-03	6.57E-04	3.71E-04	2.96E-04	1.53E-04
1321	569689.4	4215028	0.004482	2.54E-03	6.84E-04	3.86E-04	3.09E-04	1.59E-04
1322	569694.1	4215036	0.004673	2.65E-03	7.14E-04	4.03E-04	3.22E-04	1.66E-04
1323	569698.7	4215045	0.004874	2.76E-03	7.44E-04	4.20E-04	3.36E-04	1.73E-04
1324	569703.4	4215053	0.005107	2.89E-03	7.80E-04	4.40E-04	3.52E-04	1.81E-04
1325	569708.1	4215062	0.005358	3.04E-03	8.18E-04	4.62E-04	3.69E-04	1.90E-04
1326	569712.8	4215070	0.005618	3.18E-03	8.58E-04	4.84E-04	3.87E-04	1.99E-04
1327	569717.4	4215079	0.005894	3.34E-03	9.00E-04	5.08E-04	4.06E-04	2.09E-04
1328	569722.1	4215087	0.0062	3.51E-03	9.47E-04	5.34E-04	4.27E-04	2.20E-04
1329	569726.8	4215096	0.006522	3.69E-03	9.96E-04	5.62E-04	4.49E-04	2.31E-04
1330	569731.5	4215104	0.006857	3.88E-03	1.05E-03	5.91E-04	4.73E-04	2.43E-04
1331	569736.1	4215113	0.007224	4.09E-03	1.10E-03	6.22E-04	4.98E-04	2.56E-04
1332	569740.8	4215121	0.007616	4.31E-03	1.16E-03	6.56E-04	5.25E-04	2.70E-04
1333	569773.5	4215181	0.012076	6.84E-03	1.84E-03	1.04E-03	8.32E-04	4.28E-04
1334	569778.2	4215189	0.013095	7.42E-03	2.00E-03	1.13E-03	9.02E-04	4.64E-04
1335	569782.9	4215198	0.014129	8.00E-03	2.16E-03	1.22E-03	9.74E-04	5.01E-04
1336	569787.6	4215206	0.014807	8.39E-03	2.26E-03	1.28E-03	1.02E-03	5.25E-04
1337	569792.2	4215215	0.015457	8.76E-03	2.36E-03	1.33E-03	1.07E-03	5.48E-04
1338	569796.9	4215223	0.016031	9.08E-03	2.45E-03	1.38E-03	1.10E-03	5.69E-04
1339	569801.6	4215232	0.015906	9.01E-03	2.43E-03	1.37E-03	1.10E-03	5.64E-04
1340	569670.2	4215006	0.004054	2.30E-03	6.19E-04	3.49E-04	2.79E-04	1.44E-04
1341	569669.1	4214997	0.003941	2.23E-03	6.02E-04	3.40E-04	2.72E-04	1.40E-04
1342	569668	4214988	0.003843	2.18E-03	5.87E-04	3.31E-04	2.65E-04	1.36E-04
1343	569666.9	4214978	0.003738	2.12E-03	5.71E-04	3.22E-04	2.58E-04	1.33E-04
1344	569665.8	4214969	0.003637	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
1345	569664.7	4214960	0.003544	2.01E-03	5.41E-04	3.05E-04	2.44E-04	1.26E-04
1346	569663.6	4214951	0.003432	1.94E-03	5.24E-04	2.96E-04	2.36E-04	1.22E-04
1347	569662.5	4214941	0.003304	1.87E-03	5.05E-04	2.85E-04	2.28E-04	1.17E-04
1348	569661.4	4214932	0.003183	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04

1349	569660.4	4214923	0.003066	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04
1350	569659.3	4214914	0.002947	1.67E-03	4.50E-04	2.54E-04	2.03E-04	1.05E-04
1351	569658.2	4214905	0.002836	1.61E-03	4.33E-04	2.44E-04	1.95E-04	1.01E-04
1352	569657.1	4214895	0.00273	1.55E-03	4.17E-04	2.35E-04	1.88E-04	9.68E-05
1353	569656	4214886	0.002623	1.49E-03	4.01E-04	2.26E-04	1.81E-04	9.30E-05
1354	569654.9	4214877	0.002524	1.43E-03	3.85E-04	2.17E-04	1.74E-04	8.95E-05
1355	569653.8	4214868	0.002431	1.38E-03	3.71E-04	2.09E-04	1.68E-04	8.62E-05
1356	569652.7	4214858	0.002347	1.33E-03	3.58E-04	2.02E-04	1.62E-04	8.33E-05
1357	569651.6	4214849	0.00227	1.29E-03	3.47E-04	1.96E-04	1.56E-04	8.05E-05
1358	569650.5	4214840	0.002199	1.25E-03	3.36E-04	1.89E-04	1.52E-04	7.80E-05
1359	569671.3	4215015	0.004182	2.37E-03	6.39E-04	3.60E-04	2.88E-04	1.48E-04
1360	569676	4215024	0.004347	2.46E-03	6.64E-04	3.75E-04	3.00E-04	1.54E-04
1361	569680.6	4215032	0.004523	2.56E-03	6.91E-04	3.90E-04	3.12E-04	1.60E-04
1362	569685.3	4215041	0.004707	2.67E-03	7.19E-04	4.06E-04	3.24E-04	1.67E-04
1363	569690	4215049	0.004912	2.78E-03	7.50E-04	4.23E-04	3.39E-04	1.74E-04
1364	569694.7	4215058	0.005146	2.92E-03	7.86E-04	4.43E-04	3.55E-04	1.83E-04
1365	569699.3	4215066	0.005389	3.05E-03	8.23E-04	4.64E-04	3.71E-04	1.91E-04
1366	569704	4215075	0.005641	3.20E-03	8.61E-04	4.86E-04	3.89E-04	2.00E-04
1367	569708.7	4215083	0.005923	3.36E-03	9.04E-04	5.10E-04	4.08E-04	2.10E-04
1368	569713.4	4215092	0.006225	3.53E-03	9.50E-04	5.36E-04	4.29E-04	2.21E-04
1369	569718	4215100	0.006541	3.71E-03	9.99E-04	5.64E-04	4.51E-04	2.32E-04
1370	569722.7	4215109	0.006884	3.90E-03	1.05E-03	5.93E-04	4.74E-04	2.44E-04
1371	569727.4	4215117	0.007275	4.12E-03	1.11E-03	6.27E-04	5.01E-04	2.58E-04
1372	569764.8	4215185	0.012198	6.91E-03	1.86E-03	1.05E-03	8.41E-04	4.33E-04
1373	569769.4	4215194	0.0132	7.48E-03	2.02E-03	1.14E-03	9.10E-04	4.68E-04
1374	569774.1	4215202	0.013759	7.79E-03	2.10E-03	1.19E-03	9.48E-04	4.88E-04
1375	569778.8	4215211	0.014229	8.06E-03	2.17E-03	1.23E-03	9.81E-04	5.05E-04
1376	569783.5	4215219	0.01479	8.38E-03	2.26E-03	1.27E-03	1.02E-03	5.25E-04
1377	569788.1	4215228	0.015151	8.58E-03	2.31E-03	1.31E-03	1.04E-03	5.37E-04
1378	569792.8	4215236	0.014619	8.28E-03	2.23E-03	1.26E-03	1.01E-03	5.19E-04
1379	569661.4	4215011	0.004083	2.31E-03	6.23E-04	3.52E-04	2.81E-04	1.45E-04
1380	569660.2	4215001	0.00397	2.25E-03	6.06E-04	3.42E-04	2.74E-04	1.41E-04
1381	569659.1	4214991	0.003868	2.19E-03	5.91E-04	3.33E-04	2.67E-04	1.37E-04
1382	569658	4214982	0.003763	2.13E-03	5.75E-04	3.24E-04	2.59E-04	1.33E-04
1383	569656.8	4214972	0.003643	2.06E-03	5.56E-04	3.14E-04	2.51E-04	1.29E-04
1384	569655.7	4214963	0.003529	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
1385	569654.6	4214953	0.003412	1.93E-03	5.21E-04	2.94E-04	2.35E-04	1.21E-04
1386	569653.4	4214943	0.003285	1.86E-03	5.02E-04	2.83E-04	2.26E-04	1.17E-04
1387	569652.3	4214934	0.003165	1.79E-03	4.83E-04	2.73E-04	2.18E-04	1.12E-04
1388	569651.2	4214924	0.003051	1.73E-03	4.66E-04	2.63E-04	2.10E-04	1.08E-04
1389	569650	4214915	0.002934	1.66E-03	4.48E-04	2.53E-04	2.02E-04	1.04E-04
1390	569648.9	4214905	0.002823	1.60E-03	4.31E-04	2.43E-04	1.95E-04	1.00E-04
1391	569647.8	4214896	0.002719	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.65E-05
1392	569646.6	4214886	0.002617	1.48E-03	4.00E-04	2.26E-04	1.80E-04	9.28E-05
1393	569645.5	4214876	0.002522	1.43E-03	3.85E-04	2.17E-04	1.74E-04	8.95E-05
1394	569644.4	4214867	0.002434	1.38E-03	3.72E-04	2.10E-04	1.68E-04	8.63E-05
1395	569643.2	4214857	0.002358	1.34E-03	3.60E-04	2.03E-04	1.62E-04	8.36E-05
1396	569662.5	4215020	0.004223	2.39E-03	6.45E-04	3.64E-04	2.91E-04	1.50E-04
1397	569667.2	4215029	0.004386	2.48E-03	6.70E-04	3.78E-04	3.02E-04	1.56E-04
1398	569671.9	4215037	0.004556	2.58E-03	6.96E-04	3.93E-04	3.14E-04	1.62E-04
1399	569676.5	4215046	0.004733	2.68E-03	7.23E-04	4.08E-04	3.26E-04	1.68E-04
1400	569681.2	4215054	0.004946	2.80E-03	7.55E-04	4.26E-04	3.41E-04	1.75E-04

1401	569685.9	4215063	0.005172	2.93E-03	7.90E-04	4.46E-04	3.56E-04	1.83E-04
1402	569690.6	4215071	0.00541	3.06E-03	8.26E-04	4.66E-04	3.73E-04	1.92E-04
1403	569695.2	4215080	0.005668	3.21E-03	8.65E-04	4.88E-04	3.91E-04	2.01E-04
1404	569699.9	4215088	0.005951	3.37E-03	9.09E-04	5.13E-04	4.10E-04	2.11E-04
1405	569704.6	4215097	0.00625	3.54E-03	9.54E-04	5.39E-04	4.31E-04	2.22E-04
1406	569709.3	4215105	0.006567	3.72E-03	1.00E-03	5.66E-04	4.53E-04	2.33E-04
1407	569713.9	4215114	0.006916	3.92E-03	1.06E-03	5.96E-04	4.77E-04	2.45E-04
1408	569718.6	4215122	0.007327	4.15E-03	1.12E-03	6.31E-04	5.05E-04	2.60E-04
1409	569751.3	4215182	0.01142	6.47E-03	1.74E-03	9.84E-04	7.87E-04	4.05E-04
1410	569756	4215190	0.012275	6.95E-03	1.87E-03	1.06E-03	8.46E-04	4.35E-04
1411	569760.7	4215199	0.013013	7.37E-03	1.99E-03	1.12E-03	8.97E-04	4.62E-04
1412	569765.4	4215207	0.013313	7.54E-03	2.03E-03	1.15E-03	9.17E-04	4.72E-04
1413	569770	4215216	0.013694	7.76E-03	2.09E-03	1.18E-03	9.44E-04	4.86E-04
1414	569774.7	4215224	0.014156	8.02E-03	2.16E-03	1.22E-03	9.76E-04	5.02E-04
1415	569779.4	4215233	0.013923	7.89E-03	2.13E-03	1.20E-03	9.59E-04	4.94E-04
1416	569784.1	4215241	0.013372	7.58E-03	2.04E-03	1.15E-03	9.21E-04	4.74E-04
1417	569652.6	4215015	0.004112	2.33E-03	6.28E-04	3.54E-04	2.83E-04	1.46E-04
1418	569651.5	4215006	0.003996	2.26E-03	6.10E-04	3.44E-04	2.75E-04	1.42E-04
1419	569650.4	4214997	0.003891	2.20E-03	5.94E-04	3.35E-04	2.68E-04	1.38E-04
1420	569649.3	4214987	0.003796	2.15E-03	5.80E-04	3.27E-04	2.62E-04	1.35E-04
1421	569648.1	4214978	0.003673	2.08E-03	5.61E-04	3.16E-04	2.53E-04	1.30E-04
1422	569647	4214968	0.003549	2.01E-03	5.42E-04	3.06E-04	2.45E-04	1.26E-04
1423	569645.9	4214959	0.00343	1.94E-03	5.24E-04	2.96E-04	2.36E-04	1.22E-04
1424	569644.8	4214949	0.003309	1.87E-03	5.05E-04	2.85E-04	2.28E-04	1.17E-04
1425	569643.6	4214940	0.003193	1.81E-03	4.88E-04	2.75E-04	2.20E-04	1.13E-04
1426	569642.5	4214930	0.003084	1.75E-03	4.71E-04	2.66E-04	2.13E-04	1.09E-04
1427	569641.4	4214921	0.002975	1.69E-03	4.54E-04	2.56E-04	2.05E-04	1.06E-04
1428	569640.3	4214911	0.002868	1.62E-03	4.38E-04	2.47E-04	1.98E-04	1.02E-04
1429	569639.1	4214902	0.002767	1.57E-03	4.22E-04	2.38E-04	1.91E-04	9.81E-05
1430	569638	4214892	0.002671	1.51E-03	4.08E-04	2.30E-04	1.84E-04	9.48E-05
1431	569636.9	4214883	0.002581	1.46E-03	3.94E-04	2.22E-04	1.78E-04	9.16E-05
1432	569635.8	4214873	0.002497	1.41E-03	3.81E-04	2.15E-04	1.72E-04	8.86E-05
1433	569634.7	4214864	0.002422	1.37E-03	3.70E-04	2.09E-04	1.67E-04	8.59E-05
1434	569653.8	4215025	0.004259	2.41E-03	6.50E-04	3.67E-04	2.93E-04	1.51E-04
1435	569658.4	4215033	0.004415	2.50E-03	6.74E-04	3.80E-04	3.04E-04	1.57E-04
1436	569663.1	4215042	0.00458	2.59E-03	6.99E-04	3.95E-04	3.16E-04	1.62E-04
1437	569667.8	4215050	0.004766	2.70E-03	7.28E-04	4.11E-04	3.28E-04	1.69E-04
1438	569672.5	4215059	0.004969	2.82E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
1439	569677.1	4215067	0.005186	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
1440	569681.8	4215076	0.005412	3.07E-03	8.26E-04	4.66E-04	3.73E-04	1.92E-04
1441	569686.5	4215084	0.005682	3.22E-03	8.68E-04	4.90E-04	3.92E-04	2.02E-04
1442	569691.2	4215093	0.005973	3.38E-03	9.12E-04	5.15E-04	4.12E-04	2.12E-04
1443	569695.8	4215101	0.006281	3.56E-03	9.59E-04	5.41E-04	4.33E-04	2.23E-04
1444	569700.5	4215110	0.006594	3.74E-03	1.01E-03	5.68E-04	4.54E-04	2.34E-04
1445	569737.9	4215178	0.010741	6.09E-03	1.64E-03	9.26E-04	7.40E-04	3.81E-04
1446	569742.6	4215187	0.011492	6.51E-03	1.75E-03	9.90E-04	7.92E-04	4.08E-04
1447	569747.2	4215195	0.012326	6.98E-03	1.88E-03	1.06E-03	8.49E-04	4.37E-04
1448	569751.9	4215204	0.012585	7.13E-03	1.92E-03	1.08E-03	8.67E-04	4.46E-04
1449	569756.6	4215212	0.012796	7.25E-03	1.95E-03	1.10E-03	8.82E-04	4.54E-04
1450	569761.3	4215221	0.013095	7.42E-03	2.00E-03	1.13E-03	9.02E-04	4.64E-04
1451	569765.9	4215229	0.013203	7.48E-03	2.02E-03	1.14E-03	9.10E-04	4.68E-04
1452	569770.6	4215238	0.012746	7.22E-03	1.95E-03	1.10E-03	8.78E-04	4.52E-04

1453	569775.3	4215246	0.012278	6.96E-03	1.87E-03	1.06E-03	8.46E-04	4.36E-04
1454	569643.9	4215020	0.004144	2.35E-03	6.33E-04	3.57E-04	2.86E-04	1.47E-04
1455	569642.8	4215011	0.004022	2.28E-03	6.14E-04	3.47E-04	2.77E-04	1.43E-04
1456	569641.7	4215002	0.003916	2.22E-03	5.98E-04	3.37E-04	2.70E-04	1.39E-04
1457	569640.5	4214992	0.003817	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
1458	569639.4	4214983	0.00371	2.10E-03	5.67E-04	3.20E-04	2.56E-04	1.32E-04
1459	569638.3	4214973	0.003579	2.03E-03	5.47E-04	3.08E-04	2.47E-04	1.27E-04
1460	569637.2	4214964	0.003452	1.96E-03	5.27E-04	2.97E-04	2.38E-04	1.22E-04
1461	569636.1	4214955	0.003328	1.89E-03	5.08E-04	2.87E-04	2.29E-04	1.18E-04
1462	569635	4214945	0.003216	1.82E-03	4.91E-04	2.77E-04	2.22E-04	1.14E-04
1463	569633.9	4214936	0.00311	1.76E-03	4.75E-04	2.68E-04	2.14E-04	1.10E-04
1464	569632.7	4214926	0.003012	1.71E-03	4.60E-04	2.60E-04	2.08E-04	1.07E-04
1465	569631.6	4214917	0.002909	1.65E-03	4.44E-04	2.51E-04	2.00E-04	1.03E-04
1466	569630.5	4214908	0.002812	1.59E-03	4.29E-04	2.42E-04	1.94E-04	9.97E-05
1467	569629.4	4214898	0.002721	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.65E-05
1468	569628.3	4214889	0.002637	1.49E-03	4.03E-04	2.27E-04	1.82E-04	9.35E-05
1469	569627.2	4214879	0.002559	1.45E-03	3.91E-04	2.21E-04	1.76E-04	9.08E-05
1470	569626.1	4214870	0.002487	1.41E-03	3.80E-04	2.14E-04	1.71E-04	8.82E-05
1471	569645	4215030	0.004285	2.43E-03	6.54E-04	3.69E-04	2.95E-04	1.52E-04
1472	569649.7	4215038	0.004434	2.51E-03	6.77E-04	3.82E-04	3.06E-04	1.57E-04
1473	569654.3	4215047	0.004594	2.60E-03	7.01E-04	3.96E-04	3.17E-04	1.63E-04
1474	569659	4215055	0.004787	2.71E-03	7.31E-04	4.12E-04	3.30E-04	1.70E-04
1475	569663.7	4215064	0.004983	2.82E-03	7.61E-04	4.29E-04	3.43E-04	1.77E-04
1476	569668.4	4215072	0.005188	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
1477	569673	4215081	0.005421	3.07E-03	8.28E-04	4.67E-04	3.74E-04	1.92E-04
1478	569677.7	4215089	0.005685	3.22E-03	8.68E-04	4.90E-04	3.92E-04	2.02E-04
1479	569682.4	4215098	0.005971	3.38E-03	9.12E-04	5.15E-04	4.11E-04	2.12E-04
1480	569687.1	4215106	0.006285	3.56E-03	9.60E-04	5.42E-04	4.33E-04	2.23E-04
1481	569691.7	4215115	0.006598	3.74E-03	1.01E-03	5.69E-04	4.55E-04	2.34E-04
1482	569724.5	4215174	0.010151	5.75E-03	1.55E-03	8.75E-04	7.00E-04	3.60E-04
1483	569729.1	4215183	0.010811	6.12E-03	1.65E-03	9.32E-04	7.45E-04	3.83E-04
1484	569733.8	4215191	0.011522	6.53E-03	1.76E-03	9.93E-04	7.94E-04	4.09E-04
1485	569738.5	4215200	0.012024	6.81E-03	1.84E-03	1.04E-03	8.29E-04	4.26E-04
1486	569743.2	4215208	0.012157	6.89E-03	1.86E-03	1.05E-03	8.38E-04	4.31E-04
1487	569747.8	4215217	0.012305	6.97E-03	1.88E-03	1.06E-03	8.48E-04	4.36E-04
1488	569752.5	4215225	0.012467	7.06E-03	1.90E-03	1.07E-03	8.59E-04	4.42E-04
1489	569757.2	4215234	0.012124	6.87E-03	1.85E-03	1.04E-03	8.35E-04	4.30E-04
1490	569761.9	4215242	0.011737	6.65E-03	1.79E-03	1.01E-03	8.09E-04	4.16E-04
1491	569766.5	4215251	0.011345	6.43E-03	1.73E-03	9.78E-04	7.82E-04	4.02E-04
1492	569635.1	4215025	0.004172	2.36E-03	6.37E-04	3.59E-04	2.87E-04	1.48E-04
1493	569634	4215016	0.004047	2.29E-03	6.18E-04	3.49E-04	2.79E-04	1.44E-04
1494	569632.9	4215007	0.003939	2.23E-03	6.01E-04	3.39E-04	2.71E-04	1.40E-04
1495	569631.8	4214997	0.003834	2.17E-03	5.85E-04	3.30E-04	2.64E-04	1.36E-04
1496	569630.7	4214988	0.003735	2.12E-03	5.70E-04	3.22E-04	2.57E-04	1.32E-04
1497	569629.6	4214979	0.003608	2.04E-03	5.51E-04	3.11E-04	2.49E-04	1.28E-04
1498	569628.5	4214969	0.003478	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
1499	569627.4	4214960	0.003354	1.90E-03	5.12E-04	2.89E-04	2.31E-04	1.19E-04
1500	569626.3	4214951	0.003242	1.84E-03	4.95E-04	2.79E-04	2.23E-04	1.15E-04
1501	569625.2	4214941	0.003141	1.78E-03	4.80E-04	2.71E-04	2.16E-04	1.11E-04
1502	569624.1	4214932	0.003046	1.73E-03	4.65E-04	2.62E-04	2.10E-04	1.08E-04
1503	569623	4214923	0.002953	1.67E-03	4.51E-04	2.54E-04	2.03E-04	1.05E-04
1504	569621.9	4214913	0.002858	1.62E-03	4.36E-04	2.46E-04	1.97E-04	1.01E-04

1505	569620.8	4214904	0.002769	1.57E-03	4.23E-04	2.39E-04	1.91E-04	9.82E-05
1506	569619.7	4214895	0.002687	1.52E-03	4.10E-04	2.32E-04	1.85E-04	9.53E-05
1507	569618.6	4214885	0.002614	1.48E-03	3.99E-04	2.25E-04	1.80E-04	9.27E-05
1508	569636.2	4215035	0.004302	2.44E-03	6.57E-04	3.71E-04	2.96E-04	1.53E-04
1509	569640.9	4215043	0.004444	2.52E-03	6.79E-04	3.83E-04	3.06E-04	1.58E-04
1510	569645.6	4215052	0.004612	2.61E-03	7.04E-04	3.97E-04	3.18E-04	1.64E-04
1511	569650.3	4215060	0.004796	2.72E-03	7.32E-04	4.13E-04	3.31E-04	1.70E-04
1512	569654.9	4215069	0.004986	2.82E-03	7.61E-04	4.30E-04	3.44E-04	1.77E-04
1513	569659.6	4215077	0.005182	2.94E-03	7.91E-04	4.46E-04	3.57E-04	1.84E-04
1514	569664.3	4215086	0.005423	3.07E-03	8.28E-04	4.67E-04	3.74E-04	1.92E-04
1515	569669	4215094	0.005682	3.22E-03	8.68E-04	4.90E-04	3.92E-04	2.02E-04
1516	569673.6	4215103	0.005962	3.38E-03	9.10E-04	5.14E-04	4.11E-04	2.11E-04
1517	569678.3	4215111	0.006252	3.54E-03	9.55E-04	5.39E-04	4.31E-04	2.22E-04
1518	569683	4215120	0.006555	3.71E-03	1.00E-03	5.65E-04	4.52E-04	2.33E-04
1519	569711	4215171	0.009199	5.21E-03	1.40E-03	7.93E-04	6.34E-04	3.26E-04
1520	569715.7	4215179	0.009943	5.63E-03	1.52E-03	8.57E-04	6.85E-04	3.53E-04
1521	569720.4	4215188	0.010737	6.08E-03	1.64E-03	9.25E-04	7.40E-04	3.81E-04
1522	569725	4215196	0.011525	6.53E-03	1.76E-03	9.93E-04	7.94E-04	4.09E-04
1523	569729.7	4215205	0.011618	6.58E-03	1.77E-03	1.00E-03	8.01E-04	4.12E-04
1524	569734.4	4215213	0.011723	6.64E-03	1.79E-03	1.01E-03	8.08E-04	4.16E-04
1525	569739.1	4215222	0.011839	6.71E-03	1.81E-03	1.02E-03	8.16E-04	4.20E-04
1526	569743.7	4215230	0.011677	6.62E-03	1.78E-03	1.01E-03	8.05E-04	4.14E-04
1527	569748.4	4215239	0.011252	6.37E-03	1.72E-03	9.70E-04	7.75E-04	3.99E-04
1528	569753.1	4215247	0.01087	6.16E-03	1.66E-03	9.37E-04	7.49E-04	3.86E-04
1529	569757.8	4215256	0.01055	5.98E-03	1.61E-03	9.09E-04	7.27E-04	3.74E-04
1530	569626.3	4215030	0.004174	2.36E-03	6.37E-04	3.60E-04	2.88E-04	1.48E-04
1531	569625.2	4215020	0.004046	2.29E-03	6.18E-04	3.49E-04	2.79E-04	1.44E-04
1532	569624	4215011	0.003926	2.22E-03	6.00E-04	3.38E-04	2.71E-04	1.39E-04
1533	569622.9	4215001	0.003815	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
1534	569621.8	4214991	0.003708	2.10E-03	5.66E-04	3.20E-04	2.56E-04	1.32E-04
1535	569620.6	4214982	0.003591	2.03E-03	5.48E-04	3.09E-04	2.47E-04	1.27E-04
1536	569619.5	4214972	0.003463	1.96E-03	5.29E-04	2.98E-04	2.39E-04	1.23E-04
1537	569618.3	4214962	0.00334	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.18E-04
1538	569617.2	4214953	0.003227	1.83E-03	4.93E-04	2.78E-04	2.22E-04	1.14E-04
1539	569616.1	4214943	0.003127	1.77E-03	4.78E-04	2.69E-04	2.15E-04	1.11E-04
1540	569614.9	4214933	0.003034	1.72E-03	4.63E-04	2.61E-04	2.09E-04	1.08E-04
1541	569613.8	4214924	0.002944	1.67E-03	4.50E-04	2.54E-04	2.03E-04	1.04E-04
1542	569612.6	4214914	0.002851	1.62E-03	4.35E-04	2.46E-04	1.96E-04	1.01E-04
1543	569611.5	4214905	0.002764	1.57E-03	4.22E-04	2.38E-04	1.90E-04	9.81E-05
1544	569610.4	4214895	0.002684	1.52E-03	4.10E-04	2.31E-04	1.85E-04	9.52E-05
1545	569627.5	4215039	0.004301	2.44E-03	6.57E-04	3.71E-04	2.96E-04	1.53E-04
1546	569632.1	4215048	0.00445	2.52E-03	6.80E-04	3.83E-04	3.07E-04	1.58E-04
1547	569636.8	4215056	0.004621	2.62E-03	7.06E-04	3.98E-04	3.18E-04	1.64E-04
1548	569641.5	4215065	0.004797	2.72E-03	7.33E-04	4.13E-04	3.31E-04	1.70E-04
1549	569646.2	4215073	0.004977	2.82E-03	7.60E-04	4.29E-04	3.43E-04	1.77E-04
1550	569650.8	4215082	0.005184	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
1551	569655.5	4215090	0.005419	3.07E-03	8.27E-04	4.67E-04	3.73E-04	1.92E-04
1552	569660.2	4215099	0.005671	3.21E-03	8.66E-04	4.89E-04	3.91E-04	2.01E-04
1553	569664.9	4215107	0.005941	3.37E-03	9.07E-04	5.12E-04	4.09E-04	2.11E-04
1554	569669.5	4215116	0.00621	3.52E-03	9.48E-04	5.35E-04	4.28E-04	2.20E-04
1555	569674.2	4215124	0.006503	3.68E-03	9.93E-04	5.60E-04	4.48E-04	2.31E-04
1556	569688.2	4215150	0.00751	4.25E-03	1.15E-03	6.47E-04	5.18E-04	2.66E-04

1557	569692.9	4215158	0.007885	4.47E-03	1.20E-03	6.79E-04	5.43E-04	2.80E-04
1558	569697.6	4215167	0.008347	4.73E-03	1.27E-03	7.19E-04	5.75E-04	2.96E-04
1559	569702.3	4215175	0.009004	5.10E-03	1.37E-03	7.76E-04	6.20E-04	3.19E-04
1560	569706.9	4215184	0.00973	5.51E-03	1.49E-03	8.38E-04	6.70E-04	3.45E-04
1561	569711.6	4215192	0.010503	5.95E-03	1.60E-03	9.05E-04	7.24E-04	3.73E-04
1562	569716.3	4215201	0.010999	6.23E-03	1.68E-03	9.48E-04	7.58E-04	3.90E-04
1563	569721	4215209	0.01118	6.33E-03	1.71E-03	9.63E-04	7.70E-04	3.97E-04
1564	569725.6	4215218	0.011282	6.39E-03	1.72E-03	9.72E-04	7.77E-04	4.00E-04
1565	569730.3	4215226	0.011349	6.43E-03	1.73E-03	9.78E-04	7.82E-04	4.03E-04
1566	569735	4215235	0.010888	6.17E-03	1.66E-03	9.38E-04	7.50E-04	3.86E-04
1567	569739.7	4215243	0.010487	5.94E-03	1.60E-03	9.04E-04	7.23E-04	3.72E-04
1568	569744.3	4215252	0.010142	5.75E-03	1.55E-03	8.74E-04	6.99E-04	3.60E-04
1569	569749	4215260	0.009859	5.59E-03	1.51E-03	8.50E-04	6.79E-04	3.50E-04
1570	569984.8	4215238	0.054158	3.07E-02	8.27E-03	4.67E-03	3.73E-03	1.92E-03
1571	569985.1	4215248	0.049806	2.82E-02	7.61E-03	4.29E-03	3.43E-03	1.77E-03
1572	569985.4	4215257	0.045339	2.57E-02	6.92E-03	3.91E-03	3.12E-03	1.61E-03
1573	569985.7	4215267	0.04075	2.31E-02	6.22E-03	3.51E-03	2.81E-03	1.45E-03
1574	569986	4215277	0.036657	2.08E-02	5.60E-03	3.16E-03	2.53E-03	1.30E-03
1575	569986.3	4215287	0.033329	1.89E-02	5.09E-03	2.87E-03	2.30E-03	1.18E-03
1576	569986.7	4215296	0.03254	1.84E-02	4.97E-03	2.80E-03	2.24E-03	1.15E-03
1577	569987	4215306	0.032118	1.82E-02	4.90E-03	2.77E-03	2.21E-03	1.14E-03
1578	569987.3	4215316	0.032087	1.82E-02	4.90E-03	2.76E-03	2.21E-03	1.14E-03
1579	569987.6	4215325	0.03314	1.88E-02	5.06E-03	2.86E-03	2.28E-03	1.18E-03
1580	569987.9	4215335	0.034546	1.96E-02	5.28E-03	2.98E-03	2.38E-03	1.23E-03
1581	569988.2	4215345	0.036811	2.09E-02	5.62E-03	3.17E-03	2.54E-03	1.31E-03
1582	569988.6	4215354	0.036559	2.07E-02	5.58E-03	3.15E-03	2.52E-03	1.30E-03
1583	569988.9	4215364	0.035578	2.02E-02	5.43E-03	3.07E-03	2.45E-03	1.26E-03
1584	569989.2	4215374	0.035647	2.02E-02	5.44E-03	3.07E-03	2.46E-03	1.26E-03
1585	569973.5	4215200	0.058768	3.33E-02	8.97E-03	5.06E-03	4.05E-03	2.08E-03
1586	569973.8	4215209	0.056656	3.21E-02	8.65E-03	4.88E-03	3.90E-03	2.01E-03
1587	569974.1	4215219	0.053451	3.03E-02	8.16E-03	4.61E-03	3.68E-03	1.90E-03
1588	569974.5	4215229	0.049938	2.83E-02	7.63E-03	4.30E-03	3.44E-03	1.77E-03
1589	569974.8	4215238	0.046708	2.65E-02	7.13E-03	4.02E-03	3.22E-03	1.66E-03
1590	569975.1	4215248	0.043334	2.45E-02	6.62E-03	3.73E-03	2.99E-03	1.54E-03
1591	569975.4	4215258	0.039882	2.26E-02	6.09E-03	3.44E-03	2.75E-03	1.41E-03
1592	569975.7	4215267	0.036159	2.05E-02	5.52E-03	3.12E-03	2.49E-03	1.28E-03
1593	569976	4215277	0.032871	1.86E-02	5.02E-03	2.83E-03	2.27E-03	1.17E-03
1594	569976.4	4215287	0.03031	1.72E-02	4.63E-03	2.61E-03	2.09E-03	1.08E-03
1595	569976.7	4215297	0.029805	1.69E-02	4.55E-03	2.57E-03	2.05E-03	1.06E-03
1596	569977	4215306	0.029566	1.68E-02	4.51E-03	2.55E-03	2.04E-03	1.05E-03
1597	569977.3	4215316	0.029598	1.68E-02	4.52E-03	2.55E-03	2.04E-03	1.05E-03
1598	569977.6	4215326	0.030703	1.74E-02	4.69E-03	2.65E-03	2.12E-03	1.09E-03
1599	569977.9	4215335	0.03206	1.82E-02	4.90E-03	2.76E-03	2.21E-03	1.14E-03
1600	569978.2	4215345	0.034333	1.95E-02	5.24E-03	2.96E-03	2.37E-03	1.22E-03
1601	569978.6	4215355	0.03424	1.94E-02	5.23E-03	2.95E-03	2.36E-03	1.21E-03
1602	569978.9	4215364	0.033774	1.91E-02	5.16E-03	2.91E-03	2.33E-03	1.20E-03
1603	569979.2	4215374	0.035038	1.98E-02	5.35E-03	3.02E-03	2.41E-03	1.24E-03
1604	569962.6	4215171	0.053593	3.04E-02	8.18E-03	4.62E-03	3.69E-03	1.90E-03
1605	569962.9	4215181	0.054157	3.07E-02	8.27E-03	4.67E-03	3.73E-03	1.92E-03
1606	569963.2	4215190	0.053374	3.02E-02	8.15E-03	4.60E-03	3.68E-03	1.89E-03
1607	569963.5	4215200	0.051983	2.94E-02	7.94E-03	4.48E-03	3.58E-03	1.84E-03
1608	569963.8	4215210	0.049368	2.80E-02	7.54E-03	4.25E-03	3.40E-03	1.75E-03

1609	569964.2	4215219	0.046069	2.61E-02	7.03E-03	3.97E-03	3.17E-03	1.63E-03
1610	569964.5	4215229	0.042857	2.43E-02	6.54E-03	3.69E-03	2.95E-03	1.52E-03
1611	569964.8	4215239	0.040476	2.29E-02	6.18E-03	3.49E-03	2.79E-03	1.44E-03
1612	569965.1	4215248	0.038011	2.15E-02	5.80E-03	3.28E-03	2.62E-03	1.35E-03
1613	569965.4	4215258	0.035408	2.01E-02	5.41E-03	3.05E-03	2.44E-03	1.26E-03
1614	569965.7	4215268	0.032345	1.83E-02	4.94E-03	2.79E-03	2.23E-03	1.15E-03
1615	569966	4215277	0.029696	1.68E-02	4.53E-03	2.56E-03	2.05E-03	1.05E-03
1616	569966.4	4215287	0.027697	1.57E-02	4.23E-03	2.39E-03	1.91E-03	9.82E-04
1617	569966.7	4215297	0.0274	1.55E-02	4.18E-03	2.36E-03	1.89E-03	9.72E-04
1618	569967	4215307	0.027283	1.55E-02	4.17E-03	2.35E-03	1.88E-03	9.68E-04
1619	569967.3	4215316	0.027355	1.55E-02	4.18E-03	2.36E-03	1.89E-03	9.70E-04
1620	569967.6	4215326	0.028517	1.62E-02	4.35E-03	2.46E-03	1.97E-03	1.01E-03
1621	569967.9	4215336	0.029838	1.69E-02	4.56E-03	2.57E-03	2.06E-03	1.06E-03
1622	569968.2	4215345	0.031397	1.78E-02	4.79E-03	2.71E-03	2.16E-03	1.11E-03
1623	569968.6	4215355	0.031456	1.78E-02	4.80E-03	2.71E-03	2.17E-03	1.12E-03
1624	569968.9	4215365	0.032231	1.83E-02	4.92E-03	2.78E-03	2.22E-03	1.14E-03
1625	569969.2	4215374	0.034824	1.97E-02	5.32E-03	3.00E-03	2.40E-03	1.24E-03
1626	569952.3	4215162	0.04675	2.65E-02	7.14E-03	4.03E-03	3.22E-03	1.66E-03
1627	569952.6	4215171	0.048234	2.73E-02	7.37E-03	4.16E-03	3.32E-03	1.71E-03
1628	569952.9	4215181	0.048587	2.75E-02	7.42E-03	4.19E-03	3.35E-03	1.72E-03
1629	569953.2	4215191	0.047851	2.71E-02	7.31E-03	4.12E-03	3.30E-03	1.70E-03
1630	569953.5	4215200	0.046533	2.64E-02	7.11E-03	4.01E-03	3.21E-03	1.65E-03
1631	569953.8	4215210	0.043919	2.49E-02	6.71E-03	3.78E-03	3.03E-03	1.56E-03
1632	569954.2	4215220	0.040685	2.30E-02	6.21E-03	3.51E-03	2.80E-03	1.44E-03
1633	569954.5	4215229	0.037685	2.13E-02	5.75E-03	3.25E-03	2.60E-03	1.34E-03
1634	569954.8	4215239	0.035608	2.02E-02	5.44E-03	3.07E-03	2.45E-03	1.26E-03
1635	569955.1	4215249	0.033509	1.90E-02	5.12E-03	2.89E-03	2.31E-03	1.19E-03
1636	569955.4	4215258	0.031403	1.78E-02	4.80E-03	2.71E-03	2.16E-03	1.11E-03
1637	569955.7	4215268	0.029211	1.65E-02	4.46E-03	2.52E-03	2.01E-03	1.04E-03
1638	569956	4215278	0.027288	1.55E-02	4.17E-03	2.35E-03	1.88E-03	9.68E-04
1639	569956.4	4215287	0.025834	1.46E-02	3.94E-03	2.23E-03	1.78E-03	9.16E-04
1640	569956.7	4215297	0.025557	1.45E-02	3.90E-03	2.20E-03	1.76E-03	9.07E-04
1641	569957	4215307	0.025442	1.44E-02	3.88E-03	2.19E-03	1.75E-03	9.02E-04
1642	569957.3	4215317	0.025505	1.44E-02	3.89E-03	2.20E-03	1.76E-03	9.05E-04
1643	569957.6	4215326	0.02646	1.50E-02	4.04E-03	2.28E-03	1.82E-03	9.39E-04
1644	569957.9	4215336	0.027535	1.56E-02	4.20E-03	2.37E-03	1.90E-03	9.77E-04
1645	569958.3	4215346	0.028839	1.63E-02	4.40E-03	2.49E-03	1.99E-03	1.02E-03
1646	569958.6	4215355	0.029153	1.65E-02	4.45E-03	2.51E-03	2.01E-03	1.03E-03
1647	569958.9	4215365	0.030545	1.73E-02	4.66E-03	2.63E-03	2.10E-03	1.08E-03
1648	569959.2	4215375	0.034494	1.95E-02	5.27E-03	2.97E-03	2.38E-03	1.22E-03
1649	569942.6	4215172	0.043793	2.48E-02	6.69E-03	3.77E-03	3.02E-03	1.55E-03
1650	569942.9	4215181	0.043979	2.49E-02	6.72E-03	3.79E-03	3.03E-03	1.56E-03
1651	569943.2	4215191	0.043893	2.49E-02	6.70E-03	3.78E-03	3.02E-03	1.56E-03
1652	569943.5	4215201	0.041903	2.37E-02	6.40E-03	3.61E-03	2.89E-03	1.49E-03
1653	569943.8	4215210	0.03929	2.23E-02	6.00E-03	3.39E-03	2.71E-03	1.39E-03
1654	569944.2	4215220	0.036156	2.05E-02	5.52E-03	3.12E-03	2.49E-03	1.28E-03
1655	569944.5	4215230	0.033397	1.89E-02	5.10E-03	2.88E-03	2.30E-03	1.18E-03
1656	569944.8	4215239	0.03155	1.79E-02	4.82E-03	2.72E-03	2.17E-03	1.12E-03
1657	569945.1	4215249	0.029725	1.68E-02	4.54E-03	2.56E-03	2.05E-03	1.05E-03
1658	569945.4	4215259	0.028029	1.59E-02	4.28E-03	2.42E-03	1.93E-03	9.94E-04
1659	569945.7	4215268	0.026567	1.51E-02	4.06E-03	2.29E-03	1.83E-03	9.42E-04
1660	569946.1	4215278	0.02527	1.43E-02	3.86E-03	2.18E-03	1.74E-03	8.96E-04

1661	569946.4	4215288	0.024278	1.38E-02	3.71E-03	2.09E-03	1.67E-03	8.61E-04
1662	569946.7	4215297	0.024002	1.36E-02	3.67E-03	2.07E-03	1.65E-03	8.51E-04
1663	569947	4215307	0.023847	1.35E-02	3.64E-03	2.05E-03	1.64E-03	8.46E-04
1664	569947.3	4215317	0.023871	1.35E-02	3.65E-03	2.06E-03	1.64E-03	8.47E-04
1665	569947.6	4215327	0.024561	1.39E-02	3.75E-03	2.12E-03	1.69E-03	8.71E-04
1666	569947.9	4215336	0.025359	1.44E-02	3.87E-03	2.19E-03	1.75E-03	8.99E-04
1667	569948.3	4215346	0.026348	1.49E-02	4.02E-03	2.27E-03	1.82E-03	9.35E-04
1668	569948.6	4215356	0.026993	1.53E-02	4.12E-03	2.33E-03	1.86E-03	9.57E-04
1669	569948.9	4215365	0.029008	1.64E-02	4.43E-03	2.50E-03	2.00E-03	1.03E-03
1670	569949.2	4215375	0.034313	1.94E-02	5.24E-03	2.96E-03	2.36E-03	1.22E-03
1671	569932.6	4215172	0.040061	2.27E-02	6.12E-03	3.45E-03	2.76E-03	1.42E-03
1672	569932.9	4215182	0.0401	2.27E-02	6.12E-03	3.46E-03	2.76E-03	1.42E-03
1673	569933.2	4215191	0.039991	2.27E-02	6.11E-03	3.45E-03	2.76E-03	1.42E-03
1674	569933.5	4215201	0.037928	2.15E-02	5.79E-03	3.27E-03	2.61E-03	1.35E-03
1675	569933.9	4215211	0.035314	2.00E-02	5.39E-03	3.04E-03	2.43E-03	1.25E-03
1676	569934.2	4215220	0.032289	1.83E-02	4.93E-03	2.78E-03	2.23E-03	1.15E-03
1677	569934.5	4215230	0.029777	1.69E-02	4.55E-03	2.57E-03	2.05E-03	1.06E-03
1678	569934.8	4215240	0.028135	1.59E-02	4.30E-03	2.42E-03	1.94E-03	9.98E-04
1679	569935.1	4215249	0.026546	1.50E-02	4.05E-03	2.29E-03	1.83E-03	9.42E-04
1680	569935.4	4215259	0.02522	1.43E-02	3.85E-03	2.17E-03	1.74E-03	8.95E-04
1681	569935.7	4215269	0.024318	1.38E-02	3.71E-03	2.10E-03	1.68E-03	8.63E-04
1682	569936.1	4215278	0.023504	1.33E-02	3.59E-03	2.03E-03	1.62E-03	8.34E-04
1683	569936.4	4215288	0.022863	1.30E-02	3.49E-03	1.97E-03	1.58E-03	8.11E-04
1684	569936.7	4215298	0.022573	1.28E-02	3.45E-03	1.95E-03	1.56E-03	8.01E-04
1685	569937	4215307	0.022386	1.27E-02	3.42E-03	1.93E-03	1.54E-03	7.94E-04
1686	569937.3	4215317	0.022357	1.27E-02	3.41E-03	1.93E-03	1.54E-03	7.93E-04
1687	569937.6	4215327	0.02284	1.29E-02	3.49E-03	1.97E-03	1.57E-03	8.10E-04
1688	569937.9	4215336	0.023476	1.33E-02	3.58E-03	2.02E-03	1.62E-03	8.33E-04
1689	569938.3	4215346	0.024365	1.38E-02	3.72E-03	2.10E-03	1.68E-03	8.64E-04
1690	569938.6	4215356	0.0254	1.44E-02	3.88E-03	2.19E-03	1.75E-03	9.01E-04
1691	569938.9	4215366	0.028077	1.59E-02	4.29E-03	2.42E-03	1.93E-03	9.96E-04
1692	569939.2	4215375	0.034664	1.96E-02	5.29E-03	2.99E-03	2.39E-03	1.23E-03
1693	569922.9	4215182	0.036851	2.09E-02	5.63E-03	3.18E-03	2.54E-03	1.31E-03
1694	569923.2	4215192	0.036961	2.09E-02	5.64E-03	3.18E-03	2.55E-03	1.31E-03
1695	569923.5	4215201	0.035266	2.00E-02	5.39E-03	3.04E-03	2.43E-03	1.25E-03
1696	569923.9	4215211	0.03271	1.85E-02	4.99E-03	2.82E-03	2.25E-03	1.16E-03
1697	569924.2	4215221	0.02969	1.68E-02	4.53E-03	2.56E-03	2.05E-03	1.05E-03
1698	569924.5	4215230	0.027258	1.54E-02	4.16E-03	2.35E-03	1.88E-03	9.67E-04
1699	569924.8	4215240	0.02567	1.45E-02	3.92E-03	2.21E-03	1.77E-03	9.11E-04
1700	569925.1	4215250	0.02417	1.37E-02	3.69E-03	2.08E-03	1.67E-03	8.57E-04
1701	569925.4	4215259	0.023016	1.30E-02	3.51E-03	1.98E-03	1.59E-03	8.16E-04
1702	569925.7	4215269	0.022343	1.27E-02	3.41E-03	1.93E-03	1.54E-03	7.92E-04
1703	569926.1	4215279	0.021752	1.23E-02	3.32E-03	1.87E-03	1.50E-03	7.72E-04
1704	569926.4	4215288	0.021279	1.21E-02	3.25E-03	1.83E-03	1.47E-03	7.55E-04
1705	569926.7	4215298	0.021006	1.19E-02	3.21E-03	1.81E-03	1.45E-03	7.45E-04
1706	569927	4215308	0.020817	1.18E-02	3.18E-03	1.79E-03	1.43E-03	7.38E-04
1707	569927.3	4215317	0.020793	1.18E-02	3.18E-03	1.79E-03	1.43E-03	7.38E-04
1708	569927.6	4215327	0.02126	1.20E-02	3.25E-03	1.83E-03	1.47E-03	7.54E-04
1709	569928	4215337	0.021919	1.24E-02	3.35E-03	1.89E-03	1.51E-03	7.78E-04
1710	569928.3	4215346	0.022905	1.30E-02	3.50E-03	1.97E-03	1.58E-03	8.12E-04
1711	569928.6	4215356	0.024222	1.37E-02	3.70E-03	2.09E-03	1.67E-03	8.59E-04
1712	569928.9	4215366	0.027348	1.55E-02	4.18E-03	2.36E-03	1.88E-03	9.70E-04

1713	569929.2	4215376	0.034566	1.96E-02	5.28E-03	2.98E-03	2.38E-03	1.23E-03
1714	569912.9	4215182	0.034057	1.93E-02	5.20E-03	2.93E-03	2.35E-03	1.21E-03
1715	569913.2	4215192	0.034328	1.94E-02	5.24E-03	2.96E-03	2.37E-03	1.22E-03
1716	569913.5	4215202	0.032895	1.86E-02	5.02E-03	2.83E-03	2.27E-03	1.17E-03
1717	569913.9	4215211	0.0304	1.72E-02	4.64E-03	2.62E-03	2.09E-03	1.08E-03
1718	569914.2	4215221	0.027426	1.55E-02	4.19E-03	2.36E-03	1.89E-03	9.73E-04
1719	569914.5	4215231	0.025091	1.42E-02	3.83E-03	2.16E-03	1.73E-03	8.90E-04
1720	569914.8	4215240	0.023565	1.34E-02	3.60E-03	2.03E-03	1.62E-03	8.36E-04
1721	569915.1	4215250	0.02217	1.26E-02	3.39E-03	1.91E-03	1.53E-03	7.86E-04
1722	569915.4	4215260	0.021108	1.20E-02	3.22E-03	1.82E-03	1.45E-03	7.49E-04
1723	569915.8	4215269	0.020564	1.17E-02	3.14E-03	1.77E-03	1.42E-03	7.29E-04
1724	569916.1	4215279	0.020074	1.14E-02	3.07E-03	1.73E-03	1.38E-03	7.12E-04
1725	569916.4	4215289	0.019672	1.11E-02	3.00E-03	1.70E-03	1.36E-03	6.98E-04
1726	569916.7	4215298	0.019388	1.10E-02	2.96E-03	1.67E-03	1.34E-03	6.88E-04
1727	569917	4215308	0.01933	1.10E-02	2.95E-03	1.67E-03	1.33E-03	6.86E-04
1728	569917.3	4215318	0.019321	1.09E-02	2.95E-03	1.66E-03	1.33E-03	6.85E-04
1729	569917.6	4215327	0.019858	1.13E-02	3.03E-03	1.71E-03	1.37E-03	7.04E-04
1730	569918	4215337	0.02061	1.17E-02	3.15E-03	1.78E-03	1.42E-03	7.31E-04
1731	569918.3	4215347	0.021724	1.23E-02	3.32E-03	1.87E-03	1.50E-03	7.71E-04
1732	569918.6	4215356	0.023093	1.31E-02	3.53E-03	1.99E-03	1.59E-03	8.19E-04
1733	569918.9	4215366	0.026099	1.48E-02	3.99E-03	2.25E-03	1.80E-03	9.26E-04
1734	569919.2	4215376	0.032379	1.83E-02	4.94E-03	2.79E-03	2.23E-03	1.15E-03
1735	569903.2	4215192	0.032019	1.81E-02	4.89E-03	2.76E-03	2.21E-03	1.14E-03
1736	569903.6	4215202	0.030785	1.74E-02	4.70E-03	2.65E-03	2.12E-03	1.09E-03
1737	569903.9	4215212	0.028344	1.61E-02	4.33E-03	2.44E-03	1.95E-03	1.01E-03
1738	569904.2	4215221	0.025403	1.44E-02	3.88E-03	2.19E-03	1.75E-03	9.01E-04
1739	569904.5	4215231	0.023182	1.31E-02	3.54E-03	2.00E-03	1.60E-03	8.22E-04
1740	569904.8	4215241	0.021734	1.23E-02	3.32E-03	1.87E-03	1.50E-03	7.71E-04
1741	569905.1	4215250	0.020375	1.15E-02	3.11E-03	1.76E-03	1.40E-03	7.23E-04
1742	569905.4	4215260	0.01949	1.10E-02	2.98E-03	1.68E-03	1.34E-03	6.91E-04
1743	569905.8	4215270	0.019051	1.08E-02	2.91E-03	1.64E-03	1.31E-03	6.76E-04
1744	569906.1	4215279	0.018653	1.06E-02	2.85E-03	1.61E-03	1.29E-03	6.62E-04
1745	569906.4	4215289	0.018307	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.49E-04
1746	569906.7	4215299	0.018023	1.02E-02	2.75E-03	1.55E-03	1.24E-03	6.39E-04
1747	569907	4215308	0.017792	1.01E-02	2.72E-03	1.53E-03	1.23E-03	6.31E-04
1748	569907.3	4215318	0.017758	1.01E-02	2.71E-03	1.53E-03	1.22E-03	6.30E-04
1749	569907.6	4215328	0.018618	1.05E-02	2.84E-03	1.60E-03	1.28E-03	6.60E-04
1750	569908	4215337	0.019426	1.10E-02	2.97E-03	1.67E-03	1.34E-03	6.89E-04
1751	569908.3	4215347	0.020558	1.16E-02	3.14E-03	1.77E-03	1.42E-03	7.29E-04
1752	569908.6	4215357	0.021798	1.23E-02	3.33E-03	1.88E-03	1.50E-03	7.73E-04
1753	569908.9	4215366	0.024225	1.37E-02	3.70E-03	2.09E-03	1.67E-03	8.59E-04
1754	569909.2	4215376	0.028481	1.61E-02	4.35E-03	2.45E-03	1.96E-03	1.01E-03
1755	569893.2	4215193	0.030005	1.70E-02	4.58E-03	2.59E-03	2.07E-03	1.06E-03
1756	569893.6	4215202	0.029124	1.65E-02	4.45E-03	2.51E-03	2.01E-03	1.03E-03
1757	569893.9	4215212	0.026989	1.53E-02	4.12E-03	2.33E-03	1.86E-03	9.57E-04
1758	569894.2	4215222	0.024266	1.37E-02	3.71E-03	2.09E-03	1.67E-03	8.61E-04
1759	569894.5	4215231	0.022132	1.25E-02	3.38E-03	1.91E-03	1.53E-03	7.85E-04
1760	569894.8	4215241	0.020612	1.17E-02	3.15E-03	1.78E-03	1.42E-03	7.31E-04
1761	569895.1	4215251	0.019288	1.09E-02	2.95E-03	1.66E-03	1.33E-03	6.84E-04
1762	569895.4	4215260	0.01836	1.04E-02	2.80E-03	1.58E-03	1.27E-03	6.51E-04
1763	569895.8	4215270	0.0178	1.01E-02	2.72E-03	1.53E-03	1.23E-03	6.31E-04
1764	569896.1	4215280	0.0173	9.80E-03	2.64E-03	1.49E-03	1.19E-03	6.14E-04

1765	569896.4	4215289	0.016938	9.60E-03	2.59E-03	1.46E-03	1.17E-03	6.01E-04
1766	569896.7	4215299	0.016743	9.49E-03	2.56E-03	1.44E-03	1.15E-03	5.94E-04
1767	569897	4215309	0.016582	9.39E-03	2.53E-03	1.43E-03	1.14E-03	5.88E-04
1768	569897.3	4215318	0.016588	9.40E-03	2.53E-03	1.43E-03	1.14E-03	5.88E-04
1769	569897.7	4215328	0.017139	9.71E-03	2.62E-03	1.48E-03	1.18E-03	6.08E-04
1770	569898	4215338	0.018239	1.03E-02	2.79E-03	1.57E-03	1.26E-03	6.47E-04
1771	569898.3	4215347	0.019258	1.09E-02	2.94E-03	1.66E-03	1.33E-03	6.83E-04
1772	569898.6	4215357	0.020301	1.15E-02	3.10E-03	1.75E-03	1.40E-03	7.20E-04
1773	569898.9	4215367	0.022062	1.25E-02	3.37E-03	1.90E-03	1.52E-03	7.83E-04
1774	569883.6	4215203	0.027589	1.56E-02	4.21E-03	2.38E-03	1.90E-03	9.79E-04
1775	569883.9	4215212	0.025735	1.46E-02	3.93E-03	2.22E-03	1.77E-03	9.13E-04
1776	569884.2	4215222	0.023242	1.32E-02	3.55E-03	2.00E-03	1.60E-03	8.24E-04
1777	569884.5	4215232	0.02121	1.20E-02	3.24E-03	1.83E-03	1.46E-03	7.52E-04
1778	569884.8	4215241	0.019681	1.11E-02	3.01E-03	1.70E-03	1.36E-03	6.98E-04
1779	569885.1	4215251	0.018353	1.04E-02	2.80E-03	1.58E-03	1.26E-03	6.51E-04
1780	569885.5	4215261	0.017375	9.84E-03	2.65E-03	1.50E-03	1.20E-03	6.16E-04
1781	569885.8	4215270	0.016684	9.45E-03	2.55E-03	1.44E-03	1.15E-03	5.92E-04
1782	569886.1	4215280	0.016089	9.11E-03	2.46E-03	1.39E-03	1.11E-03	5.71E-04
1783	569886.4	4215290	0.015709	8.90E-03	2.40E-03	1.35E-03	1.08E-03	5.57E-04
1784	569886.7	4215299	0.015601	8.84E-03	2.38E-03	1.34E-03	1.08E-03	5.53E-04
1785	569887	4215309	0.015514	8.79E-03	2.37E-03	1.34E-03	1.07E-03	5.50E-04
1786	569887.3	4215319	0.015565	8.82E-03	2.38E-03	1.34E-03	1.07E-03	5.52E-04
1787	569887.7	4215328	0.016007	9.07E-03	2.44E-03	1.38E-03	1.10E-03	5.68E-04
1788	569888	4215338	0.016678	9.45E-03	2.55E-03	1.44E-03	1.15E-03	5.92E-04
1789	569888.3	4215348	0.01787	1.01E-02	2.73E-03	1.54E-03	1.23E-03	6.34E-04
1790	569888.6	4215357	0.018697	1.06E-02	2.86E-03	1.61E-03	1.29E-03	6.63E-04
1791	569888.9	4215367	0.019898	1.13E-02	3.04E-03	1.71E-03	1.37E-03	7.06E-04
1792	569873.6	4215203	0.026169	1.48E-02	4.00E-03	2.25E-03	1.80E-03	9.28E-04
1793	569873.9	4215213	0.024558	1.39E-02	3.75E-03	2.12E-03	1.69E-03	8.71E-04
1794	569874.2	4215222	0.022278	1.26E-02	3.40E-03	1.92E-03	1.54E-03	7.90E-04
1795	569874.5	4215232	0.020346	1.15E-02	3.11E-03	1.75E-03	1.40E-03	7.22E-04
1796	569874.8	4215242	0.018806	1.07E-02	2.87E-03	1.62E-03	1.30E-03	6.67E-04
1797	569875.1	4215251	0.017483	9.90E-03	2.67E-03	1.51E-03	1.20E-03	6.20E-04
1798	569875.5	4215261	0.016453	9.32E-03	2.51E-03	1.42E-03	1.13E-03	5.84E-04
1799	569875.8	4215271	0.015671	8.88E-03	2.39E-03	1.35E-03	1.08E-03	5.56E-04
1800	569876.1	4215280	0.015017	8.51E-03	2.29E-03	1.29E-03	1.03E-03	5.33E-04
1801	569876.4	4215290	0.014651	8.30E-03	2.24E-03	1.26E-03	1.01E-03	5.20E-04
1802	569876.7	4215300	0.014596	8.27E-03	2.23E-03	1.26E-03	1.01E-03	5.18E-04
1803	569877	4215309	0.014564	8.25E-03	2.22E-03	1.25E-03	1.00E-03	5.17E-04
1804	569877.3	4215319	0.014636	8.29E-03	2.23E-03	1.26E-03	1.01E-03	5.19E-04
1805	569877.7	4215329	0.014976	8.48E-03	2.29E-03	1.29E-03	1.03E-03	5.31E-04
1806	569878	4215338	0.015506	8.78E-03	2.37E-03	1.34E-03	1.07E-03	5.50E-04
1807	569878.3	4215348	0.016218	9.19E-03	2.48E-03	1.40E-03	1.12E-03	5.75E-04
1808	569878.6	4215358	0.016929	9.59E-03	2.59E-03	1.46E-03	1.17E-03	6.00E-04
1809	569878.9	4215367	0.017863	1.01E-02	2.73E-03	1.54E-03	1.23E-03	6.34E-04
1810	569863.9	4215213	0.023457	1.33E-02	3.58E-03	2.02E-03	1.62E-03	8.32E-04
1811	569864.2	4215223	0.021789	1.23E-02	3.33E-03	1.88E-03	1.50E-03	7.73E-04
1812	569864.5	4215232	0.020073	1.14E-02	3.07E-03	1.73E-03	1.38E-03	7.12E-04
1813	569864.8	4215242	0.018509	1.05E-02	2.83E-03	1.59E-03	1.28E-03	6.57E-04
1814	569865.1	4215252	0.017054	9.66E-03	2.60E-03	1.47E-03	1.18E-03	6.05E-04
1815	569865.5	4215261	0.015982	9.05E-03	2.44E-03	1.38E-03	1.10E-03	5.67E-04
1816	569865.8	4215271	0.015168	8.59E-03	2.32E-03	1.31E-03	1.05E-03	5.38E-04

1817	569866.1	4215281	0.014488	8.21E-03	2.21E-03	1.25E-03	9.98E-04	5.14E-04
1818	569866.4	4215290	0.014088	7.98E-03	2.15E-03	1.21E-03	9.71E-04	5.00E-04
1819	569866.7	4215300	0.013952	7.90E-03	2.13E-03	1.20E-03	9.61E-04	4.95E-04
1820	569867	4215310	0.013841	7.84E-03	2.11E-03	1.19E-03	9.54E-04	4.91E-04
1821	569867.4	4215319	0.01383	7.84E-03	2.11E-03	1.19E-03	9.53E-04	4.91E-04
1822	569867.7	4215329	0.01404	7.95E-03	2.14E-03	1.21E-03	9.68E-04	4.98E-04
1823	569868	4215339	0.014395	8.15E-03	2.20E-03	1.24E-03	9.92E-04	5.11E-04
1824	569868.3	4215348	0.014894	8.44E-03	2.27E-03	1.28E-03	1.03E-03	5.28E-04
1825	569868.6	4215358	0.015453	8.75E-03	2.36E-03	1.33E-03	1.06E-03	5.48E-04
1826	569868.9	4215368	0.016121	9.13E-03	2.46E-03	1.39E-03	1.11E-03	5.72E-04
1827	569853.9	4215213	0.022448	1.27E-02	3.43E-03	1.93E-03	1.55E-03	7.96E-04
1828	569854.2	4215223	0.021307	1.21E-02	3.25E-03	1.84E-03	1.47E-03	7.56E-04
1829	569854.5	4215233	0.019827	1.12E-02	3.03E-03	1.71E-03	1.37E-03	7.03E-04
1830	569854.8	4215242	0.018234	1.03E-02	2.78E-03	1.57E-03	1.26E-03	6.47E-04
1831	569855.2	4215252	0.016722	9.47E-03	2.55E-03	1.44E-03	1.15E-03	5.93E-04
1832	569855.5	4215262	0.01563	8.85E-03	2.39E-03	1.35E-03	1.08E-03	5.54E-04
1833	569855.8	4215271	0.014817	8.39E-03	2.26E-03	1.28E-03	1.02E-03	5.26E-04
1834	569856.1	4215281	0.014135	8.01E-03	2.16E-03	1.22E-03	9.74E-04	5.01E-04
1835	569856.4	4215291	0.013695	7.76E-03	2.09E-03	1.18E-03	9.44E-04	4.86E-04
1836	569856.7	4215300	0.01345	7.62E-03	2.05E-03	1.16E-03	9.27E-04	4.77E-04
1837	569857	4215310	0.013221	7.49E-03	2.02E-03	1.14E-03	9.11E-04	4.69E-04
1838	569857.4	4215320	0.013103	7.42E-03	2.00E-03	1.13E-03	9.03E-04	4.65E-04
1839	569857.7	4215329	0.013185	7.47E-03	2.01E-03	1.14E-03	9.09E-04	4.68E-04
1840	569858	4215339	0.013358	7.57E-03	2.04E-03	1.15E-03	9.21E-04	4.74E-04
1841	569858.3	4215349	0.013646	7.73E-03	2.08E-03	1.18E-03	9.40E-04	4.84E-04
1842	569858.6	4215358	0.014048	7.96E-03	2.15E-03	1.21E-03	9.68E-04	4.98E-04
1843	569858.9	4215368	0.014499	8.21E-03	2.21E-03	1.25E-03	9.99E-04	5.14E-04
1844	569844.2	4215223	0.020811	1.18E-02	3.18E-03	1.79E-03	1.43E-03	7.38E-04
1845	569844.5	4215233	0.019531	1.11E-02	2.98E-03	1.68E-03	1.35E-03	6.93E-04
1846	569844.8	4215243	0.017955	1.02E-02	2.74E-03	1.55E-03	1.24E-03	6.37E-04
1847	569845.2	4215252	0.016401	9.29E-03	2.50E-03	1.41E-03	1.13E-03	5.82E-04
1848	569845.5	4215262	0.015306	8.67E-03	2.34E-03	1.32E-03	1.05E-03	5.43E-04
1849	569845.8	4215272	0.014501	8.22E-03	2.21E-03	1.25E-03	9.99E-04	5.14E-04
1850	569846.1	4215281	0.013813	7.83E-03	2.11E-03	1.19E-03	9.52E-04	4.90E-04
1851	569846.4	4215291	0.013319	7.55E-03	2.03E-03	1.15E-03	9.18E-04	4.72E-04
1852	569846.7	4215301	0.012962	7.34E-03	1.98E-03	1.12E-03	8.93E-04	4.60E-04
1853	569847.1	4215310	0.012629	7.15E-03	1.93E-03	1.09E-03	8.70E-04	4.48E-04
1854	569847.4	4215320	0.01242	7.04E-03	1.90E-03	1.07E-03	8.56E-04	4.41E-04
1855	569847.7	4215330	0.012395	7.02E-03	1.89E-03	1.07E-03	8.54E-04	4.40E-04
1856	569848	4215339	0.012419	7.04E-03	1.90E-03	1.07E-03	8.56E-04	4.41E-04
1857	569848.3	4215349	0.012546	7.11E-03	1.92E-03	1.08E-03	8.65E-04	4.45E-04
1858	569848.6	4215359	0.012813	7.26E-03	1.96E-03	1.10E-03	8.83E-04	4.54E-04
1859	569848.9	4215368	0.013095	7.42E-03	2.00E-03	1.13E-03	9.02E-04	4.65E-04
1860	569834.2	4215224	0.019693	1.12E-02	3.01E-03	1.70E-03	1.36E-03	6.99E-04
1861	569834.5	4215233	0.018594	1.05E-02	2.84E-03	1.60E-03	1.28E-03	6.60E-04
1862	569834.9	4215243	0.017197	9.74E-03	2.63E-03	1.48E-03	1.19E-03	6.10E-04
1863	569835.2	4215253	0.01579	8.95E-03	2.41E-03	1.36E-03	1.09E-03	5.60E-04
1864	569835.5	4215262	0.014792	8.38E-03	2.26E-03	1.27E-03	1.02E-03	5.25E-04
1865	569835.8	4215272	0.014029	7.95E-03	2.14E-03	1.21E-03	9.67E-04	4.98E-04
1866	569836.1	4215282	0.013375	7.58E-03	2.04E-03	1.15E-03	9.22E-04	4.74E-04
1867	569836.4	4215291	0.012869	7.29E-03	1.97E-03	1.11E-03	8.87E-04	4.56E-04
1868	569836.7	4215301	0.012461	7.06E-03	1.90E-03	1.07E-03	8.59E-04	4.42E-04

1869	569837.1	4215311	0.012078	6.84E-03	1.84E-03	1.04E-03	8.32E-04	4.28E-04
1870	569837.4	4215320	0.011828	6.70E-03	1.81E-03	1.02E-03	8.15E-04	4.20E-04
1871	569837.7	4215330	0.01174	6.65E-03	1.79E-03	1.01E-03	8.09E-04	4.16E-04
1872	569838	4215340	0.011678	6.62E-03	1.78E-03	1.01E-03	8.05E-04	4.14E-04
1873	569838.3	4215349	0.011691	6.62E-03	1.79E-03	1.01E-03	8.06E-04	4.15E-04
1874	569838.6	4215359	0.011832	6.70E-03	1.81E-03	1.02E-03	8.15E-04	4.20E-04
1875	569838.9	4215369	0.011961	6.78E-03	1.83E-03	1.03E-03	8.24E-04	4.24E-04
1876	569824.5	4215234	0.017679	1.00E-02	2.70E-03	1.52E-03	1.22E-03	6.27E-04
1877	569824.9	4215243	0.016429	9.31E-03	2.51E-03	1.42E-03	1.13E-03	5.83E-04
1878	569825.2	4215253	0.015166	8.59E-03	2.32E-03	1.31E-03	1.05E-03	5.38E-04
1879	569825.5	4215263	0.014254	8.08E-03	2.18E-03	1.23E-03	9.82E-04	5.06E-04
1880	569825.8	4215272	0.013538	7.67E-03	2.07E-03	1.17E-03	9.33E-04	4.80E-04
1881	569826.1	4215282	0.012915	7.32E-03	1.97E-03	1.11E-03	8.90E-04	4.58E-04
1882	569826.4	4215292	0.012404	7.03E-03	1.89E-03	1.07E-03	8.55E-04	4.40E-04
1883	569826.7	4215301	0.011969	6.78E-03	1.83E-03	1.03E-03	8.25E-04	4.25E-04
1884	569827.1	4215311	0.011562	6.55E-03	1.77E-03	9.96E-04	7.97E-04	4.10E-04
1885	569827.4	4215321	0.011297	6.40E-03	1.73E-03	9.73E-04	7.78E-04	4.01E-04
1886	569827.7	4215330	0.011178	6.33E-03	1.71E-03	9.63E-04	7.70E-04	3.96E-04
1887	569828	4215340	0.011067	6.27E-03	1.69E-03	9.54E-04	7.63E-04	3.93E-04
1888	569828.3	4215350	0.011011	6.24E-03	1.68E-03	9.49E-04	7.59E-04	3.91E-04
1889	569828.6	4215359	0.011041	6.26E-03	1.69E-03	9.51E-04	7.61E-04	3.92E-04
1890	569829	4215369	0.011047	6.26E-03	1.69E-03	9.52E-04	7.61E-04	3.92E-04
1891	569814.9	4215244	0.015717	8.90E-03	2.40E-03	1.35E-03	1.08E-03	5.58E-04
1892	569815.2	4215253	0.014581	8.26E-03	2.23E-03	1.26E-03	1.00E-03	5.17E-04
1893	569815.5	4215263	0.013748	7.79E-03	2.10E-03	1.18E-03	9.47E-04	4.88E-04
1894	569815.8	4215273	0.013069	7.40E-03	2.00E-03	1.13E-03	9.01E-04	4.64E-04
1895	569816.1	4215282	0.012472	7.07E-03	1.90E-03	1.07E-03	8.59E-04	4.42E-04
1896	569816.4	4215292	0.011956	6.77E-03	1.83E-03	1.03E-03	8.24E-04	4.24E-04
1897	569816.8	4215302	0.011495	6.51E-03	1.76E-03	9.91E-04	7.92E-04	4.08E-04
1898	569817.1	4215311	0.011069	6.27E-03	1.69E-03	9.54E-04	7.63E-04	3.93E-04
1899	569817.4	4215321	0.010794	6.11E-03	1.65E-03	9.30E-04	7.44E-04	3.83E-04
1900	569817.7	4215331	0.010644	6.03E-03	1.63E-03	9.17E-04	7.33E-04	3.78E-04
1901	569818	4215340	0.010496	5.95E-03	1.60E-03	9.04E-04	7.23E-04	3.72E-04
1902	569818.3	4215350	0.010387	5.88E-03	1.59E-03	8.95E-04	7.16E-04	3.68E-04
1903	569818.6	4215360	0.010334	5.85E-03	1.58E-03	8.90E-04	7.12E-04	3.67E-04
1904	569819	4215369	0.010246	5.80E-03	1.56E-03	8.83E-04	7.06E-04	3.63E-04
1905	569804.9	4215244	0.014804	8.39E-03	2.26E-03	1.28E-03	1.02E-03	5.25E-04
1906	569805.2	4215254	0.013738	7.78E-03	2.10E-03	1.18E-03	9.47E-04	4.87E-04
1907	569805.5	4215263	0.012975	7.35E-03	1.98E-03	1.12E-03	8.94E-04	4.60E-04
1908	569805.8	4215273	0.012357	7.00E-03	1.89E-03	1.06E-03	8.52E-04	4.38E-04
1909	569806.1	4215283	0.011814	6.69E-03	1.80E-03	1.02E-03	8.14E-04	4.19E-04
1910	569806.4	4215292	0.011353	6.43E-03	1.73E-03	9.78E-04	7.82E-04	4.03E-04
1911	569806.8	4215302	0.010939	6.20E-03	1.67E-03	9.43E-04	7.54E-04	3.88E-04
1912	569807.1	4215312	0.010546	5.97E-03	1.61E-03	9.09E-04	7.27E-04	3.74E-04
1913	569807.4	4215321	0.010288	5.83E-03	1.57E-03	8.86E-04	7.09E-04	3.65E-04
1914	569807.7	4215331	0.010128	5.74E-03	1.55E-03	8.73E-04	6.98E-04	3.59E-04
1915	569808	4215341	0.009957	5.64E-03	1.52E-03	8.58E-04	6.86E-04	3.53E-04
1916	569808.3	4215350	0.00982	5.56E-03	1.50E-03	8.46E-04	6.77E-04	3.48E-04
1917	569808.6	4215360	0.009724	5.51E-03	1.48E-03	8.38E-04	6.70E-04	3.45E-04
1918	569809	4215370	0.009591	5.43E-03	1.46E-03	8.26E-04	6.61E-04	3.40E-04
1919	569795.2	4215254	0.012911	7.31E-03	1.97E-03	1.11E-03	8.90E-04	4.58E-04
1920	569795.5	4215264	0.012209	6.92E-03	1.86E-03	1.05E-03	8.41E-04	4.33E-04

1921	569795.8	4215273	0.011639	6.59E-03	1.78E-03	1.00E-03	8.02E-04	4.13E-04
1922	569796.1	4215283	0.01114	6.31E-03	1.70E-03	9.60E-04	7.68E-04	3.95E-04
1923	569796.4	4215293	0.010737	6.08E-03	1.64E-03	9.25E-04	7.40E-04	3.81E-04
1924	569796.8	4215302	0.01038	5.88E-03	1.59E-03	8.94E-04	7.15E-04	3.68E-04
1925	569797.1	4215312	0.010033	5.68E-03	1.53E-03	8.65E-04	6.91E-04	3.56E-04
1926	569797.4	4215322	0.0098	5.55E-03	1.50E-03	8.44E-04	6.75E-04	3.48E-04
1927	569797.7	4215331	0.009635	5.46E-03	1.47E-03	8.30E-04	6.64E-04	3.42E-04
1928	569798	4215341	0.009456	5.36E-03	1.44E-03	8.15E-04	6.52E-04	3.35E-04
1929	569798.3	4215351	0.009309	5.27E-03	1.42E-03	8.02E-04	6.41E-04	3.30E-04
1930	569798.7	4215360	0.009198	5.21E-03	1.40E-03	7.93E-04	6.34E-04	3.26E-04
1931	569785.2	4215254	0.012157	6.89E-03	1.86E-03	1.05E-03	8.38E-04	4.31E-04
1932	569785.5	4215264	0.011511	6.52E-03	1.76E-03	9.92E-04	7.93E-04	4.08E-04
1933	569785.8	4215274	0.010985	6.22E-03	1.68E-03	9.47E-04	7.57E-04	3.90E-04
1934	569786.1	4215283	0.010523	5.96E-03	1.61E-03	9.07E-04	7.25E-04	3.73E-04
1935	569786.5	4215293	0.010174	5.76E-03	1.55E-03	8.77E-04	7.01E-04	3.61E-04
1936	569786.8	4215303	0.009863	5.59E-03	1.51E-03	8.50E-04	6.80E-04	3.50E-04
1937	569787.1	4215312	0.009557	5.41E-03	1.46E-03	8.23E-04	6.59E-04	3.39E-04
1938	569787.4	4215322	0.009343	5.29E-03	1.43E-03	8.05E-04	6.44E-04	3.31E-04
1939	569787.7	4215332	0.009175	5.20E-03	1.40E-03	7.91E-04	6.32E-04	3.25E-04
1940	569788	4215341	0.00899	5.09E-03	1.37E-03	7.75E-04	6.19E-04	3.19E-04
1941	569788.3	4215351	0.008838	5.01E-03	1.35E-03	7.62E-04	6.09E-04	3.13E-04
1942	569788.7	4215361	0.00872	4.94E-03	1.33E-03	7.51E-04	6.01E-04	3.09E-04
1943	569775.5	4215264	0.010933	6.19E-03	1.67E-03	9.42E-04	7.53E-04	3.88E-04
1944	569775.8	4215274	0.010433	5.91E-03	1.59E-03	8.99E-04	7.19E-04	3.70E-04
1945	569776.1	4215284	0.009997	5.66E-03	1.53E-03	8.61E-04	6.89E-04	3.55E-04
1946	569776.5	4215293	0.009664	5.47E-03	1.48E-03	8.33E-04	6.66E-04	3.43E-04
1947	569776.8	4215303	0.009366	5.31E-03	1.43E-03	8.07E-04	6.45E-04	3.32E-04
1948	569777.1	4215313	0.009074	5.14E-03	1.39E-03	7.82E-04	6.25E-04	3.22E-04
1949	569777.4	4215322	0.008873	5.03E-03	1.35E-03	7.65E-04	6.11E-04	3.15E-04
1950	569777.7	4215332	0.008706	4.93E-03	1.33E-03	7.50E-04	6.00E-04	3.09E-04
1951	569778	4215342	0.008518	4.83E-03	1.30E-03	7.34E-04	5.87E-04	3.02E-04
1952	569778.3	4215351	0.008368	4.74E-03	1.28E-03	7.21E-04	5.77E-04	2.97E-04
1953	569778.7	4215361	0.008254	4.68E-03	1.26E-03	7.11E-04	5.69E-04	2.93E-04
1954	569765.5	4215265	0.010407	5.90E-03	1.59E-03	8.97E-04	7.17E-04	3.69E-04
1955	569765.8	4215274	0.009932	5.63E-03	1.52E-03	8.56E-04	6.84E-04	3.52E-04
1956	569766.1	4215284	0.009518	5.39E-03	1.45E-03	8.20E-04	6.56E-04	3.38E-04
1957	569766.5	4215294	0.009193	5.21E-03	1.40E-03	7.92E-04	6.34E-04	3.26E-04
1958	569766.8	4215303	0.008899	5.04E-03	1.36E-03	7.67E-04	6.13E-04	3.16E-04
1959	569767.1	4215313	0.008613	4.88E-03	1.32E-03	7.42E-04	5.94E-04	3.06E-04
1960	569767.4	4215323	0.008419	4.77E-03	1.29E-03	7.25E-04	5.80E-04	2.99E-04
1961	569767.7	4215332	0.008252	4.68E-03	1.26E-03	7.11E-04	5.69E-04	2.93E-04
1962	569768	4215342	0.008064	4.57E-03	1.23E-03	6.95E-04	5.56E-04	2.86E-04
1963	569768.4	4215352	0.007918	4.49E-03	1.21E-03	6.82E-04	5.46E-04	2.81E-04
1964	569768.7	4215361	0.007805	4.42E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
1965	569755.8	4215275	0.009464	5.36E-03	1.45E-03	8.15E-04	6.52E-04	3.36E-04
1966	569756.2	4215284	0.009074	5.14E-03	1.39E-03	7.82E-04	6.25E-04	3.22E-04
1967	569756.5	4215294	0.008756	4.96E-03	1.34E-03	7.54E-04	6.03E-04	3.11E-04
1968	569756.8	4215304	0.008467	4.80E-03	1.29E-03	7.30E-04	5.83E-04	3.00E-04
1969	569757.1	4215313	0.008195	4.64E-03	1.25E-03	7.06E-04	5.65E-04	2.91E-04
1970	569757.4	4215323	0.008013	4.54E-03	1.22E-03	6.90E-04	5.52E-04	2.84E-04
1971	569757.7	4215333	0.007843	4.44E-03	1.20E-03	6.76E-04	5.40E-04	2.78E-04
1972	569758	4215342	0.007656	4.34E-03	1.17E-03	6.60E-04	5.28E-04	2.72E-04

1973	569758.4	4215352	0.007513	4.26E-03	1.15E-03	6.47E-04	5.18E-04	2.66E-04
1974	569758.7	4215362	0.007403	4.19E-03	1.13E-03	6.38E-04	5.10E-04	2.63E-04
1975	569745.8	4215275	0.009027	5.11E-03	1.38E-03	7.78E-04	6.22E-04	3.20E-04
1976	569746.2	4215285	0.008656	4.90E-03	1.32E-03	7.46E-04	5.97E-04	3.07E-04
1977	569746.5	4215294	0.008368	4.74E-03	1.28E-03	7.21E-04	5.77E-04	2.97E-04
1978	569746.8	4215304	0.008101	4.59E-03	1.24E-03	6.98E-04	5.58E-04	2.87E-04
1979	569747.1	4215314	0.007849	4.45E-03	1.20E-03	6.76E-04	5.41E-04	2.78E-04
1980	569747.4	4215323	0.00767	4.35E-03	1.17E-03	6.61E-04	5.29E-04	2.72E-04
1981	569747.7	4215333	0.007502	4.25E-03	1.15E-03	6.46E-04	5.17E-04	2.66E-04
1982	569748	4215343	0.007314	4.14E-03	1.12E-03	6.30E-04	5.04E-04	2.59E-04
1983	569748.4	4215352	0.007169	4.06E-03	1.09E-03	6.18E-04	4.94E-04	2.54E-04
1984	569735.2	4215256	0.009509	5.39E-03	1.45E-03	8.19E-04	6.55E-04	3.37E-04
1985	569735.5	4215266	0.009025	5.11E-03	1.38E-03	7.78E-04	6.22E-04	3.20E-04
1986	569735.8	4215275	0.008617	4.88E-03	1.32E-03	7.42E-04	5.94E-04	3.06E-04
1987	569736.2	4215285	0.008267	4.68E-03	1.26E-03	7.12E-04	5.70E-04	2.93E-04
1988	569736.5	4215295	0.00801	4.54E-03	1.22E-03	6.90E-04	5.52E-04	2.84E-04
1989	569736.8	4215304	0.00777	4.40E-03	1.19E-03	6.70E-04	5.35E-04	2.76E-04
1990	569737.1	4215314	0.007539	4.27E-03	1.15E-03	6.50E-04	5.20E-04	2.67E-04
1991	569737.4	4215324	0.007368	4.17E-03	1.13E-03	6.35E-04	5.08E-04	2.61E-04
1992	569737.7	4215333	0.007198	4.08E-03	1.10E-03	6.20E-04	4.96E-04	2.55E-04
1993	569738.1	4215343	0.007006	3.97E-03	1.07E-03	6.04E-04	4.83E-04	2.49E-04
1994	569738.4	4215353	0.006867	3.89E-03	1.05E-03	5.92E-04	4.73E-04	2.44E-04
1995	569724.6	4215237	0.010282	5.82E-03	1.57E-03	8.86E-04	7.09E-04	3.65E-04
1996	569724.9	4215247	0.009637	5.46E-03	1.47E-03	8.30E-04	6.64E-04	3.42E-04
1997	569725.2	4215256	0.009084	5.15E-03	1.39E-03	7.83E-04	6.26E-04	3.22E-04
1998	569725.5	4215266	0.008622	4.88E-03	1.32E-03	7.43E-04	5.94E-04	3.06E-04
1999	569725.9	4215276	0.008232	4.66E-03	1.26E-03	7.09E-04	5.67E-04	2.92E-04
2000	569726.2	4215285	0.007903	4.48E-03	1.21E-03	6.81E-04	5.45E-04	2.80E-04
2001	569726.5	4215295	0.007676	4.35E-03	1.17E-03	6.61E-04	5.29E-04	2.72E-04
2002	569726.8	4215305	0.00746	4.23E-03	1.14E-03	6.43E-04	5.14E-04	2.65E-04
2003	569727.1	4215314	0.007246	4.11E-03	1.11E-03	6.24E-04	4.99E-04	2.57E-04
2004	569727.4	4215324	0.00708	4.01E-03	1.08E-03	6.10E-04	4.88E-04	2.51E-04
2005	569727.7	4215334	0.006911	3.91E-03	1.06E-03	5.95E-04	4.76E-04	2.45E-04
2006	569728.1	4215343	0.006722	3.81E-03	1.03E-03	5.79E-04	4.63E-04	2.38E-04
2007	569728.4	4215353	0.006587	3.73E-03	1.01E-03	5.68E-04	4.54E-04	2.34E-04
2008	569728.7	4215363	0.006484	3.67E-03	9.90E-04	5.59E-04	4.47E-04	2.30E-04
2009	569714	4215218	0.010771	6.10E-03	1.64E-03	9.28E-04	7.42E-04	3.82E-04
2010	569714.3	4215228	0.010627	6.02E-03	1.62E-03	9.16E-04	7.32E-04	3.77E-04
2011	569714.6	4215237	0.009964	5.64E-03	1.52E-03	8.59E-04	6.87E-04	3.53E-04
2012	569714.9	4215247	0.009356	5.30E-03	1.43E-03	8.06E-04	6.45E-04	3.32E-04
2013	569715.2	4215257	0.008828	5.00E-03	1.35E-03	7.61E-04	6.08E-04	3.13E-04
2014	569715.5	4215266	0.008365	4.74E-03	1.28E-03	7.21E-04	5.76E-04	2.97E-04
2015	569715.9	4215276	0.007976	4.52E-03	1.22E-03	6.87E-04	5.50E-04	2.83E-04
2016	569716.2	4215286	0.007645	4.33E-03	1.17E-03	6.59E-04	5.27E-04	2.71E-04
2017	569716.5	4215295	0.007419	4.20E-03	1.13E-03	6.39E-04	5.11E-04	2.63E-04
2018	569716.8	4215305	0.007203	4.08E-03	1.10E-03	6.21E-04	4.96E-04	2.55E-04
2019	569717.1	4215315	0.006993	3.96E-03	1.07E-03	6.03E-04	4.82E-04	2.48E-04
2020	569717.4	4215324	0.006826	3.87E-03	1.04E-03	5.88E-04	4.70E-04	2.42E-04
2021	569717.7	4215334	0.006652	3.77E-03	1.02E-03	5.73E-04	4.58E-04	2.36E-04
2022	569718.1	4215344	0.006462	3.66E-03	9.87E-04	5.57E-04	4.45E-04	2.29E-04
2023	569718.4	4215353	0.00633	3.59E-03	9.67E-04	5.45E-04	4.36E-04	2.25E-04
2024	569718.7	4215363	0.006226	3.53E-03	9.51E-04	5.36E-04	4.29E-04	2.21E-04

2025	569719	4215373	0.006125	3.47E-03	9.35E-04	5.28E-04	4.22E-04	2.17E-04
2026	569719.3	4215382	0.006086	3.45E-03	9.29E-04	5.24E-04	4.19E-04	2.16E-04
2027	569709.1	4215385	0.005823	3.30E-03	8.89E-04	5.02E-04	4.01E-04	2.07E-04
2028	569699.1	4215385	0.005584	3.16E-03	8.53E-04	4.81E-04	3.85E-04	1.98E-04
2029	569702.4	4215377	0.005683	3.22E-03	8.68E-04	4.90E-04	3.92E-04	2.02E-04
2030	569705.6	4215368	0.005854	3.32E-03	8.94E-04	5.04E-04	4.03E-04	2.08E-04
2031	569708.9	4215360	0.006031	3.42E-03	9.21E-04	5.20E-04	4.16E-04	2.14E-04
2032	569689.3	4215385	0.005376	3.05E-03	8.21E-04	4.63E-04	3.70E-04	1.91E-04
2033	569692.7	4215376	0.005477	3.10E-03	8.36E-04	4.72E-04	3.77E-04	1.94E-04
2034	569696.1	4215367	0.005656	3.20E-03	8.64E-04	4.87E-04	3.90E-04	2.01E-04
2035	569699.6	4215358	0.00584	3.31E-03	8.92E-04	5.03E-04	4.02E-04	2.07E-04
2036	569703	4215349	0.006024	3.41E-03	9.20E-04	5.19E-04	4.15E-04	2.14E-04
2037	569706.5	4215340	0.00626	3.55E-03	9.56E-04	5.39E-04	4.31E-04	2.22E-04
2038	569679.2	4215386	0.005184	2.94E-03	7.92E-04	4.47E-04	3.57E-04	1.84E-04
2039	569682.6	4215377	0.005301	3.00E-03	8.09E-04	4.57E-04	3.65E-04	1.88E-04
2040	569686	4215368	0.00547	3.10E-03	8.35E-04	4.71E-04	3.77E-04	1.94E-04
2041	569689.4	4215359	0.005637	3.19E-03	8.61E-04	4.86E-04	3.88E-04	2.00E-04
2042	569692.8	4215350	0.005801	3.29E-03	8.86E-04	5.00E-04	4.00E-04	2.06E-04
2043	569696.2	4215341	0.006018	3.41E-03	9.19E-04	5.19E-04	4.15E-04	2.13E-04
2044	569699.6	4215332	0.00627	3.55E-03	9.57E-04	5.40E-04	4.32E-04	2.22E-04
2045	569703	4215324	0.006514	3.69E-03	9.95E-04	5.61E-04	4.49E-04	2.31E-04
2046	569706.4	4215315	0.006753	3.83E-03	1.03E-03	5.82E-04	4.65E-04	2.40E-04
2047	569669.2	4215386	0.005002	2.83E-03	7.64E-04	4.31E-04	3.45E-04	1.77E-04
2048	569672.6	4215377	0.005133	2.91E-03	7.84E-04	4.42E-04	3.54E-04	1.82E-04
2049	569675.9	4215368	0.005301	3.00E-03	8.09E-04	4.57E-04	3.65E-04	1.88E-04
2050	569679.3	4215360	0.00547	3.10E-03	8.35E-04	4.71E-04	3.77E-04	1.94E-04
2051	569682.7	4215351	0.005633	3.19E-03	8.60E-04	4.85E-04	3.88E-04	2.00E-04
2052	569686.1	4215342	0.005824	3.30E-03	8.89E-04	5.02E-04	4.01E-04	2.07E-04
2053	569689.4	4215333	0.006052	3.43E-03	9.24E-04	5.21E-04	4.17E-04	2.15E-04
2054	569692.8	4215325	0.006278	3.56E-03	9.59E-04	5.41E-04	4.33E-04	2.23E-04
2055	569696.2	4215316	0.006507	3.69E-03	9.94E-04	5.61E-04	4.48E-04	2.31E-04
2056	569699.5	4215307	0.00678	3.84E-03	1.04E-03	5.84E-04	4.67E-04	2.40E-04
2057	569702.9	4215298	0.007057	4.00E-03	1.08E-03	6.08E-04	4.86E-04	2.50E-04
2058	569706.3	4215290	0.007338	4.16E-03	1.12E-03	6.32E-04	5.06E-04	2.60E-04
2059	569659.2	4215386	0.004817	2.73E-03	7.36E-04	4.15E-04	3.32E-04	1.71E-04
2060	569662.5	4215378	0.004967	2.81E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
2061	569665.9	4215369	0.005144	2.91E-03	7.85E-04	4.43E-04	3.54E-04	1.82E-04
2062	569669.2	4215360	0.005311	3.01E-03	8.11E-04	4.58E-04	3.66E-04	1.88E-04
2063	569672.5	4215352	0.005477	3.10E-03	8.36E-04	4.72E-04	3.77E-04	1.94E-04
2064	569675.9	4215343	0.005655	3.20E-03	8.64E-04	4.87E-04	3.90E-04	2.01E-04
2065	569679.2	4215334	0.005869	3.32E-03	8.96E-04	5.06E-04	4.04E-04	2.08E-04
2066	569682.6	4215326	0.006083	3.45E-03	9.29E-04	5.24E-04	4.19E-04	2.16E-04
2067	569685.9	4215317	0.006294	3.57E-03	9.61E-04	5.42E-04	4.34E-04	2.23E-04
2068	569689.2	4215308	0.006557	3.71E-03	1.00E-03	5.65E-04	4.52E-04	2.33E-04
2069	569692.6	4215299	0.006824	3.87E-03	1.04E-03	5.88E-04	4.70E-04	2.42E-04
2070	569695.9	4215291	0.007101	4.02E-03	1.08E-03	6.12E-04	4.89E-04	2.52E-04
2071	569699.2	4215282	0.00742	4.20E-03	1.13E-03	6.39E-04	5.11E-04	2.63E-04
2072	569702.6	4215273	0.007805	4.42E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
2073	569705.9	4215265	0.008239	4.67E-03	1.26E-03	7.10E-04	5.68E-04	2.92E-04
2074	569649.2	4215387	0.004629	2.62E-03	7.07E-04	3.99E-04	3.19E-04	1.64E-04
2075	569652.5	4215378	0.004785	2.71E-03	7.31E-04	4.12E-04	3.30E-04	1.70E-04
2076	569655.8	4215369	0.004967	2.81E-03	7.58E-04	4.28E-04	3.42E-04	1.76E-04

2077	569659.1	4215361	0.005153	2.92E-03	7.87E-04	4.44E-04	3.55E-04	1.83E-04
2078	569662.4	4215352	0.005325	3.02E-03	8.13E-04	4.59E-04	3.67E-04	1.89E-04
2079	569665.7	4215344	0.005498	3.11E-03	8.39E-04	4.74E-04	3.79E-04	1.95E-04
2080	569669	4215335	0.005701	3.23E-03	8.71E-04	4.91E-04	3.93E-04	2.02E-04
2081	569672.3	4215326	0.0059	3.34E-03	9.01E-04	5.08E-04	4.07E-04	2.09E-04
2082	569675.7	4215318	0.0061	3.46E-03	9.31E-04	5.26E-04	4.20E-04	2.16E-04
2083	569679	4215309	0.006358	3.60E-03	9.71E-04	5.48E-04	4.38E-04	2.26E-04
2084	569682.3	4215301	0.006634	3.76E-03	1.01E-03	5.72E-04	4.57E-04	2.35E-04
2085	569685.6	4215292	0.006916	3.92E-03	1.06E-03	5.96E-04	4.77E-04	2.45E-04
2086	569688.9	4215283	0.007212	4.09E-03	1.10E-03	6.21E-04	4.97E-04	2.56E-04
2087	569692.2	4215275	0.007564	4.29E-03	1.16E-03	6.52E-04	5.21E-04	2.68E-04
2088	569695.5	4215266	0.007978	4.52E-03	1.22E-03	6.87E-04	5.50E-04	2.83E-04
2089	569698.8	4215257	0.008454	4.79E-03	1.29E-03	7.28E-04	5.83E-04	3.00E-04
2090	569702.2	4215249	0.008963	5.08E-03	1.37E-03	7.72E-04	6.18E-04	3.18E-04
2091	569705.5	4215240	0.009536	5.40E-03	1.46E-03	8.22E-04	6.57E-04	3.38E-04
2092	569639.3	4215387	0.004463	2.53E-03	6.81E-04	3.85E-04	3.08E-04	1.58E-04
2093	569642.7	4215378	0.004628	2.62E-03	7.07E-04	3.99E-04	3.19E-04	1.64E-04
2094	569646.2	4215369	0.004823	2.73E-03	7.36E-04	4.16E-04	3.32E-04	1.71E-04
2095	569649.6	4215360	0.005021	2.84E-03	7.67E-04	4.33E-04	3.46E-04	1.78E-04
2096	569653.1	4215351	0.005206	2.95E-03	7.95E-04	4.49E-04	3.59E-04	1.85E-04
2097	569656.5	4215342	0.005402	3.06E-03	8.25E-04	4.65E-04	3.72E-04	1.92E-04
2098	569660	4215333	0.00561	3.18E-03	8.57E-04	4.83E-04	3.87E-04	1.99E-04
2099	569663.4	4215324	0.005806	3.29E-03	8.87E-04	5.00E-04	4.00E-04	2.06E-04
2100	569666.9	4215315	0.006011	3.41E-03	9.18E-04	5.18E-04	4.14E-04	2.13E-04
2101	569670.3	4215306	0.006304	3.57E-03	9.63E-04	5.43E-04	4.34E-04	2.24E-04
2102	569673.7	4215297	0.006609	3.74E-03	1.01E-03	5.69E-04	4.55E-04	2.34E-04
2103	569677.2	4215288	0.006923	3.92E-03	1.06E-03	5.97E-04	4.77E-04	2.46E-04
2104	569680.6	4215279	0.007255	4.11E-03	1.11E-03	6.25E-04	5.00E-04	2.57E-04
2105	569684.1	4215270	0.00763	4.32E-03	1.17E-03	6.57E-04	5.26E-04	2.71E-04
2106	569687.5	4215261	0.008066	4.57E-03	1.23E-03	6.95E-04	5.56E-04	2.86E-04
2107	569691	4215252	0.008553	4.85E-03	1.31E-03	7.37E-04	5.89E-04	3.03E-04
2108	569694.4	4215243	0.009093	5.15E-03	1.39E-03	7.83E-04	6.27E-04	3.23E-04
2109	569697.9	4215234	0.009697	5.49E-03	1.48E-03	8.36E-04	6.68E-04	3.44E-04
2110	569701.3	4215225	0.010302	5.84E-03	1.57E-03	8.88E-04	7.10E-04	3.65E-04
2111	569704.7	4215216	0.010402	5.89E-03	1.59E-03	8.96E-04	7.17E-04	3.69E-04
2112	569629.3	4215387	0.004305	2.44E-03	6.57E-04	3.71E-04	2.97E-04	1.53E-04
2113	569632.7	4215378	0.004466	2.53E-03	6.82E-04	3.85E-04	3.08E-04	1.58E-04
2114	569636.1	4215369	0.00466	2.64E-03	7.12E-04	4.01E-04	3.21E-04	1.65E-04
2115	569639.5	4215360	0.004859	2.75E-03	7.42E-04	4.19E-04	3.35E-04	1.72E-04
2116	569642.9	4215352	0.005051	2.86E-03	7.71E-04	4.35E-04	3.48E-04	1.79E-04
2117	569646.3	4215343	0.005251	2.97E-03	8.02E-04	4.52E-04	3.62E-04	1.86E-04
2118	569649.8	4215334	0.005464	3.10E-03	8.34E-04	4.71E-04	3.77E-04	1.94E-04
2119	569653.2	4215325	0.00567	3.21E-03	8.66E-04	4.89E-04	3.91E-04	2.01E-04
2120	569656.6	4215316	0.005861	3.32E-03	8.95E-04	5.05E-04	4.04E-04	2.08E-04
2121	569660	4215307	0.006138	3.48E-03	9.37E-04	5.29E-04	4.23E-04	2.18E-04
2122	569663.4	4215298	0.006437	3.65E-03	9.83E-04	5.55E-04	4.44E-04	2.28E-04
2123	569666.8	4215289	0.006769	3.83E-03	1.03E-03	5.83E-04	4.66E-04	2.40E-04
2124	569670.2	4215280	0.007094	4.02E-03	1.08E-03	6.11E-04	4.89E-04	2.52E-04
2125	569673.7	4215272	0.007439	4.21E-03	1.14E-03	6.41E-04	5.13E-04	2.64E-04
2126	569677.1	4215263	0.007834	4.44E-03	1.20E-03	6.75E-04	5.40E-04	2.78E-04
2127	569680.5	4215254	0.008274	4.69E-03	1.26E-03	7.13E-04	5.70E-04	2.93E-04
2128	569683.9	4215245	0.008727	4.94E-03	1.33E-03	7.52E-04	6.01E-04	3.10E-04

2129	569687.3	4215236	0.009262	5.25E-03	1.41E-03	7.98E-04	6.38E-04	3.29E-04
2130	569690.7	4215227	0.009877	5.60E-03	1.51E-03	8.51E-04	6.81E-04	3.50E-04
2131	569694.1	4215218	0.01001	5.67E-03	1.53E-03	8.63E-04	6.90E-04	3.55E-04
2132	569697.6	4215209	0.010066	5.70E-03	1.54E-03	8.67E-04	6.94E-04	3.57E-04
2133	569625.9	4215396	0.004142	2.35E-03	6.32E-04	3.57E-04	2.85E-04	1.47E-04
2134	569619.3	4215387	0.004163	2.36E-03	6.36E-04	3.59E-04	2.87E-04	1.48E-04
2135	569622.6	4215379	0.004324	2.45E-03	6.60E-04	3.73E-04	2.98E-04	1.53E-04
2136	569626	4215370	0.004508	2.55E-03	6.88E-04	3.88E-04	3.11E-04	1.60E-04
2137	569629.4	4215361	0.004705	2.67E-03	7.18E-04	4.05E-04	3.24E-04	1.67E-04
2138	569632.8	4215352	0.004902	2.78E-03	7.49E-04	4.22E-04	3.38E-04	1.74E-04
2139	569636.2	4215343	0.005104	2.89E-03	7.79E-04	4.40E-04	3.52E-04	1.81E-04
2140	569639.6	4215335	0.005328	3.02E-03	8.14E-04	4.59E-04	3.67E-04	1.89E-04
2141	569643	4215326	0.005544	3.14E-03	8.47E-04	4.78E-04	3.82E-04	1.97E-04
2142	569646.3	4215317	0.005749	3.26E-03	8.78E-04	4.95E-04	3.96E-04	2.04E-04
2143	569649.7	4215308	0.006017	3.41E-03	9.19E-04	5.18E-04	4.15E-04	2.13E-04
2144	569653.1	4215299	0.006311	3.58E-03	9.64E-04	5.44E-04	4.35E-04	2.24E-04
2145	569656.5	4215291	0.006632	3.76E-03	1.01E-03	5.71E-04	4.57E-04	2.35E-04
2146	569659.9	4215282	0.006952	3.94E-03	1.06E-03	5.99E-04	4.79E-04	2.47E-04
2147	569663.3	4215273	0.007269	4.12E-03	1.11E-03	6.26E-04	5.01E-04	2.58E-04
2148	569666.7	4215264	0.007628	4.32E-03	1.16E-03	6.57E-04	5.26E-04	2.71E-04
2149	569670.1	4215255	0.008028	4.55E-03	1.23E-03	6.92E-04	5.53E-04	2.85E-04
2150	569673.4	4215246	0.008405	4.76E-03	1.28E-03	7.24E-04	5.79E-04	2.98E-04
2151	569676.8	4215238	0.008843	5.01E-03	1.35E-03	7.62E-04	6.09E-04	3.14E-04
2152	569680.2	4215229	0.009352	5.30E-03	1.43E-03	8.06E-04	6.44E-04	3.32E-04
2153	569683.6	4215220	0.00952	5.39E-03	1.45E-03	8.20E-04	6.56E-04	3.38E-04
2154	569687	4215211	0.009552	5.41E-03	1.46E-03	8.23E-04	6.58E-04	3.39E-04
2155	569690.4	4215202	0.009615	5.45E-03	1.47E-03	8.29E-04	6.63E-04	3.41E-04
2156	569615.9	4215396	0.004001	2.27E-03	6.11E-04	3.45E-04	2.76E-04	1.42E-04
2157	569616.2	4215406	0.003879	2.20E-03	5.92E-04	3.34E-04	2.67E-04	1.38E-04
2158	569616.5	4215416	0.003774	2.14E-03	5.76E-04	3.25E-04	2.60E-04	1.34E-04
2159	569609.2	4215388	0.004028	2.28E-03	6.15E-04	3.47E-04	2.78E-04	1.43E-04
2160	569612.6	4215379	0.004187	2.37E-03	6.39E-04	3.61E-04	2.89E-04	1.49E-04
2161	569616	4215370	0.004366	2.47E-03	6.67E-04	3.76E-04	3.01E-04	1.55E-04
2162	569619.3	4215362	0.004558	2.58E-03	6.96E-04	3.93E-04	3.14E-04	1.62E-04
2163	569622.7	4215353	0.004752	2.69E-03	7.26E-04	4.09E-04	3.27E-04	1.69E-04
2164	569626	4215344	0.004955	2.81E-03	7.57E-04	4.27E-04	3.41E-04	1.76E-04
2165	569629.4	4215335	0.005189	2.94E-03	7.92E-04	4.47E-04	3.58E-04	1.84E-04
2166	569632.8	4215327	0.005425	3.07E-03	8.28E-04	4.67E-04	3.74E-04	1.92E-04
2167	569636.1	4215318	0.005651	3.20E-03	8.63E-04	4.87E-04	3.89E-04	2.00E-04
2168	569639.5	4215309	0.00591	3.35E-03	9.02E-04	5.09E-04	4.07E-04	2.10E-04
2169	569642.8	4215300	0.0062	3.51E-03	9.47E-04	5.34E-04	4.27E-04	2.20E-04
2170	569646.2	4215292	0.006514	3.69E-03	9.95E-04	5.61E-04	4.49E-04	2.31E-04
2171	569649.6	4215283	0.006828	3.87E-03	1.04E-03	5.88E-04	4.71E-04	2.42E-04
2172	569652.9	4215274	0.007119	4.03E-03	1.09E-03	6.13E-04	4.91E-04	2.53E-04
2173	569656.3	4215265	0.007442	4.22E-03	1.14E-03	6.41E-04	5.13E-04	2.64E-04
2174	569659.7	4215257	0.007806	4.42E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
2175	569663	4215248	0.008118	4.60E-03	1.24E-03	6.99E-04	5.59E-04	2.88E-04
2176	569666.4	4215239	0.008477	4.80E-03	1.29E-03	7.30E-04	5.84E-04	3.01E-04
2177	569669.7	4215230	0.008892	5.04E-03	1.36E-03	7.66E-04	6.13E-04	3.15E-04
2178	569673.1	4215222	0.009082	5.14E-03	1.39E-03	7.83E-04	6.26E-04	3.22E-04
2179	569676.5	4215213	0.009043	5.12E-03	1.38E-03	7.79E-04	6.23E-04	3.21E-04
2180	569679.8	4215204	0.009033	5.12E-03	1.38E-03	7.78E-04	6.23E-04	3.20E-04

2181	569683.2	4215195	0.009036	5.12E-03	1.38E-03	7.79E-04	6.23E-04	3.21E-04
2182	569695.1	4215183	0.009058	5.13E-03	1.38E-03	7.80E-04	6.24E-04	3.21E-04
2183	569605.9	4215397	0.003869	2.19E-03	5.91E-04	3.33E-04	2.67E-04	1.37E-04
2184	569606.2	4215406	0.003746	2.12E-03	5.72E-04	3.23E-04	2.58E-04	1.33E-04
2185	569606.5	4215416	0.003651	2.07E-03	5.58E-04	3.15E-04	2.52E-04	1.30E-04
2186	569606.8	4215426	0.003559	2.02E-03	5.43E-04	3.07E-04	2.45E-04	1.26E-04
2187	569599.2	4215388	0.003901	2.21E-03	5.96E-04	3.36E-04	2.69E-04	1.38E-04
2188	569602.6	4215379	0.004057	2.30E-03	6.19E-04	3.50E-04	2.80E-04	1.44E-04
2189	569605.9	4215371	0.00423	2.40E-03	6.46E-04	3.64E-04	2.92E-04	1.50E-04
2190	569609.2	4215362	0.004418	2.50E-03	6.75E-04	3.81E-04	3.04E-04	1.57E-04
2191	569612.6	4215353	0.004609	2.61E-03	7.04E-04	3.97E-04	3.18E-04	1.63E-04
2192	569615.9	4215345	0.004806	2.72E-03	7.34E-04	4.14E-04	3.31E-04	1.70E-04
2193	569619.2	4215336	0.005041	2.86E-03	7.70E-04	4.34E-04	3.47E-04	1.79E-04
2194	569622.6	4215327	0.005282	2.99E-03	8.07E-04	4.55E-04	3.64E-04	1.87E-04
2195	569625.9	4215319	0.005525	3.13E-03	8.44E-04	4.76E-04	3.81E-04	1.96E-04
2196	569629.3	4215310	0.005795	3.28E-03	8.85E-04	4.99E-04	3.99E-04	2.06E-04
2197	569632.6	4215301	0.006096	3.45E-03	9.31E-04	5.25E-04	4.20E-04	2.16E-04
2198	569635.9	4215293	0.00641	3.63E-03	9.79E-04	5.52E-04	4.42E-04	2.27E-04
2199	569639.3	4215284	0.00672	3.81E-03	1.03E-03	5.79E-04	4.63E-04	2.38E-04
2200	569642.6	4215275	0.006982	3.96E-03	1.07E-03	6.02E-04	4.81E-04	2.48E-04
2201	569646	4215267	0.007274	4.12E-03	1.11E-03	6.27E-04	5.01E-04	2.58E-04
2202	569649.3	4215258	0.007597	4.30E-03	1.16E-03	6.55E-04	5.24E-04	2.69E-04
2203	569652.6	4215249	0.007838	4.44E-03	1.20E-03	6.75E-04	5.40E-04	2.78E-04
2204	569656	4215241	0.008106	4.59E-03	1.24E-03	6.98E-04	5.59E-04	2.88E-04
2205	569659.3	4215232	0.008441	4.78E-03	1.29E-03	7.27E-04	5.82E-04	2.99E-04
2206	569662.6	4215223	0.008679	4.92E-03	1.33E-03	7.48E-04	5.98E-04	3.08E-04
2207	569666	4215214	0.008593	4.87E-03	1.31E-03	7.40E-04	5.92E-04	3.05E-04
2208	569669.3	4215206	0.008526	4.83E-03	1.30E-03	7.35E-04	5.88E-04	3.02E-04
2209	569672.7	4215197	0.008486	4.81E-03	1.30E-03	7.31E-04	5.85E-04	3.01E-04
2210	569676	4215188	0.008356	4.73E-03	1.28E-03	7.20E-04	5.76E-04	2.96E-04
2211	569687.9	4215176	0.008375	4.74E-03	1.28E-03	7.22E-04	5.77E-04	2.97E-04
2212	569595.9	4215397	0.003749	2.12E-03	5.72E-04	3.23E-04	2.58E-04	1.33E-04
2213	569596.2	4215407	0.003629	2.06E-03	5.54E-04	3.13E-04	2.50E-04	1.29E-04
2214	569596.5	4215416	0.003539	2.01E-03	5.40E-04	3.05E-04	2.44E-04	1.26E-04
2215	569596.8	4215426	0.003452	1.96E-03	5.27E-04	2.97E-04	2.38E-04	1.22E-04
2216	569597.1	4215435	0.003367	1.91E-03	5.14E-04	2.90E-04	2.32E-04	1.19E-04
2217	569589.3	4215388	0.003789	2.15E-03	5.79E-04	3.26E-04	2.61E-04	1.34E-04
2218	569592.8	4215379	0.003946	2.24E-03	6.03E-04	3.40E-04	2.72E-04	1.40E-04
2219	569596.2	4215370	0.004122	2.34E-03	6.29E-04	3.55E-04	2.84E-04	1.46E-04
2220	569599.7	4215361	0.004313	2.44E-03	6.59E-04	3.72E-04	2.97E-04	1.53E-04
2221	569603.1	4215352	0.004509	2.55E-03	6.89E-04	3.89E-04	3.11E-04	1.60E-04
2222	569606.6	4215343	0.004721	2.67E-03	7.21E-04	4.07E-04	3.25E-04	1.67E-04
2223	569610	4215334	0.004967	2.81E-03	7.59E-04	4.28E-04	3.42E-04	1.76E-04
2224	569613.5	4215325	0.005224	2.96E-03	7.98E-04	4.50E-04	3.60E-04	1.85E-04
2225	569616.9	4215316	0.005488	3.11E-03	8.38E-04	4.73E-04	3.78E-04	1.95E-04
2226	569620.4	4215307	0.005772	3.27E-03	8.81E-04	4.97E-04	3.98E-04	2.05E-04
2227	569623.8	4215298	0.006081	3.45E-03	9.29E-04	5.24E-04	4.19E-04	2.16E-04
2228	569627.3	4215289	0.006421	3.64E-03	9.80E-04	5.53E-04	4.42E-04	2.28E-04
2229	569630.7	4215281	0.006708	3.80E-03	1.02E-03	5.78E-04	4.62E-04	2.38E-04
2230	569634.2	4215272	0.007005	3.97E-03	1.07E-03	6.04E-04	4.83E-04	2.48E-04
2231	569637.6	4215263	0.007289	4.13E-03	1.11E-03	6.28E-04	5.02E-04	2.59E-04
2232	569641.1	4215254	0.007548	4.28E-03	1.15E-03	6.50E-04	5.20E-04	2.68E-04

2233	569644.5	4215245	0.007709	4.37E-03	1.18E-03	6.64E-04	5.31E-04	2.73E-04
2234	569648	4215236	0.007924	4.49E-03	1.21E-03	6.83E-04	5.46E-04	2.81E-04
2235	569651.4	4215227	0.008203	4.65E-03	1.25E-03	7.07E-04	5.65E-04	2.91E-04
2236	569654.9	4215218	0.008202	4.65E-03	1.25E-03	7.07E-04	5.65E-04	2.91E-04
2237	569658.3	4215209	0.008139	4.61E-03	1.24E-03	7.01E-04	5.61E-04	2.89E-04
2238	569661.8	4215200	0.008032	4.55E-03	1.23E-03	6.92E-04	5.54E-04	2.85E-04
2239	569665.2	4215191	0.007921	4.49E-03	1.21E-03	6.82E-04	5.46E-04	2.81E-04
2240	569668.7	4215182	0.007813	4.43E-03	1.19E-03	6.73E-04	5.38E-04	2.77E-04
2241	569680.9	4215169	0.007835	4.44E-03	1.20E-03	6.75E-04	5.40E-04	2.78E-04
2242	569585.9	4215397	0.003636	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
2243	569586.2	4215407	0.00352	1.99E-03	5.38E-04	3.03E-04	2.43E-04	1.25E-04
2244	569586.5	4215416	0.003435	1.95E-03	5.24E-04	2.96E-04	2.37E-04	1.22E-04
2245	569586.8	4215426	0.003351	1.90E-03	5.12E-04	2.89E-04	2.31E-04	1.19E-04
2246	569587.1	4215436	0.003269	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
2247	569918.2	4215544	0.005545	3.14E-03	8.47E-04	4.78E-04	3.82E-04	1.97E-04
2248	569927.5	4215543	0.005642	3.20E-03	8.61E-04	4.86E-04	3.89E-04	2.00E-04
2249	569936.8	4215541	0.005746	3.26E-03	8.77E-04	4.95E-04	3.96E-04	2.04E-04
2250	569946.1	4215539	0.005858	3.32E-03	8.95E-04	5.05E-04	4.04E-04	2.08E-04
2251	569955.4	4215538	0.005983	3.39E-03	9.14E-04	5.16E-04	4.12E-04	2.12E-04
2252	569964.8	4215536	0.006122	3.47E-03	9.35E-04	5.28E-04	4.22E-04	2.17E-04
2253	569974.1	4215534	0.00628	3.56E-03	9.59E-04	5.41E-04	4.33E-04	2.23E-04
2254	569983.4	4215533	0.006455	3.66E-03	9.86E-04	5.56E-04	4.45E-04	2.29E-04
2255	569992.7	4215531	0.006646	3.77E-03	1.01E-03	5.73E-04	4.58E-04	2.36E-04
2256	570002	4215529	0.006848	3.88E-03	1.05E-03	5.90E-04	4.72E-04	2.43E-04
2257	570011.3	4215527	0.007056	4.00E-03	1.08E-03	6.08E-04	4.86E-04	2.50E-04
2258	570020.6	4215526	0.007264	4.12E-03	1.11E-03	6.26E-04	5.01E-04	2.58E-04
2259	569911.2	4215552	0.005191	2.94E-03	7.93E-04	4.47E-04	3.58E-04	1.84E-04
2260	569902.5	4215550	0.005279	2.99E-03	8.06E-04	4.55E-04	3.64E-04	1.87E-04
2261	569929.3	4215552	0.005181	2.94E-03	7.91E-04	4.46E-04	3.57E-04	1.84E-04
2262	569938.6	4215551	0.005266	2.98E-03	8.04E-04	4.54E-04	3.63E-04	1.87E-04
2263	569947.9	4215549	0.005359	3.04E-03	8.18E-04	4.62E-04	3.69E-04	1.90E-04
2264	569957.2	4215547	0.00546	3.09E-03	8.34E-04	4.70E-04	3.76E-04	1.94E-04
2265	569966.5	4215546	0.005573	3.16E-03	8.51E-04	4.80E-04	3.84E-04	1.98E-04
2266	569975.8	4215544	0.005699	3.23E-03	8.70E-04	4.91E-04	3.93E-04	2.02E-04
2267	569985.2	4215542	0.00584	3.31E-03	8.92E-04	5.03E-04	4.02E-04	2.07E-04
2268	569994.5	4215541	0.005994	3.40E-03	9.15E-04	5.17E-04	4.13E-04	2.13E-04
2269	570003.8	4215539	0.00616	3.49E-03	9.41E-04	5.31E-04	4.24E-04	2.18E-04
2270	570013.1	4215537	0.006327	3.58E-03	9.66E-04	5.45E-04	4.36E-04	2.24E-04
2271	570022.4	4215536	0.006492	3.68E-03	9.91E-04	5.59E-04	4.47E-04	2.30E-04
2272	569913	4215562	0.004787	2.71E-03	7.31E-04	4.13E-04	3.30E-04	1.70E-04
2273	569895.7	4215557	0.004955	2.81E-03	7.57E-04	4.27E-04	3.41E-04	1.76E-04
2274	569878.3	4215553	0.005116	2.90E-03	7.81E-04	4.41E-04	3.53E-04	1.81E-04
2275	569921.7	4215564	0.004703	2.66E-03	7.18E-04	4.05E-04	3.24E-04	1.67E-04
2276	569931	4215562	0.00477	2.70E-03	7.28E-04	4.11E-04	3.29E-04	1.69E-04
2277	569940.3	4215561	0.004841	2.74E-03	7.39E-04	4.17E-04	3.34E-04	1.72E-04
2278	569949.7	4215559	0.004918	2.79E-03	7.51E-04	4.24E-04	3.39E-04	1.74E-04
2279	569959	4215557	0.005002	2.83E-03	7.64E-04	4.31E-04	3.45E-04	1.77E-04
2280	569968.3	4215556	0.005095	2.89E-03	7.78E-04	4.39E-04	3.51E-04	1.81E-04
2281	569977.6	4215554	0.005198	2.94E-03	7.94E-04	4.48E-04	3.58E-04	1.84E-04
2282	569986.9	4215552	0.005313	3.01E-03	8.11E-04	4.58E-04	3.66E-04	1.88E-04
2283	569996.2	4215551	0.005433	3.08E-03	8.30E-04	4.68E-04	3.74E-04	1.93E-04
2284	570005.6	4215549	0.00556	3.15E-03	8.49E-04	4.79E-04	3.83E-04	1.97E-04

2285	570014.9	4215547	0.005692	3.22E-03	8.69E-04	4.90E-04	3.92E-04	2.02E-04
2286	570024.2	4215546	0.005829	3.30E-03	8.90E-04	5.02E-04	4.02E-04	2.07E-04
2287	570033.5	4215544	0.005947	3.37E-03	9.08E-04	5.12E-04	4.10E-04	2.11E-04
2288	569914.8	4215572	0.004426	2.51E-03	6.76E-04	3.81E-04	3.05E-04	1.57E-04
2289	569897.6	4215567	0.004583	2.60E-03	7.00E-04	3.95E-04	3.16E-04	1.63E-04
2290	569880.3	4215563	0.004736	2.68E-03	7.23E-04	4.08E-04	3.26E-04	1.68E-04
2291	569863	4215558	0.004883	2.77E-03	7.46E-04	4.21E-04	3.36E-04	1.73E-04
2292	569923.5	4215574	0.004348	2.46E-03	6.64E-04	3.75E-04	3.00E-04	1.54E-04
2293	569932.8	4215572	0.004404	2.50E-03	6.73E-04	3.80E-04	3.04E-04	1.56E-04
2294	569942.1	4215570	0.004465	2.53E-03	6.82E-04	3.85E-04	3.08E-04	1.58E-04
2295	569951.4	4215569	0.004529	2.57E-03	6.92E-04	3.90E-04	3.12E-04	1.61E-04
2296	569960.7	4215567	0.004599	2.61E-03	7.02E-04	3.96E-04	3.17E-04	1.63E-04
2297	569970.1	4215565	0.004677	2.65E-03	7.14E-04	4.03E-04	3.22E-04	1.66E-04
2298	569979.4	4215564	0.004758	2.70E-03	7.27E-04	4.10E-04	3.28E-04	1.69E-04
2299	569988.7	4215562	0.004846	2.75E-03	7.40E-04	4.18E-04	3.34E-04	1.72E-04
2300	569998	4215560	0.00494	2.80E-03	7.54E-04	4.26E-04	3.40E-04	1.75E-04
2301	570007.3	4215559	0.005043	2.86E-03	7.70E-04	4.35E-04	3.48E-04	1.79E-04
2302	570016.6	4215557	0.005152	2.92E-03	7.87E-04	4.44E-04	3.55E-04	1.83E-04
2303	570026	4215555	0.005263	2.98E-03	8.04E-04	4.54E-04	3.63E-04	1.87E-04
2304	569916.7	4215581	0.0041	2.32E-03	6.26E-04	3.53E-04	2.83E-04	1.45E-04
2305	569899.4	4215577	0.004247	2.41E-03	6.49E-04	3.66E-04	2.93E-04	1.51E-04
2306	569882.2	4215573	0.004393	2.49E-03	6.71E-04	3.79E-04	3.03E-04	1.56E-04
2307	569865	4215568	0.004534	2.57E-03	6.92E-04	3.91E-04	3.12E-04	1.61E-04
2308	569847.8	4215564	0.004666	2.64E-03	7.13E-04	4.02E-04	3.22E-04	1.66E-04
2309	569830.6	4215559	0.0046	2.61E-03	7.02E-04	3.96E-04	3.17E-04	1.63E-04
2310	569934.6	4215582	0.004075	2.31E-03	6.22E-04	3.51E-04	2.81E-04	1.45E-04
2311	569943.9	4215580	0.004127	2.34E-03	6.30E-04	3.56E-04	2.84E-04	1.46E-04
2312	569953.2	4215579	0.004182	2.37E-03	6.39E-04	3.60E-04	2.88E-04	1.48E-04
2313	569962.5	4215577	0.004242	2.40E-03	6.48E-04	3.66E-04	2.92E-04	1.50E-04
2314	569971.8	4215575	0.004303	2.44E-03	6.57E-04	3.71E-04	2.96E-04	1.53E-04
2315	569981.1	4215574	0.004368	2.47E-03	6.67E-04	3.76E-04	3.01E-04	1.55E-04
2316	569990.5	4215572	0.00444	2.52E-03	6.78E-04	3.83E-04	3.06E-04	1.57E-04
2317	569999.8	4215570	0.004518	2.56E-03	6.90E-04	3.89E-04	3.11E-04	1.60E-04
2318	570009.1	4215569	0.004604	2.61E-03	7.03E-04	3.97E-04	3.17E-04	1.63E-04
2319	570065	4215558	0.005191	2.94E-03	7.93E-04	4.47E-04	3.58E-04	1.84E-04
2320	570074.3	4215557	0.005332	3.02E-03	8.14E-04	4.59E-04	3.67E-04	1.89E-04
2321	570083.6	4215555	0.005485	3.11E-03	8.38E-04	4.73E-04	3.78E-04	1.95E-04
2322	569917.9	4215591	0.003808	2.16E-03	5.81E-04	3.28E-04	2.62E-04	1.35E-04
2323	569908.7	4215589	0.003879	2.20E-03	5.92E-04	3.34E-04	2.67E-04	1.38E-04
2324	569899.6	4215586	0.003954	2.24E-03	6.04E-04	3.41E-04	2.72E-04	1.40E-04
2325	569890.5	4215584	0.004032	2.28E-03	6.16E-04	3.47E-04	2.78E-04	1.43E-04
2326	569881.3	4215582	0.004104	2.33E-03	6.27E-04	3.54E-04	2.83E-04	1.46E-04
2327	569872.2	4215579	0.004176	2.37E-03	6.38E-04	3.60E-04	2.88E-04	1.48E-04
2328	569863	4215577	0.004247	2.41E-03	6.48E-04	3.66E-04	2.93E-04	1.51E-04
2329	569853.9	4215575	0.004315	2.44E-03	6.59E-04	3.72E-04	2.97E-04	1.53E-04
2330	569844.8	4215572	0.004382	2.48E-03	6.69E-04	3.78E-04	3.02E-04	1.55E-04
2331	569835.6	4215570	0.004286	2.43E-03	6.54E-04	3.69E-04	2.95E-04	1.52E-04
2332	569826.5	4215568	0.004326	2.45E-03	6.61E-04	3.73E-04	2.98E-04	1.53E-04
2333	569817.3	4215565	0.004368	2.47E-03	6.67E-04	3.76E-04	3.01E-04	1.55E-04
2334	569808.2	4215563	0.004408	2.50E-03	6.73E-04	3.80E-04	3.04E-04	1.56E-04
2335	569927	4215593	0.003737	2.12E-03	5.71E-04	3.22E-04	2.57E-04	1.33E-04
2336	569936.3	4215592	0.003778	2.14E-03	5.77E-04	3.26E-04	2.60E-04	1.34E-04

2337	569945.7	4215590	0.003822	2.17E-03	5.84E-04	3.29E-04	2.63E-04	1.36E-04
2338	569955	4215588	0.00387	2.19E-03	5.91E-04	3.33E-04	2.67E-04	1.37E-04
2339	569964.3	4215587	0.003922	2.22E-03	5.99E-04	3.38E-04	2.70E-04	1.39E-04
2340	569973.6	4215585	0.003971	2.25E-03	6.06E-04	3.42E-04	2.74E-04	1.41E-04
2341	569982.9	4215583	0.004026	2.28E-03	6.15E-04	3.47E-04	2.77E-04	1.43E-04
2342	569992.2	4215582	0.004086	2.31E-03	6.24E-04	3.52E-04	2.82E-04	1.45E-04
2343	570048.1	4215572	0.004554	2.58E-03	6.95E-04	3.92E-04	3.14E-04	1.62E-04
2344	570057.4	4215570	0.00465	2.63E-03	7.10E-04	4.01E-04	3.20E-04	1.65E-04
2345	570066.8	4215568	0.004768	2.70E-03	7.28E-04	4.11E-04	3.29E-04	1.69E-04
2346	570076.1	4215567	0.004897	2.77E-03	7.48E-04	4.22E-04	3.37E-04	1.74E-04
2347	570085.4	4215565	0.005034	2.85E-03	7.69E-04	4.34E-04	3.47E-04	1.79E-04
2348	569919.7	4215601	0.003546	2.01E-03	5.41E-04	3.06E-04	2.44E-04	1.26E-04
2349	569910.6	4215599	0.003612	2.05E-03	5.52E-04	3.11E-04	2.49E-04	1.28E-04
2350	569901.6	4215596	0.00368	2.08E-03	5.62E-04	3.17E-04	2.54E-04	1.31E-04
2351	569892.5	4215594	0.003751	2.12E-03	5.73E-04	3.23E-04	2.58E-04	1.33E-04
2352	569883.4	4215592	0.00382	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.36E-04
2353	569874.4	4215589	0.003887	2.20E-03	5.94E-04	3.35E-04	2.68E-04	1.38E-04
2354	569865.3	4215587	0.003954	2.24E-03	6.04E-04	3.41E-04	2.72E-04	1.40E-04
2355	569856.2	4215585	0.00402	2.28E-03	6.14E-04	3.46E-04	2.77E-04	1.43E-04
2356	569847.1	4215582	0.004084	2.31E-03	6.24E-04	3.52E-04	2.81E-04	1.45E-04
2357	569838.1	4215580	0.004146	2.35E-03	6.33E-04	3.57E-04	2.86E-04	1.47E-04
2358	569829	4215578	0.004047	2.29E-03	6.18E-04	3.49E-04	2.79E-04	1.44E-04
2359	569819.9	4215575	0.004082	2.31E-03	6.23E-04	3.52E-04	2.81E-04	1.45E-04
2360	569810.8	4215573	0.00412	2.33E-03	6.29E-04	3.55E-04	2.84E-04	1.46E-04
2361	569801.8	4215571	0.004159	2.36E-03	6.35E-04	3.58E-04	2.87E-04	1.48E-04
2362	569792.7	4215568	0.004194	2.38E-03	6.40E-04	3.61E-04	2.89E-04	1.49E-04
2363	569928.8	4215603	0.00348	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
2364	569938.1	4215602	0.003516	1.99E-03	5.37E-04	3.03E-04	2.42E-04	1.25E-04
2365	569947.4	4215600	0.003555	2.01E-03	5.43E-04	3.06E-04	2.45E-04	1.26E-04
2366	569956.7	4215598	0.003597	2.04E-03	5.49E-04	3.10E-04	2.48E-04	1.28E-04
2367	569966.1	4215597	0.003641	2.06E-03	5.56E-04	3.14E-04	2.51E-04	1.29E-04
2368	569975.4	4215595	0.003684	2.09E-03	5.62E-04	3.17E-04	2.54E-04	1.31E-04
2369	570031.3	4215585	0.00404	2.29E-03	6.17E-04	3.48E-04	2.78E-04	1.43E-04
2370	570040.6	4215583	0.004118	2.33E-03	6.29E-04	3.55E-04	2.84E-04	1.46E-04
2371	570049.9	4215582	0.0042	2.38E-03	6.41E-04	3.62E-04	2.89E-04	1.49E-04
2372	570059.2	4215580	0.004294	2.43E-03	6.56E-04	3.70E-04	2.96E-04	1.52E-04
2373	570068.5	4215578	0.004401	2.49E-03	6.72E-04	3.79E-04	3.03E-04	1.56E-04
2374	570077.8	4215576	0.004516	2.56E-03	6.90E-04	3.89E-04	3.11E-04	1.60E-04
2375	570087.2	4215575	0.00464	2.63E-03	7.09E-04	4.00E-04	3.20E-04	1.65E-04
2376	569921.6	4215611	0.00331	1.88E-03	5.05E-04	2.85E-04	2.28E-04	1.17E-04
2377	569912.5	4215609	0.003371	1.91E-03	5.15E-04	2.90E-04	2.32E-04	1.20E-04
2378	569903.5	4215606	0.003434	1.95E-03	5.24E-04	2.96E-04	2.37E-04	1.22E-04
2379	569894.5	4215604	0.003497	1.98E-03	5.34E-04	3.01E-04	2.41E-04	1.24E-04
2380	569885.5	4215602	0.003562	2.02E-03	5.44E-04	3.07E-04	2.45E-04	1.26E-04
2381	569876.5	4215599	0.003626	2.05E-03	5.54E-04	3.12E-04	2.50E-04	1.29E-04
2382	569867.5	4215597	0.003688	2.09E-03	5.63E-04	3.18E-04	2.54E-04	1.31E-04
2383	569858.5	4215595	0.003751	2.13E-03	5.73E-04	3.23E-04	2.58E-04	1.33E-04
2384	569849.4	4215592	0.003812	2.16E-03	5.82E-04	3.28E-04	2.63E-04	1.35E-04
2385	569840.4	4215590	0.003872	2.19E-03	5.91E-04	3.34E-04	2.67E-04	1.37E-04
2386	569831.4	4215588	0.00393	2.23E-03	6.00E-04	3.39E-04	2.71E-04	1.39E-04
2387	569822.4	4215585	0.003824	2.17E-03	5.84E-04	3.30E-04	2.64E-04	1.36E-04
2388	569813.4	4215583	0.003855	2.18E-03	5.89E-04	3.32E-04	2.66E-04	1.37E-04

2389	569804.4	4215581	0.003895	2.21E-03	5.95E-04	3.36E-04	2.68E-04	1.38E-04
2390	569795.4	4215578	0.003933	2.23E-03	6.01E-04	3.39E-04	2.71E-04	1.39E-04
2391	569786.3	4215576	0.003968	2.25E-03	6.06E-04	3.42E-04	2.73E-04	1.41E-04
2392	569930.6	4215613	0.00325	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
2393	569939.9	4215611	0.003282	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
2394	569949.2	4215610	0.003316	1.88E-03	5.06E-04	2.86E-04	2.29E-04	1.18E-04
2395	570005.1	4215600	0.003566	2.02E-03	5.44E-04	3.07E-04	2.46E-04	1.26E-04
2396	570014.4	4215598	0.003618	2.05E-03	5.52E-04	3.12E-04	2.49E-04	1.28E-04
2397	570023.7	4215596	0.003676	2.08E-03	5.61E-04	3.17E-04	2.53E-04	1.30E-04
2398	570033	4215595	0.003745	2.12E-03	5.72E-04	3.23E-04	2.58E-04	1.33E-04
2399	570042.3	4215593	0.003819	2.16E-03	5.83E-04	3.29E-04	2.63E-04	1.35E-04
2400	570051.7	4215591	0.003898	2.21E-03	5.95E-04	3.36E-04	2.69E-04	1.38E-04
2401	570061	4215590	0.003985	2.26E-03	6.08E-04	3.43E-04	2.75E-04	1.41E-04
2402	570070.3	4215588	0.00408	2.31E-03	6.23E-04	3.52E-04	2.81E-04	1.45E-04
2403	570079.6	4215586	0.004182	2.37E-03	6.39E-04	3.60E-04	2.88E-04	1.48E-04
2404	570088.9	4215585	0.004295	2.43E-03	6.56E-04	3.70E-04	2.96E-04	1.52E-04
2405	569923.4	4215621	0.0031	1.76E-03	4.73E-04	2.67E-04	2.14E-04	1.10E-04
2406	569914.4	4215618	0.003155	1.79E-03	4.82E-04	2.72E-04	2.17E-04	1.12E-04
2407	569905.5	4215616	0.003212	1.82E-03	4.90E-04	2.77E-04	2.21E-04	1.14E-04
2408	569896.5	4215614	0.003269	1.85E-03	4.99E-04	2.82E-04	2.25E-04	1.16E-04
2409	569887.5	4215611	0.003327	1.88E-03	5.08E-04	2.87E-04	2.29E-04	1.18E-04
2410	569878.6	4215609	0.003386	1.92E-03	5.17E-04	2.92E-04	2.33E-04	1.20E-04
2411	569869.6	4215607	0.003447	1.95E-03	5.26E-04	2.97E-04	2.38E-04	1.22E-04
2412	569860.6	4215605	0.003506	1.99E-03	5.35E-04	3.02E-04	2.42E-04	1.24E-04
2413	569851.7	4215602	0.003564	2.02E-03	5.44E-04	3.07E-04	2.46E-04	1.26E-04
2414	569842.7	4215600	0.003621	2.05E-03	5.53E-04	3.12E-04	2.50E-04	1.28E-04
2415	569833.8	4215598	0.003677	2.08E-03	5.62E-04	3.17E-04	2.53E-04	1.30E-04
2416	569824.8	4215595	0.003732	2.11E-03	5.70E-04	3.22E-04	2.57E-04	1.32E-04
2417	569815.8	4215593	0.003623	2.05E-03	5.53E-04	3.12E-04	2.50E-04	1.28E-04
2418	569806.9	4215591	0.003656	2.07E-03	5.58E-04	3.15E-04	2.52E-04	1.30E-04
2419	569797.9	4215588	0.003692	2.09E-03	5.64E-04	3.18E-04	2.54E-04	1.31E-04
2420	569789	4215586	0.003728	2.11E-03	5.69E-04	3.21E-04	2.57E-04	1.32E-04
2421	569932.3	4215623	0.003047	1.73E-03	4.65E-04	2.63E-04	2.10E-04	1.08E-04
2422	569988.2	4215613	0.003245	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
2423	569997.5	4215611	0.003286	1.86E-03	5.02E-04	2.83E-04	2.26E-04	1.17E-04
2424	570006.9	4215610	0.003326	1.88E-03	5.08E-04	2.87E-04	2.29E-04	1.18E-04
2425	570016.2	4215608	0.003371	1.91E-03	5.15E-04	2.90E-04	2.32E-04	1.20E-04
2426	570025.5	4215606	0.003422	1.94E-03	5.23E-04	2.95E-04	2.36E-04	1.21E-04
2427	570034.8	4215605	0.003489	1.98E-03	5.33E-04	3.01E-04	2.40E-04	1.24E-04
2428	570044.1	4215603	0.003561	2.02E-03	5.44E-04	3.07E-04	2.45E-04	1.26E-04
2429	570053.4	4215601	0.003637	2.06E-03	5.55E-04	3.13E-04	2.51E-04	1.29E-04
2430	570062.7	4215600	0.003719	2.11E-03	5.68E-04	3.20E-04	2.56E-04	1.32E-04
2431	570072.1	4215598	0.003808	2.16E-03	5.81E-04	3.28E-04	2.62E-04	1.35E-04
2432	570081.4	4215596	0.003903	2.21E-03	5.96E-04	3.36E-04	2.69E-04	1.38E-04
2433	570090.7	4215595	0.004008	2.27E-03	6.12E-04	3.45E-04	2.76E-04	1.42E-04
2434	569925.2	4215631	0.002914	1.65E-03	4.45E-04	2.51E-04	2.01E-04	1.03E-04
2435	569916.3	4215628	0.002963	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
2436	569907.4	4215626	0.003014	1.71E-03	4.60E-04	2.60E-04	2.08E-04	1.07E-04
2437	569898.5	4215624	0.003066	1.74E-03	4.68E-04	2.64E-04	2.11E-04	1.09E-04
2438	569889.5	4215621	0.003118	1.77E-03	4.76E-04	2.69E-04	2.15E-04	1.11E-04
2439	569880.6	4215619	0.00317	1.80E-03	4.84E-04	2.73E-04	2.18E-04	1.12E-04
2440	569871.7	4215617	0.003224	1.83E-03	4.92E-04	2.78E-04	2.22E-04	1.14E-04

2441	569862.8	4215615	0.003282	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
2442	569853.9	4215612	0.003337	1.89E-03	5.10E-04	2.88E-04	2.30E-04	1.18E-04
2443	569845	4215610	0.003392	1.92E-03	5.18E-04	2.92E-04	2.34E-04	1.20E-04
2444	569836.1	4215608	0.003445	1.95E-03	5.26E-04	2.97E-04	2.37E-04	1.22E-04
2445	569827.1	4215605	0.003497	1.98E-03	5.34E-04	3.01E-04	2.41E-04	1.24E-04
2446	569818.2	4215603	0.003414	1.93E-03	5.21E-04	2.94E-04	2.35E-04	1.21E-04
2447	569809.3	4215601	0.003443	1.95E-03	5.26E-04	2.97E-04	2.37E-04	1.22E-04
2448	569800.4	4215598	0.003476	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
2449	569791.5	4215596	0.00351	1.99E-03	5.36E-04	3.02E-04	2.42E-04	1.24E-04
2450	569971.4	4215626	0.002971	1.68E-03	4.54E-04	2.56E-04	2.05E-04	1.05E-04
2451	569980.7	4215624	0.003004	1.70E-03	4.59E-04	2.59E-04	2.07E-04	1.07E-04
2452	569990	4215623	0.003041	1.72E-03	4.64E-04	2.62E-04	2.10E-04	1.08E-04
2453	569999.3	4215621	0.003077	1.74E-03	4.70E-04	2.65E-04	2.12E-04	1.09E-04
2454	570008.6	4215619	0.003114	1.76E-03	4.76E-04	2.68E-04	2.15E-04	1.10E-04
2455	570017.9	4215618	0.003153	1.79E-03	4.81E-04	2.72E-04	2.17E-04	1.12E-04
2456	570027.3	4215616	0.0032	1.81E-03	4.89E-04	2.76E-04	2.21E-04	1.14E-04
2457	570036.6	4215614	0.003264	1.85E-03	4.98E-04	2.81E-04	2.25E-04	1.16E-04
2458	570045.9	4215613	0.003334	1.89E-03	5.09E-04	2.87E-04	2.30E-04	1.18E-04
2459	570055.2	4215611	0.003407	1.93E-03	5.20E-04	2.94E-04	2.35E-04	1.21E-04
2460	570064.5	4215609	0.003483	1.97E-03	5.32E-04	3.00E-04	2.40E-04	1.24E-04
2461	570073.8	4215608	0.003565	2.02E-03	5.44E-04	3.07E-04	2.46E-04	1.26E-04
2462	570083.2	4215606	0.003654	2.07E-03	5.58E-04	3.15E-04	2.52E-04	1.30E-04
2463	570092.5	4215604	0.003755	2.13E-03	5.73E-04	3.24E-04	2.59E-04	1.33E-04
2464	569909.3	4215636	0.002835	1.61E-03	4.33E-04	2.44E-04	1.95E-04	1.01E-04
2465	569900.4	4215634	0.002883	1.63E-03	4.40E-04	2.48E-04	1.99E-04	1.02E-04
2466	569891.5	4215631	0.00293	1.66E-03	4.47E-04	2.53E-04	2.02E-04	1.04E-04
2467	569882.6	4215629	0.002979	1.69E-03	4.55E-04	2.57E-04	2.05E-04	1.06E-04
2468	569873.8	4215627	0.003028	1.72E-03	4.62E-04	2.61E-04	2.09E-04	1.07E-04
2469	569864.9	4215624	0.00308	1.74E-03	4.70E-04	2.65E-04	2.12E-04	1.09E-04
2470	569856	4215622	0.00313	1.77E-03	4.78E-04	2.70E-04	2.16E-04	1.11E-04
2471	569847.2	4215620	0.003182	1.80E-03	4.86E-04	2.74E-04	2.19E-04	1.13E-04
2472	569838.3	4215618	0.003232	1.83E-03	4.93E-04	2.78E-04	2.23E-04	1.15E-04
2473	569829.4	4215615	0.003282	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
2474	569820.5	4215613	0.003331	1.89E-03	5.09E-04	2.87E-04	2.30E-04	1.18E-04
2475	569811.7	4215611	0.00325	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
2476	569802.8	4215608	0.003279	1.86E-03	5.01E-04	2.83E-04	2.26E-04	1.16E-04
2477	569945.2	4215641	0.002721	1.54E-03	4.16E-04	2.34E-04	1.88E-04	9.65E-05
2478	569954.5	4215639	0.002742	1.55E-03	4.19E-04	2.36E-04	1.89E-04	9.73E-05
2479	569963.8	4215638	0.002766	1.57E-03	4.22E-04	2.38E-04	1.91E-04	9.81E-05
2480	569973.1	4215636	0.002793	1.58E-03	4.26E-04	2.41E-04	1.92E-04	9.91E-05
2481	569982.5	4215634	0.002823	1.60E-03	4.31E-04	2.43E-04	1.95E-04	1.00E-04
2482	569991.8	4215633	0.002856	1.62E-03	4.36E-04	2.46E-04	1.97E-04	1.01E-04
2483	570001.1	4215631	0.002891	1.64E-03	4.41E-04	2.49E-04	1.99E-04	1.03E-04
2484	570010.4	4215629	0.002929	1.66E-03	4.47E-04	2.52E-04	2.02E-04	1.04E-04
2485	570019.7	4215628	0.002969	1.68E-03	4.53E-04	2.56E-04	2.05E-04	1.05E-04
2486	570029	4215626	0.003016	1.71E-03	4.61E-04	2.60E-04	2.08E-04	1.07E-04
2487	570038.3	4215624	0.003072	1.74E-03	4.69E-04	2.65E-04	2.12E-04	1.09E-04
2488	570047.7	4215623	0.003135	1.78E-03	4.79E-04	2.70E-04	2.16E-04	1.11E-04
2489	570057	4215621	0.003202	1.81E-03	4.89E-04	2.76E-04	2.21E-04	1.14E-04
2490	570066.3	4215619	0.003272	1.85E-03	5.00E-04	2.82E-04	2.25E-04	1.16E-04
2491	570075.6	4215618	0.003348	1.90E-03	5.11E-04	2.89E-04	2.31E-04	1.19E-04
2492	570084.9	4215616	0.003432	1.94E-03	5.24E-04	2.96E-04	2.37E-04	1.22E-04

2493	570094.2	4215614	0.003528	2.00E-03	5.39E-04	3.04E-04	2.43E-04	1.25E-04
2494	569902.3	4215643	0.002716	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.63E-05
2495	569893.5	4215641	0.002759	1.56E-03	4.21E-04	2.38E-04	1.90E-04	9.79E-05
2496	569884.6	4215639	0.002804	1.59E-03	4.28E-04	2.42E-04	1.93E-04	9.94E-05
2497	569875.8	4215637	0.002849	1.61E-03	4.35E-04	2.45E-04	1.96E-04	1.01E-04
2498	569867	4215634	0.002895	1.64E-03	4.42E-04	2.49E-04	2.00E-04	1.03E-04
2499	569858.1	4215632	0.002942	1.67E-03	4.49E-04	2.54E-04	2.03E-04	1.04E-04
2500	569849.3	4215630	0.00299	1.69E-03	4.57E-04	2.58E-04	2.06E-04	1.06E-04
2501	569840.5	4215628	0.003037	1.72E-03	4.64E-04	2.62E-04	2.09E-04	1.08E-04
2502	569831.6	4215625	0.003084	1.75E-03	4.71E-04	2.66E-04	2.13E-04	1.09E-04
2503	569822.8	4215623	0.003131	1.77E-03	4.78E-04	2.70E-04	2.16E-04	1.11E-04
2504	569814	4215621	0.003176	1.80E-03	4.85E-04	2.74E-04	2.19E-04	1.13E-04
2505	569937.6	4215653	0.002552	1.45E-03	3.90E-04	2.20E-04	1.76E-04	9.05E-05
2506	569947	4215651	0.002569	1.46E-03	3.92E-04	2.21E-04	1.77E-04	9.11E-05
2507	569956.3	4215649	0.002587	1.47E-03	3.95E-04	2.23E-04	1.78E-04	9.18E-05
2508	569965.6	4215647	0.002608	1.48E-03	3.98E-04	2.25E-04	1.80E-04	9.25E-05
2509	569974.9	4215646	0.002632	1.49E-03	4.02E-04	2.27E-04	1.81E-04	9.34E-05
2510	569984.2	4215644	0.00266	1.51E-03	4.06E-04	2.29E-04	1.83E-04	9.43E-05
2511	569993.5	4215642	0.00269	1.52E-03	4.11E-04	2.32E-04	1.85E-04	9.54E-05
2512	570002.9	4215641	0.002726	1.54E-03	4.16E-04	2.35E-04	1.88E-04	9.67E-05
2513	570012.2	4215639	0.002764	1.57E-03	4.22E-04	2.38E-04	1.90E-04	9.80E-05
2514	570021.5	4215637	0.002805	1.59E-03	4.28E-04	2.42E-04	1.93E-04	9.95E-05
2515	570030.8	4215636	0.00285	1.61E-03	4.35E-04	2.46E-04	1.96E-04	1.01E-04
2516	570040.1	4215634	0.002901	1.64E-03	4.43E-04	2.50E-04	2.00E-04	1.03E-04
2517	570049.4	4215632	0.002957	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
2518	570058.7	4215631	0.003018	1.71E-03	4.61E-04	2.60E-04	2.08E-04	1.07E-04
2519	570068.1	4215629	0.003083	1.75E-03	4.71E-04	2.66E-04	2.12E-04	1.09E-04
2520	570077.4	4215627	0.003154	1.79E-03	4.82E-04	2.72E-04	2.17E-04	1.12E-04
2521	570086.7	4215626	0.003233	1.83E-03	4.94E-04	2.79E-04	2.23E-04	1.15E-04
2522	570096	4215624	0.003321	1.88E-03	5.07E-04	2.86E-04	2.29E-04	1.18E-04
2523	569930.6	4215660	0.00245	1.39E-03	3.74E-04	2.11E-04	1.69E-04	8.69E-05
2524	569921.8	4215658	0.002486	1.41E-03	3.80E-04	2.14E-04	1.71E-04	8.82E-05
2525	569895.4	4215651	0.002603	1.47E-03	3.97E-04	2.24E-04	1.79E-04	9.23E-05
2526	569886.6	4215649	0.002643	1.50E-03	4.04E-04	2.28E-04	1.82E-04	9.38E-05
2527	569877.8	4215647	0.002685	1.52E-03	4.10E-04	2.31E-04	1.85E-04	9.52E-05
2528	569869	4215644	0.002727	1.55E-03	4.16E-04	2.35E-04	1.88E-04	9.67E-05
2529	569860.2	4215642	0.002771	1.57E-03	4.23E-04	2.39E-04	1.91E-04	9.83E-05
2530	569851.4	4215640	0.002815	1.59E-03	4.30E-04	2.43E-04	1.94E-04	9.98E-05
2531	569842.6	4215637	0.002859	1.62E-03	4.37E-04	2.46E-04	1.97E-04	1.01E-04
2532	569833.8	4215635	0.002903	1.64E-03	4.43E-04	2.50E-04	2.00E-04	1.03E-04
2533	569816.2	4215631	0.00299	1.69E-03	4.57E-04	2.58E-04	2.06E-04	1.06E-04
2534	569939.4	4215662	0.002414	1.37E-03	3.69E-04	2.08E-04	1.66E-04	8.56E-05
2535	569948.7	4215661	0.00243	1.38E-03	3.71E-04	2.09E-04	1.67E-04	8.62E-05
2536	569958	4215659	0.002448	1.39E-03	3.74E-04	2.11E-04	1.69E-04	8.68E-05
2537	569967.4	4215657	0.002467	1.40E-03	3.77E-04	2.13E-04	1.70E-04	8.75E-05
2538	569976.7	4215656	0.00249	1.41E-03	3.80E-04	2.15E-04	1.72E-04	8.83E-05
2539	569986	4215654	0.002515	1.42E-03	3.84E-04	2.17E-04	1.73E-04	8.92E-05
2540	569995.3	4215652	0.002543	1.44E-03	3.88E-04	2.19E-04	1.75E-04	9.02E-05
2541	570004.6	4215651	0.002577	1.46E-03	3.93E-04	2.22E-04	1.78E-04	9.14E-05
2542	570013.9	4215649	0.002614	1.48E-03	3.99E-04	2.25E-04	1.80E-04	9.27E-05
2543	570023.3	4215647	0.002656	1.50E-03	4.06E-04	2.29E-04	1.83E-04	9.42E-05
2544	570032.6	4215646	0.002699	1.53E-03	4.12E-04	2.33E-04	1.86E-04	9.57E-05

2545	570041.9	4215644	0.002745	1.55E-03	4.19E-04	2.36E-04	1.89E-04	9.74E-05
2546	570051.2	4215642	0.002796	1.58E-03	4.27E-04	2.41E-04	1.93E-04	9.92E-05
2547	570060.5	4215641	0.002852	1.62E-03	4.35E-04	2.46E-04	1.97E-04	1.01E-04
2548	570069.8	4215639	0.002912	1.65E-03	4.45E-04	2.51E-04	2.01E-04	1.03E-04
2549	570079.1	4215637	0.002978	1.69E-03	4.55E-04	2.57E-04	2.05E-04	1.06E-04
2550	570088.5	4215636	0.003051	1.73E-03	4.66E-04	2.63E-04	2.10E-04	1.08E-04
2551	570097.8	4215634	0.003132	1.77E-03	4.78E-04	2.70E-04	2.16E-04	1.11E-04
2552	569932	4215670	0.002323	1.32E-03	3.55E-04	2.00E-04	1.60E-04	8.24E-05
2553	569922.9	4215667	0.002358	1.34E-03	3.60E-04	2.03E-04	1.62E-04	8.36E-05
2554	569913.7	4215665	0.002393	1.36E-03	3.65E-04	2.06E-04	1.65E-04	8.49E-05
2555	569877	4215656	0.002549	1.44E-03	3.89E-04	2.20E-04	1.76E-04	9.04E-05
2556	569867.9	4215653	0.00259	1.47E-03	3.95E-04	2.23E-04	1.78E-04	9.19E-05
2557	569858.7	4215651	0.002631	1.49E-03	4.02E-04	2.27E-04	1.81E-04	9.33E-05
2558	569849.5	4215649	0.002673	1.51E-03	4.08E-04	2.30E-04	1.84E-04	9.48E-05
2559	569840.4	4215646	0.002716	1.54E-03	4.15E-04	2.34E-04	1.87E-04	9.63E-05
2560	569831.2	4215644	0.002759	1.56E-03	4.21E-04	2.38E-04	1.90E-04	9.79E-05
2561	569941.2	4215672	0.002289	1.30E-03	3.50E-04	1.97E-04	1.58E-04	8.12E-05
2562	569950.5	4215671	0.002304	1.31E-03	3.52E-04	1.99E-04	1.59E-04	8.17E-05
2563	569959.8	4215669	0.00232	1.31E-03	3.54E-04	2.00E-04	1.60E-04	8.23E-05
2564	569969.1	4215667	0.002339	1.33E-03	3.57E-04	2.02E-04	1.61E-04	8.30E-05
2565	569978.4	4215665	0.00236	1.34E-03	3.60E-04	2.03E-04	1.63E-04	8.37E-05
2566	569987.8	4215664	0.002384	1.35E-03	3.64E-04	2.05E-04	1.64E-04	8.46E-05
2567	569997.1	4215662	0.00241	1.37E-03	3.68E-04	2.08E-04	1.66E-04	8.55E-05
2568	570006.4	4215660	0.00244	1.38E-03	3.73E-04	2.10E-04	1.68E-04	8.66E-05
2569	570015.7	4215659	0.002474	1.40E-03	3.78E-04	2.13E-04	1.71E-04	8.78E-05
2570	570025	4215657	0.002512	1.42E-03	3.84E-04	2.16E-04	1.73E-04	8.91E-05
2571	570034.3	4215655	0.002553	1.45E-03	3.90E-04	2.20E-04	1.76E-04	9.06E-05
2572	570043.7	4215654	0.002598	1.47E-03	3.97E-04	2.24E-04	1.79E-04	9.21E-05
2573	570053	4215652	0.002646	1.50E-03	4.04E-04	2.28E-04	1.82E-04	9.39E-05
2574	570062.3	4215650	0.002699	1.53E-03	4.12E-04	2.33E-04	1.86E-04	9.57E-05
2575	570071.6	4215649	0.002756	1.56E-03	4.21E-04	2.37E-04	1.90E-04	9.78E-05
2576	570080.9	4215647	0.002819	1.60E-03	4.30E-04	2.43E-04	1.94E-04	1.00E-04
2577	570090.2	4215645	0.002886	1.64E-03	4.41E-04	2.49E-04	1.99E-04	1.02E-04
2578	570099.5	4215644	0.002959	1.68E-03	4.52E-04	2.55E-04	2.04E-04	1.05E-04
2579	569933.8	4215680	0.002206	1.25E-03	3.37E-04	1.90E-04	1.52E-04	7.82E-05
2580	569924.7	4215677	0.002237	1.27E-03	3.42E-04	1.93E-04	1.54E-04	7.93E-05
2581	569915.6	4215675	0.002269	1.29E-03	3.46E-04	1.95E-04	1.56E-04	8.05E-05
2582	569906.5	4215673	0.002302	1.30E-03	3.52E-04	1.98E-04	1.59E-04	8.17E-05
2583	569870	4215663	0.002449	1.39E-03	3.74E-04	2.11E-04	1.69E-04	8.69E-05
2584	569860.9	4215661	0.002487	1.41E-03	3.80E-04	2.14E-04	1.71E-04	8.82E-05
2585	569851.8	4215659	0.002526	1.43E-03	3.86E-04	2.18E-04	1.74E-04	8.96E-05
2586	569842.7	4215656	0.002565	1.45E-03	3.92E-04	2.21E-04	1.77E-04	9.10E-05
2587	569833.6	4215654	0.002605	1.48E-03	3.98E-04	2.24E-04	1.79E-04	9.24E-05
2588	569943	4215682	0.002175	1.23E-03	3.32E-04	1.87E-04	1.50E-04	7.72E-05
2589	569952.3	4215680	0.00219	1.24E-03	3.34E-04	1.89E-04	1.51E-04	7.77E-05
2590	569961.6	4215679	0.002205	1.25E-03	3.37E-04	1.90E-04	1.52E-04	7.82E-05
2591	569970.9	4215677	0.002222	1.26E-03	3.39E-04	1.91E-04	1.53E-04	7.88E-05
2592	569980.2	4215675	0.002242	1.27E-03	3.42E-04	1.93E-04	1.55E-04	7.95E-05
2593	569989.5	4215674	0.002264	1.28E-03	3.46E-04	1.95E-04	1.56E-04	8.03E-05
2594	569998.8	4215672	0.002289	1.30E-03	3.49E-04	1.97E-04	1.58E-04	8.12E-05
2595	570008.2	4215670	0.002316	1.31E-03	3.54E-04	2.00E-04	1.60E-04	8.21E-05
2596	570017.5	4215669	0.002347	1.33E-03	3.58E-04	2.02E-04	1.62E-04	8.32E-05

2597	570026.8	4215667	0.002381	1.35E-03	3.64E-04	2.05E-04	1.64E-04	8.45E-05
2598	570036.1	4215665	0.00242	1.37E-03	3.70E-04	2.09E-04	1.67E-04	8.58E-05
2599	570045.4	4215664	0.002463	1.40E-03	3.76E-04	2.12E-04	1.70E-04	8.74E-05
2600	570054.7	4215662	0.002509	1.42E-03	3.83E-04	2.16E-04	1.73E-04	8.90E-05
2601	570064.1	4215660	0.002558	1.45E-03	3.91E-04	2.20E-04	1.76E-04	9.07E-05
2602	570073.4	4215659	0.002611	1.48E-03	3.99E-04	2.25E-04	1.80E-04	9.26E-05
2603	570082.7	4215657	0.002669	1.51E-03	4.08E-04	2.30E-04	1.84E-04	9.47E-05
2604	570092	4215655	0.002732	1.55E-03	4.17E-04	2.35E-04	1.88E-04	9.69E-05
2605	570101.3	4215654	0.0028	1.59E-03	4.28E-04	2.41E-04	1.93E-04	9.93E-05
2606	569935.7	4215690	0.002098	1.19E-03	3.20E-04	1.81E-04	1.45E-04	7.44E-05
2607	569926.6	4215687	0.002126	1.20E-03	3.25E-04	1.83E-04	1.47E-04	7.54E-05
2608	569917.5	4215685	0.002155	1.22E-03	3.29E-04	1.86E-04	1.49E-04	7.65E-05
2609	569908.4	4215683	0.002185	1.24E-03	3.34E-04	1.88E-04	1.51E-04	7.75E-05
2610	569899.4	4215680	0.002217	1.26E-03	3.39E-04	1.91E-04	1.53E-04	7.86E-05
2611	569863.1	4215671	0.002355	1.33E-03	3.60E-04	2.03E-04	1.62E-04	8.35E-05
2612	569854	4215669	0.00239	1.35E-03	3.65E-04	2.06E-04	1.65E-04	8.48E-05
2613	569844.9	4215666	0.002426	1.37E-03	3.71E-04	2.09E-04	1.67E-04	8.61E-05
2614	569944.7	4215692	0.002071	1.17E-03	3.16E-04	1.78E-04	1.43E-04	7.35E-05
2615	569954	4215690	0.002086	1.18E-03	3.18E-04	1.80E-04	1.44E-04	7.40E-05
2616	569963.4	4215689	0.002101	1.19E-03	3.21E-04	1.81E-04	1.45E-04	7.45E-05
2617	569972.7	4215687	0.002118	1.20E-03	3.23E-04	1.82E-04	1.46E-04	7.51E-05
2618	569982	4215685	0.002136	1.21E-03	3.26E-04	1.84E-04	1.47E-04	7.58E-05
2619	569991.3	4215684	0.002157	1.22E-03	3.29E-04	1.86E-04	1.49E-04	7.65E-05
2620	570000.6	4215682	0.002179	1.23E-03	3.33E-04	1.88E-04	1.50E-04	7.73E-05
2621	570009.9	4215680	0.002203	1.25E-03	3.36E-04	1.90E-04	1.52E-04	7.81E-05
2622	570019.2	4215678	0.00223	1.26E-03	3.41E-04	1.92E-04	1.54E-04	7.91E-05
2623	570028.6	4215677	0.002263	1.28E-03	3.45E-04	1.95E-04	1.56E-04	8.03E-05
2624	570037.9	4215675	0.0023	1.30E-03	3.51E-04	1.98E-04	1.58E-04	8.16E-05
2625	570047.2	4215673	0.002341	1.33E-03	3.57E-04	2.02E-04	1.61E-04	8.30E-05
2626	570056.5	4215672	0.002384	1.35E-03	3.64E-04	2.05E-04	1.64E-04	8.46E-05
2627	570065.8	4215670	0.002429	1.38E-03	3.71E-04	2.09E-04	1.67E-04	8.62E-05
2628	570075.1	4215668	0.002479	1.40E-03	3.79E-04	2.14E-04	1.71E-04	8.79E-05
2629	570084.5	4215667	0.002533	1.44E-03	3.87E-04	2.18E-04	1.75E-04	8.98E-05
2630	570093.8	4215665	0.002592	1.47E-03	3.96E-04	2.23E-04	1.79E-04	9.19E-05
2631	570103.1	4215663	0.002655	1.50E-03	4.05E-04	2.29E-04	1.83E-04	9.42E-05
2632	569937.5	4215699	0.002	1.13E-03	3.05E-04	1.72E-04	1.38E-04	7.09E-05
2633	569928.4	4215697	0.002025	1.15E-03	3.09E-04	1.74E-04	1.40E-04	7.18E-05
2634	569919.4	4215695	0.002051	1.16E-03	3.13E-04	1.77E-04	1.41E-04	7.28E-05
2635	569910.4	4215692	0.002078	1.18E-03	3.17E-04	1.79E-04	1.43E-04	7.37E-05
2636	569901.3	4215690	0.002107	1.19E-03	3.22E-04	1.82E-04	1.45E-04	7.47E-05
2637	569892.3	4215688	0.002138	1.21E-03	3.26E-04	1.84E-04	1.47E-04	7.58E-05
2638	569946.5	4215702	0.001976	1.12E-03	3.02E-04	1.70E-04	1.36E-04	7.01E-05
2639	569955.8	4215700	0.00199	1.13E-03	3.04E-04	1.71E-04	1.37E-04	7.06E-05
2640	569965.1	4215698	0.002005	1.14E-03	3.06E-04	1.73E-04	1.38E-04	7.11E-05
2641	569974.4	4215697	0.002021	1.15E-03	3.09E-04	1.74E-04	1.39E-04	7.17E-05
2642	569983.8	4215695	0.002039	1.16E-03	3.11E-04	1.76E-04	1.41E-04	7.23E-05
2643	569993.1	4215693	0.002059	1.17E-03	3.14E-04	1.77E-04	1.42E-04	7.30E-05
2644	570002.4	4215692	0.002079	1.18E-03	3.17E-04	1.79E-04	1.43E-04	7.37E-05
2645	570011.7	4215690	0.002101	1.19E-03	3.21E-04	1.81E-04	1.45E-04	7.45E-05
2646	570021	4215688	0.002126	1.20E-03	3.25E-04	1.83E-04	1.46E-04	7.54E-05
2647	570030.3	4215687	0.002156	1.22E-03	3.29E-04	1.86E-04	1.49E-04	7.65E-05
2648	570039.6	4215685	0.002189	1.24E-03	3.34E-04	1.89E-04	1.51E-04	7.77E-05

2649	570049	4215683	0.002227	1.26E-03	3.40E-04	1.92E-04	1.53E-04	7.90E-05
2650	570058.3	4215682	0.002268	1.28E-03	3.46E-04	1.95E-04	1.56E-04	8.04E-05
2651	570067.6	4215680	0.002311	1.31E-03	3.53E-04	1.99E-04	1.59E-04	8.20E-05
2652	570076.9	4215678	0.002358	1.34E-03	3.60E-04	2.03E-04	1.62E-04	8.36E-05
2653	570086.2	4215677	0.002408	1.36E-03	3.68E-04	2.08E-04	1.66E-04	8.54E-05
2654	570095.5	4215675	0.002463	1.40E-03	3.76E-04	2.12E-04	1.70E-04	8.74E-05
2655	570104.9	4215673	0.002522	1.43E-03	3.85E-04	2.17E-04	1.74E-04	8.95E-05
2656	569939.3	4215709	0.00191	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.77E-05
2657	569930.3	4215707	0.001932	1.09E-03	2.95E-04	1.66E-04	1.33E-04	6.85E-05
2658	569921.3	4215705	0.001955	1.11E-03	2.99E-04	1.68E-04	1.35E-04	6.94E-05
2659	569912.3	4215702	0.00198	1.12E-03	3.02E-04	1.71E-04	1.36E-04	7.02E-05
2660	569903.3	4215700	0.002006	1.14E-03	3.06E-04	1.73E-04	1.38E-04	7.11E-05
2661	569894.3	4215698	0.002034	1.15E-03	3.11E-04	1.75E-04	1.40E-04	7.21E-05
2662	569885.3	4215695	0.002063	1.17E-03	3.15E-04	1.78E-04	1.42E-04	7.32E-05
2663	569876.3	4215693	0.002003	1.13E-03	3.06E-04	1.73E-04	1.38E-04	7.10E-05
2664	569948.3	4215712	0.001888	1.07E-03	2.88E-04	1.63E-04	1.30E-04	6.70E-05
2665	569957.6	4215710	0.001902	1.08E-03	2.90E-04	1.64E-04	1.31E-04	6.75E-05
2666	569966.9	4215708	0.001916	1.09E-03	2.93E-04	1.65E-04	1.32E-04	6.80E-05
2667	569976.2	4215707	0.001932	1.09E-03	2.95E-04	1.67E-04	1.33E-04	6.85E-05
2668	569985.5	4215705	0.00195	1.10E-03	2.98E-04	1.68E-04	1.34E-04	6.91E-05
2669	569994.8	4215703	0.001968	1.11E-03	3.00E-04	1.70E-04	1.36E-04	6.98E-05
2670	570004.2	4215702	0.001986	1.13E-03	3.03E-04	1.71E-04	1.37E-04	7.05E-05
2671	570013.5	4215700	0.002007	1.14E-03	3.06E-04	1.73E-04	1.38E-04	7.12E-05
2672	570022.8	4215698	0.002029	1.15E-03	3.10E-04	1.75E-04	1.40E-04	7.20E-05
2673	570032.1	4215696	0.002057	1.17E-03	3.14E-04	1.77E-04	1.42E-04	7.30E-05
2674	570041.4	4215695	0.002088	1.18E-03	3.19E-04	1.80E-04	1.44E-04	7.41E-05
2675	570050.7	4215693	0.002122	1.20E-03	3.24E-04	1.83E-04	1.46E-04	7.53E-05
2676	570060	4215691	0.002159	1.22E-03	3.30E-04	1.86E-04	1.49E-04	7.66E-05
2677	570069.4	4215690	0.002199	1.25E-03	3.36E-04	1.90E-04	1.52E-04	7.80E-05
2678	570078.7	4215688	0.002243	1.27E-03	3.43E-04	1.93E-04	1.55E-04	7.96E-05
2679	570088	4215686	0.002291	1.30E-03	3.50E-04	1.97E-04	1.58E-04	8.13E-05
2680	570097.3	4215685	0.002343	1.33E-03	3.58E-04	2.02E-04	1.61E-04	8.31E-05
2681	569941.1	4215719	0.001827	1.03E-03	2.79E-04	1.57E-04	1.26E-04	6.48E-05
2682	569932.1	4215717	0.001847	1.05E-03	2.82E-04	1.59E-04	1.27E-04	6.55E-05
2683	569923.2	4215715	0.001869	1.06E-03	2.85E-04	1.61E-04	1.29E-04	6.63E-05
2684	569914.2	4215712	0.001891	1.07E-03	2.89E-04	1.63E-04	1.30E-04	6.71E-05
2685	569905.2	4215710	0.001914	1.08E-03	2.92E-04	1.65E-04	1.32E-04	6.79E-05
2686	569896.3	4215708	0.001938	1.10E-03	2.96E-04	1.67E-04	1.34E-04	6.88E-05
2687	569887.3	4215705	0.001965	1.11E-03	3.00E-04	1.69E-04	1.35E-04	6.97E-05
2688	569878.3	4215703	0.001992	1.13E-03	3.04E-04	1.72E-04	1.37E-04	7.06E-05
2689	569869.4	4215701	0.001923	1.09E-03	2.94E-04	1.66E-04	1.33E-04	6.82E-05
2690	569950	4215721	0.001807	1.02E-03	2.76E-04	1.56E-04	1.25E-04	6.41E-05
2691	569959.4	4215720	0.001819	1.03E-03	2.78E-04	1.57E-04	1.25E-04	6.45E-05
2692	569968.7	4215718	0.001833	1.04E-03	2.80E-04	1.58E-04	1.26E-04	6.50E-05
2693	569978	4215716	0.001848	1.05E-03	2.82E-04	1.59E-04	1.27E-04	6.56E-05
2694	569987.3	4215715	0.001865	1.06E-03	2.85E-04	1.61E-04	1.28E-04	6.61E-05
2695	569996.6	4215713	0.001882	1.07E-03	2.87E-04	1.62E-04	1.30E-04	6.68E-05
2696	570005.9	4215711	0.0019	1.08E-03	2.90E-04	1.64E-04	1.31E-04	6.74E-05
2697	570015.2	4215710	0.001919	1.09E-03	2.93E-04	1.65E-04	1.32E-04	6.81E-05
2698	570024.6	4215708	0.00194	1.10E-03	2.96E-04	1.67E-04	1.34E-04	6.88E-05
2699	570033.9	4215706	0.001965	1.11E-03	3.00E-04	1.69E-04	1.35E-04	6.97E-05
2700	570043.2	4215705	0.001994	1.13E-03	3.04E-04	1.72E-04	1.37E-04	7.07E-05

2701	570052.5	4215703	0.002025	1.15E-03	3.09E-04	1.75E-04	1.40E-04	7.18E-05
2702	570061.8	4215701	0.00206	1.17E-03	3.14E-04	1.77E-04	1.42E-04	7.31E-05
2703	570071.1	4215700	0.002097	1.19E-03	3.20E-04	1.81E-04	1.45E-04	7.44E-05
2704	570080.5	4215698	0.002138	1.21E-03	3.26E-04	1.84E-04	1.47E-04	7.58E-05
2705	570089.8	4215696	0.002184	1.24E-03	3.33E-04	1.88E-04	1.50E-04	7.75E-05
2706	570099.1	4215695	0.002233	1.27E-03	3.41E-04	1.92E-04	1.54E-04	7.92E-05
2707	570108.4	4215693	0.002287	1.30E-03	3.49E-04	1.97E-04	1.58E-04	8.11E-05
2708	569942.9	4215729	0.00175	9.91E-04	2.67E-04	1.51E-04	1.21E-04	6.21E-05
2709	569933.9	4215727	0.001769	1.00E-03	2.70E-04	1.52E-04	1.22E-04	6.27E-05
2710	569925	4215724	0.001788	1.01E-03	2.73E-04	1.54E-04	1.23E-04	6.34E-05
2711	569916.1	4215722	0.001808	1.02E-03	2.76E-04	1.56E-04	1.25E-04	6.41E-05
2712	569907.2	4215720	0.001829	1.04E-03	2.79E-04	1.58E-04	1.26E-04	6.49E-05
2713	569898.2	4215717	0.001852	1.05E-03	2.83E-04	1.60E-04	1.28E-04	6.57E-05
2714	569889.3	4215715	0.001875	1.06E-03	2.86E-04	1.62E-04	1.29E-04	6.65E-05
2715	569880.4	4215713	0.001899	1.08E-03	2.90E-04	1.64E-04	1.31E-04	6.74E-05
2716	569871.4	4215711	0.001837	1.04E-03	2.81E-04	1.58E-04	1.27E-04	6.52E-05
2717	569862.5	4215708	0.00185	1.05E-03	2.82E-04	1.59E-04	1.27E-04	6.56E-05
2718	569591.2	4215444	0.00325	1.84E-03	4.96E-04	2.80E-04	2.24E-04	1.15E-04
2719	569951.8	4215731	0.001731	9.81E-04	2.64E-04	1.49E-04	1.19E-04	6.14E-05
2720	569961.1	4215730	0.001743	9.87E-04	2.66E-04	1.50E-04	1.20E-04	6.18E-05
2721	569970.4	4215728	0.001756	9.95E-04	2.68E-04	1.51E-04	1.21E-04	6.23E-05
2722	569979.8	4215726	0.00177	1.00E-03	2.70E-04	1.53E-04	1.22E-04	6.28E-05
2723	569989.1	4215725	0.001786	1.01E-03	2.73E-04	1.54E-04	1.23E-04	6.34E-05
2724	569998.4	4215723	0.001802	1.02E-03	2.75E-04	1.55E-04	1.24E-04	6.39E-05
2725	570007.7	4215721	0.001819	1.03E-03	2.78E-04	1.57E-04	1.25E-04	6.45E-05
2726	570017	4215720	0.001837	1.04E-03	2.80E-04	1.58E-04	1.27E-04	6.52E-05
2727	570026.3	4215718	0.001857	1.05E-03	2.84E-04	1.60E-04	1.28E-04	6.59E-05
2728	570035.6	4215716	0.001881	1.07E-03	2.87E-04	1.62E-04	1.30E-04	6.67E-05
2729	570045	4215714	0.001907	1.08E-03	2.91E-04	1.64E-04	1.31E-04	6.76E-05
2730	570054.3	4215713	0.001935	1.10E-03	2.96E-04	1.67E-04	1.33E-04	6.87E-05
2731	570063.6	4215711	0.001968	1.11E-03	3.00E-04	1.70E-04	1.36E-04	6.98E-05
2732	570072.9	4215709	0.002003	1.13E-03	3.06E-04	1.73E-04	1.38E-04	7.10E-05
2733	570082.2	4215708	0.002041	1.16E-03	3.12E-04	1.76E-04	1.41E-04	7.24E-05
2734	570091.5	4215706	0.002085	1.18E-03	3.18E-04	1.80E-04	1.44E-04	7.39E-05
2735	570134.3	4215513	0.00931	5.27E-03	1.42E-03	8.02E-04	6.42E-04	3.30E-04
2736	570122.9	4215521	0.008145	4.61E-03	1.24E-03	7.02E-04	5.61E-04	2.89E-04
2737	570111.5	4215529	0.007247	4.11E-03	1.11E-03	6.24E-04	4.99E-04	2.57E-04
2738	570121.1	4215531	0.007297	4.13E-03	1.11E-03	6.29E-04	5.03E-04	2.59E-04
2739	570100.1	4215538	0.006569	3.72E-03	1.00E-03	5.66E-04	4.53E-04	2.33E-04
2740	570109.8	4215539	0.006563	3.72E-03	1.00E-03	5.66E-04	4.52E-04	2.33E-04
2741	570119.4	4215541	0.006602	3.74E-03	1.01E-03	5.69E-04	4.55E-04	2.34E-04
2742	570129	4215543	0.006682	3.79E-03	1.02E-03	5.76E-04	4.60E-04	2.37E-04
2743	570098.4	4215547	0.005979	3.39E-03	9.13E-04	5.15E-04	4.12E-04	2.12E-04
2744	570108	4215549	0.005974	3.38E-03	9.12E-04	5.15E-04	4.12E-04	2.12E-04
2745	570117.7	4215551	0.006004	3.40E-03	9.17E-04	5.17E-04	4.14E-04	2.13E-04
2746	570096.7	4215557	0.005463	3.10E-03	8.34E-04	4.71E-04	3.76E-04	1.94E-04
2747	570106.3	4215559	0.005461	3.09E-03	8.34E-04	4.71E-04	3.76E-04	1.94E-04
2748	570115.9	4215561	0.005483	3.11E-03	8.37E-04	4.72E-04	3.78E-04	1.94E-04
2749	570094.9	4215567	0.005004	2.83E-03	7.64E-04	4.31E-04	3.45E-04	1.77E-04
2750	570104.6	4215569	0.005008	2.84E-03	7.65E-04	4.31E-04	3.45E-04	1.78E-04
2751	570114.2	4215571	0.005028	2.85E-03	7.68E-04	4.33E-04	3.46E-04	1.78E-04
2752	570123.8	4215572	0.005081	2.88E-03	7.76E-04	4.38E-04	3.50E-04	1.80E-04

2753	570102.8	4215579	0.004608	2.61E-03	7.04E-04	3.97E-04	3.18E-04	1.63E-04
2754	570112.5	4215580	0.004629	2.62E-03	7.07E-04	3.99E-04	3.19E-04	1.64E-04
2755	570122.1	4215582	0.004675	2.65E-03	7.14E-04	4.03E-04	3.22E-04	1.66E-04
2756	570101.1	4215589	0.004258	2.41E-03	6.50E-04	3.67E-04	2.93E-04	1.51E-04
2757	570110.7	4215590	0.004285	2.43E-03	6.54E-04	3.69E-04	2.95E-04	1.52E-04
2758	570099.3	4215598	0.003961	2.24E-03	6.05E-04	3.41E-04	2.73E-04	1.40E-04
2759	570109	4215600	0.003989	2.26E-03	6.09E-04	3.44E-04	2.75E-04	1.41E-04
2760	570118.6	4215602	0.004027	2.28E-03	6.15E-04	3.47E-04	2.77E-04	1.43E-04
2761	570107.2	4215610	0.003722	2.11E-03	5.68E-04	3.21E-04	2.57E-04	1.32E-04
2762	570105.5	4215620	0.003478	1.97E-03	5.31E-04	3.00E-04	2.40E-04	1.23E-04
2763	570113.4	4215631	0.003278	1.86E-03	5.01E-04	2.82E-04	2.26E-04	1.16E-04
2764	570111.7	4215641	0.003071	1.74E-03	4.69E-04	2.65E-04	2.12E-04	1.09E-04
2765	570088.1	4215718	0.001957	1.11E-03	2.99E-04	1.69E-04	1.35E-04	6.94E-05
2766	570097.7	4215720	0.001968	1.12E-03	3.01E-04	1.70E-04	1.36E-04	6.98E-05

	Max Yr	**1**	T2	T2L3	T4f
	Row	**18**	1.41E-01	2.15E-02	9.68E-03
		Col	**3**	**4**	**5**
		Adjustment	**100%**	**15%**	**7%**
			Year 1	Year 1	Year 1
1	570176.2	4215489	7.74E-02	1.18E-02	5.34E-03
2	570192.2	4215484	8.75E-02	1.34E-02	6.03E-03
3	570208.7	4215477	1.02E-01	1.56E-02	7.03E-03
4	570225.2	4215470	1.17E-01	1.79E-02	8.09E-03
5	570241.7	4215462	1.30E-01	1.98E-02	8.96E-03
6	570258.2	4215455	1.38E-01	2.11E-02	9.50E-03
7	570179.3	4215498	6.84E-02	1.04E-02	4.71E-03
8	570162	4215500	6.17E-02	9.43E-03	4.25E-03
9	570196.2	4215493	7.78E-02	1.19E-02	5.36E-03
10	570212.7	4215486	9.12E-02	1.39E-02	6.28E-03
11	570229.2	4215479	1.05E-01	1.61E-02	7.25E-03
12	570237.5	4215475	1.11E-01	1.70E-02	7.68E-03
13	570254	4215468	1.22E-01	1.86E-02	8.39E-03
14	570183.7	4215507	6.18E-02	9.44E-03	4.26E-03
15	570167.2	4215509	5.59E-02	8.54E-03	3.85E-03
16	570150.7	4215511	5.09E-02	7.77E-03	3.51E-03
17	570200.2	4215503	7.02E-02	1.07E-02	4.84E-03
18	570216.7	4215495	8.22E-02	1.26E-02	5.67E-03
19	570225	4215492	8.88E-02	1.36E-02	6.12E-03
20	570241.5	4215484	1.01E-01	1.54E-02	6.94E-03
21	570249.8	4215481	1.06E-01	1.62E-02	7.29E-03
22	570266.3	4215473	1.14E-01	1.74E-02	7.86E-03
23	570188.1	4215516	5.64E-02	8.61E-03	3.89E-03
24	570172.2	4215518	5.09E-02	7.77E-03	3.51E-03
25	570156.3	4215520	4.66E-02	7.11E-03	3.21E-03
26	570140.5	4215522	4.29E-02	6.55E-03	2.95E-03
27	570204.3	4215512	6.41E-02	9.79E-03	4.42E-03
28	570220.8	4215504	7.50E-02	1.15E-02	5.17E-03
29	570237.3	4215497	8.63E-02	1.32E-02	5.95E-03
30	570253.8	4215490	9.61E-02	1.47E-02	6.62E-03
31	570262.1	4215486	1.00E-01	1.53E-02	6.92E-03
32	570191.4	4215526	5.16E-02	7.87E-03	3.55E-03
33	570174.1	4215528	4.59E-02	7.01E-03	3.16E-03
34	570156.8	4215530	4.19E-02	6.40E-03	2.89E-03
35	570139.4	4215532	3.85E-02	5.87E-03	2.65E-03
36	570208.3	4215521	5.90E-02	9.02E-03	4.07E-03
37	570216.6	4215517	6.38E-02	9.74E-03	4.39E-03
38	570233.1	4215510	7.38E-02	1.13E-02	5.09E-03
39	570249.6	4215503	8.34E-02	1.27E-02	5.75E-03
40	570266.1	4215495	9.16E-02	1.40E-02	6.31E-03
41	570274.4	4215492	9.52E-02	1.45E-02	6.56E-03
42	570195.7	4215535	4.78E-02	7.30E-03	3.30E-03
43	570179.1	4215537	4.29E-02	6.55E-03	2.96E-03
44	570162.4	4215539	3.91E-02	5.97E-03	2.69E-03
45	570145.7	4215541	3.60E-02	5.50E-03	2.48E-03
46	570212.3	4215530	5.45E-02	8.33E-03	3.76E-03

47	570228.8	4215523	6.31E-02	9.64E-03	4.35E-03
48	570245.4	4215515	7.22E-02	1.10E-02	4.98E-03
49	570261.9	4215508	8.08E-02	1.23E-02	5.57E-03
50	570278.4	4215501	8.76E-02	1.34E-02	6.04E-03
51	570200	4215544	4.45E-02	6.80E-03	3.07E-03
52	570183.9	4215546	4.02E-02	6.14E-03	2.77E-03
53	570167.7	4215548	3.66E-02	5.59E-03	2.52E-03
54	570151.5	4215550	3.38E-02	5.16E-03	2.33E-03
55	570135.4	4215552	3.14E-02	4.80E-03	2.17E-03
56	570216.4	4215539	5.06E-02	7.73E-03	3.49E-03
57	570232.9	4215532	5.84E-02	8.92E-03	4.03E-03
58	570241.1	4215528	6.25E-02	9.54E-03	4.31E-03
59	570257.6	4215521	7.07E-02	1.08E-02	4.87E-03
60	570274.2	4215514	7.80E-02	1.19E-02	5.37E-03
61	570203.5	4215553	4.13E-02	6.31E-03	2.85E-03
62	570186.2	4215555	3.72E-02	5.68E-03	2.56E-03
63	570168.8	4215557	3.37E-02	5.14E-03	2.32E-03
64	570151.5	4215559	3.10E-02	4.73E-03	2.14E-03
65	570134.2	4215561	2.87E-02	4.38E-03	1.98E-03
66	570220.4	4215548	4.72E-02	7.20E-03	3.25E-03
67	570228.6	4215545	5.08E-02	7.75E-03	3.50E-03
68	570245.2	4215537	5.82E-02	8.88E-03	4.01E-03
69	570253.4	4215534	6.19E-02	9.46E-03	4.27E-03
70	570269.9	4215526	6.89E-02	1.05E-02	4.75E-03
71	570286.5	4215519	7.51E-02	1.15E-02	5.17E-03
72	570207.8	4215562	3.89E-02	5.94E-03	2.68E-03
73	570191	4215564	3.51E-02	5.36E-03	2.42E-03
74	570174.2	4215566	3.18E-02	4.85E-03	2.19E-03
75	570157.4	4215568	2.93E-02	4.47E-03	2.02E-03
76	570140.6	4215570	2.72E-02	4.15E-03	1.87E-03
77	570224.4	4215557	4.41E-02	6.74E-03	3.04E-03
78	570240.9	4215550	5.08E-02	7.75E-03	3.50E-03
79	570257.5	4215543	5.77E-02	8.80E-03	3.97E-03
80	570274	4215536	6.42E-02	9.80E-03	4.42E-03
81	570282.2	4215532	6.71E-02	1.02E-02	4.62E-03
82	570211.3	4215571	3.65E-02	5.58E-03	2.52E-03
83	570193.4	4215573	3.28E-02	5.01E-03	2.26E-03
84	570175.6	4215576	2.95E-02	4.51E-03	2.04E-03
85	570157.8	4215578	2.71E-02	4.13E-03	1.86E-03
86	570139.9	4215580	2.50E-02	3.82E-03	1.72E-03
87	570220.2	4215570	3.85E-02	5.88E-03	2.65E-03
88	570236.7	4215563	4.43E-02	6.77E-03	3.05E-03
89	570253.2	4215556	5.05E-02	7.71E-03	3.48E-03
90	570269.7	4215548	5.67E-02	8.66E-03	3.91E-03
91	570286.3	4215541	6.25E-02	9.55E-03	4.31E-03
92	570215.6	4215580	3.45E-02	5.26E-03	2.38E-03
93	570198.3	4215583	3.12E-02	4.76E-03	2.15E-03
94	570180.9	4215585	2.82E-02	4.30E-03	1.94E-03
95	570163.6	4215587	2.57E-02	3.93E-03	1.77E-03
96	570146.3	4215589	2.38E-02	3.63E-03	1.64E-03
97	570129	4215591	2.23E-02	3.40E-03	1.54E-03
98	570232.5	4215576	3.87E-02	5.92E-03	2.67E-03

99	570249	4215568	4.41E-02	6.74E-03	3.04E-03
100	570265.5	4215561	4.98E-02	7.60E-03	3.43E-03
101	570282	4215554	5.55E-02	8.48E-03	3.83E-03
102	570290.3	4215550	5.82E-02	8.89E-03	4.01E-03
103	570298.5	4215547	6.07E-02	9.27E-03	4.19E-03
104	570219.8	4215590	3.25E-02	4.96E-03	2.24E-03
105	570203	4215592	2.95E-02	4.51E-03	2.04E-03
106	570186.1	4215594	2.69E-02	4.10E-03	1.85E-03
107	570169.2	4215596	2.45E-02	3.74E-03	1.69E-03
108	570152.4	4215598	2.27E-02	3.47E-03	1.57E-03
109	570135.5	4215600	2.13E-02	3.25E-03	1.47E-03
110	570236.5	4215585	3.60E-02	5.50E-03	2.48E-03
111	570253	4215578	4.07E-02	6.22E-03	2.80E-03
112	570261.3	4215574	4.32E-02	6.60E-03	2.98E-03
113	570277.8	4215567	4.86E-02	7.42E-03	3.35E-03
114	570294.3	4215559	5.40E-02	8.24E-03	3.72E-03
115	570223.4	4215599	3.04E-02	4.64E-03	2.10E-03
116	570205.7	4215601	2.77E-02	4.23E-03	1.91E-03
117	570187.9	4215603	2.51E-02	3.84E-03	1.73E-03
118	570170.1	4215605	2.29E-02	3.50E-03	1.58E-03
119	570161.3	4215606	2.20E-02	3.36E-03	1.52E-03
120	570143.5	4215608	2.05E-02	3.12E-03	1.41E-03
121	570125.8	4215611	1.93E-02	2.95E-03	1.33E-03
122	570232.3	4215598	3.16E-02	4.82E-03	2.18E-03
123	570248.8	4215590	3.56E-02	5.43E-03	2.45E-03
124	570265.3	4215583	3.74E-02	5.72E-03	2.58E-03
125	570281.8	4215576	4.50E-02	6.87E-03	3.10E-03
126	570290.1	4215572	4.75E-02	7.25E-03	3.27E-03
127	570298.4	4215569	5.00E-02	7.63E-03	3.44E-03
128	570227.7	4215608	2.85E-02	4.35E-03	1.96E-03
129	570210.4	4215610	2.63E-02	4.02E-03	1.81E-03
130	570193	4215612	2.40E-02	3.67E-03	1.65E-03
131	570175.7	4215614	2.19E-02	3.35E-03	1.51E-03
132	570158.4	4215616	2.03E-02	3.10E-03	1.40E-03
133	570141.1	4215618	1.90E-02	2.90E-03	1.31E-03
134	570123.8	4215620	1.80E-02	2.75E-03	1.24E-03
135	570244.6	4215603	3.13E-02	4.79E-03	2.16E-03
136	570261.1	4215596	3.26E-02	4.98E-03	2.25E-03
137	570277.6	4215589	3.66E-02	5.58E-03	2.52E-03
138	570294.1	4215581	4.14E-02	6.33E-03	2.86E-03
139	570302.4	4215578	4.44E-02	6.78E-03	3.06E-03
140	570231.9	4215617	2.68E-02	4.09E-03	1.84E-03
141	570215	4215619	2.49E-02	3.81E-03	1.72E-03
142	570198	4215621	2.29E-02	3.49E-03	1.58E-03
143	570181.1	4215623	2.10E-02	3.20E-03	1.44E-03
144	570164.2	4215625	1.94E-02	2.96E-03	1.34E-03
145	570147.3	4215627	1.82E-02	2.78E-03	1.25E-03
146	570130.3	4215629	1.72E-02	2.63E-03	1.19E-03
147	570248.6	4215612	2.75E-02	4.20E-03	1.89E-03
148	570256.9	4215609	2.88E-02	4.40E-03	1.99E-03
149	570273.4	4215601	3.21E-02	4.90E-03	2.21E-03
150	570289.9	4215594	3.60E-02	5.50E-03	2.48E-03

151	570298.2	4215591	3.83E-02	5.84E-03	2.64E-03
152	570314.7	4215583	4.34E-02	6.62E-03	2.99E-03
153	570235.5	4215626	2.52E-02	3.85E-03	1.74E-03
154	570226.7	4215627	2.43E-02	3.71E-03	1.67E-03
155	570209	4215629	2.24E-02	3.42E-03	1.55E-03
156	570191.3	4215632	2.05E-02	3.14E-03	1.41E-03
157	570173.6	4215634	1.88E-02	2.87E-03	1.30E-03
158	570164.8	4215635	1.82E-02	2.78E-03	1.25E-03
159	570147.1	4215637	1.70E-02	2.60E-03	1.17E-03
160	570129.4	4215639	1.61E-02	2.46E-03	1.11E-03
161	570252.6	4215622	2.58E-02	3.94E-03	1.78E-03
162	570269.2	4215614	2.83E-02	4.32E-03	1.95E-03
163	570285.7	4215607	3.18E-02	4.86E-03	2.19E-03
164	570302.2	4215600	3.59E-02	5.48E-03	2.47E-03
165	570318.7	4215592	4.04E-02	6.17E-03	2.78E-03
166	570239.8	4215635	2.38E-02	3.64E-03	1.64E-03
167	570222.5	4215637	2.22E-02	3.40E-03	1.53E-03
168	570205.1	4215640	2.05E-02	3.12E-03	1.41E-03
169	570187.8	4215642	1.88E-02	2.87E-03	1.30E-03
170	570170.5	4215644	1.74E-02	2.66E-03	1.20E-03
171	570153.2	4215646	1.64E-02	2.50E-03	1.13E-03
172	570135.9	4215648	1.55E-02	2.36E-03	1.07E-03
173	570118.6	4215650	1.48E-02	2.25E-03	1.02E-03
174	570256.7	4215631	2.61E-02	3.98E-03	1.80E-03
175	570273.2	4215623	2.69E-02	4.11E-03	1.86E-03
176	570281.5	4215620	2.83E-02	4.33E-03	1.95E-03
177	570298	4215612	3.17E-02	4.84E-03	2.19E-03
178	570306.2	4215609	3.38E-02	5.16E-03	2.33E-03
179	570314.5	4215605	3.59E-02	5.48E-03	2.47E-03
180	570244	4215644	2.26E-02	3.45E-03	1.56E-03
181	570227	4215647	2.11E-02	3.23E-03	1.46E-03
182	570210	4215649	1.95E-02	2.98E-03	1.34E-03
183	570193	4215651	1.80E-02	2.75E-03	1.24E-03
184	570176.1	4215653	1.67E-02	2.55E-03	1.15E-03
185	570159.1	4215655	1.57E-02	2.40E-03	1.08E-03
186	570142.1	4215657	1.49E-02	2.27E-03	1.02E-03
187	570125.2	4215659	1.42E-02	2.17E-03	9.77E-04
188	570260.7	4215640	2.47E-02	3.77E-03	1.70E-03
189	570269	4215636	2.60E-02	3.97E-03	1.79E-03
190	570277.2	4215633	2.58E-02	3.93E-03	1.77E-03
191	570293.7	4215625	2.85E-02	4.34E-03	1.96E-03
192	570310.3	4215618	3.19E-02	4.88E-03	2.20E-03
193	570326.8	4215611	3.71E-02	5.67E-03	2.56E-03
194	570247.7	4215654	2.14E-02	3.27E-03	1.48E-03
195	570230	4215656	1.99E-02	3.04E-03	1.37E-03
196	570212.4	4215658	1.84E-02	2.80E-03	1.27E-03
197	570194.7	4215660	1.70E-02	2.59E-03	1.17E-03
198	570177.1	4215662	1.57E-02	2.40E-03	1.08E-03
199	570159.4	4215664	1.48E-02	2.26E-03	1.02E-03
200	570141.7	4215666	1.40E-02	2.14E-03	9.67E-04
201	570124.1	4215669	1.34E-02	2.04E-03	9.22E-04
202	570264.7	4215649	2.34E-02	3.57E-03	1.61E-03

203	570281.3	4215642	2.59E-02	3.96E-03	1.79E-03
204	570297.8	4215634	2.87E-02	4.39E-03	1.98E-03
205	570314.3	4215627	3.18E-02	4.85E-03	2.19E-03
206	570330.8	4215620	3.49E-02	5.33E-03	2.40E-03
207	570251.9	4215663	2.03E-02	3.11E-03	1.40E-03
208	570234.6	4215665	1.89E-02	2.89E-03	1.30E-03
209	570217.2	4215667	1.75E-02	2.67E-03	1.21E-03
210	570199.9	4215669	1.62E-02	2.48E-03	1.12E-03
211	570182.6	4215671	1.51E-02	2.31E-03	1.04E-03
212	570165.3	4215673	1.42E-02	2.17E-03	9.81E-04
213	570148	4215675	1.35E-02	2.07E-03	9.32E-04
214	570130.7	4215677	1.29E-02	1.97E-03	8.89E-04
215	570113.4	4215680	1.24E-02	1.89E-03	8.52E-04
216	570268.8	4215658	2.22E-02	3.39E-03	1.53E-03
217	570277	4215654	2.33E-02	3.56E-03	1.61E-03
218	570293.6	4215647	2.58E-02	3.94E-03	1.78E-03
219	570310.1	4215640	2.85E-02	4.36E-03	1.97E-03
220	570326.6	4215633	3.14E-02	4.80E-03	2.16E-03
221	570256	4215672	1.93E-02	2.94E-03	1.33E-03
222	570239	4215674	1.79E-02	2.74E-03	1.23E-03
223	570222	4215676	1.67E-02	2.55E-03	1.15E-03
224	570205	4215678	1.55E-02	2.37E-03	1.07E-03
225	570188	4215680	1.45E-02	2.22E-03	1.00E-03
226	570171	4215682	1.37E-02	2.09E-03	9.43E-04
227	570154	4215684	1.30E-02	1.99E-03	8.97E-04
228	570137	4215686	1.24E-02	1.90E-03	8.57E-04
229	570120	4215688	1.19E-02	1.82E-03	8.22E-04
230	570272.8	4215667	2.10E-02	3.21E-03	1.45E-03
231	570281.1	4215664	2.22E-02	3.39E-03	1.53E-03
232	570297.6	4215656	2.45E-02	3.74E-03	1.69E-03
233	570305.8	4215653	2.57E-02	3.93E-03	1.77E-03
234	570314.1	4215649	2.70E-02	4.12E-03	1.86E-03
235	570330.6	4215642	2.97E-02	4.53E-03	2.04E-03
236	570338.9	4215638	3.10E-02	4.73E-03	2.14E-03
237	570259.8	4215681	1.82E-02	2.78E-03	1.25E-03
238	570242.2	4215683	1.69E-02	2.58E-03	1.16E-03
239	570224.5	4215685	1.57E-02	2.39E-03	1.08E-03
240	570206.9	4215687	1.46E-02	2.23E-03	1.01E-03
241	570189.3	4215690	1.37E-02	2.10E-03	9.46E-04
242	570171.7	4215692	1.30E-02	1.98E-03	8.94E-04
243	570154.1	4215694	1.23E-02	1.88E-03	8.50E-04
244	570136.5	4215696	1.18E-02	1.80E-03	8.13E-04
245	570118.8	4215698	1.13E-02	1.73E-03	7.81E-04
246	570276.8	4215676	1.99E-02	3.04E-03	1.37E-03
247	570285.1	4215673	2.09E-02	3.20E-03	1.44E-03
248	570293.4	4215669	2.20E-02	3.37E-03	1.52E-03
249	570309.9	4215662	2.44E-02	3.72E-03	1.68E-03
250	570318.1	4215658	2.56E-02	3.90E-03	1.76E-03
251	570334.6	4215651	2.80E-02	4.28E-03	1.93E-03
252	570264	4215690	1.71E-02	2.62E-03	1.18E-03
253	570246.6	4215692	1.59E-02	2.44E-03	1.10E-03
254	570229.3	4215694	1.49E-02	2.27E-03	1.02E-03

255	570212	4215697	1.39E-02	2.13E-03	9.61E-04
256	570194.7	4215699	1.32E-02	2.01E-03	9.07E-04
257	570177.4	4215701	1.25E-02	1.91E-03	8.61E-04
258	570160.1	4215703	1.19E-02	1.82E-03	8.20E-04
259	570142.8	4215705	1.14E-02	1.74E-03	7.84E-04
260	570125.5	4215707	1.09E-02	1.67E-03	7.54E-04
261	570108.1	4215709	1.05E-02	1.61E-03	7.27E-04
262	570280.9	4215686	1.87E-02	2.86E-03	1.29E-03
263	570297.4	4215678	2.08E-02	3.18E-03	1.43E-03
264	570305.6	4215675	2.19E-02	3.34E-03	1.51E-03
265	570322.2	4215667	2.41E-02	3.68E-03	1.66E-03
266	570330.4	4215664	2.53E-02	3.86E-03	1.74E-03
267	570346.9	4215656	2.75E-02	4.20E-03	1.90E-03
268	570267.7	4215699	1.61E-02	2.46E-03	1.11E-03
269	570249.8	4215702	1.50E-02	2.29E-03	1.03E-03
270	570231.9	4215704	1.40E-02	2.13E-03	9.63E-04
271	570223	4215705	1.35E-02	2.07E-03	9.34E-04
272	570214	4215706	1.31E-02	2.01E-03	9.06E-04
273	570196.1	4215708	1.25E-02	1.90E-03	8.59E-04
274	570178.3	4215710	1.19E-02	1.82E-03	8.19E-04
275	570169.3	4215711	1.16E-02	1.77E-03	8.00E-04
276	570151.4	4215713	1.11E-02	1.69E-03	7.63E-04
277	570133.5	4215716	1.06E-02	1.62E-03	7.32E-04
278	570115.6	4215718	1.02E-02	1.56E-03	7.05E-04
279	570284.9	4215695	1.76E-02	2.69E-03	1.22E-03
280	570293.2	4215691	1.86E-02	2.84E-03	1.28E-03
281	570309.7	4215684	2.06E-02	3.15E-03	1.42E-03
282	570317.9	4215680	2.17E-02	3.32E-03	1.50E-03
283	570334.5	4215673	2.38E-02	3.64E-03	1.64E-03
284	570342.7	4215669	2.49E-02	3.80E-03	1.72E-03
285	570282.2	4215444	1.41E-01	2.15E-02	9.68E-03
286	570275.6	4215451	1.37E-01	2.09E-02	9.42E-03
287	570268.9	4215458	1.32E-01	2.01E-02	9.07E-03
288	570298.6	4215441	1.34E-01	2.05E-02	9.24E-03
289	570292.2	4215447	1.32E-01	2.02E-02	9.10E-03
290	570285.7	4215454	1.29E-01	1.97E-02	8.90E-03
291	570279.2	4215460	1.25E-01	1.91E-02	8.63E-03
292	570272.8	4215467	1.20E-01	1.84E-02	8.29E-03
293	570308.3	4215444	1.27E-01	1.93E-02	8.72E-03
294	570302	4215450	1.25E-01	1.91E-02	8.60E-03
295	570295.6	4215457	1.22E-01	1.87E-02	8.42E-03
296	570289.3	4215463	1.19E-01	1.82E-02	8.21E-03
297	570276.6	4215476	1.10E-01	1.68E-02	7.57E-03
298	570322.7	4215443	1.20E-01	1.84E-02	8.28E-03
299	570315.8	4215450	1.19E-01	1.82E-02	8.22E-03
300	570308.9	4215457	1.17E-01	1.79E-02	8.09E-03
301	570302	4215464	1.15E-01	1.75E-02	7.90E-03
302	570295.1	4215471	1.11E-01	1.70E-02	7.65E-03
303	570288.2	4215478	1.06E-01	1.63E-02	7.34E-03
304	570281.3	4215485	1.01E-01	1.54E-02	6.97E-03
305	570339	4215439	1.13E-01	1.72E-02	7.75E-03
306	570332.2	4215446	1.13E-01	1.73E-02	7.80E-03

307	570325.5	4215453	1.13E-01	1.72E-02	7.78E-03
308	570318.8	4215460	1.12E-01	1.70E-02	7.68E-03
309	570312	4215467	1.09E-01	1.67E-02	7.53E-03
310	570305.3	4215474	1.06E-01	1.62E-02	7.33E-03
311	570298.6	4215480	1.03E-01	1.57E-02	7.07E-03
312	570291.8	4215487	9.80E-02	1.50E-02	6.75E-03
313	570285.1	4215494	9.30E-02	1.42E-02	6.41E-03
314	570355.7	4215399	1.13E-01	1.73E-02	7.79E-03
315	570355.5	4215408	1.11E-01	1.69E-02	7.64E-03
316	570355.3	4215418	1.09E-01	1.67E-02	7.52E-03
317	570348.3	4215443	1.06E-01	1.62E-02	7.32E-03
318	570341.7	4215450	1.07E-01	1.64E-02	7.38E-03
319	570335.1	4215457	1.07E-01	1.64E-02	7.38E-03
320	570328.5	4215463	1.06E-01	1.62E-02	7.31E-03
321	570322	4215470	1.04E-01	1.59E-02	7.19E-03
322	570315.4	4215477	1.02E-01	1.56E-02	7.02E-03
323	570308.8	4215483	9.88E-02	1.51E-02	6.81E-03
324	570302.2	4215490	9.50E-02	1.45E-02	6.54E-03
325	570295.6	4215497	9.05E-02	1.38E-02	6.24E-03
326	570289	4215503	8.59E-02	1.31E-02	5.92E-03
327	570365.1	4215394	1.08E-01	1.65E-02	7.45E-03
328	570364.9	4215404	1.06E-01	1.62E-02	7.33E-03
329	570364.7	4215413	1.05E-01	1.60E-02	7.22E-03
330	570357.6	4215447	1.01E-01	1.54E-02	6.95E-03
331	570351.2	4215454	1.02E-01	1.55E-02	7.01E-03
332	570344.7	4215460	1.02E-01	1.56E-02	7.03E-03
333	570338.2	4215467	1.01E-01	1.55E-02	6.98E-03
334	570331.8	4215473	9.98E-02	1.52E-02	6.88E-03
335	570325.3	4215480	9.78E-02	1.49E-02	6.74E-03
336	570318.8	4215486	9.51E-02	1.45E-02	6.56E-03
337	570312.3	4215493	9.19E-02	1.40E-02	6.33E-03
338	570305.9	4215499	8.81E-02	1.35E-02	6.07E-03
339	570299.4	4215506	8.40E-02	1.28E-02	5.79E-03
340	570292.9	4215513	7.96E-02	1.22E-02	5.49E-03
341	570374.4	4215395	1.03E-01	1.57E-02	7.06E-03
342	570374.2	4215405	1.01E-01	1.54E-02	6.96E-03
343	570374	4215415	9.96E-02	1.52E-02	6.86E-03
344	570366.4	4215451	9.59E-02	1.47E-02	6.61E-03
345	570359.5	4215458	9.69E-02	1.48E-02	6.68E-03
346	570352.6	4215465	9.74E-02	1.49E-02	6.71E-03
347	570345.7	4215472	9.65E-02	1.47E-02	6.65E-03
348	570338.8	4215479	9.50E-02	1.45E-02	6.55E-03
349	570331.9	4215486	9.29E-02	1.42E-02	6.40E-03
350	570325	4215493	9.01E-02	1.38E-02	6.21E-03
351	570318.1	4215500	8.67E-02	1.32E-02	5.97E-03
352	570311.2	4215507	8.28E-02	1.26E-02	5.71E-03
353	570304.3	4215514	7.86E-02	1.20E-02	5.42E-03
354	570297.4	4215521	7.42E-02	1.13E-02	5.11E-03
355	570383.8	4215390	9.80E-02	1.50E-02	6.75E-03
356	570383.6	4215400	9.69E-02	1.48E-02	6.68E-03
357	570383.4	4215410	9.57E-02	1.46E-02	6.60E-03
358	570382.7	4215439	9.15E-02	1.40E-02	6.31E-03

359	570375.8	4215455	9.14E-02	1.40E-02	6.30E-03
360	570369	4215462	9.24E-02	1.41E-02	6.36E-03
361	570362.2	4215469	9.28E-02	1.42E-02	6.39E-03
362	570355.4	4215476	9.24E-02	1.41E-02	6.37E-03
363	570348.7	4215483	9.12E-02	1.39E-02	6.29E-03
364	570341.9	4215489	8.94E-02	1.37E-02	6.16E-03
365	570335.1	4215496	8.71E-02	1.33E-02	6.00E-03
366	570328.4	4215503	8.41E-02	1.28E-02	5.79E-03
367	570321.6	4215510	8.06E-02	1.23E-02	5.56E-03
368	570314.8	4215517	7.69E-02	1.17E-02	5.30E-03
369	570308.1	4215524	7.30E-02	1.11E-02	5.03E-03
370	570301.3	4215531	6.91E-02	1.06E-02	4.76E-03
371	570393	4215395	9.28E-02	1.42E-02	6.39E-03
372	570392.8	4215405	9.18E-02	1.40E-02	6.32E-03
373	570392.6	4215414	9.08E-02	1.39E-02	6.26E-03
374	570392	4215443	8.72E-02	1.33E-02	6.01E-03
375	570385.1	4215459	8.72E-02	1.33E-02	6.01E-03
376	570378.4	4215466	8.81E-02	1.35E-02	6.07E-03
377	570371.8	4215472	8.84E-02	1.35E-02	6.09E-03
378	570365.1	4215479	8.82E-02	1.35E-02	6.08E-03
379	570358.5	4215486	8.75E-02	1.34E-02	6.03E-03
380	570351.8	4215493	8.61E-02	1.31E-02	5.93E-03
381	570345.1	4215499	8.40E-02	1.28E-02	5.79E-03
382	570338.5	4215506	8.15E-02	1.24E-02	5.62E-03
383	570331.8	4215513	7.85E-02	1.20E-02	5.41E-03
384	570325.2	4215520	7.51E-02	1.15E-02	5.17E-03
385	570318.5	4215526	7.15E-02	1.09E-02	4.93E-03
386	570311.9	4215533	6.81E-02	1.04E-02	4.69E-03
387	570305.2	4215540	6.45E-02	9.85E-03	4.45E-03
388	570402.4	4215391	8.87E-02	1.36E-02	6.12E-03
389	570402.2	4215400	8.80E-02	1.34E-02	6.07E-03
390	570402	4215409	8.72E-02	1.33E-02	6.01E-03
391	570401.2	4215447	8.32E-02	1.27E-02	5.73E-03
392	570394.4	4215463	8.31E-02	1.27E-02	5.73E-03
393	570387.8	4215469	8.40E-02	1.28E-02	5.79E-03
394	570381.3	4215476	8.45E-02	1.29E-02	5.82E-03
395	570374.7	4215483	8.44E-02	1.29E-02	5.81E-03
396	570368.2	4215489	8.38E-02	1.28E-02	5.77E-03
397	570361.6	4215496	8.27E-02	1.26E-02	5.70E-03
398	570355	4215503	8.11E-02	1.24E-02	5.59E-03
399	570348.5	4215509	7.89E-02	1.20E-02	5.44E-03
400	570341.9	4215516	7.63E-02	1.16E-02	5.26E-03
401	570335.4	4215523	7.33E-02	1.12E-02	5.05E-03
402	570328.8	4215529	7.01E-02	1.07E-02	4.83E-03
403	570322.3	4215536	6.69E-02	1.02E-02	4.61E-03
404	570315.7	4215542	6.36E-02	9.71E-03	4.38E-03
405	570309.1	4215549	6.01E-02	9.18E-03	4.14E-03
406	570411.7	4215391	8.46E-02	1.29E-02	5.83E-03
407	570411.5	4215401	8.40E-02	1.28E-02	5.79E-03
408	570411.3	4215411	8.33E-02	1.27E-02	5.74E-03
409	570410.6	4215440	8.06E-02	1.23E-02	5.56E-03
410	570410.4	4215450	7.95E-02	1.21E-02	5.48E-03

411	570403.3	4215467	7.94E-02	1.21E-02	5.47E-03
412	570396.3	4215474	8.02E-02	1.22E-02	5.52E-03
413	570389.4	4215481	8.07E-02	1.23E-02	5.56E-03
414	570382.5	4215488	8.08E-02	1.23E-02	5.57E-03
415	570375.6	4215495	8.01E-02	1.22E-02	5.52E-03
416	570368.7	4215502	7.89E-02	1.20E-02	5.43E-03
417	570361.8	4215509	7.72E-02	1.18E-02	5.32E-03
418	570354.9	4215516	7.52E-02	1.15E-02	5.18E-03
419	570348	4215523	7.25E-02	1.11E-02	5.00E-03
420	570341.1	4215530	6.96E-02	1.06E-02	4.79E-03
421	570334.2	4215537	6.64E-02	1.01E-02	4.58E-03
422	570327.3	4215544	6.32E-02	9.64E-03	4.35E-03
423	570320.4	4215551	5.98E-02	9.12E-03	4.12E-03
424	570313.5	4215558	5.62E-02	8.59E-03	3.87E-03
425	570421.1	4215386	8.10E-02	1.24E-02	5.58E-03
426	570420.9	4215396	8.06E-02	1.23E-02	5.55E-03
427	570420.7	4215406	8.00E-02	1.22E-02	5.52E-03
428	570420.5	4215415	7.95E-02	1.21E-02	5.48E-03
429	570419.8	4215444	7.69E-02	1.17E-02	5.30E-03
430	570419.6	4215454	7.59E-02	1.16E-02	5.23E-03
431	570412.6	4215471	7.58E-02	1.16E-02	5.22E-03
432	570405.8	4215478	7.65E-02	1.17E-02	5.27E-03
433	570399	4215484	7.69E-02	1.17E-02	5.30E-03
434	570392.2	4215491	7.71E-02	1.18E-02	5.31E-03
435	570385.4	4215498	7.68E-02	1.17E-02	5.29E-03
436	570378.6	4215505	7.58E-02	1.16E-02	5.22E-03
437	570371.8	4215512	7.43E-02	1.14E-02	5.12E-03
438	570365	4215519	7.26E-02	1.11E-02	5.00E-03
439	570358.2	4215526	7.04E-02	1.08E-02	4.85E-03
440	570351.4	4215533	6.80E-02	1.04E-02	4.68E-03
441	570344.6	4215540	6.51E-02	9.94E-03	4.49E-03
442	570337.8	4215547	6.21E-02	9.48E-03	4.28E-03
443	570331	4215553	5.89E-02	9.00E-03	4.06E-03
444	570324.2	4215560	5.57E-02	8.50E-03	3.84E-03
445	570317.4	4215567	5.22E-02	7.97E-03	3.60E-03
446	570430.5	4215382	7.74E-02	1.18E-02	5.34E-03
447	570430.3	4215391	7.73E-02	1.18E-02	5.33E-03
448	570430.1	4215401	7.70E-02	1.18E-02	5.30E-03
449	570429.9	4215410	7.65E-02	1.17E-02	5.27E-03
450	570429.2	4215439	7.43E-02	1.13E-02	5.12E-03
451	570429	4215449	7.34E-02	1.12E-02	5.06E-03
452	570428.8	4215458	7.24E-02	1.11E-02	4.99E-03
453	570421.9	4215474	7.21E-02	1.10E-02	4.97E-03
454	570415.2	4215481	7.29E-02	1.11E-02	5.03E-03
455	570408.5	4215488	7.34E-02	1.12E-02	5.06E-03
456	570401.8	4215495	7.36E-02	1.12E-02	5.07E-03
457	570395.1	4215502	7.33E-02	1.12E-02	5.05E-03
458	570388.4	4215508	7.27E-02	1.11E-02	5.01E-03
459	570381.7	4215515	7.16E-02	1.09E-02	4.93E-03
460	570375	4215522	7.00E-02	1.07E-02	4.82E-03
461	570368.3	4215529	6.81E-02	1.04E-02	4.69E-03
462	570361.6	4215536	6.60E-02	1.01E-02	4.55E-03

463	570354.9	4215542	6.36E-02	9.71E-03	4.38E-03
464	570348.2	4215549	6.09E-02	9.29E-03	4.19E-03
465	570341.5	4215556	5.80E-02	8.85E-03	4.00E-03
466	570334.8	4215563	5.49E-02	8.39E-03	3.79E-03
467	570328.1	4215570	5.18E-02	7.90E-03	3.57E-03
468	570321.4	4215576	4.85E-02	7.41E-03	3.34E-03
469	570439.7	4215387	7.40E-02	1.13E-02	5.10E-03
470	570439.5	4215396	7.39E-02	1.13E-02	5.09E-03
471	570439.3	4215406	7.37E-02	1.13E-02	5.08E-03
472	570439.1	4215415	7.32E-02	1.12E-02	5.04E-03
473	570438.4	4215443	7.09E-02	1.08E-02	4.89E-03
474	570438.2	4215453	7.01E-02	1.07E-02	4.83E-03
475	570438	4215462	6.92E-02	1.06E-02	4.77E-03
476	570431.2	4215478	6.87E-02	1.05E-02	4.74E-03
477	570424.6	4215485	6.94E-02	1.06E-02	4.78E-03
478	570417.9	4215492	7.00E-02	1.07E-02	4.82E-03
479	570411.3	4215498	7.02E-02	1.07E-02	4.84E-03
480	570404.7	4215505	7.00E-02	1.07E-02	4.83E-03
481	570398.1	4215512	6.95E-02	1.06E-02	4.79E-03
482	570391.5	4215519	6.87E-02	1.05E-02	4.73E-03
483	570384.9	4215525	6.75E-02	1.03E-02	4.65E-03
484	570378.2	4215532	6.58E-02	1.00E-02	4.53E-03
485	570371.6	4215539	6.39E-02	9.75E-03	4.40E-03
486	570365	4215545	6.17E-02	9.43E-03	4.25E-03
487	570358.4	4215552	5.94E-02	9.07E-03	4.09E-03
488	570351.8	4215559	5.69E-02	8.68E-03	3.92E-03
489	570345.2	4215566	5.41E-02	8.26E-03	3.73E-03
490	570338.6	4215572	5.12E-02	7.81E-03	3.53E-03
491	570331.9	4215579	4.82E-02	7.36E-03	3.32E-03
492	570325.3	4215586	4.35E-02	6.65E-03	3.00E-03
493	570449.2	4215377	7.09E-02	1.08E-02	4.88E-03
494	570449	4215387	7.09E-02	1.08E-02	4.89E-03
495	570448.8	4215397	7.08E-02	1.08E-02	4.88E-03
496	570448.5	4215407	7.05E-02	1.08E-02	4.86E-03
497	570448.3	4215416	7.00E-02	1.07E-02	4.83E-03
498	570447.7	4215446	6.79E-02	1.04E-02	4.68E-03
499	570447.4	4215456	6.70E-02	1.02E-02	4.62E-03
500	570447.2	4215466	6.61E-02	1.01E-02	4.55E-03
501	570440.1	4215482	6.55E-02	1.00E-02	4.51E-03
502	570433.2	4215489	6.61E-02	1.01E-02	4.56E-03
503	570426.3	4215496	6.66E-02	1.02E-02	4.59E-03
504	570419.4	4215503	6.69E-02	1.02E-02	4.61E-03
505	570412.5	4215510	6.69E-02	1.02E-02	4.61E-03
506	570405.6	4215517	6.63E-02	1.01E-02	4.57E-03
507	570398.7	4215524	6.55E-02	1.00E-02	4.51E-03
508	570391.8	4215531	6.42E-02	9.81E-03	4.43E-03
509	570384.9	4215538	6.27E-02	9.57E-03	4.32E-03
510	570378	4215546	6.07E-02	9.28E-03	4.19E-03
511	570371.1	4215553	5.86E-02	8.95E-03	4.04E-03
512	570364.2	4215560	5.63E-02	8.60E-03	3.88E-03
513	570357.3	4215567	5.38E-02	8.21E-03	3.70E-03
514	570350.4	4215574	5.10E-02	7.79E-03	3.52E-03

515	570343.5	4215581	4.82E-02	7.36E-03	3.32E-03
516	570336.5	4215588	4.53E-02	6.91E-03	3.12E-03
517	570329.6	4215595	4.24E-02	6.47E-03	2.92E-03
518	570458.6	4215373	6.82E-02	1.04E-02	4.70E-03
519	570458.4	4215382	6.81E-02	1.04E-02	4.69E-03
520	570458.2	4215392	6.79E-02	1.04E-02	4.68E-03
521	570458	4215402	6.76E-02	1.03E-02	4.66E-03
522	570457.7	4215411	6.72E-02	1.03E-02	4.63E-03
523	570457.1	4215441	6.55E-02	1.00E-02	4.51E-03
524	570456.9	4215450	6.47E-02	9.89E-03	4.46E-03
525	570456.6	4215460	6.39E-02	9.75E-03	4.40E-03
526	570456.4	4215470	6.28E-02	9.59E-03	4.33E-03
527	570449.4	4215486	6.23E-02	9.51E-03	4.29E-03
528	570442.6	4215493	6.30E-02	9.61E-03	4.34E-03
529	570435.8	4215500	6.34E-02	9.68E-03	4.37E-03
530	570429	4215507	6.37E-02	9.72E-03	4.39E-03
531	570422.1	4215514	6.37E-02	9.73E-03	4.39E-03
532	570415.3	4215521	6.35E-02	9.70E-03	4.38E-03
533	570408.5	4215528	6.29E-02	9.60E-03	4.33E-03
534	570401.7	4215535	6.18E-02	9.43E-03	4.26E-03
535	570394.9	4215542	6.04E-02	9.23E-03	4.16E-03
536	570388.1	4215548	5.88E-02	8.98E-03	4.05E-03
537	570381.3	4215555	5.70E-02	8.70E-03	3.92E-03
538	570374.5	4215562	5.49E-02	8.38E-03	3.78E-03
539	570367.6	4215569	5.26E-02	8.03E-03	3.62E-03
540	570360.8	4215576	5.02E-02	7.66E-03	3.46E-03
541	570354	4215583	4.76E-02	7.27E-03	3.28E-03
542	570347.2	4215590	4.50E-02	6.87E-03	3.10E-03
543	570340.4	4215597	4.23E-02	6.46E-03	2.92E-03
544	570333.6	4215604	3.97E-02	6.06E-03	2.73E-03
545	570468	4215368	6.57E-02	1.00E-02	4.53E-03
546	570467.8	4215378	6.55E-02	1.00E-02	4.52E-03
547	570467.6	4215387	6.53E-02	9.97E-03	4.50E-03
548	570467.4	4215397	6.49E-02	9.91E-03	4.47E-03
549	570467.1	4215407	6.44E-02	9.84E-03	4.44E-03
550	570466.9	4215416	6.41E-02	9.79E-03	4.42E-03
551	570466.3	4215445	6.25E-02	9.55E-03	4.31E-03
552	570466.1	4215454	6.18E-02	9.43E-03	4.26E-03
553	570465.8	4215464	6.09E-02	9.30E-03	4.20E-03
554	570465.6	4215474	5.98E-02	9.13E-03	4.12E-03
555	570458.7	4215490	5.93E-02	9.05E-03	4.08E-03
556	570452	4215497	5.99E-02	9.14E-03	4.12E-03
557	570445.2	4215504	6.03E-02	9.21E-03	4.16E-03
558	570438.5	4215511	6.06E-02	9.26E-03	4.18E-03
559	570431.8	4215517	6.07E-02	9.27E-03	4.18E-03
560	570425	4215524	6.06E-02	9.25E-03	4.18E-03
561	570418.3	4215531	6.02E-02	9.19E-03	4.15E-03
562	570411.6	4215538	5.95E-02	9.08E-03	4.10E-03
563	570404.8	4215545	5.83E-02	8.90E-03	4.02E-03
564	570398.1	4215552	5.69E-02	8.69E-03	3.92E-03
565	570391.4	4215558	5.52E-02	8.43E-03	3.81E-03
566	570384.7	4215565	5.34E-02	8.15E-03	3.68E-03

567	570377.9	4215572	5.13E-02	7.84E-03	3.54E-03
568	570371.2	4215579	4.92E-02	7.51E-03	3.39E-03
569	570364.5	4215586	4.69E-02	7.17E-03	3.23E-03
570	570357.7	4215593	4.45E-02	6.80E-03	3.07E-03
571	570351	4215599	4.21E-02	6.43E-03	2.90E-03
572	570344.3	4215606	3.96E-02	6.05E-03	2.73E-03
573	570337.5	4215613	3.72E-02	5.69E-03	2.57E-03
574	570477.4	4215364	6.32E-02	9.66E-03	4.36E-03
575	570477.2	4215373	6.32E-02	9.65E-03	4.35E-03
576	570477	4215383	6.29E-02	9.61E-03	4.34E-03
577	570476.8	4215392	6.26E-02	9.55E-03	4.31E-03
578	570476.5	4215402	6.21E-02	9.48E-03	4.28E-03
579	570476.3	4215411	6.17E-02	9.42E-03	4.25E-03
580	570475.7	4215440	6.05E-02	9.23E-03	4.17E-03
581	570475.5	4215449	5.98E-02	9.13E-03	4.12E-03
582	570475.3	4215459	5.90E-02	9.01E-03	4.06E-03
583	570475	4215468	5.81E-02	8.87E-03	4.00E-03
584	570474.8	4215478	5.70E-02	8.70E-03	3.93E-03
585	570468	4215494	5.64E-02	8.61E-03	3.89E-03
586	570461.3	4215501	5.69E-02	8.69E-03	3.92E-03
587	570454.7	4215507	5.73E-02	8.75E-03	3.95E-03
588	570448	4215514	5.77E-02	8.81E-03	3.97E-03
589	570441.3	4215521	5.79E-02	8.84E-03	3.99E-03
590	570434.7	4215528	5.78E-02	8.82E-03	3.98E-03
591	570428	4215534	5.75E-02	8.77E-03	3.96E-03
592	570421.4	4215541	5.69E-02	8.69E-03	3.92E-03
593	570414.7	4215548	5.62E-02	8.58E-03	3.87E-03
594	570408.1	4215555	5.50E-02	8.40E-03	3.79E-03
595	570401.4	4215561	5.35E-02	8.17E-03	3.69E-03
596	570394.7	4215568	5.18E-02	7.91E-03	3.57E-03
597	570388.1	4215575	5.00E-02	7.64E-03	3.45E-03
598	570381.4	4215582	4.81E-02	7.34E-03	3.31E-03
599	570374.8	4215588	4.61E-02	7.03E-03	3.17E-03
600	570368.1	4215595	4.39E-02	6.70E-03	3.03E-03
601	570361.5	4215602	4.17E-02	6.37E-03	2.87E-03
602	570354.8	4215609	3.95E-02	6.03E-03	2.72E-03
603	570348.2	4215615	3.72E-02	5.68E-03	2.56E-03
604	570341.5	4215622	3.50E-02	5.35E-03	2.41E-03
605	570486.7	4215363	6.08E-02	9.29E-03	4.19E-03
606	570486.5	4215373	6.08E-02	9.28E-03	4.19E-03
607	570486.3	4215383	6.06E-02	9.25E-03	4.18E-03
608	570486	4215393	6.03E-02	9.21E-03	4.16E-03
609	570485.8	4215403	5.99E-02	9.14E-03	4.13E-03
610	570485.6	4215412	5.95E-02	9.09E-03	4.10E-03
611	570484.9	4215442	5.81E-02	8.87E-03	4.00E-03
612	570484.7	4215452	5.74E-02	8.77E-03	3.96E-03
613	570484.5	4215462	5.66E-02	8.65E-03	3.90E-03
614	570484.3	4215471	5.57E-02	8.50E-03	3.84E-03
615	570484.1	4215481	5.46E-02	8.34E-03	3.76E-03
616	570476.9	4215498	5.38E-02	8.22E-03	3.71E-03
617	570470	4215505	5.42E-02	8.27E-03	3.73E-03
618	570463.1	4215512	5.46E-02	8.33E-03	3.76E-03

619	570456.2	4215519	5.49E-02	8.38E-03	3.78E-03
620	570449.3	4215526	5.51E-02	8.41E-03	3.79E-03
621	570442.4	4215533	5.50E-02	8.41E-03	3.79E-03
622	570435.5	4215540	5.47E-02	8.36E-03	3.77E-03
623	570428.6	4215547	5.42E-02	8.28E-03	3.74E-03
624	570421.7	4215554	5.35E-02	8.17E-03	3.69E-03
625	570414.8	4215561	5.25E-02	8.01E-03	3.62E-03
626	570407.9	4215568	5.10E-02	7.79E-03	3.51E-03
627	570401	4215575	4.94E-02	7.54E-03	3.40E-03
628	570394.1	4215582	4.76E-02	7.27E-03	3.28E-03
629	570387.2	4215589	4.57E-02	6.98E-03	3.15E-03
630	570380.3	4215596	4.37E-02	6.67E-03	3.01E-03
631	570373.4	4215603	4.16E-02	6.35E-03	2.87E-03
632	570366.5	4215610	3.95E-02	6.03E-03	2.72E-03
633	570359.6	4215617	3.73E-02	5.70E-03	2.57E-03
634	570352.7	4215624	3.52E-02	5.37E-03	2.42E-03
635	570345.8	4215631	3.31E-02	5.05E-03	2.28E-03
636	570496.1	4215359	5.86E-02	8.94E-03	4.04E-03
637	570495.9	4215369	5.86E-02	8.95E-03	4.04E-03
638	570495.7	4215378	5.85E-02	8.93E-03	4.03E-03
639	570495.5	4215388	5.83E-02	8.90E-03	4.02E-03
640	570495.2	4215398	5.80E-02	8.86E-03	4.00E-03
641	570495	4215407	5.77E-02	8.80E-03	3.97E-03
642	570494.8	4215417	5.73E-02	8.75E-03	3.95E-03
643	570494.1	4215446	5.57E-02	8.51E-03	3.84E-03
644	570493.9	4215456	5.50E-02	8.40E-03	3.79E-03
645	570493.7	4215466	5.43E-02	8.29E-03	3.74E-03
646	570493.5	4215475	5.33E-02	8.14E-03	3.67E-03
647	570493.3	4215485	5.23E-02	7.98E-03	3.60E-03
648	570486.2	4215502	5.15E-02	7.87E-03	3.55E-03
649	570479.4	4215509	5.18E-02	7.90E-03	3.57E-03
650	570472.6	4215516	5.19E-02	7.92E-03	3.58E-03
651	570465.7	4215523	5.21E-02	7.96E-03	3.59E-03
652	570458.9	4215530	5.23E-02	7.99E-03	3.60E-03
653	570452.1	4215536	5.23E-02	7.99E-03	3.61E-03
654	570445.3	4215543	5.22E-02	7.97E-03	3.60E-03
655	570438.4	4215550	5.18E-02	7.92E-03	3.57E-03
656	570431.6	4215557	5.12E-02	7.82E-03	3.53E-03
657	570424.8	4215564	5.04E-02	7.69E-03	3.47E-03
658	570418	4215571	4.93E-02	7.53E-03	3.40E-03
659	570411.1	4215578	4.79E-02	7.32E-03	3.30E-03
660	570404.3	4215585	4.64E-02	7.08E-03	3.20E-03
661	570397.5	4215592	4.47E-02	6.82E-03	3.08E-03
662	570390.7	4215599	4.29E-02	6.54E-03	2.95E-03
663	570383.9	4215606	4.10E-02	6.26E-03	2.82E-03
664	570377	4215613	3.90E-02	5.96E-03	2.69E-03
665	570370.2	4215620	3.70E-02	5.65E-03	2.55E-03
666	570363.4	4215627	3.50E-02	5.35E-03	2.41E-03
667	570356.6	4215633	3.30E-02	5.04E-03	2.28E-03
668	570349.7	4215640	3.11E-02	4.75E-03	2.14E-03
669	570505.5	4215355	5.64E-02	8.61E-03	3.89E-03
670	570505.3	4215364	5.65E-02	8.62E-03	3.89E-03

671	570505.1	4215374	5.65E-02	8.62E-03	3.89E-03
672	570504.9	4215383	5.64E-02	8.61E-03	3.88E-03
673	570504.6	4215393	5.62E-02	8.58E-03	3.87E-03
674	570504.4	4215403	5.59E-02	8.54E-03	3.85E-03
675	570504.2	4215412	5.56E-02	8.48E-03	3.83E-03
676	570503.6	4215441	5.41E-02	8.25E-03	3.72E-03
677	570503.3	4215451	5.35E-02	8.16E-03	3.68E-03
678	570503.1	4215460	5.28E-02	8.06E-03	3.64E-03
679	570502.9	4215470	5.20E-02	7.94E-03	3.58E-03
680	570502.7	4215480	5.11E-02	7.80E-03	3.52E-03
681	570502.5	4215489	5.01E-02	7.65E-03	3.45E-03
682	570495.5	4215506	4.94E-02	7.54E-03	3.40E-03
683	570488.7	4215513	4.96E-02	7.57E-03	3.42E-03
684	570482	4215519	4.97E-02	7.59E-03	3.42E-03
685	570475.2	4215526	4.97E-02	7.58E-03	3.42E-03
686	570468.5	4215533	4.97E-02	7.59E-03	3.43E-03
687	570461.7	4215540	4.98E-02	7.60E-03	3.43E-03
688	570455	4215547	4.97E-02	7.59E-03	3.42E-03
689	570448.2	4215554	4.95E-02	7.56E-03	3.41E-03
690	570441.5	4215561	4.90E-02	7.49E-03	3.38E-03
691	570434.7	4215567	4.83E-02	7.38E-03	3.33E-03
692	570428	4215574	4.74E-02	7.24E-03	3.27E-03
693	570421.2	4215581	4.63E-02	7.07E-03	3.19E-03
694	570414.5	4215588	4.51E-02	6.88E-03	3.11E-03
695	570407.7	4215595	4.35E-02	6.65E-03	3.00E-03
696	570401	4215602	4.19E-02	6.40E-03	2.89E-03
697	570394.2	4215608	4.02E-02	6.14E-03	2.77E-03
698	570387.5	4215615	3.85E-02	5.87E-03	2.65E-03
699	570380.7	4215622	3.66E-02	5.59E-03	2.52E-03
700	570373.9	4215629	3.47E-02	5.31E-03	2.39E-03
701	570367.2	4215636	3.29E-02	5.02E-03	2.27E-03
702	570360.4	4215643	3.11E-02	4.74E-03	2.14E-03
703	570353.7	4215650	2.93E-02	4.47E-03	2.02E-03
704	570514.9	4215350	5.43E-02	8.30E-03	3.74E-03
705	570514.7	4215360	5.44E-02	8.31E-03	3.75E-03
706	570514.5	4215369	5.45E-02	8.32E-03	3.75E-03
707	570514.3	4215379	5.44E-02	8.31E-03	3.75E-03
708	570514	4215388	5.43E-02	8.29E-03	3.74E-03
709	570513.8	4215398	5.41E-02	8.27E-03	3.73E-03
710	570513.6	4215407	5.39E-02	8.22E-03	3.71E-03
711	570513.4	4215417	5.35E-02	8.17E-03	3.69E-03
712	570512.7	4215446	5.21E-02	7.95E-03	3.59E-03
713	570512.5	4215455	5.15E-02	7.86E-03	3.55E-03
714	570512.3	4215465	5.08E-02	7.76E-03	3.50E-03
715	570512.1	4215474	5.01E-02	7.64E-03	3.45E-03
716	570511.9	4215484	4.92E-02	7.52E-03	3.39E-03
717	570511.7	4215493	4.83E-02	7.38E-03	3.33E-03
718	570504.8	4215510	4.74E-02	7.24E-03	3.27E-03
719	570498.1	4215516	4.76E-02	7.26E-03	3.28E-03
720	570491.4	4215523	4.77E-02	7.28E-03	3.28E-03
721	570484.7	4215530	4.77E-02	7.28E-03	3.28E-03
722	570478	4215537	4.75E-02	7.26E-03	3.28E-03

723	570471.3	4215543	4.74E-02	7.23E-03	3.26E-03
724	570464.7	4215550	4.73E-02	7.22E-03	3.26E-03
725	570458	4215557	4.71E-02	7.20E-03	3.25E-03
726	570451.3	4215564	4.68E-02	7.15E-03	3.23E-03
727	570444.6	4215571	4.63E-02	7.07E-03	3.19E-03
728	570437.9	4215577	4.56E-02	6.96E-03	3.14E-03
729	570431.2	4215584	4.46E-02	6.82E-03	3.08E-03
730	570424.5	4215591	4.35E-02	6.65E-03	3.00E-03
731	570417.8	4215598	4.23E-02	6.46E-03	2.91E-03
732	570411.2	4215605	4.09E-02	6.24E-03	2.82E-03
733	570404.5	4215611	3.94E-02	6.01E-03	2.71E-03
734	570397.8	4215618	3.78E-02	5.77E-03	2.60E-03
735	570391.1	4215625	3.61E-02	5.51E-03	2.49E-03
736	570384.4	4215632	3.44E-02	5.25E-03	2.37E-03
737	570377.7	4215638	3.27E-02	4.99E-03	2.25E-03
738	570371	4215645	3.09E-02	4.72E-03	2.13E-03
739	570364.3	4215652	2.92E-02	4.46E-03	2.01E-03
740	570357.7	4215659	2.76E-02	4.21E-03	1.90E-03
741	569937.1	4214980	1.94E-02	2.97E-03	1.34E-03
742	569941.8	4214988	2.08E-02	3.18E-03	1.44E-03
743	569895.6	4214925	1.41E-02	2.15E-03	9.69E-04
744	569900.3	4214934	1.45E-02	2.22E-03	1.00E-03
745	569905	4214942	1.51E-02	2.31E-03	1.04E-03
746	569909.6	4214951	1.58E-02	2.41E-03	1.09E-03
747	569914.3	4214959	1.66E-02	2.54E-03	1.15E-03
748	569919	4214968	1.77E-02	2.70E-03	1.22E-03
749	569923.7	4214976	1.88E-02	2.87E-03	1.30E-03
750	569928.3	4214985	2.01E-02	3.07E-03	1.38E-03
751	569933	4214993	2.16E-02	3.29E-03	1.49E-03
752	569877.5	4214913	1.35E-02	2.06E-03	9.32E-04
753	569882.2	4214922	1.39E-02	2.12E-03	9.58E-04
754	569886.9	4214930	1.43E-02	2.19E-03	9.88E-04
755	569891.5	4214939	1.49E-02	2.27E-03	1.02E-03
756	569896.2	4214947	1.55E-02	2.36E-03	1.07E-03
757	569900.9	4214956	1.62E-02	2.48E-03	1.12E-03
758	569905.5	4214964	1.72E-02	2.62E-03	1.18E-03
759	569910.2	4214973	1.82E-02	2.78E-03	1.26E-03
760	569914.9	4214981	1.94E-02	2.96E-03	1.34E-03
761	569919.6	4214990	2.08E-02	3.17E-03	1.43E-03
762	569924.2	4214998	2.24E-02	3.42E-03	1.54E-03
763	569928.9	4215007	2.42E-02	3.69E-03	1.67E-03
764	569868.7	4214918	1.38E-02	2.11E-03	9.50E-04
765	569873.4	4214926	1.42E-02	2.17E-03	9.78E-04
766	569878.1	4214935	1.46E-02	2.24E-03	1.01E-03
767	569882.8	4214943	1.52E-02	2.32E-03	1.05E-03
768	569887.4	4214952	1.59E-02	2.42E-03	1.09E-03
769	569892.1	4214960	1.67E-02	2.55E-03	1.15E-03
770	569896.8	4214969	1.77E-02	2.71E-03	1.22E-03
771	569901.5	4214977	1.88E-02	2.88E-03	1.30E-03
772	569906.1	4214986	2.01E-02	3.07E-03	1.38E-03
773	569910.8	4214994	2.16E-02	3.29E-03	1.49E-03
774	569915.5	4215003	2.33E-02	3.55E-03	1.60E-03

775	569920.2	4215011	2.52E-02	3.85E-03	1.74E-03
776	569860	4214923	1.41E-02	2.15E-03	9.71E-04
777	569864.7	4214931	1.45E-02	2.21E-03	9.98E-04
778	569869.3	4214940	1.50E-02	2.29E-03	1.03E-03
779	569874	4214948	1.56E-02	2.38E-03	1.07E-03
780	569878.7	4214957	1.63E-02	2.49E-03	1.12E-03
781	569883.3	4214965	1.73E-02	2.63E-03	1.19E-03
782	569888	4214974	1.83E-02	2.80E-03	1.26E-03
783	569892.7	4214982	1.95E-02	2.98E-03	1.34E-03
784	569897.4	4214991	2.08E-02	3.18E-03	1.44E-03
785	569902	4214999	2.24E-02	3.42E-03	1.54E-03
786	569906.7	4215008	2.42E-02	3.69E-03	1.67E-03
787	569911.4	4215016	2.62E-02	4.01E-03	1.81E-03
788	569851.2	4214927	1.44E-02	2.20E-03	9.93E-04
789	569855.9	4214936	1.48E-02	2.26E-03	1.02E-03
790	569860.6	4214944	1.53E-02	2.34E-03	1.06E-03
791	569865.2	4214953	1.60E-02	2.44E-03	1.10E-03
792	569869.9	4214961	1.68E-02	2.57E-03	1.16E-03
793	569874.6	4214970	1.78E-02	2.72E-03	1.23E-03
794	569879.3	4214978	1.89E-02	2.89E-03	1.30E-03
795	569883.9	4214987	2.01E-02	3.08E-03	1.39E-03
796	569888.6	4214996	2.16E-02	3.30E-03	1.49E-03
797	569893.3	4215004	2.33E-02	3.56E-03	1.61E-03
798	569898	4215013	2.52E-02	3.85E-03	1.74E-03
799	569902.6	4215021	2.73E-02	4.18E-03	1.88E-03
800	569842.5	4214932	1.47E-02	2.24E-03	1.01E-03
801	569847.1	4214941	1.51E-02	2.31E-03	1.04E-03
802	569851.8	4214949	1.57E-02	2.40E-03	1.08E-03
803	569856.5	4214958	1.64E-02	2.51E-03	1.13E-03
804	569861.1	4214966	1.74E-02	2.65E-03	1.20E-03
805	569865.8	4214975	1.84E-02	2.81E-03	1.27E-03
806	569870.5	4214983	1.96E-02	2.99E-03	1.35E-03
807	569875.2	4214992	2.09E-02	3.19E-03	1.44E-03
808	569879.8	4215000	2.25E-02	3.43E-03	1.55E-03
809	569884.5	4215009	2.42E-02	3.70E-03	1.67E-03
810	569889.2	4215017	2.62E-02	4.01E-03	1.81E-03
811	569893.9	4215026	2.85E-02	4.35E-03	1.96E-03
812	569833.7	4214937	1.50E-02	2.29E-03	1.03E-03
813	569838.4	4214946	1.55E-02	2.36E-03	1.07E-03
814	569843	4214954	1.61E-02	2.46E-03	1.11E-03
815	569847.7	4214963	1.69E-02	2.59E-03	1.17E-03
816	569852.4	4214971	1.79E-02	2.74E-03	1.23E-03
817	569857.1	4214980	1.90E-02	2.90E-03	1.31E-03
818	569861.7	4214988	2.02E-02	3.09E-03	1.39E-03
819	569866.4	4214997	2.17E-02	3.31E-03	1.49E-03
820	569871.1	4215005	2.33E-02	3.56E-03	1.61E-03
821	569875.8	4215014	2.52E-02	3.85E-03	1.74E-03
822	569880.4	4215022	2.73E-02	4.17E-03	1.88E-03
823	569885.1	4215031	2.97E-02	4.53E-03	2.05E-03
824	569941.2	4215133	1.79E-01	2.73E-02	1.23E-02
825	569945.9	4215141	1.99E-01	3.04E-02	1.37E-02
826	569950.6	4215150	2.19E-01	3.35E-02	1.51E-02

827	569824.9	4214942	1.53E-02	2.34E-03	1.06E-03
828	569829.6	4214950	1.59E-02	2.42E-03	1.09E-03
829	569834.3	4214959	1.66E-02	2.53E-03	1.14E-03
830	569838.9	4214967	1.75E-02	2.67E-03	1.20E-03
831	569843.6	4214976	1.85E-02	2.82E-03	1.27E-03
832	569848.3	4214984	1.96E-02	2.99E-03	1.35E-03
833	569853	4214993	2.09E-02	3.19E-03	1.44E-03
834	569857.6	4215001	2.25E-02	3.43E-03	1.55E-03
835	569862.3	4215010	2.42E-02	3.70E-03	1.67E-03
836	569867	4215018	2.62E-02	4.00E-03	1.80E-03
837	569871.7	4215027	2.83E-02	4.33E-03	1.95E-03
838	569876.3	4215035	3.08E-02	4.71E-03	2.12E-03
839	569927.8	4215129	1.54E-01	2.36E-02	1.06E-02
840	569932.4	4215137	1.72E-01	2.63E-02	1.19E-02
841	569937.1	4215146	1.89E-01	2.89E-02	1.31E-02
842	569941.8	4215154	2.07E-01	3.15E-02	1.42E-02
843	569816.2	4214947	1.57E-02	2.39E-03	1.08E-03
844	569820.8	4214955	1.63E-02	2.48E-03	1.12E-03
845	569825.5	4214964	1.71E-02	2.61E-03	1.18E-03
846	569830.2	4214972	1.80E-02	2.75E-03	1.24E-03
847	569834.9	4214981	1.90E-02	2.91E-03	1.31E-03
848	569839.5	4214989	2.02E-02	3.09E-03	1.39E-03
849	569844.2	4214998	2.16E-02	3.31E-03	1.49E-03
850	569848.9	4215006	2.33E-02	3.55E-03	1.60E-03
851	569853.6	4215015	2.51E-02	3.83E-03	1.73E-03
852	569858.2	4215023	2.71E-02	4.14E-03	1.87E-03
853	569862.9	4215032	2.94E-02	4.49E-03	2.02E-03
854	569914.3	4215125	1.28E-01	1.96E-02	8.84E-03
855	569919	4215134	1.51E-01	2.31E-02	1.04E-02
856	569923.7	4215142	1.65E-01	2.52E-02	1.14E-02
857	569928.4	4215151	1.80E-01	2.75E-02	1.24E-02
858	569933	4215159	1.95E-01	2.97E-02	1.34E-02
859	569802.7	4214943	1.56E-02	2.38E-03	1.07E-03
860	569807.4	4214952	1.61E-02	2.45E-03	1.11E-03
861	569812.1	4214960	1.67E-02	2.55E-03	1.15E-03
862	569816.7	4214969	1.76E-02	2.68E-03	1.21E-03
863	569821.4	4214977	1.85E-02	2.83E-03	1.28E-03
864	569826.1	4214986	1.96E-02	2.99E-03	1.35E-03
865	569830.8	4214994	2.09E-02	3.19E-03	1.44E-03
866	569835.4	4215003	2.24E-02	3.42E-03	1.54E-03
867	569840.1	4215011	2.41E-02	3.68E-03	1.66E-03
868	569844.8	4215020	2.60E-02	3.96E-03	1.79E-03
869	569849.5	4215028	2.80E-02	4.28E-03	1.93E-03
870	569854.1	4215037	3.04E-02	4.64E-03	2.09E-03
871	569905.6	4215130	1.27E-01	1.94E-02	8.75E-03
872	569910.2	4215139	1.47E-01	2.24E-02	1.01E-02
873	569914.9	4215147	1.58E-01	2.41E-02	1.09E-02
874	569919.6	4215156	1.71E-01	2.62E-02	1.18E-02
875	569924.3	4215164	1.84E-01	2.80E-02	1.27E-02
876	569792.9	4214939	1.54E-02	2.36E-03	1.06E-03
877	569794	4214948	1.59E-02	2.43E-03	1.10E-03
878	569798.6	4214956	1.65E-02	2.51E-03	1.13E-03

879	569803.3	4214965	1.72E-02	2.63E-03	1.19E-03
880	569808	4214973	1.81E-02	2.76E-03	1.24E-03
881	569812.7	4214982	1.90E-02	2.90E-03	1.31E-03
882	569817.3	4214990	2.02E-02	3.08E-03	1.39E-03
883	569822	4214999	2.16E-02	3.29E-03	1.49E-03
884	569826.7	4215007	2.31E-02	3.53E-03	1.59E-03
885	569831.4	4215016	2.48E-02	3.79E-03	1.71E-03
886	569836	4215024	2.68E-02	4.09E-03	1.84E-03
887	569840.7	4215033	2.89E-02	4.42E-03	1.99E-03
888	569896.8	4215135	1.26E-01	1.92E-02	8.66E-03
889	569901.5	4215143	1.42E-01	2.17E-02	9.78E-03
890	569906.2	4215152	1.51E-01	2.31E-02	1.04E-02
891	569910.8	4215160	1.63E-01	2.49E-02	1.12E-02
892	569915.5	4215169	1.73E-01	2.65E-02	1.19E-02
893	569784.2	4214944	1.58E-02	2.41E-03	1.09E-03
894	569783.1	4214935	1.54E-02	2.35E-03	1.06E-03
895	569789.9	4214961	1.69E-02	2.58E-03	1.17E-03
896	569794.5	4214970	1.77E-02	2.70E-03	1.22E-03
897	569799.2	4214978	1.86E-02	2.83E-03	1.28E-03
898	569803.9	4214987	1.96E-02	2.99E-03	1.35E-03
899	569808.6	4214995	2.08E-02	3.18E-03	1.43E-03
900	569813.2	4215004	2.22E-02	3.39E-03	1.53E-03
901	569817.9	4215012	2.38E-02	3.63E-03	1.64E-03
902	569822.6	4215021	2.56E-02	3.90E-03	1.76E-03
903	569827.3	4215029	2.75E-02	4.20E-03	1.90E-03
904	569831.9	4215038	2.97E-02	4.53E-03	2.05E-03
905	569888	4215140	1.23E-01	1.87E-02	8.45E-03
906	569892.7	4215148	1.37E-01	2.09E-02	9.41E-03
907	569897.4	4215157	1.44E-01	2.21E-02	9.96E-03
908	569902.1	4215165	1.55E-01	2.37E-02	1.07E-02
909	569906.7	4215174	1.63E-01	2.48E-02	1.12E-02
910	569775.3	4214948	1.61E-02	2.46E-03	1.11E-03
911	569774.2	4214939	1.56E-02	2.39E-03	1.08E-03
912	569773.1	4214929	1.53E-02	2.34E-03	1.05E-03
913	569776.4	4214958	1.67E-02	2.55E-03	1.15E-03
914	569781.1	4214966	1.74E-02	2.65E-03	1.20E-03
915	569785.8	4214975	1.81E-02	2.77E-03	1.25E-03
916	569790.5	4214983	1.91E-02	2.91E-03	1.31E-03
917	569795.1	4214992	2.01E-02	3.07E-03	1.39E-03
918	569799.8	4215000	2.14E-02	3.26E-03	1.47E-03
919	569804.5	4215009	2.28E-02	3.48E-03	1.57E-03
920	569809.2	4215017	2.44E-02	3.73E-03	1.68E-03
921	569813.8	4215026	2.62E-02	4.00E-03	1.81E-03
922	569818.5	4215034	2.82E-02	4.30E-03	1.94E-03
923	569823.2	4215043	3.04E-02	4.64E-03	2.09E-03
924	569879.3	4215145	1.18E-01	1.81E-02	8.16E-03
925	569884	4215153	1.31E-01	2.00E-02	9.01E-03
926	569888.6	4215162	1.38E-01	2.10E-02	9.48E-03
927	569893.3	4215170	1.46E-01	2.23E-02	1.01E-02
928	569898	4215179	1.52E-01	2.33E-02	1.05E-02
929	569766.6	4214953	1.65E-02	2.52E-03	1.14E-03
930	569765.5	4214944	1.60E-02	2.44E-03	1.10E-03

931	569764.4	4214934	1.56E-02	2.38E-03	1.08E-03
932	569763.3	4214925	1.53E-02	2.34E-03	1.06E-03
933	569777.2	4214821	9.11E-03	1.39E-03	6.28E-04
934	569782.9	4214813	8.71E-03	1.33E-03	6.00E-04
935	569767.7	4214962	1.71E-02	2.62E-03	1.18E-03
936	569772.3	4214971	1.78E-02	2.72E-03	1.23E-03
937	569777	4214979	1.86E-02	2.84E-03	1.28E-03
938	569781.7	4214988	1.95E-02	2.98E-03	1.35E-03
939	569786.4	4214996	2.06E-02	3.15E-03	1.42E-03
940	569791	4215005	2.19E-02	3.34E-03	1.51E-03
941	569795.7	4215013	2.33E-02	3.56E-03	1.61E-03
942	569800.4	4215022	2.49E-02	3.80E-03	1.72E-03
943	569805.1	4215030	2.67E-02	4.08E-03	1.84E-03
944	569809.7	4215039	2.87E-02	4.39E-03	1.98E-03
945	569814.4	4215047	3.10E-02	4.73E-03	2.13E-03
946	569819.1	4215056	3.34E-02	5.10E-03	2.30E-03
947	569870.5	4215149	1.12E-01	1.71E-02	7.72E-03
948	569875.2	4215158	1.24E-01	1.90E-02	8.58E-03
949	569879.9	4215166	1.34E-01	2.05E-02	9.24E-03
950	569884.5	4215175	1.37E-01	2.10E-02	9.47E-03
951	569889.2	4215183	1.43E-01	2.19E-02	9.86E-03
952	569757.8	4214958	1.69E-02	2.58E-03	1.16E-03
953	569756.7	4214949	1.64E-02	2.50E-03	1.13E-03
954	569755.7	4214940	1.59E-02	2.43E-03	1.10E-03
955	569754.6	4214930	1.56E-02	2.38E-03	1.08E-03
956	569753.5	4214921	1.54E-02	2.35E-03	1.06E-03
957	569750.4	4214841	9.99E-03	1.53E-03	6.89E-04
958	569756	4214833	9.57E-03	1.46E-03	6.60E-04
959	569767.2	4214818	8.89E-03	1.36E-03	6.12E-04
960	569772.8	4214811	8.54E-03	1.30E-03	5.88E-04
961	569784	4214796	7.98E-03	1.22E-03	5.50E-04
962	569758.9	4214967	1.76E-02	2.68E-03	1.21E-03
963	569763.6	4214976	1.83E-02	2.79E-03	1.26E-03
964	569768.3	4214984	1.91E-02	2.91E-03	1.31E-03
965	569772.9	4214993	2.01E-02	3.06E-03	1.38E-03
966	569777.6	4215001	2.12E-02	3.23E-03	1.46E-03
967	569782.3	4215010	2.24E-02	3.42E-03	1.54E-03
968	569787	4215018	2.38E-02	3.63E-03	1.64E-03
969	569791.6	4215027	2.54E-02	3.87E-03	1.75E-03
970	569796.3	4215035	2.72E-02	4.15E-03	1.87E-03
971	569801	4215044	2.92E-02	4.45E-03	2.01E-03
972	569805.7	4215052	3.13E-02	4.79E-03	2.16E-03
973	569810.3	4215061	3.37E-02	5.15E-03	2.32E-03
974	569861.8	4215154	1.03E-01	1.57E-02	7.11E-03
975	569866.4	4215163	1.16E-01	1.77E-02	7.99E-03
976	569871.1	4215171	1.26E-01	1.93E-02	8.70E-03
977	569875.8	4215180	1.33E-01	2.03E-02	9.18E-03
978	569880.5	4215188	1.35E-01	2.07E-02	9.34E-03
979	569749.1	4214963	1.73E-02	2.64E-03	1.19E-03
980	569748	4214954	1.67E-02	2.56E-03	1.15E-03
981	569746.9	4214945	1.63E-02	2.49E-03	1.12E-03
982	569745.9	4214936	1.59E-02	2.43E-03	1.10E-03

983	569744.8	4214927	1.56E-02	2.39E-03	1.08E-03
984	569743.7	4214918	1.54E-02	2.36E-03	1.06E-03
985	569736.2	4214854	1.09E-02	1.67E-03	7.52E-04
986	569740.7	4214838	9.83E-03	1.50E-03	6.77E-04
987	569746.2	4214831	9.42E-03	1.44E-03	6.49E-04
988	569757.3	4214816	8.70E-03	1.33E-03	6.00E-04
989	569768.3	4214802	8.13E-03	1.24E-03	5.60E-04
990	569779.4	4214787	7.68E-03	1.17E-03	5.29E-04
991	569750.1	4214972	1.80E-02	2.74E-03	1.24E-03
992	569754.8	4214980	1.87E-02	2.85E-03	1.29E-03
993	569759.5	4214989	1.95E-02	2.98E-03	1.35E-03
994	569764.2	4214997	2.05E-02	3.14E-03	1.42E-03
995	569768.8	4215006	2.16E-02	3.31E-03	1.49E-03
996	569773.5	4215014	2.29E-02	3.49E-03	1.58E-03
997	569778.2	4215023	2.43E-02	3.70E-03	1.67E-03
998	569782.9	4215031	2.58E-02	3.94E-03	1.78E-03
999	569787.5	4215040	2.75E-02	4.21E-03	1.90E-03
1000	569792.2	4215048	2.95E-02	4.50E-03	2.03E-03
1001	569796.9	4215057	3.16E-02	4.83E-03	2.18E-03
1002	569801.6	4215066	3.40E-02	5.19E-03	2.34E-03
1003	569806.2	4215074	3.65E-02	5.57E-03	2.51E-03
1004	569853	4215159	9.43E-02	1.44E-02	6.50E-03
1005	569857.7	4215168	1.07E-01	1.63E-02	7.36E-03
1006	569862.3	4215176	1.18E-01	1.80E-02	8.13E-03
1007	569867	4215185	1.26E-01	1.92E-02	8.68E-03
1008	569871.7	4215193	1.29E-01	1.97E-02	8.89E-03
1009	569740.2	4214967	1.77E-02	2.70E-03	1.22E-03
1010	569739.1	4214958	1.71E-02	2.61E-03	1.18E-03
1011	569738	4214948	1.66E-02	2.53E-03	1.14E-03
1012	569736.8	4214938	1.62E-02	2.47E-03	1.11E-03
1013	569735.7	4214929	1.58E-02	2.42E-03	1.09E-03
1014	569734.6	4214919	1.55E-02	2.37E-03	1.07E-03
1015	569727.8	4214862	1.14E-02	1.74E-03	7.87E-04
1016	569726.6	4214852	1.07E-02	1.64E-03	7.39E-04
1017	569731.4	4214835	9.66E-03	1.48E-03	6.66E-04
1018	569737.2	4214827	9.26E-03	1.41E-03	6.38E-04
1019	569743.1	4214820	8.87E-03	1.36E-03	6.12E-04
1020	569748.9	4214812	8.50E-03	1.30E-03	5.86E-04
1021	569754.8	4214804	8.18E-03	1.25E-03	5.64E-04
1022	569760.6	4214797	7.96E-03	1.22E-03	5.49E-04
1023	569766.5	4214789	7.74E-03	1.18E-03	5.33E-04
1024	569772.3	4214781	7.51E-03	1.15E-03	5.17E-04
1025	569741.4	4214977	1.84E-02	2.81E-03	1.27E-03
1026	569746.1	4214985	1.91E-02	2.91E-03	1.32E-03
1027	569750.7	4214994	2.00E-02	3.05E-03	1.38E-03
1028	569755.4	4215002	2.10E-02	3.21E-03	1.45E-03
1029	569760.1	4215011	2.21E-02	3.38E-03	1.52E-03
1030	569764.8	4215019	2.33E-02	3.57E-03	1.61E-03
1031	569769.4	4215028	2.47E-02	3.78E-03	1.70E-03
1032	569774.1	4215036	2.63E-02	4.01E-03	1.81E-03
1033	569778.8	4215045	2.79E-02	4.26E-03	1.92E-03
1034	569783.5	4215053	2.98E-02	4.55E-03	2.05E-03

1035	569788.1	4215062	3.19E-02	4.87E-03	2.20E-03
1036	569792.8	4215070	3.41E-02	5.21E-03	2.35E-03
1037	569797.5	4215079	3.65E-02	5.58E-03	2.52E-03
1038	569844.2	4215164	8.60E-02	1.31E-02	5.92E-03
1039	569848.9	4215172	9.94E-02	1.52E-02	6.85E-03
1040	569853.6	4215181	1.11E-01	1.70E-02	7.67E-03
1041	569858.3	4215189	1.20E-01	1.83E-02	8.25E-03
1042	569862.9	4215198	1.25E-01	1.90E-02	8.60E-03
1043	569731.5	4214972	1.81E-02	2.76E-03	1.25E-03
1044	569730.4	4214963	1.75E-02	2.67E-03	1.20E-03
1045	569729.3	4214953	1.70E-02	2.59E-03	1.17E-03
1046	569728.1	4214944	1.65E-02	2.52E-03	1.14E-03
1047	569727	4214934	1.62E-02	2.47E-03	1.11E-03
1048	569725.9	4214925	1.58E-02	2.42E-03	1.09E-03
1049	569724.8	4214916	1.54E-02	2.35E-03	1.06E-03
1050	569719.2	4214868	1.19E-02	1.82E-03	8.20E-04
1051	569718.1	4214859	1.12E-02	1.71E-03	7.72E-04
1052	569717	4214849	1.06E-02	1.62E-03	7.29E-04
1053	569721.6	4214832	9.56E-03	1.46E-03	6.59E-04
1054	569727.4	4214825	9.17E-03	1.40E-03	6.32E-04
1055	569733.2	4214817	8.81E-03	1.34E-03	6.07E-04
1056	569738.9	4214810	8.46E-03	1.29E-03	5.83E-04
1057	569744.7	4214802	8.17E-03	1.25E-03	5.63E-04
1058	569750.5	4214795	7.93E-03	1.21E-03	5.47E-04
1059	569756.2	4214787	7.70E-03	1.18E-03	5.31E-04
1060	569762	4214779	7.49E-03	1.14E-03	5.16E-04
1061	569767.8	4214772	7.33E-03	1.12E-03	5.05E-04
1062	569732.6	4214982	1.88E-02	2.87E-03	1.29E-03
1063	569737.3	4214990	1.95E-02	2.98E-03	1.35E-03
1064	569742	4214999	2.04E-02	3.12E-03	1.41E-03
1065	569746.6	4215007	2.14E-02	3.27E-03	1.48E-03
1066	569751.3	4215016	2.25E-02	3.44E-03	1.55E-03
1067	569756	4215024	2.38E-02	3.63E-03	1.64E-03
1068	569760.7	4215033	2.51E-02	3.84E-03	1.73E-03
1069	569765.3	4215041	2.66E-02	4.07E-03	1.83E-03
1070	569770	4215050	2.83E-02	4.32E-03	1.95E-03
1071	569774.7	4215058	3.01E-02	4.60E-03	2.07E-03
1072	569779.4	4215067	3.21E-02	4.90E-03	2.21E-03
1073	569784	4215075	3.42E-02	5.22E-03	2.36E-03
1074	569788.7	4215084	3.65E-02	5.57E-03	2.52E-03
1075	569793.4	4215092	3.90E-02	5.95E-03	2.68E-03
1076	569835.5	4215169	8.27E-02	1.26E-02	5.70E-03
1077	569840.1	4215177	9.49E-02	1.45E-02	6.54E-03
1078	569844.8	4215186	1.06E-01	1.63E-02	7.34E-03
1079	569849.5	4215194	1.15E-01	1.75E-02	7.91E-03
1080	569854.2	4215203	1.17E-01	1.79E-02	8.07E-03
1081	569722.8	4214977	1.85E-02	2.82E-03	1.27E-03
1082	569721.7	4214968	1.79E-02	2.73E-03	1.23E-03
1083	569720.5	4214958	1.73E-02	2.65E-03	1.20E-03
1084	569719.4	4214949	1.69E-02	2.58E-03	1.16E-03
1085	569718.3	4214940	1.65E-02	2.52E-03	1.13E-03
1086	569717.2	4214931	1.61E-02	2.46E-03	1.11E-03

1087	569716.1	4214921	1.57E-02	2.40E-03	1.08E-03
1088	569715	4214912	1.52E-02	2.32E-03	1.05E-03
1089	569711.7	4214884	1.32E-02	2.01E-03	9.07E-04
1090	569710.6	4214875	1.24E-02	1.89E-03	8.54E-04
1091	569709.5	4214865	1.17E-02	1.79E-03	8.07E-04
1092	569708.4	4214856	1.11E-02	1.69E-03	7.62E-04
1093	569707.3	4214847	1.05E-02	1.60E-03	7.22E-04
1094	569711.9	4214830	9.55E-03	1.46E-03	6.58E-04
1095	569717.6	4214822	9.14E-03	1.40E-03	6.30E-04
1096	569723.3	4214815	8.75E-03	1.34E-03	6.03E-04
1097	569729	4214807	8.41E-03	1.28E-03	5.80E-04
1098	569734.7	4214800	8.18E-03	1.25E-03	5.64E-04
1099	569740.4	4214793	7.96E-03	1.22E-03	5.49E-04
1100	569746.1	4214785	7.73E-03	1.18E-03	5.33E-04
1101	569751.8	4214778	7.50E-03	1.14E-03	5.17E-04
1102	569757.4	4214770	7.36E-03	1.12E-03	5.07E-04
1103	569763.1	4214763	7.25E-03	1.11E-03	5.00E-04
1104	569723.9	4214986	1.92E-02	2.92E-03	1.32E-03
1105	569728.5	4214995	2.00E-02	3.05E-03	1.38E-03
1106	569733.2	4215003	2.09E-02	3.18E-03	1.44E-03
1107	569737.9	4215012	2.18E-02	3.34E-03	1.51E-03
1108	569742.6	4215020	2.30E-02	3.51E-03	1.58E-03
1109	569747.2	4215029	2.42E-02	3.69E-03	1.67E-03
1110	569751.9	4215037	2.55E-02	3.89E-03	1.76E-03
1111	569756.6	4215046	2.69E-02	4.11E-03	1.85E-03
1112	569761.3	4215054	2.86E-02	4.36E-03	1.97E-03
1113	569765.9	4215063	3.03E-02	4.63E-03	2.09E-03
1114	569770.6	4215071	3.22E-02	4.92E-03	2.22E-03
1115	569775.3	4215080	3.43E-02	5.23E-03	2.36E-03
1116	569780	4215088	3.64E-02	5.56E-03	2.51E-03
1117	569784.6	4215097	3.87E-02	5.91E-03	2.67E-03
1118	569789.3	4215105	4.11E-02	6.28E-03	2.83E-03
1119	569826.7	4215173	8.04E-02	1.23E-02	5.54E-03
1120	569831.4	4215182	9.16E-02	1.40E-02	6.31E-03
1121	569836.1	4215190	1.02E-01	1.56E-02	7.04E-03
1122	569840.7	4215199	1.09E-01	1.66E-02	7.50E-03
1123	569845.4	4215207	1.10E-01	1.68E-02	7.60E-03
1124	569714	4214982	1.88E-02	2.87E-03	1.30E-03
1125	569712.9	4214973	1.82E-02	2.78E-03	1.25E-03
1126	569711.8	4214964	1.77E-02	2.70E-03	1.22E-03
1127	569710.7	4214954	1.72E-02	2.63E-03	1.19E-03
1128	569709.6	4214945	1.68E-02	2.57E-03	1.16E-03
1129	569708.6	4214936	1.64E-02	2.51E-03	1.13E-03
1130	569707.5	4214927	1.61E-02	2.45E-03	1.11E-03
1131	569706.4	4214918	1.55E-02	2.36E-03	1.07E-03
1132	569705.3	4214908	1.49E-02	2.27E-03	1.03E-03
1133	569704.2	4214899	1.43E-02	2.19E-03	9.87E-04
1134	569703.1	4214890	1.36E-02	2.07E-03	9.36E-04
1135	569702	4214881	1.28E-02	1.96E-03	8.85E-04
1136	569700.9	4214872	1.22E-02	1.86E-03	8.38E-04
1137	569699.8	4214862	1.15E-02	1.76E-03	7.95E-04
1138	569698.7	4214853	1.09E-02	1.67E-03	7.54E-04

1139	569697.6	4214844	1.04E-02	1.59E-03	7.17E-04
1140	569702.2	4214827	9.54E-03	1.46E-03	6.58E-04
1141	569707.8	4214820	9.16E-03	1.40E-03	6.31E-04
1142	569713.4	4214813	8.78E-03	1.34E-03	6.05E-04
1143	569719.1	4214805	8.43E-03	1.29E-03	5.81E-04
1144	569730.3	4214790	8.01E-03	1.22E-03	5.52E-04
1145	569735.9	4214783	7.80E-03	1.19E-03	5.37E-04
1146	569741.6	4214776	7.58E-03	1.16E-03	5.23E-04
1147	569752.8	4214761	7.32E-03	1.12E-03	5.05E-04
1148	569715.1	4214991	1.95E-02	2.98E-03	1.35E-03
1149	569719.8	4215000	2.03E-02	3.11E-03	1.40E-03
1150	569724.4	4215008	2.12E-02	3.24E-03	1.46E-03
1151	569729.1	4215017	2.22E-02	3.40E-03	1.53E-03
1152	569733.8	4215025	2.33E-02	3.56E-03	1.61E-03
1153	569738.5	4215034	2.45E-02	3.75E-03	1.69E-03
1154	569743.1	4215042	2.58E-02	3.94E-03	1.78E-03
1155	569747.8	4215051	2.72E-02	4.16E-03	1.88E-03
1156	569752.5	4215059	2.88E-02	4.39E-03	1.98E-03
1157	569757.2	4215068	3.05E-02	4.65E-03	2.10E-03
1158	569761.8	4215076	3.23E-02	4.93E-03	2.23E-03
1159	569766.5	4215085	3.43E-02	5.23E-03	2.36E-03
1160	569771.2	4215093	3.63E-02	5.55E-03	2.50E-03
1161	569775.9	4215102	3.85E-02	5.88E-03	2.65E-03
1162	569780.5	4215110	4.07E-02	6.22E-03	2.81E-03
1163	569817.9	4215178	7.79E-02	1.19E-02	5.37E-03
1164	569822.6	4215187	8.83E-02	1.35E-02	6.08E-03
1165	569827.3	4215195	9.80E-02	1.50E-02	6.75E-03
1166	569832	4215204	1.01E-01	1.55E-02	6.98E-03
1167	569836.6	4215212	1.03E-01	1.57E-02	7.09E-03
1168	569705.3	4214987	1.91E-02	2.92E-03	1.32E-03
1169	569704.2	4214978	1.85E-02	2.83E-03	1.28E-03
1170	569703.1	4214969	1.80E-02	2.75E-03	1.24E-03
1171	569702	4214960	1.76E-02	2.69E-03	1.21E-03
1172	569700.9	4214951	1.72E-02	2.62E-03	1.18E-03
1173	569699.9	4214941	1.67E-02	2.55E-03	1.15E-03
1174	569698.8	4214932	1.63E-02	2.50E-03	1.13E-03
1175	569697.7	4214923	1.59E-02	2.43E-03	1.09E-03
1176	569696.6	4214914	1.52E-02	2.32E-03	1.05E-03
1177	569695.5	4214905	1.46E-02	2.22E-03	1.00E-03
1178	569694.5	4214896	1.39E-02	2.13E-03	9.60E-04
1179	569693.4	4214887	1.32E-02	2.02E-03	9.11E-04
1180	569692.3	4214878	1.26E-02	1.92E-03	8.66E-04
1181	569691.2	4214868	1.20E-02	1.83E-03	8.25E-04
1182	569690.1	4214859	1.14E-02	1.74E-03	7.86E-04
1183	569689.1	4214850	1.09E-02	1.66E-03	7.49E-04
1184	569688	4214841	1.04E-02	1.58E-03	7.15E-04
1185	569692.5	4214825	9.57E-03	1.46E-03	6.59E-04
1186	569703.6	4214810	8.83E-03	1.35E-03	6.08E-04
1187	569714.7	4214796	8.32E-03	1.27E-03	5.73E-04
1188	569725.9	4214781	7.89E-03	1.20E-03	5.44E-04
1189	569731.5	4214774	7.72E-03	1.18E-03	5.32E-04
1190	569742.6	4214759	7.50E-03	1.15E-03	5.17E-04

1191	569706.3	4214996	1.99E-02	3.04E-03	1.37E-03
1192	569711	4215005	2.07E-02	3.16E-03	1.43E-03
1193	569715.7	4215013	2.16E-02	3.29E-03	1.49E-03
1194	569720.4	4215022	2.26E-02	3.45E-03	1.56E-03
1195	569725	4215030	2.37E-02	3.62E-03	1.63E-03
1196	569729.7	4215039	2.48E-02	3.79E-03	1.71E-03
1197	569734.4	4215047	2.61E-02	3.98E-03	1.80E-03
1198	569739.1	4215056	2.75E-02	4.20E-03	1.90E-03
1199	569743.7	4215064	2.90E-02	4.43E-03	2.00E-03
1200	569748.4	4215073	3.06E-02	4.68E-03	2.11E-03
1201	569753.1	4215081	3.23E-02	4.94E-03	2.23E-03
1202	569757.8	4215090	3.42E-02	5.22E-03	2.36E-03
1203	569762.4	4215098	3.62E-02	5.53E-03	2.49E-03
1204	569767.1	4215107	3.82E-02	5.84E-03	2.64E-03
1205	569771.8	4215115	4.04E-02	6.18E-03	2.79E-03
1206	569809.2	4215183	7.61E-02	1.16E-02	5.24E-03
1207	569813.8	4215192	8.49E-02	1.30E-02	5.85E-03
1208	569818.5	4215200	9.15E-02	1.40E-02	6.31E-03
1209	569823.2	4215209	9.44E-02	1.44E-02	6.50E-03
1210	569827.9	4215217	9.63E-02	1.47E-02	6.63E-03
1211	569696.4	4214991	1.94E-02	2.97E-03	1.34E-03
1212	569695.3	4214982	1.88E-02	2.87E-03	1.29E-03
1213	569694.2	4214972	1.82E-02	2.79E-03	1.26E-03
1214	569693.1	4214963	1.78E-02	2.72E-03	1.23E-03
1215	569691.9	4214953	1.74E-02	2.66E-03	1.20E-03
1216	569690.8	4214944	1.69E-02	2.58E-03	1.16E-03
1217	569689.7	4214934	1.64E-02	2.51E-03	1.13E-03
1218	569688.5	4214925	1.59E-02	2.43E-03	1.10E-03
1219	569687.4	4214915	1.52E-02	2.32E-03	1.05E-03
1220	569686.3	4214906	1.45E-02	2.22E-03	1.00E-03
1221	569685.2	4214896	1.39E-02	2.12E-03	9.57E-04
1222	569684	4214887	1.32E-02	2.01E-03	9.09E-04
1223	569682.9	4214877	1.26E-02	1.92E-03	8.66E-04
1224	569681.8	4214868	1.20E-02	1.83E-03	8.25E-04
1225	569680.6	4214858	1.14E-02	1.74E-03	7.87E-04
1226	569679.5	4214848	1.09E-02	1.66E-03	7.51E-04
1227	569678.4	4214839	1.04E-02	1.59E-03	7.18E-04
1228	569683.1	4214822	9.64E-03	1.47E-03	6.64E-04
1229	569688.9	4214814	9.23E-03	1.41E-03	6.36E-04
1230	569694.7	4214807	8.84E-03	1.35E-03	6.09E-04
1231	569700.5	4214799	8.63E-03	1.32E-03	5.95E-04
1232	569706.4	4214791	8.42E-03	1.29E-03	5.80E-04
1233	569712.2	4214784	8.20E-03	1.25E-03	5.65E-04
1234	569718	4214776	7.98E-03	1.22E-03	5.50E-04
1235	569723.8	4214768	7.86E-03	1.20E-03	5.41E-04
1236	569697.6	4215001	2.02E-02	3.08E-03	1.39E-03
1237	569702.2	4215009	2.10E-02	3.20E-03	1.45E-03
1238	569706.9	4215018	2.19E-02	3.34E-03	1.51E-03
1239	569711.6	4215026	2.29E-02	3.50E-03	1.58E-03
1240	569716.3	4215035	2.40E-02	3.66E-03	1.65E-03
1241	569720.9	4215043	2.51E-02	3.83E-03	1.73E-03
1242	569725.6	4215052	2.64E-02	4.03E-03	1.82E-03

1243	569730.3	4215060	2.78E-02	4.24E-03	1.91E-03
1244	569735	4215069	2.92E-02	4.46E-03	2.01E-03
1245	569739.6	4215077	3.08E-02	4.70E-03	2.12E-03
1246	569744.3	4215086	3.24E-02	4.95E-03	2.24E-03
1247	569749	4215094	3.42E-02	5.22E-03	2.36E-03
1248	569753.7	4215103	3.60E-02	5.50E-03	2.48E-03
1249	569758.3	4215111	3.80E-02	5.80E-03	2.62E-03
1250	569763	4215120	4.02E-02	6.13E-03	2.77E-03
1251	569800.4	4215188	7.46E-02	1.14E-02	5.14E-03
1252	569805.1	4215196	8.25E-02	1.26E-02	5.68E-03
1253	569809.8	4215205	8.58E-02	1.31E-02	5.91E-03
1254	569814.4	4215213	8.87E-02	1.35E-02	6.11E-03
1255	569819.1	4215222	9.09E-02	1.39E-02	6.26E-03
1256	569687.7	4214996	1.98E-02	3.02E-03	1.36E-03
1257	569686.6	4214987	1.91E-02	2.92E-03	1.32E-03
1258	569685.5	4214977	1.85E-02	2.83E-03	1.28E-03
1259	569684.3	4214968	1.81E-02	2.76E-03	1.24E-03
1260	569683.2	4214959	1.76E-02	2.69E-03	1.22E-03
1261	569682.1	4214949	1.71E-02	2.62E-03	1.18E-03
1262	569681	4214940	1.66E-02	2.54E-03	1.14E-03
1263	569679.9	4214930	1.61E-02	2.46E-03	1.11E-03
1264	569678.8	4214921	1.55E-02	2.36E-03	1.07E-03
1265	569677.7	4214912	1.48E-02	2.26E-03	1.02E-03
1266	569676.5	4214902	1.42E-02	2.17E-03	9.79E-04
1267	569675.4	4214893	1.36E-02	2.07E-03	9.36E-04
1268	569674.3	4214883	1.30E-02	1.98E-03	8.94E-04
1269	569673.2	4214874	1.24E-02	1.89E-03	8.54E-04
1270	569672.1	4214864	1.19E-02	1.81E-03	8.18E-04
1271	569671	4214855	1.14E-02	1.73E-03	7.83E-04
1272	569669.8	4214846	1.09E-02	1.66E-03	7.51E-04
1273	569668.7	4214836	1.05E-02	1.60E-03	7.21E-04
1274	569673.4	4214819	9.76E-03	1.49E-03	6.73E-04
1275	569679.1	4214812	9.36E-03	1.43E-03	6.45E-04
1276	569684.9	4214804	9.02E-03	1.38E-03	6.21E-04
1277	569690.6	4214797	8.82E-03	1.35E-03	6.08E-04
1278	569696.4	4214789	8.63E-03	1.32E-03	5.94E-04
1279	569688.8	4215006	2.05E-02	3.13E-03	1.41E-03
1280	569693.5	4215014	2.13E-02	3.25E-03	1.46E-03
1281	569698.2	4215023	2.22E-02	3.38E-03	1.53E-03
1282	569702.8	4215031	2.32E-02	3.54E-03	1.60E-03
1283	569707.5	4215040	2.42E-02	3.69E-03	1.67E-03
1284	569712.2	4215048	2.53E-02	3.87E-03	1.74E-03
1285	569716.9	4215057	2.66E-02	4.06E-03	1.83E-03
1286	569721.5	4215065	2.79E-02	4.27E-03	1.93E-03
1287	569726.2	4215074	2.93E-02	4.48E-03	2.02E-03
1288	569730.9	4215082	3.09E-02	4.72E-03	2.13E-03
1289	569735.6	4215091	3.25E-02	4.97E-03	2.24E-03
1290	569740.2	4215099	3.42E-02	5.23E-03	2.36E-03
1291	569744.9	4215108	3.60E-02	5.50E-03	2.48E-03
1292	569749.6	4215116	3.79E-02	5.79E-03	2.61E-03
1293	569754.3	4215125	3.99E-02	6.09E-03	2.75E-03
1294	569787	4215184	6.56E-02	1.00E-02	4.52E-03

1295	569791.6	4215193	7.28E-02	1.11E-02	5.02E-03
1296	569796.3	4215201	7.79E-02	1.19E-02	5.37E-03
1297	569801	4215210	8.12E-02	1.24E-02	5.60E-03
1298	569805.7	4215218	8.41E-02	1.28E-02	5.79E-03
1299	569810.3	4215227	8.62E-02	1.32E-02	5.94E-03
1300	569678.9	4215001	2.00E-02	3.06E-03	1.38E-03
1301	569677.8	4214992	1.94E-02	2.97E-03	1.34E-03
1302	569676.7	4214983	1.89E-02	2.88E-03	1.30E-03
1303	569675.6	4214973	1.84E-02	2.80E-03	1.27E-03
1304	569674.5	4214964	1.79E-02	2.73E-03	1.23E-03
1305	569673.4	4214955	1.74E-02	2.66E-03	1.20E-03
1306	569672.3	4214945	1.69E-02	2.57E-03	1.16E-03
1307	569671.2	4214936	1.63E-02	2.49E-03	1.12E-03
1308	569670.1	4214927	1.57E-02	2.40E-03	1.08E-03
1309	569669	4214917	1.51E-02	2.30E-03	1.04E-03
1310	569667.9	4214908	1.45E-02	2.21E-03	9.98E-04
1311	569666.8	4214899	1.39E-02	2.12E-03	9.59E-04
1312	569665.7	4214889	1.33E-02	2.04E-03	9.19E-04
1313	569664.6	4214880	1.28E-02	1.95E-03	8.81E-04
1314	569663.5	4214871	1.23E-02	1.87E-03	8.45E-04
1315	569662.4	4214861	1.18E-02	1.80E-03	8.12E-04
1316	569661.3	4214852	1.13E-02	1.73E-03	7.81E-04
1317	569660.2	4214843	1.09E-02	1.67E-03	7.53E-04
1318	569659.1	4214833	1.06E-02	1.61E-03	7.28E-04
1319	569680	4215011	2.07E-02	3.16E-03	1.43E-03
1320	569684.7	4215019	2.15E-02	3.28E-03	1.48E-03
1321	569689.4	4215028	2.24E-02	3.42E-03	1.54E-03
1322	569694.1	4215036	2.34E-02	3.57E-03	1.61E-03
1323	569698.7	4215045	2.44E-02	3.72E-03	1.68E-03
1324	569703.4	4215053	2.55E-02	3.90E-03	1.76E-03
1325	569708.1	4215062	2.68E-02	4.09E-03	1.85E-03
1326	569712.8	4215070	2.81E-02	4.29E-03	1.94E-03
1327	569717.4	4215079	2.95E-02	4.50E-03	2.03E-03
1328	569722.1	4215087	3.10E-02	4.73E-03	2.14E-03
1329	569726.8	4215096	3.26E-02	4.98E-03	2.25E-03
1330	569731.5	4215104	3.43E-02	5.24E-03	2.36E-03
1331	569736.1	4215113	3.61E-02	5.52E-03	2.49E-03
1332	569740.8	4215121	3.81E-02	5.81E-03	2.62E-03
1333	569773.5	4215181	6.04E-02	9.22E-03	4.16E-03
1334	569778.2	4215189	6.55E-02	1.00E-02	4.51E-03
1335	569782.9	4215198	7.06E-02	1.08E-02	4.87E-03
1336	569787.6	4215206	7.40E-02	1.13E-02	5.10E-03
1337	569792.2	4215215	7.73E-02	1.18E-02	5.33E-03
1338	569796.9	4215223	8.02E-02	1.22E-02	5.52E-03
1339	569801.6	4215232	7.95E-02	1.21E-02	5.48E-03
1340	569670.2	4215006	2.03E-02	3.10E-03	1.40E-03
1341	569669.1	4214997	1.97E-02	3.01E-03	1.36E-03
1342	569668	4214988	1.92E-02	2.93E-03	1.32E-03
1343	569666.9	4214978	1.87E-02	2.85E-03	1.29E-03
1344	569665.8	4214969	1.82E-02	2.78E-03	1.25E-03
1345	569664.7	4214960	1.77E-02	2.71E-03	1.22E-03
1346	569663.6	4214951	1.72E-02	2.62E-03	1.18E-03

1347	569662.5	4214941	1.65E-02	2.52E-03	1.14E-03
1348	569661.4	4214932	1.59E-02	2.43E-03	1.10E-03
1349	569660.4	4214923	1.53E-02	2.34E-03	1.06E-03
1350	569659.3	4214914	1.47E-02	2.25E-03	1.02E-03
1351	569658.2	4214905	1.42E-02	2.17E-03	9.77E-04
1352	569657.1	4214895	1.36E-02	2.08E-03	9.41E-04
1353	569656	4214886	1.31E-02	2.00E-03	9.04E-04
1354	569654.9	4214877	1.26E-02	1.93E-03	8.70E-04
1355	569653.8	4214868	1.22E-02	1.86E-03	8.38E-04
1356	569652.7	4214858	1.17E-02	1.79E-03	8.09E-04
1357	569651.6	4214849	1.14E-02	1.73E-03	7.82E-04
1358	569650.5	4214840	1.10E-02	1.68E-03	7.58E-04
1359	569671.3	4215015	2.09E-02	3.19E-03	1.44E-03
1360	569676	4215024	2.17E-02	3.32E-03	1.50E-03
1361	569680.6	4215032	2.26E-02	3.45E-03	1.56E-03
1362	569685.3	4215041	2.35E-02	3.59E-03	1.62E-03
1363	569690	4215049	2.46E-02	3.75E-03	1.69E-03
1364	569694.7	4215058	2.57E-02	3.93E-03	1.77E-03
1365	569699.3	4215066	2.69E-02	4.11E-03	1.86E-03
1366	569704	4215075	2.82E-02	4.31E-03	1.94E-03
1367	569708.7	4215083	2.96E-02	4.52E-03	2.04E-03
1368	569713.4	4215092	3.11E-02	4.75E-03	2.14E-03
1369	569718	4215100	3.27E-02	4.99E-03	2.25E-03
1370	569722.7	4215109	3.44E-02	5.26E-03	2.37E-03
1371	569727.4	4215117	3.64E-02	5.55E-03	2.51E-03
1372	569764.8	4215185	6.10E-02	9.31E-03	4.20E-03
1373	569769.4	4215194	6.60E-02	1.01E-02	4.55E-03
1374	569774.1	4215202	6.88E-02	1.05E-02	4.74E-03
1375	569778.8	4215211	7.11E-02	1.09E-02	4.90E-03
1376	569783.5	4215219	7.39E-02	1.13E-02	5.10E-03
1377	569788.1	4215228	7.58E-02	1.16E-02	5.22E-03
1378	569792.8	4215236	7.31E-02	1.12E-02	5.04E-03
1379	569661.4	4215011	2.04E-02	3.12E-03	1.41E-03
1380	569660.2	4215001	1.98E-02	3.03E-03	1.37E-03
1381	569659.1	4214991	1.93E-02	2.95E-03	1.33E-03
1382	569658	4214982	1.88E-02	2.87E-03	1.30E-03
1383	569656.8	4214972	1.82E-02	2.78E-03	1.26E-03
1384	569655.7	4214963	1.76E-02	2.69E-03	1.22E-03
1385	569654.6	4214953	1.71E-02	2.60E-03	1.18E-03
1386	569653.4	4214943	1.64E-02	2.51E-03	1.13E-03
1387	569652.3	4214934	1.58E-02	2.42E-03	1.09E-03
1388	569651.2	4214924	1.53E-02	2.33E-03	1.05E-03
1389	569650	4214915	1.47E-02	2.24E-03	1.01E-03
1390	569648.9	4214905	1.41E-02	2.16E-03	9.73E-04
1391	569647.8	4214896	1.36E-02	2.08E-03	9.37E-04
1392	569646.6	4214886	1.31E-02	2.00E-03	9.02E-04
1393	569645.5	4214876	1.26E-02	1.93E-03	8.69E-04
1394	569644.4	4214867	1.22E-02	1.86E-03	8.39E-04
1395	569643.2	4214857	1.18E-02	1.80E-03	8.12E-04
1396	569662.5	4215020	2.11E-02	3.22E-03	1.46E-03
1397	569667.2	4215029	2.19E-02	3.35E-03	1.51E-03
1398	569671.9	4215037	2.28E-02	3.48E-03	1.57E-03

1399	569676.5	4215046	2.37E-02	3.61E-03	1.63E-03
1400	569681.2	4215054	2.47E-02	3.78E-03	1.70E-03
1401	569685.9	4215063	2.59E-02	3.95E-03	1.78E-03
1402	569690.6	4215071	2.70E-02	4.13E-03	1.86E-03
1403	569695.2	4215080	2.83E-02	4.33E-03	1.95E-03
1404	569699.9	4215088	2.98E-02	4.54E-03	2.05E-03
1405	569704.6	4215097	3.13E-02	4.77E-03	2.15E-03
1406	569709.3	4215105	3.28E-02	5.01E-03	2.26E-03
1407	569713.9	4215114	3.46E-02	5.28E-03	2.38E-03
1408	569718.6	4215122	3.66E-02	5.59E-03	2.52E-03
1409	569751.3	4215182	5.71E-02	8.72E-03	3.93E-03
1410	569756	4215190	6.14E-02	9.37E-03	4.23E-03
1411	569760.7	4215199	6.51E-02	9.94E-03	4.48E-03
1412	569765.4	4215207	6.66E-02	1.02E-02	4.59E-03
1413	569770	4215216	6.85E-02	1.05E-02	4.72E-03
1414	569774.7	4215224	7.08E-02	1.08E-02	4.88E-03
1415	569779.4	4215233	6.96E-02	1.06E-02	4.80E-03
1416	569784.1	4215241	6.69E-02	1.02E-02	4.61E-03
1417	569652.6	4215015	2.06E-02	3.14E-03	1.42E-03
1418	569651.5	4215006	2.00E-02	3.05E-03	1.38E-03
1419	569650.4	4214997	1.95E-02	2.97E-03	1.34E-03
1420	569649.3	4214987	1.90E-02	2.90E-03	1.31E-03
1421	569648.1	4214978	1.84E-02	2.80E-03	1.27E-03
1422	569647	4214968	1.77E-02	2.71E-03	1.22E-03
1423	569645.9	4214959	1.71E-02	2.62E-03	1.18E-03
1424	569644.8	4214949	1.65E-02	2.53E-03	1.14E-03
1425	569643.6	4214940	1.60E-02	2.44E-03	1.10E-03
1426	569642.5	4214930	1.54E-02	2.35E-03	1.06E-03
1427	569641.4	4214921	1.49E-02	2.27E-03	1.03E-03
1428	569640.3	4214911	1.43E-02	2.19E-03	9.88E-04
1429	569639.1	4214902	1.38E-02	2.11E-03	9.53E-04
1430	569638	4214892	1.34E-02	2.04E-03	9.20E-04
1431	569636.9	4214883	1.29E-02	1.97E-03	8.89E-04
1432	569635.8	4214873	1.25E-02	1.91E-03	8.60E-04
1433	569634.7	4214864	1.21E-02	1.85E-03	8.35E-04
1434	569653.8	4215025	2.13E-02	3.25E-03	1.47E-03
1435	569658.4	4215033	2.21E-02	3.37E-03	1.52E-03
1436	569663.1	4215042	2.29E-02	3.50E-03	1.58E-03
1437	569667.8	4215050	2.38E-02	3.64E-03	1.64E-03
1438	569672.5	4215059	2.48E-02	3.79E-03	1.71E-03
1439	569677.1	4215067	2.59E-02	3.96E-03	1.79E-03
1440	569681.8	4215076	2.71E-02	4.13E-03	1.86E-03
1441	569686.5	4215084	2.84E-02	4.34E-03	1.96E-03
1442	569691.2	4215093	2.99E-02	4.56E-03	2.06E-03
1443	569695.8	4215101	3.14E-02	4.80E-03	2.16E-03
1444	569700.5	4215110	3.30E-02	5.03E-03	2.27E-03
1445	569737.9	4215178	5.37E-02	8.20E-03	3.70E-03
1446	569742.6	4215187	5.75E-02	8.77E-03	3.96E-03
1447	569747.2	4215195	6.16E-02	9.41E-03	4.25E-03
1448	569751.9	4215204	6.29E-02	9.61E-03	4.34E-03
1449	569756.6	4215212	6.40E-02	9.77E-03	4.41E-03
1450	569761.3	4215221	6.55E-02	1.00E-02	4.51E-03

1451	569765.9	4215229	6.60E-02	1.01E-02	4.55E-03
1452	569770.6	4215238	6.37E-02	9.73E-03	4.39E-03
1453	569775.3	4215246	6.14E-02	9.37E-03	4.23E-03
1454	569643.9	4215020	2.07E-02	3.16E-03	1.43E-03
1455	569642.8	4215011	2.01E-02	3.07E-03	1.39E-03
1456	569641.7	4215002	1.96E-02	2.99E-03	1.35E-03
1457	569640.5	4214992	1.91E-02	2.91E-03	1.32E-03
1458	569639.4	4214983	1.86E-02	2.83E-03	1.28E-03
1459	569638.3	4214973	1.79E-02	2.73E-03	1.23E-03
1460	569637.2	4214964	1.73E-02	2.64E-03	1.19E-03
1461	569636.1	4214955	1.66E-02	2.54E-03	1.15E-03
1462	569635	4214945	1.61E-02	2.46E-03	1.11E-03
1463	569633.9	4214936	1.56E-02	2.37E-03	1.07E-03
1464	569632.7	4214926	1.51E-02	2.30E-03	1.04E-03
1465	569631.6	4214917	1.45E-02	2.22E-03	1.00E-03
1466	569630.5	4214908	1.41E-02	2.15E-03	9.69E-04
1467	569629.4	4214898	1.36E-02	2.08E-03	9.37E-04
1468	569628.3	4214889	1.32E-02	2.01E-03	9.09E-04
1469	569627.2	4214879	1.28E-02	1.95E-03	8.82E-04
1470	569626.1	4214870	1.24E-02	1.90E-03	8.57E-04
1471	569645	4215030	2.14E-02	3.27E-03	1.48E-03
1472	569649.7	4215038	2.22E-02	3.39E-03	1.53E-03
1473	569654.3	4215047	2.30E-02	3.51E-03	1.58E-03
1474	569659	4215055	2.39E-02	3.65E-03	1.65E-03
1475	569663.7	4215064	2.49E-02	3.80E-03	1.72E-03
1476	569668.4	4215072	2.59E-02	3.96E-03	1.79E-03
1477	569673	4215081	2.71E-02	4.14E-03	1.87E-03
1478	569677.7	4215089	2.84E-02	4.34E-03	1.96E-03
1479	569682.4	4215098	2.99E-02	4.56E-03	2.06E-03
1480	569687.1	4215106	3.14E-02	4.80E-03	2.17E-03
1481	569691.7	4215115	3.30E-02	5.04E-03	2.27E-03
1482	569724.5	4215174	5.08E-02	7.75E-03	3.50E-03
1483	569729.1	4215183	5.41E-02	8.25E-03	3.72E-03
1484	569733.8	4215191	5.76E-02	8.80E-03	3.97E-03
1485	569738.5	4215200	6.01E-02	9.18E-03	4.14E-03
1486	569743.2	4215208	6.08E-02	9.28E-03	4.19E-03
1487	569747.8	4215217	6.15E-02	9.40E-03	4.24E-03
1488	569752.5	4215225	6.23E-02	9.52E-03	4.30E-03
1489	569757.2	4215234	6.06E-02	9.26E-03	4.18E-03
1490	569761.9	4215242	5.87E-02	8.96E-03	4.04E-03
1491	569766.5	4215251	5.67E-02	8.66E-03	3.91E-03
1492	569635.1	4215025	2.09E-02	3.19E-03	1.44E-03
1493	569634	4215016	2.02E-02	3.09E-03	1.39E-03
1494	569632.9	4215007	1.97E-02	3.01E-03	1.36E-03
1495	569631.8	4214997	1.92E-02	2.93E-03	1.32E-03
1496	569630.7	4214988	1.87E-02	2.85E-03	1.29E-03
1497	569629.6	4214979	1.80E-02	2.75E-03	1.24E-03
1498	569628.5	4214969	1.74E-02	2.66E-03	1.20E-03
1499	569627.4	4214960	1.68E-02	2.56E-03	1.16E-03
1500	569626.3	4214951	1.62E-02	2.48E-03	1.12E-03
1501	569625.2	4214941	1.57E-02	2.40E-03	1.08E-03
1502	569624.1	4214932	1.52E-02	2.33E-03	1.05E-03

1503	569623	4214923	1.48E-02	2.25E-03	1.02E-03
1504	569621.9	4214913	1.43E-02	2.18E-03	9.85E-04
1505	569620.8	4214904	1.38E-02	2.11E-03	9.54E-04
1506	569619.7	4214895	1.34E-02	2.05E-03	9.26E-04
1507	569618.6	4214885	1.31E-02	2.00E-03	9.01E-04
1508	569636.2	4215035	2.15E-02	3.28E-03	1.48E-03
1509	569640.9	4215043	2.22E-02	3.39E-03	1.53E-03
1510	569645.6	4215052	2.31E-02	3.52E-03	1.59E-03
1511	569650.3	4215060	2.40E-02	3.66E-03	1.65E-03
1512	569654.9	4215069	2.49E-02	3.81E-03	1.72E-03
1513	569659.6	4215077	2.59E-02	3.96E-03	1.79E-03
1514	569664.3	4215086	2.71E-02	4.14E-03	1.87E-03
1515	569669	4215094	2.84E-02	4.34E-03	1.96E-03
1516	569673.6	4215103	2.98E-02	4.55E-03	2.05E-03
1517	569678.3	4215111	3.13E-02	4.77E-03	2.15E-03
1518	569683	4215120	3.28E-02	5.00E-03	2.26E-03
1519	569711	4215171	4.60E-02	7.02E-03	3.17E-03
1520	569715.7	4215179	4.97E-02	7.59E-03	3.43E-03
1521	569720.4	4215188	5.37E-02	8.20E-03	3.70E-03
1522	569725	4215196	5.76E-02	8.80E-03	3.97E-03
1523	569729.7	4215205	5.81E-02	8.87E-03	4.00E-03
1524	569734.4	4215213	5.86E-02	8.95E-03	4.04E-03
1525	569739.1	4215222	5.92E-02	9.04E-03	4.08E-03
1526	569743.7	4215230	5.84E-02	8.92E-03	4.02E-03
1527	569748.4	4215239	5.63E-02	8.59E-03	3.88E-03
1528	569753.1	4215247	5.43E-02	8.30E-03	3.75E-03
1529	569757.8	4215256	5.28E-02	8.06E-03	3.64E-03
1530	569626.3	4215030	2.09E-02	3.19E-03	1.44E-03
1531	569625.2	4215020	2.02E-02	3.09E-03	1.39E-03
1532	569624	4215011	1.96E-02	3.00E-03	1.35E-03
1533	569622.9	4215001	1.91E-02	2.91E-03	1.31E-03
1534	569621.8	4214991	1.85E-02	2.83E-03	1.28E-03
1535	569620.6	4214982	1.80E-02	2.74E-03	1.24E-03
1536	569619.5	4214972	1.73E-02	2.64E-03	1.19E-03
1537	569618.3	4214962	1.67E-02	2.55E-03	1.15E-03
1538	569617.2	4214953	1.61E-02	2.46E-03	1.11E-03
1539	569616.1	4214943	1.56E-02	2.39E-03	1.08E-03
1540	569614.9	4214933	1.52E-02	2.32E-03	1.05E-03
1541	569613.8	4214924	1.47E-02	2.25E-03	1.01E-03
1542	569612.6	4214914	1.43E-02	2.18E-03	9.82E-04
1543	569611.5	4214905	1.38E-02	2.11E-03	9.52E-04
1544	569610.4	4214895	1.34E-02	2.05E-03	9.25E-04
1545	569627.5	4215039	2.15E-02	3.28E-03	1.48E-03
1546	569632.1	4215048	2.23E-02	3.40E-03	1.53E-03
1547	569636.8	4215056	2.31E-02	3.53E-03	1.59E-03
1548	569641.5	4215065	2.40E-02	3.66E-03	1.65E-03
1549	569646.2	4215073	2.49E-02	3.80E-03	1.71E-03
1550	569650.8	4215082	2.59E-02	3.96E-03	1.79E-03
1551	569655.5	4215090	2.71E-02	4.14E-03	1.87E-03
1552	569660.2	4215099	2.84E-02	4.33E-03	1.95E-03
1553	569664.9	4215107	2.97E-02	4.54E-03	2.05E-03
1554	569669.5	4215116	3.11E-02	4.74E-03	2.14E-03

1555	569674.2	4215124	3.25E-02	4.96E-03	2.24E-03
1556	569688.2	4215150	3.75E-02	5.73E-03	2.59E-03
1557	569692.9	4215158	3.94E-02	6.02E-03	2.72E-03
1558	569697.6	4215167	4.17E-02	6.37E-03	2.88E-03
1559	569702.3	4215175	4.50E-02	6.87E-03	3.10E-03
1560	569706.9	4215184	4.86E-02	7.43E-03	3.35E-03
1561	569711.6	4215192	5.25E-02	8.02E-03	3.62E-03
1562	569716.3	4215201	5.50E-02	8.40E-03	3.79E-03
1563	569721	4215209	5.59E-02	8.54E-03	3.85E-03
1564	569725.6	4215218	5.64E-02	8.61E-03	3.89E-03
1565	569730.3	4215226	5.67E-02	8.67E-03	3.91E-03
1566	569735	4215235	5.44E-02	8.31E-03	3.75E-03
1567	569739.7	4215243	5.24E-02	8.01E-03	3.61E-03
1568	569744.3	4215252	5.07E-02	7.74E-03	3.49E-03
1569	569749	4215260	4.93E-02	7.53E-03	3.40E-03
1570	569984.8	4215238	2.71E-01	4.13E-02	1.87E-02
1571	569985.1	4215248	2.49E-01	3.80E-02	1.72E-02
1572	569985.4	4215257	2.27E-01	3.46E-02	1.56E-02
1573	569985.7	4215267	2.04E-01	3.11E-02	1.40E-02
1574	569986	4215277	1.83E-01	2.80E-02	1.26E-02
1575	569986.3	4215287	1.67E-01	2.54E-02	1.15E-02
1576	569986.7	4215296	1.63E-01	2.48E-02	1.12E-02
1577	569987	4215306	1.61E-01	2.45E-02	1.11E-02
1578	569987.3	4215316	1.60E-01	2.45E-02	1.11E-02
1579	569987.6	4215325	1.66E-01	2.53E-02	1.14E-02
1580	569987.9	4215335	1.73E-01	2.64E-02	1.19E-02
1581	569988.2	4215345	1.84E-01	2.81E-02	1.27E-02
1582	569988.6	4215354	1.83E-01	2.79E-02	1.26E-02
1583	569988.9	4215364	1.78E-01	2.72E-02	1.23E-02
1584	569989.2	4215374	1.78E-01	2.72E-02	1.23E-02
1585	569973.5	4215200	2.94E-01	4.49E-02	2.02E-02
1586	569973.8	4215209	2.83E-01	4.33E-02	1.95E-02
1587	569974.1	4215219	2.67E-01	4.08E-02	1.84E-02
1588	569974.5	4215229	2.50E-01	3.81E-02	1.72E-02
1589	569974.8	4215238	2.34E-01	3.57E-02	1.61E-02
1590	569975.1	4215248	2.17E-01	3.31E-02	1.49E-02
1591	569975.4	4215258	1.99E-01	3.04E-02	1.37E-02
1592	569975.7	4215267	1.81E-01	2.76E-02	1.25E-02
1593	569976	4215277	1.64E-01	2.51E-02	1.13E-02
1594	569976.4	4215287	1.52E-01	2.31E-02	1.04E-02
1595	569976.7	4215297	1.49E-01	2.28E-02	1.03E-02
1596	569977	4215306	1.48E-01	2.26E-02	1.02E-02
1597	569977.3	4215316	1.48E-01	2.26E-02	1.02E-02
1598	569977.6	4215326	1.54E-01	2.34E-02	1.06E-02
1599	569977.9	4215335	1.60E-01	2.45E-02	1.10E-02
1600	569978.2	4215345	1.72E-01	2.62E-02	1.18E-02
1601	569978.6	4215355	1.71E-01	2.61E-02	1.18E-02
1602	569978.9	4215364	1.69E-01	2.58E-02	1.16E-02
1603	569979.2	4215374	1.75E-01	2.68E-02	1.21E-02
1604	569962.6	4215171	2.68E-01	4.09E-02	1.85E-02
1605	569962.9	4215181	2.71E-01	4.13E-02	1.87E-02
1606	569963.2	4215190	2.67E-01	4.08E-02	1.84E-02

1607	569963.5	4215200	2.60E-01	3.97E-02	1.79E-02
1608	569963.8	4215210	2.47E-01	3.77E-02	1.70E-02
1609	569964.2	4215219	2.30E-01	3.52E-02	1.59E-02
1610	569964.5	4215229	2.14E-01	3.27E-02	1.48E-02
1611	569964.8	4215239	2.02E-01	3.09E-02	1.39E-02
1612	569965.1	4215248	1.90E-01	2.90E-02	1.31E-02
1613	569965.4	4215258	1.77E-01	2.70E-02	1.22E-02
1614	569965.7	4215268	1.62E-01	2.47E-02	1.11E-02
1615	569966	4215277	1.48E-01	2.27E-02	1.02E-02
1616	569966.4	4215287	1.38E-01	2.11E-02	9.54E-03
1617	569966.7	4215297	1.37E-01	2.09E-02	9.44E-03
1618	569967	4215307	1.36E-01	2.08E-02	9.40E-03
1619	569967.3	4215316	1.37E-01	2.09E-02	9.43E-03
1620	569967.6	4215326	1.43E-01	2.18E-02	9.83E-03
1621	569967.9	4215336	1.49E-01	2.28E-02	1.03E-02
1622	569968.2	4215345	1.57E-01	2.40E-02	1.08E-02
1623	569968.6	4215355	1.57E-01	2.40E-02	1.08E-02
1624	569968.9	4215365	1.61E-01	2.46E-02	1.11E-02
1625	569969.2	4215374	1.74E-01	2.66E-02	1.20E-02
1626	569952.3	4215162	2.34E-01	3.57E-02	1.61E-02
1627	569952.6	4215171	2.41E-01	3.68E-02	1.66E-02
1628	569952.9	4215181	2.43E-01	3.71E-02	1.67E-02
1629	569953.2	4215191	2.39E-01	3.65E-02	1.65E-02
1630	569953.5	4215200	2.33E-01	3.55E-02	1.60E-02
1631	569953.8	4215210	2.20E-01	3.35E-02	1.51E-02
1632	569954.2	4215220	2.03E-01	3.11E-02	1.40E-02
1633	569954.5	4215229	1.88E-01	2.88E-02	1.30E-02
1634	569954.8	4215239	1.78E-01	2.72E-02	1.23E-02
1635	569955.1	4215249	1.68E-01	2.56E-02	1.15E-02
1636	569955.4	4215258	1.57E-01	2.40E-02	1.08E-02
1637	569955.7	4215268	1.46E-01	2.23E-02	1.01E-02
1638	569956	4215278	1.36E-01	2.08E-02	9.40E-03
1639	569956.4	4215287	1.29E-01	1.97E-02	8.90E-03
1640	569956.7	4215297	1.28E-01	1.95E-02	8.81E-03
1641	569957	4215307	1.27E-01	1.94E-02	8.77E-03
1642	569957.3	4215317	1.28E-01	1.95E-02	8.79E-03
1643	569957.6	4215326	1.32E-01	2.02E-02	9.12E-03
1644	569957.9	4215336	1.38E-01	2.10E-02	9.49E-03
1645	569958.3	4215346	1.44E-01	2.20E-02	9.94E-03
1646	569958.6	4215355	1.46E-01	2.23E-02	1.00E-02
1647	569958.9	4215365	1.53E-01	2.33E-02	1.05E-02
1648	569959.2	4215375	1.72E-01	2.63E-02	1.19E-02
1649	569942.6	4215172	2.19E-01	3.34E-02	1.51E-02
1650	569942.9	4215181	2.20E-01	3.36E-02	1.52E-02
1651	569943.2	4215191	2.19E-01	3.35E-02	1.51E-02
1652	569943.5	4215201	2.10E-01	3.20E-02	1.44E-02
1653	569943.8	4215210	1.96E-01	3.00E-02	1.35E-02
1654	569944.2	4215220	1.81E-01	2.76E-02	1.25E-02
1655	569944.5	4215230	1.67E-01	2.55E-02	1.15E-02
1656	569944.8	4215239	1.58E-01	2.41E-02	1.09E-02
1657	569945.1	4215249	1.49E-01	2.27E-02	1.02E-02
1658	569945.4	4215259	1.40E-01	2.14E-02	9.66E-03

1659	569945.7	4215268	1.33E-01	2.03E-02	9.15E-03
1660	569946.1	4215278	1.26E-01	1.93E-02	8.71E-03
1661	569946.4	4215288	1.21E-01	1.85E-02	8.37E-03
1662	569946.7	4215297	1.20E-01	1.83E-02	8.27E-03
1663	569947	4215307	1.19E-01	1.82E-02	8.22E-03
1664	569947.3	4215317	1.19E-01	1.82E-02	8.22E-03
1665	569947.6	4215327	1.23E-01	1.88E-02	8.46E-03
1666	569947.9	4215336	1.27E-01	1.94E-02	8.74E-03
1667	569948.3	4215346	1.32E-01	2.01E-02	9.08E-03
1668	569948.6	4215356	1.35E-01	2.06E-02	9.30E-03
1669	569948.9	4215365	1.45E-01	2.21E-02	1.00E-02
1670	569949.2	4215375	1.72E-01	2.62E-02	1.18E-02
1671	569932.6	4215172	2.00E-01	3.06E-02	1.38E-02
1672	569932.9	4215182	2.01E-01	3.06E-02	1.38E-02
1673	569933.2	4215191	2.00E-01	3.05E-02	1.38E-02
1674	569933.5	4215201	1.90E-01	2.90E-02	1.31E-02
1675	569933.9	4215211	1.77E-01	2.70E-02	1.22E-02
1676	569934.2	4215220	1.61E-01	2.47E-02	1.11E-02
1677	569934.5	4215230	1.49E-01	2.27E-02	1.03E-02
1678	569934.8	4215240	1.41E-01	2.15E-02	9.69E-03
1679	569935.1	4215249	1.33E-01	2.03E-02	9.15E-03
1680	569935.4	4215259	1.26E-01	1.93E-02	8.69E-03
1681	569935.7	4215269	1.22E-01	1.86E-02	8.38E-03
1682	569936.1	4215278	1.18E-01	1.79E-02	8.10E-03
1683	569936.4	4215288	1.14E-01	1.75E-02	7.88E-03
1684	569936.7	4215298	1.13E-01	1.72E-02	7.78E-03
1685	569937	4215307	1.12E-01	1.71E-02	7.71E-03
1686	569937.3	4215317	1.12E-01	1.71E-02	7.70E-03
1687	569937.6	4215327	1.14E-01	1.74E-02	7.87E-03
1688	569937.9	4215336	1.17E-01	1.79E-02	8.09E-03
1689	569938.3	4215346	1.22E-01	1.86E-02	8.40E-03
1690	569938.6	4215356	1.27E-01	1.94E-02	8.75E-03
1691	569938.9	4215366	1.40E-01	2.14E-02	9.67E-03
1692	569939.2	4215375	1.73E-01	2.65E-02	1.19E-02
1693	569922.9	4215182	1.84E-01	2.81E-02	1.27E-02
1694	569923.2	4215192	1.85E-01	2.82E-02	1.27E-02
1695	569923.5	4215201	1.76E-01	2.69E-02	1.22E-02
1696	569923.9	4215211	1.64E-01	2.50E-02	1.13E-02
1697	569924.2	4215221	1.48E-01	2.27E-02	1.02E-02
1698	569924.5	4215230	1.36E-01	2.08E-02	9.39E-03
1699	569924.8	4215240	1.28E-01	1.96E-02	8.84E-03
1700	569925.1	4215250	1.21E-01	1.85E-02	8.33E-03
1701	569925.4	4215259	1.15E-01	1.76E-02	7.93E-03
1702	569925.7	4215269	1.12E-01	1.71E-02	7.70E-03
1703	569926.1	4215279	1.09E-01	1.66E-02	7.49E-03
1704	569926.4	4215288	1.06E-01	1.62E-02	7.33E-03
1705	569926.7	4215298	1.05E-01	1.60E-02	7.24E-03
1706	569927	4215308	1.04E-01	1.59E-02	7.17E-03
1707	569927.3	4215317	1.04E-01	1.59E-02	7.16E-03
1708	569927.6	4215327	1.06E-01	1.62E-02	7.33E-03
1709	569928	4215337	1.10E-01	1.67E-02	7.55E-03
1710	569928.3	4215346	1.15E-01	1.75E-02	7.89E-03

1711	569928.6	4215356	1.21E-01	1.85E-02	8.35E-03
1712	569928.9	4215366	1.37E-01	2.09E-02	9.42E-03
1713	569929.2	4215376	1.73E-01	2.64E-02	1.19E-02
1714	569912.9	4215182	1.70E-01	2.60E-02	1.17E-02
1715	569913.2	4215192	1.72E-01	2.62E-02	1.18E-02
1716	569913.5	4215202	1.64E-01	2.51E-02	1.13E-02
1717	569913.9	4215211	1.52E-01	2.32E-02	1.05E-02
1718	569914.2	4215221	1.37E-01	2.09E-02	9.45E-03
1719	569914.5	4215231	1.25E-01	1.92E-02	8.65E-03
1720	569914.8	4215240	1.18E-01	1.80E-02	8.12E-03
1721	569915.1	4215250	1.11E-01	1.69E-02	7.64E-03
1722	569915.4	4215260	1.06E-01	1.61E-02	7.27E-03
1723	569915.8	4215269	1.03E-01	1.57E-02	7.09E-03
1724	569916.1	4215279	1.00E-01	1.53E-02	6.92E-03
1725	569916.4	4215289	9.84E-02	1.50E-02	6.78E-03
1726	569916.7	4215298	9.69E-02	1.48E-02	6.68E-03
1727	569917	4215308	9.67E-02	1.48E-02	6.66E-03
1728	569917.3	4215318	9.66E-02	1.48E-02	6.66E-03
1729	569917.6	4215327	9.93E-02	1.52E-02	6.84E-03
1730	569918	4215337	1.03E-01	1.57E-02	7.10E-03
1731	569918.3	4215347	1.09E-01	1.66E-02	7.49E-03
1732	569918.6	4215356	1.15E-01	1.76E-02	7.96E-03
1733	569918.9	4215366	1.30E-01	1.99E-02	8.99E-03
1734	569919.2	4215376	1.62E-01	2.47E-02	1.12E-02
1735	569903.2	4215192	1.60E-01	2.44E-02	1.10E-02
1736	569903.6	4215202	1.54E-01	2.35E-02	1.06E-02
1737	569903.9	4215212	1.42E-01	2.16E-02	9.77E-03
1738	569904.2	4215221	1.27E-01	1.94E-02	8.75E-03
1739	569904.5	4215231	1.16E-01	1.77E-02	7.99E-03
1740	569904.8	4215241	1.09E-01	1.66E-02	7.49E-03
1741	569905.1	4215250	1.02E-01	1.56E-02	7.02E-03
1742	569905.4	4215260	9.75E-02	1.49E-02	6.72E-03
1743	569905.8	4215270	9.53E-02	1.45E-02	6.56E-03
1744	569906.1	4215279	9.33E-02	1.42E-02	6.43E-03
1745	569906.4	4215289	9.15E-02	1.40E-02	6.31E-03
1746	569906.7	4215299	9.01E-02	1.38E-02	6.21E-03
1747	569907	4215308	8.90E-02	1.36E-02	6.13E-03
1748	569907.3	4215318	8.88E-02	1.36E-02	6.12E-03
1749	569907.6	4215328	9.31E-02	1.42E-02	6.42E-03
1750	569908	4215337	9.71E-02	1.48E-02	6.69E-03
1751	569908.3	4215347	1.03E-01	1.57E-02	7.08E-03
1752	569908.6	4215357	1.09E-01	1.66E-02	7.51E-03
1753	569908.9	4215366	1.21E-01	1.85E-02	8.35E-03
1754	569909.2	4215376	1.42E-01	2.17E-02	9.81E-03
1755	569893.2	4215193	1.50E-01	2.29E-02	1.03E-02
1756	569893.6	4215202	1.46E-01	2.22E-02	1.00E-02
1757	569893.9	4215212	1.35E-01	2.06E-02	9.30E-03
1758	569894.2	4215222	1.21E-01	1.85E-02	8.36E-03
1759	569894.5	4215231	1.11E-01	1.69E-02	7.63E-03
1760	569894.8	4215241	1.03E-01	1.57E-02	7.10E-03
1761	569895.1	4215251	9.64E-02	1.47E-02	6.65E-03
1762	569895.4	4215260	9.18E-02	1.40E-02	6.33E-03

1763	569895.8	4215270	8.90E-02	1.36E-02	6.13E-03
1764	569896.1	4215280	8.65E-02	1.32E-02	5.96E-03
1765	569896.4	4215289	8.47E-02	1.29E-02	5.84E-03
1766	569896.7	4215299	8.37E-02	1.28E-02	5.77E-03
1767	569897	4215309	8.29E-02	1.27E-02	5.71E-03
1768	569897.3	4215318	8.29E-02	1.27E-02	5.72E-03
1769	569897.7	4215328	8.57E-02	1.31E-02	5.91E-03
1770	569898	4215338	9.12E-02	1.39E-02	6.28E-03
1771	569898.3	4215347	9.63E-02	1.47E-02	6.64E-03
1772	569898.6	4215357	1.02E-01	1.55E-02	6.99E-03
1773	569898.9	4215367	1.10E-01	1.68E-02	7.60E-03
1774	569883.6	4215203	1.38E-01	2.11E-02	9.51E-03
1775	569883.9	4215212	1.29E-01	1.96E-02	8.87E-03
1776	569884.2	4215222	1.16E-01	1.77E-02	8.01E-03
1777	569884.5	4215232	1.06E-01	1.62E-02	7.31E-03
1778	569884.8	4215241	9.84E-02	1.50E-02	6.78E-03
1779	569885.1	4215251	9.18E-02	1.40E-02	6.32E-03
1780	569885.5	4215261	8.69E-02	1.33E-02	5.99E-03
1781	569885.8	4215270	8.34E-02	1.27E-02	5.75E-03
1782	569886.1	4215280	8.04E-02	1.23E-02	5.54E-03
1783	569886.4	4215290	7.85E-02	1.20E-02	5.41E-03
1784	569886.7	4215299	7.80E-02	1.19E-02	5.38E-03
1785	569887	4215309	7.76E-02	1.18E-02	5.35E-03
1786	569887.3	4215319	7.78E-02	1.19E-02	5.36E-03
1787	569887.7	4215328	8.00E-02	1.22E-02	5.52E-03
1788	569888	4215338	8.34E-02	1.27E-02	5.75E-03
1789	569888.3	4215348	8.94E-02	1.36E-02	6.16E-03
1790	569888.6	4215357	9.35E-02	1.43E-02	6.44E-03
1791	569888.9	4215367	9.95E-02	1.52E-02	6.86E-03
1792	569873.6	4215203	1.31E-01	2.00E-02	9.02E-03
1793	569873.9	4215213	1.23E-01	1.87E-02	8.46E-03
1794	569874.2	4215222	1.11E-01	1.70E-02	7.68E-03
1795	569874.5	4215232	1.02E-01	1.55E-02	7.01E-03
1796	569874.8	4215242	9.40E-02	1.44E-02	6.48E-03
1797	569875.1	4215251	8.74E-02	1.33E-02	6.02E-03
1798	569875.5	4215261	8.23E-02	1.26E-02	5.67E-03
1799	569875.8	4215271	7.84E-02	1.20E-02	5.40E-03
1800	569876.1	4215280	7.51E-02	1.15E-02	5.17E-03
1801	569876.4	4215290	7.33E-02	1.12E-02	5.05E-03
1802	569876.7	4215300	7.30E-02	1.11E-02	5.03E-03
1803	569877	4215309	7.28E-02	1.11E-02	5.02E-03
1804	569877.3	4215319	7.32E-02	1.12E-02	5.04E-03
1805	569877.7	4215329	7.49E-02	1.14E-02	5.16E-03
1806	569878	4215338	7.75E-02	1.18E-02	5.34E-03
1807	569878.3	4215348	8.11E-02	1.24E-02	5.59E-03
1808	569878.6	4215358	8.46E-02	1.29E-02	5.83E-03
1809	569878.9	4215367	8.93E-02	1.36E-02	6.15E-03
1810	569863.9	4215213	1.17E-01	1.79E-02	8.08E-03
1811	569864.2	4215223	1.09E-01	1.66E-02	7.51E-03
1812	569864.5	4215232	1.00E-01	1.53E-02	6.92E-03
1813	569864.8	4215242	9.25E-02	1.41E-02	6.38E-03
1814	569865.1	4215252	8.53E-02	1.30E-02	5.88E-03

1815	569865.5	4215261	7.99E-02	1.22E-02	5.51E-03
1816	569865.8	4215271	7.58E-02	1.16E-02	5.23E-03
1817	569866.1	4215281	7.24E-02	1.11E-02	4.99E-03
1818	569866.4	4215290	7.04E-02	1.08E-02	4.85E-03
1819	569866.7	4215300	6.98E-02	1.07E-02	4.81E-03
1820	569867	4215310	6.92E-02	1.06E-02	4.77E-03
1821	569867.4	4215319	6.92E-02	1.06E-02	4.77E-03
1822	569867.7	4215329	7.02E-02	1.07E-02	4.84E-03
1823	569868	4215339	7.20E-02	1.10E-02	4.96E-03
1824	569868.3	4215348	7.45E-02	1.14E-02	5.13E-03
1825	569868.6	4215358	7.73E-02	1.18E-02	5.32E-03
1826	569868.9	4215368	8.06E-02	1.23E-02	5.55E-03
1827	569853.9	4215213	1.12E-01	1.71E-02	7.73E-03
1828	569854.2	4215223	1.07E-01	1.63E-02	7.34E-03
1829	569854.5	4215233	9.91E-02	1.51E-02	6.83E-03
1830	569854.8	4215242	9.12E-02	1.39E-02	6.28E-03
1831	569855.2	4215252	8.36E-02	1.28E-02	5.76E-03
1832	569855.5	4215262	7.82E-02	1.19E-02	5.39E-03
1833	569855.8	4215271	7.41E-02	1.13E-02	5.11E-03
1834	569856.1	4215281	7.07E-02	1.08E-02	4.87E-03
1835	569856.4	4215291	6.85E-02	1.05E-02	4.72E-03
1836	569856.7	4215300	6.72E-02	1.03E-02	4.63E-03
1837	569857	4215310	6.61E-02	1.01E-02	4.56E-03
1838	569857.4	4215320	6.55E-02	1.00E-02	4.51E-03
1839	569857.7	4215329	6.59E-02	1.01E-02	4.54E-03
1840	569858	4215339	6.68E-02	1.02E-02	4.60E-03
1841	569858.3	4215349	6.82E-02	1.04E-02	4.70E-03
1842	569858.6	4215358	7.02E-02	1.07E-02	4.84E-03
1843	569858.9	4215368	7.25E-02	1.11E-02	5.00E-03
1844	569844.2	4215223	1.04E-01	1.59E-02	7.17E-03
1845	569844.5	4215233	9.77E-02	1.49E-02	6.73E-03
1846	569844.8	4215243	8.98E-02	1.37E-02	6.19E-03
1847	569845.2	4215252	8.20E-02	1.25E-02	5.65E-03
1848	569845.5	4215262	7.65E-02	1.17E-02	5.27E-03
1849	569845.8	4215272	7.25E-02	1.11E-02	5.00E-03
1850	569846.1	4215281	6.91E-02	1.05E-02	4.76E-03
1851	569846.4	4215291	6.66E-02	1.02E-02	4.59E-03
1852	569846.7	4215301	6.48E-02	9.90E-03	4.47E-03
1853	569847.1	4215310	6.31E-02	9.64E-03	4.35E-03
1854	569847.4	4215320	6.21E-02	9.48E-03	4.28E-03
1855	569847.7	4215330	6.20E-02	9.46E-03	4.27E-03
1856	569848	4215339	6.21E-02	9.48E-03	4.28E-03
1857	569848.3	4215349	6.27E-02	9.58E-03	4.32E-03
1858	569848.6	4215359	6.41E-02	9.78E-03	4.41E-03
1859	569848.9	4215368	6.55E-02	1.00E-02	4.51E-03
1860	569834.2	4215224	9.85E-02	1.50E-02	6.79E-03
1861	569834.5	4215233	9.30E-02	1.42E-02	6.41E-03
1862	569834.9	4215243	8.60E-02	1.31E-02	5.93E-03
1863	569835.2	4215253	7.89E-02	1.21E-02	5.44E-03
1864	569835.5	4215262	7.40E-02	1.13E-02	5.10E-03
1865	569835.8	4215272	7.01E-02	1.07E-02	4.83E-03
1866	569836.1	4215282	6.69E-02	1.02E-02	4.61E-03

1867	569836.4	4215291	6.43E-02	9.83E-03	4.43E-03
1868	569836.7	4215301	6.23E-02	9.51E-03	4.29E-03
1869	569837.1	4215311	6.04E-02	9.22E-03	4.16E-03
1870	569837.4	4215320	5.91E-02	9.03E-03	4.08E-03
1871	569837.7	4215330	5.87E-02	8.96E-03	4.05E-03
1872	569838	4215340	5.84E-02	8.92E-03	4.02E-03
1873	569838.3	4215349	5.85E-02	8.93E-03	4.03E-03
1874	569838.6	4215359	5.92E-02	9.03E-03	4.08E-03
1875	569838.9	4215369	5.98E-02	9.13E-03	4.12E-03
1876	569824.5	4215234	8.84E-02	1.35E-02	6.09E-03
1877	569824.9	4215243	8.21E-02	1.25E-02	5.66E-03
1878	569825.2	4215253	7.58E-02	1.16E-02	5.23E-03
1879	569825.5	4215263	7.13E-02	1.09E-02	4.91E-03
1880	569825.8	4215272	6.77E-02	1.03E-02	4.66E-03
1881	569826.1	4215282	6.46E-02	9.86E-03	4.45E-03
1882	569826.4	4215292	6.20E-02	9.47E-03	4.27E-03
1883	569826.7	4215301	5.98E-02	9.14E-03	4.12E-03
1884	569827.1	4215311	5.78E-02	8.83E-03	3.98E-03
1885	569827.4	4215321	5.65E-02	8.63E-03	3.89E-03
1886	569827.7	4215330	5.59E-02	8.53E-03	3.85E-03
1887	569828	4215340	5.53E-02	8.45E-03	3.81E-03
1888	569828.3	4215350	5.51E-02	8.41E-03	3.79E-03
1889	569828.6	4215359	5.52E-02	8.43E-03	3.80E-03
1890	569829	4215369	5.52E-02	8.43E-03	3.81E-03
1891	569814.9	4215244	7.86E-02	1.20E-02	5.42E-03
1892	569815.2	4215253	7.29E-02	1.11E-02	5.02E-03
1893	569815.5	4215263	6.87E-02	1.05E-02	4.74E-03
1894	569815.8	4215273	6.53E-02	9.98E-03	4.50E-03
1895	569816.1	4215282	6.24E-02	9.52E-03	4.30E-03
1896	569816.4	4215292	5.98E-02	9.13E-03	4.12E-03
1897	569816.8	4215302	5.75E-02	8.78E-03	3.96E-03
1898	569817.1	4215311	5.53E-02	8.45E-03	3.81E-03
1899	569817.4	4215321	5.40E-02	8.24E-03	3.72E-03
1900	569817.7	4215331	5.32E-02	8.13E-03	3.67E-03
1901	569818	4215340	5.25E-02	8.01E-03	3.62E-03
1902	569818.3	4215350	5.19E-02	7.93E-03	3.58E-03
1903	569818.6	4215360	5.17E-02	7.89E-03	3.56E-03
1904	569819	4215369	5.12E-02	7.82E-03	3.53E-03
1905	569804.9	4215244	7.40E-02	1.13E-02	5.10E-03
1906	569805.2	4215254	6.87E-02	1.05E-02	4.73E-03
1907	569805.5	4215263	6.49E-02	9.91E-03	4.47E-03
1908	569805.8	4215273	6.18E-02	9.43E-03	4.26E-03
1909	569806.1	4215283	5.91E-02	9.02E-03	4.07E-03
1910	569806.4	4215292	5.68E-02	8.67E-03	3.91E-03
1911	569806.8	4215302	5.47E-02	8.35E-03	3.77E-03
1912	569807.1	4215312	5.27E-02	8.05E-03	3.63E-03
1913	569807.4	4215321	5.14E-02	7.85E-03	3.54E-03
1914	569807.7	4215331	5.06E-02	7.73E-03	3.49E-03
1915	569808	4215341	4.98E-02	7.60E-03	3.43E-03
1916	569808.3	4215350	4.91E-02	7.50E-03	3.38E-03
1917	569808.6	4215360	4.86E-02	7.42E-03	3.35E-03
1918	569809	4215370	4.80E-02	7.32E-03	3.30E-03

1919	569795.2	4215254	6.46E-02	9.86E-03	4.45E-03
1920	569795.5	4215264	6.10E-02	9.32E-03	4.21E-03
1921	569795.8	4215273	5.82E-02	8.89E-03	4.01E-03
1922	569796.1	4215283	5.57E-02	8.51E-03	3.84E-03
1923	569796.4	4215293	5.37E-02	8.20E-03	3.70E-03
1924	569796.8	4215302	5.19E-02	7.92E-03	3.58E-03
1925	569797.1	4215312	5.02E-02	7.66E-03	3.46E-03
1926	569797.4	4215322	4.90E-02	7.48E-03	3.38E-03
1927	569797.7	4215331	4.82E-02	7.36E-03	3.32E-03
1928	569798	4215341	4.73E-02	7.22E-03	3.26E-03
1929	569798.3	4215351	4.65E-02	7.11E-03	3.21E-03
1930	569798.7	4215360	4.60E-02	7.02E-03	3.17E-03
1931	569785.2	4215254	6.08E-02	9.28E-03	4.19E-03
1932	569785.5	4215264	5.76E-02	8.79E-03	3.97E-03
1933	569785.8	4215274	5.49E-02	8.39E-03	3.78E-03
1934	569786.1	4215283	5.26E-02	8.03E-03	3.63E-03
1935	569786.5	4215293	5.09E-02	7.77E-03	3.51E-03
1936	569786.8	4215303	4.93E-02	7.53E-03	3.40E-03
1937	569787.1	4215312	4.78E-02	7.30E-03	3.29E-03
1938	569787.4	4215322	4.67E-02	7.13E-03	3.22E-03
1939	569787.7	4215332	4.59E-02	7.01E-03	3.16E-03
1940	569788	4215341	4.49E-02	6.86E-03	3.10E-03
1941	569788.3	4215351	4.42E-02	6.75E-03	3.05E-03
1942	569788.7	4215361	4.36E-02	6.66E-03	3.00E-03
1943	569775.5	4215264	5.47E-02	8.35E-03	3.77E-03
1944	569775.8	4215274	5.22E-02	7.97E-03	3.59E-03
1945	569776.1	4215284	5.00E-02	7.63E-03	3.44E-03
1946	569776.5	4215293	4.83E-02	7.38E-03	3.33E-03
1947	569776.8	4215303	4.68E-02	7.15E-03	3.23E-03
1948	569777.1	4215313	4.54E-02	6.93E-03	3.13E-03
1949	569777.4	4215322	4.44E-02	6.77E-03	3.06E-03
1950	569777.7	4215332	4.35E-02	6.65E-03	3.00E-03
1951	569778	4215342	4.26E-02	6.50E-03	2.94E-03
1952	569778.3	4215351	4.18E-02	6.39E-03	2.88E-03
1953	569778.7	4215361	4.13E-02	6.30E-03	2.84E-03
1954	569765.5	4215265	5.20E-02	7.95E-03	3.59E-03
1955	569765.8	4215274	4.97E-02	7.58E-03	3.42E-03
1956	569766.1	4215284	4.76E-02	7.27E-03	3.28E-03
1957	569766.5	4215294	4.60E-02	7.02E-03	3.17E-03
1958	569766.8	4215303	4.45E-02	6.79E-03	3.07E-03
1959	569767.1	4215313	4.31E-02	6.58E-03	2.97E-03
1960	569767.4	4215323	4.21E-02	6.43E-03	2.90E-03
1961	569767.7	4215332	4.13E-02	6.30E-03	2.84E-03
1962	569768	4215342	4.03E-02	6.16E-03	2.78E-03
1963	569768.4	4215352	3.96E-02	6.05E-03	2.73E-03
1964	569768.7	4215361	3.90E-02	5.96E-03	2.69E-03
1965	569755.8	4215275	4.73E-02	7.23E-03	3.26E-03
1966	569756.2	4215284	4.54E-02	6.93E-03	3.13E-03
1967	569756.5	4215294	4.38E-02	6.69E-03	3.02E-03
1968	569756.8	4215304	4.23E-02	6.46E-03	2.92E-03
1969	569757.1	4215313	4.10E-02	6.26E-03	2.82E-03
1970	569757.4	4215323	4.01E-02	6.12E-03	2.76E-03

1971	569757.7	4215333	3.92E-02	5.99E-03	2.70E-03
1972	569758	4215342	3.83E-02	5.85E-03	2.64E-03
1973	569758.4	4215352	3.76E-02	5.74E-03	2.59E-03
1974	569758.7	4215362	3.70E-02	5.65E-03	2.55E-03
1975	569745.8	4215275	4.51E-02	6.89E-03	3.11E-03
1976	569746.2	4215285	4.33E-02	6.61E-03	2.98E-03
1977	569746.5	4215294	4.18E-02	6.39E-03	2.88E-03
1978	569746.8	4215304	4.05E-02	6.18E-03	2.79E-03
1979	569747.1	4215314	3.92E-02	5.99E-03	2.70E-03
1980	569747.4	4215323	3.84E-02	5.86E-03	2.64E-03
1981	569747.7	4215333	3.75E-02	5.73E-03	2.58E-03
1982	569748	4215343	3.66E-02	5.58E-03	2.52E-03
1983	569748.4	4215352	3.58E-02	5.47E-03	2.47E-03
1984	569735.2	4215256	4.75E-02	7.26E-03	3.28E-03
1985	569735.5	4215266	4.51E-02	6.89E-03	3.11E-03
1986	569735.8	4215275	4.31E-02	6.58E-03	2.97E-03
1987	569736.2	4215285	4.13E-02	6.31E-03	2.85E-03
1988	569736.5	4215295	4.01E-02	6.12E-03	2.76E-03
1989	569736.8	4215304	3.89E-02	5.93E-03	2.68E-03
1990	569737.1	4215314	3.77E-02	5.76E-03	2.60E-03
1991	569737.4	4215324	3.68E-02	5.63E-03	2.54E-03
1992	569737.7	4215333	3.60E-02	5.50E-03	2.48E-03
1993	569738.1	4215343	3.50E-02	5.35E-03	2.41E-03
1994	569738.4	4215353	3.43E-02	5.24E-03	2.37E-03
1995	569724.6	4215237	5.14E-02	7.85E-03	3.54E-03
1996	569724.9	4215247	4.82E-02	7.36E-03	3.32E-03
1997	569725.2	4215256	4.54E-02	6.94E-03	3.13E-03
1998	569725.5	4215266	4.31E-02	6.58E-03	2.97E-03
1999	569725.9	4215276	4.12E-02	6.29E-03	2.84E-03
2000	569726.2	4215285	3.95E-02	6.03E-03	2.72E-03
2001	569726.5	4215295	3.84E-02	5.86E-03	2.64E-03
2002	569726.8	4215305	3.73E-02	5.70E-03	2.57E-03
2003	569727.1	4215314	3.62E-02	5.53E-03	2.50E-03
2004	569727.4	4215324	3.54E-02	5.41E-03	2.44E-03
2005	569727.7	4215334	3.46E-02	5.28E-03	2.38E-03
2006	569728.1	4215343	3.36E-02	5.13E-03	2.32E-03
2007	569728.4	4215353	3.29E-02	5.03E-03	2.27E-03
2008	569728.7	4215363	3.24E-02	4.95E-03	2.23E-03
2009	569714	4215218	5.39E-02	8.22E-03	3.71E-03
2010	569714.3	4215228	5.31E-02	8.11E-03	3.66E-03
2011	569714.6	4215237	4.98E-02	7.61E-03	3.43E-03
2012	569714.9	4215247	4.68E-02	7.14E-03	3.22E-03
2013	569715.2	4215257	4.41E-02	6.74E-03	3.04E-03
2014	569715.5	4215266	4.18E-02	6.39E-03	2.88E-03
2015	569715.9	4215276	3.99E-02	6.09E-03	2.75E-03
2016	569716.2	4215286	3.82E-02	5.84E-03	2.63E-03
2017	569716.5	4215295	3.71E-02	5.66E-03	2.56E-03
2018	569716.8	4215305	3.60E-02	5.50E-03	2.48E-03
2019	569717.1	4215315	3.50E-02	5.34E-03	2.41E-03
2020	569717.4	4215324	3.41E-02	5.21E-03	2.35E-03
2021	569717.7	4215334	3.33E-02	5.08E-03	2.29E-03
2022	569718.1	4215344	3.23E-02	4.93E-03	2.23E-03

2023	569718.4	4215353	3.16E-02	4.83E-03	2.18E-03
2024	569718.7	4215363	3.11E-02	4.75E-03	2.15E-03
2025	569719	4215373	3.06E-02	4.68E-03	2.11E-03
2026	569719.3	4215382	3.04E-02	4.65E-03	2.10E-03
2027	569709.1	4215385	2.91E-02	4.45E-03	2.01E-03
2028	569699.1	4215385	2.79E-02	4.26E-03	1.92E-03
2029	569702.4	4215377	2.84E-02	4.34E-03	1.96E-03
2030	569705.6	4215368	2.93E-02	4.47E-03	2.02E-03
2031	569708.9	4215360	3.02E-02	4.60E-03	2.08E-03
2032	569689.3	4215385	2.69E-02	4.10E-03	1.85E-03
2033	569692.7	4215376	2.74E-02	4.18E-03	1.89E-03
2034	569696.1	4215367	2.83E-02	4.32E-03	1.95E-03
2035	569699.6	4215358	2.92E-02	4.46E-03	2.01E-03
2036	569703	4215349	3.01E-02	4.60E-03	2.08E-03
2037	569706.5	4215340	3.13E-02	4.78E-03	2.16E-03
2038	569679.2	4215386	2.59E-02	3.96E-03	1.79E-03
2039	569682.6	4215377	2.65E-02	4.05E-03	1.83E-03
2040	569686	4215368	2.73E-02	4.18E-03	1.88E-03
2041	569689.4	4215359	2.82E-02	4.30E-03	1.94E-03
2042	569692.8	4215350	2.90E-02	4.43E-03	2.00E-03
2043	569696.2	4215341	3.01E-02	4.59E-03	2.07E-03
2044	569699.6	4215332	3.13E-02	4.79E-03	2.16E-03
2045	569703	4215324	3.26E-02	4.97E-03	2.24E-03
2046	569706.4	4215315	3.38E-02	5.16E-03	2.33E-03
2047	569669.2	4215386	2.50E-02	3.82E-03	1.72E-03
2048	569672.6	4215377	2.57E-02	3.92E-03	1.77E-03
2049	569675.9	4215368	2.65E-02	4.05E-03	1.83E-03
2050	569679.3	4215360	2.74E-02	4.18E-03	1.88E-03
2051	569682.7	4215351	2.82E-02	4.30E-03	1.94E-03
2052	569686.1	4215342	2.91E-02	4.45E-03	2.01E-03
2053	569689.4	4215333	3.03E-02	4.62E-03	2.09E-03
2054	569692.8	4215325	3.14E-02	4.79E-03	2.16E-03
2055	569696.2	4215316	3.25E-02	4.97E-03	2.24E-03
2056	569699.5	4215307	3.39E-02	5.18E-03	2.34E-03
2057	569702.9	4215298	3.53E-02	5.39E-03	2.43E-03
2058	569706.3	4215290	3.67E-02	5.60E-03	2.53E-03
2059	569659.2	4215386	2.41E-02	3.68E-03	1.66E-03
2060	569662.5	4215378	2.48E-02	3.79E-03	1.71E-03
2061	569665.9	4215369	2.57E-02	3.93E-03	1.77E-03
2062	569669.2	4215360	2.66E-02	4.06E-03	1.83E-03
2063	569672.5	4215352	2.74E-02	4.18E-03	1.89E-03
2064	569675.9	4215343	2.83E-02	4.32E-03	1.95E-03
2065	569679.2	4215334	2.93E-02	4.48E-03	2.02E-03
2066	569682.6	4215326	3.04E-02	4.64E-03	2.10E-03
2067	569685.9	4215317	3.15E-02	4.81E-03	2.17E-03
2068	569689.2	4215308	3.28E-02	5.01E-03	2.26E-03
2069	569692.6	4215299	3.41E-02	5.21E-03	2.35E-03
2070	569695.9	4215291	3.55E-02	5.42E-03	2.45E-03
2071	569699.2	4215282	3.71E-02	5.66E-03	2.56E-03
2072	569702.6	4215273	3.90E-02	5.96E-03	2.69E-03
2073	569705.9	4215265	4.12E-02	6.29E-03	2.84E-03
2074	569649.2	4215387	2.31E-02	3.53E-03	1.60E-03

2075	569652.5	4215378	2.39E-02	3.65E-03	1.65E-03
2076	569655.8	4215369	2.48E-02	3.79E-03	1.71E-03
2077	569659.1	4215361	2.58E-02	3.93E-03	1.78E-03
2078	569662.4	4215352	2.66E-02	4.07E-03	1.83E-03
2079	569665.7	4215344	2.75E-02	4.20E-03	1.89E-03
2080	569669	4215335	2.85E-02	4.35E-03	1.96E-03
2081	569672.3	4215326	2.95E-02	4.50E-03	2.03E-03
2082	569675.7	4215318	3.05E-02	4.66E-03	2.10E-03
2083	569679	4215309	3.18E-02	4.85E-03	2.19E-03
2084	569682.3	4215301	3.32E-02	5.07E-03	2.29E-03
2085	569685.6	4215292	3.46E-02	5.28E-03	2.38E-03
2086	569688.9	4215283	3.61E-02	5.51E-03	2.48E-03
2087	569692.2	4215275	3.78E-02	5.78E-03	2.61E-03
2088	569695.5	4215266	3.99E-02	6.09E-03	2.75E-03
2089	569698.8	4215257	4.23E-02	6.45E-03	2.91E-03
2090	569702.2	4215249	4.48E-02	6.84E-03	3.09E-03
2091	569705.5	4215240	4.77E-02	7.28E-03	3.29E-03
2092	569639.3	4215387	2.23E-02	3.41E-03	1.54E-03
2093	569642.7	4215378	2.31E-02	3.53E-03	1.59E-03
2094	569646.2	4215369	2.41E-02	3.68E-03	1.66E-03
2095	569649.6	4215360	2.51E-02	3.83E-03	1.73E-03
2096	569653.1	4215351	2.60E-02	3.98E-03	1.79E-03
2097	569656.5	4215342	2.70E-02	4.12E-03	1.86E-03
2098	569660	4215333	2.81E-02	4.28E-03	1.93E-03
2099	569663.4	4215324	2.90E-02	4.43E-03	2.00E-03
2100	569666.9	4215315	3.01E-02	4.59E-03	2.07E-03
2101	569670.3	4215306	3.15E-02	4.81E-03	2.17E-03
2102	569673.7	4215297	3.30E-02	5.05E-03	2.28E-03
2103	569677.2	4215288	3.46E-02	5.29E-03	2.39E-03
2104	569680.6	4215279	3.63E-02	5.54E-03	2.50E-03
2105	569684.1	4215270	3.82E-02	5.83E-03	2.63E-03
2106	569687.5	4215261	4.03E-02	6.16E-03	2.78E-03
2107	569691	4215252	4.28E-02	6.53E-03	2.95E-03
2108	569694.4	4215243	4.55E-02	6.94E-03	3.13E-03
2109	569697.9	4215234	4.85E-02	7.40E-03	3.34E-03
2110	569701.3	4215225	5.15E-02	7.87E-03	3.55E-03
2111	569704.7	4215216	5.20E-02	7.94E-03	3.58E-03
2112	569629.3	4215387	2.15E-02	3.29E-03	1.48E-03
2113	569632.7	4215378	2.23E-02	3.41E-03	1.54E-03
2114	569636.1	4215369	2.33E-02	3.56E-03	1.61E-03
2115	569639.5	4215360	2.43E-02	3.71E-03	1.67E-03
2116	569642.9	4215352	2.53E-02	3.86E-03	1.74E-03
2117	569646.3	4215343	2.63E-02	4.01E-03	1.81E-03
2118	569649.8	4215334	2.73E-02	4.17E-03	1.88E-03
2119	569653.2	4215325	2.83E-02	4.33E-03	1.95E-03
2120	569656.6	4215316	2.93E-02	4.47E-03	2.02E-03
2121	569660	4215307	3.07E-02	4.69E-03	2.11E-03
2122	569663.4	4215298	3.22E-02	4.91E-03	2.22E-03
2123	569666.8	4215289	3.38E-02	5.17E-03	2.33E-03
2124	569670.2	4215280	3.55E-02	5.42E-03	2.44E-03
2125	569673.7	4215272	3.72E-02	5.68E-03	2.56E-03
2126	569677.1	4215263	3.92E-02	5.98E-03	2.70E-03

2127	569680.5	4215254	4.14E-02	6.32E-03	2.85E-03
2128	569683.9	4215245	4.36E-02	6.66E-03	3.01E-03
2129	569687.3	4215236	4.63E-02	7.07E-03	3.19E-03
2130	569690.7	4215227	4.94E-02	7.54E-03	3.40E-03
2131	569694.1	4215218	5.01E-02	7.64E-03	3.45E-03
2132	569697.6	4215209	5.03E-02	7.69E-03	3.47E-03
2133	569625.9	4215396	2.07E-02	3.16E-03	1.43E-03
2134	569619.3	4215387	2.08E-02	3.18E-03	1.43E-03
2135	569622.6	4215379	2.16E-02	3.30E-03	1.49E-03
2136	569626	4215370	2.25E-02	3.44E-03	1.55E-03
2137	569629.4	4215361	2.35E-02	3.59E-03	1.62E-03
2138	569632.8	4215352	2.45E-02	3.74E-03	1.69E-03
2139	569636.2	4215343	2.55E-02	3.90E-03	1.76E-03
2140	569639.6	4215335	2.66E-02	4.07E-03	1.84E-03
2141	569643	4215326	2.77E-02	4.23E-03	1.91E-03
2142	569646.3	4215317	2.87E-02	4.39E-03	1.98E-03
2143	569649.7	4215308	3.01E-02	4.59E-03	2.07E-03
2144	569653.1	4215299	3.16E-02	4.82E-03	2.17E-03
2145	569656.5	4215291	3.32E-02	5.06E-03	2.29E-03
2146	569659.9	4215282	3.48E-02	5.31E-03	2.40E-03
2147	569663.3	4215273	3.63E-02	5.55E-03	2.50E-03
2148	569666.7	4215264	3.81E-02	5.82E-03	2.63E-03
2149	569670.1	4215255	4.01E-02	6.13E-03	2.77E-03
2150	569673.4	4215246	4.20E-02	6.42E-03	2.90E-03
2151	569676.8	4215238	4.42E-02	6.75E-03	3.05E-03
2152	569680.2	4215229	4.68E-02	7.14E-03	3.22E-03
2153	569683.6	4215220	4.76E-02	7.27E-03	3.28E-03
2154	569687	4215211	4.78E-02	7.29E-03	3.29E-03
2155	569690.4	4215202	4.81E-02	7.34E-03	3.31E-03
2156	569615.9	4215396	2.00E-02	3.06E-03	1.38E-03
2157	569616.2	4215406	1.94E-02	2.96E-03	1.34E-03
2158	569616.5	4215416	1.89E-02	2.88E-03	1.30E-03
2159	569609.2	4215388	2.01E-02	3.08E-03	1.39E-03
2160	569612.6	4215379	2.09E-02	3.20E-03	1.44E-03
2161	569616	4215370	2.18E-02	3.33E-03	1.50E-03
2162	569619.3	4215362	2.28E-02	3.48E-03	1.57E-03
2163	569622.7	4215353	2.38E-02	3.63E-03	1.64E-03
2164	569626	4215344	2.48E-02	3.78E-03	1.71E-03
2165	569629.4	4215335	2.59E-02	3.96E-03	1.79E-03
2166	569632.8	4215327	2.71E-02	4.14E-03	1.87E-03
2167	569636.1	4215318	2.83E-02	4.31E-03	1.95E-03
2168	569639.5	4215309	2.96E-02	4.51E-03	2.04E-03
2169	569642.8	4215300	3.10E-02	4.73E-03	2.14E-03
2170	569646.2	4215292	3.26E-02	4.97E-03	2.24E-03
2171	569649.6	4215283	3.41E-02	5.21E-03	2.35E-03
2172	569652.9	4215274	3.56E-02	5.43E-03	2.45E-03
2173	569656.3	4215265	3.72E-02	5.68E-03	2.56E-03
2174	569659.7	4215257	3.90E-02	5.96E-03	2.69E-03
2175	569663	4215248	4.06E-02	6.20E-03	2.80E-03
2176	569666.4	4215239	4.24E-02	6.47E-03	2.92E-03
2177	569669.7	4215230	4.45E-02	6.79E-03	3.06E-03
2178	569673.1	4215222	4.54E-02	6.93E-03	3.13E-03

2179	569676.5	4215213	4.52E-02	6.90E-03	3.12E-03
2180	569679.8	4215204	4.52E-02	6.90E-03	3.11E-03
2181	569683.2	4215195	4.52E-02	6.90E-03	3.11E-03
2182	569695.1	4215183	4.53E-02	6.92E-03	3.12E-03
2183	569605.9	4215397	1.93E-02	2.95E-03	1.33E-03
2184	569606.2	4215406	1.87E-02	2.86E-03	1.29E-03
2185	569606.5	4215416	1.83E-02	2.79E-03	1.26E-03
2186	569606.8	4215426	1.78E-02	2.72E-03	1.23E-03
2187	569599.2	4215388	1.95E-02	2.98E-03	1.34E-03
2188	569602.6	4215379	2.03E-02	3.10E-03	1.40E-03
2189	569605.9	4215371	2.12E-02	3.23E-03	1.46E-03
2190	569609.2	4215362	2.21E-02	3.37E-03	1.52E-03
2191	569612.6	4215353	2.30E-02	3.52E-03	1.59E-03
2192	569615.9	4215345	2.40E-02	3.67E-03	1.66E-03
2193	569619.2	4215336	2.52E-02	3.85E-03	1.74E-03
2194	569622.6	4215327	2.64E-02	4.03E-03	1.82E-03
2195	569625.9	4215319	2.76E-02	4.22E-03	1.90E-03
2196	569629.3	4215310	2.90E-02	4.42E-03	2.00E-03
2197	569632.6	4215301	3.05E-02	4.65E-03	2.10E-03
2198	569635.9	4215293	3.20E-02	4.89E-03	2.21E-03
2199	569639.3	4215284	3.36E-02	5.13E-03	2.32E-03
2200	569642.6	4215275	3.49E-02	5.33E-03	2.41E-03
2201	569646	4215267	3.64E-02	5.55E-03	2.51E-03
2202	569649.3	4215258	3.80E-02	5.80E-03	2.62E-03
2203	569652.6	4215249	3.92E-02	5.98E-03	2.70E-03
2204	569656	4215241	4.05E-02	6.19E-03	2.79E-03
2205	569659.3	4215232	4.22E-02	6.44E-03	2.91E-03
2206	569662.6	4215223	4.34E-02	6.63E-03	2.99E-03
2207	569666	4215214	4.30E-02	6.56E-03	2.96E-03
2208	569669.3	4215206	4.26E-02	6.51E-03	2.94E-03
2209	569672.7	4215197	4.24E-02	6.48E-03	2.92E-03
2210	569676	4215188	4.18E-02	6.38E-03	2.88E-03
2211	569687.9	4215176	4.19E-02	6.39E-03	2.89E-03
2212	569595.9	4215397	1.87E-02	2.86E-03	1.29E-03
2213	569596.2	4215407	1.81E-02	2.77E-03	1.25E-03
2214	569596.5	4215416	1.77E-02	2.70E-03	1.22E-03
2215	569596.8	4215426	1.73E-02	2.64E-03	1.19E-03
2216	569597.1	4215435	1.68E-02	2.57E-03	1.16E-03
2217	569589.3	4215388	1.89E-02	2.89E-03	1.31E-03
2218	569592.8	4215379	1.97E-02	3.01E-03	1.36E-03
2219	569596.2	4215370	2.06E-02	3.15E-03	1.42E-03
2220	569599.7	4215361	2.16E-02	3.29E-03	1.49E-03
2221	569603.1	4215352	2.25E-02	3.44E-03	1.55E-03
2222	569606.6	4215343	2.36E-02	3.60E-03	1.63E-03
2223	569610	4215334	2.48E-02	3.79E-03	1.71E-03
2224	569613.5	4215325	2.61E-02	3.99E-03	1.80E-03
2225	569616.9	4215316	2.74E-02	4.19E-03	1.89E-03
2226	569620.4	4215307	2.89E-02	4.41E-03	1.99E-03
2227	569623.8	4215298	3.04E-02	4.64E-03	2.10E-03
2228	569627.3	4215289	3.21E-02	4.90E-03	2.21E-03
2229	569630.7	4215281	3.35E-02	5.12E-03	2.31E-03
2230	569634.2	4215272	3.50E-02	5.35E-03	2.41E-03

2231	569637.6	4215263	3.64E-02	5.56E-03	2.51E-03
2232	569641.1	4215254	3.77E-02	5.76E-03	2.60E-03
2233	569644.5	4215245	3.85E-02	5.89E-03	2.66E-03
2234	569648	4215236	3.96E-02	6.05E-03	2.73E-03
2235	569651.4	4215227	4.10E-02	6.26E-03	2.83E-03
2236	569654.9	4215218	4.10E-02	6.26E-03	2.83E-03
2237	569658.3	4215209	4.07E-02	6.21E-03	2.80E-03
2238	569661.8	4215200	4.02E-02	6.13E-03	2.77E-03
2239	569665.2	4215191	3.96E-02	6.05E-03	2.73E-03
2240	569668.7	4215182	3.91E-02	5.97E-03	2.69E-03
2241	569680.9	4215169	3.92E-02	5.98E-03	2.70E-03
2242	569585.9	4215397	1.82E-02	2.78E-03	1.25E-03
2243	569586.2	4215407	1.76E-02	2.69E-03	1.21E-03
2244	569586.5	4215416	1.72E-02	2.62E-03	1.18E-03
2245	569586.8	4215426	1.68E-02	2.56E-03	1.15E-03
2246	569587.1	4215436	1.63E-02	2.50E-03	1.13E-03
2247	569918.2	4215544	2.77E-02	4.23E-03	1.91E-03
2248	569927.5	4215543	2.82E-02	4.31E-03	1.94E-03
2249	569936.8	4215541	2.87E-02	4.39E-03	1.98E-03
2250	569946.1	4215539	2.93E-02	4.47E-03	2.02E-03
2251	569955.4	4215538	2.99E-02	4.57E-03	2.06E-03
2252	569964.8	4215536	3.06E-02	4.67E-03	2.11E-03
2253	569974.1	4215534	3.14E-02	4.79E-03	2.16E-03
2254	569983.4	4215533	3.23E-02	4.93E-03	2.22E-03
2255	569992.7	4215531	3.32E-02	5.07E-03	2.29E-03
2256	570002	4215529	3.42E-02	5.23E-03	2.36E-03
2257	570011.3	4215527	3.53E-02	5.39E-03	2.43E-03
2258	570020.6	4215526	3.63E-02	5.55E-03	2.50E-03
2259	569911.2	4215552	2.60E-02	3.96E-03	1.79E-03
2260	569902.5	4215550	2.64E-02	4.03E-03	1.82E-03
2261	569929.3	4215552	2.59E-02	3.96E-03	1.79E-03
2262	569938.6	4215551	2.63E-02	4.02E-03	1.81E-03
2263	569947.9	4215549	2.68E-02	4.09E-03	1.85E-03
2264	569957.2	4215547	2.73E-02	4.17E-03	1.88E-03
2265	569966.5	4215546	2.79E-02	4.26E-03	1.92E-03
2266	569975.8	4215544	2.85E-02	4.35E-03	1.96E-03
2267	569985.2	4215542	2.92E-02	4.46E-03	2.01E-03
2268	569994.5	4215541	3.00E-02	4.58E-03	2.07E-03
2269	570003.8	4215539	3.08E-02	4.70E-03	2.12E-03
2270	570013.1	4215537	3.16E-02	4.83E-03	2.18E-03
2271	570022.4	4215536	3.25E-02	4.96E-03	2.24E-03
2272	569913	4215562	2.39E-02	3.66E-03	1.65E-03
2273	569895.7	4215557	2.48E-02	3.78E-03	1.71E-03
2274	569878.3	4215553	2.56E-02	3.91E-03	1.76E-03
2275	569921.7	4215564	2.35E-02	3.59E-03	1.62E-03
2276	569931	4215562	2.39E-02	3.64E-03	1.64E-03
2277	569940.3	4215561	2.42E-02	3.70E-03	1.67E-03
2278	569949.7	4215559	2.46E-02	3.75E-03	1.69E-03
2279	569959	4215557	2.50E-02	3.82E-03	1.72E-03
2280	569968.3	4215556	2.55E-02	3.89E-03	1.76E-03
2281	569977.6	4215554	2.60E-02	3.97E-03	1.79E-03
2282	569986.9	4215552	2.66E-02	4.06E-03	1.83E-03

2283	569996.2	4215551	2.72E-02	4.15E-03	1.87E-03
2284	570005.6	4215549	2.78E-02	4.24E-03	1.92E-03
2285	570014.9	4215547	2.85E-02	4.35E-03	1.96E-03
2286	570024.2	4215546	2.91E-02	4.45E-03	2.01E-03
2287	570033.5	4215544	2.97E-02	4.54E-03	2.05E-03
2288	569914.8	4215572	2.21E-02	3.38E-03	1.52E-03
2289	569897.6	4215567	2.29E-02	3.50E-03	1.58E-03
2290	569880.3	4215563	2.37E-02	3.62E-03	1.63E-03
2291	569863	4215558	2.44E-02	3.73E-03	1.68E-03
2292	569923.5	4215574	2.17E-02	3.32E-03	1.50E-03
2293	569932.8	4215572	2.20E-02	3.36E-03	1.52E-03
2294	569942.1	4215570	2.23E-02	3.41E-03	1.54E-03
2295	569951.4	4215569	2.26E-02	3.46E-03	1.56E-03
2296	569960.7	4215567	2.30E-02	3.51E-03	1.58E-03
2297	569970.1	4215565	2.34E-02	3.57E-03	1.61E-03
2298	569979.4	4215564	2.38E-02	3.63E-03	1.64E-03
2299	569988.7	4215562	2.42E-02	3.70E-03	1.67E-03
2300	569998	4215560	2.47E-02	3.77E-03	1.70E-03
2301	570007.3	4215559	2.52E-02	3.85E-03	1.74E-03
2302	570016.6	4215557	2.58E-02	3.93E-03	1.78E-03
2303	570026	4215555	2.63E-02	4.02E-03	1.81E-03
2304	569916.7	4215581	2.05E-02	3.13E-03	1.41E-03
2305	569899.4	4215577	2.12E-02	3.24E-03	1.46E-03
2306	569882.2	4215573	2.20E-02	3.35E-03	1.51E-03
2307	569865	4215568	2.27E-02	3.46E-03	1.56E-03
2308	569847.8	4215564	2.33E-02	3.56E-03	1.61E-03
2309	569830.6	4215559	2.30E-02	3.51E-03	1.59E-03
2310	569934.6	4215582	2.04E-02	3.11E-03	1.40E-03
2311	569943.9	4215580	2.06E-02	3.15E-03	1.42E-03
2312	569953.2	4215579	2.09E-02	3.19E-03	1.44E-03
2313	569962.5	4215577	2.12E-02	3.24E-03	1.46E-03
2314	569971.8	4215575	2.15E-02	3.29E-03	1.48E-03
2315	569981.1	4215574	2.18E-02	3.33E-03	1.50E-03
2316	569990.5	4215572	2.22E-02	3.39E-03	1.53E-03
2317	569999.8	4215570	2.26E-02	3.45E-03	1.56E-03
2318	570009.1	4215569	2.30E-02	3.52E-03	1.59E-03
2319	570065	4215558	2.60E-02	3.96E-03	1.79E-03
2320	570074.3	4215557	2.67E-02	4.07E-03	1.84E-03
2321	570083.6	4215555	2.74E-02	4.19E-03	1.89E-03
2322	569917.9	4215591	1.90E-02	2.91E-03	1.31E-03
2323	569908.7	4215589	1.94E-02	2.96E-03	1.34E-03
2324	569899.6	4215586	1.98E-02	3.02E-03	1.36E-03
2325	569890.5	4215584	2.02E-02	3.08E-03	1.39E-03
2326	569881.3	4215582	2.05E-02	3.13E-03	1.41E-03
2327	569872.2	4215579	2.09E-02	3.19E-03	1.44E-03
2328	569863	4215577	2.12E-02	3.24E-03	1.46E-03
2329	569853.9	4215575	2.16E-02	3.29E-03	1.49E-03
2330	569844.8	4215572	2.19E-02	3.35E-03	1.51E-03
2331	569835.6	4215570	2.14E-02	3.27E-03	1.48E-03
2332	569826.5	4215568	2.16E-02	3.30E-03	1.49E-03
2333	569817.3	4215565	2.18E-02	3.34E-03	1.51E-03
2334	569808.2	4215563	2.20E-02	3.37E-03	1.52E-03

2335	569927	4215593	1.87E-02	2.85E-03	1.29E-03
2336	569936.3	4215592	1.89E-02	2.88E-03	1.30E-03
2337	569945.7	4215590	1.91E-02	2.92E-03	1.32E-03
2338	569955	4215588	1.94E-02	2.95E-03	1.33E-03
2339	569964.3	4215587	1.96E-02	2.99E-03	1.35E-03
2340	569973.6	4215585	1.99E-02	3.03E-03	1.37E-03
2341	569982.9	4215583	2.01E-02	3.07E-03	1.39E-03
2342	569992.2	4215582	2.04E-02	3.12E-03	1.41E-03
2343	570048.1	4215572	2.28E-02	3.48E-03	1.57E-03
2344	570057.4	4215570	2.32E-02	3.55E-03	1.60E-03
2345	570066.8	4215568	2.38E-02	3.64E-03	1.64E-03
2346	570076.1	4215567	2.45E-02	3.74E-03	1.69E-03
2347	570085.4	4215565	2.52E-02	3.84E-03	1.73E-03
2348	569919.7	4215601	1.77E-02	2.71E-03	1.22E-03
2349	569910.6	4215599	1.81E-02	2.76E-03	1.24E-03
2350	569901.6	4215596	1.84E-02	2.81E-03	1.27E-03
2351	569892.5	4215594	1.88E-02	2.86E-03	1.29E-03
2352	569883.4	4215592	1.91E-02	2.92E-03	1.32E-03
2353	569874.4	4215589	1.94E-02	2.97E-03	1.34E-03
2354	569865.3	4215587	1.98E-02	3.02E-03	1.36E-03
2355	569856.2	4215585	2.01E-02	3.07E-03	1.39E-03
2356	569847.1	4215582	2.04E-02	3.12E-03	1.41E-03
2357	569838.1	4215580	2.07E-02	3.17E-03	1.43E-03
2358	569829	4215578	2.02E-02	3.09E-03	1.39E-03
2359	569819.9	4215575	2.04E-02	3.12E-03	1.41E-03
2360	569810.8	4215573	2.06E-02	3.15E-03	1.42E-03
2361	569801.8	4215571	2.08E-02	3.17E-03	1.43E-03
2362	569792.7	4215568	2.10E-02	3.20E-03	1.45E-03
2363	569928.8	4215603	1.74E-02	2.66E-03	1.20E-03
2364	569938.1	4215602	1.76E-02	2.68E-03	1.21E-03
2365	569947.4	4215600	1.78E-02	2.71E-03	1.22E-03
2366	569956.7	4215598	1.80E-02	2.75E-03	1.24E-03
2367	569966.1	4215597	1.82E-02	2.78E-03	1.25E-03
2368	569975.4	4215595	1.84E-02	2.81E-03	1.27E-03
2369	570031.3	4215585	2.02E-02	3.08E-03	1.39E-03
2370	570040.6	4215583	2.06E-02	3.14E-03	1.42E-03
2371	570049.9	4215582	2.10E-02	3.21E-03	1.45E-03
2372	570059.2	4215580	2.15E-02	3.28E-03	1.48E-03
2373	570068.5	4215578	2.20E-02	3.36E-03	1.52E-03
2374	570077.8	4215576	2.26E-02	3.45E-03	1.56E-03
2375	570087.2	4215575	2.32E-02	3.54E-03	1.60E-03
2376	569921.6	4215611	1.66E-02	2.53E-03	1.14E-03
2377	569912.5	4215609	1.69E-02	2.57E-03	1.16E-03
2378	569903.5	4215606	1.72E-02	2.62E-03	1.18E-03
2379	569894.5	4215604	1.75E-02	2.67E-03	1.20E-03
2380	569885.5	4215602	1.78E-02	2.72E-03	1.23E-03
2381	569876.5	4215599	1.81E-02	2.77E-03	1.25E-03
2382	569867.5	4215597	1.84E-02	2.82E-03	1.27E-03
2383	569858.5	4215595	1.88E-02	2.86E-03	1.29E-03
2384	569849.4	4215592	1.91E-02	2.91E-03	1.31E-03
2385	569840.4	4215590	1.94E-02	2.96E-03	1.33E-03
2386	569831.4	4215588	1.97E-02	3.00E-03	1.35E-03

2387	569822.4	4215585	1.91E-02	2.92E-03	1.32E-03
2388	569813.4	4215583	1.93E-02	2.94E-03	1.33E-03
2389	569804.4	4215581	1.95E-02	2.97E-03	1.34E-03
2390	569795.4	4215578	1.97E-02	3.00E-03	1.35E-03
2391	569786.3	4215576	1.98E-02	3.03E-03	1.37E-03
2392	569930.6	4215613	1.62E-02	2.48E-03	1.12E-03
2393	569939.9	4215611	1.64E-02	2.51E-03	1.13E-03
2394	569949.2	4215610	1.66E-02	2.53E-03	1.14E-03
2395	570005.1	4215600	1.78E-02	2.72E-03	1.23E-03
2396	570014.4	4215598	1.81E-02	2.76E-03	1.25E-03
2397	570023.7	4215596	1.84E-02	2.81E-03	1.27E-03
2398	570033	4215595	1.87E-02	2.86E-03	1.29E-03
2399	570042.3	4215593	1.91E-02	2.92E-03	1.32E-03
2400	570051.7	4215591	1.95E-02	2.98E-03	1.34E-03
2401	570061	4215590	1.99E-02	3.04E-03	1.37E-03
2402	570070.3	4215588	2.04E-02	3.11E-03	1.41E-03
2403	570079.6	4215586	2.09E-02	3.19E-03	1.44E-03
2404	570088.9	4215585	2.15E-02	3.28E-03	1.48E-03
2405	569923.4	4215621	1.55E-02	2.37E-03	1.07E-03
2406	569914.4	4215618	1.58E-02	2.41E-03	1.09E-03
2407	569905.5	4215616	1.61E-02	2.45E-03	1.11E-03
2408	569896.5	4215614	1.63E-02	2.50E-03	1.13E-03
2409	569887.5	4215611	1.66E-02	2.54E-03	1.15E-03
2410	569878.6	4215609	1.69E-02	2.59E-03	1.17E-03
2411	569869.6	4215607	1.72E-02	2.63E-03	1.19E-03
2412	569860.6	4215605	1.75E-02	2.68E-03	1.21E-03
2413	569851.7	4215602	1.78E-02	2.72E-03	1.23E-03
2414	569842.7	4215600	1.81E-02	2.76E-03	1.25E-03
2415	569833.8	4215598	1.84E-02	2.81E-03	1.27E-03
2416	569824.8	4215595	1.87E-02	2.85E-03	1.29E-03
2417	569815.8	4215593	1.81E-02	2.77E-03	1.25E-03
2418	569806.9	4215591	1.83E-02	2.79E-03	1.26E-03
2419	569797.9	4215588	1.85E-02	2.82E-03	1.27E-03
2420	569789	4215586	1.86E-02	2.85E-03	1.28E-03
2421	569932.3	4215623	1.52E-02	2.33E-03	1.05E-03
2422	569988.2	4215613	1.62E-02	2.48E-03	1.12E-03
2423	569997.5	4215611	1.64E-02	2.51E-03	1.13E-03
2424	570006.9	4215610	1.66E-02	2.54E-03	1.15E-03
2425	570016.2	4215608	1.69E-02	2.57E-03	1.16E-03
2426	570025.5	4215606	1.71E-02	2.61E-03	1.18E-03
2427	570034.8	4215605	1.74E-02	2.66E-03	1.20E-03
2428	570044.1	4215603	1.78E-02	2.72E-03	1.23E-03
2429	570053.4	4215601	1.82E-02	2.78E-03	1.25E-03
2430	570062.7	4215600	1.86E-02	2.84E-03	1.28E-03
2431	570072.1	4215598	1.90E-02	2.91E-03	1.31E-03
2432	570081.4	4215596	1.95E-02	2.98E-03	1.34E-03
2433	570090.7	4215595	2.00E-02	3.06E-03	1.38E-03
2434	569925.2	4215631	1.46E-02	2.22E-03	1.00E-03
2435	569916.3	4215628	1.48E-02	2.26E-03	1.02E-03
2436	569907.4	4215626	1.51E-02	2.30E-03	1.04E-03
2437	569898.5	4215624	1.53E-02	2.34E-03	1.06E-03
2438	569889.5	4215621	1.56E-02	2.38E-03	1.07E-03

2439	569880.6	4215619	1.58E-02	2.42E-03	1.09E-03
2440	569871.7	4215617	1.61E-02	2.46E-03	1.11E-03
2441	569862.8	4215615	1.64E-02	2.51E-03	1.13E-03
2442	569853.9	4215612	1.67E-02	2.55E-03	1.15E-03
2443	569845	4215610	1.70E-02	2.59E-03	1.17E-03
2444	569836.1	4215608	1.72E-02	2.63E-03	1.19E-03
2445	569827.1	4215605	1.75E-02	2.67E-03	1.21E-03
2446	569818.2	4215603	1.71E-02	2.61E-03	1.18E-03
2447	569809.3	4215601	1.72E-02	2.63E-03	1.19E-03
2448	569800.4	4215598	1.74E-02	2.65E-03	1.20E-03
2449	569791.5	4215596	1.75E-02	2.68E-03	1.21E-03
2450	569971.4	4215626	1.49E-02	2.27E-03	1.02E-03
2451	569980.7	4215624	1.50E-02	2.29E-03	1.04E-03
2452	569990	4215623	1.52E-02	2.32E-03	1.05E-03
2453	569999.3	4215621	1.54E-02	2.35E-03	1.06E-03
2454	570008.6	4215619	1.56E-02	2.38E-03	1.07E-03
2455	570017.9	4215618	1.58E-02	2.41E-03	1.09E-03
2456	570027.3	4215616	1.60E-02	2.44E-03	1.10E-03
2457	570036.6	4215614	1.63E-02	2.49E-03	1.12E-03
2458	570045.9	4215613	1.67E-02	2.55E-03	1.15E-03
2459	570055.2	4215611	1.70E-02	2.60E-03	1.17E-03
2460	570064.5	4215609	1.74E-02	2.66E-03	1.20E-03
2461	570073.8	4215608	1.78E-02	2.72E-03	1.23E-03
2462	570083.2	4215606	1.83E-02	2.79E-03	1.26E-03
2463	570092.5	4215604	1.88E-02	2.87E-03	1.29E-03
2464	569909.3	4215636	1.42E-02	2.16E-03	9.77E-04
2465	569900.4	4215634	1.44E-02	2.20E-03	9.93E-04
2466	569891.5	4215631	1.47E-02	2.24E-03	1.01E-03
2467	569882.6	4215629	1.49E-02	2.27E-03	1.03E-03
2468	569873.8	4215627	1.51E-02	2.31E-03	1.04E-03
2469	569864.9	4215624	1.54E-02	2.35E-03	1.06E-03
2470	569856	4215622	1.57E-02	2.39E-03	1.08E-03
2471	569847.2	4215620	1.59E-02	2.43E-03	1.10E-03
2472	569838.3	4215618	1.62E-02	2.47E-03	1.11E-03
2473	569829.4	4215615	1.64E-02	2.51E-03	1.13E-03
2474	569820.5	4215613	1.67E-02	2.54E-03	1.15E-03
2475	569811.7	4215611	1.62E-02	2.48E-03	1.12E-03
2476	569802.8	4215608	1.64E-02	2.50E-03	1.13E-03
2477	569945.2	4215641	1.36E-02	2.08E-03	9.38E-04
2478	569954.5	4215639	1.37E-02	2.09E-03	9.45E-04
2479	569963.8	4215638	1.38E-02	2.11E-03	9.53E-04
2480	569973.1	4215636	1.40E-02	2.13E-03	9.62E-04
2481	569982.5	4215634	1.41E-02	2.16E-03	9.73E-04
2482	569991.8	4215633	1.43E-02	2.18E-03	9.84E-04
2483	570001.1	4215631	1.45E-02	2.21E-03	9.96E-04
2484	570010.4	4215629	1.46E-02	2.24E-03	1.01E-03
2485	570019.7	4215628	1.48E-02	2.27E-03	1.02E-03
2486	570029	4215626	1.51E-02	2.30E-03	1.04E-03
2487	570038.3	4215624	1.54E-02	2.35E-03	1.06E-03
2488	570047.7	4215623	1.57E-02	2.39E-03	1.08E-03
2489	570057	4215621	1.60E-02	2.44E-03	1.10E-03
2490	570066.3	4215619	1.64E-02	2.50E-03	1.13E-03

2491	570075.6	4215618	1.67E-02	2.56E-03	1.15E-03
2492	570084.9	4215616	1.72E-02	2.62E-03	1.18E-03
2493	570094.2	4215614	1.76E-02	2.69E-03	1.22E-03
2494	569902.3	4215643	1.36E-02	2.07E-03	9.36E-04
2495	569893.5	4215641	1.38E-02	2.11E-03	9.51E-04
2496	569884.6	4215639	1.40E-02	2.14E-03	9.66E-04
2497	569875.8	4215637	1.42E-02	2.18E-03	9.82E-04
2498	569867	4215634	1.45E-02	2.21E-03	9.98E-04
2499	569858.1	4215632	1.47E-02	2.25E-03	1.01E-03
2500	569849.3	4215630	1.49E-02	2.28E-03	1.03E-03
2501	569840.5	4215628	1.52E-02	2.32E-03	1.05E-03
2502	569831.6	4215625	1.54E-02	2.35E-03	1.06E-03
2503	569822.8	4215623	1.57E-02	2.39E-03	1.08E-03
2504	569814	4215621	1.59E-02	2.43E-03	1.09E-03
2505	569937.6	4215653	1.28E-02	1.95E-03	8.79E-04
2506	569947	4215651	1.28E-02	1.96E-03	8.85E-04
2507	569956.3	4215649	1.29E-02	1.98E-03	8.91E-04
2508	569965.6	4215647	1.30E-02	1.99E-03	8.98E-04
2509	569974.9	4215646	1.32E-02	2.01E-03	9.07E-04
2510	569984.2	4215644	1.33E-02	2.03E-03	9.16E-04
2511	569993.5	4215642	1.35E-02	2.05E-03	9.27E-04
2512	570002.9	4215641	1.36E-02	2.08E-03	9.39E-04
2513	570012.2	4215639	1.38E-02	2.11E-03	9.52E-04
2514	570021.5	4215637	1.40E-02	2.14E-03	9.66E-04
2515	570030.8	4215636	1.42E-02	2.18E-03	9.82E-04
2516	570040.1	4215634	1.45E-02	2.21E-03	9.99E-04
2517	570049.4	4215632	1.48E-02	2.26E-03	1.02E-03
2518	570058.7	4215631	1.51E-02	2.30E-03	1.04E-03
2519	570068.1	4215629	1.54E-02	2.35E-03	1.06E-03
2520	570077.4	4215627	1.58E-02	2.41E-03	1.09E-03
2521	570086.7	4215626	1.62E-02	2.47E-03	1.11E-03
2522	570096	4215624	1.66E-02	2.54E-03	1.14E-03
2523	569930.6	4215660	1.23E-02	1.87E-03	8.44E-04
2524	569921.8	4215658	1.24E-02	1.90E-03	8.57E-04
2525	569895.4	4215651	1.30E-02	1.99E-03	8.97E-04
2526	569886.6	4215649	1.32E-02	2.02E-03	9.11E-04
2527	569877.8	4215647	1.34E-02	2.05E-03	9.25E-04
2528	569869	4215644	1.36E-02	2.08E-03	9.40E-04
2529	569860.2	4215642	1.39E-02	2.12E-03	9.55E-04
2530	569851.4	4215640	1.41E-02	2.15E-03	9.70E-04
2531	569842.6	4215637	1.43E-02	2.18E-03	9.85E-04
2532	569833.8	4215635	1.45E-02	2.22E-03	1.00E-03
2533	569816.2	4215631	1.49E-02	2.28E-03	1.03E-03
2534	569939.4	4215662	1.21E-02	1.84E-03	8.32E-04
2535	569948.7	4215661	1.22E-02	1.86E-03	8.37E-04
2536	569958	4215659	1.22E-02	1.87E-03	8.43E-04
2537	569967.4	4215657	1.23E-02	1.88E-03	8.50E-04
2538	569976.7	4215656	1.24E-02	1.90E-03	8.58E-04
2539	569986	4215654	1.26E-02	1.92E-03	8.67E-04
2540	569995.3	4215652	1.27E-02	1.94E-03	8.76E-04
2541	570004.6	4215651	1.29E-02	1.97E-03	8.88E-04
2542	570013.9	4215649	1.31E-02	2.00E-03	9.01E-04

2543	570023.3	4215647	1.33E-02	2.03E-03	9.15E-04
2544	570032.6	4215646	1.35E-02	2.06E-03	9.30E-04
2545	570041.9	4215644	1.37E-02	2.10E-03	9.46E-04
2546	570051.2	4215642	1.40E-02	2.13E-03	9.63E-04
2547	570060.5	4215641	1.43E-02	2.18E-03	9.83E-04
2548	570069.8	4215639	1.46E-02	2.22E-03	1.00E-03
2549	570079.1	4215637	1.49E-02	2.27E-03	1.03E-03
2550	570088.5	4215636	1.53E-02	2.33E-03	1.05E-03
2551	570097.8	4215634	1.57E-02	2.39E-03	1.08E-03
2552	569932	4215670	1.16E-02	1.77E-03	8.00E-04
2553	569922.9	4215667	1.18E-02	1.80E-03	8.12E-04
2554	569913.7	4215665	1.20E-02	1.83E-03	8.25E-04
2555	569877	4215656	1.27E-02	1.95E-03	8.78E-04
2556	569867.9	4215653	1.29E-02	1.98E-03	8.92E-04
2557	569858.7	4215651	1.32E-02	2.01E-03	9.07E-04
2558	569849.5	4215649	1.34E-02	2.04E-03	9.21E-04
2559	569840.4	4215646	1.36E-02	2.07E-03	9.36E-04
2560	569831.2	4215644	1.38E-02	2.11E-03	9.51E-04
2561	569941.2	4215672	1.14E-02	1.75E-03	7.89E-04
2562	569950.5	4215671	1.15E-02	1.76E-03	7.94E-04
2563	569959.8	4215669	1.16E-02	1.77E-03	8.00E-04
2564	569969.1	4215667	1.17E-02	1.79E-03	8.06E-04
2565	569978.4	4215665	1.18E-02	1.80E-03	8.13E-04
2566	569987.8	4215664	1.19E-02	1.82E-03	8.21E-04
2567	569997.1	4215662	1.21E-02	1.84E-03	8.30E-04
2568	570006.4	4215660	1.22E-02	1.86E-03	8.41E-04
2569	570015.7	4215659	1.24E-02	1.89E-03	8.52E-04
2570	570025	4215657	1.26E-02	1.92E-03	8.66E-04
2571	570034.3	4215655	1.28E-02	1.95E-03	8.80E-04
2572	570043.7	4215654	1.30E-02	1.98E-03	8.95E-04
2573	570053	4215652	1.32E-02	2.02E-03	9.12E-04
2574	570062.3	4215650	1.35E-02	2.06E-03	9.30E-04
2575	570071.6	4215649	1.38E-02	2.10E-03	9.50E-04
2576	570080.9	4215647	1.41E-02	2.15E-03	9.71E-04
2577	570090.2	4215645	1.44E-02	2.20E-03	9.94E-04
2578	570099.5	4215644	1.48E-02	2.26E-03	1.02E-03
2579	569933.8	4215680	1.10E-02	1.68E-03	7.60E-04
2580	569924.7	4215677	1.12E-02	1.71E-03	7.71E-04
2581	569915.6	4215675	1.13E-02	1.73E-03	7.82E-04
2582	569906.5	4215673	1.15E-02	1.76E-03	7.93E-04
2583	569870	4215663	1.22E-02	1.87E-03	8.44E-04
2584	569860.9	4215661	1.24E-02	1.90E-03	8.57E-04
2585	569851.8	4215659	1.26E-02	1.93E-03	8.70E-04
2586	569842.7	4215656	1.28E-02	1.96E-03	8.84E-04
2587	569833.6	4215654	1.30E-02	1.99E-03	8.97E-04
2588	569943	4215682	1.09E-02	1.66E-03	7.50E-04
2589	569952.3	4215680	1.09E-02	1.67E-03	7.54E-04
2590	569961.6	4215679	1.10E-02	1.68E-03	7.60E-04
2591	569970.9	4215677	1.11E-02	1.70E-03	7.66E-04
2592	569980.2	4215675	1.12E-02	1.71E-03	7.73E-04
2593	569989.5	4215674	1.13E-02	1.73E-03	7.80E-04
2594	569998.8	4215672	1.14E-02	1.75E-03	7.89E-04

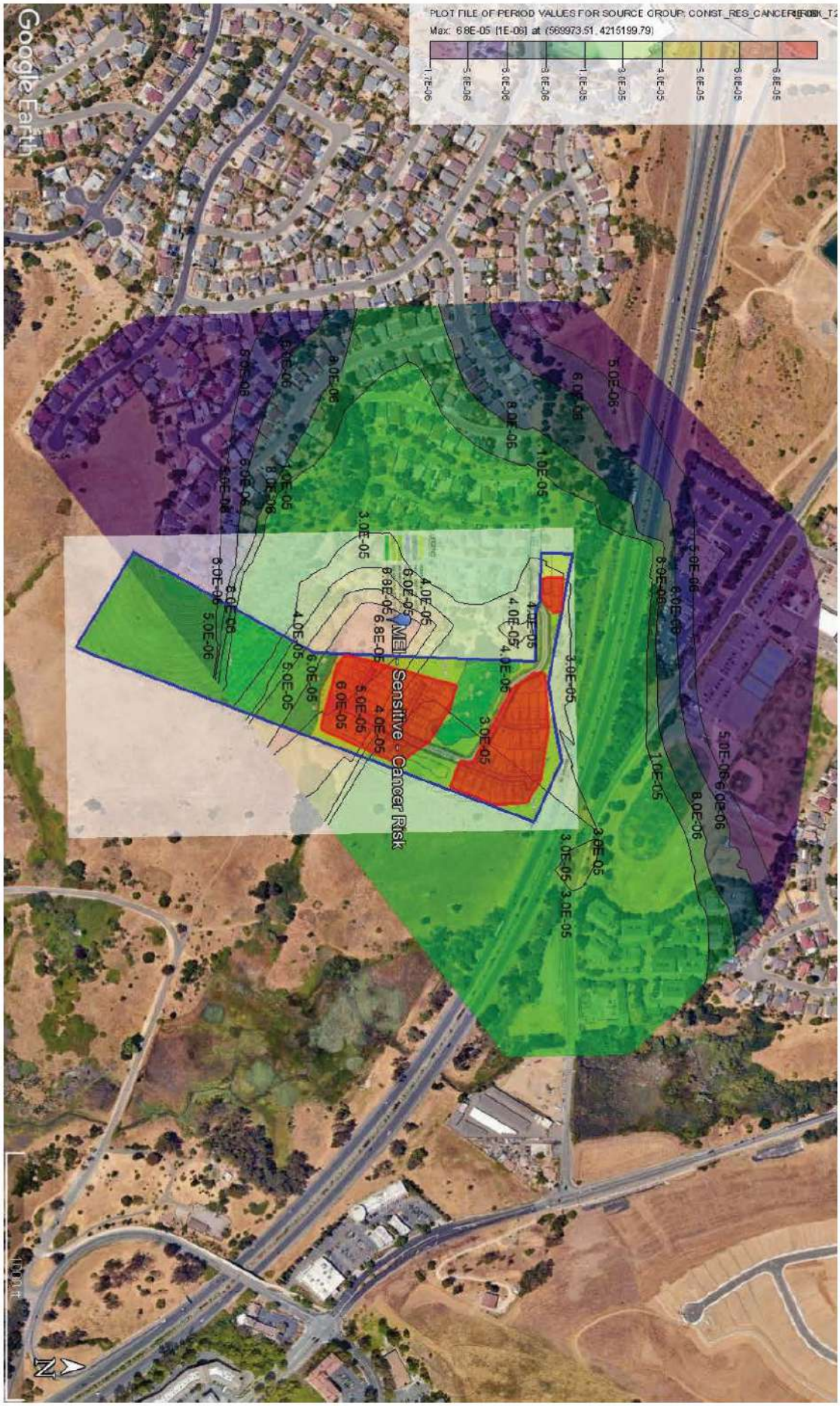
2595	570008.2	4215670	1.16E-02	1.77E-03	7.98E-04
2596	570017.5	4215669	1.17E-02	1.79E-03	8.09E-04
2597	570026.8	4215667	1.19E-02	1.82E-03	8.20E-04
2598	570036.1	4215665	1.21E-02	1.85E-03	8.34E-04
2599	570045.4	4215664	1.23E-02	1.88E-03	8.49E-04
2600	570054.7	4215662	1.25E-02	1.92E-03	8.65E-04
2601	570064.1	4215660	1.28E-02	1.95E-03	8.81E-04
2602	570073.4	4215659	1.31E-02	1.99E-03	9.00E-04
2603	570082.7	4215657	1.33E-02	2.04E-03	9.20E-04
2604	570092	4215655	1.37E-02	2.09E-03	9.41E-04
2605	570101.3	4215654	1.40E-02	2.14E-03	9.65E-04
2606	569935.7	4215690	1.05E-02	1.60E-03	7.23E-04
2607	569926.6	4215687	1.06E-02	1.62E-03	7.33E-04
2608	569917.5	4215685	1.08E-02	1.65E-03	7.43E-04
2609	569908.4	4215683	1.09E-02	1.67E-03	7.53E-04
2610	569899.4	4215680	1.11E-02	1.69E-03	7.64E-04
2611	569863.1	4215671	1.18E-02	1.80E-03	8.11E-04
2612	569854	4215669	1.20E-02	1.82E-03	8.24E-04
2613	569844.9	4215666	1.21E-02	1.85E-03	8.36E-04
2614	569944.7	4215692	1.04E-02	1.58E-03	7.14E-04
2615	569954	4215690	1.04E-02	1.59E-03	7.19E-04
2616	569963.4	4215689	1.05E-02	1.60E-03	7.24E-04
2617	569972.7	4215687	1.06E-02	1.62E-03	7.30E-04
2618	569982	4215685	1.07E-02	1.63E-03	7.36E-04
2619	569991.3	4215684	1.08E-02	1.65E-03	7.43E-04
2620	570000.6	4215682	1.09E-02	1.66E-03	7.51E-04
2621	570009.9	4215680	1.10E-02	1.68E-03	7.59E-04
2622	570019.2	4215678	1.12E-02	1.70E-03	7.69E-04
2623	570028.6	4215677	1.13E-02	1.73E-03	7.80E-04
2624	570037.9	4215675	1.15E-02	1.76E-03	7.92E-04
2625	570047.2	4215673	1.17E-02	1.79E-03	8.06E-04
2626	570056.5	4215672	1.19E-02	1.82E-03	8.21E-04
2627	570065.8	4215670	1.21E-02	1.85E-03	8.37E-04
2628	570075.1	4215668	1.24E-02	1.89E-03	8.54E-04
2629	570084.5	4215667	1.27E-02	1.93E-03	8.73E-04
2630	570093.8	4215665	1.30E-02	1.98E-03	8.93E-04
2631	570103.1	4215663	1.33E-02	2.03E-03	9.15E-04
2632	569937.5	4215699	1.00E-02	1.53E-03	6.89E-04
2633	569928.4	4215697	1.01E-02	1.55E-03	6.98E-04
2634	569919.4	4215695	1.03E-02	1.57E-03	7.07E-04
2635	569910.4	4215692	1.04E-02	1.59E-03	7.16E-04
2636	569901.3	4215690	1.05E-02	1.61E-03	7.26E-04
2637	569892.3	4215688	1.07E-02	1.63E-03	7.37E-04
2638	569946.5	4215702	9.88E-03	1.51E-03	6.81E-04
2639	569955.8	4215700	9.95E-03	1.52E-03	6.86E-04
2640	569965.1	4215698	1.00E-02	1.53E-03	6.91E-04
2641	569974.4	4215697	1.01E-02	1.54E-03	6.97E-04
2642	569983.8	4215695	1.02E-02	1.56E-03	7.03E-04
2643	569993.1	4215693	1.03E-02	1.57E-03	7.09E-04
2644	570002.4	4215692	1.04E-02	1.59E-03	7.16E-04
2645	570011.7	4215690	1.05E-02	1.60E-03	7.24E-04
2646	570021	4215688	1.06E-02	1.62E-03	7.32E-04

2647	570030.3	4215687	1.08E-02	1.65E-03	7.43E-04
2648	570039.6	4215685	1.09E-02	1.67E-03	7.54E-04
2649	570049	4215683	1.11E-02	1.70E-03	7.67E-04
2650	570058.3	4215682	1.13E-02	1.73E-03	7.81E-04
2651	570067.6	4215680	1.16E-02	1.76E-03	7.96E-04
2652	570076.9	4215678	1.18E-02	1.80E-03	8.12E-04
2653	570086.2	4215677	1.20E-02	1.84E-03	8.30E-04
2654	570095.5	4215675	1.23E-02	1.88E-03	8.49E-04
2655	570104.9	4215673	1.26E-02	1.93E-03	8.69E-04
2656	569939.3	4215709	9.55E-03	1.46E-03	6.58E-04
2657	569930.3	4215707	9.66E-03	1.47E-03	6.66E-04
2658	569921.3	4215705	9.78E-03	1.49E-03	6.74E-04
2659	569912.3	4215702	9.90E-03	1.51E-03	6.82E-04
2660	569903.3	4215700	1.00E-02	1.53E-03	6.91E-04
2661	569894.3	4215698	1.02E-02	1.55E-03	7.01E-04
2662	569885.3	4215695	1.03E-02	1.57E-03	7.11E-04
2663	569876.3	4215693	1.00E-02	1.53E-03	6.90E-04
2664	569948.3	4215712	9.44E-03	1.44E-03	6.51E-04
2665	569957.6	4215710	9.51E-03	1.45E-03	6.55E-04
2666	569966.9	4215708	9.58E-03	1.46E-03	6.60E-04
2667	569976.2	4215707	9.66E-03	1.48E-03	6.66E-04
2668	569985.5	4215705	9.75E-03	1.49E-03	6.72E-04
2669	569994.8	4215703	9.84E-03	1.50E-03	6.78E-04
2670	570004.2	4215702	9.93E-03	1.52E-03	6.84E-04
2671	570013.5	4215700	1.00E-02	1.53E-03	6.91E-04
2672	570022.8	4215698	1.01E-02	1.55E-03	6.99E-04
2673	570032.1	4215696	1.03E-02	1.57E-03	7.09E-04
2674	570041.4	4215695	1.04E-02	1.59E-03	7.19E-04
2675	570050.7	4215693	1.06E-02	1.62E-03	7.31E-04
2676	570060	4215691	1.08E-02	1.65E-03	7.44E-04
2677	570069.4	4215690	1.10E-02	1.68E-03	7.58E-04
2678	570078.7	4215688	1.12E-02	1.71E-03	7.73E-04
2679	570088	4215686	1.15E-02	1.75E-03	7.89E-04
2680	570097.3	4215685	1.17E-02	1.79E-03	8.07E-04
2681	569941.1	4215719	9.13E-03	1.39E-03	6.29E-04
2682	569932.1	4215717	9.24E-03	1.41E-03	6.36E-04
2683	569923.2	4215715	9.34E-03	1.43E-03	6.44E-04
2684	569914.2	4215712	9.45E-03	1.44E-03	6.52E-04
2685	569905.2	4215710	9.57E-03	1.46E-03	6.59E-04
2686	569896.3	4215708	9.69E-03	1.48E-03	6.68E-04
2687	569887.3	4215705	9.82E-03	1.50E-03	6.77E-04
2688	569878.3	4215703	9.96E-03	1.52E-03	6.86E-04
2689	569869.4	4215701	9.62E-03	1.47E-03	6.63E-04
2690	569950	4215721	9.03E-03	1.38E-03	6.23E-04
2691	569959.4	4215720	9.10E-03	1.39E-03	6.27E-04
2692	569968.7	4215718	9.17E-03	1.40E-03	6.32E-04
2693	569978	4215716	9.24E-03	1.41E-03	6.37E-04
2694	569987.3	4215715	9.32E-03	1.42E-03	6.43E-04
2695	569996.6	4215713	9.41E-03	1.44E-03	6.48E-04
2696	570005.9	4215711	9.50E-03	1.45E-03	6.55E-04
2697	570015.2	4215710	9.59E-03	1.46E-03	6.61E-04
2698	570024.6	4215708	9.70E-03	1.48E-03	6.68E-04

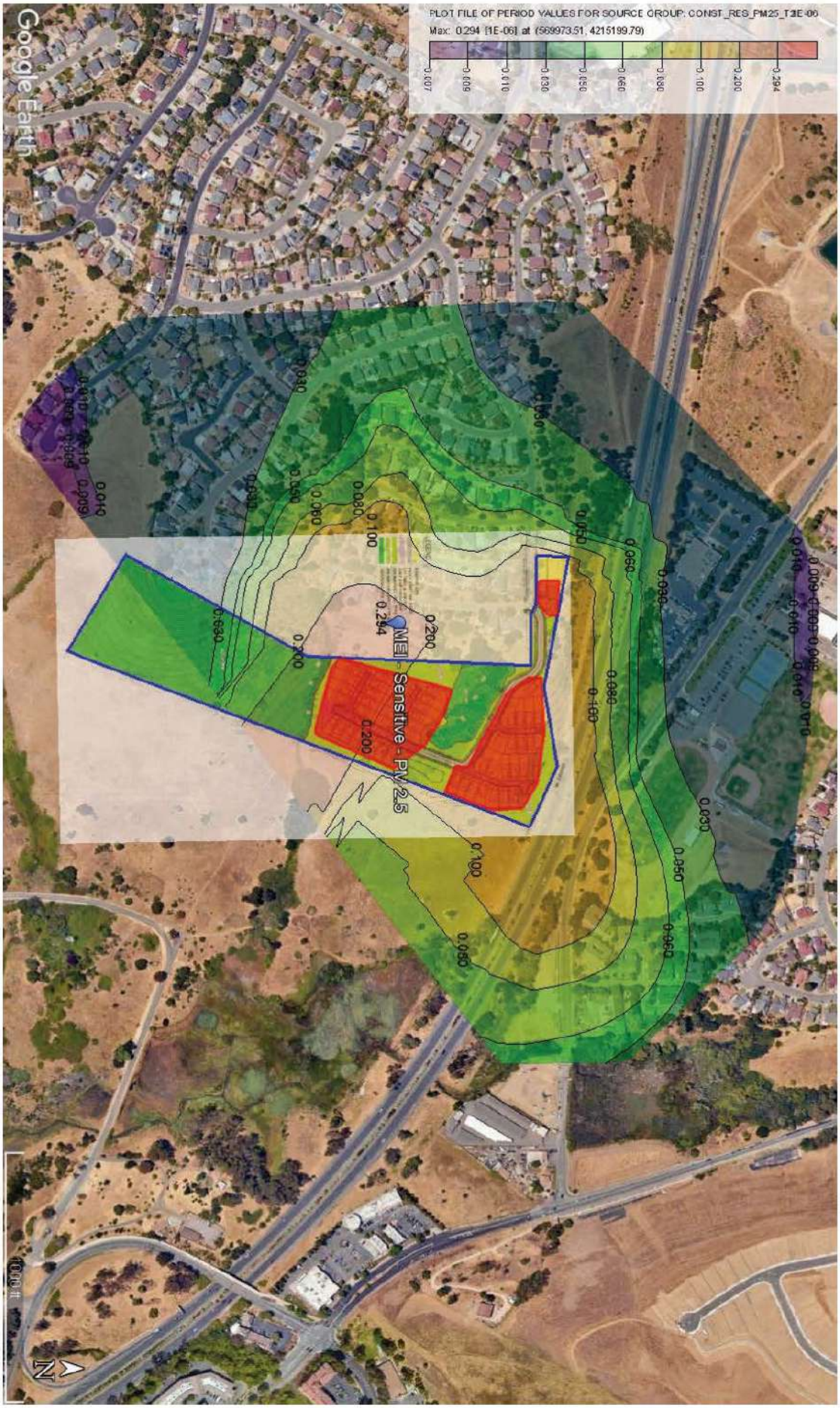
2699	570033.9	4215706	9.83E-03	1.50E-03	6.77E-04
2700	570043.2	4215705	9.97E-03	1.52E-03	6.87E-04
2701	570052.5	4215703	1.01E-02	1.55E-03	6.98E-04
2702	570061.8	4215701	1.03E-02	1.57E-03	7.10E-04
2703	570071.1	4215700	1.05E-02	1.60E-03	7.23E-04
2704	570080.5	4215698	1.07E-02	1.63E-03	7.37E-04
2705	570089.8	4215696	1.09E-02	1.67E-03	7.52E-04
2706	570099.1	4215695	1.12E-02	1.71E-03	7.70E-04
2707	570108.4	4215693	1.14E-02	1.75E-03	7.88E-04
2708	569942.9	4215729	8.75E-03	1.34E-03	6.03E-04
2709	569933.9	4215727	8.84E-03	1.35E-03	6.09E-04
2710	569925	4215724	8.94E-03	1.37E-03	6.16E-04
2711	569916.1	4215722	9.04E-03	1.38E-03	6.23E-04
2712	569907.2	4215720	9.15E-03	1.40E-03	6.30E-04
2713	569898.2	4215717	9.26E-03	1.41E-03	6.38E-04
2714	569889.3	4215715	9.38E-03	1.43E-03	6.46E-04
2715	569880.4	4215713	9.50E-03	1.45E-03	6.54E-04
2716	569871.4	4215711	9.19E-03	1.40E-03	6.33E-04
2717	569862.5	4215708	9.25E-03	1.41E-03	6.37E-04
2718	569591.2	4215444	1.63E-02	2.48E-03	1.12E-03
2719	569951.8	4215731	8.66E-03	1.32E-03	5.96E-04
2720	569961.1	4215730	8.71E-03	1.33E-03	6.00E-04
2721	569970.4	4215728	8.78E-03	1.34E-03	6.05E-04
2722	569979.8	4215726	8.85E-03	1.35E-03	6.10E-04
2723	569989.1	4215725	8.93E-03	1.36E-03	6.15E-04
2724	569998.4	4215723	9.01E-03	1.38E-03	6.21E-04
2725	570007.7	4215721	9.09E-03	1.39E-03	6.27E-04
2726	570017	4215720	9.18E-03	1.40E-03	6.33E-04
2727	570026.3	4215718	9.29E-03	1.42E-03	6.40E-04
2728	570035.6	4215716	9.40E-03	1.44E-03	6.48E-04
2729	570045	4215714	9.53E-03	1.46E-03	6.57E-04
2730	570054.3	4215713	9.68E-03	1.48E-03	6.67E-04
2731	570063.6	4215711	9.84E-03	1.50E-03	6.78E-04
2732	570072.9	4215709	1.00E-02	1.53E-03	6.90E-04
2733	570082.2	4215708	1.02E-02	1.56E-03	7.03E-04
2734	570091.5	4215706	1.04E-02	1.59E-03	7.18E-04
2735	570134.3	4215513	4.66E-02	7.11E-03	3.21E-03
2736	570122.9	4215521	4.07E-02	6.22E-03	2.81E-03
2737	570111.5	4215529	3.62E-02	5.53E-03	2.50E-03
2738	570121.1	4215531	3.65E-02	5.57E-03	2.51E-03
2739	570100.1	4215538	3.28E-02	5.02E-03	2.26E-03
2740	570109.8	4215539	3.28E-02	5.01E-03	2.26E-03
2741	570119.4	4215541	3.30E-02	5.04E-03	2.27E-03
2742	570129	4215543	3.34E-02	5.10E-03	2.30E-03
2743	570098.4	4215547	2.99E-02	4.57E-03	2.06E-03
2744	570108	4215549	2.99E-02	4.56E-03	2.06E-03
2745	570117.7	4215551	3.00E-02	4.58E-03	2.07E-03
2746	570096.7	4215557	2.73E-02	4.17E-03	1.88E-03
2747	570106.3	4215559	2.73E-02	4.17E-03	1.88E-03
2748	570115.9	4215561	2.74E-02	4.19E-03	1.89E-03
2749	570094.9	4215567	2.50E-02	3.82E-03	1.72E-03
2750	570104.6	4215569	2.50E-02	3.82E-03	1.73E-03

2751	570114.2	4215571	2.51E-02	3.84E-03	1.73E-03
2752	570123.8	4215572	2.54E-02	3.88E-03	1.75E-03
2753	570102.8	4215579	2.30E-02	3.52E-03	1.59E-03
2754	570112.5	4215580	2.31E-02	3.53E-03	1.59E-03
2755	570122.1	4215582	2.34E-02	3.57E-03	1.61E-03
2756	570101.1	4215589	2.13E-02	3.25E-03	1.47E-03
2757	570110.7	4215590	2.14E-02	3.27E-03	1.48E-03
2758	570099.3	4215598	1.98E-02	3.02E-03	1.36E-03
2759	570109	4215600	1.99E-02	3.05E-03	1.37E-03
2760	570118.6	4215602	2.01E-02	3.07E-03	1.39E-03
2761	570107.2	4215610	1.86E-02	2.84E-03	1.28E-03
2762	570105.5	4215620	1.74E-02	2.66E-03	1.20E-03
2763	570113.4	4215631	1.64E-02	2.50E-03	1.13E-03
2764	570111.7	4215641	1.54E-02	2.34E-03	1.06E-03
2765	570088.1	4215718	9.78E-03	1.49E-03	6.74E-04
2766	570097.7	4215720	9.84E-03	1.50E-03	6.78E-04

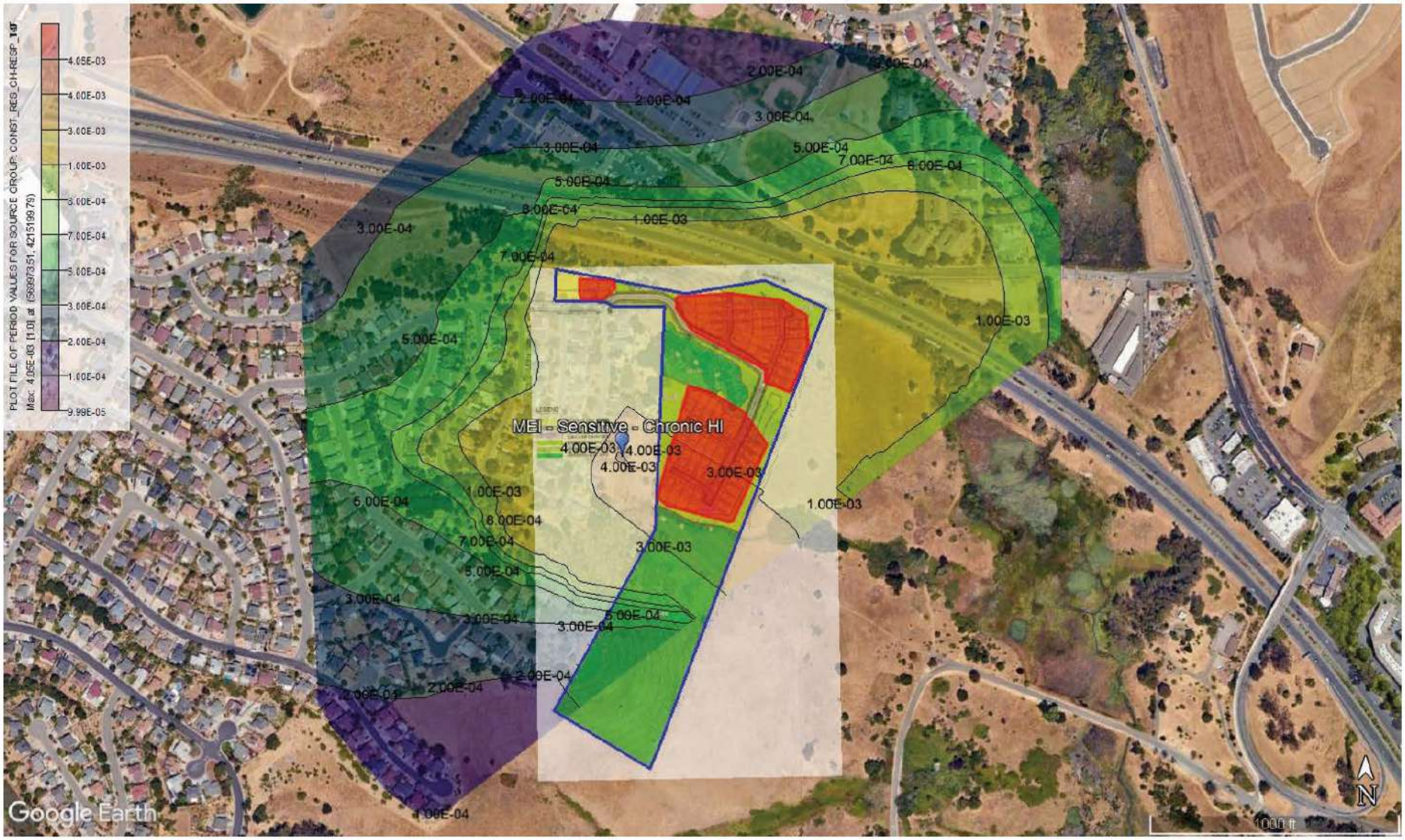
Saint Patrick Saint Vincent High School
Soccer field
California Highway Patrol
Athletic track
SPSV Football Field
Safeway
Domino's Pizza
Secure Space Self Storage Vallejo
Central Bark Pet Grooming
Starbucks
Genworth Financial
Benicia State Recreation Area Camping
Google Earth
1000 ft
N

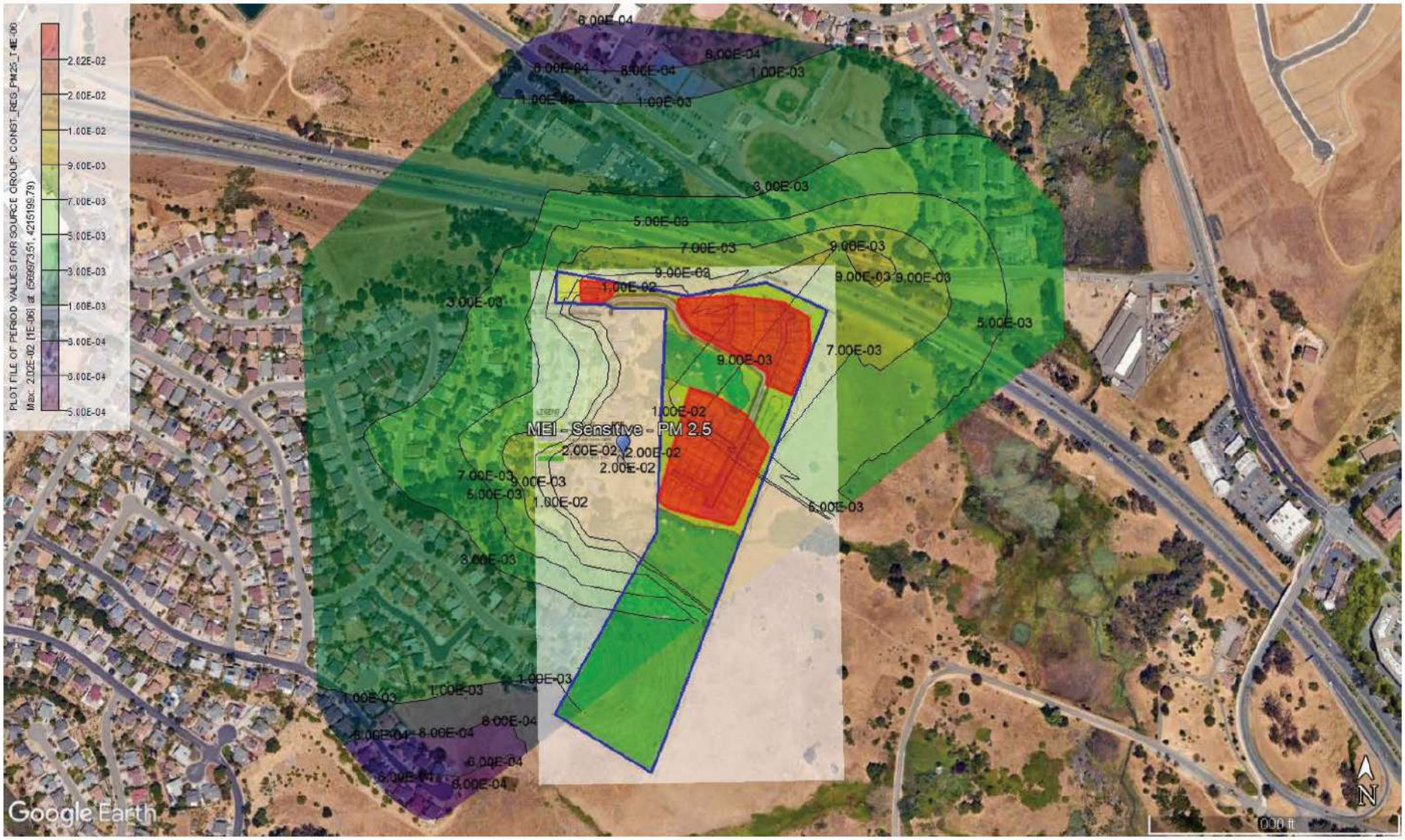

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_RES_CANCERRISK_T2
Max: 6.8E-05 (1E-06) at (569973.51, 4215199.79)
1.7E-06
5.0E-06
6.0E-06
8.0E-06
1.0E-05
3.0E-05
4.0E-05
5.0E-05
6.0E-05
6.8E-05
Google Earth
Sensitive - Cancer Risk
N

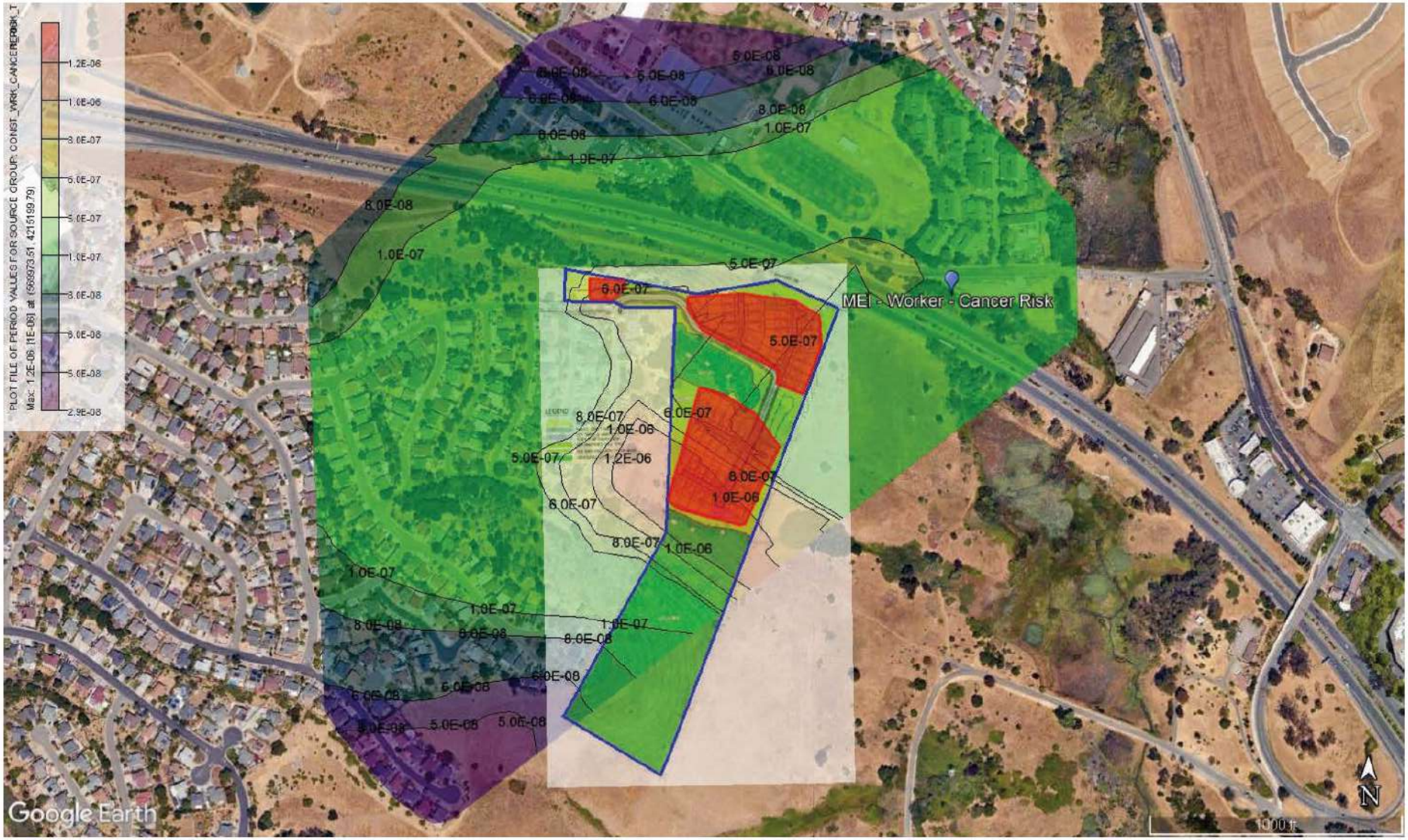
PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_RES_CH-RESP_12
Max: 5.9E-02 [1.0] at (568973.51, 4215199.79)
1.0E-03
4.0E-03
5.0E-03
8.0E-03
1.0E-02
2.0E-02
4.0E-02
5.0E-02
6.0E-02
MEI - Sensitive - Chronic HI
Google Earth
N
1000 ft

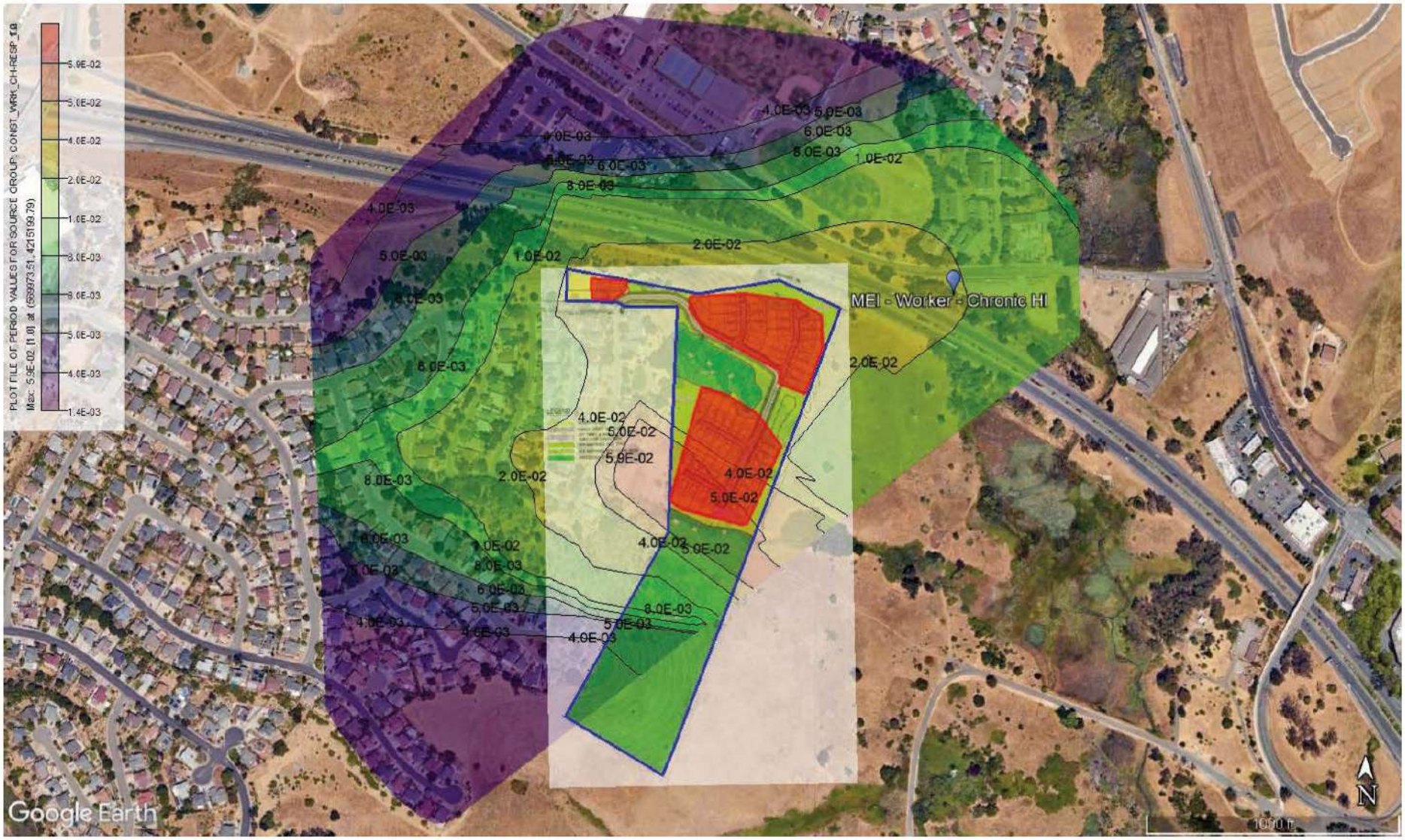

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_RES_PM25_T3E-06
Max: 0.294 (1E-06) at (569973.51, 4215199.79)
0.007
0.009
0.010
0.030
0.050
0.060
0.080
0.100
0.200
0.294
Google Earth
MEI - Sensitive - PM 2.5
1000 ft
N

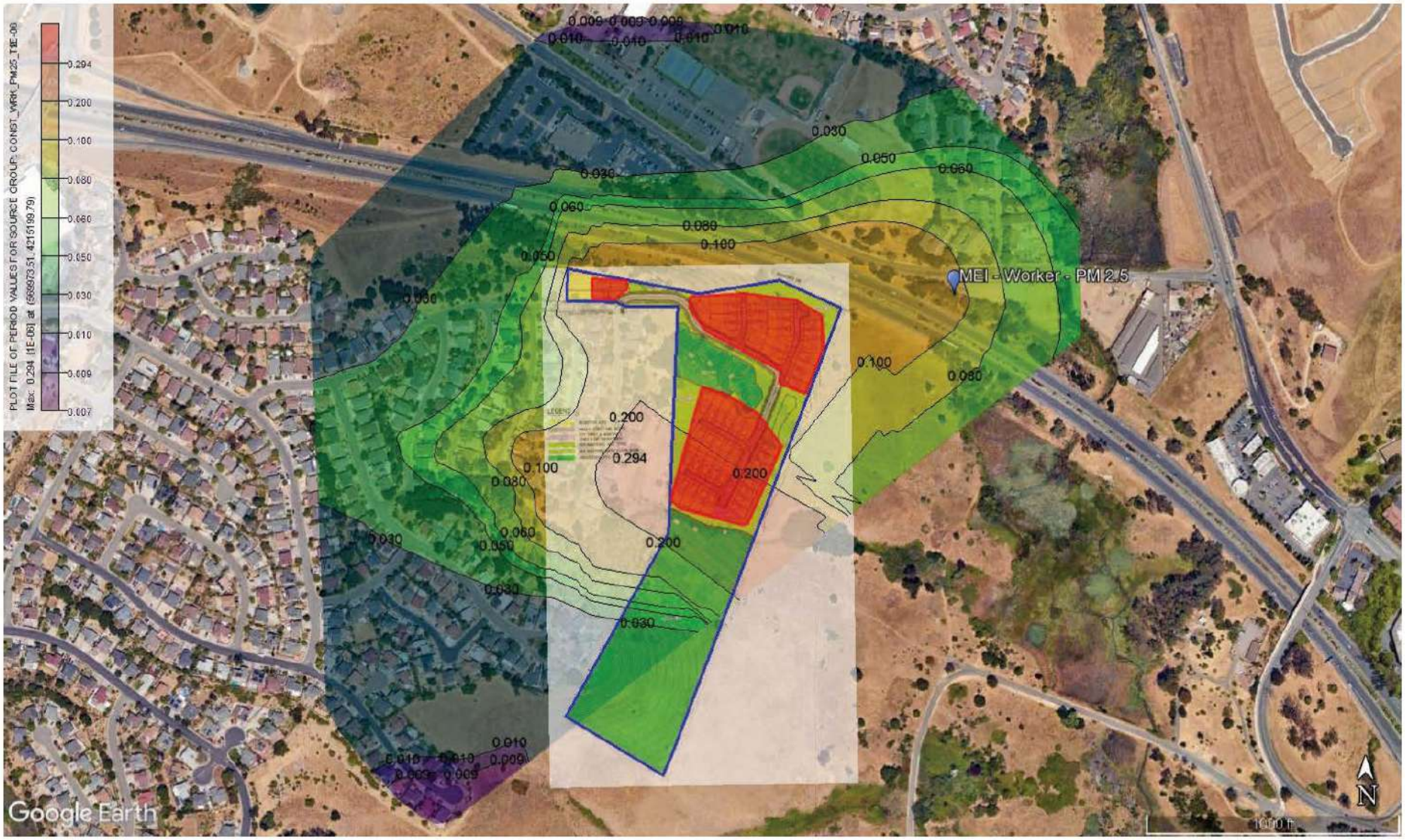
PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_RES_CANCER
Max: 4.5E-06 (1E-06) at (569973.51, 4215199.79)
1.0E-07
4.0E-07
5.0E-07
8.0E-07
7.0E-07
9.0E-07
1.0E-06
3.0E-06
4.0E-06
4.5E-06
Google Earth
MEI - Sensitive - Cancer Risk
1000 ft
N

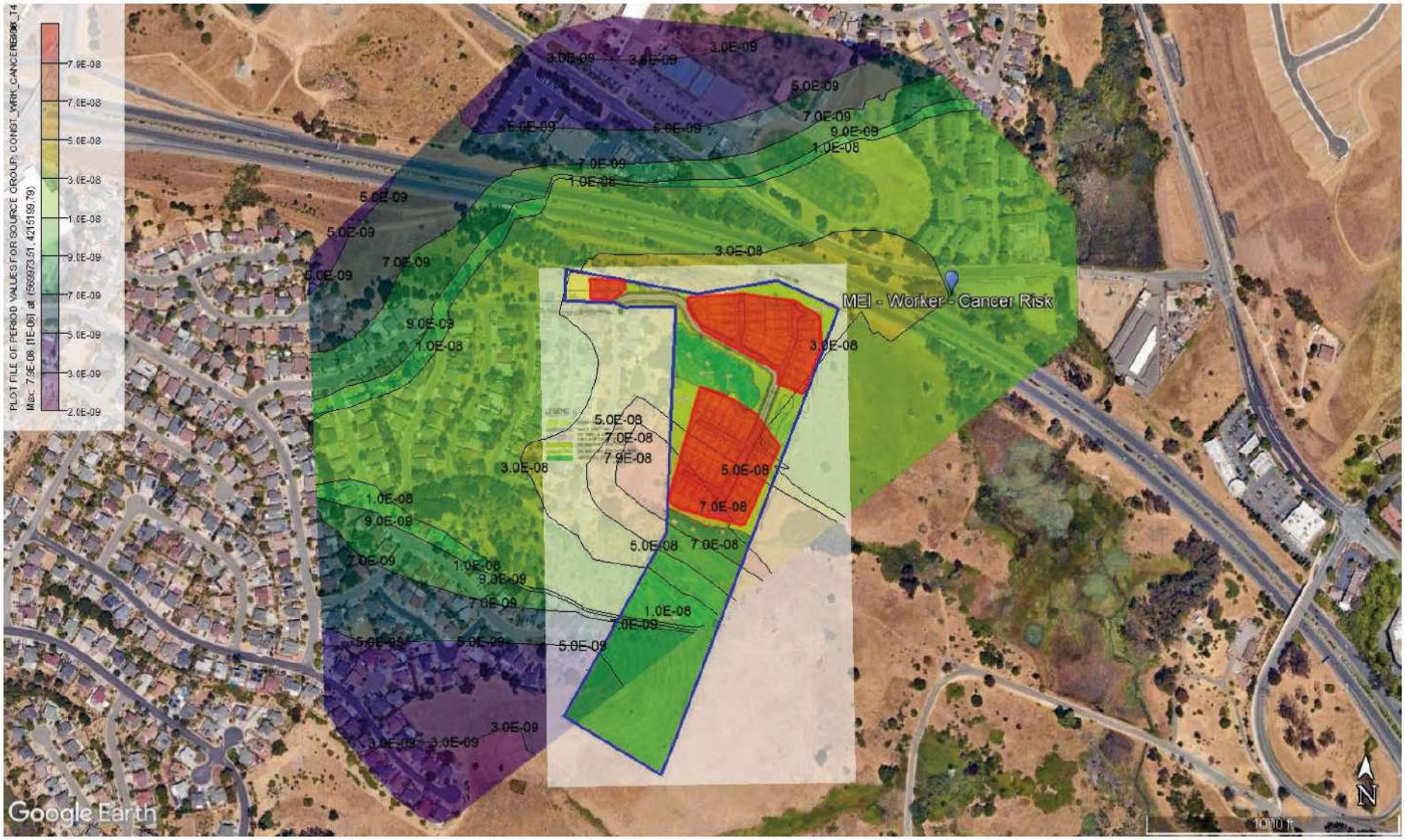

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_RES_CH-RESP_14F
Max: 4.05E-03 [1.0] at (569973.51, 4215199.79)
4.05E-03
4.00E-03
3.00E-03
1.00E-03
8.00E-04
7.00E-04
5.00E-04
3.00E-04
2.00E-04
1.00E-04
9.99E-05
MEI - Sensitive - Chronic HI
Google Earth
N
1000 ft

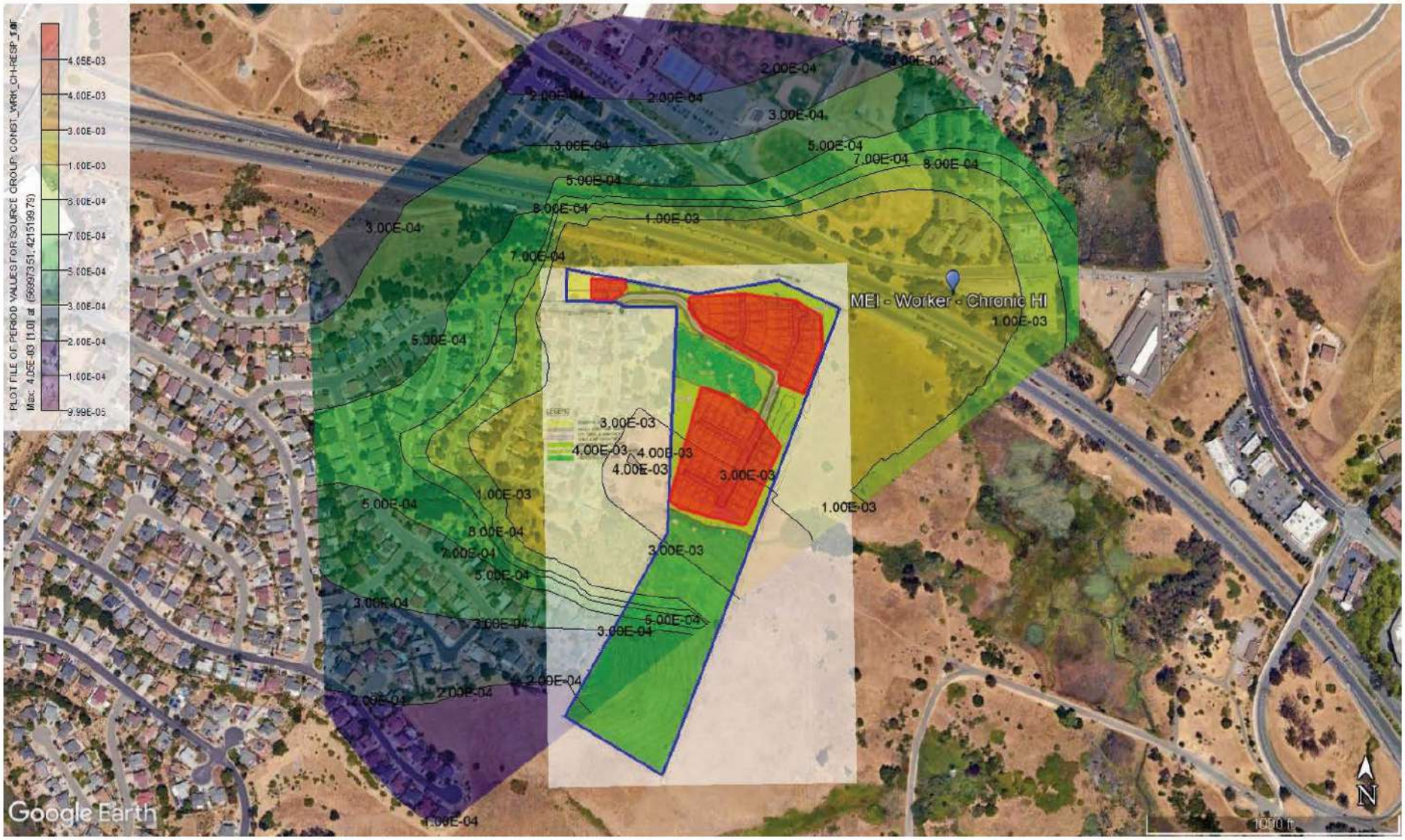

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_REG_PM25_T4E-06
Max: 2.02E-02 (1E-06) at (569973.51, 4215196.79)
2.02E-02
2.00E-02
1.00E-02
9.00E-03
7.00E-03
5.00E-03
3.00E-03
1.00E-03
8.00E-04
6.00E-04
5.00E-04
MEI - Sensitive - PM 2.5
Google Earth
000 ft
N

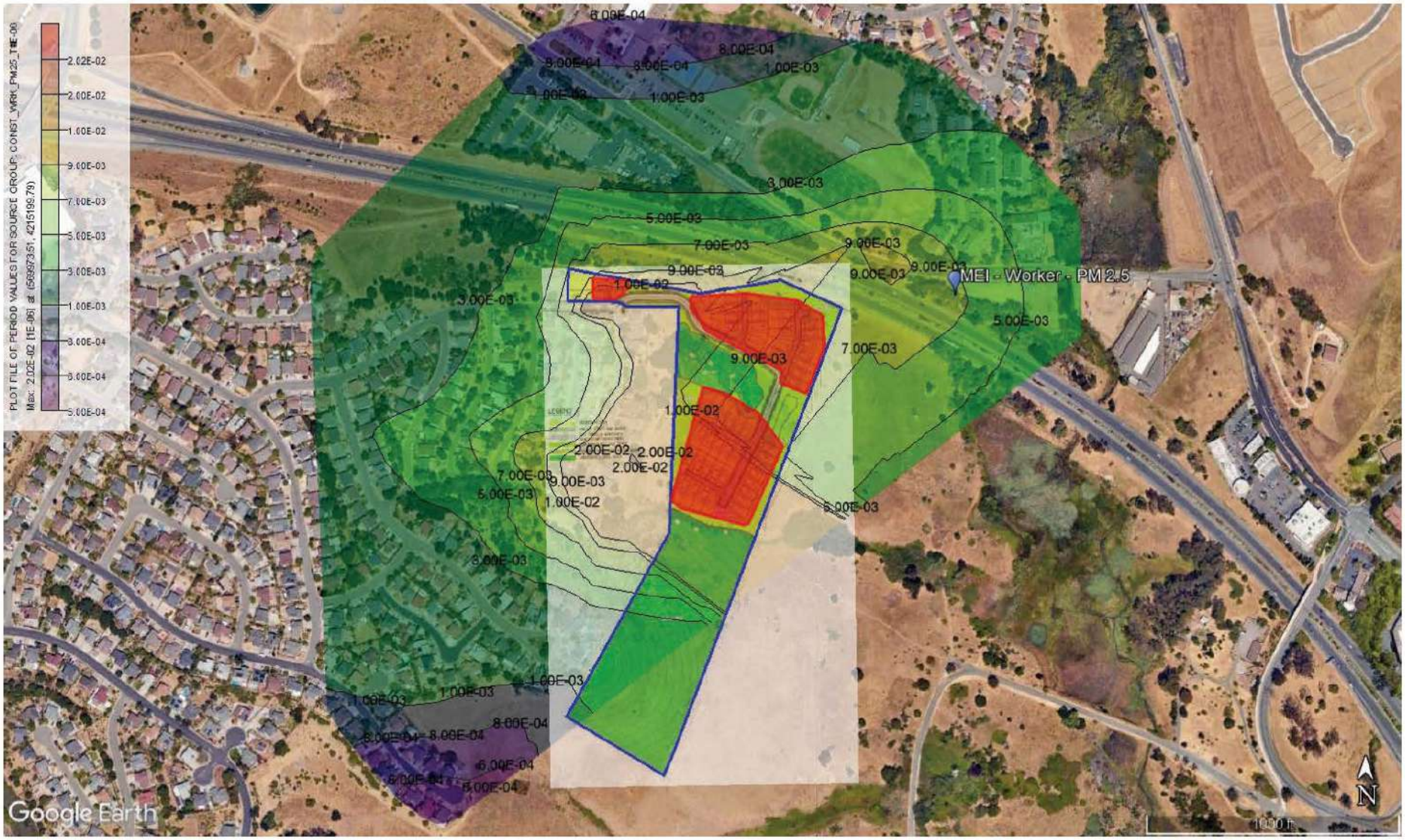

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_WRK_CANCERRISK_T
Max: 1.2E-06 [1E-06] at (568973.51, 4215199.79)
1.2E-06
1.0E-06
8.0E-07
6.0E-07
5.0E-07
4.0E-07
3.0E-07
2.9E-08
MEI - Worker - Cancer Risk
Google Earth
N
1000 ft

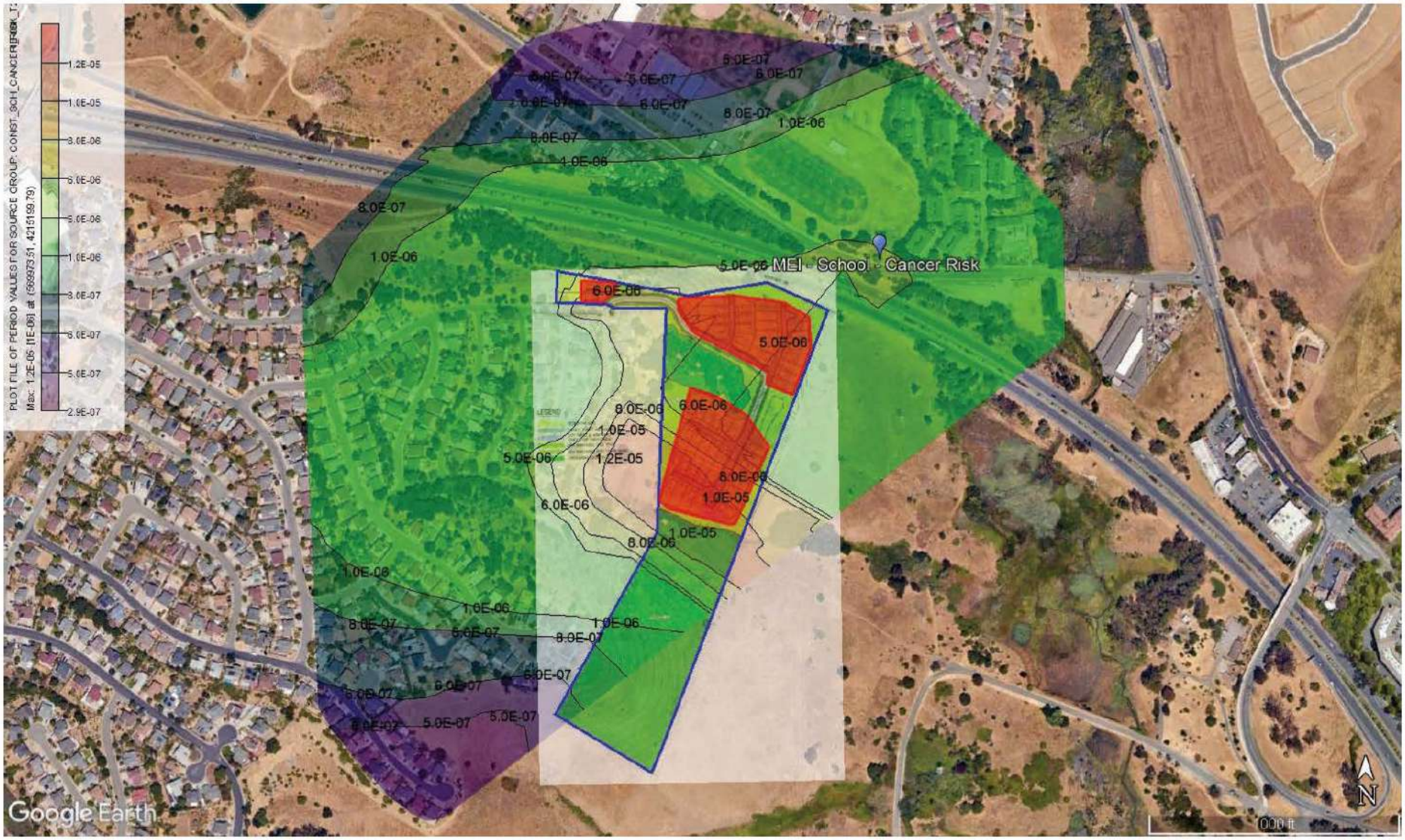

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_WRK_CH-RESP_10
Max: 5.9E-02 (1.0) at (699973.51, 4215199.79)
5.9E-02
5.0E-02
4.0E-02
2.0E-02
1.0E-02
8.0E-03
6.0E-03
5.0E-03
4.0E-03
1.4E-03
MEI - Worker - Chronic HI
Google Earth
N

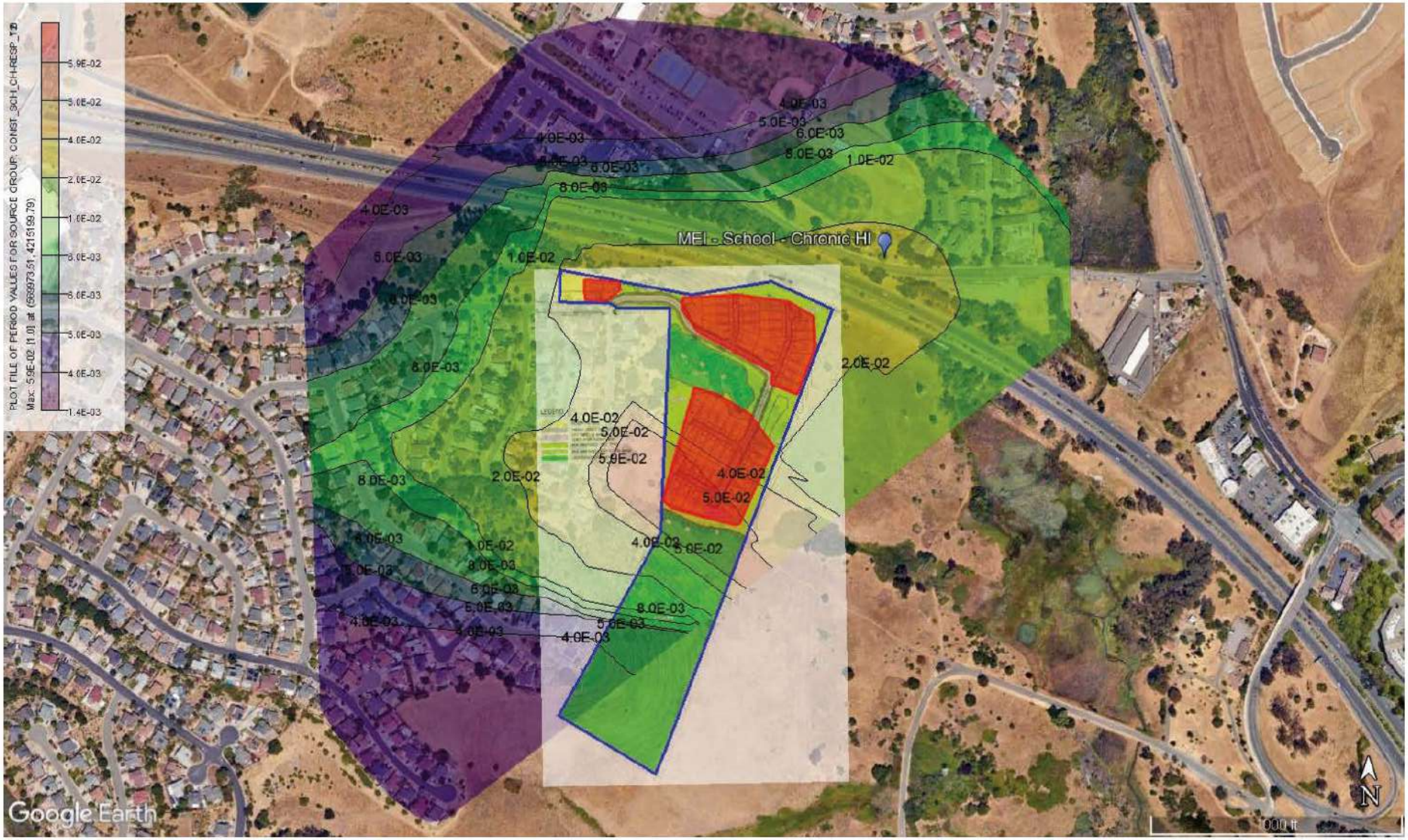

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_WRK_PM25_TIE-08
Max: 0.294 (1E-06) at (569973.51, 4215199.79)
0.294
0.200
0.100
0.080
0.060
0.050
0.030
0.010
0.009
0.007
MEI - Worker - PM 2.5
Google Earth
N

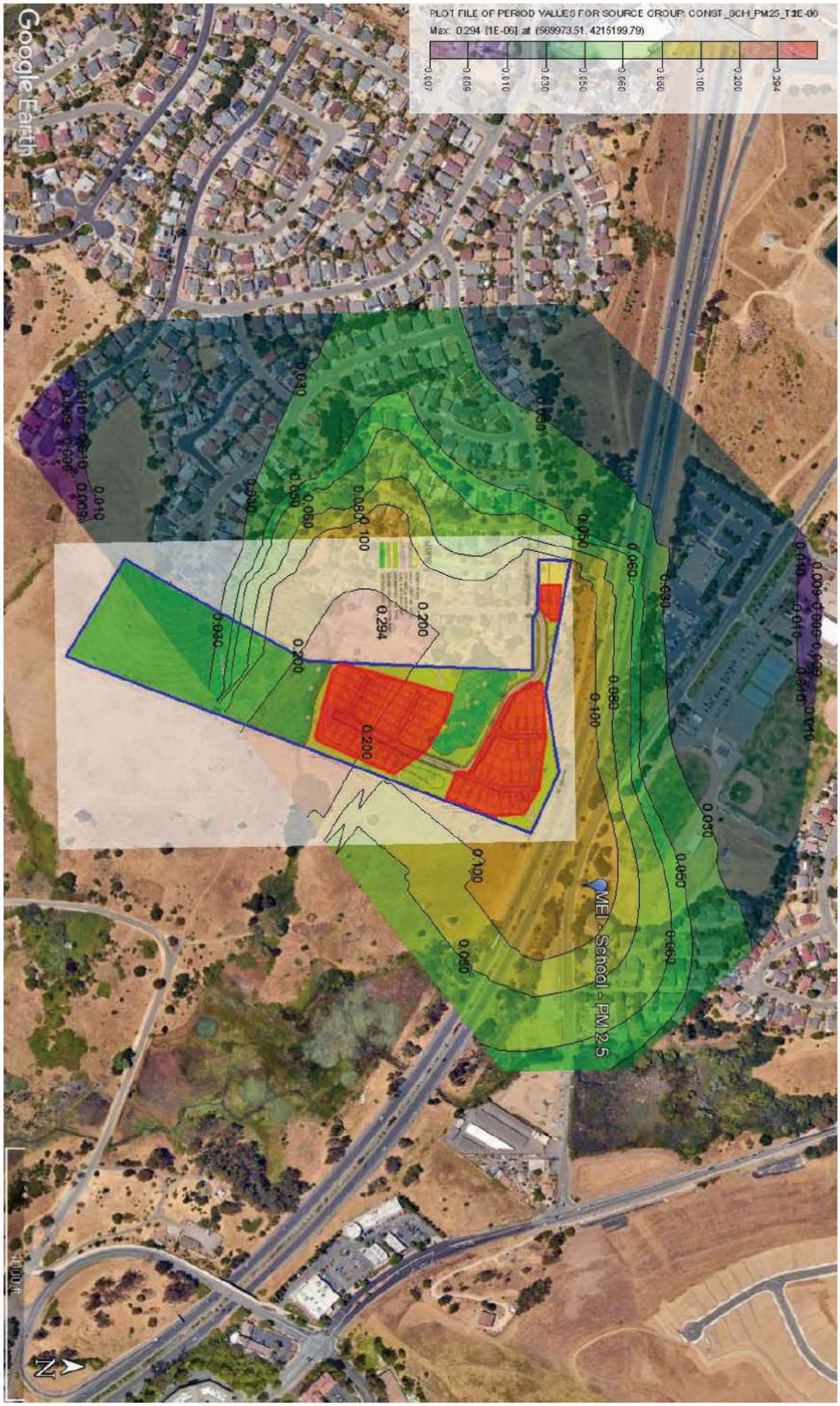

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_WRK_CANCERRISK_T4
Max: 7.9E-08 [1E-06] at (569973.51, 4215159.79)
7.9E-08
7.0E-08
5.0E-08
3.0E-08
1.0E-08
9.0E-09
7.0E-09
5.0E-09
3.0E-09
2.0E-09
MEI - Worker - Cancer Risk
Google Earth
N

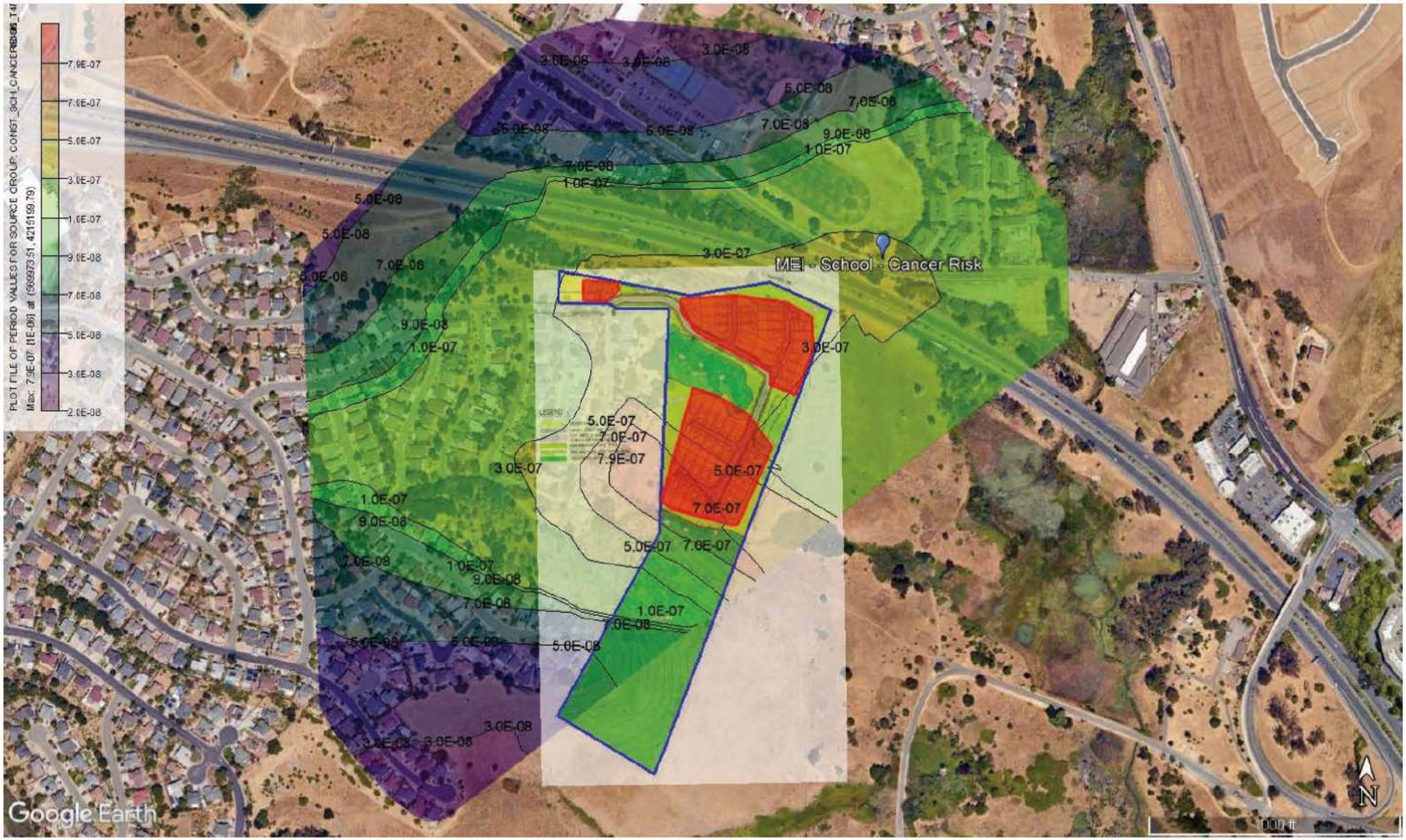

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_WRK_CH-RESP_100
Max: 4.05E-03 (1.0) at (669973.51, 4215199.79)
4.05E-03
4.00E-03
3.00E-03
1.00E-03
8.00E-04
7.00E-04
6.00E-04
5.00E-04
4.00E-04
3.00E-04
2.00E-04
1.00E-04
9.99E-05
MEI - Worker - Chronic HI
1.00E-03
Google Earth
N

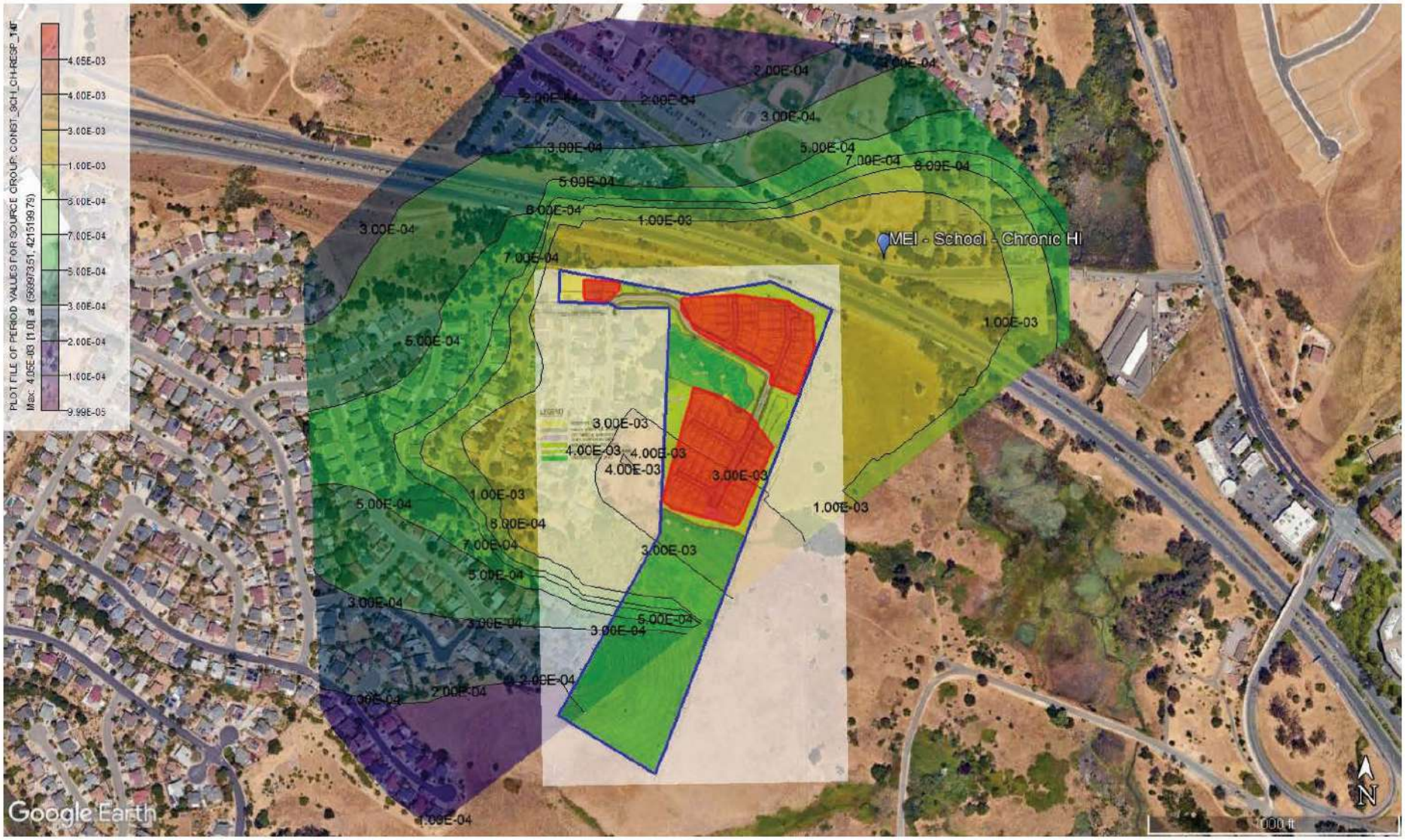

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_WRK_PM25_TIE-06
Max: 2.02E-02 [1E-06] at (569973.51, 4215196.79)
2.02E-02
2.00E-02
1.00E-02
9.00E-03
7.00E-03
5.00E-03
3.00E-03
1.00E-03
8.00E-04
6.00E-04
5.00E-04
MEI - Worker - PM 2.5
Google Earth
N

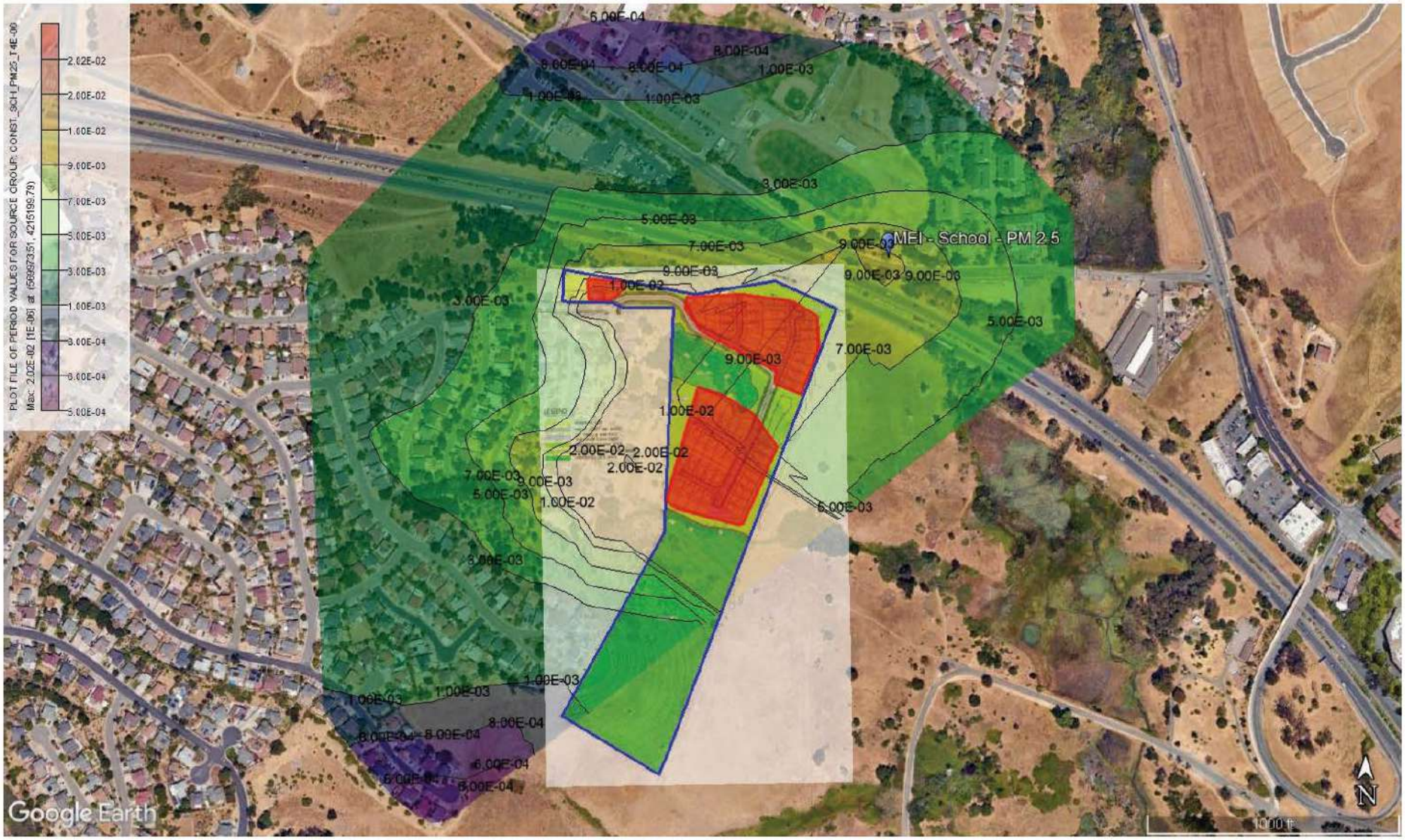

PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_SCH_CANCERRISK_T
Max: 1.2E-05 [1E-06] at (569973.51, 4215159.79)
1.2E-05
1.0E-05
8.0E-06
6.0E-06
5.0E-06
1.0E-06
8.0E-07
6.0E-07
2.9E-07
5.0E-06 MEI - School - Cancer Risk
Google Earth
000 ft
N


PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_SCH_CH-RESP_TD
Max: 5.9E-02 (1.00) at (688973.51, 4215199.79)
5.9E-02
5.0E-02
4.0E-02
2.0E-02
1.0E-02
8.0E-03
6.0E-03
5.0E-03
4.0E-03
1.4E-03
MEI - School - Chronic HI
Google Earth
N
000 ft


PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_SCH_PM25_T2E-06
Max: 0.294 (1E-06) at (569973.51, 4215199.79)
0.007
0.009
0.010
0.030
0.050
0.060
0.080
0.100
0.200
0.294
Google Earth
MEI - School - PM 2.5
N
100 ft


PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_SCH_CANCER_T4
Max: 7.9E-07 [1E-06] at (599973.51, 4215199.79)
7.9E-07
7.0E-07
5.0E-07
3.0E-07
1.0E-07
9.0E-08
7.0E-08
5.0E-08
3.0E-08
2.0E-08
MEI - School - Cancer Risk
Google Earth
N
000 ft


PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_SCH_CH-RESP_1HF
Max: 4.05E-03 [1.0] at (566973.51, 4215199.79)
4.05E-03
4.00E-03
3.00E-03
1.00E-03
9.00E-04
8.00E-04
7.00E-04
6.00E-04
5.00E-04
4.00E-04
3.00E-04
2.00E-04
1.00E-04
9.99E-05
MEI - School - Chronic HI
Google Earth
1000 ft
N


PLOT FILE OF PERIOD VALUES FOR SOURCE GROUP: CONST_SCH_PM25_T4E-06
Max: 2.02E-02 [1E-06] at (569973151, 4215198.79)
2.02E-02
2.00E-02
1.00E-02
9.00E-03
7.00E-03
5.00E-03
3.00E-03
1.00E-03
8.00E-04
6.00E-04
5.00E-04
MEI - School - PM 2.5
Google Earth
N

PM 10				
Tons/Yr	T2	T2L3	T4f	
Year 1	0.05465	0.008345	0.003766	0
Year 2	0.03096	0.004709	0.001939	0
Year 3	0	0	0	0
Year 4	0	0	0	0

PM 10				
Lbs /Yr	T2	T2L3	T4f	0
Year 1	109.3	16.69	7.532	0
Year 2	61.92	9.418	3.877	0
Year 3	0	0	0	0
Year 4	0	0	0	0

PM 10				
% Chng	T2	T2L3	T4f	0
Year 1	100%	15%	7%	0%
Year 2	100%	15%	6%	0%
Year 3	0%	0%	0%	0%
Year 4	0%	0%	0%	0%

HARP Adjustment						
24	X	7	X	52	=	3.73
9		5		52		

PM 2.5				
Tons/Yr	T4			
Year 1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Year 2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Year 3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Year 4	0.00E+00	0.00E+00	0.00E+00	0.00E+00

PM 2.5				
Lbs /Yr	T4	0	0	0
Year 1	0	0	0	0
Year 2	0	0	0	0
Year 3	0	0	0	0
Year 4	0	0	0	0

PM 2.5				
g/sec	T4	0	0	0
Year 1	0	0	0	0
Year 2	0	0	0	0
Year 3	0	0	0	0
Year 4	0	0	0	0

		Fraction of emissios
Area 1	942.4	0.035513
Area 2	11299.7	0.425819
Area 3	14294.3	0.538668
	26536.4	1

```
** Lakes Environmental AERMOD MPI
**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 13.0.0
** Lakes Environmental Software Inc.
** Date: 3/29/2025
** File: D:\LSA\2025\20241845 - Vista Cove\Construction\Construction.ADI
**
****************************************
**
**
****************************************
** AERMOD Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE D:\LSA\2025\20241845 - Vista Cove\Construction\Construction.isc
   MODELOPT DFAULT CONC
   AVERTIME 1 PERIOD
   URBANOPT 120749 Vallejo,_CA
   POLLUTID OTHER
   RUNORNOT RUN
   ERRORFIL Construction.err
CO FINISHED
**
****************************************
** AERMOD Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION PARCEL_1     AREAPOLY   569926.627  4215389.789       54.940
   LOCATION PARCEL_2     AREAPOLY   570183.728  4215278.758       30.420
   LOCATION PARCEL_3     AREAPOLY   570059.317  4215286.311       42.860
** Source Parameters **
   SRCPARAM PARCEL_1     0.0000376856     3.048         5
   AREAVERT PARCEL_1     569926.627 4215389.789 569953.019 4215388.879
   AREAVERT PARCEL_1     569969.401 4215402.075 569968.036 4215412.541
   AREAVERT PARCEL_1     569925.716 4215414.817
   SRCPARAM PARCEL_2     0.0000376842     3.048        10
   AREAVERT PARCEL_2     570183.728 4215278.758 570205.570 4215336.549
   AREAVERT PARCEL_2     570202.840 4215372.952 570173.262 4215390.244
   AREAVERT PARCEL_2     570110.010 4215398.435 570044.029 4215393.884
   AREAVERT PARCEL_2     570044.029 4215378.413 570063.140 4215352.475
   AREAVERT PARCEL_2     570153.240 4215306.061 570152.330 4215290.589
   SRCPARAM PARCEL_3     0.0000376841     3.048         8
   AREAVERT PARCEL_3     570059.317 4215286.311 570022.156 4215150.265
   AREAVERT PARCEL_3     570034.123 4215140.187 570109.074 4215121.292
   AREAVERT PARCEL_3     570115.373 4215121.922 570156.313 4215215.769
   AREAVERT PARCEL_3     570127.340 4215254.819 570089.549 4215277.493
```

```
   URBANSRC ALL
   SRCGROUP ALL
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED Construction.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\VALLEJO_2013-2017.SFC
   PROFFILE ..\VALLEJO_2013-2017.PFL
   SURFDATA 93227 2013
   UAIRDATA 23230 2013 OAKLAND/WSO_AP
   SITEDATA 8903 2013
   PROFBASE 6.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST Construction.AD\01H1GALL.PLT 31
   PLOTFILE PERIOD ALL Construction.AD\PE00GALL.PLT 32
   SUMMFILE Construction.sum
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            1 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***
```

```
   ********   WARNING MESSAGES   ********
MX W403      80       PFLCNV: Turbulence data is being used w/o ADJ_U* option       SigA Data

**********************************
*** SETUP Finishes Successfully ***
**********************************
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** MODEL SETUP OPTIONS SUMMARY ***

- -

** Model Options Selected:
* Model Uses Regulatory DEFAULT Options
* Model Is Setup For Calculation of Average CONCentration Values.
* NO GAS DEPOSITION Data Provided.
* NO PARTICLE DEPOSITION Data Provided.
* Model Uses NO DRY DEPLETION. DDPLETE = F
* Model Uses NO WET DEPLETION. WETDPLT = F
* Stack-tip Downwash.
* Model Accounts for ELEVated Terrain Effects.
* Use Calms Processing Routine.
* Use Missing Data Processing Routine.
* No Exponential Decay.
* Model Uses URBAN Dispersion Algorithm for the SBL for 3 Source(s),
for Total of 1 Urban Area(s):
Urban Population = 120749.0 ; Urban Roughness Length = 1.000 m
* Urban Roughness Length of 1.0 Meter Used.
* TEMP_Sub - Meteorological data includes TEMP substitutions
* Model Assumes No FLAGPOLE Receptor Heights.
* The User Specified a Pollutant Type of: OTHER

**Model Calculates 1 Short Term Average(s) of: 1-HR
and Calculates PERIOD Averages

**This Run Includes: 3 Source(s); 1 Source Group(s); and 2766 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 0 VOLUME source(s)
and: 3 AREA type source(s)
and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)
and: 0 SWPOINT source(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 18081

**Output Options Selected:
Model Outputs Tables of PERIOD Averages by Receptor
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours

```
                                                    m for Missing Hours
                                                    b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =     6.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.8 MB of RAM.

**Input Runstream File:          aermod.inp
**Output Print File:             aermod.out

**Detailed Error/Message File:   Construction.err
**File for Summary of Results:   Construction.sum
```

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY	AIRCRAFT
PARCEL_1	0	0.37686E-04	569926.6	4215389.8	54.9	3.05	5	0.00	YES		NO
PARCEL_2	0	0.37684E-04	570183.7	4215278.8	30.4	3.05	10	0.00	YES		NO
PARCEL_3	0	0.37684E-04	570059.3	4215286.3	42.9	3.05	8	0.00	YES		NO

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	PARCEL_1 , PARCEL_2 , PARCEL_3 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
	120749.	PARCEL_1 , PARCEL_2 , PARCEL_3 ,

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\VALLEJO_2013-2017.SFC Met Version: 18081
Profile file: ..\VALLEJO_2013-2017.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 93227 Upper air station no.: 23230
Name: UNKNOWN Name: OAKLAND/WSO_AP
Year: 2013 Year: 2013

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
13	01	01	1	01	-4.9	0.086	-9.000	-9.000	-999.	61.	11.9	0.31	1.10	1.00	1.50	355.	10.0	277.1	8.1
13	01	01	1	02	-4.5	0.084	-9.000	-9.000	-999.	58.	11.7	0.35	1.10	1.00	1.40	103.	10.0	276.6	8.1
13	01	01	1	03	-0.7	0.035	-9.000	-9.000	-999.	16.	5.2	0.31	1.10	1.00	0.60	5.	10.0	276.4	8.1
13	01	01	1	04	-4.2	0.084	-9.000	-9.000	-999.	58.	12.8	0.35	1.10	1.00	1.40	85.	10.0	277.2	8.1
13	01	01	1	05	-13.6	0.237	-9.000	-9.000	-999.	276.	88.4	0.30	1.10	1.00	2.40	113.	10.0	278.9	8.1
13	01	01	1	06	-15.6	0.227	-9.000	-9.000	-999.	260.	68.6	0.30	1.10	1.00	2.40	117.	10.0	278.6	8.1
13	01	01	1	07	-11.3	0.115	-9.000	-9.000	-999.	100.	12.1	0.30	1.10	1.00	2.00	128.	10.0	277.5	8.1
13	01	01	1	08	-2.8	0.057	-9.000	-9.000	-999.	34.	6.1	0.30	1.10	1.00	1.00	147.	10.0	276.4	8.1
13	01	01	1	09	-0.2	0.024	-9.000	-9.000	-999.	9.	5.9	0.35	1.10	0.40	0.40	63.	10.0	276.9	8.1
13	01	01	1	10	44.0	0.247	0.519	0.005	116.	295.	-31.3	0.30	1.10	0.27	1.80	128.	10.0	278.9	8.1
13	01	01	1	11	82.6	0.227	0.846	0.005	268.	261.	-13.0	0.35	1.10	0.22	1.40	99.	10.0	280.4	8.1
13	01	01	1	12	104.8	0.406	1.278	0.008	727.	620.	-58.1	0.35	1.10	0.21	3.00	83.	10.0	282.4	8.1
13	01	01	1	13	108.8	0.472	1.388	0.008	897.	777.	-87.8	0.35	1.10	0.20	3.60	70.	10.0	283.5	8.1
13	01	01	1	14	94.8	0.490	1.341	0.007	926.	823.	-113.0	0.35	1.10	0.21	3.80	69.	10.0	284.9	8.1
13	01	01	1	15	63.2	0.627	1.179	0.005	946.	1190.	-354.9	0.35	1.10	0.25	5.10	63.	10.0	285.4	8.1
13	01	01	1	16	17.0	0.533	0.762	0.006	950.	943.	-810.4	0.35	1.10	0.33	4.40	69.	10.0	285.2	8.1
13	01	01	1	17	-38.8	0.403	-9.000	-9.000	-999.	628.	152.8	0.35	1.10	0.57	3.70	90.	10.0	284.2	8.1
13	01	01	1	18	-35.3	0.310	-9.000	-9.000	-999.	420.	76.9	0.35	1.10	1.00	3.10	87.	10.0	282.5	8.1
13	01	01	1	19	-7.2	0.092	-9.000	-9.000	-999.	140.	9.8	0.30	1.10	1.00	1.60	126.	10.0	280.9	8.1
13	01	01	1	20	-7.6	0.096	-9.000	-9.000	-999.	71.	10.4	0.35	1.10	1.00	1.60	106.	10.0	280.4	8.1
13	01	01	1	21	-5.9	0.084	-9.000	-9.000	-999.	58.	9.1	0.35	1.10	1.00	1.40	81.	10.0	279.8	8.1
13	01	01	1	22	-5.9	0.084	-9.000	-9.000	-999.	58.	9.1	0.35	1.10	1.00	1.40	70.	10.0	278.2	8.1
13	01	01	1	23	-2.8	0.058	-9.000	-9.000	-999.	33.	6.1	0.31	1.10	1.00	1.00	1.	10.0	277.5	8.1
13	01	01	1	24	-0.5	0.023	-9.000	-9.000	-999.	9.	2.4	0.31	1.10	1.00	0.40	353.	10.0	276.4	8.1

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
13	01	01	01	8.1	0	-999.	-99.00	277.2	999.0	-99.00	-99.00
13	01	01	01	10.0	1	355.	1.50	-999.0	25.7	-99.00	0.61

F indicates top of profile (=1) or below (=0)

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** THE SUMMARY OF MAXIMUM PERIOD (43824 HRS) RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	50.11042 AT (569973.51, 4215199.79, 47.09, 107.00, 0.00)	DC	
	2ND HIGHEST VALUE IS	48.30956 AT (569973.83, 4215209.46, 48.12, 107.00, 0.00)	DC	
	3RD HIGHEST VALUE IS	46.17934 AT (569984.77, 4215238.15, 48.74, 107.00, 0.00)	DC	
	4TH HIGHEST VALUE IS	46.17869 AT (569962.89, 4215180.77, 44.43, 107.00, 0.00)	DC	
	5TH HIGHEST VALUE IS	45.69766 AT (569962.57, 4215171.10, 42.16, 107.00, 0.00)	DC	
	6TH HIGHEST VALUE IS	45.57657 AT (569974.14, 4215219.13, 49.13, 107.00, 0.00)	DC	
	7TH HIGHEST VALUE IS	45.51039 AT (569963.20, 4215190.44, 46.69, 107.00, 0.00)	DC	
	8TH HIGHEST VALUE IS	44.32493 AT (569963.52, 4215200.12, 48.54, 107.00, 0.00)	DC	
	9TH HIGHEST VALUE IS	42.58095 AT (569974.46, 4215228.80, 49.99, 107.00, 0.00)	DC	
	10TH HIGHEST VALUE IS	42.46814 AT (569985.08, 4215247.82, 49.47, 107.00, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF OTHER IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGH VALUE IS	623.85095	ON 16111302: AT (570225.19, 4215469.68, 18.17, 107.00, 0.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV URBAN SigA Data

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 2 Warning Message(s)
A Total of 1007 Informational Message(s)

A Total of 43824 Hours Were Processed

A Total of 85 Calm Hours Identified

A Total of 922 Missing Hours Identified (2.10 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
MX W403 80 PFLCNV: Turbulence data is being used w/o ADJ_U* option SigA Data
MX W403 1 PFLCNV: Turbulence data is being used w/o ADJ_U* option SigA Data

****
*** AERMOD Finishes Successfully ***
****

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Sensitive_Year1CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Sensitive_Year1CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Sensitive_Year1NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Sensitive_Year1NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Sensitive_Year1NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Sensitive_Year1NCAcuteRiskSumByRec.csv
HRA ran successfully

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 1
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: ON
16 years to 70 years: ON

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Sensitive_Year2_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Sensitive_Year2_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Sensitive_Year2_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Sensitive_Year2_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Sensitive_Year2_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Sensitive_Year2_NCAcuteRiskSumByRec.csv
HRA ran successfully

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Worker_Year1_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Worker_Year1_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Worker_Year1_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Worker_Year1_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Worker_Year1_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Worker_Year1_NCAcuteRiskSumByRec.csv
HRA ran successfully

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 17
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 1
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Worker_Year2_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Worker_Year2_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Worker_Year2_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Worker_Year2_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Worker_Year2_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_Worker_Year2_NCAcuteRiskSumByRec.csv
HRA ran successfully

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 14
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 1
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_School_Year1_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_School_Year1_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_School_Year1_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_School_Year1_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_School_Year1_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_School_Year1_NCAcuteRiskSumByRec.csv
HRA ran successfully

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 15
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 1
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: True
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: RMP

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****

SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.02
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
HOMEGROWN CROP PATHWAY SETTINGS

Household type: HouseholdsthatGarden
Fraction leafy: 0.137
Fraction exposed: 0.137
Fraction protected: 0.137
Fraction root: 0.137

****
TIER 2 SETTINGS

Tier2 adjustments were used in this assessment. Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_School_Year2_CancerRisk.csv
Cancer risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_School_Year2_CancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_School_Year2_NCChronicRisk.csv
Chronic risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_School_Year2_NCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_School_Year2_NCAcuteRisk.csv
Acute risk total by receptor saved to: D:\LSA\2025\20241845 - Vista Cove\HARP_CONST\hra\Const_School_Year2_NCAcuteRiskSumByRec.csv
HRA ran successfully

This page intentionally left blank

APPENDIX C

BIOLOGICAL RESOURCES REPORTS AND PEER REVIEWS

BIOLOGICAL RESOURCES TECHNICAL REPORT

VISTA COVE PROJECT

VALLEJO, SOLANO COUNTY, CALIFORNIA

Prepared for:

Sancerra Management
2618 San Miguel Drive, Suite 1223
Newport Beach, CA 92660

Attn: Adam Smith
asmith@sancerra.com

Prepared by:

WRA, Inc.
2169-G East Francisco Boulevard
San Rafael, CA 94901

Attn: Patricia Valcarcel
valcarcel@wra-ca.com

WRA #320072
FEBRUARY 2024

wra Environmental Consultants

TABLE OF CONTENTS

1.0 INTRODUCTION 1

1.1 Overview and Purpose 1
1.2 Project Description 1
1.3 Summary of Results 2

2.0 REGULATORY BACKGROUND 3

2.1 Federal and State Regulatory Setting 3

2.1.1 Vegetation and Aquatic Communities 3
2.1.2 Special-status Species 6

2.2 Local Plans and Policies 8

3.0 ASSESSMENT METHODOLOGY 9

3.1 Vegetation Communities and Other Land Cover Types 9
3.2 Special-status Species 10
3.3 Wildlife Corridors and Native Wildlife Nursery Sites 11

4.0 ECOLOGICAL SETTING 12

4.1 Soils and Topography 12
4.2 Climate and Hydrology 12
4.3 Land-use 12

5.0 ASSESSMENT RESULTS 14

5.1 Vegetation Communities and Other Land Cover 14

5.1.1 Terrestrial Land Cover 14
5.1.2 Aquatic Land Cover 17

5.2 Special-status Species 18

5.2.1 Special-status Plants 18
5.2.2 Special-status Wildlife 19

5.3 Wildlife Corridors and Native Wildlife Nursery Sites 23

6.0 ANALYTICAL METHODOLOGY AND SIGNIFICANCE THRESHOLD CRITERIA 24
7.0 IMPACTS AND MITIGATION EVALUATION 24

7.1 Special-status Species 25

7.1.1 Special-status Plant Species 25
7.1.2 Special-status Wildlife Species 25

7.2 Sensitive Natural Communities and Land Cover Types 27
7.3 Aquatic Resources 29
7.4 Wildlife Corridors 30
7.5 Local Policies and Ordinances 30
7.6 Habitat Conservation Plans 31

8.0 REFERENCES 32

LIST OF TABLES

Table 1. Summary of Biological Resources Evaluation 4
Table 2. Vegetation Community and Land Cover Types 14

LIST OF PHOTOS

Photo 1. Riparian area within the Study Area 14
Photo 2. Toyon chaparral within the Study Area 15
Photo 3. Coyote brush scrub within the Study Area 15
Photo 4. Poison oak scrub within the Study Area 15
Photo 5. Artichoke thistle field within the Study Area 16
Photo 6. Non-native grassland within the Study Area 16
Photo 7. The intermittent stream within the Study Area 17
Photo 8. The seasonal wetland within the Study Area 17
Photo 9. The freshwater marsh within the Study Area 18

LIST OF APPENDICES

Appendix A – Figures
- Figure 1. Study Area Regional Location Map
- Figure 2. Land Cover Types within the Study Area
- Figure 3. Soils in the Study Area
- Figure 4. Project Impacts to Land Cover Types within the Study Area

Appendix B – Plant and Wildlife Species Observed within the Study Area
Appendix C – Potential for Special-status Species to Occur in the Study Area
Appendix D – Tentative Map for Condominium Purposes (November 2023)

LIST OF PREPARERS

Patricia Valcarcel – Principal-in-Charge
Matt Osowski – Project Manager
Scott Batiuk – Associate Plant Biologist
Katie Tyree – Plant Biologist
Sean MacDonald – Wildlife Biologist
Sundaran Gillespie – GIS Analyst

LIST OF ACRONYMS

APN	Assessor Parcel Number
BIOS	Biogeographic Information and Observation System
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CFP	California Fully Protected Species
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPPA	California Native Plant Protection Act
CNPS	California Native Plant Society
Corps	U.S. Army Corps of Engineers
CWA	Clean Water Act
EFH	Essential Fish Habitat
ESA	Federal Endangered Species Act
NCCP	Natural Community Conservation Plan
NOAA	National Oceanic and Atmospheric Administration
NMFS	National Marine Fisheries Service
NWI	National Wetland Inventory
OHWM	Ordinary High Water Mark
Inventory	Inventory of Rare and Endangered Plants
Rank	California Rare Plant Ranks
RHA	Rivers and Harbors Act
RWQCB	Regional Water Quality Control Board
SSC	Species of Special Concern
SWRCB	State Water Resource Control Board
TPZ	Tree Protection Zone
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group
WRA	WRA, Inc.

1.0 INTRODUCTION

This Biological Resources Technical Report evaluates existing biological resources, potential impacts, and mitigation measures for the Vista Cove Project (Project) located in the City of Vallejo, Solano County, California (Figure 1, Appendix A). An approximately 20.13-acre Study Area was evaluated that includes Assessor Parcel Numbers (APN) 079-12-100 and 079-171-170. The proposed Project involves the construction of a residential development.

1.1 Overview and Purpose

This report provides an assessment of biological resources within the Study Area and immediate vicinity. The purpose of the assessment is to develop and gather information on sensitive biological communities and special-status plant and wildlife species to support an evaluation of the Project under the California Environmental Quality Act (CEQA). This report describes the results of the site visit, which assessed the Study Area for: (1) the presence of sensitive biological communities, special-status plant species, and special-status wildlife species, and (2) the potential for the site to support special-status plant and wildlife species. The assessment includes a formal wetland delineation. Based on the results of the site assessment, potential impacts to sensitive biological communities and special-status species resulting from the Project are evaluated. If the Project has the potential to result in significant impacts to sensitive biological resources, measures to avoid, minimize, or mitigate for those significant impacts are described.

A biological resources assessment provides general information on the presence, or potential presence, of sensitive species and habitats. This assessment is based on information available at the time of the study and on-site conditions that were observed on the dates the site was visited. Conclusions are based on currently available information used in combination with the professional judgement of the biologists completing this study.

1.2 Project Description

The Study Area, located northeast of the intersection of Shady Lane and Wildflower Avenue in the City of Vallejo, CA is comprised of 20.13 acres of undeveloped land designated by the City of Vallejo for Residential land uses. The Project Area, listed as Lot 1 within the design plans, includes the northern half of the Study Area, approximately 10.40 acres. Parcel A, the southern half of the Study Area, and Parcel B, the riparian and intermittent stream within Lot 1, will not be impacted as a result of this proposed Project (Appendices A and D).

The Project Area encompasses APN 0079-171-170 and a portion of APN 0079-120-100. The western parcel, APN 0079-171-170, approximately 1 acre, is zoned Residential Low Density and has a General Plan designation as primarily single-family. The other parcel, APN 0079-120-100, is zoned Residential Medium Density and has a General Plan designation of Mix of Housing Types/Medium Density. The Project is development for a 10. 40-acre property. The Project would provide for development of 51 single-family residential homes. The proposed 51 dwelling units are comprised of two floor plans with three elevations each. For parking, 102 covered garage spaces, 102 driveway stalls, 24 on-street stalls, and 1 mailbox stall will be provided. Grading proposed by the project would disturb the entirety of the Project Area (10.40 acres). Access to the Project would be provided by one (1) full access driveway through an established residential community to the west.

1.3 Summary of Results

Sensitive vegetation communities or land cover types in the Study Area include riparian, seasonal wetland, freshwater marsh, intermittent stream, and toyon chaparral habitats. Non-sensitive land cover types in the Study Area include non-native grassland, artichoke thistle fields, poison oak scrub, and coyote brush scrub. Only one sensitive land cover type, seasonal wetland, is present within the Project Area. No special-status or rare plant species were observed during the site visits or have potential to occur within the Study Area. One special-status bird, as well as non-status birds with baseline legal protections, have potential to occur within the Study Area. Recommended avoidance, minimization, and mitigation measures are provided to ensure potential impacts to sensitive resources are less than significant.

2.0 REGULATORY BACKGROUND

The following sections explain the regulatory context of the biological assessment, including applicable laws and regulations that were applied to the field investigations and analysis of potential project impacts. Table 1 shows the correlation between these regulations and each Biological Resources question in the Environmental Checklist Form (Appendix G) of the CEQA guidelines.

2.1 Federal and State Regulatory Setting

2.1.1 Vegetation and Aquatic Communities

CEQA provides protections for particular vegetation types defined as sensitive by the California Department of Fish and Game (CDFW), and aquatic communities protected by laws and regulations administered by the U.S Army Corps of Engineers (Corps), State Water Resources Control Board (SWRCB), and Regional Water Quality Control Boards (RWQCB). The laws and regulations that provide protection for these resources are summarized below.

Sensitive Natural Communities: Sensitive natural communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened" (CDFW 2022a) and keeps records of their occurrences in its California Natural Diversity Database (CNDDB; CDFW 2022b). Vegetation alliances are ranked 1 through 5 in the CNDDB based on NatureServe's (2022) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or U.S. Fish and Wildlife Service (USFWS) must be considered and evaluated under CEQA (CCR Title 14, Div. 6, Chap. 3, Appendix G). In addition, this general class includes oak woodlands that are protected by local ordinances under the Oak Woodlands Protection Act and Section 21083.4 of California Public Resources Code.

Waters of the United States, Including Wetlands: The Corps regulates “Waters of the United States” under Section 404 of the Clean Water Act (CWA). Waters of the United States are defined in the Code of Federal Regulations (CFR) as including the territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, such as tributaries, lakes and ponds, impoundments of waters of the U.S., and wetlands that are hydrologically connected with these navigable features (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (Corps Manual; Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Unvegetated waters including lakes, rivers, and streams may also be subject to Section 404 jurisdiction and are characterized by an ordinary high water mark (OHWM) identified based on field indicators such as the lack of vegetation, sorting of sediments, and other indicators of flowing or standing water. The placement of fill material into Waters of the United States generally requires a permit from the Corps under Section 404 of the CWA.

TABLE 1. SUMMARY OF BIOLOGICAL RESOURCES EVALUATION

CEQA ASSESSMENT CATEGORY[1] IV. -BIOLOGICAL RESOURCES	BIOLOGICAL RESOURCES CONSIDERED	RELEVANT LAWS AND REGULATIONS	RESPONSIBLE REGULATORY AGENCY	SUMMARY OF FINDINGS & REPORT SECTION[2]
Question A. Special-status species	Special-status Plants Special-status Wildlife Designated Critical Habitat	Federal Endangered Species Act California Endangered Species Act California Native Plant Protection Act Migratory Bird Treaty Act Bald and Golden Eagle Protection Act	U.S. Fish and Wildlife Service National Marine Fisheries Service California Department of Fish and Wildlife	Potentially significant impacts were identified, and mitigation measures are included that reduce those impacts to a level that is less than significant. **See Sections 5.2 and 7.1 for more information**
Question B. Sensitive natural communities & riparian habitat	Sensitive Natural Communities Streams, Lakes, & Riparian Habitat	California Fish and Game Code Oak Woodland Conservation Act Porter-Cologne Act Clean Water Act	California Department of Fish and Wildlife U.S. Army Corps of Engineers U.S. Environmental Protection Agency State Water Resources Control Board Regional Water Quality Control Board	Potentially significant impacts were identified, and mitigation measures are included that reduce those impacts to a level that is less than significant. **See Section 5.1 and 7.2 for more information**
Question C. State and federally protected wetlands	Wetlands Unvegetated surface waters	Clean Water Act Sections 404/401 Rivers and Harbors Act Section 10 Porter Cologne Act	U.S. Army Corps of Engineers U.S. Environmental Protection Agency State Water Resources Control Board Regional Water Quality Control Board	Potentially significant impacts were identified, and mitigation measures are included that reduce those impacts to a level that is less than significant. **See Section 5.1 and 7.3 for more information**

[1] CEQA Questions have been summarized here; see Section 6.0 for details.

[2] As given in this report; see Section 5.0 subheadings

Question D. Fish & wildlife corridors	Essential Fish Habitat Wildlife Corridors	California Fish and Game Code Magnuson-Stevens Fishery Conservation & Management Act	California Department of Fish and Wildlife National Marine Fisheries Service	No potentially significant impacts were identified, and no mitigation measures are required. **See Section 5.3 and 7.4 for more information**
Question E. Local policies	Protected Trees Coastal zone resources Other biological protections	Local Tree Ordinance General Plan (e.g., Stream & Wetland Setbacks) Local ordinances	Local and regional agencies California Coastal Commission San Francisco Bay Conservation and Development Commission	No potentially significant impacts were identified, and no mitigation measures are required. **See Section 7.5 for more information**
Question F. Local, state, federal conservation plans	Habitat Conservation Plans Natural Community Conservation Plans	Federal Endangered Species Act Natural Community Conservation Planning Act	U.S. Fish and Wildlife Service California Department of Fish and Wildlife	No potentially significant impacts were identified, and no mitigation measures are required. **See Section 7.6 for more information**

The Corps also regulates construction in navigable waterways of the U.S. through Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 USC 403). Section 10 of the RHA requires Corps approval and a permit for excavation or fill, or alteration or modification of the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor or refuge, or enclosure within the limits of any breakwater, or of the channel of any navigable water of the United States. Section 10 requirements apply only to navigable waters themselves, and are not applicable to tributaries, adjacent wetlands, and similar aquatic features not capable of supporting interstate commerce.

Waters of the State, Including Wetlands: The term "Waters of the State" is defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The SWRCB and nine RWQCB protect waters within this broad regulatory scope through many different regulatory programs. Waters of the State in the context of a CEQA Biological Resources evaluation include wetlands and other surface waters protected by the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2019). The SWRCB and RWQCB issue permits for the discharge of fill material into surface waters through the State Water Quality Certification Program, which fulfills requirements of Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a CWA permit are also required to obtain a Water Quality Certification. If a project does not require a federal permit but does involve discharge of dredge or fill material into surface waters of the State, the SWRCB and RWQCB may issue a permit in the form of Waste Discharge Requirements.

Sections 1600-1616 of California Fish and Game Code: Streams and lakes, as habitat for fish and wildlife species, are regulated by CDFW under Sections 1600-1616 of California Fish and Game Code (CFGC). Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream," which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). The term "stream" can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). Riparian vegetation has been defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFG 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

2.1.2 Special-status Species

Endangered and Threatened Plants, Fish, and Wildlife. Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the federal Endangered Species Act (ESA), or the California Endangered Species Act (CESA). Specific protections and permitting mechanisms for these species differ under each of these acts, and a species' designation under one law does not automatically provide protection under the other.

The ESA (16 USC 1531 et seq.) is implemented by the USFWS and the National Marine Fisheries Service (NMFS). The USFWS and NMFS maintain lists of endangered and threatened plant and animal species (referred to as "listed species"). "Proposed" or "candidate" species are those that are being considered for listing and are not protected until they are formally listed as threatened or endangered. Under the ESA, authorization must be obtained from the USFWS or NMFS prior to take of any listed species. "Take"

under the ESA is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Take under the ESA includes direct injury or mortality to individuals, disruptions in normal behavioral patterns resulting from factors such as noise and visual disturbance, and impacts to habitat for listed species. Actions that may result in take of an ESA-listed species may obtain a permit under ESA Section 10, or via the interagency consultation described in ESA Section 7. Federally listed plant species are only protected when take occurs on federal land.

The ESA also provides for designation of critical habitat, which are specific geographic areas containing physical or biological features “essential to the conservation of the species.” Protections afforded to designated critical habitat apply only to actions that are funded, permitted, or carried out by federal agencies. Critical habitat designations do not affect activities by private landowners if there is no other federal agency involvement.

The CESA (CFGC 2050 et seq.) prohibits the take of any plant and animal species that the CFGC determines to be an endangered or threatened species in California. CESA regulations include take protection for threatened and endangered plants on private lands, as well as extending this protection to candidate species that are proposed for listing as threatened or endangered under CESA. The definition of a "take" under CESA ("hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") only applies to direct impact to individuals, and does not extend to habitat impacts or harassment. CDFW may issue an Incidental Take Permit under CESA to authorize take if it is incidental to otherwise lawful activity and if specific criteria are met. Take of these species is also authorized if the geographic area is covered by a Natural Community Conservation Plan (NCCP), as long as the NCCP covers that activity.

Fully Protected Species and Designated Rare Plant Species. This category includes specific plant and wildlife species that are designated in the CFGC as protected even if not listed under CESA or ESA. Fully Protected Species includes specific lists of birds, mammals, reptiles, amphibians, and fish designated in CFGC. Fully protected species may not be taken or possessed at any time. No licenses or permits may be issued for take of fully protected species, except for necessary scientific research and conservation purposes. The definition of "take" is the same under the California Fish and Game Code and the CESA. By law, CDFW may not issue an Incidental Take Permit for Fully Protected Species. Under the California Native Plant Protection Act (CNPPA), CDFW has listed 64 “rare” or “endangered” plant species, and prevents “take”, with few exceptions, of these species. CDFW may authorize take of species protected by the CNPPA through the Incidental Take Permit process, or under a NCCP.

Special Protections for Nesting Birds and Bats. The federal Bald and Golden Eagle Protection Act provides relatively broad protections to both of North America’s eagle species (bald eagle [*Haliaeetus leucocephalus*] and golden eagle [*Aquila chrysaetos*)] that in some regards are similar to those provided by the ESA. In addition to regulations for special-status species, most native birds in the United States, including non-status species, have baseline legal protections under the Migratory Bird Treaty Act of 1918 and CFGC, i.e., sections 3503, 3503.5 and 3513. Under these laws/codes, the intentional harm or collection of adult birds as well as the intentional collection or destruction of active nests, eggs, and young is illegal. For bat species, the Western Bat Working Group (WBWG) designates conservation status for species of bats, and those with a high or medium-high priority are typically given special consideration under CEQA.

Essential Fish Habitat. The Magnuson-Stevens Fishery Conservation and Management Act provides for conservation and management of fishery resources in the U.S., administered by NMFS. This Act establishes a national program intended to prevent overfishing, rebuild overfished stocks, ensure conservation, and facilitate long-term protection through the establishment of Essential Fish Habitat

(EFH). EFH consists of aquatic areas that contain habitat essential to the long-term survival and health of fisheries, which may include the water column, certain bottom types, vegetation (e.g., eelgrass (*Zostera* spp.)), or complex structures such as oyster beds. Any federal agency that authorizes, funds, or undertakes action that may adversely affect EFH is required to consult with NMFS.

Species of Special Concern, Movement Corridors, and Other Special-status Species under CEQA. A Species of Special Concern (SSC) is a species formally designated by the CDFW which meets one or more criteria related to a Federal ESA status (if it is not listed under CESA), including extirpation from California, documented population declines, or small population size within California and risk of declines. In addition, CDFW has developed a list of special species as "a general term that refers to all of the taxa the CNDDB is interested in tracking, regardless of their legal or protection status." This list includes lists developed by other organizations, including for example, the Audubon Watch List Species, the Bureau of Land Management Sensitive Species, and USFWS Birds of Conservation Concern. Plant species on the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (Inventory) with California Rare Plant Ranks (Rank) of 1 and 2, as well as some with a Rank of 3, are also considered special-status plant species and must be considered under CEQA. Some Rank 3 species and all Rank 4 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare. Additionally, any species listed as sensitive within local plans, policies and ordinances are likewise considered sensitive. Movement and migratory corridors for native wildlife (including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

2.2 Local Plans and Policies

City of Vallejo General Plan. The City of Vallejo General Plan 2040 (City of Vallejo 2020) contains policies pertaining to the following biological resources categories:

- Wetlands, streams, riparian, and aquatic areas (Policies NBE-1.1G, 1.2D, 1.4A),
- Vegetation communities (Policy NBE 1.2D),
- Plant Species (Policies NBE-1.1E, NBE 1.2D, 1.2E), and
- Wildlife Species (Policies NBE-1.2C, NBE 1.2D, 1.2E)

City of Vallejo Tree Ordinance. The City of Vallejo municipal code (Tree Protection 16.504.07) requires a tree inventory for all trees that will be preserved on the project site prior to construction or permit submittal. For trees that are proposed for removal, "[t]he director may approve the removal of trees based on a determination that there is no feasible alternative design for developing the site and based on report and recommendation by a qualified arborist submitted by the applicant".

The municipal code requires the replacement of "Significant Trees" if they are removed. With the exception of the fire-prone species defined as: blue gum eucalyptus (*Eucalyptus globulus*), Monterey pines (*Pinus radiata*), juniper (*Cupressaceae* spp.), Tree of Heaven (*Ailanthus altissima*), black acacia (*Acacia melanoxylon*), and bamboo. Significant Trees are defined as: "any tree or stand of trees on private property having either a height of twenty-five feet measured above ground level, or a diameter of ten or more inches" (16.701.02). Significant trees shall be replaced at a ratio of at least 3:1, and with at least 15-gallon replacement trees on the project site, adjacent to the project site (subject to the owner's approval), or in the public right-of-way adjacent to the property (subject to approval from the director of public works).

3.0 ASSESSMENT METHODOLOGY

On February 28, 2022, and July 14, 2022, WRA, Inc. (WRA) biologists visited the Study Area to map vegetation, aquatic communities, unvegetated land cover types, document plant and wildlife species present, and evaluate on-site habitat for the potential to support special-status species as defined by CEQA. The site visits did not constitute protocol-level surveys for special status plants or wildlife. Prior to the site visit, WRA biologists reviewed literature resources and performed database searches to assess the potential for sensitive biological communities and special-status species, including:

- Soil Survey of Solano County, California (USDA 1969)
- Benicia 7.5-minute U.S. Geological Survey (USGS) quadrangle (USGS 2021)
- Contemporary aerial photographs (Google Earth 2024)
- Nationwide Environmental Title Research (NETR 2024)
- National Wetlands Inventory (NWI) (USFWS 2024)
- California Aquatic Resources Inventory (SFEI 2024)
- CNDDB (CDFW 2024b)
- CNPS Inventory (CNPS 2024a)
- Consortium of California Herbaria (CCH1 2024, CCH2 2024)
- USFWS List of Federal Endangered and Threatened Species (USFWS 2024)
- eBird Online Database (Cornell 2024)
- California Bird Species of Special Concern in California (Shuford and Gardali 2008)
- California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)
- A Manual of California Vegetation, Online Edition (CNPS 2024b)
- Preliminary Descriptions of the Terrestrial Natural Communities (Holland 1986)
- California Natural Community List (CDFW 2024a)
- Database searches (i.e., CNDDB, CNPS) for special-status species focused on the Cuttings Wharf, Cordelia, Fairfield South, Mare Island, Benicia, Vine Hill, Richmond, Briones Valley, and Walnut Creek USGS 7.5-minute quadrangles.

Following the remote assessment, WRA biologists conducted field assessments on February 28 and July 14, 2022 to document: (1) land cover types (e.g., terrestrial communities, aquatic resources), (2) existing conditions and to determine if such provide suitable habitat for any special-status plant or wildlife species, (3) if and what type of aquatic natural communities (e.g., wetlands) are present, and (4) if special-status species are present[3].

3.1 Vegetation Communities and Other Land Cover Types

During the site visits, WRA evaluated the species composition and area occupied by distinct vegetation communities, aquatic communities, and other land cover types. Mapping of these classifications utilized a combination of aerial imagery and ground surveys. In most instances, communities are characterized and mapped based on distinct shifts in plant assemblage (vegetation) and follow the California Natural Community List (CDFW 2024a) and A Manual of California Vegetation, Online Edition (CNPS 2024b). These

[3] Due to the timing of the assessment, it may or may not constitute protocol-level species surveys; see Section 5.2 if the site assessment would constitute a formal or protocol-level species survey.

resources cannot anticipate every component of every potential vegetation assemblage in California, and so in some cases, it is necessary to identify other appropriate vegetative classifications based on best professional judgment of WRA biologists. When undescribed variants are used, it is noted in the description. Vegetation alliances (natural communities) with a CDFW Rank of 1 through 3 (globally critically imperiled [S1/G1], imperiled [S2/G2], or vulnerable [S3/G3]) (CDFW 2024a), were evaluated as sensitive as part of this evaluation.

The site was reviewed for the presence of wetlands and other aquatic resources during a formal delineation on July 14, 2022. The delineation was conducted according to the methods described in the Corps Manual (Environmental Laboratory 1987), the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West* (Corps 2008), and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Lichvar and McColley 2008). Areas meeting these indicators were mapped as aquatic resources and categorized using the vegetation community classification methods described above. Aquatic communities which are mapped in the NMFS EFH Mapper (NMFS 2024) or otherwise meet criteria for designation as EFH are indicated as such in the community description below in Section 5.1. The presence of riparian habitat was evaluated based on woody plant species meeting the definition of riparian provided in *A Field Guide to Lake and Streambed Alteration Agreements, Section 1600-1607, California Fish and Game Code* (CDFG 1994) and based on best professional judgement of biologists completing the field surveys.

3.2 Special-status Species

Potential occurrence of special-status species in the Study Area was evaluated by first determining which special-status species occur in the vicinity of the Study Area through a literature and database review as described above. Presence of suitable habitat for special-status species was evaluated during the site visits based on physical and biological conditions of the site as well as the professional expertise of the investigating biologists. The potential for each special-status species to occur in the Study Area was then determined according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

- **Unlikely.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

- **Present.** Species is observed on the site or has been recorded (i.e., CNDDB, other reports) on the site in the recent past.

If a more thorough assessment was deemed necessary, a targeted or protocol-level assessment or survey was conducted or recommended as a future study. If a special-status species was observed during the site visits, its presence was recorded and discussed below in Section 5.2. If designated critical habitat is present for a species, the extent of critical habitat present and an evaluation of critical habitat elements is provided as part of the species discussions below in Section 5.2.

3.3 Wildlife Corridors and Native Wildlife Nursery Sites

To account for potential impacts to wildlife movement/migratory corridors, biologists reviewed maps from the California Essential Connectivity Project (CalTrans 2010), and habitat connectivity data available through the CDFW Biogeographic Information and Observation System (BIOS; CDFW and Caltrans 2024). Additionally, aerial imagery (Google Earth 2024) for the local area was referenced to assess if local core habitat areas were present within, or connected to the Study Area. This assessment was refined based on observations of on-site physical and/or biological conditions, including topographic and vegetative factors that can facilitate wildlife movement, as well as on-site and off-site barriers to connectivity.

The potential presence of native wildlife nursery sites is included in the discussion of individual wildlife species below. Examples of native wildlife nursery sites include nesting sites for native bird species (particularly colonial nesting sites), marine mammal pupping sites, and colonial roosting sites for other species, such as for monarch butterfly (*Danaus plexippus*).

4.0 ECOLOGICAL SETTING

The approximately 20.13-acre Study Area is located in the City of Vallejo, Solano County, California. The Study Area is located north of the Carquinez Strait, south of Interstate 780, west of the Benicia State Recreation Area, and east of a residential area. The Study Area includes all areas that may be affected by the proposed Project. Additional details of the local setting are below.

4.1 Soils and Topography

The topography of the Study Area contains undulating hills with flat areas, with elevations ranging from approximately 97 to 180 feet above sea level. According to the *Web Soil Survey* (USDA 2024b), the Study Area is underlain by Dibble-Los Osos clay loams, including three soil mapping units: 2 to 9 percent slopes, 9 to 30 percent slopes, and 30 to 50 percent slopes. Soils within the Study Area are shown in Appendix A – Figure 2. The parent soil series of all the Study Area's mapping units is summarized below.

Dibble-Los Osos Clay Loam: This series consists of moderately deep, well drained soils that formed in material weathered from shale, sandstone and semi consolidated densic material. The soil pH ranges from 5.6 to 7.3, resulting in neutral to acidic soils. Dibble soils are on foothills and fan remnants and have slopes of 2 to 75 percent (USDA 2024b). These soils are not considered hydric (USDA 2024a).

4.2 Climate and Hydrology

The average monthly maximum temperature in the area is 68.6 degrees Fahrenheit, while the average monthly minimum temperature is 49.3 degrees Fahrenheit. Predominantly, precipitation falls as rainfall between November and March with an annual average precipitation of 17.7 inches.

The regional watershed for the Study Area is San Francisco Bay (HUC 6: 180500) between the San Pablo Bay (HUC 8:18050002) and Suisun Bay (HUC 8: 18050001) watersheds. The Study Area is located in the central portions of the Suisun/San Pablo Bay watersheds. There are two streams mapped within the Study Area in the National Wetland Inventory (NWI) (USFWS 2024). NWI is a USFWS web application displaying the extent and type of wetlands within a given area. However, there are no mapped blue line streams within the Study Area according to the Benicia 7.5 minute quadrangle (USGS 2021). The stream features, shown in the NWI start at the edge of the residential properties to the east of the Study Area and run west towards the marsh within the Benicia State Recreation Area, and eventually, the Southampton Bay within the Carquinez Strait (0.9 miles south of the Study Area). These aquatic features receive runoff from the neighboring properties via culverts. Although NWI classifies the southern feature as a stream, due to wetland vegetation growing in the channel, it was classified as a freshwater marsh (Section 5.1.2).

4.3 Land-use

The majority of the Study Area is dominated by non-native annual grassland. The Study Area contains one intermittent stream, connected to a seasonal wetland, and one linear freshwater marsh. Detailed plant community descriptions are included in Section 5.1 below, and all observed plant species are included in Appendix B. Surrounding land use includes a residential community, Interstate 780, and open space/recreation area (Google Earth 2024). The area has been used for agriculture as early as 1948, and was left as open space following the construction of the neighboring community to the east of the Study Area, in the early 1980's (NETR 2024). The natural topography of the Study Area contained one drainage. The northern aquatic feature is a topographical low, but seems to have started conveying water and

supporting riparian vegetation after the adjacent housing development was constructed in the 1980's and the stormwater basin directed runoff to this area (NETR, Google Earth 2024). The southern aquatic feature within the Study Area is a historical drainage that coveys water from the hillside to the adjacent marsh southeast of the Study Area; however, additional stormwater and other runoff is directed into this feature.

5.0 ASSESSMENT RESULTS

5.1 Vegetation Communities and Other Land Cover

WRA observed nine land cover types within the Study Area as shown on Figure 3 (Appendix A) and summarized in Table 2. The non-sensitive land cover types in the Study Area include coyote brush scrub, poison oak scrub, non-native grasslands, and artichoke thistle field. The sensitive land cover types in the Study Area include intermittent stream, seasonal wetland, freshwater marsh, riparian, and toyon chaparral.

TABLE 2. VEGETATION COMMUNITY AND LAND COVER TYPES

COMMUNITY/LAND COVERS	SENSITIVE STATUS	RARITY RANKING	ACRES WITHIN STUDY AREA
Terrestrial Community/Land Cover			
Riparian	Sensitive	S3/G3	0.91
Toyon Chaparral	Sensitive	S4/G5	1.24
Coyote Brush Scrub	Not Sensitive	S5/G5	0.43
Poison Oak Scrub	Not Sensitive	S4/G4	0.91
Artichoke Thistle Field	Not Sensitive	None	3.29
Non-native Grassland	Not Sensitive	None	12.70
Aquatic Resources			
Intermittent Stream	Sensitive	None	0.05
Seasonal Wetland	Sensitive	None	0.49
Freshwater Marsh	Sensitive	None	0.12

5.1.1 Terrestrial Land Cover

Riparian (*Platanus racemosa – Quercus agrifolia* Woodland Alliance). CDFW Rank: S3/G3. The riparian land cover type borders the intermittent stream in the northern portion of the Study Area. The vegetation is characterized by a dense tree canopy dominated by coast live oak (*Quercus agrifolia*) with occasional red willows (*Salix laevigata*) and meets the membership rules for the California sycamore – coast live oak riparian woodlands (*Platanus racemosa – Quercus agrifolia* Woodland Alliance) (CNPS 2024b). Where there are gaps in the canopy, Himalayan blackberry (*Rubus armeniacus*) is dominant and dense. The understory is generally sparse to absent and dominated by Himalayan blackberry. Herbs are typically absent. This community is considered sensitive and is potentially subject to CDFW and RWQCB jurisdiction.

PHOTO 1. RIPARIAN AREA WITHIN THE STUDY AREA

Toyon Chaparral (*Prunus ilicifolia – Heteromeles arbutifolia – Ceanothus spinosus)* Shrubland Alliance). CDFW Rank: S4/G5. Toyon chaparral was mapped in the central/southern portion of the Study Area on the steep slope above and adjacent to the freshwater marsh. It is characterized by open to dense shrub canopy dominated by toyon (*Heteromeles arbutifolia*) with occasional coyote brush (*Baccharis pilularis*) and poison oak (*Toxicodendron diversilobum*). This land cover type meets the membership rules for holly leaf cherry – toyon – greenbark ceonothus chaparral (*Prunus ilicifolia – Heteromeles arbutifolia – Ceanothus spinosus* Shrubland Alliance) (CNPS 2024b). Interstitial areas are dominated by non-native annual grasses such as wild oat (*Avena* sp.) and purple false brome (*Brachypodium distachyon*). Occasional small coast live oak trees are present at low cover. Although the general holly leaf cherry – toyon – greenbark ceonothus chaparral Alliance is not considered sensitive by the CDFW, the toyon – holly leaf cherry species association within that alliance is considered sensitive.

PHOTO 2. TOYON CHAPARRAL WITHIN THE STUDY AREA

PHOTO 3. COYOTE BRUSH SCRUB WITHIN THE STUDY AREA

Coyote Brush Scrub (*Baccharis pilularis* Shrubland Alliance). CDFW Rank: S5/G5. A small patch of coyote brush scrub was mapped in the northern portion of the Study Area. It is an open stand of shrubs dominated by coyote brush and meets the membership rules for the coyote brush scrub (*Baccharis pilularis* Shrubland Alliance) (CNPS 2024b). The interstitial areas are dominated by wild oat. Trees are absent. Coyote brush scrub is not considered sensitive.

Poison Oak Scrub (*Toxicodendron diversilobum* Shrubland Alliance). CDFW Rank: S4/G4. Poison oak scrub was mapped near the top of the steep ridge in the southern portion of the Study Area. It characterized by an open shrub canopy dominated by poison oak, with occasional toyon and coyote brush present. It meets the membership rules for the poison oak scrub (*Toxicodendron diversilobum* Shrubland Alliance) (CNPS 2024b). The interstitial areas are dominated by non-native herbs such as fennel (*Foeniculum vulgare*), wild oat, and purple false brome. Poison oak scrub is not considered sensitive.

PHOTO 4. POISON OAK SCRUB WITHIN THE STUDY AREA

Artichoke Thistle Field (*Brassica nigra – Centaurea* [*solstitialis, melitensis*] Herbaceous Semi-natural Alliance). CDFW Rank: None. The artichoke thistle field was mapped on the steep slope in the southernmost portion of the Study Area. The vegetation is herbaceous and dominated by artichoke thistle (*Cynara cardunculus* ssp. *flavescens*), with other non-native herbs between artichoke thistle plants, including wild oat, purple false brome, black mustard (*Brassica nigra*), Italian thistle (*Carduus pycnocephalus* ssp. *pycnocephalus*), and fennel. Trees and shrubs were typically absent. This land cover type meets the membership rules for the upland mustards or star-thistle fields (*Brassica nigra – Centaurea* [*solstitialis, melitensis*] Herbaceous Semi-natural Alliance) (CNPS 2024b). Artichoke thistle fields is not considered sensitive.

PHOTO 5. ARTICHOKE THISTLE FIELD WITHIN THE STUDY AREA

PHOTO 6. NON-NATIVE GRASSLAND WITHIN THE STUDY AREA

Non-native Grassland (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance). CDFW Rank: None.

Non-native grassland is the most common land cover type within the Study Area, occurring on all slopes and aspects. Portions of this land cover type are periodically mowed, and in the far northern portion of the Study Area, a two-track dirt vehicle path is present. Vegetation is herbaceous and is typically characterized by dense wild oat (*Avena* spp.), with occasional shrubs, trees, and other herbs present at low cover. It intergrades with the coyote brush scrub, poison oak scrub, and artichoke thistle fields land cover types. This land cover type meets the member rules for the wild oats and annual brome grasslands (*Avena* spp. – *Bromus* spp. Herbaceous Semi-natural Alliance) (CNPS 2024b). Non-native grassland is not considered sensitive.

5.1.2 Aquatic Land Cover

PHOTO 7. THE INTERMITTENT STREAM WITHIN THE STUDY AREA

Intermittent Stream (No Alliance). CDFW Rank: Sensitive. Intermittent streams are linear features that exhibit indicators of an OHWM and due to groundwater influence, flow for a duration longer than a precipitation event but are dry for a portion of the year. The intermittent stream within the Study Area is defined by a clear bed and bank and exhibits OHWM indicators such as scour and wrack. Trickles of water were observed in portions of the channel during the February 28, 2022, site visit. However, the channel was dry at the time of the July 14, 2022, site visit. The stream receives drainage from a concrete channel from the residential community upstream (to the west). It occurs on a steep slope, and the channel peters out when the topography flattens out and transitions into the seasonal wetland. Intermittent stream is considered sensitive and is potentially subject to CDFW, Corps, and RWQCB jurisdiction.

PHOTO 8. THE SEASONAL WETLAND WITHIN THE STUDY AREA

Seasonal Wetland (No Alliance). CDFW Rank: Sensitive. Seasonal wetlands include areas which hold water for part of the year, typically during the rainy season (between October and March) and are dominated by hydrophytic vegetative cover. The seasonal wetland within the Study Area occurs in the northern portion of the Study Area, where the topography flattens out downslope of the intermittent stream. Surface water and saturation were observed in the seasonal wetland during the February 28, 2022, site visit. At the time of the July 14, 2022, site visit no surface water or saturation was observed. The wetland is dominated by bristly ox-tongue (*Helminthotheca echioides*), harding grass (*Phalaris aquatica*), iris leaved rush (*Juncus xiphioides*), and bulrush (*Schoenoplectus americanus*). Himalayan blackberry and a small number of arroyo and red willows (*Salix lasiolepis*) occur at northern edge of the seasonal wetland. The wetland narrows substantially to an incised channel just outside of the eastern edge of the Study Area. The seasonal wetland is considered sensitive and is potentially subject to Corps and RWQCB jurisdiction.

Freshwater Marsh (No Alliance) CDFW Rank: Sensitive. Freshwater marshes are wetlands which hold water for long periods of time and are dominated by graminoids and other herbaceous plants. The marsh on-site is a linear wetland drainage confined by steep slopes located centrally within the Study Area. Inundation was observed during the February 28 and July 14, 2022, site visits, but the full duration of inundation is unknown. It is dominated by dense bulrush with occasional small patches of cattails (*Typha* sp.) and is bordered by non-native annual grassland and toyon chaparral. Surface water is shallow with a very slow flow throughout the bottom of the drainage. Although this feature receives some seasonal runoff from concrete drainage channels upslope, the primary hydrological source is a culvert that drains an unknown source and was flowing at the time of the February and July site visits. The source of this water could not be confirmed, but it does includes stormwater and urban residential runoff from the residential development upslope. Freshwater marsh is considered sensitive and is potentially subject to Corps and RWQCB jurisdiction.

PHOTO 9. THE FRESHWATER MARSH WITHIN THE STUDY AREA

5.2 Special-status Species

5.2.1 Special-status Plants

Based upon a review of the resource databases listed in Section 3.0, 65 special-status plant species have been documented in the vicinity of the Study Area (Appendix C). None of these species have a moderate or high potential to occur in the Study Area. The species documented from the greater vicinity have unlikely or no potential to occur for one or more of the following reasons:

- Hydrologic conditions (e.g., tidal, riverine) necessary to support the special-status plant species are not present in the Study Area;
- Edaphic (soil) conditions (e.g., serpentine) necessary to support the special-status plant species are not present in the Study Area;
- Unique pH conditions (e.g., alkaline soils) necessary to support the special-status plant species are not present in the Study Area;
- Associated natural communities (e.g., coastal habitats, tidal marsh, vernal pools) necessary to support the special-status plant species are not present in the Study Area;
- The Study Area is geographically isolated (e.g. below elevation) from the documented range of the special-status plant species;
- Land use history and contemporary management (e.g., nearby development and the spread of invasive species) has degraded the localized habitat necessary to support the special-status plant species.

No special-status plant species were observed by WRA biologists during the February 28 and July 14, 2022, biological surveys. The biological surveys did not constitute protocol-level surveys for plant species. No further actions or surveys are recommended for special-status plants.

5.2.2 Special-status Wildlife

Based upon a review of the resources and databases listed in Section 3.0, 52 special-status wildlife species have been documented in the vicinity of the Study Area. Appendix C summarizes the potential for each of these species to occur in the Study Area. Of the 52 special-status species known from the region, five species were determined to have a moderate or high potential to occur within the Study Area. The remaining species are unlikely or have no potential to occur due to one or more of the following factors.

The Study Area:

- lacks suitable hostplants (e.g., California golden violet, blue elderberry, etc.);
- lacks suitable perennial aquatic habitat (e.g., rivers, streams, or ponds);
- lacks suitable wetland habitat (e.g., vernal pools and tidal marshes);
- is outside of the currently documented or historical range of the species; or
- is outside of the distribution range for known occurrences.

Observations of special-status wildlife by WRA biologists during the February 28 and July 14, 2022, biological surveys are documented in this section. The biological surveys did not constitute protocol-level surveys for wildlife. The species presented in Table 3. were determined to have a moderate or high potential to occur.

Table 3. Potential Special-status Wildlife

Scientific Name	Common Name	Conservation Status	Potential Habitat in the Study Area
Other Special-status Wildlife (CEQA, other)			
Elanus leucurus	White-tailed kite	CFP	**Present.** This species was observed foraging within the Study Area during the February 28, 2022 site visit. There is suitable nesting habitat in the form of large oak trees within the Study Area.
Circus hudsonius	Northern harrier	SSC	**Moderate Potential.** Grasslands and scrublands within the Study Area may provide suitable nesting habitat for this species. This species has been observed in the local area.
Asio flammeus	Short-eared owl	SSC	**Moderate Potential**. Grasslands and scrublands within the Study Area may provide suitable nesting habitat for this species. This species has been observed in the local area.
Lasionycteris noctivagans	Silver-haired bat	WBWG Med	**Moderate Potential.** Large oak trees within the Study Area provide suitable roosting habitat.
Lasiurus cinereus	Hoary bat	WBWG Med	**Moderate Potential.** Large oak trees within the Study Area provide suitable roosting habitat.

Special-status Wildlife Species that are Present in the Study Area

White-tailed kite (*Elanus leucurus*). CDFW Fully Protected Species. Present. White-tailed kite is resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas, and wetlands. Vegetative structure and prey availability seem to be more important habitat elements than associations with specific plants or vegetative communities (Dunk 1995). Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees are highly variable in size, structure, and immediate surroundings, ranging from shrubs to trees greater than 150 feet tall (Dunk 1995). This species preys upon a variety of small mammals, as well as other vertebrates and invertebrates.

The Study Area contains large oak trees suitable for nesting for this species. The Study Area also includes potential foraging habitat for white-tailed kite in the form of nonnative grasslands and scrub communities. White-tailed kites are documented to occur in the region and have been observed routinely foraging near the Benicia State Recreation Area, located east of the Study Area (CDFW 2024b, Cornell 2024). Additionally, this species was observed foraging during the February 28, 2022 site visit. Therefore, white-tailed kites have a moderate potential to nest within the Study Area.

Special-status Wildlife Species with Moderate Potential to Occur in the Study Area

Northern harrier (*Circus hudsonius [cyaneus]*). CDFW Species of Special Concern. Moderate Potential. The northern harrier occurs as a resident and winter visitor in open habitats throughout most of California, including freshwater and brackish marshes, grasslands and fields, agricultural areas, and deserts. Harriers typically nest in treeless areas within patches of dense, relatively tall, vegetation, the composition of which is highly variable; nests are placed on the ground and often located near water or within wetlands (Shuford and Gardali 2008). Harriers are birds of prey and subsist on a variety of small mammals and other vertebrates.

Large portions of the Study Area provide suitable foraging and nesting habitat for northern harriers, including areas with non-native annual grassland and scrub communities. Additionally, the Benicia State Recreation Area, less than 1,000 feet southeast of the Study Area, has a confirmed breeding occurrence in 2005 (CDFW 2024b) and several sightings documented more recently (Cornell 2024). The presence of suitable foraging and nesting habitat in and adjacent to the Study Area suggests that northern harrier has a moderate potential to nest within the Study Area.

Short-eared owl (*Asio flammeus*). CDFW Species of Special Concern. Moderate Potential. The short-eared owl occurs primarily as a winter visitor in California; regular breeding is restricted to the Great Basin, portions of the Central Valley, and scattered other lowland locations (e.g., the northern Sacramento-San Joaquin Delta (Shuford and Gardali 2008). Suitable year-round habitat for this species consists of open areas with herbaceous cover, and includes grasslands, prairies, marshes and wetlands, and some agricultural areas. Nests are placed on the ground within vegetative cover. Short-eared owl breeding varies widely in geographic extent across years and is usually closely tied to the population cycle of voles (*Microtus* spp.), their primary prey (Shuford and Gardali 2008).

There are several documented occurrences of this species in the vicinity of the Study Area within the last five years (Cornell 2024). The Study Area contains suitable nesting habitat in the form of non-native annual grasslands and scrub communities. Additionally, the Benicia State Recreation Area, less than 1,000 feet southeast of the Study Area, has a sighting in 2019 (Cornell 2024). The nearest confirmed population is at

Suisun Marsh approximately 7 miles east (Shuford and Gardali 2008; CDFW 2024b). The presence of suitable foraging and nesting habitat in and around the area suggests that short-eared owl has a moderate potential to nest within the Study Area.

Silver-haired bat (*Lasionycteris noctivagans*). WBWG Medium Priority. Moderate Potential. Silver-haired bats occur in temperate forests (coniferous, deciduous, and mixed) from southern Alaska to northeastern Mexico. Females form maternity roosts almost exclusively inside hollows or under loose bark of large trees and may switch roosts several times (WBWG 2024). Hibernation occurs in trees, rock crevices, leaf litter, in and under buildings, and in caves and mines. Foraging for insects occurs above the tree canopy. Silver-haired bats are known to migrate south in the winter, although overwintering at northern latitudes has also been documented (WBWG 2024).

The Study Area contains suitable foraging and roosting habitat for this migratory species. During the February 28, 2022 site visit, large oak trees were observed within the Study Area that could provide maternity or day-roost habitat. The presence of suitable roosting and foraging habitat in the Study Area suggests that silver-haired bats have a moderate potential to roost in the Study Area.

Hoary bat (*Lasiurus cinereus*). WBWG Medium Priority. Moderate Potential. Hoary bats are highly associated with forested habitats in the western United States, particularly in the Pacific Northwest. They are a solitary species and roost primarily in foliage of both coniferous and deciduous trees, near the ends of branches, usually at the edge of a clearing. Roosts are typically 10 to 30 feet above the ground. They have also been documented roosting in caves, beneath rock ledges, in woodpecker holes, in grey squirrel nests, under driftwood, and clinging to the side of buildings, though this behavior is not typical. Hoary bats are thought to be highly migratory; however, wintering sites and migratory routes have not been well documented. This species tolerates a wide range of temperatures and has been captured at air temperatures between 0 and 22 degrees Celsius. Hoary bats probably mate in the fall, with delayed implantation leading to birth in May through July. They usually emerge late in the evening to forage, typically from just over one hour after sunset to after midnight. This species reportedly has a strong preference for moths, but is also known to eat beetles, flies, grasshoppers, termites, dragonflies, and wasps (WBWG 2024).

The Study Area contains suitable foraging and roosting habitat for this migratory species. During the February 28, 2022, site visit, large oak trees were observed within the Study Area that could provide maternity or day-roost habitat. The presence of suitable roosting and foraging habitat in the Study Area suggests that hoary bats have a moderate potential to occur within the Study Area.

Special-Status Wildlife Species Documented Nearby but Unlikely to Occur within the Study Area

The following special-status wildlife species are unlikely to occur but are discussed here because there are documented occurrences near the Study Area or typical land cover types associated with these species present in the Study Area. However, habitat elements within the Study Area do not support these species. Discussion of additional species that were determined to have no or limited potential to occur in the Study Area is provided in Appendix C.

Pallid bat (*Antrozous pallidus*). CDFW Species of Special Concern, WBWG High Priority. Unlikely. The pallid bat is broadly distributed throughout much of western North America and typically occurs in association with open, rocky areas. Occupied habitats are highly variable and range from deserts to forests in lowland areas and include higher-elevation forests. Roosting may occur singly or in groups of up to

hundreds of individuals. Roosts must offer protection from high temperatures and are typically in rock crevices, mines, caves, or tree hollows; manmade structures are also used, including buildings (both vacant and occupied) and bridges. Pallid bats are primarily insectivorous, feeding on large prey that is usually taken on the ground but sometimes in flight (WBWG 2024).

The nearest documented occurrence of this species was approximately 13 mi north in 2007, in addition to several historic occurrences (pre-1940) south of the Study Area (CDFW 2024b). The Study Area contains suitable foraging habitat for this species. However, there is no suitable roosting habitat as this species is very sensitive to disturbance. The few large trees within the Study Area are directly adjacent (approximately 330 ft) to interstate 780 and exposed to predators, wind, and temperature fluctuations. Additionally, this species typically roosts in crevices of rocks, caves, and mines which are absent from the Study Area. This species could be found in the Study Area foraging but not roosting.

Burrowing owl (*Athene cunicularia*). CDFW Species of Special Concern; USFWS Bird of Conservation Concern. Unlikely. The burrowing owl occurs as a year-round resident and winter visitor in much of California's lowlands, inhabiting open areas with sparse or non-existent trees or shrub canopies. Typical habitat is annual or perennial grassland, although human-modified areas such as agricultural lands and airports are also used (Poulin et al. 2011). This species is dependent on burrowing mammals to provide the burrows that are characteristically used for shelter and nesting, and in northern California is typically found in close association with California ground squirrels (Otospermophilus beecheyi). Manmade substrates such as pipes or debris piles may also be occupied in place of burrows. Prey consists of insects and small vertebrates. Breeding typically takes place from March to July.

There have been numerous documented occurrences of this species within 5 miles of the Study Area during wintering and migration periods (CDFW 2024b, Cornell 2024), and two winter occurrences approximately 4 miles from the Study Area (CDFW 2024b). The Study Area contains suitable foraging habitat in the form of grasslands and shrublands and therefore may be observed foraging during winter or migration periods. During the site visit on February 28, 2022, no ground squirrel burrows were observed. Therefore, the Study Area lacks the mammal burrows necessary for nesting and refuge by this species and it is unlikely to nest withinoccupy the Study Area.

Crotch bumble bee (*Bombus crotchii*), State candidate. Unlikely. Crotch bumble bee occurs primarily in central and southern California, from coastal areas inland to the foothills (Williams et al. 2014). This species is now largely absent from the Central Valley, although it was historically common in this region (Hatfield et al. 2015). Crotch bumble bee occurs in grassland and scrub habitats and has also been documented in agricultural areas. Like other bumble bee species, Crotch bumble bee is a social species with an annual life cycle. Queens emerge from hibernation in the late winter/early spring to establish a new colony. The colony produces workers throughout the spring and summer, and reproductive (i.e. drones and queens) in the early fall. Nests are built in pre-existing cavities. They are commonly found underground, in abandoned rodent burrows, or aboveground in grass tufts, rock piles, abandoned bird nests, or tree cavities. Crotch bumble bee feeds on pollen and nectar during all life stages; preferred host species include (but are not limited to) milkweeds (Asclepias spp.), chaenactis (Chaenactis spp.), clarkias (Clarkia spp.), larkspurs (Delphinium spp.), buckwheats (Eriogonum spp.), lupines (Lupinus spp.), medicks (Medicago spp.), bladderpod (Peritoma arborea), phacelias (Phacelia spp.), poppies (Eschscholzia spp.), and sages (Salvia spp.). Queens overwinter in hibernacula; little is known about habitat requirements for hibernacula; bare ground, leaf litter and/or duff, and pre-existing cavities may provide overwintering habitat. Major threats to Crotch bumble bee include agricultural intensification and rapid urbanization (Hatfield et al. 2015). Additionally, Crotch bumble bees have a narrow climatic range compared to most

bumble bee species and may be threatened by increasing aridity and global climate change (NatureServe 2022). In general, bumble bees are threatened by a combination of factors including pesticide use, resource competition with non-native bees, and pathogen spillover from managed pollinators (Goulson 2010, Cameron et al. 2011).

The single documented occurrence of this species within 60 miles was over 13 miles away across the Carquinez Strait in 2015 (CDFW 2024b). The Study Area contains foraging and nesting habitat for this species. However, limited food resources (as nectar producing flowers) were observed within the Study Area during the February and July site visits. In addition, no ground squirrel burrows were observed and nesting habitat may be severely limited. Additionally, populations of this species have drastically contracted in recent years by 97.7 percent (CDFW 2019). The Study Area is significantly isolated and surrounded by development including large residential complexes and Interstate 780 to the north, and Carquinez Strait to the south. The nearest undeveloped lands are three miles to northeast near Lake Herman where more suitable foraging and nesting habitat occurs.

5.3 Wildlife Corridors and Native Wildlife Nursery Sites

Wildlife Corridors

No native wildlife nursery sites are present in the Study Area. Wildlife movement between suitable habitat areas can occur via open space areas lacking substantial barriers. The terms “landscape linkage” and “wildlife corridor” are often used when referring to these areas. The key to a functioning corridor or linkage is that it connects two larger habitat blocks, also referred to as core habitat areas (Beier and Loe 1992; Soulé and Terbough 1999). It is useful to think of a “landscape linkage” as being valuable in a regional planning context, a broad scale mapping of natural habitat that functions to join two larger habitat blocks. The term “wildlife corridor” is useful in the context of smaller, local area planning, where wildlife movement may be facilitated by specific local biological habitats or passages and/or may be restricted by barriers to movement. Above all, wildlife corridors must link two areas of core habitat and should not direct wildlife to developed areas or areas that are otherwise void of core habitat (Hilty et al. 2019).

The Study Area is not within a designated wildlife corridor (CalTrans 2010). The site is located within a much larger tract of housing developments intersected with several highways and nonnative grasslands in Solano County. The Benicia State Recreation Area is approximately 1,000 feet southeast of the Study Area; however, the Study Area does not provide connection to other tidal marsh habitats nor does it contain such habitat.. While common wildlife species presumably utilize the site to some degree for movement at a local scale, the Study Area itself does not provide corridor functions beyond connecting similar ruderal grassland parcels to surrounding areas.

Essential Fish Habitat

The Study Area does not function as a fisheries movement corridor. The National Oceanic and Atmospheric Administration’s (NOAA) Essential Fish Habitat geospatial dataset uses habitat modelling to identify water features with value as fishery habitat (NMFS 2024). The entirety of the Study Area is within the Chinook salmon Essential Fish Habitat. However, this database is depicting a course resolution of the entire watershed that influences this fishery. There is no stream or river within the Study Area capable of supporting the Chinook salmon fishery or its habitat in any form.

Critical Habitat

The Study Area does not contain designated critical habitat.

6.0 ANALYTICAL METHODOLOGY AND SIGNIFICANCE THRESHOLD CRITERIA

Pursuant to Appendix G, Section IV of the State CEQA Guidelines, a project would have a significant impact on biological resources if it would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service;

3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means

4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or,

6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

These thresholds were utilized in completing the analysis of potential project impacts for CEQA purposes. For the purposes of this analysis, a “substantial adverse effect” is generally interpreted to mean that a potential impact could directly or indirectly affect the resiliency or presence of a local biological community or species population. Potential impacts to natural processes that support biological communities and special-status species populations that can produce similar effects are also considered potentially significant. Impacts to individuals of a species or small areas of existing biological communities may be considered less than significant if those impacts are speculative, beneficial, de minimis, and/or would not affect the resiliency of a local population.

7.0 IMPACTS AND MITIGATION EVALUATION

Using the CEQA analysis methodology outlined in Section 6.2 above, the following section describes potential significant impacts to sensitive resources within the Project Area as well as suggested mitigation measures which are expected to reduce impacts to less than significant.

7.1 Special-status Species

This section analyzes the Project's potential impacts and mitigation for special-status species in reference to the significance threshold outlined in CEQA Appendix G, Part IV (a):

> *a) Does the project have the potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?*

Potential impacts and mitigation for potentially significant impacts are discussed below.

7.1.1 Special-status Plant Species

As detailed in Section 5.2.1, above, none of the 65 special-status plant species documented within the vicinity of the Proposed Project have potential to occur within the Project Area; therefore, there is **no impact,** and no avoidance, minimization, or mitigation measures are necessary to avoid impacts to special-status plant species in the Project Area.

7.1.2 Special-status Wildlife Species

As detailed in Section 5.2.2, above, five of the 52 special-status wildlife species documented within the vicinity of the Study Area have potential to occur within the Project Area: therefore, mitigation measures are necessary to avoid impacts to special-status wildlife species in the Project Area. With implementation of MM BIO-1a, 1b, 2a, and 2b below, the Proposed Project would reduce impacts to a less-than-significant level.

White-tailed Kite, Northern harrier, Short-Eared Owl, and Nesting Bird Species

The Proposed Project has the potential to impact white-tailed kite, northern harrier, short-eared owl, and other native nesting birds. Potential impacts to these species are regulated under CEQA and Sections 3503, 3503.5, and 3513 of Fish and Game Code. Future activities within the Project Area may impact these species during their nesting season (typically between March 1 – August 31).

The following section presents recommendations to avoid, minimize, or mitigate impacts to white-tailed kite, northern harrier, and short-eared owl.

> **Potential Impact BIO-1:** The Proposed Project's housing development within the Project Area could result in direct mortality of white-tailed kite, northern harrier, short-eared owl, and other native bird species nests, which would be considered a significant impact. Impacts to active nests of this species and their eggs, chicks and young could occur during the removal of trees, vegetation, or other ground-disturbing activities. These activities could result in the direct removal or destruction of active nests, as well as generate audible, vibratory and/or visual disturbances that might indirectly result in nest abandonment.

To reduce potential impacts to white-tailed kite, northern harrier, short-eared owl, and native nesting birds to a less-than-significant level, the following measures:

Mitigation Measure BIO-1a: To avoid adverse effects to the active nests of special-status and other native bird species, tree removal, vegetation removal, and initial ground disturbance should be prioritized to occur during the non-nesting season, between September 1 through January 31.

Mitigation Measure BIO-1b: A pre-construction nest survey for white-tailed kite, northern harrier, short-eared owl, and other native bird species shall be conducted prior to initial ground disturbance, including tree removal or vegetation removal if it begins during the nesting bird season (defined as February 1 through August 31). If active nests (containing eggs, chicks or young) are discovered during these surveys, a qualified biologist shall establish a species-specific no-work buffer around the active nest. Work may resume in the buffer after the nesting season ends or a qualified biologist confirms the nest is inactive.

Implementation of these mitigation measures will reduce potential impacts to white-tailed kite, northern harrier, and short-eared owl to a level that is less than significant.

Silver-Haired Bat, Hoary Bat, and Other Roosting Bat Species

The Proposed Project has the potential to impact silver-haired bats and hoary bats, both are Western Bat Working Group (WBWG) Medium Priority species. For bat species, the WBWG designates conservation status for species of bats, and those with a high or medium-high priority are typically given special consideration under CEQA. Future activities within the Project Area including tree removal may affect these species during their maternity roosting season (typically between March 1 – August 31). No potential hibernation roosts are present within the Project or Study Area.

The following section presents recommendations to avoid, minimize, or mitigate impacts to the silver-haired bat and hoary bat.

Potential Impact BIO-2: The removal of trees within the Project Area could result in direct mortality of silver-haired bat and hoary bat adults and maternity roosts, which would be considered a significant impact. Impacts to active maternity roosts of this species and their pups could occur during the removal of trees, vegetation, or other ground-disturbing activities in proximity to roost sites. These activities could result in the direct removal or destruction of active roosts, as well as generate audible, vibratory and/or visual disturbances that might indirectly result in roost abandonment.

To reduce potential impacts to the silver-haired bat and hoary bat to a less-than-significant level, the following measures shall be implemented:

Mitigation Measure BIO-2a: To avoid adverse effects to maternity roosts of special-status and other bat species, tree removal, vegetation removal, and initial ground disturbance should be prioritized to occur outside the maternity roosting season, between September 1 through April 30. Large trees ((DBH > 24 inches) removed during this season (September 1 – April 30) shall be cut using a two-phased system where branches and limbs are cut and left on the ground overnight prior to chipping or removal from the site.

Mitigation Measure BIO-2b: During the maternity roost season (May 1 – August 31), at least 30 days prior to the removal of any large tree (DBH > 24 inches) a bat roost assessment shall be conducted by a qualified biologist to determine if potential roost habitat is present.

If no maternity roost habitat is present, trees shall be removed using a two-phased cut. Cut branches and limbs shall be left on the ground overnight prior to chipping or removal from the site.

If potential maternity roosting habitat is present, the qualified biologist shall conduct an emergence survey to determine if the roost is occupied or assume the roost is occupied and establish a no-work buffer. If an emergence survey is conducted and does not detect bats, the tree may be removed with no further measures required to protect roosting bats. If roosting bats are detected, or the tree is assumed to be an active roost, the tree shall be given a 100-foot no work buffer and shall be avoided until after the maternity roosting season is complete. Once the maternal roosting season is complete, tree removal shall follow the two-phase approach for tree removal.

Implementation of these mitigation measures will reduce potential impacts to the silver-haired bat and hoary bat to a level that is less than significant.

7.2 Sensitive Natural Communities and Land Cover Types

This section addresses the question:

b) Does the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

Sensitive natural communities within the Project Area include seasonal wetland.

The Proposed Project is designed to avoid and minimize impacts to sensitive natural communities. The design plans account for total avoidance of the toyon chapparal land cover type, keeping the area south of the freshwater marsh as open space. Additionally, the Project plans to avoid the intermittent stream, freshwater marsh, and riparian vegetation. However, the Proposed Project would convert the seasonal wetland into a stormwater basin within the Project Area. Although the stormwater basin would be vegetated and seasonally inundated, it is a loss of the seasonal wetland and considered a permanent impact. A Section 404 CWA permit from the Corps and Section 401 CWA certification from the RWQCB may be required for conversion of the seasonal wetland. Additionally, because of the proximity of the riparian and freshwater marsh land cover types to the construction footprint, the Vista Cove Project could result in increased sedimentation to the freshwater marsh or damage to roots of riparian trees. Potential impacts and mitigation measures to avoid impacts to these sensitive natural communities are described below.

Potential Impact BIO-3: The proposed conversion of 0.49 acre of seasonal wetland to a stormwater basin for the development will result in fill and permanent loss of the seasonal wetland within the Project Area.

Potential Impact BIO-4: Temporary impacts associated with construction activities adjacent to the riparian and freshwater marsh land cover types may result increased sedimentation into freshwater marsh, trimming of riparian vegetation, or exposure of riparian tree roots.

To reduce potential impacts to the seasonal wetland, riparian, and freshwater marsh to a less-than-significant level, the following measures shall be implemented:

Mitigation Measure BIO-3: Compensatory mitigation for permanent loss of the seasonal wetland shall be required. Mitigation may be satisfied through purchase of mitigation bank credits from an approved mitigation bank, payment of in-lieu fees to an approved public agency or conservation organization (e.g. local land trust), for implementation of compensatory mitigation projects, or via a permittee responsible mitigation involving creation, restoring, or enhancing analogous habitat. The ratio for acres of mitigation to acres impacted shall be 1:1.

Mitigation Measure BIO-4a: Prior to ground disturbing activities, construction fencing or flagging shall be installed to delineate the riparian and freshwater marsh boundaries. The fencing will be checked regularly during construction activities to ensure that the fencing remains intact and functional, and that encroachment has not occurred into the sensitive habitat or boundary; any repairs to the fence or encroachment correction will be conducted immediately. At the end of the Project all temporary flagging, fencing, or other materials would be removed from the work areas and vicinity of the channel.

Mitigation Measure BIO-4b: Erosion control measures would be utilized throughout all phases of the Project where sediment runoff from construction may potentially enter nearby waters. Appropriate sediment and erosion control BMPs (e.g., use of silt fencing and/or straw waddles around the perimeter of the construction zone) will be implemented during and following construction to minimize surface runoff originating from the Project and thereby protect water quality of the freshwater marsh. Erosion control structures would be monitored for effectiveness and would be repaired or replaced as needed.

i. Prior to construction, a Stormwater Pollution Prevention Plan (SWPPP) would be developed. The plan would include the implementation and maintenance of erosion control measures.

ii. Prior to construction, an Accidental Spill Prevention and Cleanup Plan would be prepared. This plan would include required spill control absorbent material, for use beneath stationary equipment, to be present on-site and available at all times.

iii. No fueling, cleaning, or maintenance of vehicles or equipment would take place within any areas where an accidental discharge may cause hazardous materials to enter waterways.

iv. Any equipment or vehicles used for the Project would be checked and maintained daily to prevent leaks of fluids that could be deleterious to aquatic habitats.

v. All equipment would be cleaned before arriving on the site and before removal from the site to prevent spread of invasive plants.

vi. To avoid establishment of invasive, non-native plant species on or adjacent to the Project Area, the following measures will be implemented:

1. Vegetation disturbances will be limited to those areas identified on construction plans and maps as slated for development or construction staging.
2. Erosion and sediment control materials will be certified as weed-free.

vii. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, would be located outside of the stream channel banks and outside of nearby waters.

viii. Stationary equipment such as motors, pumps, and generators, located adjacent to aquatic features would be positioned over secondary containment sufficient to arrest a catastrophic failure.

ix. Stockpiles of excavated soil or other would be covered when not in active use (i.e. would not be used or moved for 72 hours). All trucks hauling soil, sand, and other loose materials would be covered.

Mitigation Measure BIO-4c: In order to protect trees adjacent to the Project Area:

i. Trees not proposed for removal but adjacent to Project activities shall have orange construction fencing installed at the dripline. This shall be known as the tree protection zone (TPZ).
ii. Work within the TPZ shall be minimized to the maximum extent feasible.
iii. If work must occur within the TPZ, the fence can be removed temporarily, the tree trunk shall be wrapped in a waddle, and the fence shall be placed back as soon as work is completed.
iv. All equipment and stockpiles must be in designated staging areas away from all TPZ.
v. All trees to be removed shall be felled away from any trees to be avoided.
vi. If trees not proposed for removal require pruning, pruning shall follow ANSI A300 standards or be performed by a certified arborist.
vii. If any roots are exposed from trees to be avoided, roots can be pruned up to the diameter of 2 inches and pruned at 90-degree angles. The roots shall be covered by a damp burlap sack or damp towel while exposed.

Implementation of these mitigation measures will reduce this potential impact to seasonal wetland, freshwater marsh, and riparian land covers to a level that is ***less than significant***.

7.3 Aquatic Resources

This section analyzes the Project's potential impacts and mitigation for wetlands and other areas presumed or determined to be within the jurisdiction of the Corps or BCDC in reference to the significance threshold outlined in CEQA Appendix G, Part IV (c):

c) Does the Project have the potential to have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

The Proposed Project is designed to avoid the freshwater marsh in the southern half of the Study Area and the intermittent stream within the Project Area. Both of which are potential Waters of the U.S. and State and the intermittent stream is potentially jurisdictional under CFGC 1602. Potential temporary impacts and mitigation measures for the freshwater marsh are described above (**Potential Impact and Mitigation Measure BIO-4**). No impacts are anticipated to the intermittent stream. Approximately 0.42 acre of seasonal wetland will be permanently impacted by Project construction as a result of conversion to a stormwater basin. Potential impacts and mitigation measures are discussed above in **Potential Impact and Mitigation Measures BIO-3 and BIO-4**. No additional impacts beyond those previously described are anticipated.

The implementation of Mitigation Measure BIO-3, BIO-4a, and BIO-4b will reduce impacts to a ***less than significant*** level***.***

7.4 Wildlife Corridors

This section analyzes the Project's potential impacts and mitigation for habitat corridors and linkages in reference to the significance threshold outlined in CEQA Appendix G, Part IV (d):

d) Does the Project have the potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

As noted in Section 5.3, no portions of the Study Area provide connectivity between areas of suitable habitat (Caltrans 2010), and the Study Area does not contain nursery sites. No impact will occur to migratory corridors for terrestrial and aquatic species.

7.5 Local Policies and Ordinances

This section analyzes the Project's potential impacts and mitigation based on conflicts with local policies and ordinances in reference to the significance threshold outlined in CEQA Appendix G, Part IV (e):

e) Does the Project have the potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;

Local plans and policies related to biological resources examined in this analysis are:

- City of Vallejo General Plan, and
- City of Vallejo Tree Ordinance

The Proposed Project is consistent with the City of Vallejo General Plan regarding protecting sensitive natural resources, when possible, and ***no conflict*** will occur related to these local policies. However, the removal of trees as a part of the Proposed Project will require compliance with the City of Vallejo Tree

Ordinance. The Proposed Project will provide an Arborist Report prior to construction and will plant replacement trees according to the City of Vallejo Tree Ordinance, therefore ***no conflict*** with the tree ordinance will occur.

Tree removal may be required for the Proposed Project, as needed for construction and access. Some of the trees removed may be classified as "significant trees" or otherwise protected by local ordinances. The City of Vallejo Tree Ordinance requires tree removal permits for any significant tree. An arborist report (WRA 2023) in compliance with the City's Tree Ordinance has been prepared and up to 47 significant trees are anticipated to be removed for the Proposed Project. The proposed Project will follow the Tree Ordinance and replanting requirements. There is no potential conflict with the local tree ordinance.

7.6 Habitat Conservation Plans

This section analyzes the Project's potential impacts and mitigation based on conflicts with any adopted local, regional, and state habitat conservation plans in reference to the significance threshold outlined in CEQA Appendix G, Part IV (f):

> *f) Does the Project have the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

The Project Area is not within an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan, therefore, there is ***no conflict*** with adopted conservation plans.

8.0 REFERENCES

Bechard, M. J., C. S. Houston, J. H. Sarasola and A. S. England. 2010. Swainson's Hawk (*Buteo swainsoni*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/265

Beier, P., and S. Loe. 1992. A checklist for evaluating impacts to wildlife movement corridors. Wildlife Society Bulletin 20(4):434–440.

Black, S. H., and D. M. Vaughan. 2005. Species Profile: *Speyeria callippe callippe*. In Shepherd, M. D., D. M. Vaughan, and S. H. Black (Eds). Red List of Pollinator Insects of North America. CD-ROM Version 1 (May 2005). Portland, OR: The Xerces Society for Invertebrate Conservation.

Buehler, D. 2000. Bald Eagle (*Haliaeetus leucocephalus*), The Birds of North America (P. G. Rodewald, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America: https://birdsna.org/Species-Account/bna/species/baleag.

Bulger, J.B., S.J. Norman, and R.B. Seymour. 2003. Terrestrial Activity and Conservation of Adult California Red-legged Frogs (Rana aurora draytonii) in Coastal Forests and Grasslands. Biological Conservation 110 (2003) 85–95.

Bumble Bee Watch. 2023. Bumble Bee Sightings Map. Online at: bumblebeewatch.org Accessed on January 2023.

Cameron, S.A., H. C. Lim, J. D. Lozier, and R. Thorp. 2016. Test of the invasive pathogen hypothesis of bumble bee decline in North America. Proceedings of the National Academy of Sciences, 113(16), 4386-4391.

Cameron, S. A., Lozier, J. D., Strange, J. P., Koch, J. B., Cordes, N., Solter, L. F., & Griswold, T. L. 2011. Patterns of widespread decline in North American bumble bees. Proceedings of the National Academy of Sciences, 108(2), 662-667.

[CDFG] California Department of Fish and Game. 2019. Evaluation of the petition from the xerces society, defenders of Wildlife, and the center for food safety To list four species of bumble bees as endangered under the California Endangered species act. Environmental Services Division, California Department of Fish and Wildlife, Sacramento, California.

[CDFG] California Department of Fish and Game. 2019. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607. Environmental Services Division, California Department of Fish and Wildlife, Sacramento, California.

[CDFW] California Department of Fish and Wildlife. 2024a. California Natural Community List. Biogeographic Data Branch. Vegetation Classification and Mapping Program, Sacramento, California. Most recently accessed February 2024.

[CDFW] California Department of Fish and Wildlife. 2024b. California Natural Diversity Database. Biogeographic Data Branch, Vegetation Classification and Mapping Program, Sacramento,

California. Available online at: https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data; most recently accessed: February 2024.

[CDFW and Caltrans] California Department of Fish and Wildlife and California Department of Transportation. 2024. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. California Department of Fish and Wildlife, Sacramento, CA.

[Caltrans] California Department of Transportation. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Prepared for California Department of Transportation, California Department of Fish and Game, and Federal Highways Administration. Available online at: https://www.wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC. Most recently accessed: August 2022.

[CNPS] California Native Plant Society. 2024a. Inventory of Rare and Endangered Plants (online edition, v9-01 1.5). Sacramento, California. Online at: http://rareplants.cnps.org/; most recently accessed: February 2024.

[CNPS] California Native Plant Society (CNPS). 2024b. A Manual of California Vegetation, Online Edition. Available online at: http://vegetation.cnps.org. Most recently accessed: February 2024.

[CCH1] Consortium of California Herbaria 1. 2024. CCH1: Featuring California Vascular Plant Data from the Consortium of California Herbaria and Other Sources. Data provided by the Consortium of California Herbaria. Available online at: http://ucjeps.berkeley.edu/consortium/; most recently accessed: February 2024.

[CCH2] Consortium of California Herbaria 2. 2024. CCH2 Portal. Online at: http://cch2.org/portal/index.php; most recently accessed: February 2024.

[Cornell] Cornell Lab of Ornithology. 2024. eBird: An online database of bird distribution and abundance. Available online at: Ithaca, NY. http://www.ebird.org. Most recently accessed: February 2024.

Dunk, JR. 1995. White-tailed Kite (*Elanus leucurus*), The Birds of North America Online (A Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/178.

Environmental Laboratory. 1987. Corp of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Technical Report Y-87-1, Vicksburg, Mississippi.

Google Earth. 2024. Aerial Imagery 1985-2022. Most recently accessed: February 2024.

Goulson, D. 2010. Bumblebees: behaviour, ecology, and conservation. Oxford University Press on Demand.

Hatfield, R., Jepsen, S., Thorp, R., Richardson, L. & Colla, S. 2015. Bombus crotchii. The IUCN Red List of Threatened Species 2015: e.T44937582A46440211. https://dx.doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937582A46440211.en. Accessed on 09 January 2023.

Hilty, J. A., W. Z. Lidicker Jr, and A. M. Merenlender. 2019. Corridor Ecology: Linking Landscapes for Biodiversity Conservation. Second Edition. Island Press.

Holland, R. F. 1986. Preliminary descriptions of the terrestrial natural communities of California. State of California, The Resources Agency, Department of Fish and Game, Sacramento, CA.

Jennings, M.R. and M.P. Hayes. 1994. Amphibian and Reptile Species of Special Concern in California. Report prepared for the California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, California.

Jepsen, S., D.F. Schweitzer, B. Young, N. Sears, M. Omes, and S. Hoffman Black. 2015. Conservation Status and Ecology of the Monarch Butterfly in the United States. Prepared for the U.S. Forest Service. Xerces Society for Invertebrate Conservation , Portland, OR.

Kochert, M., K. Steenhof, C. McIntyre, E. Craig. 2002. Golden Eagle (Aquila chrysaetos). Pp.1-44 in A. Poole, F. Gill, eds. The Birds of North America, Vol. 684. Philadelphia: The Birds of North America.

Leong, K.L.H., W.H. Sakai, W. Bremer, D. Feuerstein, and G. Yoshimura. 2004. Analysis of the pattern of distribution and abundance of monarch overwintering sites along the California coastline. Pages 177-185 in The Monarch Butterfly: Biology and Conservation, K. Oberhauser and M. Solensky (eds). Cornell University Press, Ithaca, NY.

Lichvar, R. W., and S. McColley. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. A Delineation Manual. ERDC/CRREL TR-08-12. Cold Regions Research and Engineering Laboratory. U.S. Army Engineer Research and Development Center. Page 84. Cold Regions Research and Engineering Laboratory U.S. Army Engineer Research and Development Center, ERDC/CRREL TR-08-12, Hanover, New Hampshire.

Meese, R.J., E.C. Beedy and W.J. Hamilton, III. 2014. Tricolored Blackbird (Agelaius tricolor), The Birds of the World Online (A Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of the World Online: https://birdsoftheworld.org/bow/species/tribla/cur/introduction ; Accessed February 2024.

[NMFS] National Marine Fisheries Service. 2024. Essential Fish Habitat Mapper. Available online at: https://www.habitat.noaa.gov/protection/efh/efhmapper. Most recently accessed: August 2022.

[NETR] Nationwide Environmental Title Research. 2024. Historic Aerials. Available online at: http://www.historicaerials.com/; most recently accessed: February 2024.

NatureServe. 2024. NatureServe Conservation Status. Available online at: http://explorer.natureserve.org/ranking.htm. Most recently accessed: January 2024.

Pierson, ED and WE Rainey. 1998. Distribution, Status and Management of Townsend's Big-eared Bat (Corynorhinus townsendii) in California. Department of Fish and Game. BMCP Technical Report Number 96-7.

Poulin, Ray, L. D. Todd, E. A. Haug, B. A. Millsap and M. S. Martell. 2011. Burrowing Owl (Athene cunicularia), The Birds of the World Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of the World Online: https://birdsoftheworld.org/bow/species/burowl/cur/introduction ; Accessed February 2024.

[SFEI] San Francisco Estuary Institute. 2024. California Aquatic Resource Inventory (CARI) version 0.3. Available online at: https://www.sfei.org/data/california-aquatic-resource-inventory-cari-version-03-gis-data#sthash.9SjW0wBH.dpbs. Most recently accessed: February 2024.

Shuford, W. D., and T. Gardali, eds. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Soulé, M. E., and J. Terbough. 1999. Conserving nature at regional and continental scales - a scientific program for North America. BioScience 49(10):809–817.

[SWRCB] State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State, May 14, 2019.

Stebbins, R. C. 2003. A Field Guide to Western Reptiles and Amphibians, Third edition. Houghton Mifflin Company, Boston, MA and New York, NY.

The City of Vallejo. 2020. The City of Vallejo General Plan 2040. August 19, 2020.

Thomson, R. C., A. N. Wright, and H. B. Shaffer. 2016. California amphibian and reptile species of special concern. Co-published by the California Department of Fish and Wildlife and University of California Press, Oakland, California.

[Corps] U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Page 135. U.S. Army Engineer Research and Development Center, ERDC/EL TR-08-28, Vicksburg, Mississippi.

[USDA] U.S. Department of Agriculture. 2024a. National List of Hydric Soils. Natural Resources Conservation Service. Online at: http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/use/hydric/; most recently accessed: February 2024.

U.S. Department of Agriculture. 2024b. Web Soil Survey. Soil Survey Staff, Natural Resources Conservation Service. Available online at: https://websoilsurvey.nrcs.usda.gov/app/; most recently accessed: February 2024.

[USGS] U.S. Geological Survey. 2021. Benicia Quadrangle, California. 7.5-minute topographic map.

[USFWS] U.S. Fish and Wildlife Service. 2024. National Wetlands Inventory. Available online at: http://www.fws.gov/nwi. Most recently accessed: February 2024.

[USFWS] U.S. Fish and Wildlife Service. 2010. Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the California Red-Legged Frog; Final Rule. Federal Register 75(51): 12816-12959. March 17.

[WRA] WRA, Inc. 2023. Sancerra Vista Cove Development Project – Arborist Tree Survey and Report. Prepared for Sancerra. March 2.

White, C., N. Clum, T. Cade and W. Hunt. 2002. Peregrine Falcon (*Falco peregrinus*). In: The Birds of North America, No. 660, A. Poole and F. Gill, eds. The Birds of North America, Inc. Philadelphia, Pennsylvania. Accessed online on July 21, 2022 at http://bna.birds.cornell.edu/BNA/

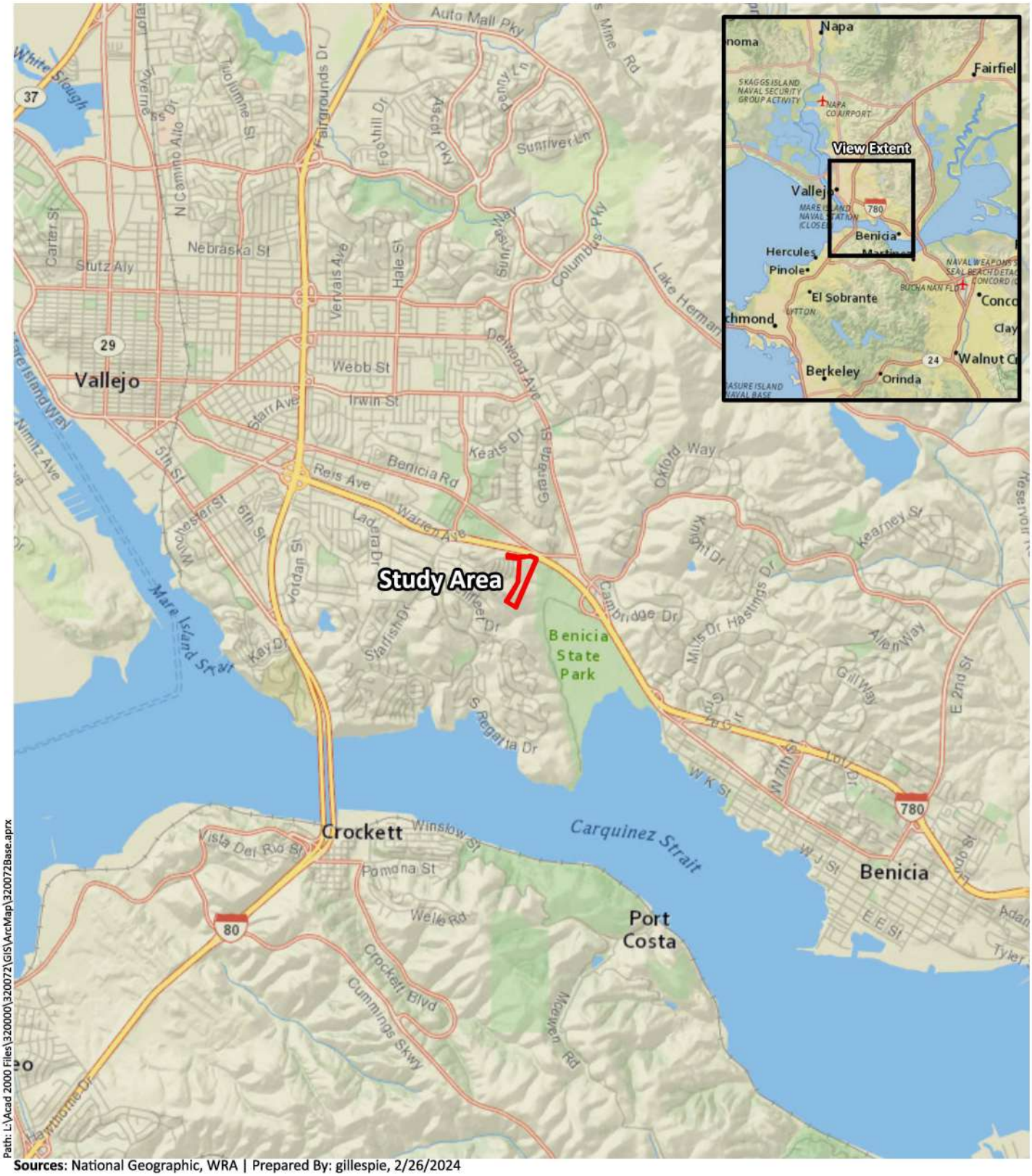
Williams, P.H., R.W. Thorp, L.L. Richardson, and S.R. Colla. 2014. Bumble bees of North America: an Identification Guide. Princeton University Press. 208 pp.

[WBWG] Western Bat Working Group. 2024. Western Species Accounts. Available online at: http://wbwg.org/western-bat-species/. Most recently accessed: February 2024.

Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. California Depart. of Fish and Game, Sacramento, California.

APPENDIX A – FIGURES

THIS PAGE INTENTIONALLY LEFT BLANK.



Path: L:\Acad 2000 Files\320000\320072\GIS\ArcMap\320072Base.aprx

Sources: National Geographic, WRA | Prepared By: gillespie, 2/26/2024

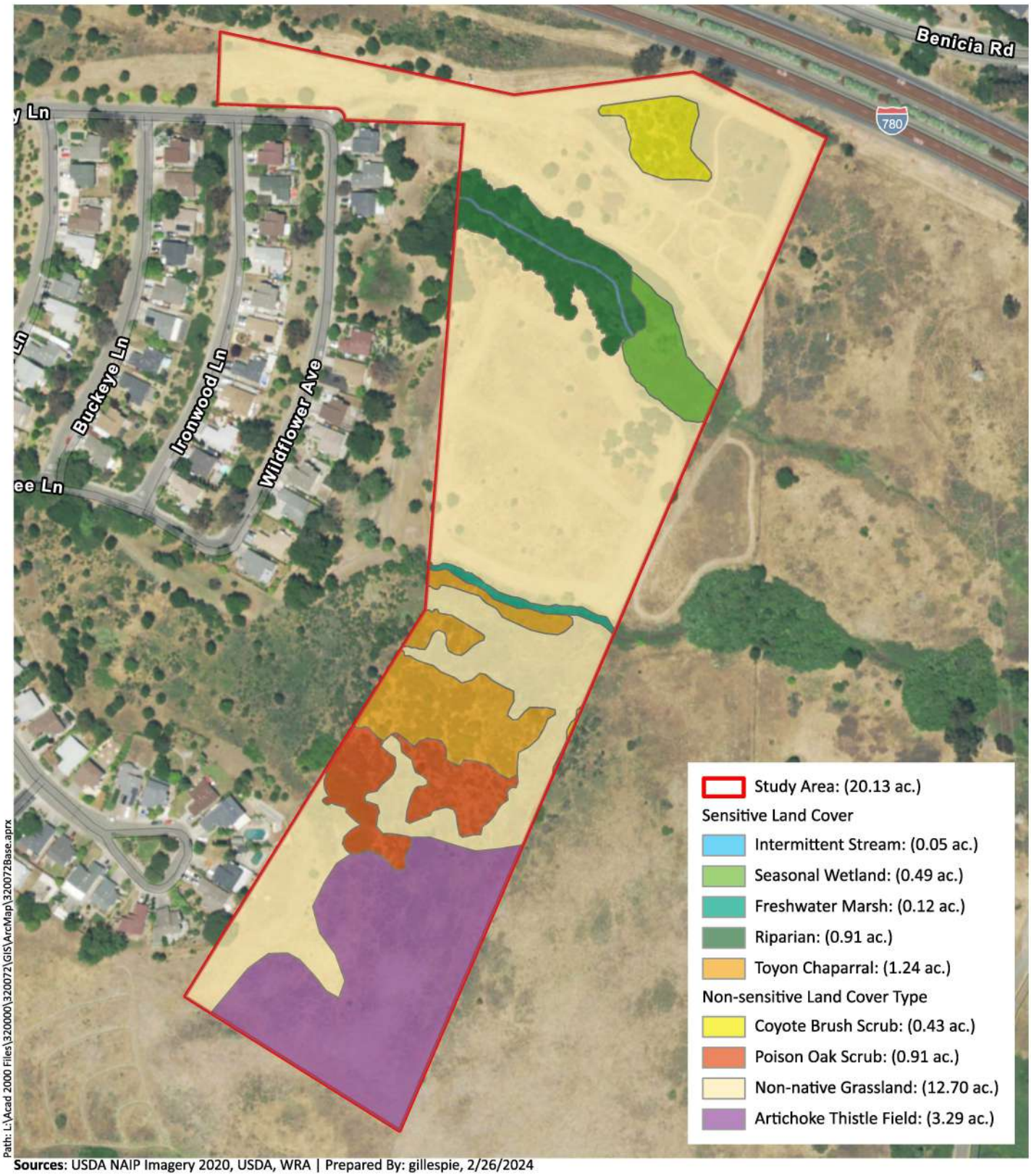
Figure 1. Study Area Regional Location Map

Sancerra Vista Cove
Vallejo, California

0 0.5 1 Miles

N

wra Environmental Consultants



Sources: USDA NAIP Imagery 2020, USDA, WRA | Prepared By: gillespie, 2/26/2024

Figure 2. Land Cover Types within the Study Area

Sancerra Vista Cove
Vallejo, California

0 100 200 Feet

N

wra Environmental Consultants

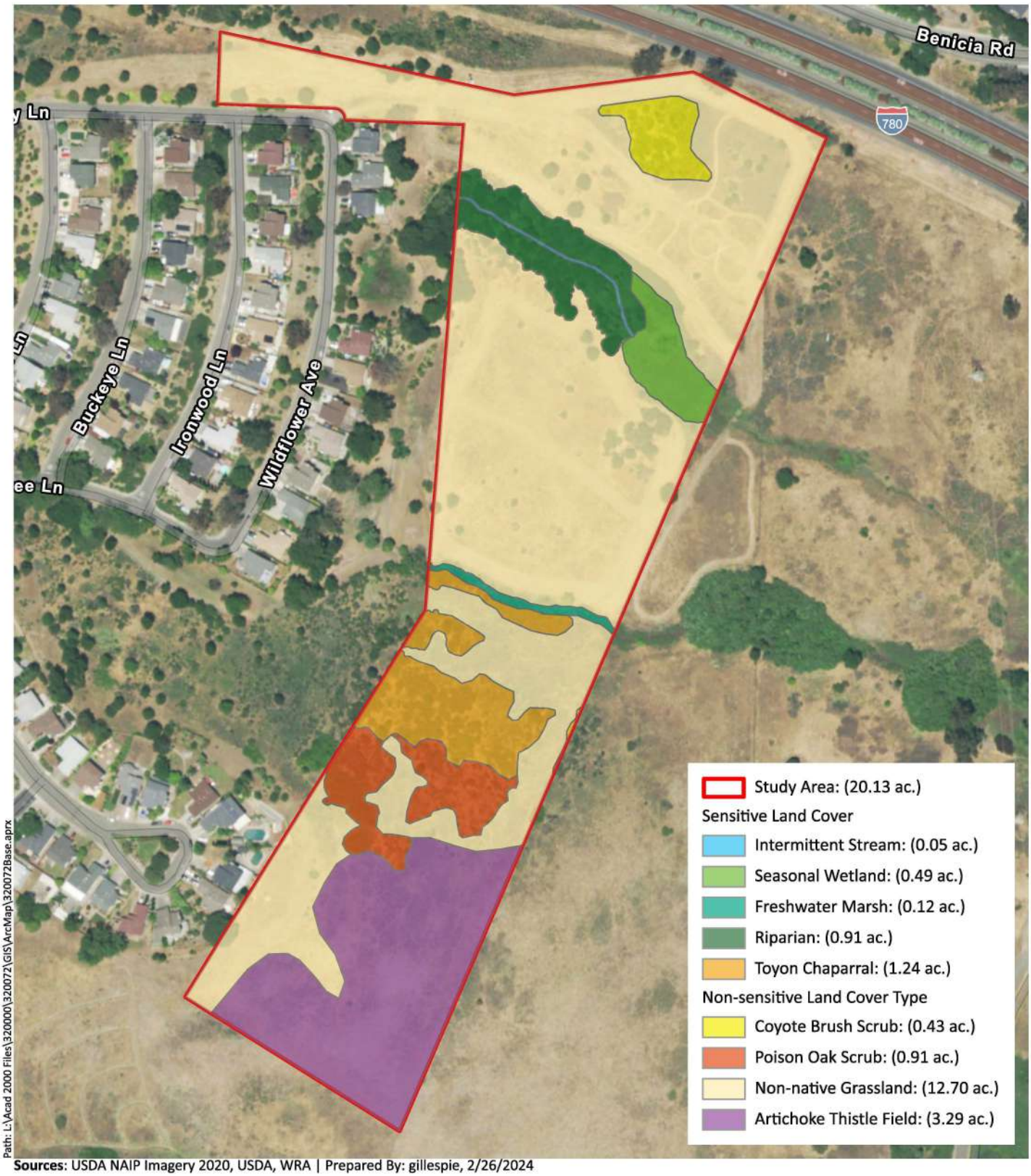


Figure 2. Land Cover Types within the Study Area

Sancerra Vista Cove
Vallejo, California

0 100 200 Feet

N

wra Environmental Consultants

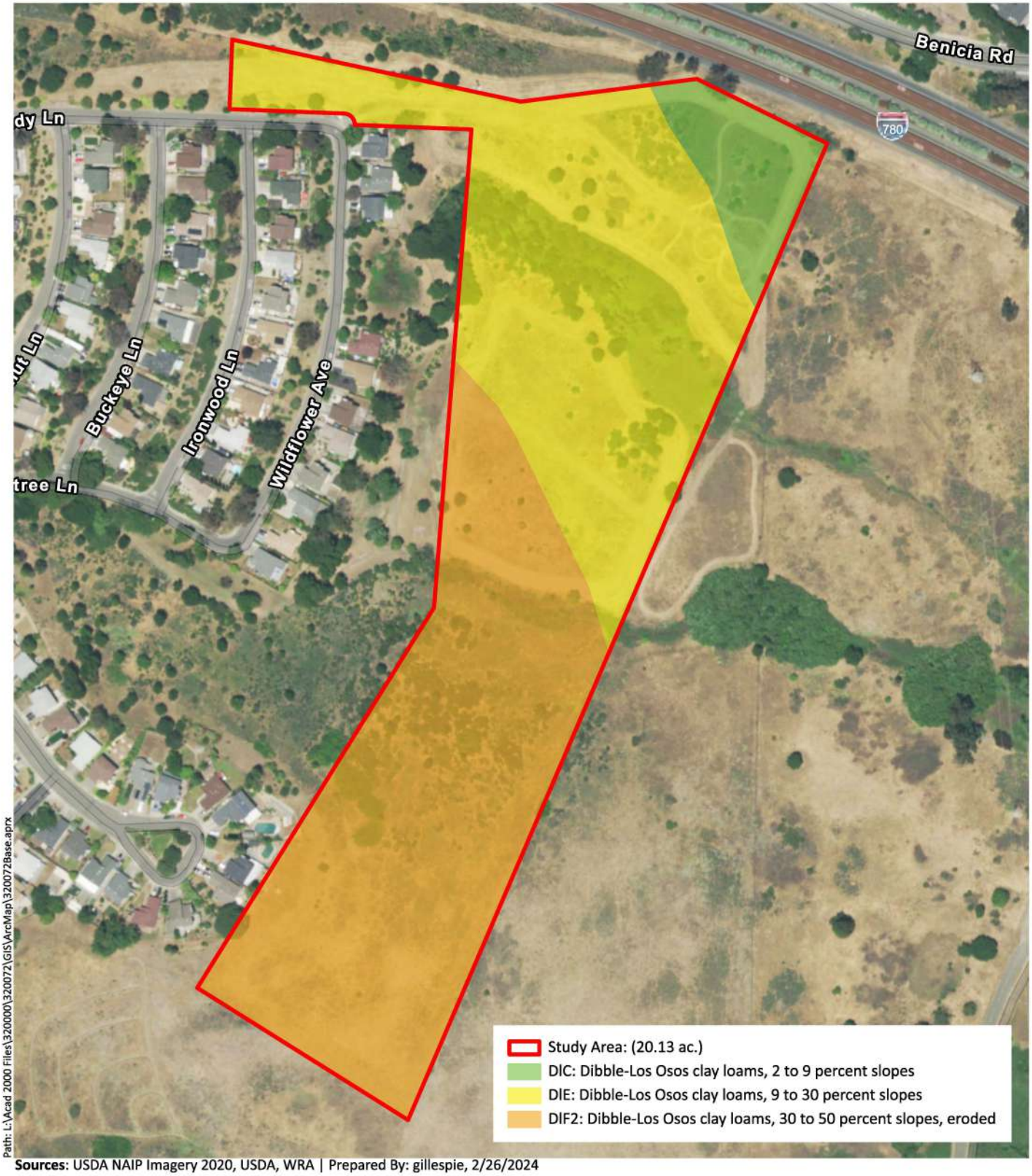


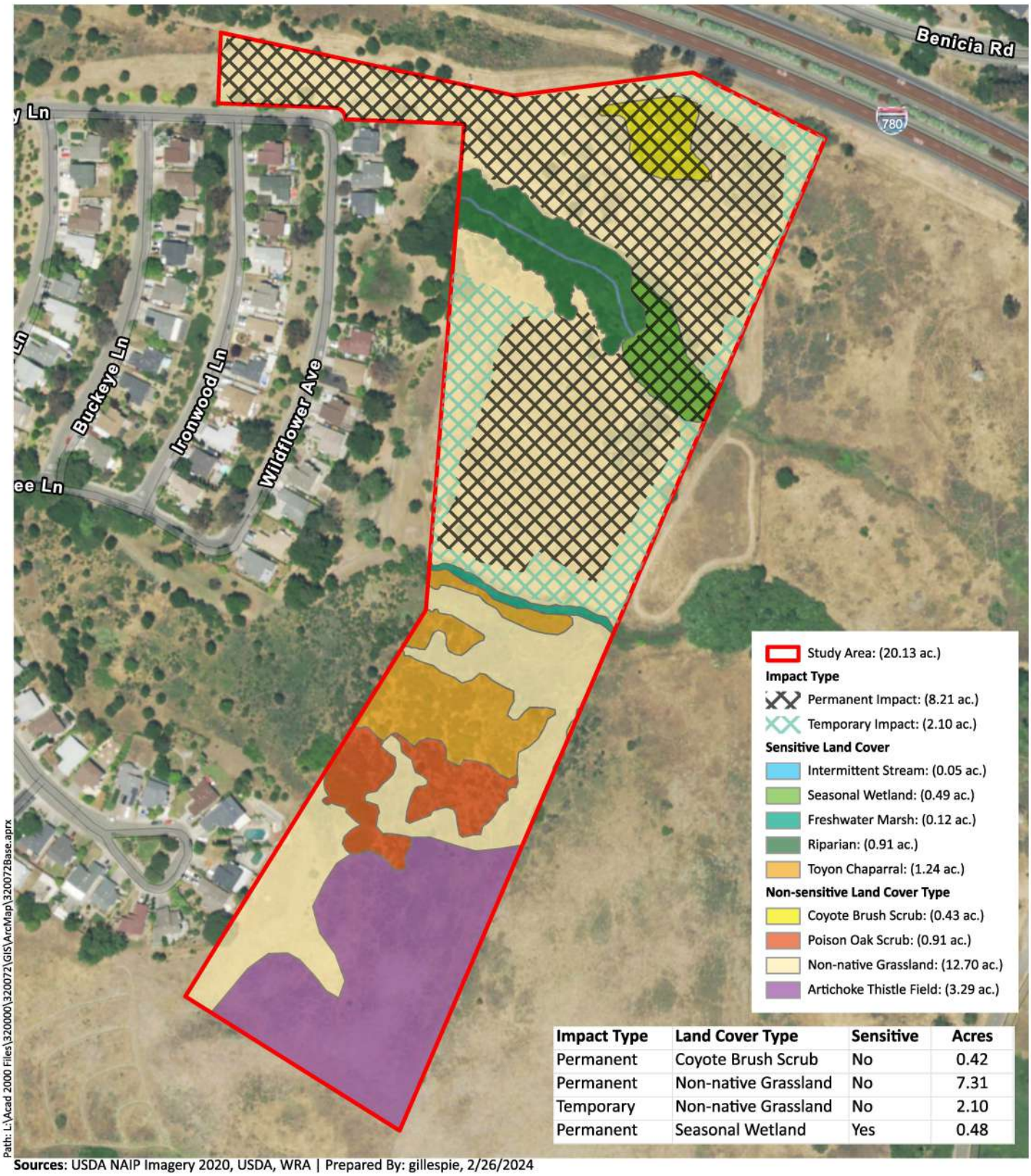
Figure 3. Soils Map

Sancerra Vista Cove
Vallejo, California

0 100 200 Feet

N

wra Environmental Consultants



Impact Type	Land Cover Type	Sensitive	Acres
Permanent	Coyote Brush Scrub	No	0.42
Permanent	Non-native Grassland	No	7.31
Temporary	Non-native Grassland	No	2.10
Permanent	Seasonal Wetland	Yes	0.48

Sources: USDA NAIP Imagery 2020, USDA, WRA | Prepared By: gillespie, 2/26/2024

Figure 4. Proposed Impacts within the Study Area

Sancerra Vista Cove
Vallejo, California

0 100 200 Feet

N

wra Environmental Consultants

APPENDIX B – SPECIES OBSERVED WITHIN THE STUDY AREA

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix B-1. Plant species observed within the Study Area on February 28 and July 14, 2022

Scientific name	Common name	Life form	Origin	Rare Status[1]	Invasive Status[2]	Wetland indicator (AW 2020)[3]
Amsinckia intermedia	Common fiddleneck	annual herb	native	-	-	-
Amsinckia lycopsoides	Tarweed fiddleneck	annual herb	native	-	-	-
Avena barbata	Slim oat	annual, perennial grass	native	-	Moderate	-
Avena fatua	Wildoats	annual grass	native	-	Moderate	-
Baccharis pilularis	Coyote brush	shrub	native	-	-	-
Bellardia trixago	Mediterranean lineseed	annual herb	native	-	Limited	-
Bolboschoenus maritimus ssp. *paludosus*	Saltmarsh bulrush	perennial grasslike herb	native	-	-	OBL
Brassica nigra	Black mustard	annual herb	non-native (invasive)	-	Moderate	-
Briza minor	Little rattlesnake grass	annual grass	non-native (invasive)	-	-	FAC
Bromus diandrus	Ripgut brome	annual grass	non-native	-	Moderate	-
Bromus hordeaceus	Soft chess	annual grass	native	-	Limited	FACU
Calandrinia menziesii	Red maids	annual herb	native	-	-	FACU
Calendula arvensis	Field marigold	annual herb	native	-	-	-
Capsella bursa-pastoris	Shepherd's purse	annual herb	native	-	-	FACU
Cardamine cf. hirsuta	Hairy bitter cress	non-native	annual herb	-	-	FACU
Carduus pycnocephalus ssp. *pycnocephalus*	Italian thistle	annual herb	native	-	Moderate	-
Chlorogalum pomeridianum	Amole	perennial herb	native	-	-	-
Cirsium vulgare	Bullthistle	perennial herb	native	-	Moderate	FACU
Cortaderia selloana	Pampas grass	perennial grass	-	-	High	FACU
Crassula connata	Sand pygmy weed	annual herb	non-native (invasive)	-	-	FAC

Scientific name	Common name	Life form	Origin	Rare Status[1]	Invasive Status[2]	Wetland indicator (AW 2020)[3]
Cynara cardunculus ssp. *flavescens*	Artichoke thistle	perennial herb	non-native (invasive)	-	Moderate	-
Cyperus eragrostis	Tall cyperus	perennial grasslike herb	-	-	-	FACW
Dittrichia graveolens	Stinkwort	annual herb	native	-	Moderate	-
Elymus caput-medusae	Medusa head	annual grass	native	-	High	-
Elymus triticoides	Beardless wild rye	perennial grass	non-native (invasive)	-	-	FAC
Erigeron canadensis	Canada horseweed	native	annual herb	-	-	FACU
Erodium botrys	Big heron bill	annual herb	native	-	-	FACU
Erodium cicutarium	Red stemmed filaree	annual herb	non-native (invasive)	-	Limited	-
Erodium moschatum	Whitestem filaree	annual herb	native	-	-	-
Euphorbia peplus	Petty spurge	annual herb	non-native (invasive)	-	-	-
Festuca bromoides	Brome fescue	annual grass	non-native	-	-	FACU
Festuca myuros	Rattail sixweeks grass	annual grass	non-native (invasive)	-	Moderate	FACU
Festuca perennis	Italian rye grass	annual, perennial grass	non-native (invasive)	-	Moderate	FAC
Ficus carica	Common fig	tree	native	-	Moderate	FACU
Foeniculum vulgare	Fennel	perennial herb	non-native	-	High	-
Galium aparine	Cleavers	annual herb	non-native	-	-	FACU
Geranium dissectum	Wild geranium	annual herb	non-native (invasive)	-	Limited	-
Geranium molle	Crane's bill geranium	annual, perennial herb	native	-	-	-
Helenium puberulum	Sneezeweed	perennial herb	non-native (invasive)	-	-	FACW
Helminthotheca echioides	Bristly ox-tongue	annual, perennial herb	non-native (invasive)	-	Limited	FAC

Scientific name	Common name	Life form	Origin	Rare Status[1]	Invasive Status[2]	Wetland indicator (AW 2020)[3]
Hemizonia congesta ssp. *luzulifolia*	Woodrush tarweed	annual herb	native	-	-	-
Heteromeles arbutifolia	Toyon	shrub	non-native (invasive)	-	-	-
Holcus lanatus	Common velvetgrass	perennial grass	native	-	Moderate	FAC
Juncus effusus	Common bog rush	perennial grasslike herb	non-native (invasive)	-	-	FACW
Juncus mexicanus	Mexican rush	perennial grasslike herb	non-native (invasive)	-	-	FACW
Juncus xiphioides	Iris leaved rush	perennial grasslike herb	native	-	-	OBL
Ligustrum lucidum	Glossy privet	tree, shrub	native	-	Limited	-
Lupinus succulentus	Arroyo lupine	annual herb	native	-	-	-
Lysimachia arvensis	Scarlet pimpernel	annual herb	non-native (invasive)	-	-	FAC
Malva sp.	Mallow	annual herb	non-native	-	-	-
Marah fabacea	California man-root	perennial herb, vine	non-native	-	-	-
Maytenus boaria	Mayten	tree, shrub	non-native	-	Watch	-
Medicago polymorpha	Bur clover	non-native (invasive)	annual herb	-	Limited	FACU
Nasturtium officinale	Watercress	perennial herb (aquatic)	non-native	-	-	OBL
Oxalis pes-caprae	Bermuda buttercup	perennial herb	non-native (invasive)	-	Moderate	-
Phalaris aquatica	Harding grass	perennial grass	non-native (invasive)	-	Moderate	FACU
Phoradendron leucarpum	American mistletoe	shrub (parasitic)	non-native (invasive)	-	-	-
Prunus cerasifera	Cherry plum	tree	non-native (invasive)	-	Limited	-
Prunus dulcis	Almond	tree	native	-	-	-
Pseudognaphalium luteoalbum	Jersey cudweed	annual herb	non-native (invasive)	-	-	FAC

Scientific name	Common name	Life form	Origin	Rare Status[1]	Invasive Status[2]	Wetland indicator (AW 2020)[3]
Quercus agrifolia	Coast live oak	tree	non-native	-	-	-
Raphanus sativus	Wild radish	annual, biennial herb	native	-	Limited	-
Rubus armeniacus	Himalayan blackberry	shrub	non-native (invasive)	-	High	FAC
Rumex crispus	Curly dock	non-native (invasive)	perennial herb	-	Limited	FAC
Rumex pulcher	Fiddleleaf dock	perennial herb	native	-	-	FAC
Salix laevigata	red willow	tree, shrub	native	-	-	FACW
Salix lasiolepis	Arroyo willow	tree, shrub	native	-	-	FACW
Sanicula bipinnatifida	Purple sanicle	native	perennial herb	-	-	-
Schoenoplectus americanus	Chairmaker's bulrush	perennial grasslike herb	native	-	-	OBL
Sisyrinchium bellum	Blue eyed grass	perennial herb	native	-	-	FACW
Sonchus oleraceus	Common sow thistle	annual herb	non-native (invasive)	-	-	UPL
Stipa pulchra	Purple needle grass	perennial grass	native	-	-	-
Toxicodendron diversilobum	Poison oak	vine, shrub	non-native	-	-	FACU
Typha sp.	-	-	native	-	-	-
Vicia sativa	Spring vetch	annual herb, vine	non-native	-	-	FACU

All species identified using the *Jepson eFlora* [Jepson Flora Project (eds.) 2022]; nomenclature follows *Jepson eFlora* [Jepson Flora Project (eds.) 2022]

[1] **California Native Plant Society. 2022. Inventory of Rare and Endangered Plants (online edition, v9-01 1.5). Sacramento, California. Online at: http://rareplants.cnps.org/; most recently accessed: March 2022**

FE: Federal Endangered
FT: Federal Threatened
SE: State Endangered
ST: State Threatened
SR: State Rare
Rank 1A: Plants presumed extinct in California
Rank 1B: Plants rare, threatened, or endangered in California and elsewhere
Rank 2: Plants rare, threatened, or endangered in California, but more common elsewhere

Rank 3: Plants about which we need more information – a review list

Rank 4: Plants of limited distribution – a watch list

[2] **California Invasive Plant Council. 2022. California Invasive Plant Inventory Database. California Invasive Plant Council, Berkeley, CA. Online at: http://www.cal-ipc.org/paf/; most recently accessed: March 2022**

High: Severe ecological impacts; high rates of dispersal and establishment; most are widely distributed ecologically.

Moderate: Substantial and apparent ecological impacts; moderate-high rates of dispersal, establishment dependent on disturbance; limited-moderate distribution ecologically

Limited: Minor or not well documented ecological impacts; low-moderate rate of invasiveness; limited distribution ecologically

Assessed: Assessed by Cal-IPC and determined to not be an existing current threat

[3] **U.S. Army Corps of Engineers. 2020. National Wetland Plant List, version 3.5. Engineer Research and Development Center. Cold Regions Research and Engineering Laboratory, Hanover, NH. Online at: http://wetland-plants.usace.army.mil/; most recently accessed: March 2022**

OBL: Almost always found in wetlands

FACW: Usually found in wetlands

FAC: Equally found in wetlands and uplands

FACU: Usually not found in wetlands

UPL: Almost never found in wetlands

NL: Not listed, assumed almost never found in wetlands

NI: No information; not factored during wetland delineation

Appendix B-2. Wildlife Species Observed within the Study Area on February 28 and July 14, 2022

Scientific Name	Common Name	Conservation Status[1]
Mammals		
Canis latrans	Coyote	-
Odocoileus hemionus californicus	California mule deer	-
Sus scrofa	Feral hog	-
Thomomys bottae	Botta's pocket Gopher	-
Birds		
Aphelocoma californica	California scrub-jay	-
Buteo jamaicensis	Red-tailed hawk	-
Buteo lineatus	Red-shouldered hawk	-
Calypte anna	Anna's hummingbird	-
Cathartes aura	Turkey vulture	-
Colaptes auratus	Northern flicker	-
Corvus brachyrhynchos	American crow	-
Elanus leucurus	White-tailed kite	FP
Haemorhous mexicanus	House finch	-
Melozone crissalis	California towhee	-
Mimus polyglottos	Northern mockingbird	-
Sayornis saya	Say's phoebe	-
Setophaga coronata	Yellow-rumped warbler	-
Zenaida macroura	Mourning dove	-
Zonotrichia atricapilla	Golden-crowned sparrow	-

Scientific Name	Common Name	Conservation Status[1]
Invertebrates		
Bombus spp.	Bumblebee	-
Apis mellifera	European honeybee	-

[1]Key to Conservation Status:

FP CDFW Fully Protected Species

APPENDIX C – POTENTIAL FOR SPECIAL-STATUS SPECIES TO OCCUR IN THE STUDY AREA

THIS PAGE INTENTIONALLY LEFT BLANK

Appendix C. Potential for Special-status Species to Occur in the Study Area. Special-status plant and wildlife species table with the potential to occur within the vicinity of the Study Area (Cuttings Wharf, Cordelia, Fairfield South, Mare Island, Benicia, Vine Hill, Richmond, Briones Valley, and Walnut Creek USGS 7.5' topographic quadrangles). Results include database searches of California Native Plant Society Rare and Endangered Plant Inventory, California Natural Diversity Database, Information Planning and Conservation, as well as U.S. Fish and Wildlife Service Threatened and Endangered Species Lists.

SPECIES	STATUS	HABITAT	POTENTIAL TO OCCUR	RECOMMENDATIONS
Plants				
bent-flowered fiddleneck *Amsinckia lunaris*	Rank 1B.2	Cismontane woodland, coastal bluff scrub, valley and foothill grassland. Elevation ranges from 10 to 1640 feet (3 to 500 meters). Blooms Mar-Jun.	**Unlikely.** Although the Study Area contains grassland habitat, the site has been historically disturbed, and in some areas, it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat, and is therefore unlikely to support this species.	No further actions are recommended for this species.
California androsace *Androsace elongata* ssp. *acuta*	Rank 4.2	Chaparral, cismontane woodland, coastal scrub, meadows and seeps, pinyon and juniper woodland, valley and foothill grassland. Elevation ranges from 490 to 4280 feet (150 to 1305 meters). Blooms Mar-Jun.	**Unlikely.** Although the Study Area contains grassland habitat, the site has been historically disturbed, and in some areas, it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. Few native species are present, indicating that the grassland is poor quality habitat, and is therefore unlikely to support this species.	No further actions are recommended for this species.
slender silver moss *Anomobryum julaceum*	Rank 4.2	Broadleafed upland forest, lower montane coniferous forest, north coast coniferous forest. Elevation ranges from 330 to 3280 feet (100 to 1000 meters).	**Unlikely.** This species is known from mesic to perennially wet sandstone (K. Kellman, pers. com.), and such habitat is absent from the Study Area.	No further actions are recommended for this species.
pallid manzanita *Arctostaphylos pallida*	FT, SE, Rank 1B.1	Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, coastal scrub. Elevation ranges from 605 to 1525 feet (185 to 465 meters). Blooms Dec-Mar.	**No Potential.** This species occurs on uplifted marine terraces on siliceous shale or thin chert (CDFW 2024b), and such substrate is absent from the Study Area.	No further actions are recommended for this species.

SPECIES	STATUS	HABITAT	POTENTIAL TO OCCUR	RECOMMENDATIONS
alkali milk-vetch *Astragalus tener* var. *tener*	Rank 1B.2	Playas, valley and foothill grassland, vernal pools. Elevation ranges from 5 to 195 feet (1 to 60 meters). Blooms Mar-Jun.	**No Potential.** The Study Area does not contain vernal pools or alkaline soils necessary to support this species.	No further actions are recommended for this species.
crownscale *Atriplex coronata* var. *coronata*	Rank 4.2	Chenopod scrub, valley and foothill grassland, vernal pools. Elevation ranges from 5 to 1935 feet (1 to 590 meters). Blooms Mar-Oct.	**No Potential.** The Study Area does not contain vernal pools or alkaline soils necessary to support this species.	No further actions are recommended for this species.
vernal pool smallscale *Atriplex persistens*	Rank 1B.2	Vernal pools. Elevation ranges from 35 to 375 feet (10 to 115 meters). Blooms Jun-Oct.	**No Potential**. The Study Area does not contain vernal pools necessary to support this species.	No further actions are recommended for this species.
big-scale balsamroot *Balsamorhiza macrolepis*	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 150 to 5100 feet (45 to 1555 meters). Blooms Mar-Jun.	**Unlikely.** Although the Study Area contains grassland and chaparral habitat, the site has been historically disturbed, and in some areas it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat and is therefore unlikely to support this species. Based on historic aerial imagery (NETR 2024), chaparral did not start establishing in the Study Area until the 1980s. As there are no occurrences of this species in the immediate vicinity, the Study Area is unlikely to have a historic seedbank containing this species and is unlikely to have been colonized by it.	No further actions are recommended for this species.
big tarplant *Blepharizonia plumosa*	Rank 1B.1	Valley and foothill grassland. Elevation ranges from 100 to 1655 feet (30 to 505 meters). Blooms Jul-Oct.	**No Potential.** The Study Area does not contain alkaline soils necessary to support this species.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Mt. Diablo fairy-lantern *Calochortus pulchellus*	Rank 1B.2	Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland. Elevation ranges from 100 to 2755 feet (30 to 840 meters). Blooms Apr-Jun.	**Unlikely.** Although the Study Area contains grassland and chaparral habitat, the site has been historically disturbed, and in some areas, it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat and is therefore unlikely to support this species. Based on historic aerial imagery (NETR 2024), chaparral did not start establishing in the Study Area until the 1980s. As there are no occurrences of this species in the immediate vicinity, the Study Area is unlikely to have a historic seedbank containing this species and is unlikely to have been colonized by it.	No further actions are recommended for this species.
Oakland star-tulip *Calochortus umbellatus*	Rank 4.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 330 to 2295 feet (100 to 700 meters). Blooms Mar-May.	**Unlikely.** Although the Study Area contains grassland, forest, and chaparral habitat, the site has been historically disturbed, and in some areas, it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat and is therefore unlikely to support this species. Based on historic aerial imagery (NETR 2024), chaparral did not start establishing in the Study Area until the 1980s. As there are no occurrences of this species in the immediate vicinity, the Study Area is unlikely to have a historic seedbank containing this species and is unlikely to have been colonized by it. Forested areas are too shady to support this species.	No further actions are recommended for this species.
coastal bluff morning-glory *Calystegia purpurata* ssp. *saxicola*	Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, north coast coniferous forest. Elevation ranges from 0 to 345 feet (0 to 105 meters). Blooms (Mar)Apr-Sep.	**No Potential.** The Study Area does not contain coastal habitats necessary to support this species.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Lyngbye's sedge *Carex lyngbyei*	Rank 2B.2	Marshes and swamps. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms Apr-Aug.	**Unlikely.** Although the Study Area contains a marsh, this species is known from brackish habitats, which are absent from the Study Area.	No further actions are recommended for this species.
Tiburon paintbrush *Castilleja affinis* var. *neglecta*	FE, ST, Rank 1B.2	Valley and foothill grassland. Elevation ranges from 195 to 1310 feet (60 to 400 meters). Blooms Apr-Jun.	**No Potential.** The Study Area does not contain serpentine soils necessary to support this species.	No further actions are recommended for this species.
johnny-nip *Castilleja ambigua* var. *ambigua*	Rank 4.2	Coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1425 feet (0 to 435 meters). Blooms Mar-Aug.	**Unlikely.** Although the Study Area contains grassland habitat, the site has been historically disturbed, and in some areas, it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat and is therefore unlikely to support this species.	No further actions are recommended for this species.
Congdon's tarplant *Centromadia parryi* ssp. *congdonii*	Rank 1B.1	Valley and foothill grassland. Elevation ranges from 0 to 755 feet (0 to 230 meters). Blooms May-Oct(Nov).	**Unlikely.** Although the Study Area contains grassland habitat, it does not contain alkaline soils typical of this species. The nearest modern occurrence of this species is 7 miles southeast of the Study Area. No species of *Centromadia* were observed during site visits.	No further actions are recommended for this species.
pappose tarplant *Centromadia parryi* ssp. *parryi*	Rank 1B.2	Chaparral, coastal prairie, marshes and swamps, meadows and seeps, valley and foothill grassland. Elevation ranges from 0 to 1380 feet (0 to 420 meters). Blooms May-Nov.	**Unlikely.** Although the Study Area contains marsh habitat, it is too consistently inundated to support this species. Additionally, the Study Area does not contain alkaline soils, on which this species often occurs (CDFW 2024b). The nearest occurrence of this species is approximately 6 miles northeast of the Study Area. No species of *Centromadia* were observed during site visits.	No further actions are recommended for this species.
Point Reyes salty bird's-beak *Chloropyron maritimum* ssp. *palustre*	Rank 1B.2	Marshes and swamps. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms Jun-Oct.	**No Potential.** Although the Study Area contains a marsh, it does not contain a tidal marsh, which is necessary to support this species.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
soft salty bird's-beak *Chloropyron molle* ssp. *molle*	FE, SR, Rank 1B.2	Marshes and swamps. Elevation ranges from 0 to 10 feet (0 to 3 meters). Blooms Jun-Nov.	**No Potential.** Although the Study Area contains a marsh, it does not contain a tidal marsh, which is necessary to support this species.	No further actions are recommended for this species.
Bolander's water-hemlock *Cicuta maculata* var. *bolander*i	Rank 2B.1	Marshes and swamps. Elevation ranges from 0 to 655 feet (0 to 200 meters). Blooms Jul-Sep.	**Unlikely.** Although the Study Area contains a marsh, based on historic aerial imagery (NETR 2024), it is recently developed and appears to persist as a result of residential runoff. As such, it is low quality habitat. In addition, all occurrences in the vicinity of the Study Area occur in tidal marsh, which is absent from the Study Area.	No further actions are recommended for this species.
Franciscan thistle *Cirsium andrewsii*	Rank 1B.2	Broadleafed upland forest, coastal bluff scrub, coastal prairie, coastal scrub. Elevation ranges from 0 to 490 feet (0 to 150 meters). Blooms Mar-Jul.	**Unlikely.** Although the Study Area contains forest habitat, it is too shady to support this species.	No further actions are recommended for this species.
Suisun thistle *Cirsium hydrophilum* var. *hydrophilum*	FE, Rank 1B.1	Marshes and swamps. Elevation ranges from 0 to 5 feet (0 to 1 meters). Blooms Jun-Sep.	**No Potential.** Although the Study Area contains a marsh, it does not contain a tidal marsh, which is necessary to support this species.	No further actions are recommended for this species.
western leatherwood *Dirca occidentalis*	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, closed-cone coniferous forest, north coast coniferous forest, riparian forest, riparian woodland. Elevation ranges from 80 to 1395 feet (25 to 425 meters). Blooms Jan-Mar (Apr).	**Unlikely.** Although the Study Area contains forest habitat, based on historic aerial imagery (NETR 2024), the forest is recently established. As there are no occurrences of this species in the immediate vicinity, the Study Area is unlikely to have a historic seedbank containing this species and is unlikely to have been colonized by it.	No further actions are recommended for this species.
dwarf downingia *Downingia pusilla*	Rank 2B.2	Valley and foothill grassland, vernal pools. Elevation ranges from 5 to 1460 feet (1 to 445 meters). Blooms Mar-May.	**No Potential.** The Study Area does not contain vernal pools necessary to support this species.	No further actions are recommended for this species.
small spikerush *Eleocharis parvula*	Rank 4.3	Marshes and swamps. Elevation ranges from 5 to 9910 feet (1 to 3020 meters). Blooms (Apr)Jun-Aug (Sep).	**Unlikely.** Although the Study Area contains a marsh, based on historic aerial imagery (NETR 2024), it is recently developed and appears to persist as a result of residential runoff. As such, it is low quality habitat.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
streamside daisy *Erigeron biolettii*	Rank 3	Broadleafed upland forest, cismontane woodland, north coast coniferous forest. Elevation ranges from 100 to 3610 feet (30 to 1100 meters). Blooms Jun-Oct.	**Unlikely.** Although the Study Area contains forest habitat, based on historic aerial imagery (NETR 2024), the forest is recently established. As there are no occurrences of this species in the immediate vicinity, the Study Area is unlikely to have a historic seedbank containing this species and is unlikely to have been colonized by it.	No further actions are recommended for this species.
Mt. Diablo buckwheat *Eriogonum truncatum*	Rank 1B.1	Chaparral, coastal scrub, valley and foothill grassland. Elevation ranges from 10 to 1150 feet (3 to 350 meters). Blooms Apr-Sep (Nov-Dec).	**No Potential.** This species has a restricted range to Mount Diablo, approximately 15 miles southeast of the Study Area. Additionally, the Study Area does not contain alkaline soil necessary to support this species.	No further actions are recommended for this species.
Jepson's coyote-thistle *Eryngium jepsonii*	Rank 1B.2	Valley and foothill grassland, vernal pools. Elevation ranges from 10 to 985 feet (3 to 300 meters). Blooms Apr-Aug.	**No Potential.** The Study Area does not contain vernal pools necessary to support this species.	No further actions are recommended for this species.
cut-leaved monkeyflower *Erythranthe laciniata*	Rank 4.3	Chaparral, lower montane coniferous forest, upper montane coniferous forest. Elevation ranges from 1610 to 8695 feet (490 to 2650 meters). Blooms Apr-Jul.	**No Potential.** The nearest recorded occurrence is a cultivated specimen from 1901 in Berkeley, California. Wild populations of this species are known from the western Sierra Nevada and adjacent foothills, far from the Study Area.	No further actions are recommended for this species.
San Joaquin spearscale *Extriplex joaquinana*	Rank 1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland. Elevation ranges from 5 to 2740 feet (1 to 835 meters). Blooms Apr-Oct.	**No Potential.** The Study Area does not contain alkaline soils necessary to support this species.	No further actions are recommended for this species.
minute pocket moss *Fissidens pauperculus*	Rank 1B.2	North coast coniferous forest. Elevation ranges from 35 to 3360 feet (10 to 1024 meters).	**No Potential.** The Study Area does not contain north coast coniferous forest necessary to support this species.	No further actions are recommended for this species.
fragrant fritillary *Fritillaria liliacea*	Rank 1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 10 to 1345 feet (3 to 410 meters). Blooms Feb-Apr.	**Unlikely.** Although the Study Area contains grassland and marsh habitat, it is too consistently inundated to support this species.	No further actions are recommended for this species.

SPECIES	STATUS	HABITAT	POTENTIAL TO OCCUR	RECOMMENDATIONS
Diablo helianthella *Helianthella castanea*	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Elevation ranges from 195 to 4265 feet (60 to 1300 meters). Blooms Mar-Jun.	**Unlikely.** Although the Study Area contains grassland, forest, and chaparral habitat, the site has been historically disturbed, and in some areas, it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat and is therefore unlikely to support this species. Based on historic aerial imagery (NETR 2024), chaparral did not start establishing in the Study Area until the 1980s. As there are no occurrences of this species in the immediate vicinity, the Study Area is unlikely to have a historic seedbank containing this species and is unlikely to have been colonized by it. Forested areas are too shady to support this species.	No further actions are recommended for this species.
hogwallow starfish *Hesperevax caulescens*	Rank 4.2	Valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1655 feet (0 to 505 meters). Blooms Mar-Jun.	**No Potential.** The Study Area does not contain vernal pools necessary to support this species.	No further actions are recommended for this species.
woolly rose-mallow *Hibiscus lasiocarpos* var. *occidentalis*	Rank 1B.2	Marshes and swamps (freshwater) Elevation ranges from 0 to 395 feet (0 to 120 meters). Blooms June-Sep.	**Unlikely.** Although the Study Area contains a marsh, based on historic aerial imagery (NETR 2024), it is recently developed and appears to persist as a result of residential runoff. As such, it is low quality habitat.	No further actions are recommended for this species.
Loma Prieta hoita *Hoita strobilina*	Rank 1B.1	Chaparral, cismontane woodland, riparian woodland. Elevation ranges from 100 to 2820 feet (30 to 860 meters). Blooms May-Jul(Aug-Oct).	**No Potential.** The Study Area does not contain serpentine soils necessary to support this species.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Santa Cruz tarplant *Holocarpha macradenia*	FT, SE, Rank 1B.1	Coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 35 to 720 feet (10 to 220 meters). Blooms Jun-Oct.	**Unlikely.** Although the Study Area contains grassland habitat, the site has been historically disturbed, and in some areas, it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat and is therefore unlikely to support this species.	No further actions are recommended for this species.
coast iris *Iris longipetala*	Rank 4.2	Coastal prairie, lower montane coniferous forest, meadows and seeps. Elevation ranges from 0 to 1970 feet (0 to 600 meters). Blooms Mar-May(Jun).	**Unlikely.** Although the Study Area contains grassland habitat, the site has been historically disturbed, and in some areas, it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat and is therefore unlikely to support this species.	No further actions are recommended for this species.
Carquinez goldenbush *Isocoma arguta*	Rank 1B.1	Valley and foothill grassland. Elevation ranges from 5 to 65 feet (1 to 20 meters). Blooms Aug-Dec.	**No Potential.** The Study Area does not contain alkaline soils necessary to support this species.	No further actions are recommended for this species.
Southern California black walnut *Juglans californica*	Rank 4.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland. Elevation ranges from 165 to 2955 feet (50 to 900 meters). Blooms Mar-Aug.	**No Potential.** The Study Area is well outside of the known range of this species, which is restricted to Southern California.	No further actions are recommended for this species.
Contra Costa goldfields *Lasthenia conjugens*	FE, Rank 1B.1	Cismontane woodland, playas, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1540 feet (0 to 470 meters). Blooms Mar-Jun.	**No Potential.** The Study Area does not contain vernal pools necessary to support this species.	No further actions are recommended for this species.
Ferris' goldfields *Lasthenia ferrisiae*	Rank 4.2	Vernal pools. Elevation ranges from 65 to 2295 feet (20 to 700 meters). Blooms Feb-May.	**No Potential.** The Study Area does not contain vernal pools necessary to support this species.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Delta tule pea *Lathyrus jepsonii* var. *jepsonii*	Rank 1B.2	Marshes and swamps. Elevation ranges from 0 to 15 feet (0 to 5 meters). Blooms May-Jul(Aug-Sep).	**No Potential.** The Study Area does not contain tidally influenced marshes necessary to support this species.	No further actions are recommended for this species.
legenere *Legenere limosa*	Rank 1B.1	Vernal pools. Elevation ranges from 5 to 2885 feet (1 to 880 meters). Blooms Apr-Jun.	**No Potential.** The Study Area does not contain vernal pools necessary to support this species.	No further actions are recommended for this species.
bristly leptosiphon *Leptosiphon acicularis*	Rank 4.2	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Elevation ranges from 180 to 4920 feet (55 to 1500 meters). Blooms Apr-Jul.	**Unlikely.** Although the Study Area contains grassland and chaparral habitat, the site has been historically disturbed, and in some areas, it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat and is therefore unlikely to support this species. Based on historic aerial imagery (NETR 2024), chaparral did not start establishing in the Study Area until the 1980s. As there are no occurrences of this species in the immediate vicinity, the Study Area is unlikely to have a historic seedbank containing this species and is unlikely to have been colonized by it.	No further actions are recommended for this species.
large-flowered leptosiphon *Leptosiphon grandiflorus*	Rank 4.2	Cismontane woodland, closed-cone coniferous forest, coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub, valley and foothill grassland. Elevation ranges from 15 to 4005 feet (5 to 1220 meters). Blooms Apr-Aug.	**Unlikely.** Although the Study Area contains grassland habitat, the site has been historically disturbed, and in some areas, it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat and is therefore unlikely to support this species.	No further actions are recommended for this species.

SPECIES	STATUS	HABITAT	POTENTIAL TO OCCUR	RECOMMENDATIONS
Jepson's leptosiphon *Leptosiphon jepsonii*	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland. Elevation ranges from 330 to 1640 feet (100 to 500 meters). Blooms Mar-May.	**Unlikely.** Although the Study Area contains grassland habitat, the site has been historically disturbed, and in some areas it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat and is therefore unlikely to support this species.	No further actions are recommended for this species.
woolly-headed lessingia *Lessingia hololeuca*	Rank 3	Broadleafed upland forest, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Elevation ranges from 50 to 1000 feet (15 to 305 meters). Blooms Jun-Oct.	**Unlikely.** Although the Study Area contains grassland habitat, the site has been historically disturbed, and in some areas it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat and is therefore unlikely to support this species.	No further actions are recommended for this species.
Mason's lilaeopsis *Lilaeopsis masonii*	SR, Rank 1B.1	Marshes and swamps, riparian scrub. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms Apr-Nov.	**No Potential.** Tidal marsh is absent from the Study Area.	No further actions are recommended for this species.
Delta mudwort *Limosella australis*	Rank 2B.1	Marshes and swamps, riparian scrub. Elevation ranges from 0 to 10 feet (0 to 3 meters). Blooms May-Aug.	**No Potential.** Tidal marsh is absent from the Study Area.	No further actions are recommended for this species.
Hall's bush-mallow ***Malacothamnus hallii***	Rank 1B.2	Chaparral, coastal scrub. Elevation ranges from 35 to 2495 feet (10 to 760 meters). Blooms (Apr)May- Sep(Oct).	Unlikely. The Study Area was historically grassland, which is not suitable habitat for this species. Based on historic aerial imagery, shrub stands did not begin establishing in the Study Area until the 1980s. The nearest occurrence of this species is located approximately 15 miles southeast, across the Carquinez Strait/Suisun Bay. It is unlikely that this species could have colonized the Study Area from that distance and across the geographic and urban development barriers that are present.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Oregon meconella *Meconella oregana*	Rank 1B.1	Coastal prairie, coastal scrub. Elevation ranges from 820 to 2035 feet (250 to 620 meters). Blooms Mar-Apr.	**No Potential.** The Study Area does not contain coastal habitats necessary to support this species.	No further actions are recommended for this species.
San Antonio Hills monardella *Monardella antonina* ssp. *antonina*	Rank 3	Chaparral, cismontane woodland. Elevation ranges from 1050 to 3280 feet (320 to 1000 meters). Blooms Jun-Aug.	**Unlikely.** Although the Study Area contains chaparral habitat, based on historic aerial imagery (NETR 2024), chaparral did not start establishing in the Study Area until the 1980s. As there are no occurrences of this species in the immediate vicinity, the Study Area is unlikely to have a historic seedbank containing this species and is unlikely to have been colonized by it.	No further actions are recommended for this species.
Antioch Dunes evening-primrose *Oenothera deltoides* ssp. *howellii*	FE, SE, Rank 1B.1	Inland dunes. Elevation ranges from 0 to 100 feet (0 to 30 meters). Blooms Mar-Sep.	**No Potential.** The Study Area does not contain inland dunes necessary to support this species.	No further actions are recommended for this species.
Marin knotweed *Polygonum marinense*	Rank 3.1	Marshes and swamps. Elevation ranges from 0 to 35 feet (0 to 10 meters). Blooms (Apr)May-Aug(Oct).	**No Potential.** Although the Study Area contains a marsh, it is not tidal or brackish.	No further actions are recommended for this species.
California alkali grass *Puccinellia simplex*	Rank 1B.2	Chenopod scrub, meadows and seeps, valley and foothill grassland, vernal pools. Elevation ranges from 5 to 3050 feet (2 to 930 meters). Blooms Mar-May.	**No Potential.** The Study Area does not contain vernal pools necessary to support this species.	No further actions are recommended for this species.
Lobb's aquatic buttercup *Ranunculus lobbii*	Rank 4.2	Cismontane woodland, north coast coniferous forest, valley and foothill grassland, vernal pools. Elevation ranges from 50 to 1540 feet (15 to 470 meters). Blooms Feb-May.	**No Potential.** The Study Area does not contain seasonally ponded areas necessary to support this species.	No further actions are recommended for this species.
chaparral ragwort *Senecio aphanactis*	Rank 2B.2	Chaparral, cismontane woodland, coastal scrub. Elevation ranges from 50 to 2625 feet (15 to 800 meters). Blooms Jan-Apr (May).	**No Potential.** The Study Area does not contain alkaline soils necessary to support this species.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
long-styled sand-spurrey *Spergularia macrotheca* var. *longistyla*	Rank 1B.2	Marshes and swamps, meadows and seeps. Elevation ranges from 0 to 835 feet (0 to 255 meters). Blooms Feb-May.	**No Potential.** The Study Area does not contain alkaline soils necessary to support this species.	No further actions are recommended for this species.
northern slender pondweed *Stuckenia filiformis* ssp. *alpina*	Rank 2B.2	Marshes and swamps. Elevation ranges from 985 to 7055 feet (300 to 2150 meters). Blooms May-Jul.	**No Potential.** This species occurs in clear, shallow water (CDFW 2024b), which is absent from the Study Area.	No further actions are recommended for this species.
California seablite *Suaeda californica*	FE, Rank 1B.1	Marshes and swamps. Elevation ranges from 0 to 50 feet (0 to 15 meters). Blooms Jul-Oct.	**No Potential.** Tidal marsh is absent from the Study Area.	No further actions are recommended for this species.
Suisun Marsh aster *Symphyotrichum lentum*	Rank 1B.2	Marshes and swamps. Elevation ranges from 0 to 10 feet (0 to 3 meters). Blooms (Apr)May-Nov.	**No Potential.** Tidal marsh is absent from the Study Area.	No further actions are recommended for this species.
two-fork clover *Trifolium amoenum*	FE, Rank 1B.1	Coastal bluff scrub, valley and foothill grassland. Elevation ranges from 15 to 1360 feet (5 to 415 meters). Blooms Apr-Jun.	**Unlikely.** Although the Study Area contains grassland habitat, the site has been historically disturbed, and in some areas, it receives modern anthropogenic disturbance, including mowing, discing, and off-highway vehicle use. The grassland is dominated by a very dense cover of non-native and invasive species. Few native species are present, indicating that the grassland is poor quality habitat and is therefore unlikely to support this species.	No further actions are recommended for this species.
saline clover *Trifolium hydrophilum*	Rank 1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Elevation ranges from 0 to 985 feet (0 to 300 meters). Blooms Apr-Jun.	**No Potential.** The Study Area does not contain vernal pools or alkaline soils necessary to support this species.	No further actions are recommended for this species.
oval-leaved viburnum *Viburnum ellipticum*	Rank 2B.3	Chaparral, cismontane woodland, lower montane coniferous forest. Elevation ranges from 705 to 4595 feet (215 to 1400 meters). Blooms May-Jun.	**Unlikely.** Although the Study Area contains chaparral habitat, based on historic aerial imagery (NETR 2024), chaparral did not start establishing in the Study Area until the 1980s. As there are no occurrences of this species in the immediate vicinity, the Study Area is unlikely to have a historic seedbank containing this species and is unlikely to have been colonized by it.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Birds				
Golden eagle *Aquila chrysaetos*	FP, BGEPA	Occurs year-round in rolling foothills, mountain areas, sage-juniper flats, and deserts. Cliff-walled canyons provide nesting habitat in most parts of range; also nests in large trees, usually within otherwise open areas.	**Unlikely.** The nearest documented breeding occurrence of this species was 1.8 mi north of the Study Area in 1987 (CDFW 2024b). There are dozens of historic and recent occurrences in the vicinity of the Study Area (CDFW 2024b, Cornell 2024). There is potential foraging habitat within the Study Area in the form of nonnative annual grasslands and scrub communities, however during the site visit on February 28, 2022, no ground squirrel burrows were observed. There is no suitable nesting habitat within the Study Area. Although golden eagles may fly over the Study Area, they are unlikely to forage or nest within the Study Area.	No further actions are recommended for this species.
Bald eagle *Haliaeetus leucocephalus*	SE, FP, BGEPA	Occurs year-round in California, but primarily a winter visitor; breeding population is growing. Nests in large trees in the vicinity of larger lakes, reservoirs and rivers. Wintering habitat somewhat more variable but usually features large concentrations of waterfowl or fish.	**Unlikely.** The nearest documented breeding occurrence of this species was over 10 mi south of the Study Area in 2006 (CDFW 2024b). There are no other occurrences within 60 miles of the Study Area (CDFW 2024b). The Study Area lacks suitable foraging and nesting habitat for this species. There are no large bodies of freshwater in the Study Area.	No further actions are recommended for this species.
Northern harrier *Circus hudsonius*	SSC	Year-round resident and winter visitor. Found in open habitats including grasslands, prairies, marshes and agricultural areas. Nests on the ground in dense vegetation, typically near water or otherwise moist areas. Preys on small vertebrates.	**Moderate Potential.** The nearest documented breeding occurrence of this species was less than 1 mile southeast of the Study Area in 2004 in the Benicia State Recreation Area (CDFW 2024b). The Benicia State Recreation Area is a 200-acre tidal wetland that could act as source population to the Study Area. Additionally, the Study Area contains suitable foraging and nesting habitat for this species. There is moderate potential this species will use the Study Area for foraging and nesting.	Work windows or pre-construction surveys. See Section 7 for a discussion of mitigation measures.

SPECIES	STATUS	HABITAT	POTENTIAL TO OCCUR	RECOMMENDATIONS
Swainson's hawk *Buteo swainsoni*	ST	Summer resident in California's Central Valley and limited portions of the southern California interior. Nests in tree groves and isolated trees in riparian and agricultural areas, including near buildings. Forages in grasslands and scrub habitats as well as agricultural fields, especially alfalfa. Preys on arthropods year-round as well as smaller vertebrates during the breeding season.	**Unlikely.** The nearest documented breeding occurrence of this species was over 9 mi north of the Study Area in 2004 (CDFW 2024b). Swainson's hawk is documented to occur in the region on occasion during migration (Cornell 2024). The Study Area contains suitable foraging in the form of grasslands, but this species is not known to nest in the vicinity and may only occasionally pass through during migration.	No further actions are recommended for this species.
American peregrine falcon *Falco peregrinus anatum*	FP	Year-round resident and winter visitor. Occurs in a wide variety of habitats, though often associated with coasts, bays, marshes and other bodies of water. Nests on protected cliffs and also on man-made structures including buildings and bridges.	**Unlikely.** This species has been documented foraging within 2 miles of the Study Area (Cornell 2024). The Study Area contains foraging habitat, but no nesting habitat such as cliffs, bridges, or other tall structures. Foraging habitat within the Study Area is not primary as this species is most likely to forage in the marshland to the east and south. It is unlikely this species could be found in the Study Area other than occasional foraging.	No further actions are recommended for this species.
White-tailed kite *Elanus leucurus*	CFP	Year-round resident in coastal and valley lowlands with scattered trees and large shrubs, including grasslands, marshes and agricultural areas. Nests in trees, of which the type and setting are highly variable. Preys on small mammals and other vertebrates.	**Moderate Potential.** There have been numerous historic and recent documented occurrences of this species (Cornell 2024),and one potential nest within 2 miles of the Study Area (CDFW 2024b). The Study Area contains suitable foraging in the form of grasslands and shrublands. Additionally, there are large oak trees that are suitable nesting habitat. This species was observed foraging within the Study Area on February 28, 2022. There is a moderate potential for this species to nest within the Study Area.	Work windows or pre-construction surveys. See Section 7 for a discussion of mitigation measures.

Species	Status	Habitat	Potential to Occur	Recommendations
Short-eared owl *Asio flammeus*	SSC	Occurs year-round, but primarily as a winter visitor; breeding very restricted in most of California. Found in open, treeless areas (e.g., marshes, grasslands) with elevated sites for foraging perches and dense herbaceous vegetation for roosting and nesting. Preys mostly on small mammals, particularly voles.	**Moderate Potential.** There are several documented occurrences of this species within 5 miles of the Study Area (Cornell 2024), although no CNDDB occurrences within 5 miles (CDFW 2024b). The Study Area contains suitable nesting habitat in the form of grasslands and shrublands. The adjacent Benicia State Recreation Area provides foraging habitat for this species. The nearest confirmed population is at Suisun Marsh approximately 7 miles east of the Study Area (Shuford and Gardali 2008; CDFW 2024b).	Work windows or pre-construction surveys. See Section 7 for a discussion of mitigation measures.
Burrowing owl *Athene cunicularia*	SSC	Year-round resident and winter visitor. Occurs in open, dry grasslands and scrub habitats with low-growing vegetation, perches and abundant mammal burrows. Preys upon insects and small vertebrates. Nests and roosts in old mammal burrows, most commonly those of ground squirrels.	**Unlikely.** There have been numerous documented occurrences of this species within 5 miles of the Study Area during wintering and migration periods (Cornell 2024), and 2 wintering occurrences about 4 miles from the Study Area in CNDDB (CDFW 2024b). The Study Area contains suitable foraging habitat in the form of grasslands and shrublands and may be observed foraging during winter or migration periods. During the site visit on February 28, 2022, no ground squirrel burrows were observed. Therefore, the Study Area lacks the mammal burrows necessary for occupation or nesting by this species and it is unlikely to nest within the Study Area.	No further actions are recommended for this species.
California Ridgway's rail *Rallus obsoletus obsoletus*	FE, SE, FP	Year-round resident in tidal marshes of the San Francisco Bay estuary. Requires tidal sloughs and intertidal mud flats for foraging, and dense marsh vegetation for nesting and cover. Typical habitat features abundant growth of cordgrass and pickleweed. Feeds primarily on mollusks and crustaceans.	**No Potential.** The Study Area does not contain any tidal marshes, sloughs, or intertidal mud flats that can support foraging or nesting for this species and is greater than 700 feet from tidal marsh habitats.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
California black rail *Laterallus jamaicensis coturniculus*	ST, FP	Year-round resident in marshes (saline to freshwater) with dense vegetation within four inches of the ground. Prefers larger, undisturbed marshes that have an extensive upper zone and are close to a major water source. Extremely secretive and cryptic.	**No Potential.** The Study Area does not contain any marshes, sloughs, or intertidal mud flats that can support foraging or nesting for this species and is greater than 700 feet from marsh habitats.	No further actions are recommended for this species.
Yellow rail *Coturnicops noveboracensis*	SSC	Summer resident in eastern Sierra Nevada in Mono County, breeding in shallow freshwater marshes and wet meadows with dense vegetation. Also a rare winter visitor along the coast and other portions of the state. Extremely cryptic.	**No Potential.** The Study Area does not contain any marshes or sloughs that can support foraging or nesting for this species.	No further actions are recommended for this species.
Tricolored blackbird *Agelaius tricolor*	ST, SSC	Nearly endemic to California, where it is most numerous in the Central Valley and vicinity. Highly colonial, nesting in dense aggregations over or near freshwater in emergent growth or riparian thickets. Also uses flooded agricultural fields. Abundant insect prey near breeding areas essential.	**Unlikely.** The Study Area has 0.42 acres of seasonal wetland that will be impacted and 0.94 acres of riparian habitat that will not be impacted. The seasonal wetland lacks riparian thickets or tall, dense emergent vegetation suitable to support nesting for this species. The riparian habitat present in the Study Area is dense tree canopy and not suitable for this species.	No further actions are recommended for this species.
Yellow-headed blackbird *Xanthocephalus xanthocephalus*	SSC	Summer resident. Breeds colonially in freshwater emergent wetlands with dense vegetation and deep water, often along borders of lakes or ponds. Requires abundant large insects such as dragonflies; nesting is timed for maximum emergence of insect prey.	**No Potential.** The seasonal wetland in the Study Area lacks riparian thickets or tall, dense emergent vegetation suitable to support nesting for this species. The Study Area does not have deep water features suitable for this species.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
San Pablo song sparrow *Melospiza melodia samuelis*	SSC	Year-round resident of tidal marshes along the north side of San Francisco and San Pablo Bays. Typical habitat is dominated by pickleweed, with gumplant and other shrubs present in the upper zone for nesting. May forage in areas adjacent to marshes.	**No Potential.** The Study Area does not contain any tidal marshes, sloughs, or intertidal mud flats that can support nesting for this species. The nearest occurrence for this species is over 3.5 miles west of the Study Area (CDFW 2024b; Cornell 2024). The Study Area is outside the known range of this species.	No further actions are recommended for this species.
Suisun song sparrow *Melospiza melodia maxillaris*	SSC	Year-round resident of brackish-water marshes along Suisun Bay. Inhabits cattails, tules, bulrushes and other emergent vegetation, including pickleweed. Nests typically placed in shrubs.	**Unlikely.** The Study Area does not contain any tidal marshes, sloughs, or intertidal mud flats that can support nesting for this species. However, the Study Area is near tidal marsh habitat and this species could forage in the Study Area. This species has been documented in the Benicia State Recreation Area (CDFW 2024b, Cornell 2024). The Study Area is within the known range of this species, but over 700 feet from typical habitat.	No further actions are recommended for this species.
Alameda song sparrow *Melospiza melodia pusillula*	SSC	Year-round resident of salt marshes bordering the south arm of San Francisco Bay. Inhabits primarily pickleweed marshes; nests placed in marsh vegetation, typically shrubs such as gumplant.	**No Potential.** The Study Area does not contain any tidal marshes, sloughs, or intertidal mud flats that can support nesting for this species. Additionally, the Study Area is outside the current range of this species.	No further actions are recommended for this species.
Saltmarsh common yellowthroat *Geothlypis trichas sinuosa*	SSC	Resident of the San Francisco Bay region, in fresh and saltwater marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	**Unlikely.** The Study Area does not contain any tidal marshes, sloughs, or intertidal mud flats that can support nesting for this species. However, the Study Area is near marsh habitat and this species could forage in the Study Area. This species has been documented in the Benicia State Recreation Area (CDFW 2024b, Cornell 2024).	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Bank swallow *Riparia riparia*	ST	Summer resident in riparian and other lowland habitats near rivers, lakes and the ocean in northern California. Nests colonially in excavated burrows on vertical cliffs and bank cuts (natural and manmade) with fine-textured soils. Historical nesting range in southern and central areas of California has been eliminated by habitat loss. Currently known to breed in Siskiyou, Shasta, and Lassen Cos., portions of the north coast, and along Sacramento River from Shasta Co. south to Yolo Co.	**No Potential.** There have been no documented occurrences of this species within 10 miles of the Study Area (CDFW 2024b; Cornell 2024). The Study Area does not contain suitable nesting habitat near rivers, lakes, or the ocean for this species.	No further actions are recommended for this species.
Western snowy plover *Charadrius nivosus nivosus*	FT, SSC	Federal listing applies only to the Pacific coastal population. Year-round resident and winter visitor. Occurs on sandy beaches, salt pond levees, and the shores of large alkali lakes. Nests on the ground, requiring sandy, gravelly or friable soils.	**No Potential.** The Study Area does not contain any tidal sandy beaches, salt ponds, or alkali lakes that can support foraging or nesting for this species.	No further actions are recommended for this species.
California least tern *Sterna antillarum browni*	FE, SE, FP	Summer resident along the coast from San Francisco Bay south to northern Baja California; inland breeding also very rarely occurs. Nests colonially on barren or sparsely vegetated areas with sandy or gravelly substrates near water, including beaches, islands, and gravel bars. In San Francisco Bay, has also nested on salt pond margins.	**No Potential.** The Study Area does not contain any tidal sandy or gravely beaches or salt ponds that can support foraging or nesting for this species.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Amphibians and Reptiles				
Foothill yellow-legged frog *Rana boylii*	SE, SSC	Found in or adjacent to rocky streams in a variety of habitats. Prefers partly-shaded, shallow streams and riffles with a rocky substrate; requires at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis. Feeds on both aquatic and terrestrial invertebrates.	**No Potential.** The Study Area does not contain any rocky streams that can support foraging, basking, or breeding for this species.	No further actions are recommended for this species.
California red-legged frog *Rana draytonii*	FT, SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Associated with quiet perennial to intermittent ponds, stream pools and wetlands. Prefers shorelines with extensive vegetation. Disperses through upland habitats after rains.	**Unlikely.** The riparian and seasonal wetland habitat within the Study Area are not historical. They were created as a result of stormwater runoff from the housing development to the west of the Study Area. Additionally, the Study Area is significantly isolated from nearby populations to the northeast by large residential developments and Interstate 780, and from populations to the south by Carquinez Strait. The nearest recent occurrence was in 2007 approximately 3.7 miles away (CDFW 2024b).	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
California tiger salamander - central California DPS *Ambystoma californiense pop. 1*	FT, ST	Restricted to grasslands and low-elevation foothill regions in California (generally under 1500 feet) where it uses seasonal aquatic habitats for breeding. The salamanders breed in natural ephemeral pools, or ponds that mimic ephemeral pools, and occupy substantial areas surrounding the breeding pool as adults. They survive hot, dry summers by living underground in burrows (e.g., ground squirrels). During wet periods, the salamanders may emerge from refugia and feed in the surrounding grasslands.	**No Potential.** The seasonal wetland habitat within the Study Area is not historical. It was created as a result of stormwater runoff from the housing development to the west of the Study Area. The Study Area has significant dispersal barriers including large residential developments and Interstate 780 to the north, and Carquinez Strait to the south. Lastly, the Study Area is over 9 miles from the nearest breeding occurrence (CDFW 2024b), much farther than the known dispersal distance of 1.3 miles.	No further actions are recommended for this species.
Alameda whipsnake *Masticophis lateralis euryxanthus*	FT, ST	Inhabits chaparral and foothill-hardwood habitats in the eastern Bay Area. Prefers south-facing slopes and ravines with rock outcroppings where shrubs form a vegetative mosaic with oak trees and grasses and small mammal burrows provide basking and refuge.	**No Potential.** The Study Area does not contain any rock outcroppings that can support foraging, basking, or breeding for this species. This species is not known to occur in Solano County.	No further actions are recommended for this species.
Giant garter snake *Thamnophis gigas*	FT, ST	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches. This is the most aquatic of the garter snakes in California.	**No Potential.** The Study Area does not contain aquatic habitats for this species, and no freshwater is present in the summer. The Study Area is outside of the known range for this species.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Northern California legless lizard *Anniella pulchra*	SSC	Found in loose soils or leaf litter with plant cover such as beach dune, sandy washes, stream terraces, chaparral, and pine-oak woodlands. Requires some soil moisture. Occasionally found in suburban gardens. Preys upon invertebrates.	**No Potential.** The Study Area does not contain any friable soils that can support foraging, breeding, or protection for this species. Additionally, the Study Area is outside the current range of this species.	No further actions are recommended for this species.
Western pond turtle *Emys marmorata*	FPT, SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	**Unlikely.** The Study Area does not contain aquatic habitat for this species as freshwater is only seasonal. Additionally, the seasonal wetland is not historical as it was created because of the housing development to the west of the Study Area. The Study Area has significant dispersal barriers to nearby populations 4 miles to the north including large residential developments and Interstate 780 to the north, and Carquinez Strait to the south.	No further actions are recommended for this species.
Mammals				
American badger *Taxidea taxus*	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Requires friable soils and open, uncultivated ground. Preys on burrowing rodents.	**No Potential.** The Study Area is isolated from large contiguous grasslands by housing developments and Interstate 780. The nearest occurrence is almost 14 miles away both of which date back to 1911 and 1925 (CDFW 2024b). Furthermore, during the site visit on February 28, 2022, no badger burrows were found and only a couple of gopher burrows were observed indicating a limited food resource.	No further actions are recommended for this species.
Big free-tailed bat *Nyctinomops macrotis*	SSC, WBWG Med	Occurs rarely in low-lying arid areas. Requires high cliffs or rocky outcrops for roosting sites.	**No Potential.** The Study Area does not contain any cliff or rock outcrops that can support this species. The Study Area is outside the home range of this species which is known to occur in the state of Colorado (USFWS 2024b). However, vagrants have been documented in Alameda and San Diego Counties in rare cases (CDFW 2021).	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Pallid bat *Antrozous pallidus*	SSC, WBWG High	Found in a variety of habitats ranging from grasslands to mixed forests, favoring open and dry, rocky areas. Roost sites include crevices in rock outcrops and cliffs, caves, mines, and also hollow trees and various manmade structures such as bridges, barns, and buildings (including occupied buildings). Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	**Unlikely.** The nearest documented occurrence of this species was ~13 mi north in 2007, in addition to several historic occurrences (pre-1940) south of the Study Area (CDFW 2024b). The Study Area contains suitable foraging habitat for this species. However, there is no suitable roosting habitat as this species is very sensitive to disturbance. The few large trees within the Study Area are directly adjacent (~330 ft) to Interstate 780 and exposed to predators, wind, and temperature fluctuations. Additionally, this species typically roosts in crevices of rocks, caves, and mines which are absent from the Study Area. This species could be found in the Study Area foraging but not roosting.	No further actions are recommended for this species.
Townsend's big-eared bat *Corynorhinus townsendii*	SSC, WBWG High	Associated with a wide variety of habitats from deserts to higher-elevation mixed and coniferous forests. Females form maternity colonies in buildings, caves and mines, and males roost singly or in small groups. Foraging typically occurs at edge habitats near wooded areas, e.g. along streams.	**Unlikely.** The Study Area does contain suitable foraging habitat for this species. However, there is no suitable roosting habitat as this species typically roosts in caves, mines, and buildings. It is unlikely this species could be found in the Study Area other than occasional foraging.	No further actions are recommended for this species.
Silver-haired bat *Lasionycteris noctivagans*	WBWG Med	Primarily a forest dweller, feeding over streams, ponds, and open brushy areas. Summer habitats include a variety of forest and woodland types, both coastal and montane. Roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark.	**Moderate Potential.** The Study Area does contain suitable foraging and roosting habitat for this migratory species. Large oak trees are present within the Study Area that could provide maternity or day-roost habitat.	Work windows or pre-construction surveys. See Section 7 for a discussion of mitigation measures.

SPECIES	STATUS	HABITAT	POTENTIAL TO OCCUR	RECOMMENDATIONS
Hoary bat *Lasiurus cinereus*	WBWG Med	Prefers open forested habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths.	**Moderate Potential.** The Study Area does contain suitable foraging and roosting habitat for this species. Large oak trees are present within the Study Area.	Work windows or pre-construction surveys. See Section 7 for a discussion of mitigation measures.
San Francisco dusky-footed woodrat *Neotoma fuscipes annectens*	SSC	Forest habitats of moderate canopy and moderate to dense understory. Also, in chaparral habitats. Constructs nests of shredded grass, leaves, and other material. May be limited by availability of nest-building materials.	**No Potential.** The Study Area is outside of this subspecies range. This subspecies does not occur north of San Pablo or Suisun Bays.	No further actions are recommended for this species.
Suisun shrew *Sorex ornatus sinuosus*	SSC	Tidal marshes of the northern shores of San Pablo and Suisun Bays. Require dense low-lying cover and driftwood and other litter above the mean hightide line for nesting and foraging.	**No Potential.** The Study Area does not contain any salt or brackish wetlands that can support this species.	No further actions are recommended for this species.
Salt-marsh wandering shrew *Sorex vagrans halicoetes*	SSC	Salt marshes of the south arm of San Francisco Bay. Medium high marsh 6 to 8 feet above sea level where abundant driftwood is scattered among Salicornia.	**No Potential.** The Study Area does not contain any salt or brackish wetlands that can support this species. The Study Area is outside the current range of this species.	No further actions are recommended for this species.
San Pablo vole ***Microtus californicus sanpabloensis***	SSC	Saltmarshes of San Pablo Creek, on the south shore of San Pablo Bay. Constructs burrow in soft soil. Feeds on grasses, sedges and herbs. Forms a network of runways leading from the burrow.	**No Potential.** The Study Area does not contain any salt or brackish wetlands that can support this species. The Study Area is outside the current range of this species.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Salt-marsh harvest mouse *Reithrodontomys raviventris*	FE, SE, FP	Endemic to emergent salt and brackish wetlands of the San Francisco Bay Estuary. Pickleweed marshes are primary habitat; also occurs in various other wetland communities with dense vegetation. Does not burrow, builds loosely organized nests. Requires higher areas for flood escape.	**No Potential.** The Study Area does not contain any salt or brackish wetlands that can support this species.	No further actions are recommended for this species.
Fish				
Sacramento splittail *Pogonichthys macrolepidotus*	SSC	Formerly endemic to the lakes and rivers of the Central Valley, but now confined to the Sacramento Delta, Suisun Bay and associated marshes. Occurs in slow-moving river sections and dead-end sloughs. Requires flooded vegetation for spawning and foraging for young. A freshwater species, but tolerant of moderate salinity (10-18 parts per thousand).	**No Potential.** The Study Area does not contain any stream or rivers. Only one intermittent stream and ephemeral drainage is present.	No further actions are recommended for this species.
Delta smelt *Hypomesus transpacificus*	FT, SE	Lives in the Sacramento-San Joaquin estuary in areas where salt and freshwater systems meet. Occurs seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Seldom found at salinities > 10 ppt; most often at salinities < 2 ppt.	**No Potential.** The Study Area does not contain any estuarine habitat.	No further actions are recommended for this species.

SPECIES	STATUS	HABITAT	POTENTIAL TO OCCUR	RECOMMENDATIONS
Sacramento perch *Archoplites interruptus*	SSC	(Only within native range) Historically found in the sloughs, slow-moving rivers, and lakes of the Central Valley. Prefer warm water. Aquatic vegetation is essential for young. Tolerate wide range of physio-chemical water conditions.	**No Potential.** The Study Area does not contain any stream or rivers. Only one intermittent stream and ephemeral drainage is present.	No further actions are recommended for this species.
Longfin smelt *Spirinchus thaleichthys*	FPE, ST	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15 to 30 ppt but can be found in completely freshwater to almost pure seawater.	**No Potential.** The Study Area does not contain any estuarine habitat	No further actions are recommended for this species.
Green sturgeon – Southern DPS *Acipenser medirostris pop. 1*	FT	Spawn in the Sacramento River and the Feather River. Spawn at temperatures between 8-14 degrees C. Preferred spawning substrate is large cobble, but can range from clean sand to bedrock.	**No Potential.** The Study Area does not contain any stream or rivers. Only one intermittent stream and ephemeral drainage is present.	No further actions are recommended for this species.
Steelhead - central California coast DPS *Oncorhynchus mykiss irideus pop. 8*	FT	They are born in freshwater streams, where they spend their first 1-3 years of life. They then emigrate to the ocean where most of their growth occurs. After spending between one to four growing seasons in the ocean, steelhead return to their native freshwater stream to spawn.	**No Potential.** The Study Area does not contain any stream or rivers. Only one intermittent stream and ephemeral drainage is present.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Invertebrates				
Callippe silverspot butterfly *Speyeria callippe callippe*	FE	Two populations in San Bruno Mountain and the Cordelia Hills are recognized. Hostplant is Viola pedunculata, which is found on serpentine soils. Most adults found on east-facing slopes; males congregate on hilltops in search of females.	**Unlikely.** The nearest population is in Cordelia Hills approximately 3 miles north (CDFW 2024b). The hostplant for this species (*Viola pedunculata*) was not observed within the Study Area during the February and July site visits. The majority of the Study Area is dominated by non-native grassland, artichoke thistle, and ruderal weeds (fennel, mustards) limiting the potential of the hostplant occurring within the site. Additionally, minimal nectar producing flowering plants occur within the Study Area as a food source.	No further actions are recommended for this species.
Monarch - California overwintering population *Danaus plexippus pop. 1*	FC	Roosts are located in wind-protected tree groves, with nectar and water sources nearby, and are often on south, southwest, or west facing slopes which may provide more favorable temperature regimes and wind protection.	**Unlikely.** There are no tree groves suitable for supporting monarch winter roosting in the Study Area. Minimal nectar producing flowering plants occur within the Study Area as a food source. This species may forage for nectar or migrate through the Study Area.	No further actions are recommended for this species.
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	Occurs only in the central valley of California, in association with blue elderberry (Sambucus spp.). Prefers to lay eggs in elderberry 2 to 8 inches in diameter; some preference shown for ""stressed"" elderberry.	**No Potential.** There are no documented occurrences of this species within 9 miles (CDFW 2024b). Additionally, no elderberry shrubs were observed within the Study Area during the February 28, 2022 site visit.	No further actions are recommended for this species.
Crotch bumble bee *Bombus crotchii*	SC	Range largely restricted to California, favoring grassland and scrub habitats. Typical of bumble bees, nests are usually constructed underground.	**Unlikely.** The single documented occurrence of this species within 60 miles was over 13 miles away across the Carquinez Strait in 2015 (CDFW 2024b). The Study Area contains foraging and nesting habitat for this species. However, limited food resources (nectar producing flowers) and no ground squirrel burrows were observed within the Study Area during the February and July site visits.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
Western bumble bee *Bombus occidentalis*	SC	Formerly common throughout much of western North America; populations from southern British Columbia to central California have nearly disappeared (Xerces 2015). Occurs in a wide variety of habitat types. Nests are constructed annually in pre-existing cavities, usually on the ground (e.g., mammal burrows). Many plant species are visited and pollinated.	**No Potential.** All documented occurrences of this species within 60 miles have been historic with the most recent being in the 1950s (CDFW 2024b), and the Study Area is outside of the current known range (CDFW 2023).	No further actions are recommended for this species.
Vernal pool fairy shrimp *Branchinecta lynchi*	FT	Endemic to the grasslands of the Central Valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	**No Potential.** There are no vernal pool or vernal swale habitat is present within the Study Area.	No further actions are recommended for this species.
Conservancy fairy shrimp *Branchinecta conservatio*	FE	Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	**No Potential.** There is no vernal pool or vernal swale habitat present within the Study Area.	No further actions are recommended for this species.

Species	Status	Habitat	Potential to Occur	Recommendations
California freshwater shrimp *Syncaris pacifica*	FE, SE	Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Shallow pools away from mainstream flow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.	**No Potential.** The Study Area does not contain any stream or rivers that are capable of supporting this species and is out of the known range of this species. Only one intermittent and one ephemeral drainage are present.	No further actions are recommended for this species.

*** Key to status codes:**

BGEPA	Bald and Golden Eagle Protection Act
CFP	California Department of Fish and Wildlife (CDFW) Fully Protected Species
FC	Federal Candidate
FE	Federal Endangered
FPE	Federal Proposed Endangered
FPT	Federal Proposed Threatened
FT	Federal Threatened
SE	State Endangered
SC	State Candidate
SSC	California Department of Fish and Wildlife (CDFW) Species of Special Concern
ST	State Threatened
WBWG High	Western Bat Working Group – High Priority
WBWG Med	Western Bat Working Group – Medium Priority

<u>California Rare Plant Rank (CRPR)</u>

Rank 1A	CRPR 1A: Plants presumed extinct in California
Rank 1B	CRPR 1B: Plants rare, threatened or endangered in California and elsewhere
Rank 2A	CRPR 2A: Plants presumed extirpated in California, but more common elsewhere
Rank 2B	CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere
Rank 3	CRPR 3: Plants about which CNPS needs more information (a review list)
Rank 4	CRPR 4: Plants of limited distribution (a watch list)

<u>Threat Ranks</u>

0.1	Seriously threatened in California
0.2	Moderately threatened in California
0.3	Not very threatened in California

****Potential species occurrence definitions:**

Present. Species was observed on the site during site visits or has been recorded (i.e. CNDDB, other reports) on the site recently.

High Potential. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

Moderate Potential. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

Unlikely. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species has a low probability of being found on the site.

No Potential. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

APPENDIX D. PROJECT PLANS

THIS PAGE INTENTIONALLY LEFT BLANK

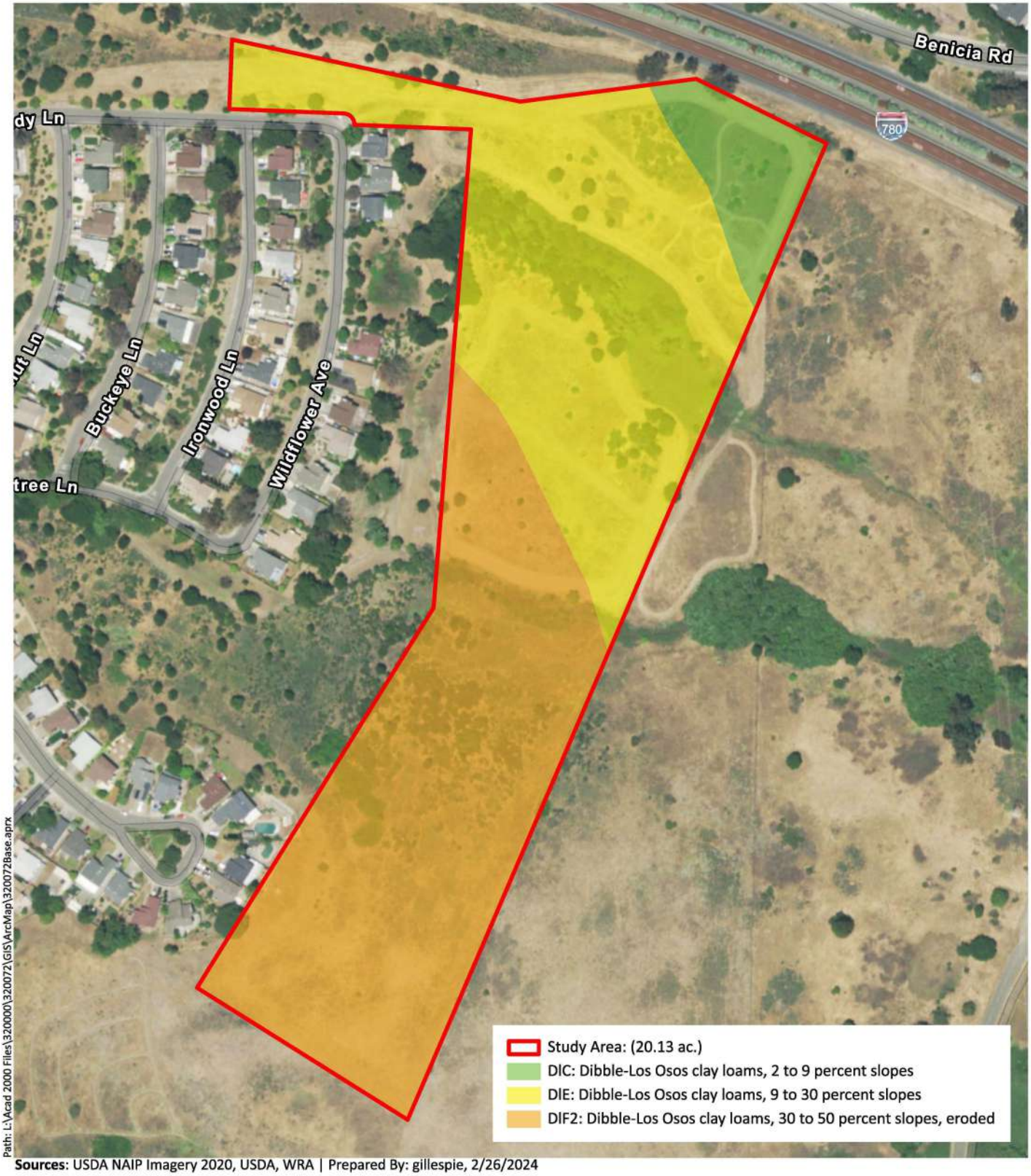


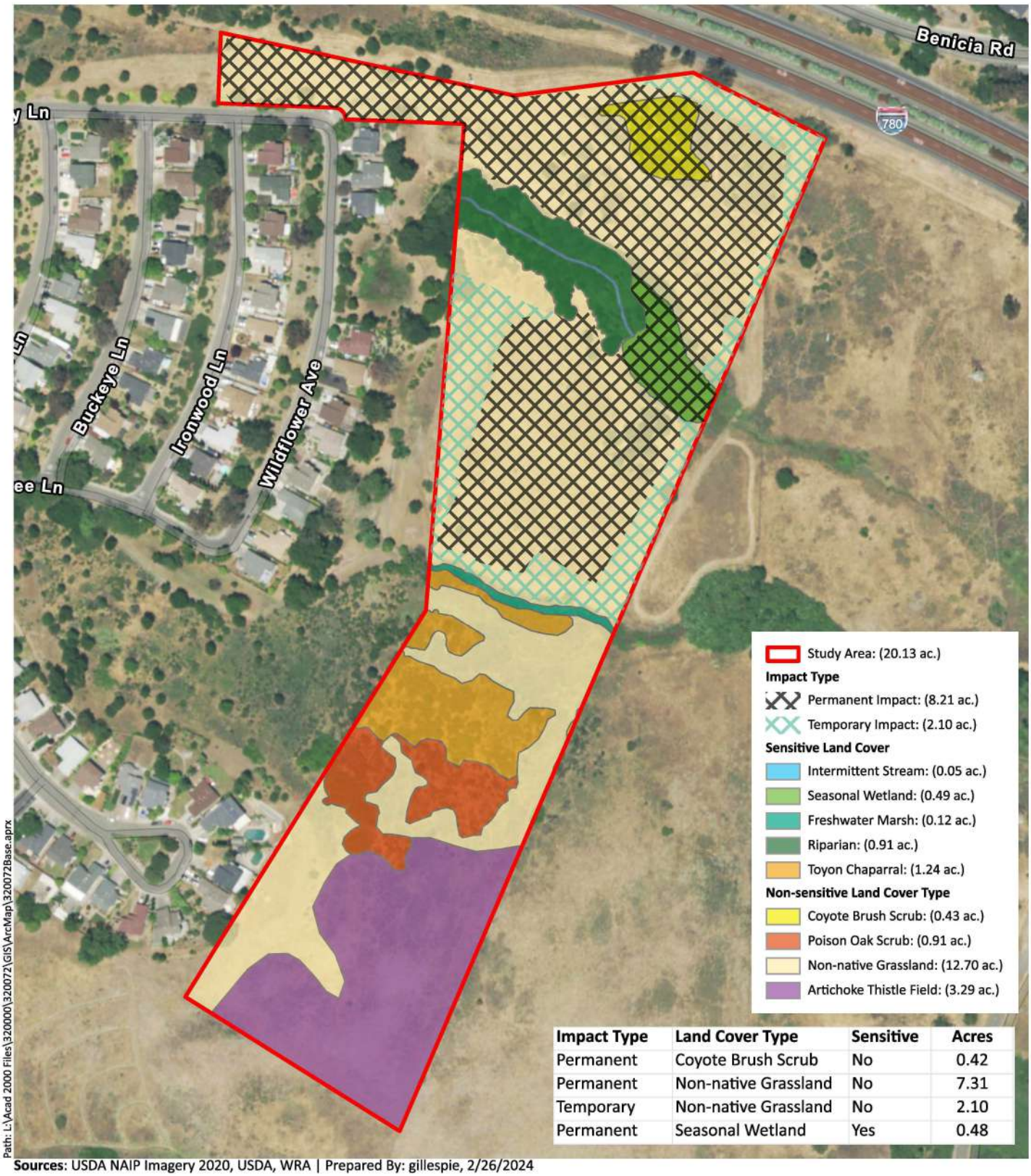
Figure 3. Soils Map

Sancerra Vista Cove
Vallejo, California

0 100 200 Feet

N

wra Environmental Consultants



Impact Type	Land Cover Type	Sensitive	Acres
Permanent	Coyote Brush Scrub	No	0.42
Permanent	Non-native Grassland	No	7.31
Temporary	Non-native Grassland	No	2.10
Permanent	Seasonal Wetland	Yes	0.48

Sources: USDA NAIP Imagery 2020, USDA, WRA | Prepared By: gillespie, 2/26/2024

Figure 4. Proposed Impacts within the Study Area

Sancerra Vista Cove
Vallejo, California

0 100 200 Feet

N

wra Environmental Consultants

Appendix B-1. Plant species observed within the Study Area on February 28 and July 14, 2022

Scientific name	Common name	Life form	Origin	Rare Status[1]	Invasive Status[2]	Wetland indicator (AW 2020)[3]
Amsinckia intermedia	Common fiddleneck	annual herb	native	-	-	-
Amsinckia lycopsoides	Tarweed fiddleneck	annual herb	native	-	-	-
Avena barbata	Slim oat	annual, perennial grass	native	-	Moderate	-
Avena fatua	Wildoats	annual grass	native	-	Moderate	-
Baccharis pilularis	Coyote brush	shrub	native	-	-	-
Bellardia trixago	Mediterranean lineseed	annual herb	native	-	Limited	-
Bolboschoenus maritimus ssp. *paludosus*	Saltmarsh bulrush	perennial grasslike herb	native	-	-	OBL
Brassica nigra	Black mustard	annual herb	non-native (invasive)	-	Moderate	-
Briza minor	Little rattlesnake grass	annual grass	non-native (invasive)	-	-	FAC
Bromus diandrus	Ripgut brome	annual grass	non-native	-	Moderate	-
Bromus hordeaceus	Soft chess	annual grass	native	-	Limited	FACU
Calandrinia menziesii	Red maids	annual herb	native	-	-	FACU
Calendula arvensis	Field marigold	annual herb	native	-	-	-
Capsella bursa-pastoris	Shepherd's purse	annual herb	native	-	-	FACU
Cardamine cf. hirsuta	Hairy bitter cress	non-native	annual herb	-	-	FACU
Carduus pycnocephalus ssp. *pycnocephalus*	Italian thistle	annual herb	native	-	Moderate	-
Chlorogalum pomeridianum	Amole	perennial herb	native	-	-	-
Cirsium vulgare	Bullthistle	perennial herb	native	-	Moderate	FACU
Cortaderia selloana	Pampas grass	perennial grass	-	-	High	FACU
Crassula connata	Sand pygmy weed	annual herb	non-native (invasive)	-	-	FAC

Scientific name	Common name	Life form	Origin	Rare Status[1]	Invasive Status[2]	Wetland indicator (AW 2020)[3]
Cynara cardunculus ssp. *flavescens*	Artichoke thistle	perennial herb	non-native (invasive)	-	Moderate	-
Cyperus eragrostis	Tall cyperus	perennial grasslike herb	-	-	-	FACW
Dittrichia graveolens	Stinkwort	annual herb	native	-	Moderate	-
Elymus caput-medusae	Medusa head	annual grass	native	-	High	-
Elymus triticoides	Beardless wild rye	perennial grass	non-native (invasive)	-	-	FAC
Erigeron canadensis	Canada horseweed	native	annual herb	-	-	FACU
Erodium botrys	Big heron bill	annual herb	native	-	-	FACU
Erodium cicutarium	Red stemmed filaree	annual herb	non-native (invasive)	-	Limited	-
Erodium moschatum	Whitestem filaree	annual herb	native	-	-	-
Euphorbia peplus	Petty spurge	annual herb	non-native (invasive)	-	-	-
Festuca bromoides	Brome fescue	annual grass	non-native	-	-	FACU
Festuca myuros	Rattail sixweeks grass	annual grass	non-native (invasive)	-	Moderate	FACU
Festuca perennis	Italian rye grass	annual, perennial grass	non-native (invasive)	-	Moderate	FAC
Ficus carica	Common fig	tree	native	-	Moderate	FACU
Foeniculum vulgare	Fennel	perennial herb	non-native	-	High	-
Galium aparine	Cleavers	annual herb	non-native	-	-	FACU
Geranium dissectum	Wild geranium	annual herb	non-native (invasive)	-	Limited	-
Geranium molle	Crane's bill geranium	annual, perennial herb	native	-	-	-
Helenium puberulum	Sneezeweed	perennial herb	non-native (invasive)	-	-	FACW
Helminthotheca echioides	Bristly ox-tongue	annual, perennial herb	non-native (invasive)	-	Limited	FAC

Scientific name	Common name	Life form	Origin	Rare Status[1]	Invasive Status[2]	Wetland indicator (AW 2020)[3]
Hemizonia congesta ssp. *luzulifolia*	Woodrush tarweed	annual herb	native	-	-	-
Heteromeles arbutifolia	Toyon	shrub	non-native (invasive)	-	-	-
Holcus lanatus	Common velvetgrass	perennial grass	native	-	Moderate	FAC
Juncus effusus	Common bog rush	perennial grasslike herb	non-native (invasive)	-	-	FACW
Juncus mexicanus	Mexican rush	perennial grasslike herb	non-native (invasive)	-	-	FACW
Juncus xiphioides	Iris leaved rush	perennial grasslike herb	native	-	-	OBL
Ligustrum lucidum	Glossy privet	tree, shrub	native	-	Limited	-
Lupinus succulentus	Arroyo lupine	annual herb	native	-	-	-
Lysimachia arvensis	Scarlet pimpernel	annual herb	non-native (invasive)	-	-	FAC
Malva sp.	Mallow	annual herb	non-native	-	-	-
Marah fabacea	California man-root	perennial herb, vine	non-native	-	-	-
Maytenus boaria	Mayten	tree, shrub	non-native	-	Watch	-
Medicago polymorpha	Bur clover	non-native (invasive)	annual herb	-	Limited	FACU
Nasturtium officinale	Watercress	perennial herb (aquatic)	non-native	-	-	OBL
Oxalis pes-caprae	Bermuda buttercup	perennial herb	non-native (invasive)	-	Moderate	-
Phalaris aquatica	Harding grass	perennial grass	non-native (invasive)	-	Moderate	FACU
Phoradendron leucarpum	American mistletoe	shrub (parasitic)	non-native (invasive)	-	-	-
Prunus cerasifera	Cherry plum	tree	non-native (invasive)	-	Limited	-
Prunus dulcis	Almond	tree	native	-	-	-
Pseudognaphalium luteoalbum	Jersey cudweed	annual herb	non-native (invasive)	-	-	FAC

Scientific name	Common name	Life form	Origin	Rare Status[1]	Invasive Status[2]	Wetland indicator (AW 2020)[3]
Quercus agrifolia	Coast live oak	tree	non-native	-	-	-
Raphanus sativus	Wild radish	annual, biennial herb	native	-	Limited	-
Rubus armeniacus	Himalayan blackberry	shrub	non-native (invasive)	-	High	FAC
Rumex crispus	Curly dock	non-native (invasive)	perennial herb	-	Limited	FAC
Rumex pulcher	Fiddleleaf dock	perennial herb	native	-	-	FAC
Salix laevigata	red willow	tree, shrub	native	-	-	FACW
Salix lasiolepis	Arroyo willow	tree, shrub	native	-	-	FACW
Sanicula bipinnatifida	Purple sanicle	native	perennial herb	-	-	-
Schoenoplectus americanus	Chairmaker's bulrush	perennial grasslike herb	native	-	-	OBL
Sisyrinchium bellum	Blue eyed grass	perennial herb	native	-	-	FACW
Sonchus oleraceus	Common sow thistle	annual herb	non-native (invasive)	-	-	UPL
Stipa pulchra	Purple needle grass	perennial grass	native	-	-	-
Toxicodendron diversilobum	Poison oak	vine, shrub	non-native	-	-	FACU
Typha sp.	-	-	native	-	-	-
Vicia sativa	Spring vetch	annual herb, vine	non-native	-	-	FACU

All species identified using the *Jepson eFlora* [Jepson Flora Project (eds.) 2022]; nomenclature follows *Jepson eFlora* [Jepson Flora Project (eds.) 2022]

[1] **California Native Plant Society. 2022. Inventory of Rare and Endangered Plants (online edition, v9-01 1.5). Sacramento, California. Online at: http://rareplants.cnps.org/; most recently accessed: March 2022**

FE: Federal Endangered
FT: Federal Threatened
SE: State Endangered
ST: State Threatened
SR: State Rare
Rank 1A: Plants presumed extinct in California
Rank 1B: Plants rare, threatened, or endangered in California and elsewhere
Rank 2: Plants rare, threatened, or endangered in California, but more common elsewhere

Scientific Name	Common Name	Conservation Status[1]
Invertebrates		
Bombus spp.	Bumblebee	-
Apis mellifera	European honeybee	-

[1]Key to Conservation Status:

FP CDFW Fully Protected Species

February 22, 2023

Attn: Scott Covington
Sancerra
2618 San Miguel Drive, Suite 1223
Newport Beach, CA 92660

Re: Sancerra Vista Cove Development Project – Arborist Tree Survey and Report

Dear Scott Covington:

The purpose of this letter is to inform you of the results of an arborist survey performed on October 12, 2022, near the east end of Shady Lane in the City of Vallejo, Solano County, California, including Assessor Parcel Numbers (APN) 007-912-010, 007-917-117, and 007-917-118 (Study Area, see Figure 1 in the attachments). The survey was conducted by WRA's ISA-Certified Arborist (#WE-9541A) and Tree Risk Assessment Qualified (TRAQ) arborist Kevin Schwartz (Arborist) for the purpose of documenting all trees with a diameter at breast height (DBH) greater than 6 inches within the Study Area and outside of the riparian area (see Figure 2 in the attachments). The tree inventory and arborist report are provided as part of the planning process for the Vista Cove Development Project (Project) consistent with the City of Vallejo's Zoning Code Chapters 16.504.07 and 16.701.02 of Title 16. The proposed Project will require tree protection, removal, and replacement. Anticipated tree impacts presented in this report may be subject to change with further design development.

Regulatory Background

Title 16 of the City of Vallejo Zoning Code (Zoning Code) details protections, restrictions, permits, and violations surrounding the removal or disturbance of Significant Trees from any parcel of property in the City. Details of the Zoning Code can be found below:

16.701.02 LAND USE TERMS AND DEFINITIONS

Significant Tree. Any tree or stand of trees on private property having either a height of twenty-five feet measured above ground level, or a diameter of ten or more inches.

16.504.07 TREE PROTECTION

A. Preserving Trees During Construction. The following measures are required to protect trees during construction in addition to any that may be recommended by an arborist hired by the applicant and imposed as a condition of approval:

1. Tree Inventory. Identify trees to be preserved on a tree inventory plan with type of tree and condition prior to construction, or permit submittal or as part of entitlements, whichever is first.

2. Existing Trees. Existing mature trees shall be preserved in non-residential zoning districts if they are over 24 inches in diameter measured 4 feet 6 inches above natural grade. However, trees meeting the above criteria may be removed on a limited basis with the permission of the Director upon submittal of an Arborist's report which determines that the tree is in poor health and not likely to survive; if the trees constitute a high fire hazard or a threat to persons, structures, or property; or, if they impede public works projects. Trees to be removed shall be shown on the Landscaping and Irrigation Plan and detailed on a tree inventory chart. The Arborist's Report shall provide guidance on the following requirements:

a. Construct fencing around the drip line of each tree or group of trees to be retained;
b. No fill, grading, or construction shall be permitted within the drip line of any tree (or within 6 feet of the trunk, whichever is greater) designated for preservation except as may be recommended by an arborist or forester.
c. Trenching shall be prohibited within the tree drip line, and any required utility line within the tree drip line shall be installed by boring or drilling through the soil. Where necessary for access in the vicinity of trees designated for preservation, paving within the drip line shall use porous materials such as gravel, loose boulders, cobbles, wood chips, or bark mulch.
d. As an option, establish an incentive program in the construction contract to encourage workers, particularly bulldozer drivers, to maximize caution when working near trees (such as a fine for each damaged tree or subtract the fine from a bonus to be divided among all construction workers at the end of the project).
e. Alternate methods to the standards above that are recommended by the Arborist may be implemented.

B. Removal of Trees. The Director may approve the removal of trees based on a determination that there is no feasible alternative design for developing the site and based on report and recommendation by a qualified arborist submitted by the applicant including information as to whether:

1. The tree is in poor health and cannot be saved;
2. The tree is a public nuisance, causing damage to public utilities or streets and sidewalks that cannot be mitigated by some other means (such as root barriers etc.);
3. The tree is in danger of falling and cannot be saved by some other means (such as pruning);
4. The tree is damaging existing private improvements on the lot (e.g., building foundation, wall, patio, deck, roof, retaining wall, etc.);
5. The tree species has been identified as fire prone including Blue gum eucalyptus (*Eucalyptus globulus*), Monterey pines (*Pinus radiata*), Juniper (Cupressaceous) Tree of

Heaven (*Ailanthus altissima*), Black acacia (*Acacia melanoxylon*), and bamboo and is located within 100 feet of structures; or

6. The tree species is known to develop weaknesses that affect its health or the safety of people and property (e.g., short-lived, weak-wooded and subject to limb breakage, shallow-rooted and subject to toppling).

C. Replacement of Significant Trees Required. Trees shall be replaced at a ratio of at least 3 new trees for every tree removed except for the fire-prone species identified above. The minimum size of a replacement tree shall be 15 gallons. Exception to this requirement may be approved by the Director when site conditions warrant. Replacement trees shall be planted in the following order of priority:

1. On the Study Area;
2. On any adjacent property subject to approval of the owner; or
3. In the public right-of-way adjacent to the property subject to approval of the Director of Public Works.

Methods

On October 12, 2022, the Study Area was traversed on foot by the Arborist to inventory all trees with a DBH of 6 inches or greater within the Study Area, not including the riparian protection zone (Figure 2). Relevant information was recorded for each surveyed tree, including:

- Tree Number – corresponds to a round aluminum tag affixed to each protected tree.
- Species – common and scientific name of the tree.
- Trunk DBH – was calculated for surveyed trees by measuring the trunk diameter at 4.5 feet (54 inches) above the ground on the high side of the trunk. For multi-trunk trees, DBH was calculated by measuring each individual trunk and calculating the sum of trunk diameters.
- Max Drip –Dripline radii were recorded to the nearest foot measuring from the center of the trunk to the edge of dripline mapped, approximating the maximum distance in feet from the trunk to the edge of the branches.
- Condition Rating – rated poor, fair, or good considering both the health and structure of the tree. A rating of fair-good or good indicates no significant condition concerns.
- Health Rating – rated poor, fair, or good considering the overall health of the tree. A rating of fair-good or good indicates no significant health concerns.
- Structure Rating – rated poor, fair, or good considering the structure of the tree. A rating of fair-good or good indicates no significant structure concerns.
- Health – specific comments contributing to the condition, health, and structure ratings were noted (e.g. major decay/dieback, dead, multiple dead trunks, poor growth form, lean, unknown abiotic disorder, lean, cankers).
- Comments – comments regarding the tree assessment, access, and whether the tree should be removed or not.

Surveyed tree locations within the Study Area were recorded using sub-meter accuracy GPS. Trees were tagged with aluminum tree tags with a unique identifying number. Two trees (#560 and

#563) were inaccessible to tag because the shrubs or Himalayan blackberry (*Rubus armeniacus*) were too dense to access the trunk. Anticipated tree impacts were determined based on a limit of work provided by DK Engineering on December 14, 2022. Final tree impacts may differ from the anticipated impacts presented in this report with further project design development.

This Arborist Tree Survey and Report includes the following figures and table as attachments:

- Figure 1, entitled "Study Area Regional Location Map" shows the project location.
- Figure 2, entitled "Tree Survey Study Area" contains the locations of the trees on an aerial image of the Study Area.
- Table A, entitled "Tree Evaluation", summarizes the results of the tree evaluation for all surveyed trees.

Additional summary tables are provided in the following sections.

Summary of Tree Evaluation

Location, Species Makeup, Number of Trees, and Age:

The Study Area is located south of Interstate 780 off Shady Lane and Wildflower Avenue in the City of Vallejo, Solano County, California. The subject trees found were native and horticultural species. The horticultural species had been planted as part of the landscaping along Shady Lane and a few scattered fruit trees were found in the southern part of the Study Area. The native species were found scattered around the property.

A total of 83 trees were surveyed within the Study Area, of which 57 trees meet the Significant Tree definition under the local ordinance. Four non-native tree species were identified during the survey, including: two strawberry trees (*Arbutus* 'Marina'), one apple tree (*Malus* sp.), three Monterey pines (*Pinus radiata*), and two cherry trees (*Prunus* sp.). Three native tree species were identified during the survey, including: one toyon (*Heteromeles arbutifolia*), 73 coast live oaks (*Quercus agrifolia*), and one valley oak (*Quercus lobata*). The diameters of surveyed trees ranged from 6 to 43.2 inches.

All tree numbers and their associated attributes are recorded in the Tree Evaluation Table (Table A in the attachments). The surveyed trees varied in age from young to mature.

Tree Condition, Health, and Structure:

The health of the trees was rated from poor to good. Most of the trees were in good condition, good health, and had good structure. Only one apple tree was in poor health having major decay and dieback. This apple tree was a small tree outside of the development footprint and poses no risk.

Root Protection Zones and Potential Impacts:

Using the max drip line, the Arborist estimated the area of root protection zone (RPZ) that would be impacted by the Project for each tree.

Of the 83 trees surveyed, a total of 69 trees are anticipated to require removal (0.76 acre of RPZ would be impacted for these 69 trees), three trees would not be removed but would have RPZ impacts (0.01 acre), and 11 trees would be entirely avoided (Table 1, below). The three trees with only RPZ impacts would have 24% to 38% of the RPZ impacted. Impacts to these three trees could be avoided with appropriate tree protection measures.

Of the 69 trees that are anticipated to require removal, 47 of these trees (≥10" DBH) meet the Significant Tree definition (0.60 acre of RPZ would be impacted for these 47 Significant Trees). Of the three trees that would not be removed but would have RPZ impacts, two meet the Significant Tree definition (<0.01 acre of RPZ).

Table 1. Tree Survey Summary

Description	Number of trees	RPZ Impact Area (Acre)
All Surveyed Trees (≥ 6" DBH)		
All Trees Surveyed	83	N/A
Trees Requiring Removal	69	0.76 acre
Trees Avoided but with RPZ Impacts	3	0.01 acre
Surveyed Trees Avoided	11	N/A
Significant Trees (≥10" DBH)		
Significant Trees Surveyed	57	N/A
Anticipated Significant Trees Requiring Removal	47	0.60 acre
Significant Trees Avoided but with RPZ Impacts	2	<0.01 acre
Significant Trees Avoided	8	N/A

Replacement Tree Requirements

According to Title 16.504.07 of the Zoning Code of the City of Vallejo, replacement of Significant Trees shall be required at a ratio of at least three new trees for every tree removed. While Monterey pine is a fire-prone species it is more than 100 feet from buildings and, thus, may still require mitigation in the form of tree replacement. The minimum size of a replacement tree shall be 15 gallons. Exception to this requirement may be approved by the Director when site conditions warrant. Replacement trees shall be planted in the following order of priority:

1. On the Study Area;
2. On any adjacent property subject to approval of the owner; or

3. In the public right-of-way adjacent to the property subject to approval of the Director of Public Works.

Table 3, below, shows the number of replacement trees that may be required to compensate for the anticipated removal of 47 Significant Trees protected under the local ordinance. A total of 141 replacement trees may be required. Selection of replacement trees should be done with approval of the City of Vallejo Public Works Director and in accordance with Chapter 16.504.09 Water-Efficient Landscape Requirements, Section G. Specific Requirements for Landscape Documentation Package, 3. Landscape Design Plan a. Plant material:

> a. **Plant material.** Any plant not within a "required landscaped area," may be selected for the landscape, providing the estimated total water use in the landscape area does not exceed the maximum applied water allowance. Plants to be located within a required landscaped area must be of a drought tolerant variety. Methods to achieve water efficiency shall include one or more of the following:
>
> i. Protection and preservation of native species and natural vegetation;
> ii. Selection of water-conserving plant, tree and turf species, especially local native plants;
> iii. Selection of plants based on local climate suitability, disease and pest resistance;
> iv. Selection of street trees based on city of Vallejo approved street tree list and size at maturity as appropriate for the planting area;
> v. Selection of plants from local and regional landscape program plant lists.
> vi. Selection of plants from local Modification Plan Guidelines.

Table 3. Summary of Anticipated Replacement Plantings Required for Significant Tree Removal

Species	Number of Significant Trees Requiring Mitigation	Number of Replacement Trees Anticipated[2]	Minimum Plant Size
strawberry tree	1	3	15 gallon pot
Monterey pine[1]	2	6	
plum or cherry	2	6	
coast live oak	42	126	
Total	47	141	

[1]Monterey pine trees are a fire prone species that may not require replacement planting.
[2]Replacement tree species can be different from the tree species proposed for removal.

Limitations

- This assessment is based upon conditions observed during the date of the site visit. Tree conditions change over time and, as they change, this report may need to be revised.

- The result of the evaluations for trees for which more detailed examination and/or testing and risk assessment is recommended (including aerial inspection, decay mapping and/or root examination) is provisional, pending the outcome of these studies.
- Tree condition assessments were based on visual observations from the ground level.
- The Arborist did not conduct any root excavation, coring, or aerial inspection to assess above ground conditions. Arborists cannot detect every condition that could possibly contribute to the structural failure or decline in the health of a tree and therefore affect the appraised value.
- There is no warranty or guarantee, expressed or implied, that problems or deficiencies in surveyed trees may not arise in the future.
- This report does not include a tree protection plan describing construction-related tree avoidance and protection measures for trees selected for preservation.

Arborist Disclosure Statement

The following statement pertains to The Arborist work and this report:

- Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the Arborist, or to seek additional advice.
- Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.
- Treatment, pruning and removal of trees may involve considerations beyond the scope of the Arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the Arborist. An Arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.
- Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk.

Certification of Performance

WRA, Inc. certifies:

- That we have personally inspected the tree(s) and/or the property referred to in this report and have stated our findings accurately. The extent of the evaluation is stated in this report;

- That we have no current or prospective interest in the vegetation, or the property, that is the subject of this report, and we have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions and conclusions stated herein are our own, and are based on current scientific procedures and facts;
- That our compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party, nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events;
- That our analysis, opinions, and conclusions were developed, and this report has been prepared according to commonly accepted Arboricultural practices;
- That no one provided significant professional assistance to the consultant, except as indicated within the report.

Please feel free to contact me, or Patricia Valcarcel, Principal for the WRA Project, if you have any questions or concerns. We are available to provide additional arborist services such as tree preservation recommendations, monitoring, or other services as requested.

Sincerely yours,

Kevin Schwartz, Ph.D.
ISA Certified Arborist #9541A
ISA Qualified Tree Risk Assessor
Kevin.Schwartz@wra-ca.com

Attachments:

Figure 1. Study Area Regional Location Map
Figure 2. Tree Survey Study Area
Table A. Tree Evaluation

Path: L:\Acad 2000 Files\320000\320072\GIS\ArcMap\320072Base.aprx

Sources: National Geographic, WRA | Prepared By: rochelle, 1/10/2023

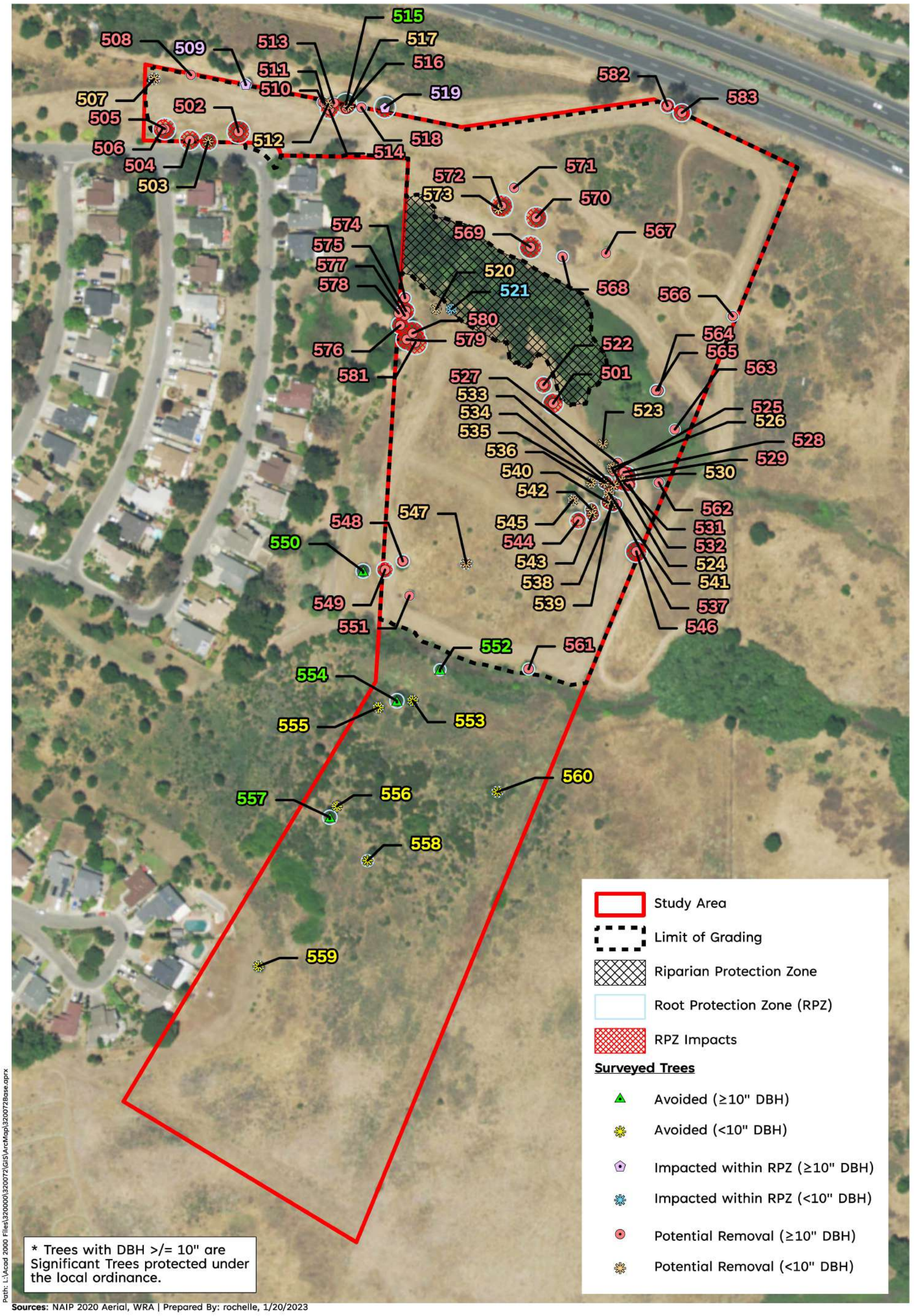
Figure 1. Study Area Regional Location Map

Sancerra Vista Cove
Vallejo, California

0 0.5 1 Miles

N

wra
ENVIRONMENTAL CONSULTANTS



Sources: NAIP 2020 Aerial, WRA | Prepared By: rochelle, 1/20/2023

Figure 2. Tree Survey Study Area

Sancerra Vista Cove
Vallejo, California

0 250 500 Feet

N

wra Environmental Consultants

Table A. Tree Evaluation

#	Tag_ID	Species	Common Name	Multistem	DBH_1	*DBH_2*	DBH_3	DBH_4	DBH_5	DBH (SUM)	Dripline_1	Dripline_2	RPZ_ FT	RPZ (ac)	RPZ (sqft)	Impact (ac)	Impact (sqft)	Impact (%)	Condition	General Health	Structure	Health_1	Health_2	Comment
1	501	Quercus agrifolia	coast live oak	yes	11.6	7.1	0	0	0	18.7	13	17.2	17	0.02	929	0.021	929	100%	Good	Good	Good			
2	502	Quercus agrifolia	coast live oak	yes	12.2	13.6	7	10.4	0	43.2	19.3	13.8	19	0.03	1170	0.027	1170	100%	Good	Good	Good			
3	503	Arbutus 'Marina'	strawberry tree	no	9.5	0	0	0	0	9.5	14.8	15	15	0.02	707	0.016	707	100%	Good	Good	Good			
4	504	Arbutus 'Marina'	strawberry tree	no	11.3	0	0	0	0	11.3	17	15	17	0.02	908	0.021	908	100%	Good	Good	Good			
5	505	Quercus agrifolia	coast live oak	yes	8.3	11.4	7.7	7.6	6.2	41.2	18	15	18	0.02	1018	0.023	1018	100%	Good	Good	Good			
6	506	Quercus agrifolia	coast live oak	no	11	0	0	0	0	11	12	15	15	0.02	707	0.016	707	100%	Good	Good	Good			
7	507	Quercus agrifolia	coast live oak	yes	3	5	0	0	0	8	9	7	9	0.01	254	0.006	254	100%	Good	Good	Good			
8	508	Quercus agrifolia	coast live oak	yes	5.8	4	5	3.5	3	21.3	8	8	8	0.00	201	0.005	201	100%	Good	Good	Good			
9	509	Quercus agrifolia	coast live oak	yes	11	10	5	0	0	26	9	9	9	0.01	254	0.002	96	38%	Good	Good	Fair	included bark		
10	510	Quercus agrifolia	coast live oak	yes	8	7	0	0	0	15	8	9	9	0.01	254	0.006	254	100%	Good	Good	Good			
11	511	Quercus agrifolia	coast live oak	yes	5.5	2.2	2.2	1.5	1.5	12.9	8	7	8	0.00	201	0.005	201	100%	Good	Good	Good			
12	512	Quercus agrifolia	coast live oak	yes	5.5	3	0	0	0	8.5	7	6	7	0.00	154	0.004	154	100%	Good	Good	Good			
13	513	Quercus agrifolia	coast live oak	yes	9.3	4.3	0	0	0	13.6	9	9	9	0.01	254	0.006	254	100%	Good	Good	Good			
14	514	Quercus agrifolia	coast live oak	yes	11	5	0	0	0	16	15	14	15	0.02	707	0.016	707	100%	Good	Good	Good			
15	515	Quercus agrifolia	coast live oak	yes	13	9	8	0	0	30	18	18	18	0.02	1018	0.000	0	0%	Good	Good	Good			
16	516	Quercus agrifolia	coast live oak	yes	5	5	4	4	1	19	8	9	9	0.01	254	0.006	254	100%	Good	Good	Good			
17	517	Quercus agrifolia	coast live oak	yes	3	3	1	1	1	9	8	7	8	0.00	201	0.005	201	100%	Good	Good	Good			
18	518	Quercus agrifolia	coast live oak	yes	8	4	0	0	0	12	9	9	9	0.01	254	0.006	254	100%	Good	Good	Fair	1 trunk growing thru fence		
19	519	Quercus agrifolia	coast live oak	yes	13	13	11	0	0	37	16	18	18	0.02	1018	0.006	249	24%	Good	Good	Good	trunk outside prprty boundary		
20	520	Quercus agrifolia	coast live oak	yes	2.8	2.2	2	1.5	1	9.5	7	7	7	0.00	154	0.004	154	100%	Fair	Fair	Good	minor decay/dieback	unk abiotic disorder	
21	521	Heteromeles arbutifolia	toyon	yes	2.1	2.2	2	2	1.5	9.8	8	7	8	0.00	201	0.002	70	35%	Fair	Fair	Fair	minor decay/dieback		
22	522	Quercus agrifolia	coast live oak	yes	6.7	10.7	0	0	0	17.4	13	14	14	0.01	616	0.014	616	100%	Good	Good	Good			
23	523	Quercus agrifolia	coast live oak	yes	3.5	1.5	1	1	1	8	4.5	5	5	0.00	79	0.002	79	100%	Good	Good	Good			
24	524	Quercus agrifolia	coast live oak	no	6	0	0	0	0	6	7	5	7	0.00	154	0.004	154	100%	Good	Good	Good			
25	525	Quercus agrifolia	coast live oak	yes	5.2	4.5	3.6	0	0	13.3	7	6	7	0.00	154	0.004	154	100%	Good	Good	Good			
26	526	Quercus agrifolia	coast live oak	no	6.6	0	0	0	0	6.6	9	9	9	0.01	254	0.006	254	100%	Good	Good	Good			
27	527	Quercus agrifolia	coast live oak	yes	6.2	7.1	5	0	0	18.3	6	9	9	0.01	254	0.006	254	100%	Good	Good	Good			
28	528	Quercus agrifolia	coast live oak	yes	8	2	0	0	0	10	9	12	12	0.01	452	0.010	452	100%	Good	Good	Good			
29	529	Quercus agrifolia	coast live oak	yes	12.5	8	4	3	3	30.5	15	18	18	0.02	1018	0.023	1018	100%	Good	Good	Good			
30	530	Quercus agrifolia	coast live oak	no	6.9	0	0	0	0	6.9	12	5	12	0.01	452	0.010	452	100%	Good	Good	Good			
31	531	Quercus agrifolia	coast live oak	yes	6.2	4.1	0	0	0	10.3	4	15	15	0.02	707	0.016	707	100%	Good	Good	Fair			
32	532	Quercus agrifolia	coast live oak	yes	8	6	4	0	0	18	12	10	12	0.01	452	0.010	452	100%	Good	Good	Good			
33	533	Quercus agrifolia	coast live oak	no	8	0	0	0	0	8	9	8	9	0.01	254	0.006	254	100%	Good	Good	Good			
34	534	Quercus agrifolia	coast live oak	no	9	0	0	0	0	9	12	10	12	0.01	452	0.010	452	100%	Good	Good	Good			
35	535	Quercus agrifolia	coast live oak	no	8	0	0	0	0	8	8	8	8	0.00	201	0.005	201	100%	Good	Good	Good			
36	536	Quercus agrifolia	coast live oak	no	6.1	0	0	0	0	6.1	8	7	8	0.00	201	0.005	201	100%	Good	Good	Good			
37	537	Quercus agrifolia	coast live oak	yes	8.5	4.5	2	0	0	15	10	10	10	0.01	314	0.007	314	100%	Good	Good	Good			
38	538	Quercus agrifolia	coast live oak	no	9	0	0	0	0	9	13	9	13	0.01	531	0.012	531	100%	Good	Good	Good			
39	539	Quercus agrifolia	coast live oak	no	6.4	0	0	0	0	6.4	10	8	10	0.01	314	0.007	314	100%	Good	Good	Good			
40	540	Quercus agrifolia	coast live oak	no	9	0	0	0	0	9	10	12	12	0.01	452	0.010	452	100%	Good	Good	Good			
41	541	Quercus agrifolia	coast live oak	no	6.4	0	0	0	0	6.4	8	7	8	0.00	201	0.005	201	100%	Good	Good	Good			
42	542	Quercus agrifolia	coast live oak	no	8.3	0	0	0	0	8.3	11	8	11	0.01	380	0.009	380	100%	Good	Good	Good			
43	543	Quercus agrifolia	coast live oak	no	9	0	0	0	0	9	10	12	12	0.01	452	0.010	452	100%	Good	Good	Good			
44	544	Quercus agrifolia	coast live oak	yes	13.5	6	4	0	0	23.5	14	12	14	0.01	616	0.014	616	100%	Good	Good	Good			
45	545	Quercus agrifolia	coast live oak	no	6.2	0	0	0	0	6.2	8	7	8	0.00	201	0.005	201	100%	Good	Good	Good			
46	546	Quercus agrifolia	coast live oak	yes	12.7	9.8	11.8	9	9	52.3	15	18	18	0.02	1018	0.023	1018	100%	Good	Good	Good			
47	547	Pinus radiata	Monterey pine	no	9.1	0	0	0	0	9.1	9	9	9	0.01	254	0.006	254	100%	Good	Good	Good			
48	548	Pinus radiata	Monterey pine	no	13.8	0	0	0	0	13.8	11	11	11	0.01	380	0.009	380	100%	Fair	Fair	Good	minor decay/dieback		
49	549	Quercus agrifolia	coast live oak	yes	6.2	7	6	5.5	3	27.7	14	13	14	0.01	616	0.014	616	100%	Good	Good	Good			
50	550	Quercus lobata	valley oak	no	11.2	0	0	0	0	11.2	12	12	12	0.01	452	0.000	0	0%	Good	Good	Good			
51	551	Pinus radiata	Monterey pine	yes	7.7	7	6.5	0	0	21.2	8	7	8	0.00	201	0.005	201	100%	Good	Good	Good			
52	552	Quercus agrifolia	coast live oak	no	10.2	0	0	0	0	10.2	10	8	10	0.01	314	0.000	0	0%	Good	Good	Good			
53	553	Quercus agrifolia	coast live oak	no	7.7	0	0	0	0	7.7	8	8	8	0.00	201	0.000	0	0%	Good	Good	Good			
54	554	Quercus agrifolia	coast live oak	no	10.5	0	0	0	0	10.5	12	10	12	0.01	452	0.000	0	0%	Good	Good	Good			
55	555	Quercus agrifolia	coast live oak	no	6.5	0	0	0	0	6.5	8	7	8	0.00	201	0.000	0	0%	Good	Good	Good			
56	556	Quercus agrifolia	coast live oak	yes	4.8	4.8	3.5	0	0	13.1	7	7	7	0.00	154	0.000	0	0%	Good	Good	Good			
57	557	Quercus agrifolia	coast live oak	no	14	0	0	0	0	14	12	12	12	0.01	452	0.000	0	0%	Good	Good	Good			
58	558	Quercus agrifolia	coast live oak	yes	8	7.7	0	0	0	15.7	10	8	10	0.01	314	0.000	0	0%	Good	Good	Good			
59	559	Malus sp.	apple	yes	4	4	3	3.6	3	17.6	7	8	8	0.00	201	0.000	0	0%	Fair	Poor	Good	major decay/dieback		
60	560	Quercus agrifolia	coast live oak	no	8	0	0	0	0	8	9	9	9	0.01	254	0.000	0	0%	Good	Good	Good			Too dense shrubs to tag
61	561	Prunus sp.	plum cherry	yes	8	6	5	5	4	28	10	8	10	0.01	314	0.007	314	100%	Fair	Good	Good	minor decay/dieback		
62	562	Quercus agrifolia	coast live oak	yes	7.5	6	0	0	0	13.5	7	8.5	9	0.01	227	0.005	227	100%	Good	Good	Good			
63	563	Quercus agrifolia	coast live oak	yes	8	5	0	0	0	13	9	9	9	0.01	254	0.006	254	100%	Good	Good	Good			inaccessible due to RUAR, no tag
64	564	Quercus agrifolia	coast live oak	yes	5.6	7	6	6	3	27.6	10	9	10	0.01	314	0.007	314	100%	Good	Good	Good			
65	565	Quercus agrifolia	coast live oak	yes	5.6	6	0	0	0	11.6	10	8	10	0.01	314	0.007	314	100%	Good	Good				
66	566	Quercus agrifolia	coast live oak	yes	7.6	8	6.5	6.7	5.4	34.2	9	9	9	0.01	254	0.006	254	100%	Good	Good	Good			
67	567	Prunus sp.	plum cherry	yes	5.5	4.5	4	3.5	3	20.5	8	7	8	0.00	201	0.005	201	100%	Fair	Fair	Good	minor decay/dieback		
68	568	Quercus agrifolia	coast live oak	yes	9.7	7.6	0	0	0	17.3	10	9	10	0.01	314	0.007	314	100%	Good	Good	Good			
69	569	Quercus agrifolia	coast live oak	yes	16.4	11.8	0	0	0	28.2	19	15	19	0.03	1134	0.026	1134	100%	Good	Good	Good			
70	570	Quercus agrifolia	coast live oak	yes	15.3	7	0	0	0	22.3	15	18	18	0.02	1018	0.023	1018	100%	Good	Good	Good			
71	571	Quercus agrifolia	coast live oak	yes	5	5.5	4	0	0	14.5	8	9	9	0.01	254	0.006	254	100%	Good	Good	Good			
72	572	Quercus agrifolia	coast live oak	yes	15	7	0	0	0	22	15	19	19	0.03	1134	0.026	1134	100%	Good	Good	Good			
73	573	Quercus agrifolia	coast live oak	no	9	0	0	0	0	9	10	8	10	0.01	314	0.007	314	100%	Good	Good	Good			
74	574	Quercus agrifolia	coast live oak	yes	10.2	7.4	0	0	0	17.6	10	12	12	0.01	452	0.010	452	100%	Good	Good	Good			
75	575	Quercus agrifolia	coast live oak	yes	7.2	18	0	0	0	25.2	15	15	15	0.02	707	0.016	707	100%	Good	Good	Good			
76	576	Quercus agrifolia	coast live oak	yes	9.2	5.2	3.5	4	3.8	25.7	15	10	15	0.02	707	0.016	707	100%	Fair	Good	Good			
77	577	Quercus agrifolia	coast live oak	no	11.4	0	0	0	0	11.4	10	9	10	0.01	314	0.007	314	100%	Good	Good	Good			
78	578	Quercus agrifolia	coast live oak	yes	3.4	4	3.6	3.5	0	14.5	6	7	7	0.00	154	0.004	154	100%	Fair	Fair	Good			
79	579	Quercus agrifolia	coast live oak	yes	9	10.8	13.5	0	0	33.3	18	14	18	0.02	1018	0.023	1018	100%	Good	Good	Good			
80	580	Quercus agrifolia	coast live oak	yes	11	7.2	8.7	12	0	38.9	20	15	20	0.03	1257	0.029	1257	100%	Good	Good	Good			
81	581	Quercus agrifolia	coast live oak	yes	8.5	7	12.5	8	0	36	20	18	20	0.03	1257	0.029	1257	100%	Good	Good	Good			
82	582	Quercus agrifolia	coast live oak	yes	3.8	7	8	4	0	22.8	15	14	15	0.02	707	0.016	707	100%	Good	Good	Good			
83	583	Quercus agrifolia	coast live oak	yes	3.5	3.6	2.6	3	0	12.7	10	10	10	0.01	314	0.007	314	100%	Good	Good	Good			

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: March 17, 2025

TO: Cesar Orozco, Principal Planner
City of Vallejo

FROM: John Kunna, Associate/Senior Biologist
Florentina Craciun, AICP Associate/Environmental Planner

SUBJECT: Third-Party Review of Biological Resources Report for the Vista Cove Project in Vallejo, California

INTRODUCTION

LSA Associates, Inc. (LSA) completed a peer review of the *Biological Resources Technical Report* (BRTR) prepared for the Vista Cove Project (project) by WRA Environmental Consultants (WRA) in February 2024 to determine whether the report complies with the California Environmental Quality Act (CEQA) and conforms to accepted methodologies and procedures (industry standards).

LSA relied on the information presented in the BRTR and did not collect additional data or conduct additional site surveys. Therefore, LSA cannot include an opinion evaluating to what extent the presented information is representative of the current project site conditions.

LSA peer reviewed the BRTR with respect to the following parameters:

- Adequate description of the proposed project and project site to analyze potential impacts to biological resources
- Adequate description of the existing setting, including the location of known on-site resources and features, resources, and features in the project vicinity, and applicable federal, State, regional, and local regulations
- Appropriate assumptions if and where project- and site-specific information is unavailable
- Appropriate analytical methodology, assumptions, and significance thresholds for analyzing project impacts in conformance with CEQA and current professional standards
- Results, determinations of significance, and adequacy of any proposed mitigation measures

METHODS

LSA reviewed the BRTR[1] as well as the December 2024 California Department of Fish and Wildlife (CDFW) Special Animals List[2] for updated legal/protection status of wildlife species. LSA also conducted an updated search of the California Department of Fish and Wildlife California Natural Diversity Database (CNDDB).[3]

RESULTS/PEER REVIEW

The following presents LSA's peer review of the BRTR in the order each section appears in the BRTR.

Section 1.0: Introduction

- **Overview and Purpose:** This section adequately describes the purpose and limitations of the BRTR. The project location is described adequately in text and on figures.

- **Project Description:** This section defines the 20.13-acre study area as well as the 10.4-acre project area. The proposed project description text is brief, but it is adequate for the purpose of analyzing impacts to biological resources. This section does contain one sentence that is partially redundant and unclear: "The Project is development for a 10. 40-acre property."

- **Summary of Results:** This section adequately summarizes the results and conclusion. It includes the statement that one special-status bird species has the potential to occur within the study area. However, later in the document, Section 5.0 and Table 3 list five special-status wildlife species that have a moderate or high potential to occur within the study area. LSA recommends this omission is clarified.

Section 2.0: Regulatory Background

This section adequately summarizes relevant laws and regulations and explains them in the context of the biological assessment.

Section 3.0: Assessment Methodology

- **Literature Review and Database Searches:** WRA reviewed all the relevant literature necessary to characterize the nature and extent of biological resources in the study area.

- **Site Visits:** The surveys, as described, conform to industry standards and are sufficient.

- **Vegetation Communities and Other Land Cover Types:** This section provides a thorough description of the methods used to map and classify vegetation communities and other land cover types on the site. The methodology is appropriate.

---

1 WRA Environmental Consultants. 2024. *Vista Cove Biological Resources Technical Report.* February.

2 California Department of Fish and Wildlife (CDFW). 2024. California Natural Diversity Database (CNDDB) Special Animals List. December. Sacramento, CA.

3 CDFW. 2024. CNDDB – Commercial version dated December 1, 2024.

- **Special-Status Species:** This sections provides an adequate description of the methods used to determine each special-status species' potential to occur on the site. This section would benefit from a clarification that for special-status bird species, the potential to *occur* is actually the potential to *nest* within the study area.

- **Wildlife Corridors and Native Wildlife Nursery Sites:** The methodology used to assess wildlife corridors and nursery sites was appropriate.

Section 4.0: Ecological Setting

- **Soils and Topography:** This section describes the soils mapped in the study area in sufficient detail.

- **Climate and Hydrology:** This section provides sufficient background on the climate at the site. The discussion of the National Wetland Inventory (NWI) and how it was ground-truthed is adequate.

- **Land Use:** This section describes the existing conditions in sufficient detail and accurately references the figures for a visual representation.

Section 5.0: Assessment Results

- **Vegetation Communities and Other Land Cover:** Table 2 provides a summary of the vegetation communities and land cover. The more detailed text and photographs in this section for each landcover type are accurate and adequate.

- **Special-Status Species:**

    - ***Plants:*** This section provides adequate justification for the conclusion that no special-status plant species are likely to occur in the study area and that further surveys are not warranted.

    - ***Wildlife:*** This section provides justification for the conclusion that five special-status wildlife species have potential to occur in the study area. It also provides more detail on three special-status wildlife species (pallid bat, burrowing owl, and Crotch bumble bee) that were determined to be unlikely to occur in the study area.

      According to Appendix C, several other wildlife species were also determined to be unlikely to occur in the study area but are not discussed in further detail in this section.

      Since the time of the writing of the BRTR, the California Fish and Game Commission voted to protect the western burrowing owl (*Athene cunicularia hypugaeae*) as a "candidate" species under the California Endangered Species Act (CESA).

- **Wildlife Corridors and Native Wildlife Nursery Sites:** This section adequately explains why the study area does not contain a wildlife corridor, essential fish habitat, native wildlife nursery sites, or designated critical habitat.

Section 6.0: Analytical Methodology and Significance Threshold Criteria

This section outlines the six biological resource categories covered by Appendix G, Section IV, of the *State CEQA Guidelines.* It adequately defines significant impact and substantial adverse effect.

Section 7.0: Impacts and Mitigation Evaluation

- **Special-Status Species:** This section provides reasonable and prudent measures to reduce impacts to a less than significant level for the five special-status wildlife species that have a moderate or higher potential to occur in the study area

- **Sensitive Natural Communities and Critical Habitat:** This section provides reasonable and prudent measures to reduce impacts to the seasonal wetland, freshwater marsh, and riparian area to a less than significant level.

- **Aquatic Resources:** This section describes how impacts to the freshwater marsh and intermittent stream will be avoided. It states that the previously described Mitigation Measures BIO-3, BIO-4a, and BIO-4b will reduce impacts to a less than significant level**.** LSA agrees with these conclusions.

  This section also refers to the wetlands or other areas that may be in the jurisdiction of "BCDC." The acronym is not defined, but presumably refers to the Bay Conservation and Development Commission. The BCDC is not mentioned elsewhere in the text, and the site is not within BCDC jurisdiction, so it is assumed this is a typographical error and refers to the CDFW, not the BCDC.

- **Wildlife Corridors:** LSA agrees with the conclusion that the project is not likely to interfere substantially with the movement of wildlife species or impact nursery sites and, therefore, mitigation measures are not required.

- **Local Policies and Ordinances:** This section references measures related to the planting of replacement trees. LSA agrees if these measures are implemented, there will be no conflict with local policies and ordinances.

- **Habitat Conservation Plans:** LSA agrees that the study area is not in an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or State habitat conservation plan and that, therefore, there would be no conflict or impact.

Section 8.0: References

All references in this section appear to have been cited accurately.

Appendix A: Figures

The figures adequately depict the study area in sufficient detail.

Appendix B: Species Observed Within the Study Area

Appendix B-1. Plant Species Observed

The number of plant species detected indicates that the biologists thoroughly inventoried the study area during the site visits.

However, the table has several errors. For five species (*Cardamine cf. hirsuta, Erigeron canadensis, Medicago polymorpha, Rumex crispus*, and *Sanicula bipinnatifida*), the Life Form and Origin columns were transposed.

Ten native plant species (Crassula connata, Galium aparine, Helenium puberulum, *Heteromeles arbutifolia*, *Juncus effusus*, *Juncus mexicanus*, *Marah fabacea*, *Nasturtium officinale*, *Phoradendron leucarpum*, and *Quercus agrifolia*) were incorrectly identified as nonnative.

Conversely, 19 nonnative species (*Avena barbata*, *Avena fatua*, *Bellardia trixago*, *Bromus hordeaceus*, *Calendula arvensis*, *Capsella bursa-pastoris*, *Carduus pycnocephalus* ssp. *pycnocephalus*, *Cirsium vulgare*, *Dittrichia graveolens*, *Elymus caput-medusae*, *Elymus triticoides*, Erodium botrys, *Erodium moschatum*, *Ficus carica*, *Geranium molle*, *Holcus lanatus*, *Ligustrum lucidum*, *Raphanus sativus*, and *Rumex pulcher*) were misidentified as native.

For two species (*Cortaderia selloana* and *Cyperus eragrostis*), the Origin column was blank.

For one species (*Typha* sp.), the Common Name and Life Form columns were blank.

Appendix B-2. Wildlife Species Observed

This table notes that bumble bees were observed. Presumably, these could not be identified to species. Several species of bumble bee in California have a protected conservation status, but the conservation status column was left blank where it should have been marked as unknown.

The table also notes that Botta's pocket gopher was observed in the study area. The absence of ground squirrel burrows was one of the justifications for the Crotch bumble bee's occurrence to be considered unlikely. However, gophers also create burrows that could be used by bumble bees.

Appendix C: Potential For Special-Status Species to Occur in the Study Area

This table provides an adequate analysis of the potential for special-status wildlife species to occur in the study area as well as recommendations for further actions.

The table states that the most recent occurrences for western bumble bee within 60 miles are from the 1950s, but a review of the CNDDB indicates that within 5 miles of the study area, Occurrence #179 is based on a collection made in 1962, and Occurrence #181 is based on a collection made in 1964.

Appendix D: Project Plans

The project plans are sufficiently detailed to provide a basis for determining potential impacts to protected biological resources.

CONCLUSION AND RECOMMENDATIONS

Generally, the efforts of the study are thorough and adequate and conform to industry standards. The errors in the BRTR are unlikely to significantly change the conclusions regarding potential impacts or the proposed mitigation measures.

Please contact me at (510) 462-1326 or via email at john.kunna@lsa.net if you have any questions regarding this document.

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: March 17, 2025

TO: Cesar Orozco, Principal Planner
City of Vallejo

FROM: John Kunna, Senior Biologist
Florentina Craciun, AICP | Associate/Environmental Planner

SUBJECT: Third-Party Review of Arborist Report for the Vista Cove Project in Vallejo, California.

INTRODUCTION

LSA completed a peer review of the *Sancerra Vista Cove Development Project – Arborist Tree Survey and Report* (ATSR) prepared by WRA dated February 22, 2023, to determine whether the report conforms to accepted methodologies and procedures (industry standards).

LSA relied on the information presented in the reviewed ATSR and did not collect additional data or survey the site. Therefore, LSA cannot include an opinion evaluating to what extent the presented information appears to be representative of the current project site conditions.

LSA peer reviewed the ATSR with respect to the following parameters:

- Adequate analysis of potential impacts to trees
- Adequate description of the applicable regulations
- Appropriate methodology, assumptions, and limitations

METHODS

LSA reviewed the ATSR.[1] LSA also reviewed the City of Vallejo's Zoning Code Chapters 16.504.07 (tree protection) and 16.701.02 (Land use terms and definitions) of Title 16. LSA used the International Society of Arboriculture (ISA) website[2] to verify the credentials of the arborist.

1 WRA, Inc. 2023. Sancerra Vista Cove Development Project – Arborist Tree Survey and Report. February 22.
2 International Society of Arboriculture (ISA). n.d. Verify an ISA Credential. Website: https://www.treesaregood.org/findanarborist/verify

RESULTS/PEER REVIEW

The following presents LSA's peer review of the ATSR in the order each section appears.

Introduction

The first paragraph adequately describes the location of the site. The paragraph also provides the arborist's certifications and the purpose of the report.

Regulatory Background

This section accurately describes the relevant municipal codes.

Methods

This section describes the methods used in sufficient detail. The methods, as described, are appropriate and conform to industry standards.

Summary of Tree Evaluation

The text adequately describes the results of the survey, and a summary is provided in Table 1. No table 2 is presented or references, but Table 3 provides a suitable summary of anticipated number of trees that may be required to be planted as mitigation for tree removal. LSA suspects the omission of a Table 2 is a simple typographical error.

Limitations

This section adequately describes the limitations of the report.

Arborist Disclosure Statement

This statement is sufficient and conforms to industry standards.

Certification of Performance

This statement is sufficient and conforms to industry standards.

Attachments

Figure 1. Study Area Regional Location Map

This map adequately shows the location of the Study Area in the regional context.

Figure 2. Tree Survey Study Area

This map adequately shows al of the surveyed trees and classifies them according to size and whether they may be impacted. LSA found the use of the "RPZ" abbreviation for Root Protection Zone to be possibly confused with the Riparian Protection Zone, particularly for tree #521, which is on the limits of grading of the Riparian Protection Zone. Cross-referencing with the tree table eliminated the confusion.

Table A. Tree Evaluation

This table is generally sufficient. It contains one unidentified abbreviation ("RUAR"), but this does not affect the conclusions of the report.

CONCLUSION AND RECOMMENDATIONS

Generally, the efforts of the study appear to be thorough and adequate and conform to industry standards.

It may help to clarify that *Prunus* sp. refers to an escaped or hybridized tree cultivar that may commonly be called either plum or cherry. On page 4, two "cherry" trees are mentioned in the text, on page 6 two "plum or cherry" trees are included in Table 3, and Table A provides the details for two "plum cherry" trees. The trees are all accurately identified as non-native, so inconsistent use of common names is not a major issue.

LSA recommends that the City of Vallejo accept the ATSR.

Please contact me at (510) 462-1326 or via email at john.kunna@lsa.net if you have any questions regarding this document.

This page intentionally left blank

APPENDIX D

CULTURAL RESOURCES ASSESSMENT

CULTURAL RESOURCES ASSESSMENT

VISTA COVE DEVELOPMENT PROJECT

VALLEJO, SOLANO COUNTY, CALIFORNIA

LSA

March 2025

CULTURAL RESOURCES ASSESSMENT

VISTA COVE DEVELOPMENT PROJECT

VALLEJO, SOLANO COUNTY, CALIFORNIA

Prepared for:

Cesar Orozco, Principal Planner
City of Vallejo
Planning and Development Services
555 Santa Clara Street
Vallejo, California 94590

Prepared by:

Riordan Goodwin, RA and Cassidy Sharp, RPA
LSA
1500 Iowa Avenue, Suite 200
Riverside, California 92507
(951) 781-9310

LSA Project No. 20241845

National Archaeological Database Information:
Type of Study: Record Search, Archaeological Survey
USGS Quadrangle: *Benicia, California*
Acreage: 20

March 2025

MANAGEMENT SUMMARY

LSA conducted a cultural resources assessment for the Vista Cove Development Project (project) in Vallejo, Solano County, California. The assessment included a record search, archival research, field surveys, and this report. The subject property is approximately 20 acres. As the Lead Agency for the project, the City of Vallejo (City) required this study as part of the environmental review process to comply with the California Environmental Quality Act (CEQA).

The purpose of the study is to provide the City with the necessary information and analysis to determine, as mandated by CEQA, whether the proposed project would cause substantial adverse changes to any historical/archaeological resources that may exist in or around the project area. To identify and evaluate such resources, LSA conducted a historical/archaeological resource records search, conducted historical background research, and carried out pedestrian field surveys.

No cultural resources within or adjacent to the project area were identified. Although eight historic resources were documented less than 0.5 miles away, the severe slopes and adjacent developments indicate that project parcel retains low potential for in situ subsurface cultural resources. Based on the site sensitivity LSA recommends that the following measures be implemented: (1) Workers Environmental Awareness Program; (2) Unknown Discovery of Archaeological Resources; and (3) Protocol for Human Remains Discovery.

TABLE OF CONTENTS

MANAGEMENT SUMMARY i
INTRODUCTION 1
SETTING 3
Current Natural Setting 3
Climate and Watershed 3
Flora and Fauna 3
Geology 3
Cultural Setting 3
Prehistory 3
Ethnography 4
History 4
Methods 5
Record Search 5
Additional Research 5
Archaeological Field Survey 5
RESULTS 6
Record Search 6
Additional Research 6
Archaeological Field Survey 6
RECOMMENDATIONS 7
REFERENCES 10

FIGURE

Figure 1: Regional and Project Location 2

APPENDIX

A: RECORD SEARCH BIBLIOGRAPHY

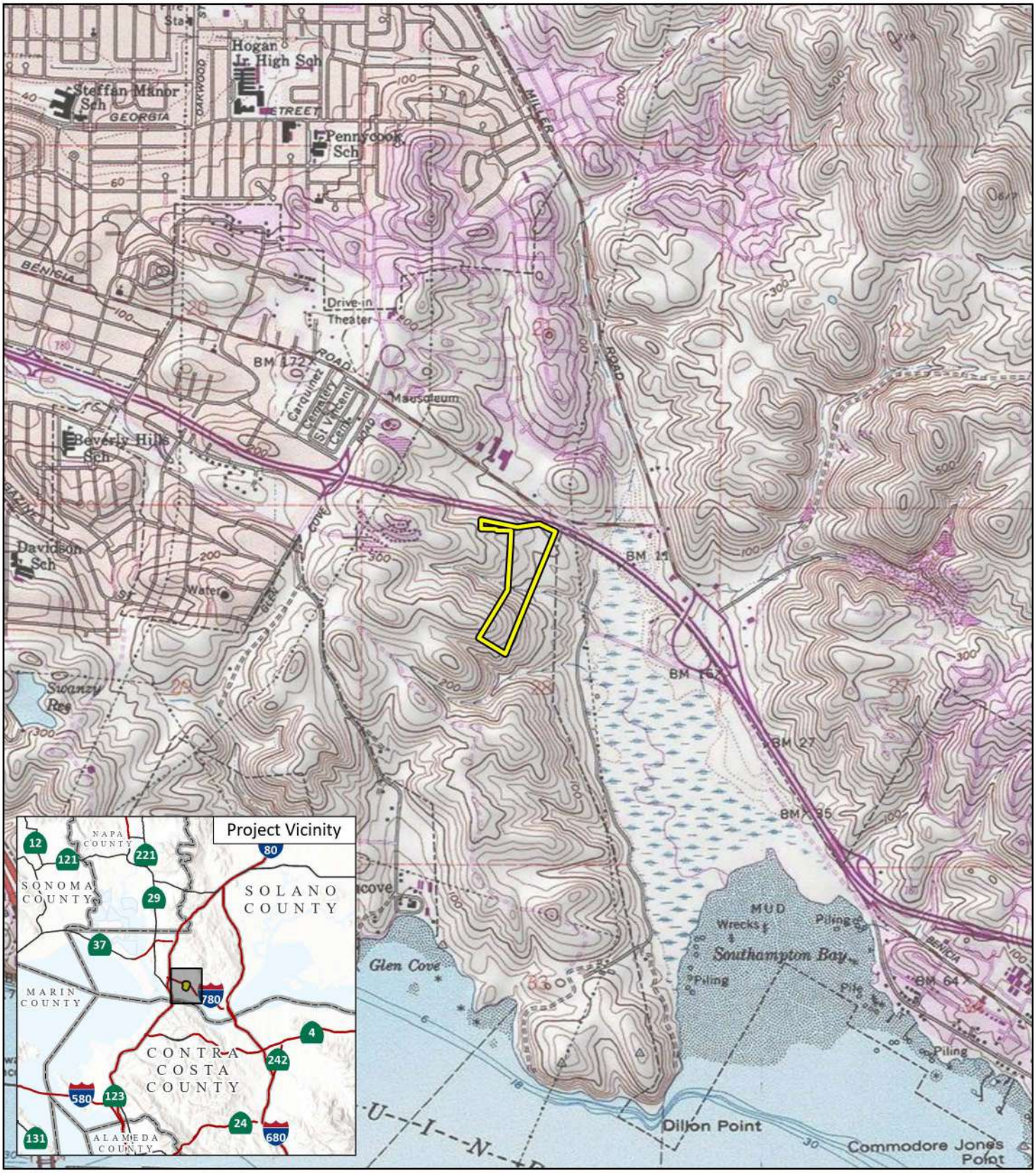
LIST OF ABBREVIATIONS AND ACRONYMS

CEQA	California Environmental Quality Act
City	City of Vallejo
County	County of Solano
MLD	Most Likely Descendant
NAHC	Native American Heritage Commission
NWIC	Northwest Information Center
PRC	Public Resources Code
project	Vista Cove Development Project

INTRODUCTION

At the request of the City of Vallejo (City), LSA performed a cultural resources study on approximately 20 acres of land in Vallejo, Solano County, California (see Figure 1). The subject property of the study, Assessor's Parcel Numbers 0079-171-170, 0079-220-070, and a portion of 0079-120-100, is at the northeast corner of Shady Lane and Wildflower Street in Township 3 North, Range 3 West, Section 28, Mt. Diablo Baseline and Meridian, as depicted on the United States Geological Survey *Benicia, California* 7.5-minute topographic quadrangle map. The study is part of the environmental review process for residential development. The City, as Lead Agency for the project, required the study in compliance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] § 21000, et seq.).

LSA performed this study to provide the City with the necessary information and analysis to determine, as mandated by CEQA, whether the proposed project would cause substantial adverse changes to any historical/archaeological resources that may exist in or around the project area. To identify and evaluate such resources, LSA conducted a historical/archaeological resources record search, pursued a historical background research, and carried out pedestrian field surveys. This report is a complete account of the methods, results, and final conclusion of the study.



LSA

FIGURE 1

0 1000 2000
FEET

Vista Cove Planned Development Project

Project Location

SOURCE: *Benicia CA*, 7.5' Quad (USGS 1980)

I:\2024\20241845\GIS\Pro\Vista Cove Planned Development Project\Vista Cove Planned Development Project.aprx (1/29/2025)

SETTING

CURRENT NATURAL SETTING

Climate and Watershed

The project region is characterized by the coastal climate, with mild summers and winters. Rainfall averages 24 inches annually. The project area is transected by two ephemeral drainages, which drain to Benicia State Park in the east, where stormwater runoff converges and is directed to the Carquinez Strait (DK Engineering 2023).

Flora and Fauna

At an elevation of approximately 250 feet, the project is just within the Lower Sonoran Life Zone of California (Schoenherr 1992), which ranges from below sea level to 3,500 feet. Monterey pine, coast live oak, poison oak, and other native species were noted on the property (particularly xeric grasses, oats, barley, and brome). Extensive fauna are known locally, including many endemic species of reptiles, birds, and insects.

The coastal environment of California hosted a rich variety of abundant floral and faunal resources that fostered a particularly dense Native American occupation of this region during prehistoric times, especially the coastal corridor within a day's "commuting" distance of fresh water.

Geology

Vallejo is within the Coast Ranges geomorphic province of California. The geological setting along the Coast Ranges is notably different between the East and West sides of the San Andreas fault. Vallejo lies to the east of the San Andreas fault, which is characterized by Mesozoic rocks of the Franciscan Complex, the Great Valley Sequence, and the Jurassic Coast Range ophiolite.

According to maps by Wagner and Gutierrez (2010), the boundaries of this project are situated within the Upper Great Valley Sequence, which dates to the Late Cretaceous. The Upper Great Valley Sequence (Ku) consists of sandstone, siltstone, shale, and minor conglomerate.

CULTURAL SETTING

Prehistory

Chronologies of prehistoric cultural change in Northern California area have been attempted numerous times, and several are reviewed in Moratto (2004). No single description is universally accepted, as the various chronologies are based primarily on material developments identified by researchers familiar with sites in a particular region and variation exists essentially due to the differences in those items found at the sites. Small differences occur over time and space, which combine to form patterns that are variously interpreted.

One of the regional chronologies commonly referenced in the archaeological literature is Meyer and Rosenthal, White, and Sutton (2007) modified from Fredrickson (1974). The earliest period is the Lower Archaic (10,000 to 6,000 A.D.), followed by the Initial Middle Archaic (6,000 to 4,500 BP),

Terminal Middle Archaic (4,500 to 2,500 BP), Upper Archaic (2,500 to 1,300 BP) and, finally, the Emergent (1,200 to 200 BP).

Ethnography

The project is within the traditional cultural territory of the Patwin (Johnson, 1978; Kroeber, 1925). Tribal territories were somewhat fluid and changed over time. Like other Native American groups in Northern California, they were semi-nomadic hunter-gatherers who subsisted by exploitation of seasonably available plant and animal resources. The first written accounts of Native American groups in California were by Spanish missionaries in the late 18th century. Later documentation of the Patwin was by Powers (1877), Barrett (1908), Merriam (1929), and many others.

With the Spanish intrusion came a drastic change in lifestyle for the Native Americans of California. Incorporation of the indigenous populations into the mission system involved conflict, forced labor, and relocation along with decimation by European diseases, all of which led to the disruption of native cultures and changes in subsistence and land use practices. Cattle ranches/farms were established on or near ancestral Native American villages, primarily in the major drainages conducive to horticulture and animal husbandry. Water was diverted for irrigation and stock. Within a short time, the missions controlled many ranchos where Indians lived and worked.

History

In California, the historic era is generally divided into three periods: the Spanish Period (1769–1821), the Mexican Period (1821–1848), and the American Period (1848–present). As there were no resources within the project site the historic context focuses on the County and local community during the American Period.

Solano County was created from part of the Sonoma territory in 1850 by the first elected Legislature of the territory of California. Solano County is therefore one of the original 27 counties in California. General Vallejo, an instrumental figure in shaping Alta California, requested that this county was named after Chief Solano, a Suisun and Patwin leader who presided over this land prior to California's statehood. Seven of the 12 townships created during Solano County's early days have incorporated into cities. These include Benicia (1850 and 1851), Vallejo (1868), Suisun City (1856), Dixon (1878), Vacaville (1892), Rio Vista (1893), and Fairfield (1903) (Solano County website, February 2025).

Vallejo

The region that became Vallejo was first mapped by Spanish colonizers in 1775. However, this area remained largely unshaped by colonial influence until 1844, when General Vallejo received this area as a part of the larger Rancho Soscol land grant. General Vallejo donated land and funds for the construction of a capital city, named Vallejo, in the newly annexed state of California in 1851. Vallejo served as a temporary capitol until Benecia was formally recognized as the capital in 1853. Mare Island became the country's first permanent naval station on the West Coast in September 1854. Vallejo formally incorporated in 1868 and experienced booms of growth reflecting periods of naval growth during the Spanish-American War and World War I (Vallejo Naval and Historical Museum website, February 2025).

METHODS

Record Search

On September 6, 2024, a cultural resources record search was conducted for the current project area at the Northwest Information Center (NWIC) at Sonoma State University. The NWIC houses the pertinent archaeological site and survey information necessary to determine whether cultural resources are recorded within the study area boundaries and which specific areas have been previously surveyed in Solano County. The research included a review of all recorded historic and prehistoric archaeological sites within one mile of the project, as well as a review of known cultural resource survey and excavation reports.

Additional Research

In February 2025, Cassidy Sharp reviewed online historic period aerial photographs and maps (NETR Online 2025).

Archaeological Field Survey

On January 20, 2025, LSA Archaeologist Kendra Kolar surveyed the project area for any cultural residues (prehistoric or historic artifacts, deposits, or features). Linear transects at 20- to30-meter- (65.6- to 98.4-foot) intervals were used to systematically examine the surface. Particular attention was given to all areas of potentially native (undisturbed) soils, exposed rocks, and rodent aprons.

RESULTS

RECORD SEARCH

Data from the NWIC indicate there have been nine previous cultural resources studies conducted within the 0.5-mile study radius, three of which included portions of the project area (see Appendix A). Although no cultural resources were recorded within the project area, eight are documented within 0.5 mile. All eight of these are from historic age resources, including four buildings (Bordoni Ranch, built post-1868, as 48-000717, a 1910 residence at 1569 Columbus Parkway as 48-001030, an adjacent 1910 residential and storage building at 1545 Columbus Parkway as 48-001031, and a 1925 bungalow at 1241 Lewis Avenue as 48-001033) and five sites (48-000716 is pre-1867 township boundary marking field stones, 48-000717 is Bordoni Ranch, built post-1868, St. Vincent's Cemetery, which dates to the 19th century, is 48-001040, and 48-002056 and 48-002057 are the same historic refuse dump). Bordoni Ranch (48-000717) is listed as both a historic site and as a historic building. Bordoni Ranch (48-000717) and the historic refuse dump (48-002056) are the nearest historic resources to the project site, within 0.25 mile of the project boundary.

Additional Research

No buildings or structures are present within the project area in historic period aerial photos or indicated on maps dating back to 1948. According to these aerials, the nearby housing development completed construction sometime between 1982 and 1987 (NETR Online 2025).

ARCHAEOLOGICAL FIELD SURVEY

The field survey revealed that there was light disturbance in some areas of the project site, as modern refuse was found in various locations. Overall visibility varied in the accessed portions of the project area, but was generally limited by the vegetation cover, ranging overall from fair to non-existent. No cultural resources were identified.

Areas of visible soil were found in the previous year's plowed firebreak lines and in the dirt access road entering the north end of the project area from the adjacent development. Visibility in the southern end of the project area was very limited by grass, thistle, and fennel, with the only visible soil in rodent burrow aprons. Access was inhibited by dense vegetation at the bottom of both drainages the very steep and densely vegetated slope on the south side of the southern drainage. Observed soil was consistently reddish-brown to brown with little to no gravel. No bedrock outcrops were observed in surveyed areas. Modern refuse was noted throughout the project area.

RECOMMENDATIONS

Through the various avenues of research, this study did not identify cultural resources within or adjacent to the project. Although eight historic resources were documented less than 0.5 mile away, the severe slopes and adjacent developments indicate that project parcel retains low potential for in situ subsurface cultural resources. Therefore, no further investigation or monitoring are recommended and Standard Conditions (CEQA California Code of Regulations, Title 14, Chapter 3, Section 15064.5 [e and f] as outlined below apply.

Standard Condition -1 **Unknown Discovery of Archeological Resources**

Should an archaeological deposit be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology contacted to assess the situation, determine if the deposit qualifies as a historical resource, consult with agencies as appropriate, and make recommendations for the treatment of the discovery.

If the deposit is found to be significant (i.e., eligible for listing in the California Register of Historical Resources), the project applicant shall be responsible for funding and implementing appropriate mitigation measures. Mitigation measures may include recording the archaeological deposit, data recovery and analysis, and public outreach regarding the scientific and cultural importance of the discovery. Upon completion of the selected mitigations, a report documenting methods, findings, and recommendations shall be prepared by the qualified archaeologist and submitted to the City of Vallejo for review, and the final report shall be submitted to the Northwest Information Center at Sonoma State University. Significant archaeological materials shall be submitted to an appropriate local curation facility and used for future research and public interpretive displays, as appropriate.

Standard Condition -2 **Protocol for Human Remains Discovery**

In the event that Native American human remains are found during development of the proposed project and the Confederated Villages of Lisjan Nation (Tribe) or a member of the Tribe is determined to be the Most Likely Descendent (MLD), the following provisions shall apply:

- The Medical Examiner shall immediately be notified, ground disturbing activities in that location shall cease within 25

feet of the discovery and the Tribe shall be allowed, pursuant to California Public Resources Code (PRC) Section 5097.98(a) to inspect the site of the discovery and make determinations as to how the human remains and grave goods should be treated and disposed of with appropriate dignity.

- The Tribe shall complete its inspection and make its MLD recommendation within forty-eight (48) hours of getting access to the site. The Tribe shall have the final determination as to the disposition and treatment of human remains and grave goods. Said determination may include avoidance of the human remains, reburial on-site or reburial on tribal or other lands that will not be disturbed in the future.

- The Tribe may wish to rebury said remains and grave goods or ceremonial and cultural items on or near the site of their discovery, in an area which will not be subject to future disturbances over a prolonged period of time. Reburial of human remains shall be accomplished in compliance with California PRC Sections 5097.98(a) and (b). The term "human remains" encompasses more than human bones because the Tribe's traditions call for the burial of associated cultural items with the deceased (funerary objects), and/or the ceremonial burning of Native American human remains, funerary objects, grave goods, and animals. Ashes, soils, and other remnants of these burning ceremonies, as well as associated funerary objects and unassociated funerary objects buried with or found near the Native American remains are to be treated in the same manner as bones or bone fragments that remain intact.

- Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act (California Government Code Section 6250 et. seq). The Medical Examiner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r). The Tribe will require that the location for reburial is recorded with the California Historic Resources Inventory System (CHRIS) on a form that is acceptable to the CHRIS center. The Tribe may also suggest that the landowner enter into an agreement

regarding the confidentiality of site information that will run with title on the property.

- Treatment of all cultural items, including ceremonial items and archaeological items will reflect the religious beliefs, customs, and practices of the Tribe. All cultural items, including ceremonial items and archaeological items, which may be found at a Project site should be turned over to the Tribe for appropriate treatment, unless otherwise ordered by a court of agency of competent jurisdiction. The project applicant should waive any and all claims to ownership of Tribal ceremonial and cultural items, including archaeological items, which may be found on a project site in favor of the Tribe. If any intermediary (e.g., an archaeological retained by the project applicant) is necessary, said entity or individual shall not possess those items for longer than is reasonably necessary, as determined solely by the Tribe.

- If additional significant sites or sites not identified as significant in the environmental review process, but later determined to be significant are located within a project impact area, such sites will be subjected to further archaeological and cultural significance evaluation by the project applicant, Solano County and the Tribe to determine if additional mitigation measures are necessary to treat sites in a culturally appropriate manner consistent with CEQA requirements for mitigation of impacts to cultural resources. If there are human remains present that have been identified as Native American, all work will cease for a period of up to 30 days in accordance with Federal Law.

REFERENCES

Barret, Samuel A.
1908 The Ethnography of Pomo and Neighboring and Neighboring Indians. *University of California Publications in American Archaeology and Ethnology* 6 (1).

DK Engineering
2023 *Drainage Study for Vista Cove in Vallejo, California.*

Frederickson, David A.
1974 *Cultural Diversity in Early Central California: A View From The North Coast Ranges*. The Journal of California Anthropology.

Johnson, Patti J.
1978 Patwin In *California*, R.F. Heizer, ed. pp. 350–360. *Handbook of North American Indians*, vol. 8, W.C. Sturtevant, general ed. Smithsonian Institution, Washington, D.C.

Kroeber, Alfred L.
1925 Handbook of the Indians of California. *Bureau of American Ethnology Bulletin* No. 78 Smithsonian Institute, Washington D.C. Reprinted in 1976, Dover Publications, New York.

Kroeber, Alfred L.
1925 *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin No. 78 Washington D.C.: Smithsonian Institute. Reprinted in 1976, New York: Dover Publications.

Merriam, C. Hart
1929 The Cop-eh of Gibbs. *American Anthropologist*, 31(1).

Meyer, Jack and Jeffrey S. Rosenthal
1997 Archaeological and Geoarchaeological Investigations at Eight Prehistoric Sites in the Los Vaqueros Reservoir Area, Contra Costa County, California. Los Vaqueros Project Final Report #7. Anthropological Studies Center, Sonoma State University Academic Foundation, Inc., Rohnert Park.

Moratto, Michael J.
2004 *California Archaeology*. Academic Press, Orlando, Florida. Reprinted by Coyote Press in 2004.

NETR Online
2025 Various historic period aerial photograph showing the project area. Website: https://historicaerials.com/ (accessed February 2025).

Powers, Stephen
1877 Tribes of California. *Contributions to North American Ethnology* 3. USG&G Survey of the Rocky Mountain Region.

Rosenthal, J.D., G. White and M. Q. Sutton
2007 The Central Valley: A View from the Catbird's Seat. In Colonization, Culture, and Complexity: California's Chaotic Prehistory. T.L. Jones and K. Klarr, editors. Alta Mira Press.

Schoenherr, Allan A.
1992 *A Natural History of California*. University of California Press, Berkeley and Los Angeles.

Solano County California
2025 Solano County History. Website: https://www.solanocounty.com/about/history.asp (accessed February 2025).

United States Geological Survey Topographic Maps
1980 *Benecia,* Calif. 7.5 minute quadrangle.

Vallejo Naval and Historical Museum
2025 Vallejo History. Website: https://vallejomuseum.net/vallejo-history/ (accessed February 2025).

Wagner, David L., and Carlos I. Gutierrez, California Geological Survey
2010 Preliminary Geologic Map of the *Napa, California* 30-minute by 60-minute quadrangle. Map scale 1:100,000

APPENDIX A

RECORD SEARCH BIBLIOGRAPHY

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-005083	Voided - ASC #341	1977		Cultural Resource Assessment of Historical Structures on the Southampton Properties, Benicia, California.	Ann S. Peak and Associates	
S-005091	Voided - ASC #349	1977	David Chavez	Archaeological Assessment of Area 5 (Glen Cove), City of Vallejo, Solano County, California.		48-000082, 48-000083
S-005893	Caltrans - 10102-297501; Voided - S-6186	1983	Roy A. Littlefield	Archaeological Evaluation of a Proposed Structure Widening and Ramp Revision on State Route 780 (P.M. 5.7/6.5), Solano County, California, 10102-297501	California Department of Transportation	
S-005893a		1983	Roy A. Littlefield	First Addendum Archaeological Survey Report for the Proposed Structure Widening and Ramp Revision on State Route 780 (P.M. 5.7/6.5), Solano County, California	California Department of Transportation	
S-006186				Voided-see S-5893a		
S-009124		1987	John Holson and Lori Hager	A Cultural Resources Study for the Vaca Dixon-Moraga 230 kV Transmission Line Reconductoring Project, Contra Costa, Napa, and Solano Counties, California	Hager/Holson and Associates	48-000067, 48-000068, 48-000076, 48-000159, 48-000160, 48-000161, 48-000162, 48-000163, 48-000164, 48-000167, 48-000168, 48-000169, 48-001001, 48-001003, 48-001004, 48-001005, 48-001006, 48-001007

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-019263	Caltrans - 04193-006010; OHP PRN - FHWA890809A; Voided - S-22300; Voided - S-25518	1991		Finding of Effect Report, Benicia-Martinez Bridge System Improvement Project, Contra Costa and Solano Counties, California, CC-680 21.2/21.5, SOL-680 0.0/13.1, SOL-780 0.7/7.2, SOL-80 10.8/14.2, 04193-006010	California Department of Transportation	07-000859, 07-002039, 07-002040, 07-002041, 07-002042, 07-002043, 07-002044, 07-002045, 07-002046, 07-002047, 07-002048, 07-002049, 07-002050, 07-002051, 07-002052, 07-002053, 07-002054, 07-002543, 07-002545, 48-000103, 48-000114, 48-000179, 48-000180, 48-000385, 48-000445, 48-000446, 48-000447, 48-000448, 48-000449, 48-000450, 48-000451, 48-000452, 48-000453, 48-000454, 48-000455, 48-000456, 48-000457, 48-000458, 48-000459, 48-000460, 48-000463, 48-000464, 48-000465, 48-000466, 48-000467, 48-000468, 48-000469, 48-000470, 48-000471, 48-000472, 48-000473, 48-000474, 48-000475, 48-000476, 48-000477, 48-000478, 48-000479, 48-000480, 48-000481, 48-000482, 48-000483, 48-000484, 48-000485, 48-000486, 48-000487, 48-000488, 48-000489, 48-000490, 48-000491, 48-000492, 48-000500, 48-000536, 48-000539, 48-000542, 48-001030, 48-001031, 48-001032, 48-001033, 48-001034, 48-001035, 48-001036, 48-001037, 48-001038, 48-001039, 48-001040, 48-001041, 48-001042, 48-001043, 48-001044, 48-001045, 48-001046, 48-001047, 48-001048, 48-001049, 48-001050, 48-001051, 48-001052, 48-001053, 48-001054, 48-001055, 48-001056, 48-001057, 48-001058, 48-001059, 48-001062, 48-001094, 48-001095, 48-001096, 48-001097, 48-001098, 48-001099, 48-001100, 48-001101, 48-001107, 48-001111, 48-001112, 48-001113, 48-001114, 48-001115, 48-001116, 48-001117, 48-001118, 48-001119, 48-001120, 48-001121, 48-001122, 48-001123, 48-001124, 48-001125, 48-001126

Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-019263a		1990	Bruce E. Cannon, Kathryn Gualtieri, Mara Melandry, and C. Thomas Hosley	FHWA890809A Re: Benicia-Martinez Bridge Project, IR-680-1 (), IR-780-1 ()	California Office of Historic Preservation	
S-019263b		1988	John W. Snyder	An Evaluation of the Southern Pacific Martinez-Benicia Bridge	California Department of Transportation	
S-019263c		1991		Section 3.4 "Alternatives Considered and Eliminated from Consideration" from Preliminary Draft - "Project Description of Benicia-Martinez Bridge System Project"	Dames and Moore	
S-019263d		1989	John Holson	Historic Properties Survey Report, Benicia-Martinez Bridge System Improvement Project in Contra Costa and Solano Counties, CC-680 21.2/21.5, SOL-680 0.0/13.1, SOL-780 0.7/7.2, 04193-006010	Caltrans, District 4	
S-019263e		1989	John Holson	Archaeological Survey Report for the Benicia-Martinez Bridge System Improvement Project, 10-SOL-680 P.M. 0.0/13.1, 10-SOL-780 P.M. 0.7/7.4, SOL-080 P.M. 0.8/3.7 and 10.8/14.2, 04-CC-680 P.M. 21.0/25.5 04193-006010	Caltrans	
S-019263f		1988	Gregory King, Stephen D. Mikesell, Gloria Scott, and John Snyder	Historic Architectural Survey Report Benicia-Martinez Bridge System Improvement Project, 11-Sol-680, 11-Sol-780, 4-CC-680, 04193-006010	California Department of Transportation	
S-019263g		2002	James M. Allan	Benicia-Martinez Bridge System Improvements Project Addendum, Archaeological Survey Report - Maritime Archaeology, Contra Costa and Solano Counties; 04-SOL-680 PM 0.0/13.1, 04-SOL-780 PM 0.7/7.4, 04-SOL-80 PM 0.8/3.7, 10.8/14.2, 04-CC-680 PM 21.0/25, EA 04193-006010	William Self Associates, Inc.	
S-019263h		1989	Kathryn Gualtieri	Benicia-Martinez Bridge System Improvement Project	California Office of Historic Preservation	
S-030414		2005	Andrew Pulcheon and Sara Palmer	A Cultural and Paleontological Resources Study and Historical Evaluation for the Bordoni Ranch Project, Vallejo, Solano County, California.	LSA Associates, Inc.	48-000716, 48-000717
S-031730		2006	Lorna Billat	Collocation ("CO") Submission Packet, FCC Form 621, PGE Glen Cove, SF-17100A	Earth Touch, Inc.	

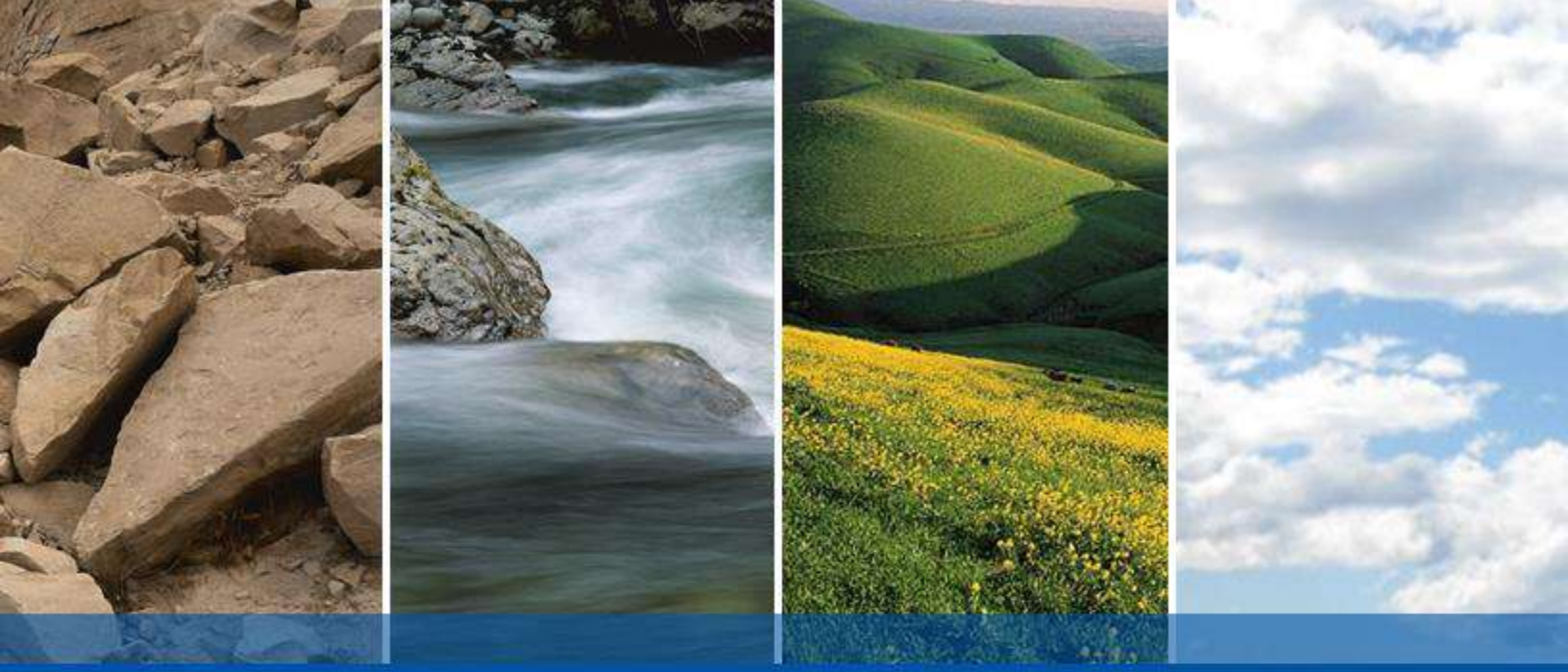
Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-034162		2007	Sunshine Psota	Historic Archaeological Testing at CA-SOL-449H, The Miller/Bordoni Ranch, Vallejo, Solano County, California	Holman & Associates	48-000717
S-034313		2007	Marshall Reed Millett	Cultural Resource Inventory for the 3 Cemeteries Project: All Souls Cemetery, Solano County, California	PAR Environmental Services, Inc.	
S-051545		1990	Jim Woodward	Shipwrecks, Mortars, and Fish Traps Along the Carquinez Straits	California Department of Parks and Recreation	48-000083
S-051546		1979	Larry Felton	Benicia S.R.A.-Field Report (Unrecorded Historic Sites)		

This page intentionally left blank

APPENDIX E

GEOTECHNICAL INVESTIGATION AND PEER REVIEW



VALLEJO PROPERTIES – VISTA COVE
VALLEJO, CALIFORNIA

PRELIMINARY GEOTECHNICAL EXPLORATION

SUBMITTED TO
Mr. Adam Smith
Sancerra
2618 San Miguel Drive, Suite 1223
Newport Beach, CA 92660

PREPARED BY
ENGEO Incorporated

September 12, 2022

PROJECT NO
20164.000.001

Copyright © 2022 by ENGEO Incorporated. This document may not be reproduced in whole or in part by any means whatsoever, nor may it be quoted or excerpted without the express written consent of ENGEO Incorporated.

ENGEO
Expect Excellence

Project No.
20164.000.001

September 12, 2022

Mr. Adam Smith
Sancerra
2618 San Miguel Drive, Suite 1223
Newport Beach, CA 92660

Subject: Vallejo Properties – Vista Cove
Wildflower Avenue
Vallejo, California

PRELIMINARY GEOTECHNICAL EXPLORATION

Dear Mr. Smith:

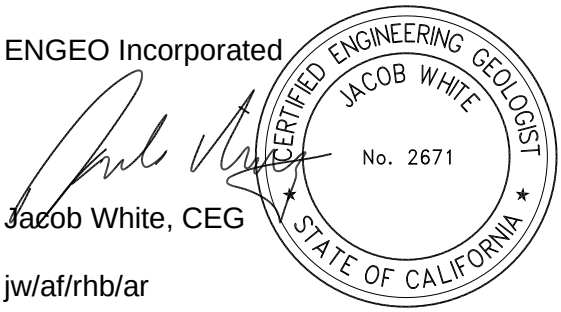
With your authorization, we have completed this preliminary geotechnical exploration for the proposed development of the Vallejo Properties – Vista Cove development located in Vallejo, California. The accompanying report presents the results of our site exploration and preliminary geotechnical conclusions and recommendations for the project.

Based on our initial assessment, the proposed residential development is feasible from a geotechnical standpoint. The main geotechnical and geologic concerns for the proposed development includes stability of graded slopes, corrective grading for planned building sites, and the presence of moderate to highly expansive soil and bedrock. A design-level exploration should be conducted prior to site development once final land plans have been prepared.

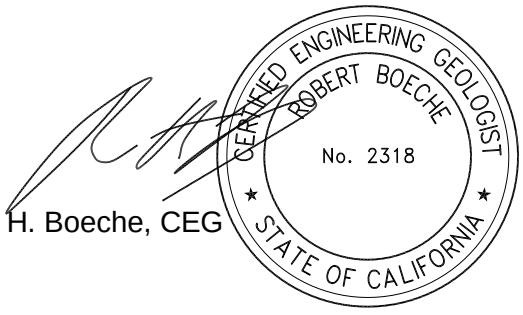
We are pleased to have been of service on this project and are prepared to consult further with you and your design team as the project progresses. If you have any questions regarding the contents of this report, please do not hesitate to contact us.

Sincerely,

ENGEO Incorporated



Jacob White, CEG



Robert H. Boeche, CEG

jw/af/rhb/ar

TABLE OF CONTENTS

LETTER OF TRANSMITTAL

1.0 INTRODUCTION 1
1.1 PURPOSE AND SCOPE 1
1.2 PROJECT LOCATION 1
1.3 PROPOSED DEVELOPMENT 1

2.0 REGIONAL GEOLOGY AND SEISMICITY 2
2.1 REGIONAL GELOGIC SETTING 2
2.2 FAULTING AND SEISMICITY 2

3.0 FIELD EXPLORATION AND GEOLOGIC MAPPING 3
3.1 EXPLORATION AND SUBSURFACE CONDITIONS 3
3.2 HISTORIC AERIAL PHOTOGRAPH REVIEW 4
3.3 SITE RECONNAISSANCE AND GEOLOGIC MAPPING 4
3.3.1 Existing Fill (Qaf) 4
3.3.2 Colluvial Deposits (Qc) 4
3.3.3 Landslide Deposits (Qls) 5
3.3.4 Panoche Formation (Kp) 5
3.4 LABORATORY TESTING 6
3.5 GROUNDWATER CONDITIONS 6

4.0 PRELIMINARY CONCLUSIONS 6
4.1 SLOPE STABILITY 6
4.2 EXPANSIVE SOIL AND BEDROCK MATERIALS 6
4.3 COMPRESSIBLE SOIL AND SOFT COLLUVIAL DEPOSITS 7
4.4 SOIL CREEP 7
4.5 BEDROCK RIPPABILITY 7
4.6 SEISMIC HAZARDS 7
4.6.1 Ground Rupture 7
4.6.2 Ground Shaking 8
4.6.3 Liquefaction/Clay Soil Softening 8
4.6.4 Seismically Induced Landsliding 8
4.7 CBC SEISMIC DESIGN PARAMETERS 8
4.8 SOIL CORROSION POTENTIAL 9

5.0 PRELIMINARY EARTHWORK RECOMMENDATIONS 9
5.1 GRADING, DEMOLITION, AND STRIPPING 9
5.2 CORRECTIVE GRADING 10
5.3 SELECTION OF MATERIALS 10
5.4 GRADED SLOPES AND SLOPE STABILIZATION 10
5.5 PLACEMENT OF FILL 11

6.0 PRELIMINARY FOUNDATION RECOMMENDATIONS 12

7.0 PRELIMINARY RETAINING WALL RECOMMENDATIONS 12

8.0 STORMWATER INFILTRATION AND BIORETENTION AREAS 13

9.0 PRELIMINARY PAVEMENT DESIGN 14

TABLE OF CONTENTS (Continued)

10.0 FUTURE STUDIES 14

11.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS 14

SELECTED REFERENCES

FIGURES

APPENDIX A – Boring Logs

APPENDIX B – Laboratory Test Data by ENGEO

APPENDIX C – Laboratory Test Data by CERCO

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

We prepared this preliminary geotechnical exploration report for the proposed Vista Cove development in Vallejo, California. Based on the findings of our feasibility study dated April 29, 2022, we provided the following scope of services.

- Reviewed the findings in our previous feasibility study for the site.
- Performed subsurface exploration, including two dry-cored borings, 13 exploratory test pits, and one exploratory trench to identify the possible presence of landslide deposits crossing the development site and characterize the general site geology.
- Provided our preliminary conclusions and recommendations for site grading, foundation design, retaining walls, and preliminary pavement recommendations for the proposed development.

We prepared this report exclusively for you and your design team consultants. ENGEO should review any changes made in the character, design, or layout of the development to modify the conclusions and recommendations contained in this report, as necessary. This document may not be reproduced in whole or in part by any means whatsoever, nor may it be quoted or excerpted without the express written consent of ENGEO.

1.2 PROJECT LOCATION

The site is located just east of Wildflower Avenue and Shady Lane, as shown in the Vicinity Map, Figure 1. The Property is approximately 30 acres in area and is identified by Assessor's Parcel Numbers (APNs) 0079-171-170, 0079-120-100, and a portion of 0079-220-070. The Property is currently undeveloped, open space located on the hillside of a residential development in the Glen Cove area of Vallejo. Development plans indicate that approximately 18 acres are planned for residential development, 9 acres are to be dedicated to the City by the developer as open space, and 3 acres are to be dedicated to the developer by the City. The southern portion of the site is generally lower in elevation and increases in elevation towards the west. Elevations range from approximately Elevation 70 feet above mean sea level (msl) in low-lying areas (eastern portion of the site) up to approximately Elevation 290 feet msl (southwestern boundary of the site). Vegetation on most of the site generally consists of weeds and grasses, with trees and wetland vegetation lining the two drainages that cross the site.

The upslope development (Glen Cove Hills) was constructed in the early 1980s, with significant cuts and fills to achieve the current site grades. A fill slope approximately 50 feet high and 2:1 (horizontal: vertical) was observed along the southwestern portion of the property. There are two storm drain outlets from Glen Cove Hills that were actively flowing during our site visit, Water is collected and conveyed within the two drainages that bisect the site west to east.

1.3 PROPOSED DEVELOPMENT

Based on the conceptual plan received via email on August 4, 2022, from dk Engineering, the project will include cuts and fills of up to 24 feet with graded slope configurations as steep as 2:1 (horizontal: vertical) and up to 46 feet tall. Retaining walls (up to 12 ½ feet in height) are shown in several areas at the top of fill slopes and the base of planned cut slopes. The current development plan depicts 52 single-family units, as shown in the Site Plan, Figure 2. Access to the project is depicted off Shady Lane and Wildflower Avenue. Development is anticipated to include roadway construction, underground utilities, and stormwater detention basins associated with the project.

2.0 REGIONAL GEOLOGY AND SEISMICITY

2.1 REGIONAL GELOGIC SETTING

The project site is situated regionally within the Coast Ranges Province. The Coast Ranges Province has a complex geological history. The Coast Ranges are characterized by complex folding and faulting that has resulted in a series of northwest-trending mountain ranges and intervening valleys. Active faulting found in the Coast Ranges has developed in response to the relative motion along the transform boundary between the North American and Pacific Tectonic Plates which, in total, is considered to be approximately 5 cm per year (Argus and Gordon, 1991). Strain associated with the relative motion of the two plates is distributed across a broad area from the San Gregorio fault offshore to just east of the Sierra Nevada. The San Andreas fault accommodates a significant portion of the relative plate motion with a geologic slip rate of approximately 2.5 to 3 cm per year. The remaining relative plate motion is partitioned along a series of faults within the broad zone of deformation with the highest slip rates occurring on faults adjacent to the San Andreas fault. In the San Francisco Bay Area, these faults include the Hayward, Rogers Creek, Calaveras, Concord, Green Valley, and Greenville faults, as well as other shorter fault segments.

More specifically, the site is located in the hills approximately 1 mile north of Southhampton Bay and Dillon Point on the north side of the Carquinez Strait. Based on geologic mapping by Dibblee (2005), the site is underlain by upper Cretaceous Panoche formation (Figure 3). We also reviewed regional geologic mapping by Crane (1988) and Graymer (1999). Dibblee maps the Southampton fault approximately 500 feet east of the site boundary. This same fault is mapped by Crane as a west-dipping thrust fault, and shown as concealed below Bay Mud deposits by Graymer. The Southampton fault is depicted on the USGS Quaternary Fault and Fold Database (Bryant, 2017) consistent with Dibblee, about 500 feet east of the site, and is described as an undifferentiated Quaternary aged reverse right-lateral fault. Crane also maps the axis of a north-trending syncline through Southampton Bay east of the site. Based on interpretations by Crane, this syncline may represent the northward continuation of the Martinez syncline. Bedding at the site is mapped with a northwest strike and dipping from 35 to 45 degrees to the west.

Regional landslide mapping by Nilsen (1975) and Bortugno (1987) was reviewed as part of our study. Landslide mapping by Bortugno is depicted in Figure 5. Bortugno maps the landslides flanking the north dipping slope, just south of the proposed development area, and a larger landslide (queried) crossing through the center of the development area. Nilsen (1975) maps a landslide upslope of Silktree Lane and the existing Glen Cove Development and does not depict any landslides crossing the development area. The California Geological Survey (CGS) provides an online “Landslide Inventory” GIS database. Consistent with the queried landslide mapped by Bortugno (Figure 2), the CGS identifies the area with a “**?**” meaning the landslide deposit is uncertain or questionable.

2.2 FAULTING AND SEISMICITY

The site is not located within a State of California Earthquake Fault Hazard Zone for active faults and no signs of recent faulting were observed during our site reconnaissance mapping. The San Andreas fault represents an active plate boundary that is expected to produce the maximum probable earthquake for the region. Other active faults of coastal California are lesser-order features of the same stress-strain system. The Greenville and Concord/Green Valley faults are mapped approximately 3.5 miles east of the site, the West Napa fault is located about 6 miles to the northwest, the Hayward-Rodgers Creek fault is mapped approximately 11 miles southwest from the site, and the San Andreas fault is mapped approximately 29 miles from the site.

Numerous small earthquakes occur every year in the nearby San Francisco Bay Region, and larger earthquakes have been recorded and can be expected to occur in the future. Figure 4 shows the approximate locations of these faults and significant historic earthquakes recorded within the region.

Historically, strong earthquakes (>M7) have occurred in the nearby Bay Area with many low-magnitude earthquakes recorded every year. It should therefore be expected that the site will be subjected to moderate to severe ground shaking at some point during the project design lifetime.

The 2014 Working Group on California Earthquake Probabilities evaluated the regional seismicity of the Bay Area and published their results as The Uniform California Earthquake Rupture Forecast, Version 3 (UCERF3). The Working Group periodically attempts to summarize seismic risk in California with time-dependent earthquake rupture forecasts, in which the probabilities of future events are conditioned upon the dates of previous earthquakes. According to UCERF3, there is an aggregated 72 percent probability of 6.7 M_W or greater earthquake on an active Bay Area fault over the next 30 years.

3.0 FIELD EXPLORATION AND GEOLOGIC MAPPING

3.1 EXPLORATION AND SUBSURFACE CONDITIONS

Our supplemental exploration included drilling two continuous “dry-core” borings within a queried landslide area to confirm the presence or absence of landsliding. The borings were drilled on August 4 and 5, 2022, utilizing a track-mounted CME-55 drill rig to a maximum depth of up to 50 feet below ground surface (bgs). Additionally, 13 test pits and one trench were excavated within the proposed development and adjacent hillslopes utilizing a tracked excavator (Figure 2). The test pits and trench were excavated on July 13 and 14, 2022, to a maximum depth of approximately 11 feet bgs.

In Boring 1-B1, colluvial soil was encountered to a depth of 3 feet bgs. Extremely weak to weak mudstone bedrock (Kp) interbedded with strong indurated sandstone and shale was encountered from 3 feet to the bottom of the boring. The bedrock was closely fractured to crushed in zones, partially due to the method of drilling. Very hard drilling was encountered at 17½ feet to 25 feet bgs. No features indicative of landsliding were observed in the recovered core samples.

In Boring 1-B2, colluvial soil consisting of very stiff fat clay was encountered to a depth of 6 feet bgs. Extremely weak to weak mudstone bedrock (Kp) interbedded with strong to very indurated sandstone and siltstone was encountered from 6 feet to the bottom of the boring. The bedrock was closely fractured to crushed in zones, partially due to the method of drilling. Very hard drilling (interpreted as very strong sandstone interbeds) was encountered at 10 feet to 13 feet, 15½ to 22½ feet, and 40 to 45 feet bgs. No features indicative of landsliding were observed in the recovered core samples.

Test Pits 1-TP1 through 1-TP9 were excavated in the previously mapped queried landslide area crossing the site. Stiff to very stiff colluvial deposits consisting of lean to fat clay were encountered to a depth of up to 9 feet. Underlying the colluvial deposits (gradational contact), weak to very weak interbedded sandstone, siltstone, and mudstone were encountered to the depth of excavation. No features indicative of landsliding were observed within the test pit excavations.

Test Pits 1-TP10 through 1-TP13 were excavated in planned development areas to characterize bedrock structure and thickness of colluvial deposits. Stiff to very stiff colluvial deposits consisting of lean to fat clay were encountered to a depth of up to 7 feet. Underlying the colluvial deposits (gradational contact), weak to very weak interbedded sandstone, siltstone, and mudstone were encountered to the depth of excavation.

Trench 1-T1 was excavated in the upslope portion of the previously mapped queried landslide area crossing the site. The trench extended approximately 110 feet and up to 10 feet deep. Colluvial deposits up to approximately 9 feet thick were observed in gradational contact with the underlying bedrock. The colluvium consisted of lean to fat stiff clay. The underlying bedrock consisted of weak interbedded sandstone and claystone with bedding ranging from north 8 east to north 33 east and dipping 32 to 45 degrees west. No features indicative of landsliding were observed during exploration, such as graben fills, fracture fills, dilated bedrock, prominent shearing, or gouge.

An ENGEO Geologist logged the borings, test pits, and trench in the field. The exploration logs are included in Appendix A of this report. The trench log is included in Figure 9. The logs depict subsurface conditions encountered at the time of our exploration; however, subsurface conditions will vary with time.

3.2 HISTORIC AERIAL PHOTOGRAPH REVIEW

We reviewed stereo-paired aerial photographs as part of our study to observe the presence of geomorphic features indicative of landsliding at the site. We reviewed the photographs for features such as linear discontinuities in the rock or soil, offset drainages, linear scarps, topographic lows, and/or vegetation patterns or breaks in slope. Features indicative of landsliding were observed in several photographs spanning years from 1937 to 1989 for Landslides 1 through 6.

3.3 SITE RECONNAISSANCE AND GEOLOGIC MAPPING

Surface geologic mapping, based on photo review and site reconnaissance, was performed as part of this study, as depicted in Figure 2 and interpreted on cross sections in Figure 6. Mapping was supplemented by subsurface findings, as described in subsequent sections of the report. Site mapping focused on bedrock exposures, existing fills, landsliding, and geomorphological features to provide a preliminary surface geologic map. Below are descriptions of the geologic units observed during mapping at the site, as shown in Figure 2.

3.3.1 Existing Fill (Qaf)

Existing fills (Qaf) are mapped along the west side of the site and are associated with mass grading for the Glen Cove development (Figure 2). The existing fills observed during our site reconnaissance and in 1981 aerial photographs appear to generally be derived from local bedrock cuts typical of the area.

3.3.2 Colluvial Deposits (Qc)

Colluvium (Qc) generally overlies the low-lying portions of the site, specifically the two drainages that cross the site and a small swale along the north side of the site. Colluvium is material that erodes from ridgelines and slopes, is transported predominantly by sheet wash, and accumulates in the adjacent swales. Colluvial deposits are typically compressible and weak, and based on our experience in the area, have the potential to be expansive. Colluvium was encountered across the site during our exploration and up to 10 feet thick as observed in 1-TP3.

3.3.3 Landslide Deposits (Qls)

As previously discussed, published geologic mapping by Bortugno (1987) shows a queried landslide area crossing through the site, Figure 5. Based on our field exploration, no features indicative of landsliding were observed in the borings, test pits, or trench. Topographic lows in this area are likely related to differential weathering and bedrock structure and are generally consistent in bedding observed in the excavations. Based on a review of the published maps, interpretation of aerial photographs, and our subsurface exploration, we identified six landslide areas adjacent to or within the property, included in Figure 2. The landslides at the site are classified as shallow soil creep/earthflows, shallow landslide deposits, and deep-seated bedrock landslides. Soil creep earthflows are generally slow-moving shallow landslides that typically mobilize during significant rainfall events and usually include the overlying surface soil. Shallow landslides at the site are characterized by rotational failures predominantly including surficial and colluvial soil, and may affect some portion of upper weathered bedrock units and likely up to 20 feet deep. Deep-seated bedrock landslides involve primarily rock, but may also include some surficial soil material, and are likely 30 to 50 feet deep. No landslide deposits were encountered in excavations or borings during our exploration.

It is our opinion that the identified landslide areas have a relatively high likelihood of experiencing instability. Conceptual mitigation measures are provided below for identified landslide areas that have been designated Landslide Areas 1 through 6 in Figure 2 for discussion purposes. The relationship of each landslide area to the planned development and conceptual mitigation measures for each landslide area is summarized in Table 3.3.3-1.

TABLE 3.3.3-1: Preliminary Landslide Classification

LANDSLIDE DESIGNATION	LANDSLIDE CLASSIFICATION	DEVELOPMENT IMPACTS	MITIGATION MEASURES
1	Deep-Seated Bedrock; Wedge Failure	Upper portion of slide crossing proposed open space area.	Outside of development area, no mitigation required.
2	Deep-Seated Bedrock	Off site within Benicia State Rec Area and not affecting current site development.	Outside of development area, no mitigation required.
3	Shallow; Rotational	Off site and not affecting current site development.	Outside of development area, no mitigation required.
4	Shallow; Rotational	Predominantly within open space parcel with portion on the east crossing into planned balance area.	Remove landslide deposits from portion within development area.
5	Shallow; Rotational	Outside of proposed development area and project boundary.	Outside of development area and project boundary, no mitigation required.
6	Soil Creep/ Earthflow	Predominantly within open space parcel with portion on the east crossing into planned balance area.	Remove landslide material from portion within development area.

3.3.4 Panoche Formation (Kp)

Bedrock at the site consists of interbedded sandstone, siltstone, claystone, shale, and mudstone of the Cretaceous Great Valley Sequence Panoche Formation (Kp). Based on our experience with similar projects in the area, bedrock exposures along Shady Lane, and our subsurface

exploration, the bedrock is generally well cemented, extremely weak to strong, and beds of more well indurated sandstones are common. Regional bedding is depicted striking northwest and dipping 35 to 45 degrees west. We collected measured bedding orientations on bedrock exposures adjacent to Shady Lane, and within test pit excavations, observed bedding striking from north 3 degrees west to north 65 east and dipping 32 to 60 degrees to the west.

3.4 LABORATORY TESTING

We performed percent passing #200 sieve (ASTM D1140), Atterberg limits (ASTM D4318), and hydrometer (ASTM D422) testing. Individual test results are also included in Appendix B.

3.5 GROUNDWATER CONDITIONS

No groundwater was encountered within the test pits, trench, and borings. The two drainages crossing the site were observed to have consistent water flow from two storm drain outlet locations associated with the existing Glen Cove Hills development. Additionally, two seepage areas were observed during our site reconnaissance, as depicted in Figure 2. The seeps were identified by saturated ground surfaces and dense vegetation. Fluctuations in groundwater levels occur seasonally and over a period of years because of variations in precipitation, temperature, irrigation, and other factors. Future irrigation may cause an overall rise in groundwater levels.

4.0 PRELIMINARY CONCLUSIONS

It is our opinion from a geotechnical and geologic viewpoint that the proposed development is feasible provided the preliminary conclusions and recommendations contained in this report are incorporated into future planning for the development. The main geotechnical and geologic concerns for the proposed development include (1) stability of graded slopes, (2) corrective grading for planned building sites, and (3) presence of moderate to highly expansive soil and bedrock.

Supplemental design-level geotechnical exploration should be performed to provide site-specific recommendations for site preparation, remedial and design grading, foundation design, site improvements, and drainage. The supplemental exploration should further characterize subsurface conditions to determine mitigation measures to address geotechnical and geologic hazards.

4.1 SLOPE STABILITY

Proposed graded slopes at the site (Figure 2) are depicted as 2:1 (horizontal: vertical) and up to 46 feet tall with intermittent benches. Based on our experience and geologic conditions at the site, proposed cut slopes will require reconstruction as drained, engineered fill slopes. In general, 2:1 cut and fill slopes will require keyway buttresses and geogrid reinforcement for construction. Slope stability analysis should be performed during design-level geotechnical study and once final development plans are available to determine corrective grading configurations.

4.2 EXPANSIVE SOIL AND BEDROCK MATERIALS

The soil and bedrock at the site generally exhibit moderate to high shrink/swell potential with variations in moisture content. The results of Atterberg Limits determination show plasticity indices (PIs) ranging from 18 to 40, which is considered moderate to highly expansive when subject to changes in moisture content. Expansive soil and bedrock materials left unmitigated may shrink

and/or swell adversely impacting site improvements, such as slabs-on-grade, pavements, and structures on shallow foundations. Our recommendations to mitigate adverse effects of expansive soil and bedrock are discussed in subsequent portions of this report.

4.3 COMPRESSIBLE SOIL AND SOFT COLLUVIAL DEPOSITS

The colluvial deposits encountered during our exploration included soft or compressible materials over bedrock. To minimize settlement of the softer colluvium due to building loads or engineered fill loads, corrective grading measures should include the removal of compressible materials down to a hard material/bedrock. We anticipate colluvium removals of up to approximately 10 feet to achieve this recommendation. Figures 2 and 6 show the general locations of the colluvium. The anticipated depth of removal of soft and compressible soil should be determined during design-level studies.

4.4 SOIL CREEP

Colluvial soil on steeper slopes is subject to soil creep. Soil creep is the slow downslope movement of soil that occurs with the annual cycle of wetting and drying under the influence of gravity. The potential for adverse impacts from soil creep can be minimized by benching through surficial soil during fill placement, as recommended in this report, or by design of drilled pier foundation systems to accommodate lateral loads from soil creep.

4.5 BEDROCK RIPPABILITY

Based on field observations during excavation of test pits, trench, borings, and experience on projects in the immediate vicinity, we opine that in general bedrock units at this site should be considered rippable with conventional heavy construction equipment (such as a D-8 Bulldozer). Localized well-cemented beds and occasional well-cemented concretions may be encountered that will require more ripping effort. Trenching for utilities should be possible with conventional equipment. As noted above, localized well-cemented beds may be encountered that may necessitate use of heavy equipment such as track-mounted excavators.

In general, all soil and bedrock materials observed on the site appear suitable for use as engineered fill, if properly processed. If rocks greater than 6 inches in diameter are encountered during grading, these should be placed in accordance with recommendations provided in Section 5.3 – Selection of Materials.

4.6 SEISMIC HAZARDS

Potential seismic hazards resulting from a nearby moderate to major earthquake can generally be classified as primary and secondary. The primary effect is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking, ground lurching, soil liquefaction, and lateral spreading. These hazards are discussed in the following sections. Based on topographic and lithologic data, the risk from regional subsidence or uplift, tsunamis, or seiches is considered low at the site.

4.6.1 Ground Rupture

Since there are no known active faults crossing the site and the property is not within a State of California Earthquake Fault Hazard Zone, the likelihood of primary fault ground rupture is considered remote.

4.6.2 Ground Shaking

An earthquake of moderate to high magnitude generated within the San Francisco Bay Region could cause considerable ground shaking at the site, similar to that which has occurred in the past. To mitigate the shaking effects, all structures should be designed using sound engineering judgment and the current California Building Code (CBC) requirements, as a minimum.

4.6.3 Liquefaction/Clay Soil Softening

Soil liquefaction is a phenomenon under which saturated, cohesionless, loose soil experience a temporary loss of shear strength when subjected to the cyclic shear stresses caused by earthquake ground shaking. The soil materials encountered within the site generally consist of clayey soil and bedrock that are not susceptible to liquefaction.

4.6.4 Seismically Induced Landsliding

Seismically induced landslides are triggered by earthquake ground shaking. The risk of this hazard is greatest in the late winter when groundwater levels are highest and hillside colluvium is saturated. As with all slopes in the region, this risk is also present at the site to varying degrees depending on the slope conditions and time of year. The hazard of seismically induced landslides to the proposed structures can be best mitigated by properly engineered stabilization of planned slopes, as recommended in this report.

4.7 CBC SEISMIC DESIGN PARAMETERS

Based on the subsurface conditions observed during exploration, we preliminarily characterized the site as Site Class C. We provide the 2019 CBC seismic design parameters in the table below, which include design spectral response acceleration parameters based on the mapped Risk-Targeted Maximum Considered Earthquake (MCE_R) spectral response acceleration parameters. Future design-level studies should include evaluation of the shear-wave velocity of the subsurface to confirm site class.

TABLE 4.7-1: 2019 CBC Seismic Design Parameters (Latitude: 38.082173, Longitude: -122.200268)

PARAMETER	VALUE
Site Class	C
Mapped MCE_R Spectral Response Acceleration at Short Periods, S_S (g)	1.5
Mapped MCE_R Spectral Response Acceleration at 1-second Period, S_1 (g)	0.6
Site Coefficient, F_a	1.2
Site Coefficient, F_v	1.4
MCE_R Spectral Response Acceleration at Short Periods, S_{MS} (g)	1.8
MCE_R Spectral Response Acceleration at 1-second Period, S_{M1} (g)	0.84
Design Spectral Response Acceleration at Short Periods, S_{DS} (g)	1.2
Design Spectral Response Acceleration at 1-second Period, S_{D1} (g)	0.56
Mapped MCE Geometric Mean (MCE_G) Peak Ground Acceleration, PGA (g)	0.5
Site Coefficient, F_{PGA}	1.2
MCE_G Peak Ground Acceleration adjusted for Site Class effects, PGA_M (g)	0.6

4.8 SOIL CORROSION POTENTIAL

We collected two samples during our exploration and transported them to CERCO Analytical and tested for concentrations of water-soluble sulfate and chloride (Cl) in accordance with ASTM D4327. The sample locations are specified in the attached analytical results, Appendix C.

The soluble sulfate concentrations were 92 ppm (0.03% by weight) and “none detected”. The 2019 California Building Code references the 2014 American Concrete Institute Manual, (ACI 318-14) Chapter 19, Sections 19.3 for concrete requirements based on sulfate exposure. In accordance with ACI criteria, the soil is classified as Exposure Class S0. Cement type and water-cement ratio are not specified for this range.

The results for chloride concentration in the samples were 92 and 110 ppm. For concrete in direct contact with soil containing concentrations of chloride ions in excess of 500 ppm, the Post-Tensioning Institute (PTI) recommends additional protection from corrosion for the tendons and reinforcing. The results show levels of chloride that do not exceed 500 ppm. Therefore, preliminarily, no additional measures are specified beyond the standard measures specified by ACI 318-14 and 423.7.

A full evaluation of possible corrosion impacts to site improvements has not been conducted on site soil because of the volume of cut and fill that will be necessary to bring the site to design grades. Once design grades are achieved, supplemental testing can be performed and a corrosion specialist can be retained.

5.0 PRELIMINARY EARTHWORK RECOMMENDATIONS

5.1 GRADING, DEMOLITION, AND STRIPPING

The following preliminary recommendations are for initial land planning and preliminary estimating purposes. Final recommendations regarding site grading and foundation construction will be provided after design-level exploration has been undertaken. Grading should begin with the removal of existing structures, if any, including their foundations. Underground structures, such as buried pipes, septic tanks, and leach fields, if any, which will be abandoned or are expected to deteriorate, should be removed from the project site entirely.

All existing artificial fill, vegetation, and soft or compressible soil should be removed, as necessary, for project requirements. The depth of removal of these materials should be determined by the geotechnical engineer’s qualified representative in the field at the time of grading. Evaluation of unsuitable deposits should be performed during grading by sampling and laboratory analyses.

Areas to receive fill or structures and those areas that serve as borrow for fill should be stripped of existing vegetation. Topsoil is estimated to be from 3 to 6 inches in thickness depending on location. Tree roots should be removed to a depth of at least 3 feet below finished grade in cut areas and 3 feet below original grade in fill areas. Subject to approval by the landscape architect, strippings and organically contaminated soil that are not suitable for use as engineered fill may be used in landscape areas. Any topsoil that will be retained for future use in landscape areas should be stockpiled in areas where it will not interfere with the mass grading.

Within the development areas, excavations resulting from demolition and stripping which extend below final grades should be cleaned to firm undisturbed soil, as determined by the geotechnical engineer's representative. Following clearing and grubbing, all depressions in areas to be filled should be scarified, moisture conditioned, and backfilled with compacted engineered fill. The requirements for backfill materials and placement procedures are the same as those for engineered fill, as described in Section 5.5 – Placement of Fill.

5.2 CORRECTIVE GRADING

Based on the proposed site grading and slopes, corrective grading, including removal of compressible colluvium, excavation of buttress keyways, cut and cut-fill lot excavation, differential fill excavation, and construction of subsurface drainage facilities, is anticipated. Keyway and subdrain configurations should be provided during design-level studies and based on final development plans, including corrective grading plans and cross sections. Typical keyway and subdrain details are included in Figures 7 and 8.

5.3 SELECTION OF MATERIALS

With the exception of the organically contaminated near-surface material, the site soil and rocks containing less than 3 percent organics are suitable for use as engineered fill. Imported fill material should meet the above requirements and have a plasticity index (PI) similar to on-site soil material.

Placement of oversized rock in the fill should be done according to the following specifications.

- During grading, rock fragments up to 6 inches in maximum size should be placed in the deeper fill areas. No rock fragments larger than 6 inches in diameter shall be placed in the upper 10 feet of finished grade.
- If oversized rock fragments are encountered, these should not exceed 18 inches in any dimension if placed at selective landscape areas. Larger rock sizes should be broken mechanically, either by the heavy bulldozers rolling on them or by a pneumatic hammer mounted on a backhoe. The rock should be spread and mixed with fines and should not be allowed to nest. Engineered fill consisting of rock fragments only is not allowed. The rock should be mixed with fines at a ratio of 1 to 10, or one load of rock fragments to 10 loads of fines, as approved by ENGEO during grading.

5.4 GRADED SLOPES AND SLOPE STABILIZATION

The following preliminary guidelines may be used when considering slope gradients, heights, and retaining walls:

- In general, graded 2:1 (horizontal: vertical) slopes may be constructed up to 10 feet in vertical height. If higher vertical 2:1 slopes are planned, 2:1 slopes up to a maximum vertical height of 30 feet high may be constructed using geogrid reinforcement. Slopes exceeding 30 feet in height should include benches and/or concrete ditches, as designed by the civil engineer.
- Graded 2½:1 slopes (unreinforced with geogrid) may be constructed up to 15 feet in vertical height. If higher vertical slopes are planned, 2½:1 slopes up to a maximum vertical height of 30 feet high may be constructed using geogrid reinforcement. Slopes exceeding 30 feet in height should include benches and/or concrete ditches, as designed by the civil engineer.

- Graded 3:1 slopes, or flatter, may exceed 30 feet and do not require benches and/or concrete ditches. Major slopes exceeding 50 feet in vertical height should include a minimum 20-foot-wide debris bench along the base of slope.
- Graded cut and fill slopes exceeding 30 feet in height should include benches and/or concrete ditches, as designed by civil engineer.

The above guidelines may be considered in combination with vertical retaining wall systems, such as MSE retaining walls; however, such walls upon shallow foundations with downslope conditions will require greater embedment than walls with level foreground at slope bottoms. As an alternative to the slope gradient recommendations described above, if steeper slope gradients exceeding the above-noted maximum vertical heights are desired, such slopes could be specially designed using appropriate geogrid reinforcement. Geogrid reinforced slopes should be designed and may include primary and secondary geogrid reinforcement layers. As a general design consideration for geogrid reinforced slopes, if selected the primary horizontal reinforcement would extend on the order of 1.5 times the total vertical height of the slope, comprising the outer geogrid reinforced buttress zone of the slope; the typical vertical spacing of geogrid layers would be anticipated ranging from 1½- to 2½-foot spacing, depending on the total vertical slope height. Specific slope recommendations should be provided during design level studies and once final plans are available.

All major cut slopes should be reviewed by an ENGEO Certified Engineering Geologist for slope conditions that might be detrimental to slope stability. If areas of instability are identified during grading, such as adverse bedrock orientation or structure or groundwater seepage conditions, these cut slopes may require overexcavation and reconstruction; if necessary supplemental recommendations to mitigate cut slopes would be provided during construction.

5.5 PLACEMENT OF FILL

After removal of soft soil and loose fill, the exposed non-yielding surface of all areas to receive minor fills, secondary slabs-on-grade, or pavements should be scarified to a depth of 12 inches, moisture conditioned, and recompacted to provide adequate bonding with the initial lift of fill. All fill should be placed in thin lifts. The lift thickness should not exceed 8 inches or the depth of penetration of the compaction equipment used, whichever is less. Test procedures should be determined in accordance with ASTM D1557. Additional samples will be collected during site grading and transported to our laboratory for compaction curve testing.

TABLE 5.5-1: Fill Placement Specifications

LOCATION	MINIMUM RELATIVE COMPACTION	MINIMUM MOISTURE CONTENT (percent above optimum)
General Fill (< 50 feet deep)	90	3
General Fill (≥ 50 feet deep)	95	2
Keyway	95	2

6.0 PRELIMINARY FOUNDATION RECOMMENDATIONS

The following preliminary foundation recommendations are provided for planning purposes and should be evaluated once the final foundation layouts are provided.

It is our opinion that the proposed residential structures can be supported on structural mat foundations (such as post-tensioned mat foundations) provided that the structures are located on level ground and at least 10 feet from the top of slopes. A minimum mat thickness of 10 inches should be considered; however, the actual thickness and perimeter embedment recommendations should be determined by the structural engineer based on structural calculations.

7.0 PRELIMINARY RETAINING WALL RECOMMENDATIONS

Unrestrained walls constructed on level foreground should be designed for active lateral fluid pressure considering drained conditions, using the parameters below.

TABLE 7.0-1: Retaining Wall Design Parameters

BACKFILL SLOPE CONDITION	ACTIVE PRESSURE (pcf)
Level	50
3:1	60
2:1	70

Passive pressures acting on shallow foundations and keyways may be assumed as 250 pounds per cubic foot (pcf) provided that the area in front of the retaining wall is level for a distance of at least 10 feet or three times the depth of foundation and keyway, whichever is greater. The upper 1 foot of soil should be excluded from passive pressure computations unless it is confined by pavement or a concrete slab. The friction factor for sliding resistance may be assumed as 0.35. It is recommended that retaining wall footings be designed using an allowable bearing pressure of 2,500 pounds per square foot (psf) in engineered fill. The footings should be at least 24 inches below lowest adjacent grades. Walls adjacent to sloping terrain should be supported on deep foundations, such as drilled piers.

Based on review of the conceptual site plan, mechanically stabilized earth (MSE) retaining walls may be feasible for many of the site retaining walls. MSE walls function as gravity structures relying on self-weight of segmental blocks at the wall face and reinforced soil mass behind the segmental blocks to resist the destabilizing forces of the retained soil. The soil reinforcement consists of geogrid reinforcement.

The following preliminary soil criteria should be incorporated into the MSE wall design.

TABLE 7.0-2: MSE Wall Design Soil Material Parameters

CONDITION	COHESION (c') (pcf)	FRICTION ANGLE (∅') (degrees)	UNIT WEIGHT (γ) (pcf)
Reinforced Fill	0	28	120
Retained Soil	0	28	120
Foundation Fill	0	28	120

The geotechnical engineer should be consulted on seismic design recommendations for walls that are taller than 6 feet in retained height, tiered retaining wall configurations, or where surcharge loading is present.

All retaining walls should be provided with drainage facilities to prevent the build-up of hydrostatic pressures behind the walls. Wall drainage may be provided using a 4-inch-diameter perforated pipe embedded in Class 2 permeable material, or free-draining gravel surrounded by synthetic filter fabric. The width of the drain blanket should be at least 12 inches. The drain blanket should extend to about 1 foot below the finished grades. As an alternative, prefabricated wall drain panels can be used. The upper 1 foot of wall backfill should consist of on-site clayey soil. Collector perforated pipes should be directed to an outlet approved by the civil engineer.

All backfill should be placed in accordance with the recommendations provided above for engineered fill. Light equipment should be used during backfill compaction to reduce possible overstressing of the walls.

8.0 STORMWATER INFILTRATION AND BIORETENTION AREAS

Due to the density of the site soil and fines content, the near-surface site soil is expected to have a low to moderate permeability value for stormwater infiltration in grassy swales or permeable pavers, unless subdrains are installed. Therefore, best management practices should assume that limited stormwater infiltration will occur at the site.

If bioretention areas are implemented, we recommend that, when practical, they be planned a minimum of 10 feet away from structural site improvements, such as buildings, streets, retaining walls, and sidewalks/driveways. When this is not practical, bioretention areas located closer to structural site improvements can either:

1. Be constructed with structural side walls capable of withstanding the loads from the adjacent improvements, or
2. Incorporate filter material compacted to between 85 and 90 percent relative compaction (ASTM D1557, latest edition) and a waterproofing system designed to reduce the potential for moisture transmission into the subgrade soil beneath the adjacent improvement.

In addition, one of the following options should be followed.

1. We recommend that bioretention design incorporate a waterproofing system lining the bioswale excavation and a subdrain, or other storm drain system, to collect and convey water to an approved outlet. The waterproofing system should cover the bioretention area excavation in such a manner as to reduce the potential for moisture transmission beneath the adjacent improvements.
2. Alternatively, and with some risk of movement of adjacent improvements, if infiltration is desired, we recommend the perimeter of the bioretention areas be lined with an HDPE tree root barrier that extends at least 1 foot below the bottom of the bioretention areas/infiltration trenches.

Site improvements located adjacent to bioretention areas that are underlain by base rock, sand, or other imported granular materials, should be designed with a deepened edge that extends to the bottom of the imported material underlying the improvement. Given the nature of bioretention systems and possible proximity to improvements, we recommend ENGEO be retained to review design plans.

9.0 PRELIMINARY PAVEMENT DESIGN

The following preliminary pavement section has been determined for an assumed R-value of 5, and in accordance to the design methods contained in Chapter 630 of Caltrans Highway Design Manual.

TABLE 9.0-1: Preliminary Pavement Section

TRAFFIC INDEX	AC (inches)	AB (inches)
5.0	3.0	10.0
6.0	3.5	13.0
7.0	4.0	16.0

Notes: AC – Asphalt Concrete
AB – Caltrans Class 2 aggregate base (R-value of 78 or greater)

The above preliminary pavement sections are provided for estimating only. We recommend the actual subgrade material be tested for R-value and the traffic index, and minimum pavement section(s) should be confirmed by the civil engineer and the City of Vallejo.

10.0 FUTURE STUDIES

As previously discussed, a site-specific design-level geotechnical exploration should be performed as part of the design process. The exploration would include additional borings and laboratory soil testing to provide data for preparation of specific recommendations regarding grading, foundation design, and drainage for the proposed development. The exploration will also allow for more detailed evaluations of the geotechnical concerns discussed in this report and afford the opportunity to provide recommendations regarding techniques and procedures to be implemented during construction to mitigate potential geotechnical/geological hazards. Slope stability analyses should be performed during design-level geotechnical study and once final development plans are available to determine corrective grading configurations.

11.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

This report presents geotechnical recommendations for design of the improvements discussed in Section 1.3 for the proposed development. If changes occur in the nature or design of the project, we should be allowed to review this report and provide additional recommendations, if any. It is the responsibility of the owner to transmit the information and recommendations of this report to the appropriate organizations or people involved in design of the project, including but not limited to developers, owners, buyers, architects, engineers, and designers. The conclusions and recommendations contained in this report are solely professional opinions and are valid for a period of no more than 2 years from the date of report issuance.

We strived to perform our professional services in accordance with generally accepted principles and practices currently employed in the area; there is no warranty, express or implied. There are risks of earth movement and property damages inherent in building on or with earth materials. We are unable to eliminate all risks; therefore, we are unable to guarantee or warrant the results of our services.

This report is based upon field and other conditions discovered at the time of report preparation. We developed this report with limited subsurface exploration data. We assumed that our subsurface exploration data is representative of the actual subsurface conditions across the site. Considering possible underground variability of soil, rock, stockpiled material, and groundwater, additional costs may be required to complete the project. We recommend that the owner establish a contingency fund to cover such costs. If unexpected conditions are encountered, notify us immediately to review these conditions and provide additional and/or modified recommendations, as necessary.

Our services did not include excavation sloping or shoring, soil volume change factors, flood potential, or a geohazard exploration. In addition, our geotechnical exploration did not include work to determine the existence of possible hazardous materials. If any hazardous materials are encountered during construction, then notify the proper regulatory officials immediately.

This document must not be subject to unauthorized reuse, that is, reusing without our written authorization. Such authorization is essential because it requires us to evaluate the document's applicability given new circumstances, not the least of which is passage of time.

Actual field or other conditions will necessitate clarifications, adjustments, modifications, or other changes to our documents. Therefore, we must be engaged to prepare the necessary clarifications, adjustments, modifications, or other changes before construction activities commence or further activity proceeds. If our scope of services does not include on-site construction observation, or if other persons or entities are retained to provide such services, we cannot be held responsible for any or all claims arising from or resulting from the performance of such services by other persons or entities, and from any or all claims arising from or resulting from clarifications, adjustments, modifications, discrepancies, or other changes necessary to reflect changed field or other conditions.

SELECTED REFERENCES

Bortugno, E.J., 1987, Landslide Hazards in the Benicia-Vallejo Area, Solano County, California: Landslide Hazard Identification Map No. 8; OFR 86-17, scale 1:24,000, Plates A – D.

Bryant, W.A., compiler, 2017, Fault Number 481, Southampton Fault, in Quaternary Fault and Fold Database of the United States: U.S. Geological Survey website, https://earthquakes.usgs.gov/hazards/qfaults.

Crane, R., 1988, Geologic Map of the Benicia Quadrangle, Geology of the Mount Diablo Region, in Guidebook for 1988 Pacific Section NCGS Convention.

Dibblee, T.W. and Minch, J.A., 2005, Geologic Map of the Benicia Quadrangle, Contra Costa and Solano Counties, California: Dibblee Geological Foundation, Dibblee Foundation Map DF-146, scale 1:24,000.

Graymer, R.W., et al, 1999, Geology of the Cordelia and the Northern Part of the Benicia 7.5 Minute Quadrangles, USGS, Open File Report 99-162.

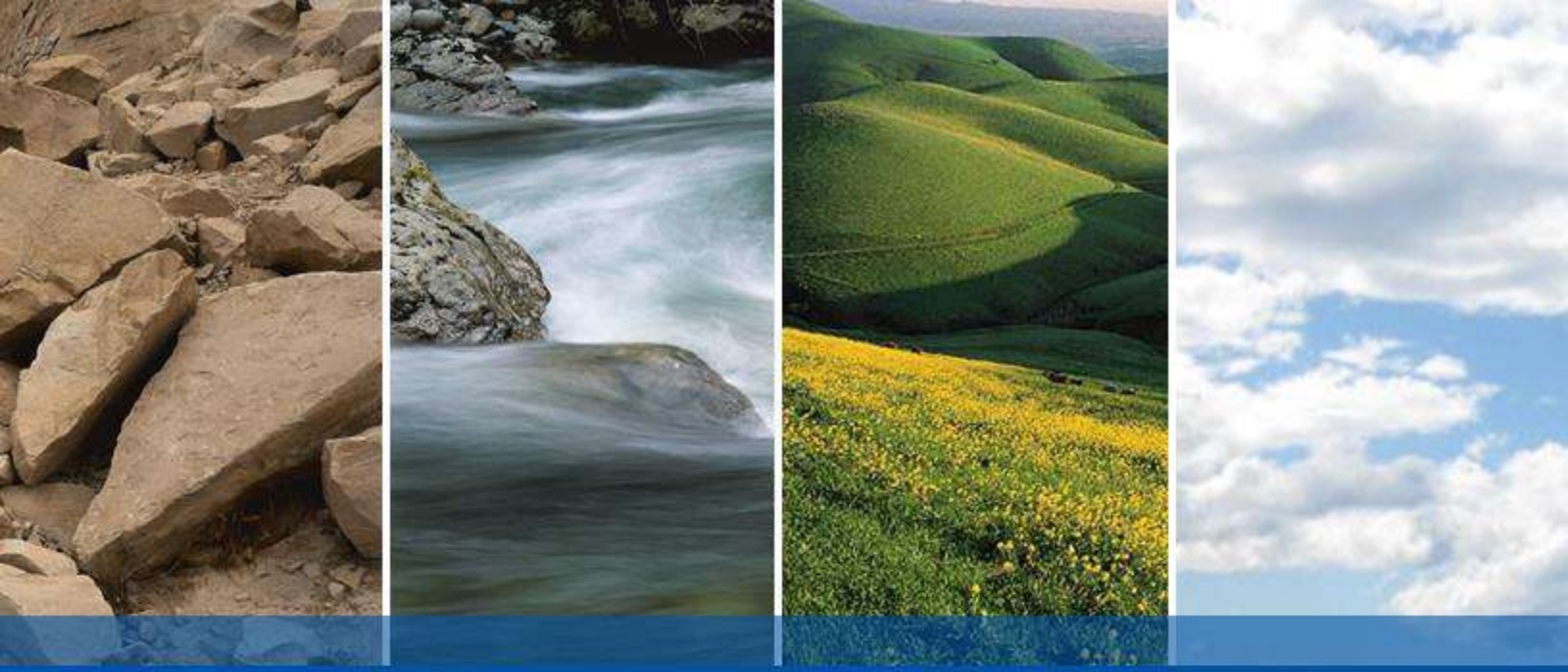
Jennings, C. W.; 1994 Fault Activity Map of California and Adjacent Areas, California Division of Mines and Geology, Map No. 6.

Jennings, C.W., and Bryant, W.A., 2010, Fault Activity Map of California: California Geological Survey Geologic Data Map No. 6, map scale 1:750,000.

Nilsen, T. H., 1975, Preliminary Photointerpretation Map of Landslide and Other Surficial Deposits, Benicia Quadrangle, USGS Open-File Map 75-277-4.

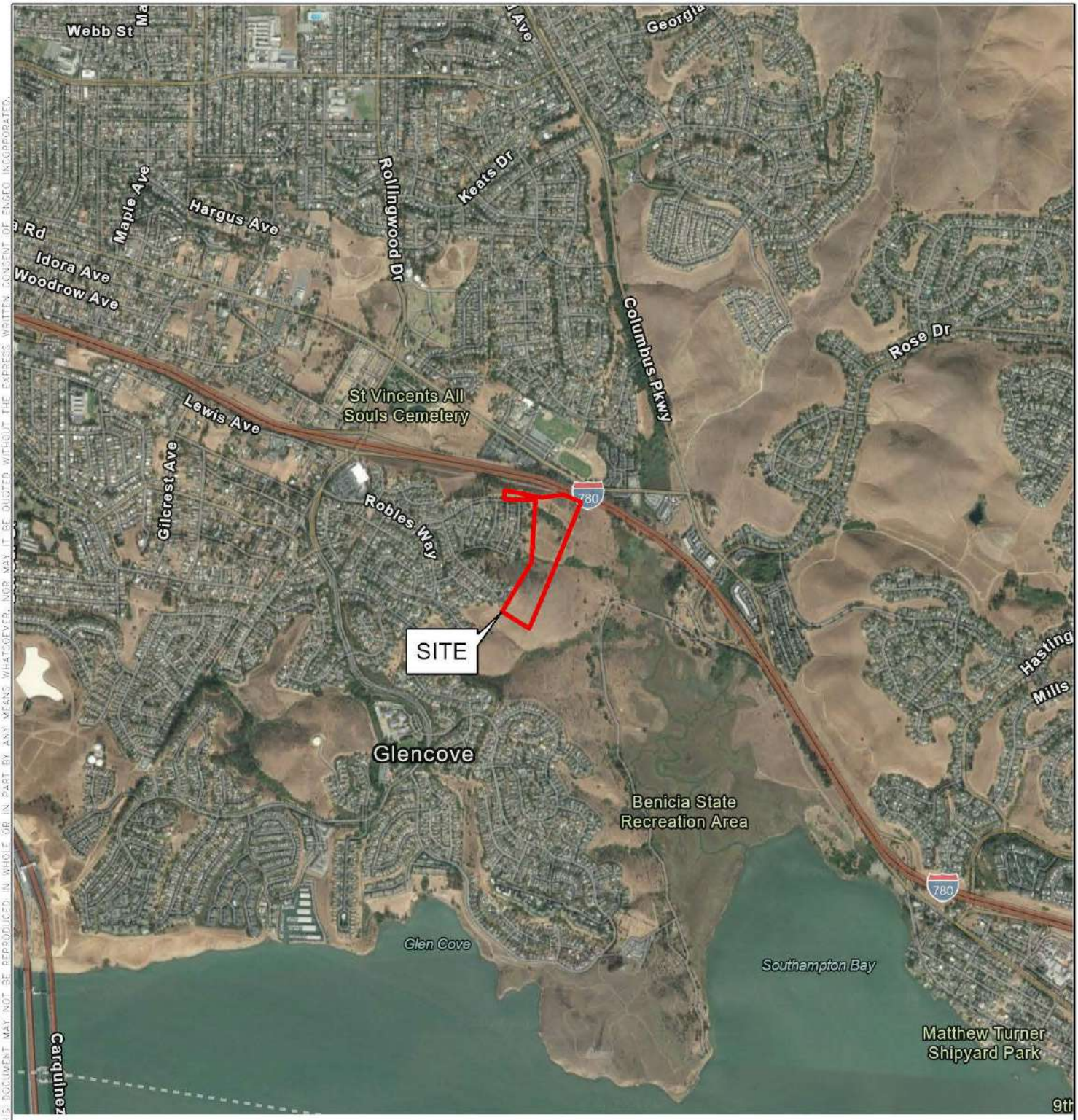
Various Aerial Photographs Reviewed; 08-20-37 ABO-52-78 and ABO-52-77; 06-29-57 ABO-33T-29 and ABO-33T-28; 06-21-65 SOL 49-30 and SOL 49-31; 03-21-70 2830-1-60 and 2830-1-59; 07-10-73 3594-1-120 and 3594-1-121; 02-20-81 GSVEZR 2-20 and GSVEZR 2-21; 07-18-89 AV3601-3-16 and AVR3601-3-17.

Working Group on California Earthquake Probabilities, 2013, The Uniform California Earthquake Rupture Forecast, Version 3 UCERF 3, USGS Open File Report 2013.



FIGURES

FIGURE 1: Vicinity Map
FIGURE 2: Site Plan
FIGURE 3: Regional Geologic Map
FIGURE 4: Regional Faulting and Seismicity
FIGURE 5: Regional Landslide Map
FIGURE 6: Cross Sections
FIGURE 7: Typical Keyway and Benching Detail
FIGURE 8: Subdrain Details
FIGURE 9: Trench Log 1-T1



N

0 1,000 2,000

FEET

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 10/12/2020

ENGEO Expect Excellence

VICINITY MAP

VALLEJO PROPERTIES - VISTA COVE

VALLEJO, CALIFORNIA

PROJECT NO. :	20164.000.001
SCALE:	AS SHOWN
DRAWN BY: NLK	CHECKED BY: AHF

FIGURE NO. 1

COPYRIGHT © 2020 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20164\20164000001\GEOTECH\20164-GEX.APRX
LAYOUT: VICINITY USER: NLAMOTTEKERR

ORIGINAL FIGURE PRINTED IN COLOR

COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED OR EXCERPTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- 1-B2 / 6' — BORING SHOWING DEPTH TO BEDROCK (ENGEO, 2022)
- 1-TP13 / 5' — TEST PIT SHOWING DEPTH TO BEDROCK (ENGEO, 2022)
- C — C' — CROSS SECTION
- 1-T1 — TRENCH (ENGEO, 2022)
- GEOLOGIC CONTACT
- 60 — GEOLOGIC ATTITUDE
- **Qaf** — EXISTING FILL
- **Qc** — COLLUVIUM
- **Kp** — PANOCHE FORMATION BEDROCK
- SOIL CREEP/ EARTH FLOW
- SEEP
- SHALLOW LANDSLIDE DEPOSIT
- DEEP SEATED LANDSLIDE DEPOSIT
- (6) — LANDSLIDE DESIGNATION
- SOUTHAMPTON FAULT (USGS)

N

0 150 FEET

BASE MAP SOURCE: DK ENGINEERING 2022, 2018 LIDAR TOPOGRAPHY

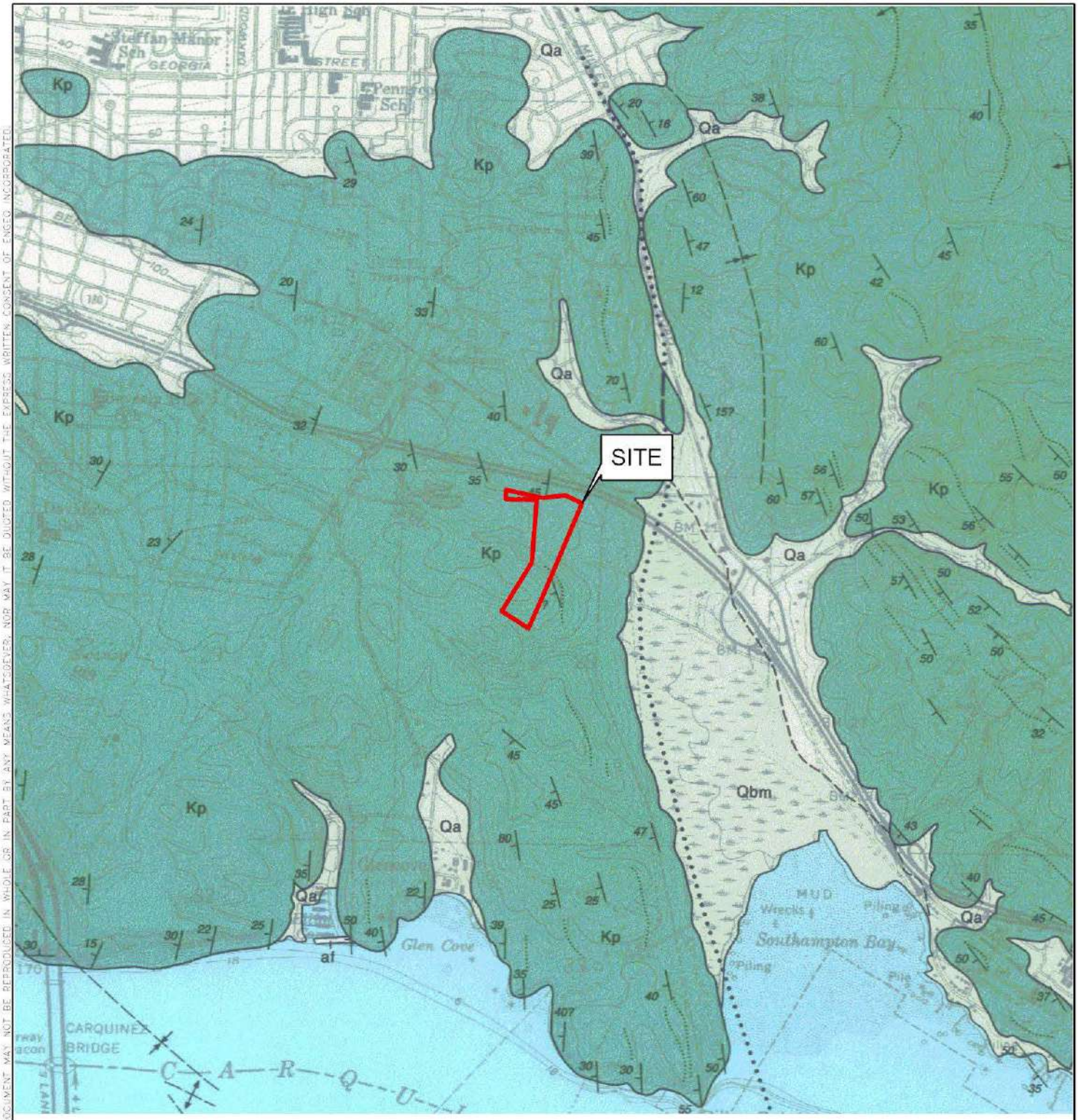
ENGEO Expect Excellence

SITE PLAN
VALLEJO PROPERTIES - VISTA COVE
VALLEJO, CALIFORNIA

PROJECT NO.: 20164.000.001 | FIGURE NO. 2
SCALE: AS SHOWN
DRAWN BY: CC | CHECKED BY: AHF

ORIGINAL FIGURE PRINTED IN COLOR

FILE PATH: G:\Drafting\PROJECTS_20000 to 21999\20164\20164000001\GEOTECH\GEX-0822\ACAD-20164000001_GEX_2_0822.dwg SAVE DATE: 9/6/2022 11:07:52 AM SAVED BY: CCulbertson



N

0 1,000 2,000

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

af	ARTIFICIAL FILL
Qa	ALLUVIAL GRAVEL, SAND AND CLAY
Qbm	BAY MUD
Kp	PANOCHE FORMATION- CLAY SHALE, DARK GRAY MICACEOUS, BEDDED, INCLUDES THIN SAND STONE

BASEMAP SOURCE: DIBBLEE (DF-146; 2005)

ENGEO Expect Excellence

REGIONAL GEOLOGIC MAP

VALLEJO PROPERTIES - VISTA COVE

VALLEJO, CALIFORNIA

PROJECT NO. :	20164.000.001
SCALE:	AS SHOWN
DRAWN BY: NLK	CHECKED BY: AHF

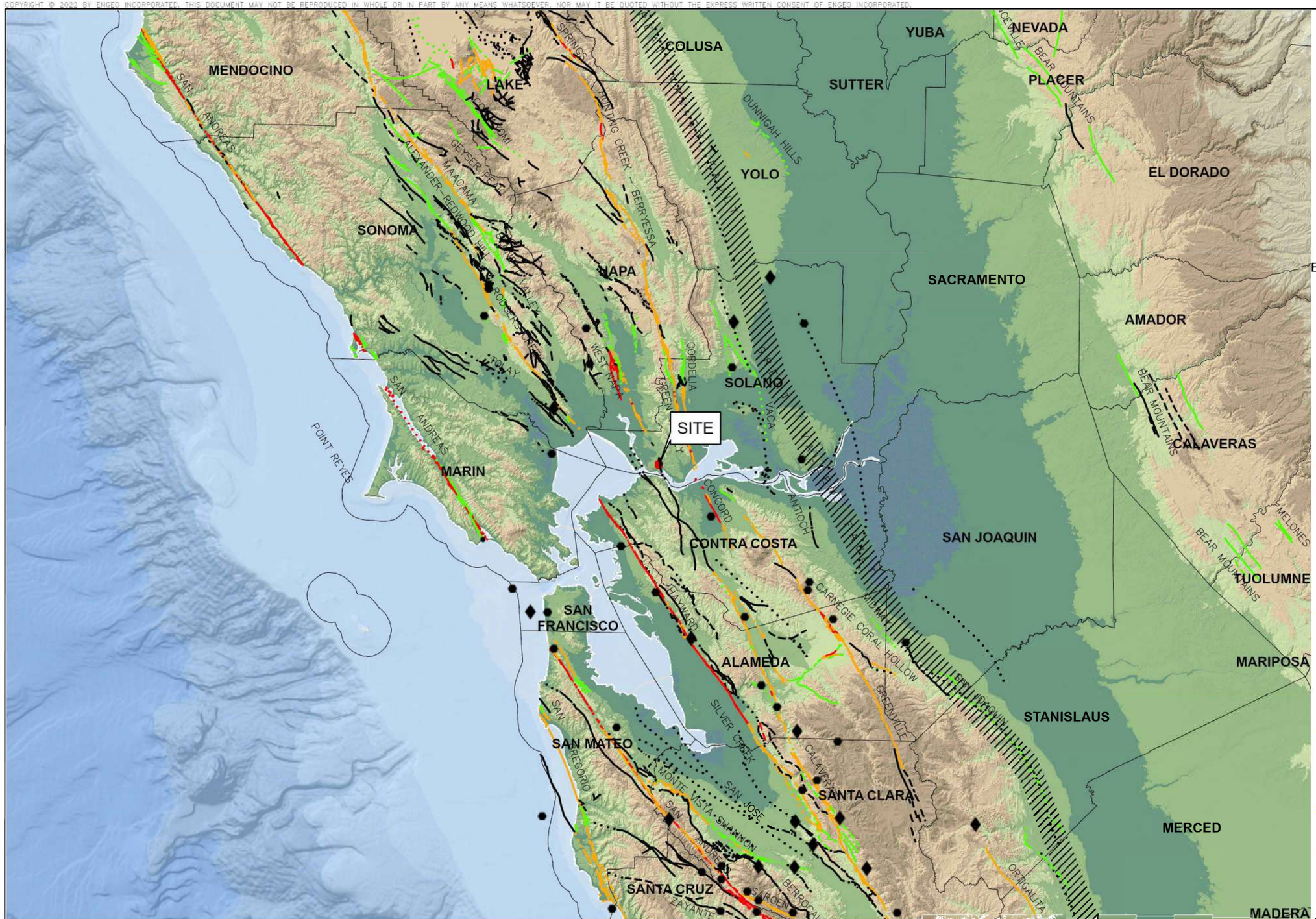
FIGURE NO. 3

COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20164\20164000001\GEOTECH\20164-GEX.APRX
LAYOUT: GEOLOGIC USER: NLAMOTTEKERR

ORIGINAL FIGURE PRINTED IN COLOR

COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

EARTHQUAKE

- ◆ MAGNITUDE 7+
- ⬢ MAGNITUDE 6-7
- ● MAGNITUDE 5-6

QUATERNARY FAULTS

BASED ON TIME OF MOST RECENT SURFACE DEFORMATION

- HISTORICAL (<150 YEARS), WELL CONSTRAINED LOCATION
- HISTORICAL (<150 YEARS), MODERATELY CONSTRAINED LOCATION
- HISTORICAL (<150 YEARS), INFERRED LOCATION
- LATEST QUATERNARY (<15,000 YEARS), WELL CONSTRAINED LOCATION
- LATEST QUATERNARY (<15,000 YEARS), MODERATELY CONSTRAINED LOCATION
- LATEST QUATERNARY (<15,000 YEARS), INFERRED LOCATION
- LATE QUATERNARY (<130,000 YEARS), WELL CONSTRAINED LOCATION
- LATE QUATERNARY (<130,000 YEARS), MODERATELY CONSTRAINED LOCATION
- LATE QUATERNARY (<130,000 YEARS), INFERRED LOCATION
- MIDDLE AND LATE QUATERNARY (<750,000 YEARS), WELL CONSTRAINED LOCATION
- MIDDLE AND LATE QUATERNARY (<750,000 YEARS), MODERATELY CONSTRAINED LOCATION
- MIDDLE AND LATE QUATERNARY (<750,000 YEARS), INFERRED LOCATION
- UNDIFFERENTIATED QUATERNARY(<1.6 MILLION YEARS), WELL CONSTRAINED LOCATION
- GREAT VALLEY FAULT ZONE

BASE MAP SOURCE
ESRI, GEBCO, DELORME, NATURALVUE
COLOR HILLSHADE IMAGE BASED ON THE NATIONAL ELEVATION DATA SET (NED) AT 30 METER RESOLUTION
U.S.G.S. QUATERNARY FAULT DATABASE, 2018
U.S.G.S. HISTORIC EARTHQUAKE DATABASE (1800-PRESENT)

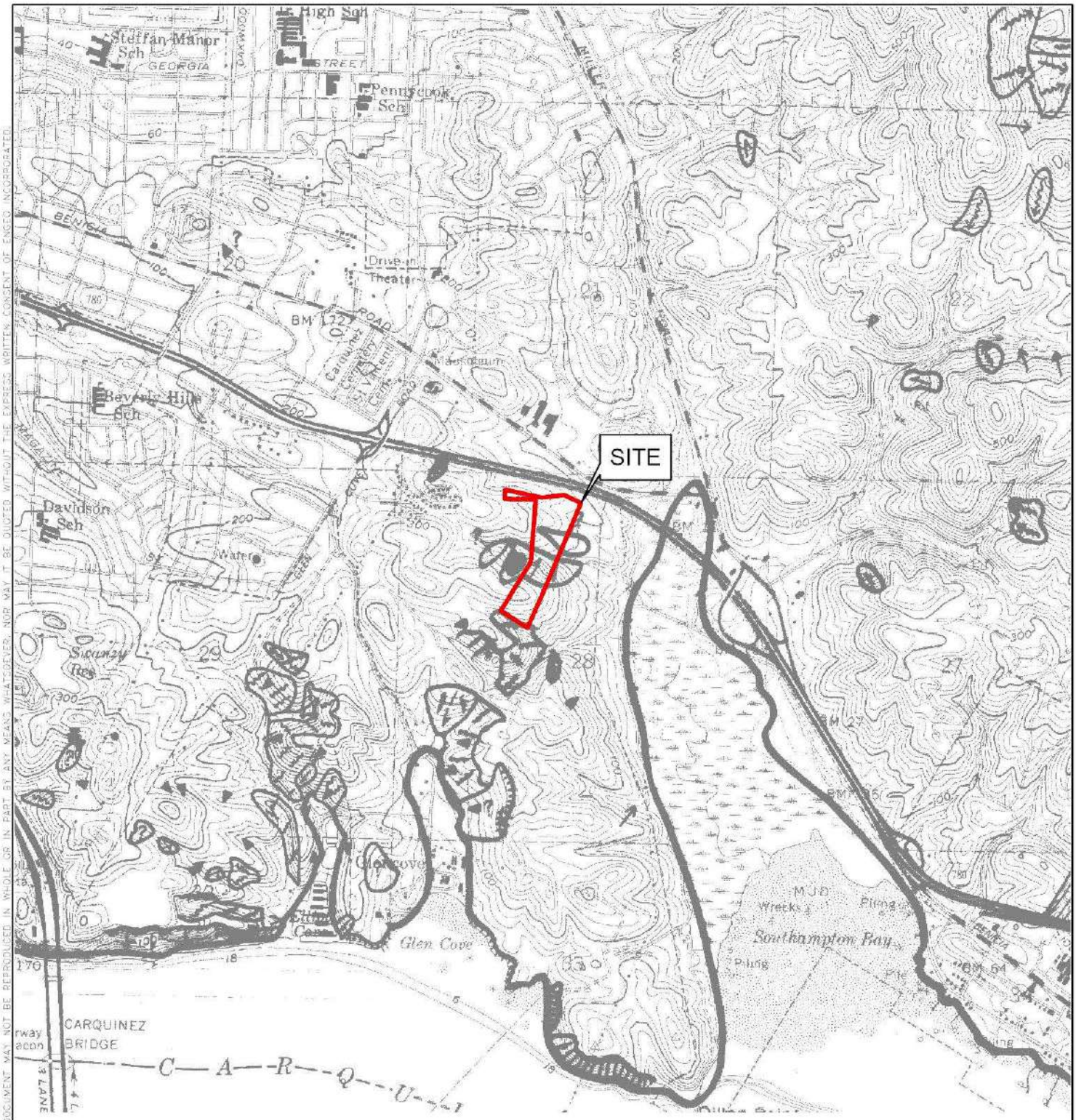
ENGEO Expect Excellence

REGIONAL FAULTING AND SEISMICITY
VALLEJO PROPERTIES - VISTA COVE
VALLEJO, CALIFORNIA

PROJECT NO. : 20164.000.001
SCALE: AS SHOWN
DRAWN BY: CC
CHECKED BY: AHF
FIGURE NO. 4

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20164\20164000001\GEOTECH\20164-GEX.APRX
LAYOUT: FAULT&SEISMICITY USER: NLAMOTTEKERR

ORIGINAL FIGURE PRINTED IN COLOR



N

0 1,000 2,000

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- DEFINITE LANDSLIDE
- PROBABLE LANDSLIDE
- QUESTIONABLE LANDSLIDE
- EARTHFLOW
- SMALL LANDSLIDE

BASEMAP SOURCE: LANDSLIDE HAZARD IDENTIFICATION MAP NO.8 (BORTUNGO, 1987)

ENGEO Expect Excellence

REGIONAL LANDSLIDE MAP

VALLEJO PROPERTIES - VISTA COVE

VALLEJO, CALIFORNIA

PROJECT NO. :	20164.000.001
SCALE:	AS SHOWN
DRAWN BY: NLK	CHECKED BY: AHF

FIGURE NO. 5

COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20164\20164000001\GEOTECH\20164-GEX.APRX
LAYOUT: GEOLOGIC USER: NLAMOTTEKERR

ORIGINAL FIGURE PRINTED IN COLOR

COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE, OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED OR EXCERPTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED. File name: G:\Projects\21\20000\21000000\21000000-Valle\Cad\Sheets\21000000-Sheet Set.dwt, 8/4/2022 1:54:54 PM, SHANE BUCHANAN

ENGEO
Expect Excellence

CROSS SECTIONS	PROJECT NO.: 20164.000.001
VALLEJO PROPOERTIES - VISTA COVE	DRAWN BY: JSW / CHECKED BY: AHF
VALLEJO, CALIFORNIA	SCALE: AS SHOWN

FIGURE NO. 6

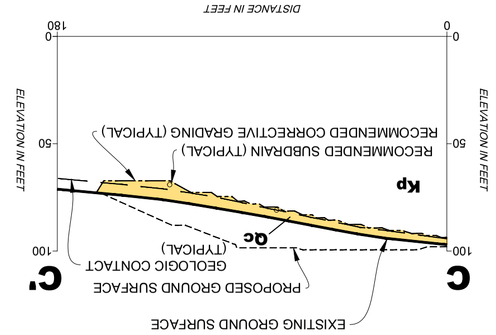
ORIGINAL FIGURE PRINTED IN COLOR

SCALE IN FEET
0 50
50

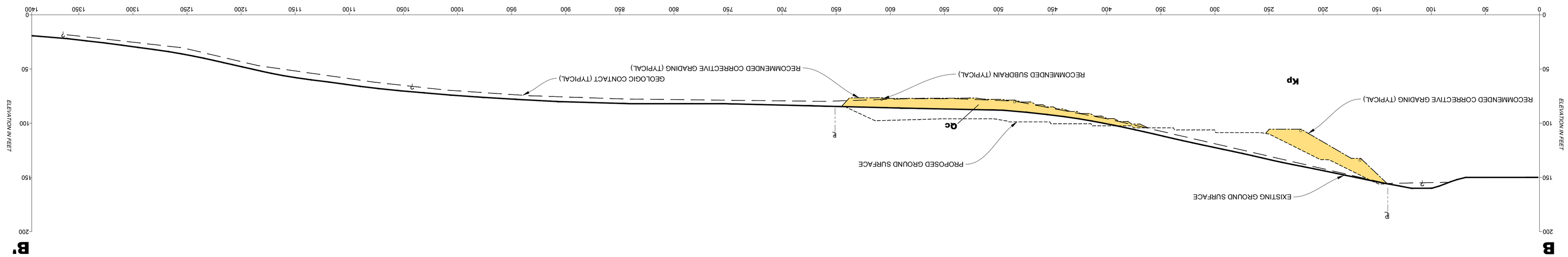
EXPLANATION

- **Qaf** EXISTING FILL
- **Qc** COLLUVIUM
- **Kp** PANOCHE FORMATION BEDROCK
- REMOVAL AREA

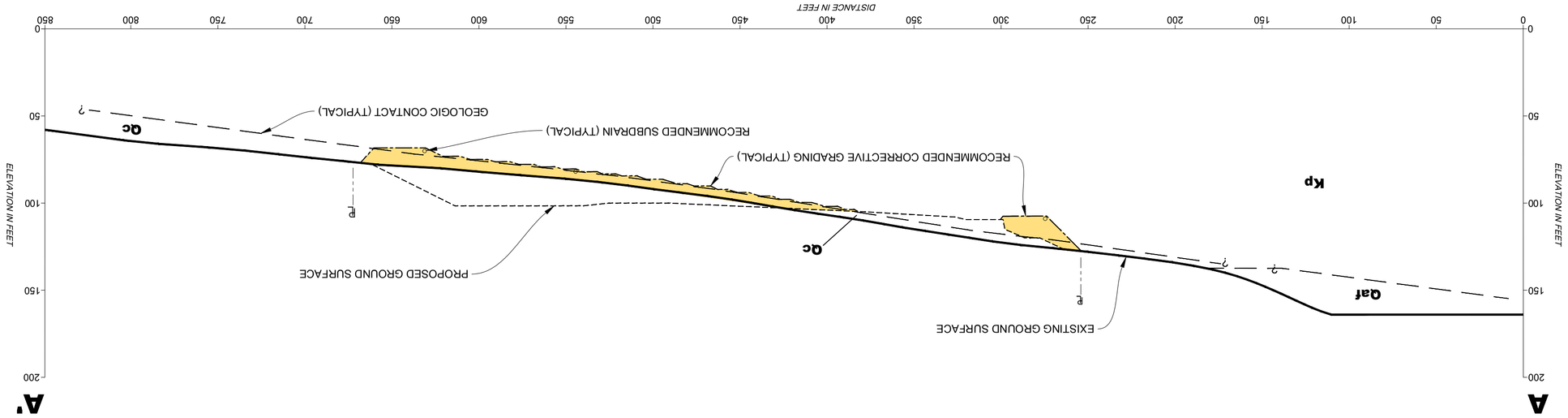
SECTION C-C'
1"=50'



SECTION B-B'
1"=50'

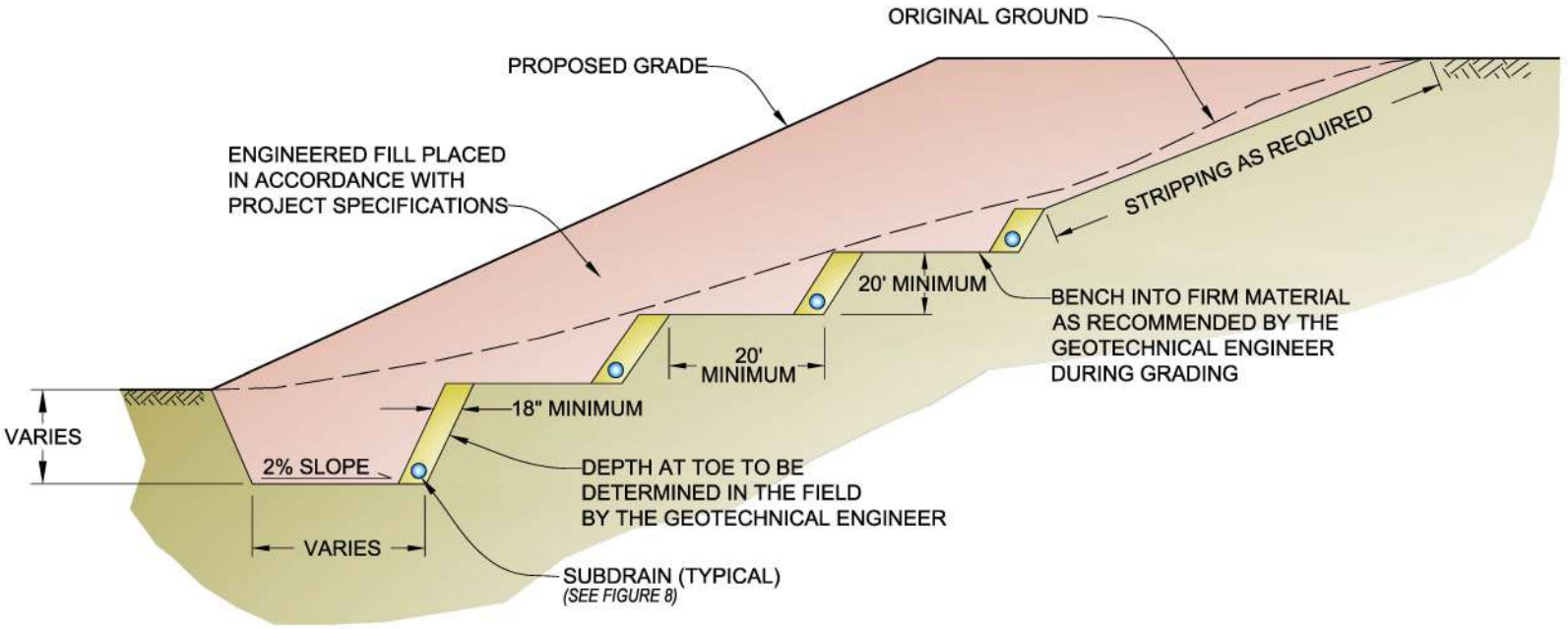


SECTION A-A'
1"=50'



COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED OR EXCERPTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

C:\Users\CCULBE~1\AppData\Local\Temp\AcPublish_17524\20164000001-7-KEYWAY_dETAIL_0822.dwg Plot Date:8-26-22 CCulbertson



ENGEO Expect Excellence

TYPICAL KEYWAY AND BENCHING DETAIL

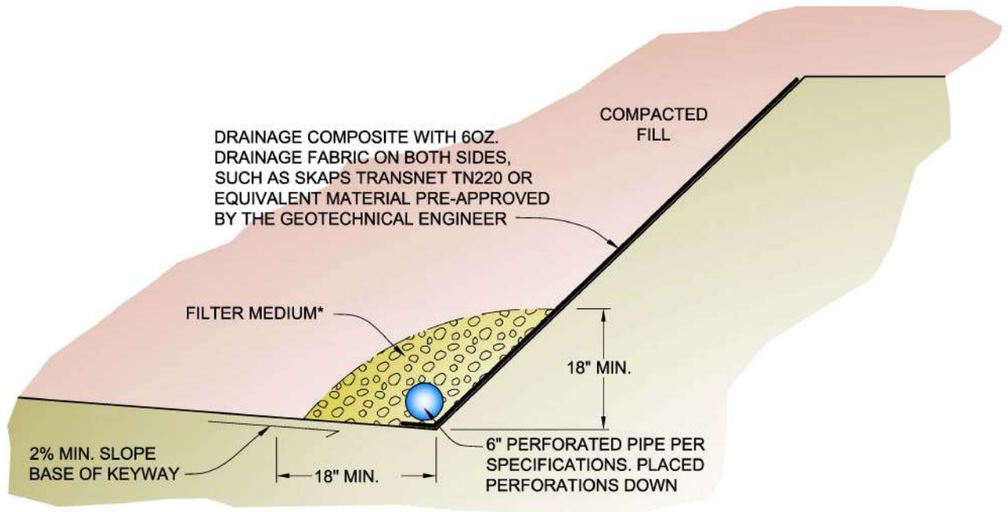
VALLEJO PROPERTIES - VISTA COVE

VALLEJO, CALIFORNIA

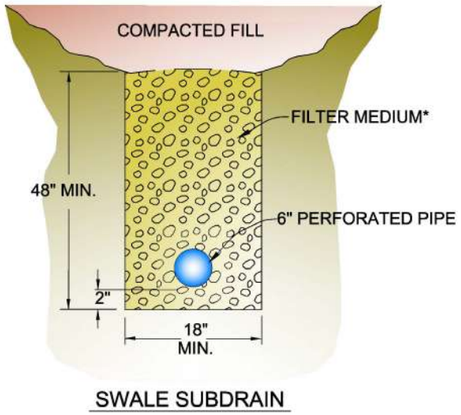
PROJECT NO.: 20164.000.001		FIGURE NO. 7
SCALE: NO SCALE		
DRAWN BY: CC	CHECKED BY: AHF	

ORIGINAL FIGURE PRINTED IN COLOR

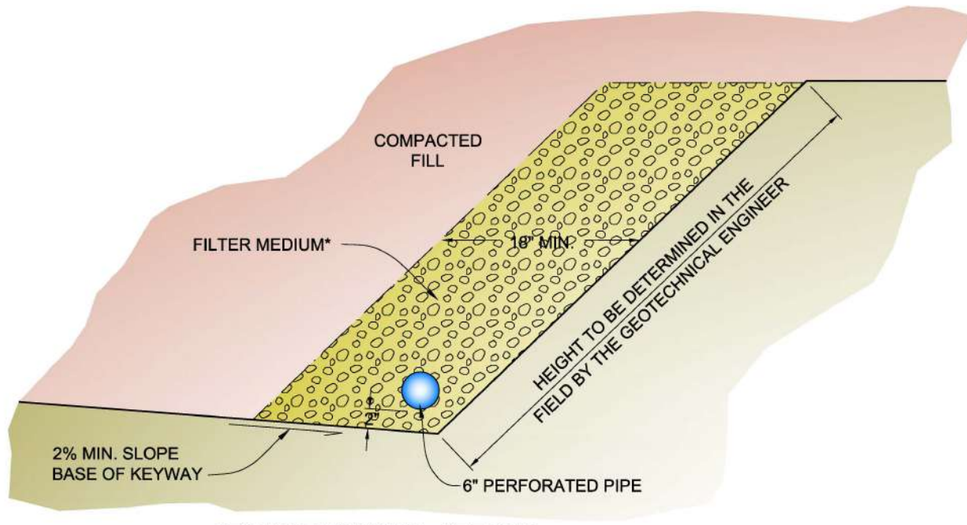
COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED OR EXCERPTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



KEYWAY SUBDRAIN - OPTION 1



SWALE SUBDRAIN



KEYWAY SUBDRAIN - OPTION 2

*FILTER MEDIUM

ALTERNATIVE A

CLASS 2 PERMEABLE MATERIAL

MATERIAL SHALL CONSIST OF CLEAN, COARSE SAND AND GRAVEL OR CRUSHED STONE, CONFORMING TO THE FOLLOWING GRADING REQUIREMENTS:

SIEVE SIZE	% PASSING SIEVE
1"	100
3/4"	90-100
3/8"	40-100
#4	25-40
#8	18-33
#30	5-15
#50	0-7
#200	0-3

ALTERNATIVE B

CLEAN CRUSHED ROCK OR GRAVEL WRAPPED IN FILTER FABRIC

ALL FILTER FABRIC SHALL MEET THE FOLLOWING MINIMUM AVERAGE ROLL VALUES UNLESS OTHERWISE SPECIFIED BY ENGEO:

GRAB STRENGTH (ASTM D-4632)	180 lbs
MASS PER UNIT AREA (ASTM D-4751)	6 oz/yd^2
APPARENT OPENING SIZE (ASTM D-4751)	70-100 U.S. STD. SIEVE
FLOW RATE (ASTM D-4491)	80 gal/min/ft
PUNCTURE STRENGTH (ASTM D-4833)	80 lbs

NOTES:

1. ALL PIPE JOINTS SHALL BE GLUED
2. ALL PERFORATED PIPE PLACED PERFORATIONS DOWN
3. 1% FALL (MINIMUM) ON ALL TRENCHES AND DRAIN LINES

ENGEO Expect Excellence

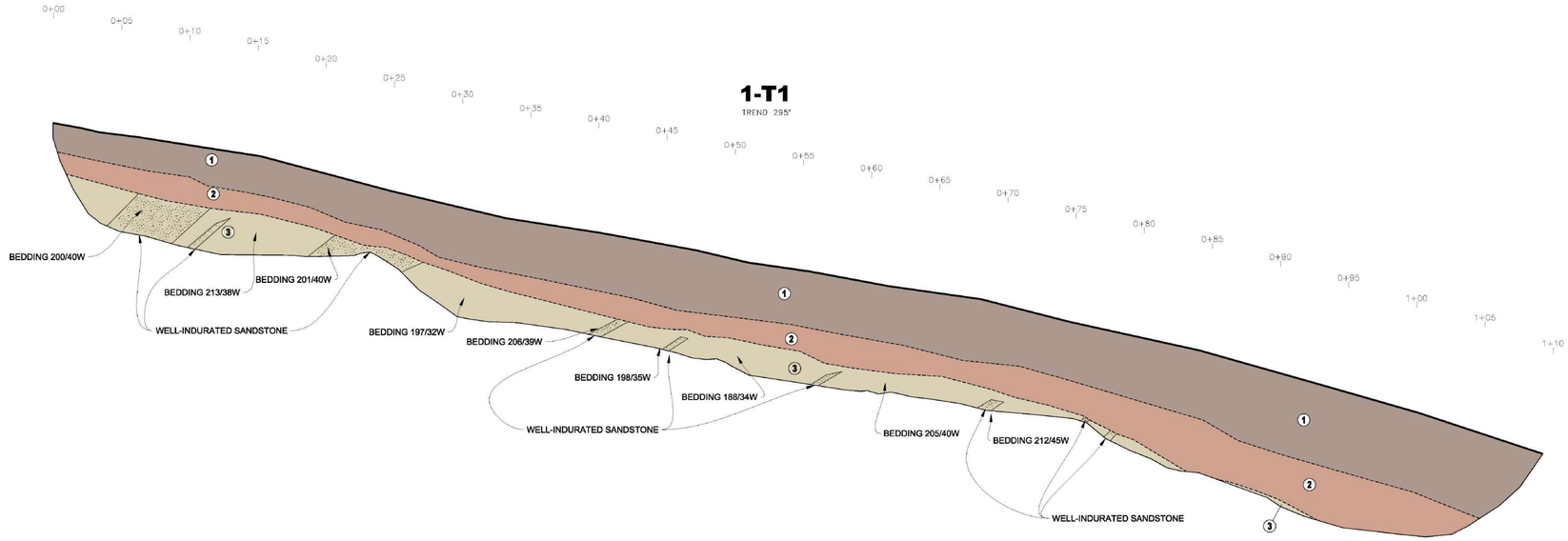
SUBDRAIN DETAILS
VALLEJO PROPERTIES - VISTA COVE
VALLEJO, CALIFORNIA

PROJECT NO.: 20164.000.001
SCALE: NO SCALE
DRAWN BY: CC CHECKED BY: AHF

FIGURE NO. 8

ORIGINAL FIGURE PRINTED IN COLOR

G:\Drafting\PROJECTS_20000 to 21999\20164\20164000001\GEOTECH\GEX-0822\20164000001-8-SubdrainDetails-0822.dwg



1-T1 EXPLANATION

(1) CLAY, dark brown, stiff, dry, blocky pedogenic structure, organic material and roots present at surface thinning out with depth (COLLUVIUM)

(2) CLAY, brown to light reddish brown,stiff, moist, blocky pedogenic structures, very thin rootlets, grades to residual soils in areas of weak claystone, gradational contact with underlying bedrock (COLLUVIUM).

(3) SANDSTONE interbedded with CLAYSTONE, light brown to grayish brown, fine-grained sandstone, moderately to well indurated interbedded with grey to greyish brown claystone, highly fractured, weak, with FeO staining, moderately to completely weathered (PANOCHE FORMATION)

5
0 5 0
SCALE IN FEET

ENGEO Expect Excellence

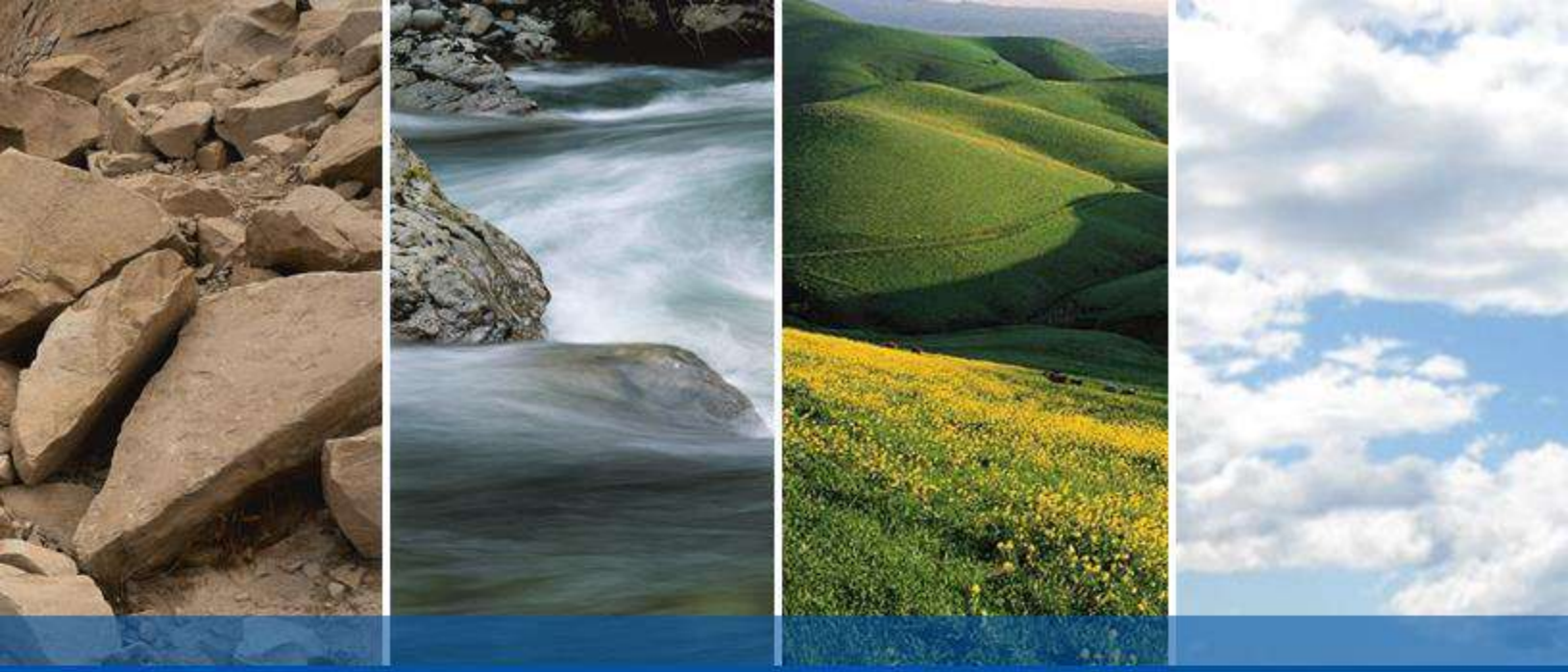
TRENCH LOG 1-T1
VALLEJO PROPERTIES - VISTA COVE
VALLEJO, CALIFORNIA

PROJECT NO.: 20164.000.001
SCALE: AS SHOWN
DRAWN BY: CC
CHECKED BY: AHF

FIGURE NO.
9

ORIGINAL FIGURE PRINTED IN COLOR

COPYRIGHT © 2021 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED OR EXCERPTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.



APPENDIX A

EXPLORATION LOGS
TEST PIT LOGS

CORELOG 1-B1

ENGEO Expect Excellence

LATITUDE: 38.081594 LONGITUDE: -122.200269

Prelim. Geotechnical Exploration
Vista Cove
Vallejo, CA
20164.000.001

DATE DRILLED: 8/4/2022
HOLE DEPTH: Approx. 50 ft.
HOLE DIAMETER: 6.0 in.
SURF ELEV (WGS84): Approx. 79 ft.

LOGGED / REVIEWED BY: K. Krisan / JSW
CORING CONTRACTOR: Britton Exploration
CORING METHOD, DRILL BIT SIZE/TYPE: Dry Core, HSA
NO. OF CORE BOXES: 4

Run Number	Drill Rate (s/ft)	Run Length (ft) / Recovery (ft)	RQD	Relative Hardness R0 R1 R2 R3 R4 R5 R6 / Weathering Grade RS WC WH WM WS F	Depth in Feet	Elevation in Feet	Graphic Log	DESCRIPTION	Discontinuities Remarks	Sample Type	In-Situ Testing	Notes
						24		Drilling starts at 0.5 feet below ground surface				
								FAT CLAY (CH), dark brown to yellowish brown, very stiff, moist, high plasticity, contains <5% fine sand [Qc]				
1		4.5/5 (90%)	N/A			23		MUDSTONE, yellowish brown, extremely weak (R0), crushed to moderately fractured, massive, residual soil (RS)				
					5			Very weak (R1) to weak (R2), highly weathered (WH)	- Jo: 40° Pl, Cl			
						22		Yellowish brown to olive gray, MnO staining	- Jo: 64°			
2		4.5/4.5 (100%)	N/A						- Jo: 10° -			
								Strong (R4), highly weathered (WH)				
					10	21		MUDSTONE, yellowish brown, very weak (R1) to weak (R2), crushed to moderately fractured, massive, highly weathered (WH) Strong (R4), contains carbonates				
3		4/5 (80%)	N/A			20		Moderately strong (R3), very closely fractured	- - Sh: 24°, Fi, S, Ca - Be: 70°, Ti, U			
					15		NR					
						19		Laminated bedding with interbedded dark gray to yellowish brown beds, contains shell fragments	- Be: 25°			
4		2.5/5 (50%)	N/A					Contains sandstone fragments, FeO staining	-			
					20	18	NR					

LOG-CORELOG_MASTER CORE LOG ATTEMPT 2.GPJ ENGEO INC.GDT 9/8/22

CORELOG 1-B1

ENGEO Expect Excellence

LATITUDE: 38.081594 LONGITUDE: -122.200269

Prelim. Geotechnical Exploration
Vista Cove
Vallejo, CA
20164.000.001

DATE DRILLED: 8/4/2022
HOLE DEPTH: Approx. 50 ft.
HOLE DIAMETER: 6.0 in.
SURF ELEV (WGS84): Approx. 79 ft.

LOGGED / REVIEWED BY: K. Krisan / JSW
CORING CONTRACTOR: Britton Exploration
CORING METHOD, DRILL BIT SIZE/TYPE: Dry Core, HSA
NO. OF CORE BOXES: 4

Run Number	Drill Rate (s/ft)	Run Length (ft) / Recovery (ft)	RQD	Relative Hardness R0 R1 R2 R3 R4 R5 R6 / Weathering Grade RS WC WH WM WS F	Depth in Feet	Elevation in Feet	Graphic Log	DESCRIPTION	Discontinuities Remarks	Sample Type	In-Situ Testing	Notes
								MUDSTONE, yellowish brown, moderately strong (R3) to strong (R4), massive, slightly weathered (WS) Very hard drilling 20 to 25 ft, straight drilled to 25 ft	- SPT Sample: 50 blows for 2"			
					17							
								MUDSTONE, olive gray to yellowish brown, very weak (R1) to weak (R2), crushed to moderately fractured, very thin bedding, highly weathered (WH)	- SPT Sample: 50 blows for 5"			
					25							
5		5/5 (100%)	N/A			16		SHALE, olive gray, extremely weak (R0) to weak (R2), crushed to moderately fractured, massive, highly weathered (WH) to completely weathered (WC)	- Jo: 43°, Ti, Pl, S - - Jo: 36°, Ti, Pl, S			
									- Be: 34°			
					30	15		Laminated bedding and fractures along bedding plane				
									- Jo: 42°, Cl			
6		5/5 (100%)	N/A			14			-			
									- Sh: 90° - Be: 74°			
					35			MUDSTONE, bluish gray, very weak (R1) to weak (R2), crushed to widely fractured, massive, moderately weathered (WM)				
						13						
7		5/5 (100%)	N/A						-			
									- Be: 10° - Sh: 70°, Ti, U, P			
					40	12						

LOG-CORELOG_MASTER CORE LOG ATTEMPT 2.GPJ ENGEO INC.GDT 9/8/22

CORELOG 1-B1

LATITUDE: 38.081594 LONGITUDE: -122.200269

Prelim. Geotechnical Exploration
Vista Cove
Vallejo, CA
20164.000.001

DATE DRILLED: 8/4/2022
HOLE DEPTH: Approx. 50 ft.
HOLE DIAMETER: 6.0 in.
SURF ELEV (WGS84): Approx. 79 ft.

LOGGED / REVIEWED BY: K. Krisan / JSW
CORING CONTRACTOR: Britton Exploration
CORING METHOD, DRILL BIT SIZE/TYPE: Dry Core, HSA
NO. OF CORE BOXES: 4

Run Number	Drill Rate (s/ft)	Run Length (ft) / Recovery (ft)	RQD	Relative Hardness R0 R1 R2 R3 R4 R5 R6 / Weathering Grade RS WC WH WM WS F	Depth in Feet	Elevation in Feet	Graphic Log	DESCRIPTION	Discontinuties Remarks	Sample Type	In-Situ Testing	Notes
8		5/5 (100%)	N/A		45	11		MUDSTONE, bluish gray, very weak (R1) to weak (R2), crushed to widely fractured, massive, moderately weathered (WM) Carbonate infill between fractures Flakes of pyrite	- Sh: 40°, Ti, U, P - - Sh: 80°, Ti, Pl, S - Jo: 40°			
9		5/5 (100%)	N/A		50	10 9			- - Jo: 38° - Sh: 75°, Pl, P			
								Bottom of boring at approximately 50 feet below ground surface. Ground water was not observed.				

LOG-CORELOG_MASTER CORE LOG ATTEMPT 2.GPJ ENGEO INC.GDT 9/8/22

ENGEO
Expect Excellence

CORELOG 1-B2

LATITUDE: 38.082062 LONGITUDE: -122.201254

Prelim. Geotechnical Exploration
Vista Cove
Vallejo, CA
20164.000.001

DATE DRILLED: 8/5/2022
HOLE DEPTH: Approx. 45 ft.
HOLE DIAMETER: 6.0 in.
SURF ELEV (WGS84): Approx. 132 ft.

LOGGED / REVIEWED BY: N. Inserra / JSW
CORING CONTRACTOR: Britton Exploration
CORING METHOD, DRILL BIT SIZE/TYPE: Dry Core, HSA
NO. OF CORE BOXES: 3

Run Number	Drill Rate (s/ft)	Run Length (ft) / Recovery (ft)	RQD	Relative Hardness R0 R1 R2 R3 R4 R5 R6 / Weathering Grade RS WC WH WM WS F	Depth in Feet	Elevation in Feet	Graphic Log	DESCRIPTION	Discontinuties Remarks	Sample Type	In-Situ Testing	Notes
1		3/5 (60%)	N/A		0	40	N/R	FAT CLAY (CH), reddish brown, very stiff, moist, high plasticity, contains <5% fine rounded gravel, carbonate, and charcoal [Qc]	-			
						39						
2		4/5 (80%)	N/A		5	38	N/R	MUDSTONE, dark brown, very weak (R1), crushed to closely fractured, massive, highly weathered (WH)	- Sh: 50°, Ti, Pl, U - Sh: 50°, Ti, Pl, U - Sh: 52°, Ti, Pl, U - Sh: 44°, Pl			
3		1.8/5 (36%)	N/A		10	37	N/R	Very hard drilling MUDSTONE, dark brown, very weak (R1), crushed to closely fractured, massive, highly weathered (WH)	- - Jo: 44°, Pl			
4		0.5/5 (10%)	N/A		15	36 35	N/R	SANDSTONE, light to dark gray, strong (R4), massive, slightly weathered (WS), Mechanically crushed. Very hard drilling from 15 to 20 feet	-			
					20							

LOG-CORELOG_MASTER CORE LOG ATTEMPT 2.GPJ ENGEO INC.GDT 9/7/22

CORELOG 1-B2

ENGEO Expect Excellence

LATITUDE: 38.082062 LONGITUDE: -122.201254

Prelim. Geotechnical Exploration
Vista Cove
Vallejo, CA
20164.000.001

DATE DRILLED: 8/5/2022
HOLE DEPTH: Approx. 45 ft.
HOLE DIAMETER: 6.0 in.
SURF ELEV (WGS84): Approx. 132 ft.

LOGGED / REVIEWED BY: N. Inserra / JSW
CORING CONTRACTOR: Britton Exploration
CORING METHOD, DRILL BIT SIZE/TYPE: Dry Core, HSA
NO. OF CORE BOXES: 3

Run Number	Drill Rate (s/ft)	Run Length (ft) / Recovery (ft)	RQD	Relative Hardness R0 R1 R2 R3 R4 R5 R6 / Weathering Grade RS WC WH WM WS F	Depth in Feet	Elevation in Feet	Graphic Log	DESCRIPTION	Discontinuties Remarks	Sample Type	In-Situ Testing	Notes
						34	SPT	SANDSTONE, dark brown, strong (R4), massive, moderately weathered (WM)	- SPT Sample: 50 blows for 4"			
							N/R	Very hard drilling from 20 to 22 1/2 feet				
5		2.5/4.5 (56%)	N/A			33		MUDSTONE, light gray to gray, strong (R4), closely fractured, massive, highly weathered (WH)	-			
					25			Residual soil (RS), Section of residual soil mudstone				
						32		SHALE, brown, weak (R2) to very weak (R1), very thin bedding, moderately weathered (WM), Interbedded siltstone, brown to gray, with thinly interbedded mudstone	- Be: 10° - Jo: 47°			
6		5/5 (100%)	N/A					MUDSTONE, brown, moderately strong (R3), massive, highly weathered (WH)	- - Be: 10° - Sh: 60°, Pl			
					30	31	N/R	Very hard drilling				
7		3.2/5 (64%)	N/A			30		SANDSTONE, yellowish red, moderately strong (R3) to strong (R4), very closely fractured to crushed, very thin bedding, highly weathered (WH) to moderately weathered (WM), fractured along bedding MUDSTONE, light gray, weak (R2), massive, completely weathered (WC)	-			
					35		N/R	SHALE, brown, moderately strong (R3), closely fractured, massive, slightly weathered (WS) SANDSTONE, dark gray to dark brown, strong (R4), crushed, massive, moderately weathered (WM)	- Jo: 45°, Ti			
		/0 (%)				29			- Jo: 40°			
8		4.4/5 (88%)	N/A					MUDSTONE, light gray, moderately strong (R3) to strong (R4), crushed to closely fractured, very thin bedding, moderately weathered (WM) to slightly weathered (WS)	-			
		/0 (%)							- Jo: 80°, Cl			
					40							

LOG-CORELOG_MASTER CORE LOG ATTEMPT 2.GPJ ENGEO INC.GDT 9/7/22

CORELOG 1-B2

ENGEO Expect Excellence

LATITUDE: 38.082062 LONGITUDE: -122.201254

Prelim. Geotechnical Exploration
Vista Cove
Vallejo, CA
20164.000.001

DATE DRILLED: 8/5/2022
HOLE DEPTH: Approx. 45 ft.
HOLE DIAMETER: 6.0 in.
SURF ELEV (WGS84): Approx. 132 ft.

LOGGED / REVIEWED BY: N. Inserra / JSW
CORING CONTRACTOR: Britton Exploration
CORING METHOD, DRILL BIT SIZE/TYPE: Dry Core, HSA
NO. OF CORE BOXES: 3

Run Number	Drill Rate (s/ft)	Run Length (ft) / Recovery (ft)	RQD	Relative Hardness R0 R1 R2 R3 R4 R5 R6 / Weathering Grade RS WC WH WM WS F	Depth in Feet	Elevation in Feet	Graphic Log	DESCRIPTION	Discontinuties Remarks	Sample Type	In-Situ Testing	Notes
			N/A			28	SPT	SANDSTONE, gray, strong (R4), massive, freshly weathered (F) Straight drilled through hard bedrock to 45 feet	- SPT Sample: 50 blows for 1"			
						27	NR		-			
					45		SPT	Bottom of boring at approximately 45 feet below ground surface. Ground water was not observed.	- SPT Sample: 50 blows for 1"			

LOG-CORELOG_MASTER CORE LOG ATTEMPT 2.GPJ ENGEO INC.GDT 9/7/22

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White/ Matt Farrell Logged Date: 7-13-2022

Test Pit Number	Depth (Feet)	Description
1-TP1	0 – 3½	LEAN CLAY WITH SAND (CL), very dark brown, stiff to very stiff, moist, blocky pedogenic texture, translocated clay films, contains sandstone gravels [Qc] PP: 4.0
	3½ – 7½	INTERBEDDED SANDSTONE AND SILTSTONE, brown to dark yellowish brown, weak, moderately to highly weathered, thinly bedded, closely to very closely fractured, predominantly sandstone [Kp] Bedrock measurements: N40E at 42°W (west end) N45E at 49°W (east end) Joint N72W at 58°S

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White/ Matt Farrell Logged Date: 7-13-2022

Test Pit Number	Depth (Feet)	Description
1-TP2	0 – 4	SANDY LEAN CLAY (CL), dark brown, stiff, moist, dark gray mottled pedogenic texture, contains gravel [Qc] PP: 3.0
	4 – 8	LEAN CLAY WITH SAND (CL), very dark brown, stiff, moist, blocky pedogenic texture, Mn nodules, fine sand, contains fine gravel [Qc] PP: 3.5
	8 – 9	CLAYEY GRAVEL (GC), dark yellowish brown, very dense, moist, gravel is bedrock fragments [Kp Residual Soil]
	9 – 10	SILTSTONE/ MUDSTONE, dark gray, weak, highly weathered, very closely fractured, weathers dark yellowish brown [Kp]

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White/ Matt Farrell Logged Date: 7-13-2022

Test Pit Number	Depth (Feet)	Description
1-TP3	0 – 8	LEAN CLAY WITH SAND (CL), very dark brown, stiff to very stiff, moist, blocky pedogenic texture, translocated clay films, contains sandstone gravels [Qc] Increasing sand at 3 feet.
	8 – 10	CLAYEY GRAVEL (GC), dark yellowish brown, very dense, moist, gravel is bedrock fragments [Kp Residual Soil]
	10 – 11	CLAYSTONE, dark olive brown to olive gray, very weak, highly weathered, thinly bedded, very closely fractured, Mn infill along fractures [Kp]

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White/ Matt Farrell Logged Date: 7-13-2022

Test Pit Number	Depth (Feet)	Description
1-TP4	0 – 3	LEAN CLAY WITH SAND (CL), very dark brown mottled with dark grayish brown, stiff to very stiff, moist, blocky pedogenic texture, translocated clay films, contains sandstone gravels [Qc]
	3 – 8	INTERBEDDED SANDSTONE AND SILTSTONE/ MUDSTONE, brown to dark yellowish brown, weak to very weak, highly weathered, thinly bedded to laminated, very closely fractured [Kp] Bedding Measurements: N65E at 48°W

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White/ Matt Farrell Logged Date: 7-13-2022

Test Pit Number	Depth (Feet)	Description
1-TP5	0 – 3	LEAN CLAY WITH SAND (CL), very dark brown, stiff to very stiff, moist, blocky pedogenic texture, translocated clay films, contains sandstone gravels [Qc]
	3 – 4	CLAYEY GRAVEL (GC), dark yellowish brown, very dense, moist, gravel is bedrock fragments [Kp Residual Soil]
	4 – 8	INTERBEDDED MUDSTONE AND SANDSTONE, very dark brown to dark grayish brown, weak, thinly bedded, very closely fractured, Mn infill along fracture surfaces [Kp] Bedding Measurement: N51E at 36°W Joint Measurement: N40W at 77°S

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White/ Matt Farrell Logged Date: 7-13-2022

Test Pit Number	Depth (Feet)	Description
1-TP6	0 – 3	LEAN CLAY WITH SAND (CL), very dark brown, stiff to very stiff, moist, blocky pedogenic texture, translocated clay films, contains sandstone gravels [Qc]
	3 – 3½	CLAYEY GRAVEL (GC), dark yellowish brown, very dense, moist, gravel is bedrock fragments [Kp Residual Soil]
	3½ – 6	INTERBEDDED MUDSTONE AND SANDSTONE, very dark brown to dark grayish brown, weak, thinly bedded, very closely fractured, Mn infill along fracture surfaces [Kp]

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White/ Matt Farrell Logged Date: 7-14-2022

Test Pit Number	Depth (Feet)	Description
1-TP7	0 – 9	LEAN CLAY WITH SAND (CL), very dark brown, stiff to very stiff, moist, blocky pedogenic texture, translocated clay films, contains sandstone gravels [Qc]
	9 – 11	CLAYSTONE, dark olive brown to olive gray, very weak, heavily weathered, thinly bedded, very closely fractured, Mn infill along fractures [Kp]

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White/ Matt Farrell Logged Date: 7-14-2022

Test Pit Number	Depth (Feet)	Description
1-TP8	0 – 2½	SANDY LEAN CLAY (CL), dark brown, hard, moist, dark gray mottled pedogenic texture, contains gravel [Qc] PP: > 4.5
	2½ – 6	SANDSTONE, brown, weak to moderately strong, moderately weathered, thinly bedded, indurated, closely fractured, some Fe staining along fractures [Kp] Bedding Measurement: N30E at 48°W

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White Logged Date: 7-14-2022

Test Pit Number	Depth (Feet)	Description
1-TP9	0 – 2	SANDY LEAN CLAY (CL), dark brown, hard, moist, dark gray mottled pedogenic texture, contains gravel [Qc]
	2 – 4	SILTSTONE, dark brownish gray to dark brown, very weak, highly weathered, very closely fractured, Fe staining along fractures [Kp] Bedding measurement: N28E at 42°W

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White Logged Date: 7-14-2022

Test Pit Number	Depth (Feet)	Description
1-TP10	0 – 5	LEAN CLAY WITH SAND (CL), very dark brown, stiff to very stiff, moist, blocky pedogenic texture, translocated clay films, contains sandstone gravels [Qc]
	5 – 6	CLAYEY GRAVEL (GC), dark yellowish brown, very dense, moist, gravel is bedrock fragments [Kp Residual Soil]
	6 – 8	INTERBEDDED MUDSTONE AND SANDSTONE, very dark brown to dark grayish brown, weak to moderately strong, thinly bedded, very closely fractured [Kp]

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White/ Matt Farrell Logged Date: 7-14-2022

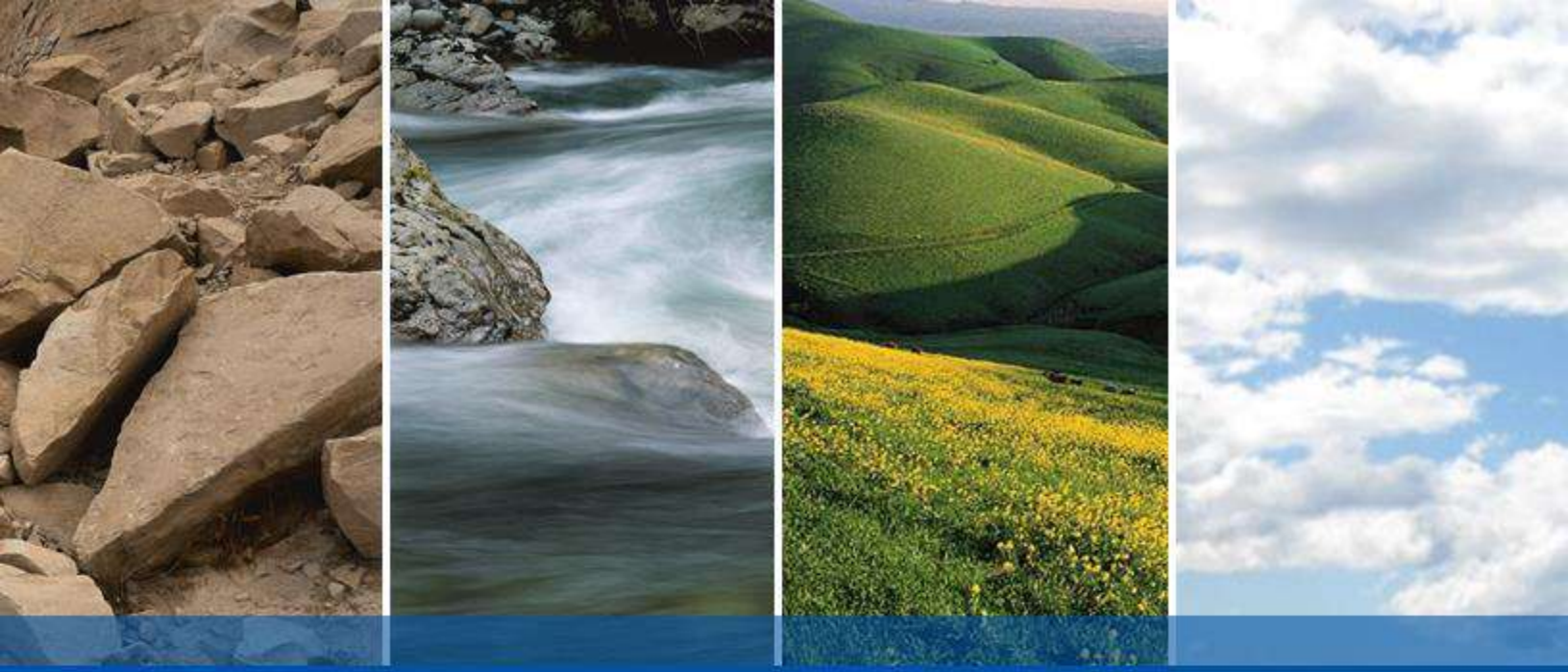
Test Pit Number	Depth (Feet)	Description
1-TP11	0 – 6	LEAN CLAY WITH SAND (CL), very dark brown, stiff to very stiff, moist, blocky pedogenic texture, translocated clay films, contains sandstone gravels [Qc]
	6 – 7	CLAYEY GRAVEL (GC), dark yellowish brown, very dense, moist, gravel is bedrock fragments [Kp Residual Soil]
	7 – 8	INTERBEDDED MUDSTONE AND SANDSTONE, very dark brown to dark grayish brown, weak to moderately strong, thinly bedded, very closely fractured [Kp]

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White/ Matt Farrell Logged Date: 7-14-2022

Test Pit Number	Depth (Feet)	Description
1-TP12	0 – 4	LEAN CLAY WITH SAND (CL), very dark brown, stiff to very stiff, moist, blocky pedogenic texture, translocated clay films, contains sandstone gravels [Qc]
	4 – 6	INTERBEDDED MUDSTONE AND SANDSTONE, yellowish brown, weak, thinly bedded, very closely fractured, Mn infill along fracture surfaces [Kp] Bedding Measurement: N45E at 46°W

ENGEO Expect Excellence	TEST PIT LOG
Vista Cove Vallejo, CA 20164.000.001	Logged By: Jacob White/ Matt Farrell Logged Date: 7-14-2022

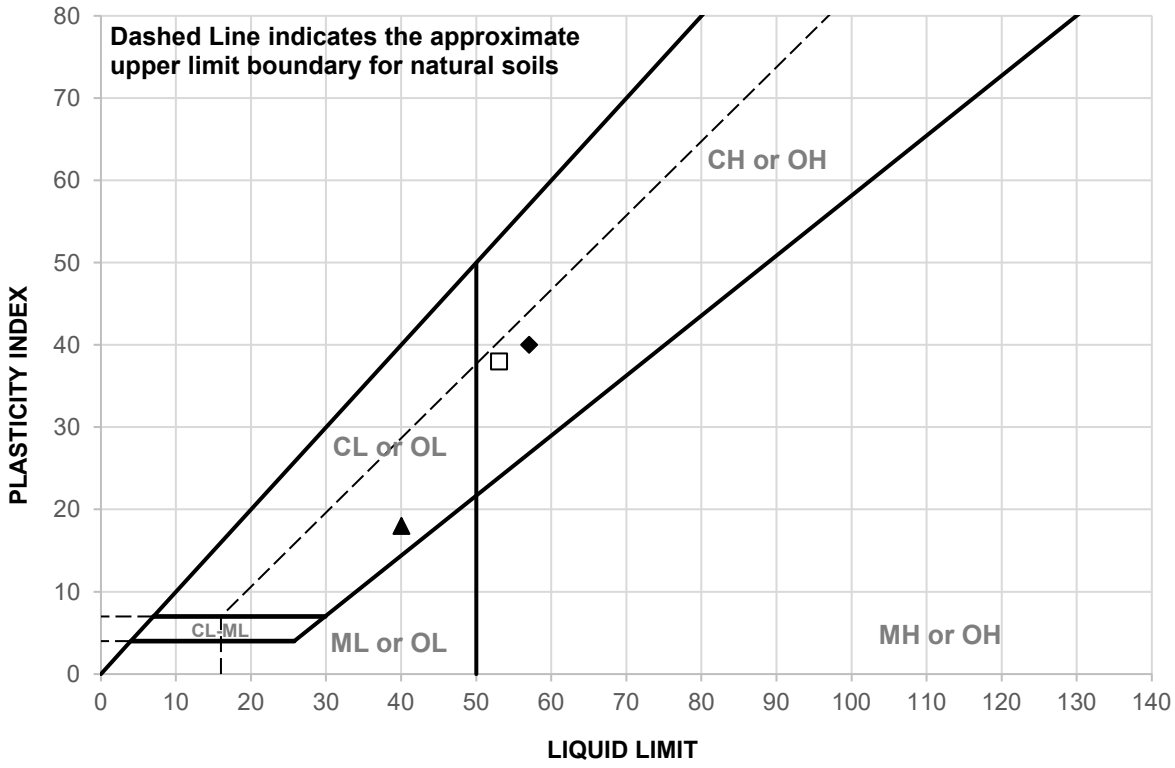
Test Pit Number	Depth (Feet)	Description
1-TP13	0 – 5	LEAN CLAY WITH SAND (CL), light to dark brown, stiff to very stiff, moist, blocky pedogenic texture, translocated clay films, contains sandstone gravels [Qc]
	5 – 7	INTERBEDDED SANDSTONE AND SILTSTONE, brown to dark yellowish brown, weak to very weak, highly weathered, thinly bedded, very closely fractured [Kp] Bedding Measurement: N25E at 37°W



APPENDIX B

LABORATORY TEST DATA BY ENGEO

LIQUID AND PLASTIC LIMITS TEST REPORT
ASTM D4318



	SAMPLE ID	DEPTH (ft)	MATERIAL DESCRIPTION	LL	PL	PI
▲	1-B1@13	13	See exploration logs	40	22	18
◆	T-1@3.5	3.5	See exploration logs	57	17	40
□	T-1@5	5	See exploration logs	53	15	38

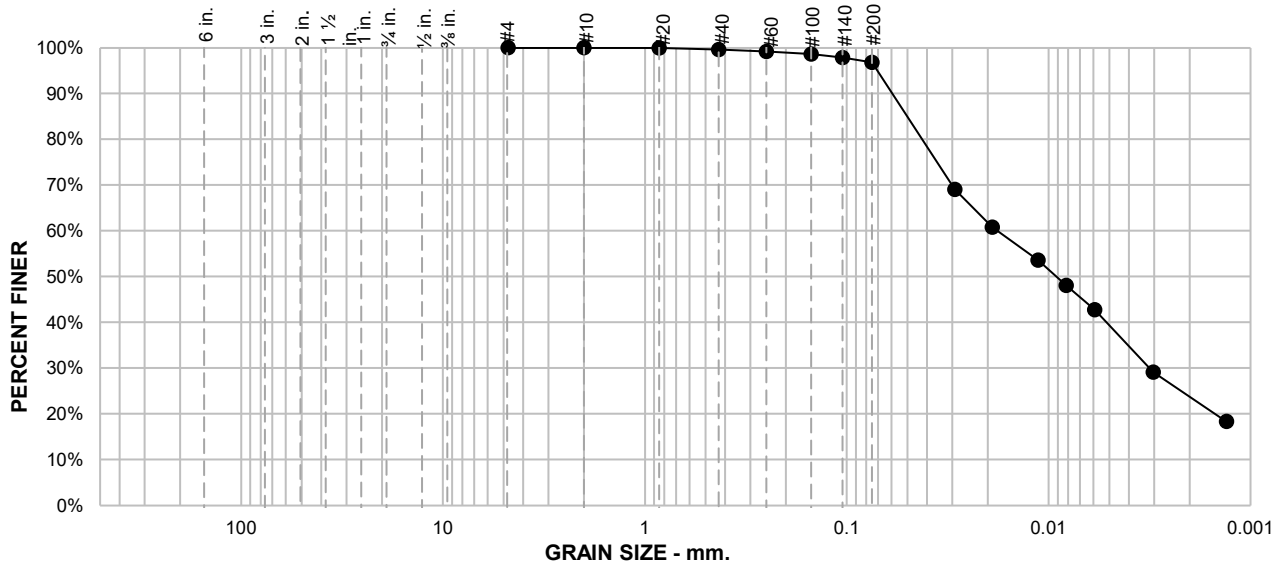
	SAMPLE ID	TEST METHOD	REMARKS
▲	1-B1@13	PI: ASTM D4318, Wet Method	
◆	T-1@3.5	PI: ASTM D4318, Wet Method	
□	T-1@5	PI: ASTM D4318, Wet Method	

ENGEO
Expect Excellence

CLIENT: Sancerra
PROJECT NAME: Vallejo Properties - Glen Cove
PROJECT NO: 20164.000.001 PH001
PROJECT LOCATION: Vallejo, California
REPORT DATE: 9/8/2022
TESTED BY: G. Criste
REVIEWED BY: D. Seibold

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D422



SAMPLE ID: 1-B1@13

DEPTH (ft): 13

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
				0.4	2.8	73.1	23.7

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#20	100.0		
#40	99.6		
#60	99.2		
#100	98.6		
#140	97.8		
#200	96.8		
0.0292 mm.	69.0		
0.0190 mm.	60.8		
0.0113 mm.	53.6		
0.0082 mm.	48.1		
0.0059 mm.	42.8		
0.0030 mm.	29.1		
0.0013 mm.	18.3		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = 22 LL = 40 PI = 18

COEFFICIENTS

D_{90} = 0.0595 mm D_{85} = 0.0502 mm D_{60} = 0.0180 mm
D_{50} = 0.0091 mm D_{30} = 0.0032 mm D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS = CL

REMARKS

Silt/clay division of 0.002mm used
PI: ASTM D4318, Wet Method
USCS: ASTM D2487

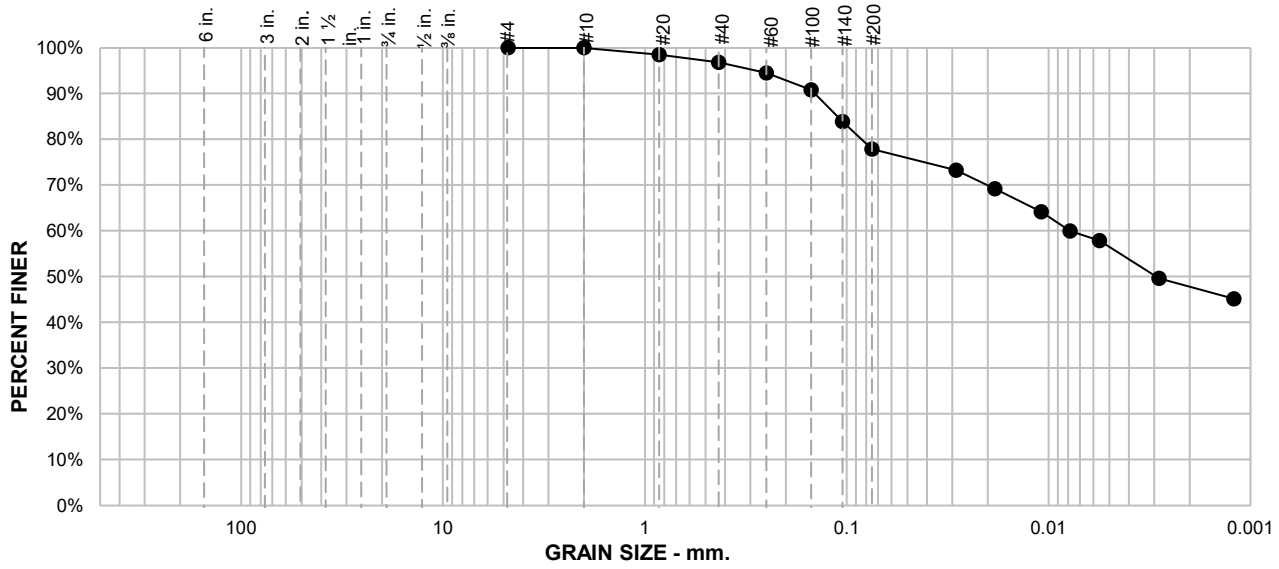
* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Sancerra
PROJECT NAME: Vallejo Properties - Glen Cove
PROJECT NO: 20164.000.001 PH001
PROJECT LOCATION: Vallejo, California
REPORT DATE: 9/8/2022
TESTED BY: G. Criste
REVIEWED BY: D. Seibold

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D422



SAMPLE ID: T-1@5

DEPTH (ft): 5

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
				3.2	19.0	30.0	47.8

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	100.0		
#20	98.5		
#40	96.8		
#60	94.5		
#100	90.8		
#140	83.9		
#200	77.8		
0.0287 mm.	73.2		
0.0184 mm.	69.2		
0.0109 mm.	64.1		
0.0078 mm.	59.9		
0.0056 mm.	57.8		
0.0028 mm.	49.6		
0.0012 mm.	45.1		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = 15 LL = 53 PI = 38

COEFFICIENTS

D_{90} = 0.1439 mm D_{85} = 0.1111 mm D_{60} = 0.0079 mm

D_{50} = 0.0029 mm D_{30} = D_{15} =

D_{10} = C_u = C_c =

CLASSIFICATION

USCS = CH

REMARKS

Silt/clay division of 0.002mm used
PI: ASTM D4318, Wet Method
USCS: ASTM D2487

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Sancerra

PROJECT NAME: Vallejo Properties - Glen Cove

PROJECT NO: 20164.000.001 PH001

PROJECT LOCATION: Vallejo, California

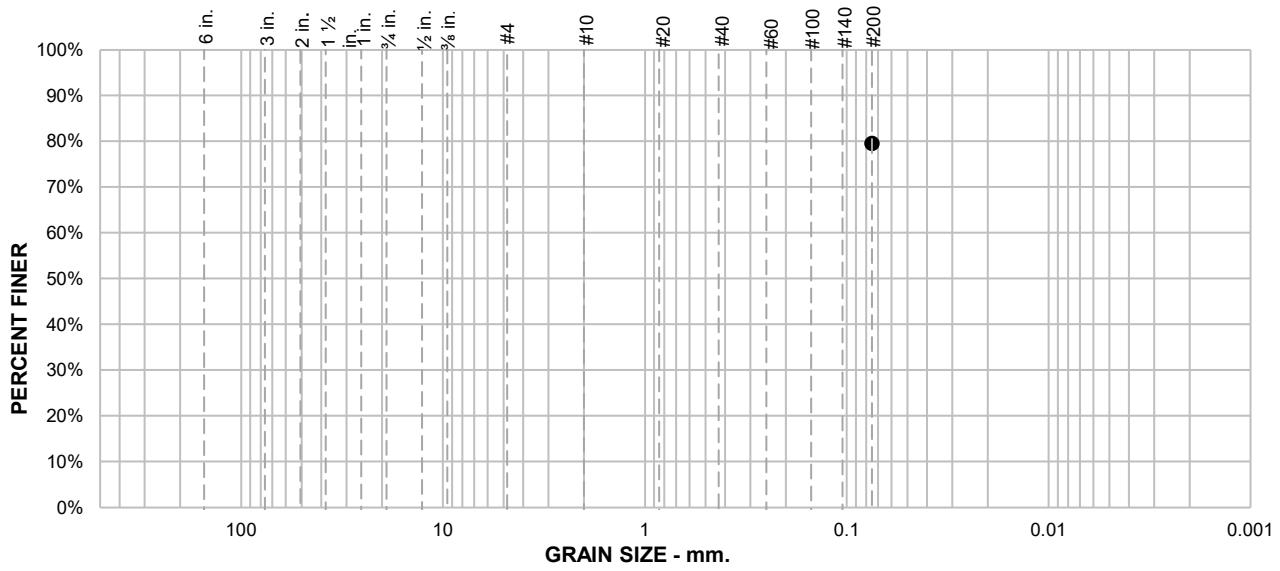
REPORT DATE: 9/8/2022

TESTED BY: G. Criste

REVIEWED BY: D. Seibold

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: T-1@3.5

DEPTH (ft): 3.5

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						20.4	79.6

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	79.6		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = 17 LL = 57 PI = 40

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS = CH

REMARKS

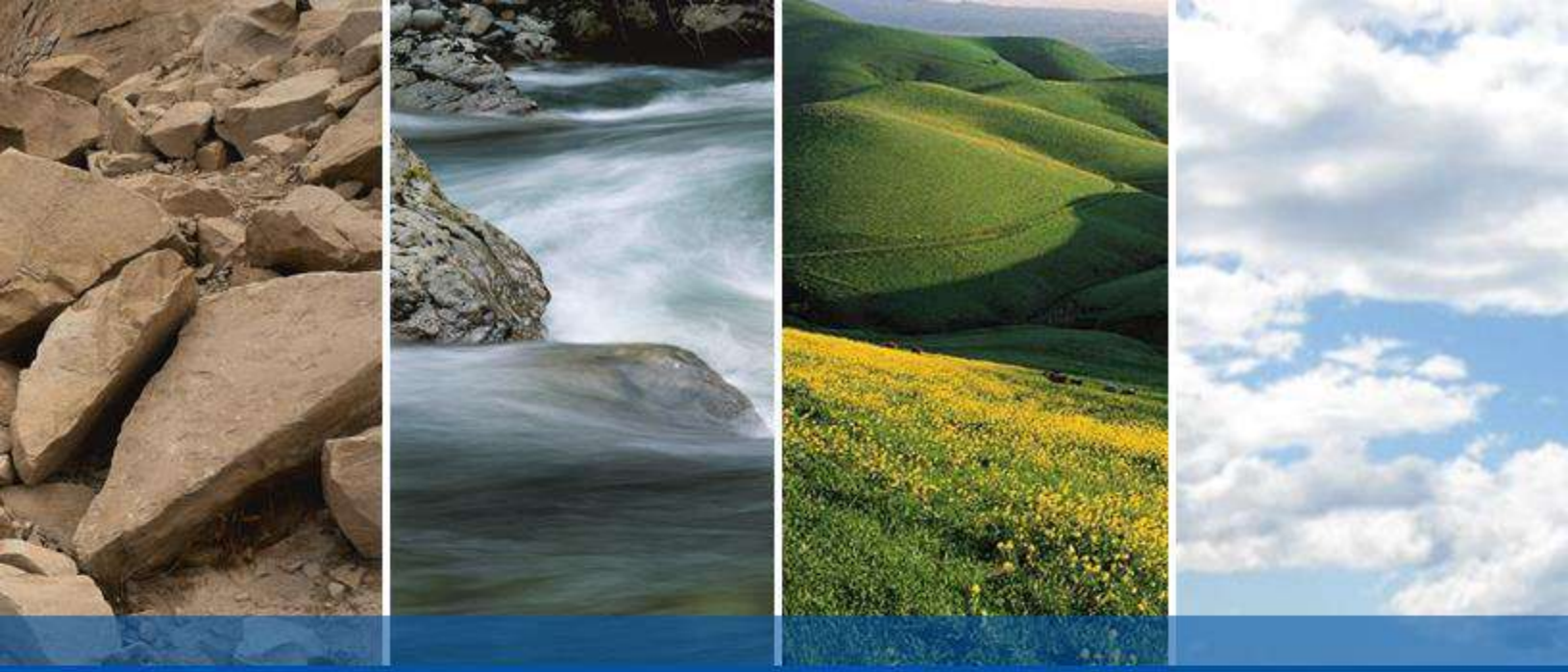
Silt/clay division of 0.002mm used
PI: ASTM D4318, Wet Method
USCS: ASTM D2487

Soak time = 180 min
Dry sample weight = 47.7 g

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Sancerra
PROJECT NAME: Vallejo Properties - Glen Cove
PROJECT NO: 20164.000.001 PH001
PROJECT LOCATION: Vallejo, California
REPORT DATE: 9/8/2022
TESTED BY: G. Criste
REVIEWED BY: D. Seibold



APPENDIX C

LABORATORY TEST DATA BY CERCO

CERCO analytical
1100 Willow Pass Court, Suite A
Concord, CA 94520-1006
925 462 2771 Fax. 925 462 2775
www.cercoanalytical.com

Client: ENGEO, Incorporated
Client's Project No.: 20164.000.001
Client's Project Name: Vallejo
Date Sampled: 24-Aug-22
Date Received: 24-Aug-22
Matrix: Soil
Authorization: Signed Chain of Custody

Date of Report: 2-Sep-2022

Job/Sample No.	Sample I.D.	Redox (mV)	pH	Conductivity (umhos/cm)*	Resistivity (100% Saturation) (ohms-cm)	Sulfide (mg/kg)*	Chloride (mg/kg)*	Sulfate (mg/kg)*
2208043-001	T-1 @ 7'	-	-	-	-	-	110	92
2208043-002	1-B2 @ 10'	-	-	-	-	-	92	N.D.

Method:	ASTM D1498	ASTM D4972	ASTM D1125M	ASTM G57	ASTM D4658M	ASTM D4327	ASTM D4327
Reporting Limit:	-	-	10	-	50	15	15
Date Analyzed:	-	-	-	-	-	1-Sep-2022	1-Sep-2022

Sherri Moore
Chemist

* Results Reported on "As Received" Basis
N.D. - None Detected

Quality Control Summary - All laboratory quality control parameters were found to be within established limits

ENGEO
Expect Excellence

BASELINE ENVIRONMENTAL CONSULTING

MEMORANDUM

Date: March 26, 2025 **Job No.:** 24217-00

To: Florentina Craciun, LSA

From: Cem Atabek, Baseline Environmental Consulting

Subject: **Peer Review of Preliminary Geotechnical Exploration, Vista Cove Planned Development Project, Vallejo, California**

Baseline Environmental Consulting (Baseline) has performed a peer review of the Preliminary Geotechnical Exploration prepared by ENGEO and dated September 12, 2022, for the Vista Cove Planned Development Project (project) located on the property identified by Assessor's Parcel Numbers (APNs) 0079-171-170 and 0079-120-100 (project site). Baseline's peer review was performed to evaluate whether the Preliminary Geotechnical Exploration provides the necessary information to perform CEQA review for the project.

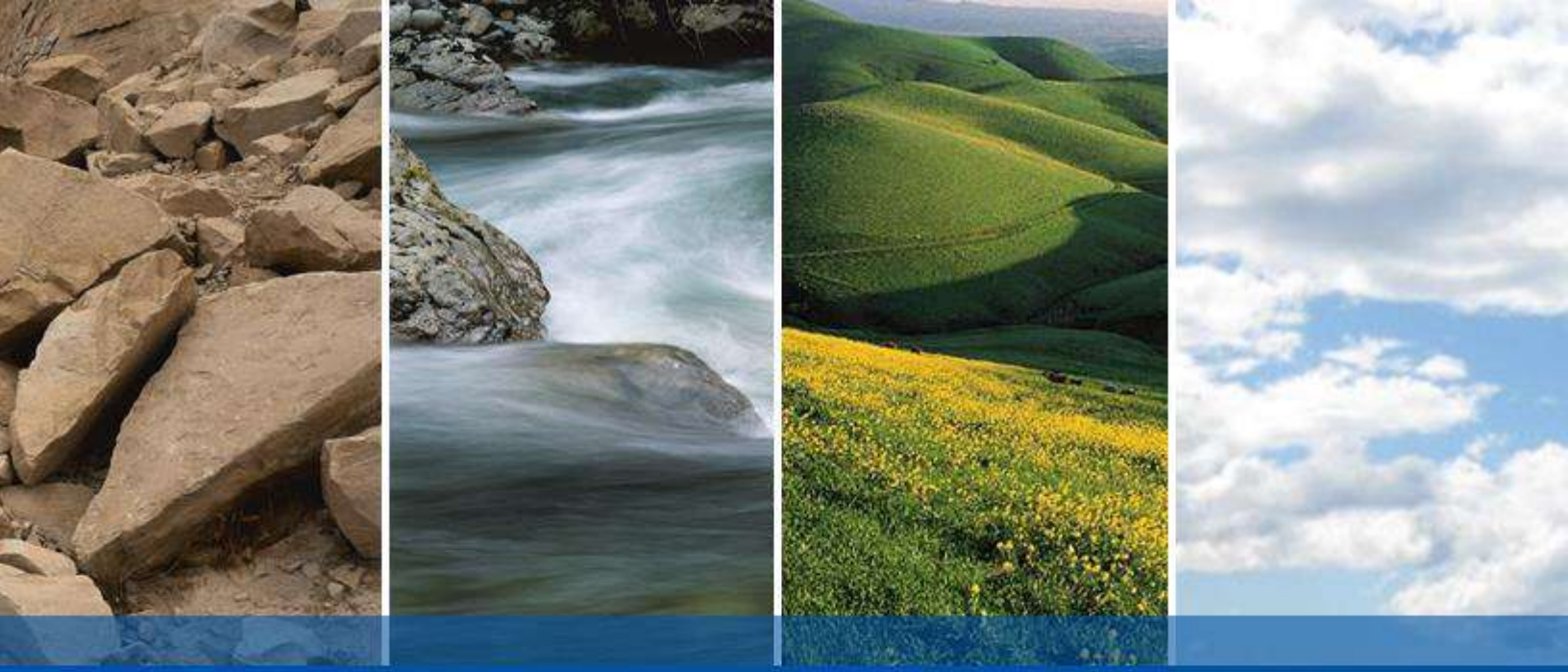
The Preliminary Geotechnical Exploration indicates that the main geotechnical and geologic concerns for the project include: 1) stability of graded slopes, 2) corrective grading for planned building sites, and 3) presence of moderate to highly expansive soil and bedrock. The Preliminary Geotechnical Exploration provides preliminary recommendations to address geotechnical and geologic concerns identified at the project site and indicates that a supplemental design-level geotechnical exploration should be performed to provide site-specific recommendations for site preparation, remedial and design grading, foundation design, site improvements, and drainage. In Baseline's opinion, the Preliminary Geotechnical Exploration provides the information necessary to perform CEQA review for the project.

The Preliminary Geotechnical Exploration indicates that corrective grading is anticipated to include construction of subsurface drainage facilities in engineered slopes, and all retaining walls should include subsurface drainage facilities to prevent the build-up of hydrostatic pressures behind the walls. The Preliminary Geotechnical Exploration also recommends that bioretention areas include a waterproof liner due to expansive soil conditions, or that alternatively if infiltration is desired, which would result in some risk of movement of adjacent improvements, the perimeter of the bioretention areas be lined with a tree root barrier that extends at least 1 foot below the bottom of the bioretention areas/infiltration trenches. Baseline recommends that the discharge of water from subsurface drainage features and the lining of bioretention areas be accounted for in the CEQA review of hydrology and water quality related impacts of the project.

This page intentionally left blank

APPENDIX F

PHASE I ENVIRONMENTAL SITE ASSESSMENT AND PEER REVIEW



VALLEJO PROPERTIES - GLEN COVE
VALLEJO, CALIFORNIA

PHASE I ENVIRONMENTAL SITE ASSESSMENT

DRAFT

SUBMITTED TO
Mr. Adam Smith
Sancerra
2618 San Miguel Drive, Suite 1223
Newport Beach, CA 92660

PREPARED BY
ENGEO Incorporated

April 26, 2022

PROJECT NO.
20164.000.001

Copyright © 2022 by ENGEO Incorporated. This document may not be reproduced in whole or in part by any means whatsoever, nor may it be quoted or excerpted without the express written consent of ENGEO Incorporated.

ENGEO
Expect Excellence

Project No.
20164.000.001

April 26, 2022

Mr. Adam Smith
Sancerra
2618 San Miguel Drive, Suite 1223
Newport Beach, CA 92660

Subject: Vallejo Properties - Glen Cove
Wildflower Avenue
Vallejo, California

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Dear Mr. Smith:

ENGEO is pleased to present our phase I environmental site assessment of the subject property (Property), located in Vallejo, California. The attached report includes a description of the site assessment activities, along with ENGEO's findings, opinions, and conclusions regarding the Property.

ENGEO has the specific qualifications based on education, training, and experience to assess the nature, history, and setting of the Property, and has developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312 and the American Society for Testing and Materials (ASTM) Practice E1527-13. We declare that, to the best of our professional knowledge and belief, the responsible charge for this study meets the definition of Environmental Professional as defined in Section 312.10 of 40 CFR Part 312 and ASTM E1527-13.

We are pleased to be of service to you on this project. If you have any questions concerning the contents of our report, please contact us.

Sincerely,

ENGEO Incorporated

Jenna Keith, EIT

Jeffrey A. Adams, PhD, PE

jk/jaa/dt

DRAFT

TABLE OF CONTENTS

LETTER OF TRANSMITTAL

EXECUTIVE SUMMARY 1

1.0 INTRODUCTION 2

1.1 PURPOSE OF PHASE I ENVIRONMENTAL SITE ASSESSMENT 2
1.2 DETAILED SCOPE OF SERVICES 2
1.3 SITE LOCATION AND DESCRIPTION 2
1.4 CURRENT USE OF PROPERTY AND ADJOINING PROPERTIES 2
1.5 SITE AND VICINITY CHARACTERISTICS 2

2.0 RECORDS REVIEW 3

2.1 PROPERTY RECORDS 3
2.1.1 Title Report/Ownership 3
2.2 HISTORICAL RECORD SOURCES 4
2.2.1 Historical Topographic Maps/Aerial Photographs/Sanborn Maps 4
2.2.2 City Directory 4
2.3 ENVIRONMENTAL RECORD SOURCES 4
2.3.1 Environmental Records 5
2.3.1.1 Subject Property 5
2.3.1.2 Other Properties 5
2.4 REGULATORY AGENCY FILES AND RECORDS 6
2.5 INDOOR AIR QUALITY 7

3.0 SITE RECONNAISSANCE 7

3.1 METHODOLOGY 7
3.2 EXTERIOR OBSERVATIONS 7
3.3 ASBESTOS, LEAD, AND PCB-CONTAINING MATERIALS 8

4.0 INTERVIEWS 8

5.0 FINDINGS AND CONCLUSIONS 9

6.0 LIMITATIONS 9

6.1 SIGNIFICANT ASSUMPTIONS OR DEVIATIONS FROM ASTM STANDARD PRACTICE 9
6.2 OPINIONS AND DATA GAPS 10
6.3 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT 10
6.4 SPECIAL TERMS AND CONDITIONS 11

SELECTED REFERENCES

FIGURES

APPENDIX A – Environmental Data Resources, Inc., Radius Map Report

APPENDIX B – First American Title Company, Preliminary Title Report

APPENDIX C – Environmental Data Resources, Inc., Historical Topographic Map Report

APPENDIX D – Environmental Data Resources, Inc., Aerial Photo Decade Package

DRAFT

TABLE OF CONTENTS (Continued)

APPENDIX E – Environmental Data Resources, Inc., Sanborn Map Report

APPENDIX F – Environmental Data Resources, Inc., City Directory

APPENDIX G – Environmental Site Assessment Questionnaire

APPENDIX H – Qualifications of Environmental Professional

DRAFT

EXECUTIVE SUMMARY

ENGEO conducted a phase I environmental site assessment for the property located at Wildflower Avenue in Vallejo, California (Property). The Property is approximately 29 acres in area and is identified by Assessor's Parcel Numbers (APNs) 0079-171-170, 0079-120-100, and a portion of 0079-220-070.

The Property is presently vegetated open space. Review of historical records indicates that the Property has remained undeveloped land since at least 1937 (the first year of aerial photographic coverage). The eastern portion of the Property was historically used for dry farming (hay cultivation).

This assessment included a review of local, state, tribal, and federal environmental record sources, standard historical sources, aerial photographs, fire insurance maps, and physical setting sources. A reconnaissance of the Property was completed to review site use and current conditions to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials and to conduct written/oral interviews with persons knowledgeable about current and past site use.

The site reconnaissance and records review did not find documentation or physical evidence of soil or groundwater impairments associated with the use or past use of the Property. A review of regulatory databases maintained by county, state, tribal, and federal agencies found no documentation of hazardous materials violations or discharge on the Property and did not identify contaminated facilities within the appropriate American Society for Testing and Materials (ASTM) search distances that would reasonably be expected to impact the Property.

Based on the findings of this assessment, no Recognized Environmental Conditions (RECs), no historical RECs, and no controlled RECs were identified for the Property.

ENGEO has performed a phase I environmental site assessment in general conformance with the scope and limitations of ASTM E1527-13 and the standards and practices of the All Appropriate Inquiry – Final Rule (40 Code of Federal Regulations Part 312).

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC. The following data gaps were identified during this assessment.

- We did not receive a response to our file review request from Solano County Environmental Health prior to the publication of this report.

- We did not receive a completed Key Site Manager-based environmental questionnaire prior to the publication of this report.

These data gaps do not affect the conclusions as to the presence or lack of presence of RECs at the Property.

This assessment has revealed no evidence of RECs in connection with the Property, and the property is suitable for residential development. ENGEO recommends no further environmental studies at this time.

DRAFT

1.0 INTRODUCTION

1.1 PURPOSE OF PHASE I ENVIRONMENTAL SITE ASSESSMENT

This assessment was performed at the request of Sancerra for the purpose of environmental due diligence during property acquisition. The objective of this phase I environmental site assessment is to identify Recognized Environmental Conditions (RECs) associated with the Property. As defined in the ASTM Standard Practice E1527-13, an REC is "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

1.2 DETAILED SCOPE OF SERVICES

The scope of services performed included the following.

- A review of publicly available and practicably reviewable standard local, state, tribal, and federal environmental record sources.
- A review of publicly available and practicably reviewable standard historical sources, aerial photographs, fire insurance maps and physical setting sources.
- A reconnaissance of the Property to review site use and current conditions. The reconnaissance was conducted to check for the storage, use, production or disposal of hazardous or potentially hazardous materials.
- Interviews with owners/occupants and public sector officials.
- Preparation of this report with our findings, opinions, and conclusions.

DRAFT

1.3 SITE LOCATION AND DESCRIPTION

The Property is located at Wildflower Avenue in Vallejo, California (Figures 1 and 2). The approximately 29-acre Property is identified as APNs 0079-171-170, 0079-120-100, and a portion of 0079-220-070 (Figure 3) and is currently vacant, vegetated open space.

1.4 CURRENT USE OF PROPERTY AND ADJOINING PROPERTIES

The Property is vacant, but the vegetation has been plowed to create several dirt paths through the Property. The Property is bordered by the Benicia State Recreation Area to the east, Interstate 780 to the north, and the Glen Cove neighborhood homes to the west and south.

1.5 SITE AND VICINITY CHARACTERISTICS

The Property consists of a northern and southern hill separated by a creek, which both slope downhill toward the east. According to published topographic maps, the elevation of the northern area of the Property ranges from approximately 160 feet above mean sea level (msl) in the west to 100 feet in the east. The elevation of the southern area ranges from approximately 290 feet in the west to approximately 90 feet above msl to the east. Review of the Geologic Map and Map Database of Northeastern San Francisco Bay Region, California – Most of Solano County and

Parts of Napa, Main, Contra Costa, San Joaquin, Sacramento, Yolo, and Sonoma Counties (Graymer et al., 2002) found that the Property is underlain by the Great Valley Complex, consisting of sandstone and shale from the Late Cretaceous period.

Geocheck – Physical Setting Source Summary of the Environmental Data Resources, Inc. (EDR) report (Appendix A) indicated no Federal United States Geological Survey (USGS) and three State wells are located approximately ½ mile west-northwest of the Property. No groundwater level measurements are reported for these wells. We also reviewed the Department of Water Resources On-line Water Data Library for depth to water in the vicinity of the Property. However, the website did not identify any wells within 1 mile of the Property.

We reviewed EnviroStor, a website maintained by the State of California Department of Toxic Substances Control (DTSC), and GeoTracker, a website maintained by the State of California Water Resources Control Board, for nearby facilities with records that include depth-to-groundwater measurements. The following information was obtained regarding local groundwater conditions. The case closure summary report for the Big 4 Rents facility, located approximately 750 feet east-northeast of the Property, indicates that groundwater may be found at a depth of 15 to 25 feet below the ground surface (bgs) with a flow direction toward the southwest, toward the marshland in Benicia State Recreation Area. Based on the local topographic gradient, we expect an easterly groundwater flow direction at the Property, similarly directed toward the marshland.

The site-specific depth to groundwater and direction of groundwater flow was not determined as part of this assessment. Fluctuations in groundwater levels may occur seasonally and over a period of years due to variations in precipitation, temperature, irrigation, and other factors.

We reviewed the Department of Conservation, Geologic Energy Management (CalGEM), formerly the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR), website and map database to determine if any historic oil and/or gas wells were located within the Property. No wells were mapped within 1 mile of the Property.

DRAFT

2.0 RECORDS REVIEW

2.1 PROPERTY RECORDS

2.1.1 Title Report/Ownership

The Title Report lists recorded land title detail, ownership fees, leases, land contracts, easements, liens, deficiencies, and other encumbrances attached to or recorded against a subject property. Laws and regulations pertaining to land trusts vary from state to state and the detail of information presented in a Title Report can vary greatly by jurisdiction. As a result, ENGEO utilizes a Title Report, when provided to us, as a supplement to other historical record sources.

A Preliminary Title Report for the Property, prepared by First American Title Company and dated February 4, 2022, was provided for our review. The Property title is vested in The Timothy F. Wei Trust; The Terrence F. Wei Trust; The Tammy F. Dong Trust; The Tina T. Dong Trust; The Litton L. Chen Trust; The Tiffany L. Chen Trust; The Thomas L. Chen Trust; The Tyler C. Chuang Trust; and The Troy Chuang Trust. No references to environmental liens, deed restrictions, or other potential environmental issues were noted. This report is included in Appendix B.

2.2 HISTORICAL RECORD SOURCES

The purpose of the historical record review is to develop a history of the previous uses or occupancies of the Property and surrounding area in order to identify those uses or occupancies that are likely to have led to RECs on the Property.

2.2.1 Historical Topographic Maps/Aerial Photographs/Sanborn Maps

Historical USGS topographic maps and aerial photographs were reviewed to determine if discernible changes pertaining to the Property had been recorded. EDR provided the following maps and photographs, presented in Appendices C and D. No Sanborn Fire Insurance Maps were identified for the Property; a copy of the Sanborn Map search report is presented in Appendix E.

TABLE 2.2.1-1: Historical Review Summary

HISTORIC MAP/PHOTOGRAPH	YEARS
Topographic Maps	1896, 1898, 1901, 1902, 1940, 1942, 1947, 1950, 1952, 1959, 1968, 1973, 1980, 2012, 2015, 2018
Aerial Photographs	1937, 1939, 1947, 1952, 1958, 1968, 1974, 1982, 1987, 1993, 2006, 2009, 2012, 2016
Sanborn Maps	N/A

In the 1896 topographic map, the Property is vacant, undeveloped land. Benicia Road is depicted north of the Property. Southampton Bay and Glen Cove are depicted south of the Property, and marshes and a creek extending into Southampton Bay are depicted just east of the Property. In the 1937 and 1939 aerial photographs, the southeastern portion of the Property appears to be used for dry farming (hay cultivation). In the 1940 topographic map, two creeks are depicted traveling eastward through the center of the Property. By 1950, only one creek was depicted. Between 1959 and 1968, the alignment of Benicia Road was adjusted and Interstate 680 (now Interstate 780) was constructed just north of the Property. The adjacent Glen Cove neighborhood development was constructed between about 1974 and 1993. No significant changes have appeared at the Property throughout its history.

DRAFT

2.2.2 City Directory

City Directories, published since the 18th century for major towns and cities, list the name of the resident or business associated with each address. A city directory search conducted by EDR is located in Appendix F. The Property is unlisted. Nearby listings show a variety of residential homes and commercial businesses along Benicia Road. No listings were identified which could be expected to pose an environmental concern to the Property.

2.3 ENVIRONMENTAL RECORD SOURCES

EDR performed a search of federal, tribal, state, and local databases regarding the Property and nearby properties. Details regarding the databases searched by EDR are provided in Appendix A. A list of the facilities documented by EDR within the approximate minimum search distance of the Property is provided below.

2.3.1 Environmental Records

2.3.1.1 Subject Property

The Property is not listed on Environmental Record source databases.

2.3.1.2 Other Properties

The following databases include facilities listed within the appropriate ASTM search distances of the Property on Environmental Records sources.

TABLE 2.3.1.2-1: Environmental Database Listings for Nearby Properties

FACILITY	STREET	DATABASES
Shady Lane Sanitary Pump Station	198 Wildflower Ave	CERS, CERS HAZ WASTE
California Highway Patrol #301 Golden Gate Division	1551 Benicia Road	CERS, CERS HAZ WASTE, CERS TANKS, RCRA NONGEN / NLR, UST
Ecolab, Inc.	1500 Benicia Road	RCRA NONGEN / NLR
St. Patrick St. Vincent High School	1500 Benicia Road	RCRA NOGEN / NLR
Big 4 Rents, Inc.	1600 Benicia Road	CA FID UST, CERS, CORTESE, ECHO, FINDS, HAZNET, HIST CORTESE, HIST UST, HWTS, LUST, RCRA-SQG, SWEEPS UST
Crusader Fence Company, Inc.	1600 Benicia Road	CERS, CERS HAZ WASTE, HWTS, RCRA NONGEN / NLR, UST
Siri Construction Company	1855 Benicia Road	HIST UST, UST
Greenmont Sanitary Pump Station	230 Greenmont Drive	CERS, CERS HAZ WASTE
St. Vincent's Cemetery/ All Souls Cemetery	550 Glen Cove Road	CERS, CIWQS, CORTESE, HIST CORTESE, LUST, NPDES, UST
Rollingwood Middle School	Rollingwood Drive/ Benicia Road	ENVIROSTOR, SCH
Shadow Ridge	Glen Cove Road	CERS, ENVIROSTOR, HIST CAL-SITES, RESPONSE
Southampton/Company/Blake Court	Rose Drive/Blake Court	ENVIROSTOR, HIST CAL-SITES, RESPONSE
Weber Property	1100 Block of Warren Avenue	CERS, ENVIROSTOR, RESPONSE

DRAFT

Shady Lane Sanitary Pump Station – 198 Wildflower Avenue

The Shady Lane Pump Station is located at the corner of Shady Lane and Wildflower Avenue, next to the northwestern area of the Property. The station is operated by Vallejo Sanitation & Flood Control District and overseen by Solano County Environmental Health, and stores chemicals. This station is not expected to pose an environmental concern to the Property.

California Highway Patrol Golden Gate Division – 1551 Benicia Road

California Highway Patrol Golden Gate Division, located approximately 200 feet north of the Property, is listed in the CERS, CERS HAZ WASTE, CERS TANKS, RCRA NONGEN / NLR, and UST databases. The facility has received numerous violations from Solano County Environmental

Health pertaining to hazardous waste storage and UST operation. However, these violations are not indicative of large-scale releases of hazardous chemicals to the environment.

Big 4 Rents, Inc./ Crusader Fence Company, Inc. – 1600 Benicia Road

Big 4 Rents is listed in the CA FID UST, CERS, CORTESE, ECHO, FINDS, HAZNET, HIST CORTESE, HIST UST, HWTS, LUST, RCRA-SQG, and SWEEPS UST databases. This facility is listed as a closed cleanup case under GeoTracker case listing T0609500271, as of November 1995. According to the case closure summary, a 4,000-gallon gasoline UST, 2,000-gallon diesel UST, and 1,000-gallon diesel UST were removed from the site in May 1995 following spills. Reportedly, 468 cubic yards of impacted soil were removed and off-hauled for landfill disposal, and groundwater was not impacted. Residual concentrations of total petroleum hydrocarbons in soil ranged from non-detect to 1 part per million (ppm). Benzene, toluene, ethylbenzene, and xylenes (BTEX) concentrations in soil were non-detect. Crusader Fence Company is the current, or more recent, tenant at this property. This facility has received several administrative violations pertaining to hazardous materials storage. Based on this information, this facility is not expected to pose an environmental concern to the Property.

Based on the distances to the identified database sites, regional topographic gradient, and the EDR findings, it is unlikely that the above-stated database sites pose an environmental risk to the Property.

One property, Benicia State Recreation Area, was listed on the “Orphan Summary” list. This site is listed in the SWF/LF database. This listing does not represent a concern to the Property.

2.4 REGULATORY AGENCY FILES AND RECORDS

The following agencies were contacted pertaining to possible past development and/or activity at the Property.

TABLE 2.4-1: Regulatory Agency Records

NAME OF AGENCY	RECORDS REVIEWED
City of Vallejo Fire Department	We contacted the City of Vallejo Fire Department regarding hazardous materials and underground storage tanks. The City does not maintain these records.
City of Vallejo Building Department	We requested historical building permit records from the City of Vallejo Building Department. We did not receive a response to our request by the time of publication of this report.
Solano County Department of Environmental Health	We contacted Solano County Environmental Health regarding hazardous materials and underground storage tanks. We did not receive a response to our file review request by the time of publication of this report.
Solano County Assessor’s Office	We reviewed online parcel maps provided by Solano County Assessor’s Office. The parcel boundaries in the EDR radius map report are consistent with those provided by Solano County Assessor’s office.
California State Water Resources Control Board	We reviewed GeoTracker, the website maintained by the California State Water Resources Control Board, for records pertaining to the Property. The Property is not listed on GeoTracker.

DRAFT

NAME OF AGENCY	RECORDS REVIEWED
Department of Toxic Substances Control	We reviewed EnviroStor, the website maintained by the California Department of Toxic Substances Control, for records pertaining to the Property. The Property is not listed on EnviroStor.

2.5 INDOOR AIR QUALITY

An evaluation of indoor air quality, mold, or radon was not included as part of the contracted scope of services. The California Department of Public Health has conducted studies of radon risks throughout the state, sorted by zip code. Results of the studies indicate that 13 tests were conducted within the Property zip code, with two tests exceeding the current EPA action level of 4 picocuries per liter (pCi/L)[1].

In accordance with ASTM E2600-15 (Tier 1) (*Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*); there is one potential petroleum hydrocarbon source for vapor intrusion within 1/10 mile of the Property (California Highway Patrol Golden Gate Division) and no volatile organic compound (VOCs) sources within 1/3 mile of the Property. As discussed, the California Highway Patrol facility is not expected to pose a concern to the Property.

3.0 SITE RECONNAISSANCE

3.1 METHODOLOGY

ENGEO conducted a reconnaissance of the Property on April 13, 2022. The reconnaissance was performed by Jenna Keith, a Staff Engineer of ENGEO. The Property was viewed for hazardous materials storage, superficial staining or discoloration, debris, stressed vegetation, or other conditions that may be indicative of potential sources of soil or groundwater contamination. The Property was also checked for evidence of fill/ventilation pipes, ground subsidence, or other evidence of existing or preexisting underground storage tanks. Photographs taken during the site reconnaissance are presented in Figure 4.

The Property is vacant, vegetated land. Several unpaved paths have been constructed through the natural vegetation in the northern portion of the Property. The southern/southwestern portion of the Property was inaccessible due to natural marshy areas and barbed wire fencing.

3.2 EXTERIOR OBSERVATIONS

The following table summarizes our observations during the reconnaissance.

TABLE 3.2-1: Exterior Site Observations

FEATURE TYPE	OBSERVATIONS
Structures	No structures were observed during the site reconnaissance.

[1] California Department of Public Health – Radon Program– (https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/EMB/Radon/Radon%20Test%20Results.pdf).

DRAFT

FEATURE TYPE	OBSERVATIONS
Hazardous Substances and Petroleum Products in Connection with Identified Uses	No hazardous substances or petroleum products were observed within the Property during the site reconnaissance.
Storage Tanks (underground and above-ground)	No above-ground storage tanks or evidence of existing underground storage tanks was observed during the site reconnaissance.
Odors	No odors indicative of hazardous materials or petroleum material impacts were noted at the time of the reconnaissance.
Pools of Potentially Hazardous Liquid	No pools of potentially hazardous liquid were observed within the Property at the time of our reconnaissance.
Drums	No drums were observed on the Property at the time of the reconnaissance.
Polychlorinated Biphenyls (PCBs) Containing Equipment	No potential PCB-containing equipment, including transformers, were observed within the Property during our site reconnaissance.
Hazardous Substances and Petroleum Product Containers	No hazardous substance or petroleum product containers were observed on the Property at the time of our reconnaissance.
Pits, Ponds, and Lagoons	No pits, ponds, or lagoons were observed within the Property at the time of our reconnaissance. There are several natural marshy areas which collect water from concrete drainage channels.
Stained Soil/Pavement	No stained soil or pavement was observed within the Property at the time of our reconnaissance.
Stressed Vegetation	No signs of stressed vegetation were observed on the Property at the time of our reconnaissance.
Solid Waste/Debris	No disposal of solid waste was observed at the Property.
Stockpiles/Fill Material	No stockpiles or fill material was observed on the Property during the reconnaissance.
Wastewater	No wastewater conveyance systems were observed at the Property during the reconnaissance. The Shady Lane Pump Station is located at the corner of Shady Lane and Wildflower Avenue, next to the northwestern area of the Property. The station is operated by Vallejo Sanitation & Flood Control District and overseen by Solano County Environmental Health.
Wells	No wells were found within the Property during our site reconnaissance.
Septic Systems	No septic systems were found within the Property during our site reconnaissance.

DRAFT

3.3 ASBESTOS, LEAD, AND PCB-CONTAINING MATERIALS

An asbestos, lead, and PCB-containing building material survey was not conducted as part of this assessment. No structures are currently located on the Property.

4.0 INTERVIEWS

Mr. Adam Smith completed a Client-based environmental site questionnaire pertaining to applicable environmental information regarding the Property. In the questionnaire, Mr. Smith noted that the Property is unimproved, undeveloped land, and did not identify potentially environmentally related issues with the Property. A summary is provided below.

Mr. Smith is unaware of commonly known, reasonably ascertainable, or specialized knowledge indicative of releases or threatened releases that is material to the potential presence of RECs. Mr. Smith has indicated that the purchase price of the Property is reflective of fair market value of the Property. The questionnaire is presented in its entirety in Appendix G.

We did not receive a completed Key Site Manager-based environmental questionnaire prior to the publication of this report.

5.0 FINDINGS AND CONCLUSIONS

This assessment included a review of local, state, tribal, and federal environmental record sources, standard historical sources, aerial photographs, fire insurance maps and physical setting sources. A reconnaissance of the Property was completed to review site use and current conditions to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials and to conduct written/oral interviews with persons knowledgeable about current and past site use.

The site reconnaissance and records review did not find documentation or physical evidence of soil or groundwater impairments associated with the use or past use of the Property. A review of regulatory databases maintained by county, state, tribal, and federal agencies found no documentation of hazardous materials violations or discharge on the Property and did not identify contaminated facilities within the appropriate American Society for Testing and Materials (ASTM) search distances that would reasonably be expected to impact the Property.

Based on the findings of this assessment, no RECs, no historical RECs, and no controlled RECs were identified for the Property.

ENGEO has performed a phase I environmental site assessment in general conformance with the scope and limitations of ASTM E1527-13 and the standards and practices of the All Appropriate Inquiry – Final Rule (40 Code of Federal Regulations Part 312).

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC.

This assessment has revealed no evidence of RECs in connection with the Property, and the Property is suitable for residential development. ENGEO recommends no further environmental studies at this time.

6.0 LIMITATIONS

6.1 SIGNIFICANT ASSUMPTIONS OR DEVIATIONS FROM ASTM STANDARD PRACTICE

There were no significant assumptions or deviations from the ASTM Standard Practice during preparation of this report.

DRAFT

6.2 OPINIONS AND DATA GAPS

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC. The following data gaps were identified during this assessment.

- We did not receive a response to our file review request from Solano County Environmental Health or the City of Vallejo Building Department prior to the publication of this report.

- We did not receive a completed Key Site Manager-based environmental questionnaire prior to the publication of this report.

These data gaps do not affect the conclusions as to the presence or lack of presence of RECs at the Property.

6.3 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

The professional staff at ENGEO strives to perform its services in a proper and professional manner with reasonable care and competence but is not infallible. The recommendations and conclusions presented in this report were based on the findings of our study, which were developed solely from the contracted services. The findings of the report are based in part on contracted database research, out-of-house reports, and personal communications. The opinions formed by ENGEO are based on the assumed accuracy of the relied upon data in conjunction with our relevant professional experience related to such data interpretation. ENGEO assumes no liability for the validity of the materials relied upon in the preparation of this report.

DRAFT

This document must not be subject to unauthorized reuse; that is, reuse without written authorization of ENGEO. Such authorization is essential because it requires ENGEO to evaluate the document's applicability given new circumstances, not the least of which is passage of time. The findings from a phase I environmental site assessment are valid for one year after completion of the report. Updates of portions of the assessment may be necessary after a period of 180 days after completion.

This phase I environmental site assessment is not intended to represent a complete soil, soil gas, or groundwater characterization, nor define the depth or extent of soil, soil gas, or groundwater contamination. It is intended to provide an evaluation of potential environmental concerns associated with the use of the Property. A more extensive assessment that would include a subsurface exploration with laboratory testing of soil, soil gas, and groundwater samples could provide more definitive information concerning site-specific conditions. If additional assessment activities are considered for the Property and if other entities are retained to provide such services, ENGEO cannot be held responsible for any and all claims arising from or resulting from the performance of such services by other persons or entities. ENGEO can also not be held responsible from any and all claims arising or resulting from clarifications, adjustments, modifications, discrepancies or other changes necessary to reflect changed field or other conditions.

6.4 SPECIAL TERMS AND CONDITIONS

ENGEO has prepared this report for the exclusive use of our client, Sancerra. It is recognized and agreed that ENGEO has assumed responsibility only for undertaking the study for the Client. The responsibility for disclosures or reports to a third party and for remedial or mitigative action shall be solely that of the Client.

Laboratory testing of soil, soil gas, or groundwater samples was not within the scope of the contracted services. The assessment did not include an asbestos survey, an evaluation of lead-based paint, an inspection of light ballasts for polychlorinated biphenyls (PCBs), or a mold survey. A radon evaluation was not performed.

This report is based upon field and other conditions discovered at the time of preparation of ENGEO's assessment. Visual observations referenced in this report are intended only to represent conditions at the time of the reconnaissance. ENGEO would not be aware of site contamination, such as dumping and/or accidental spillage, that occurred subsequent to the reconnaissance conducted by ENGEO personnel.

DRAFT

SELECTED REFERENCES

California Department of Water Resources (http://www.water.ca.gov/waterdatalibrary/)

California Department of Public Health – Radon Program–
(https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/EMB/Radon/Radon%20Test%20Results.pdf).

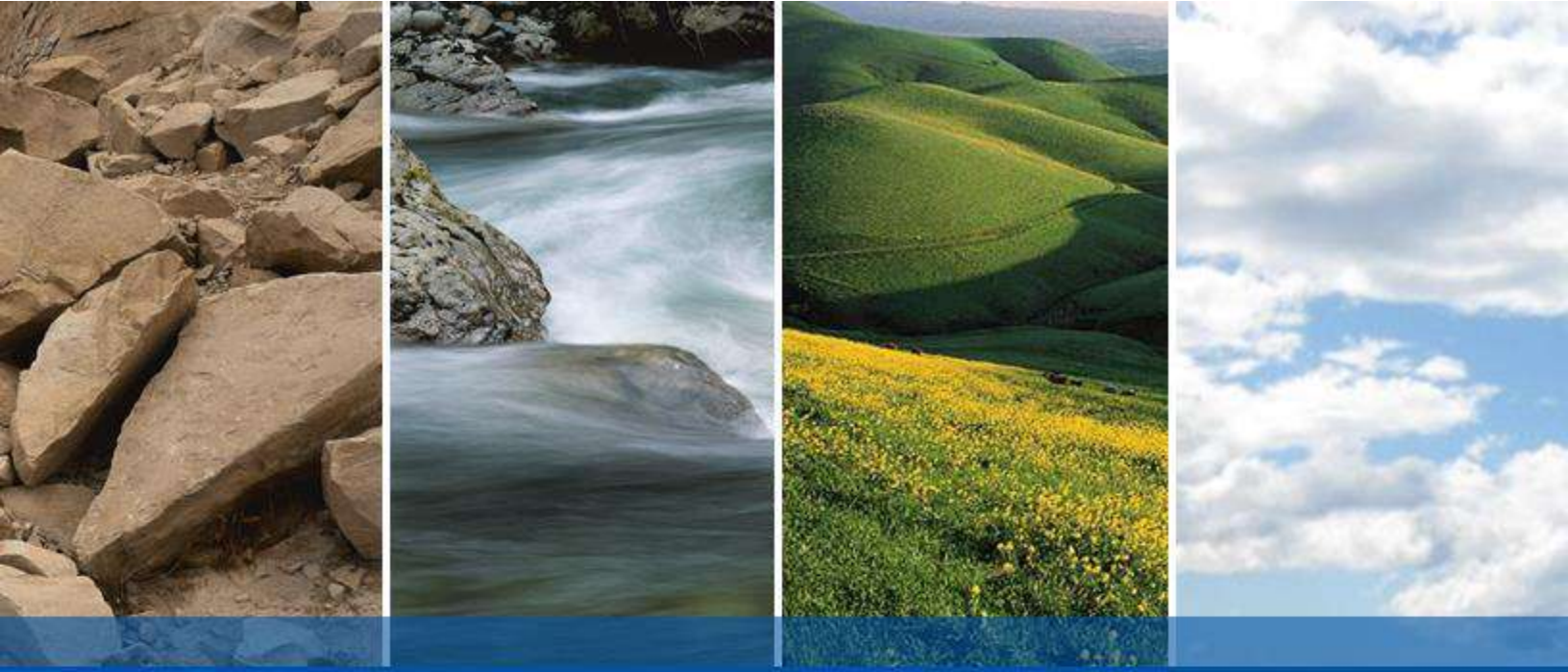
California Geologic Energy Management Division (CalGEM)
(https://www.conservation.ca.gov/calgem)

CalGEM Well Finder
(https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.94276/37.12009/6)

Google Maps (http://maps.google.com)

Graymer, R.W., Jones, D.L., and Brabb, E.E., Geologic map and map database of northeastern San Francisco Bay region, California; Most of Solano County and parts of Napa, Marin, Contra Costa, San Joaquin, Sacramento, Yolo, and Sonoma Counties. 2002.

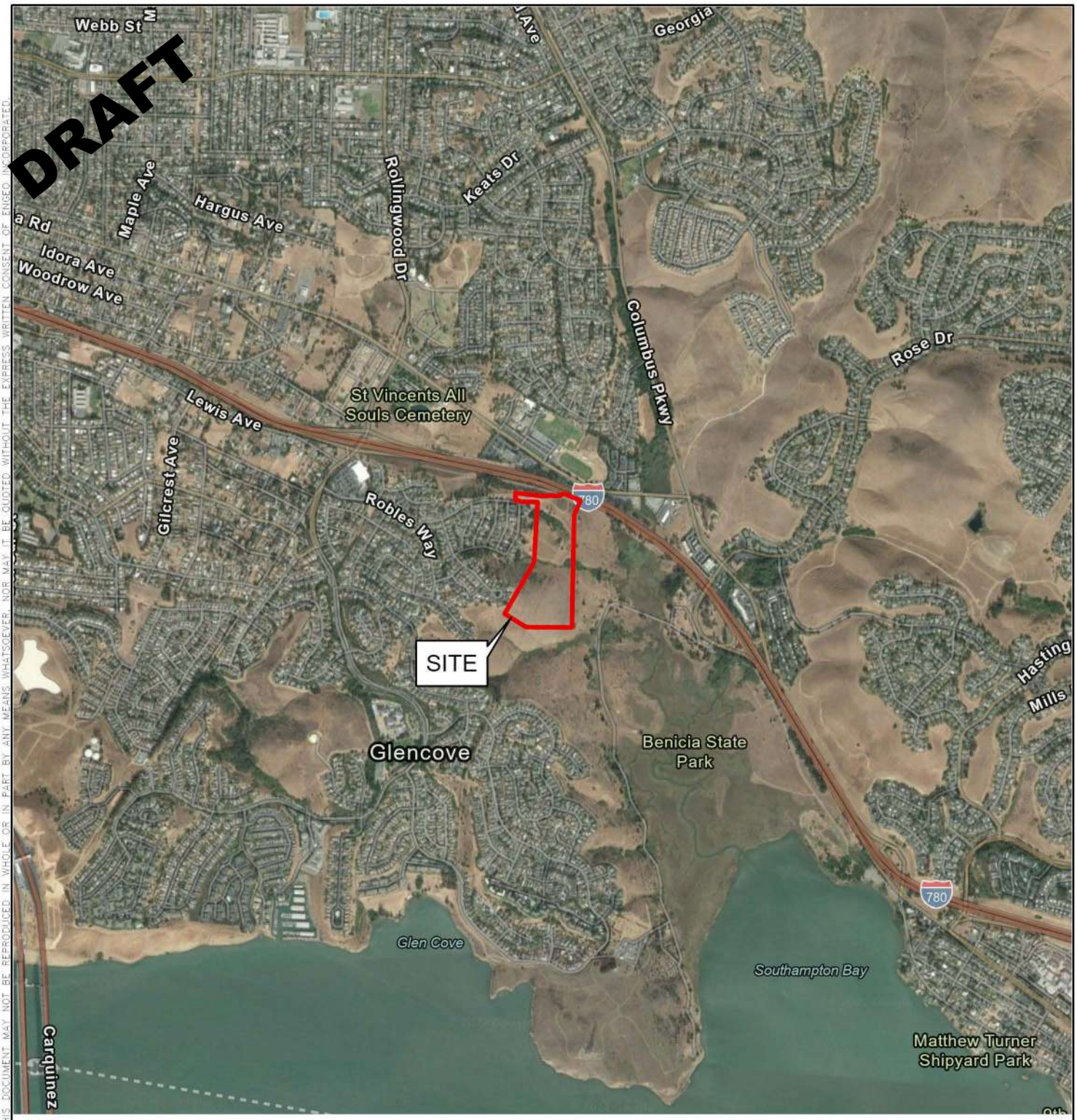
DRAFT



DRAFT

FIGURES

FIGURE 1: Vicinity Map
FIGURE 2: Site Plan
FIGURE 3: Assessor's Parcel Map
FIGURE 4: Site Photographs



BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 10/12/2020

ENGEO Expect Excellence

VICINITY MAP

VALLEJO PROPERTIES - GLEN COVE

VALLEJO, CALIFORNIA

PROJECT NO. :	20164.000.001
SCALE:	AS SHOWN
DRAWN BY: NLK	CHECKED BY: JAA

FIGURE NO. 1

COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20164\20164000001\20164-ESA.APRX
LAYOUT: VICINITY USER: NLAMOTTEKERR

ORIGINAL FIGURE PRINTED IN COLOR

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

PROJECT SITE

N

0 200 400

FEET

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 10/12/2020

ENGEO Expect Excellence

SITE PLAN

VALLEJO PROPERTIES - GLEN COVE

VALLEJO, CALIFORNIA

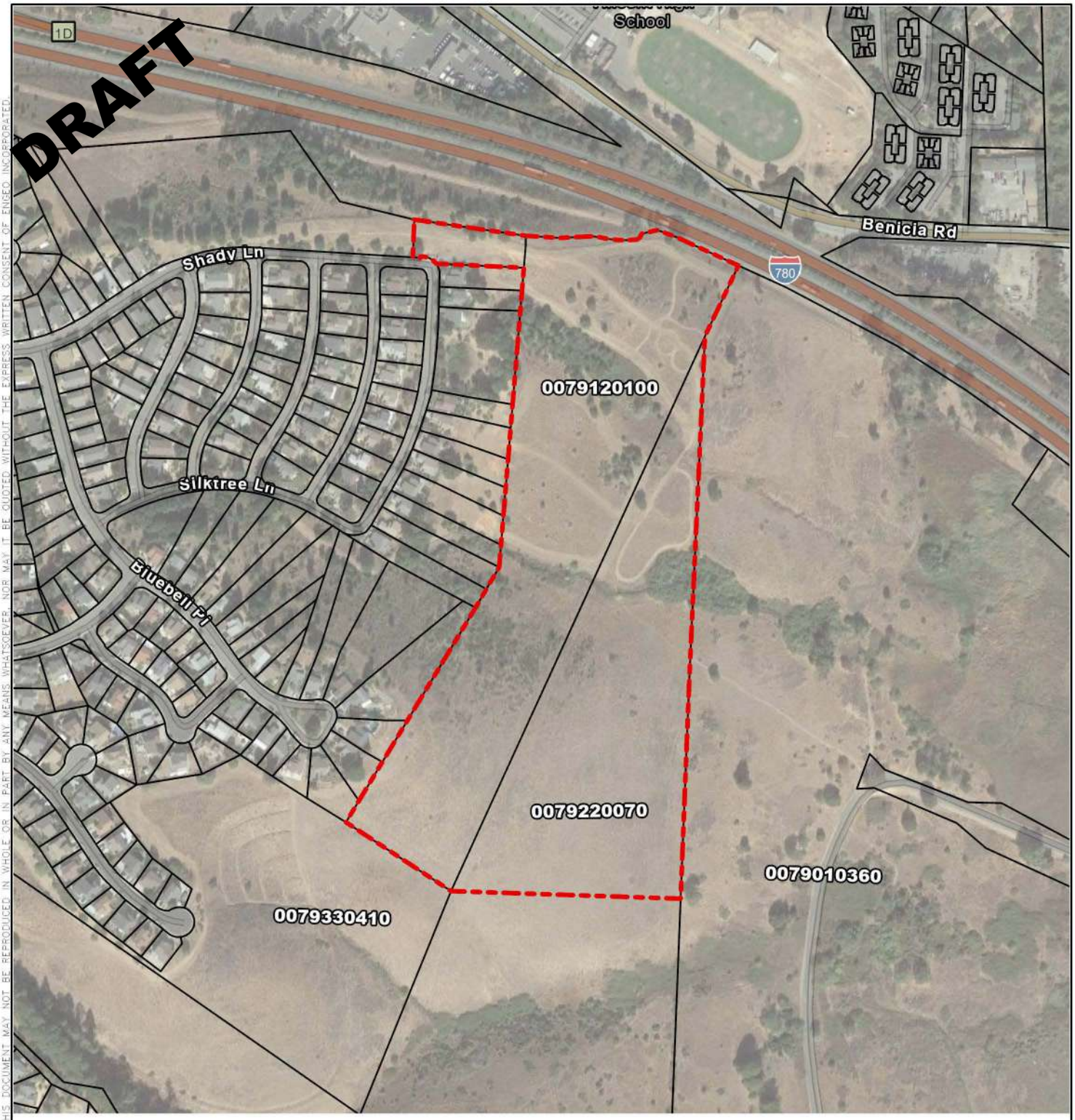
PROJECT NO. :	20164.000.001
SCALE:	AS SHOWN
DRAWN BY: NLK	CHECKED BY: JAA

FIGURE NO. 2

COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20164\20164000001\20164-ESA.APRX
LAYOUT: SITE PLAN USER: NLAMOTTEKERR

ORIGINAL FIGURE PRINTED IN COLOR



N

0 200 400

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

PROJECT SITE

PARCEL BOUNDARY

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 10/12/2020

ENGEO Expect Excellence

ASSESSOR'S PARCEL MAP

VALLEJO PROPERTIES - GLEN COVE

VALLEJO, CALIFORNIA

PROJECT NO. :	20164.000.001
SCALE:	AS SHOWN
DRAWN BY: NLK	CHECKED BY: JAA

FIGURE NO. 3

COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20164\20164000001\20164-ESA.APRX
LAYOUT: SITE PLAN USER: NLAMOTTEKERR

ORIGINAL FIGURE PRINTED IN COLOR

DRAFT

VIEW OF NEARBY HILLS FROM SITE FACING EAST

VIEW OF SITE FACING SOUTH TOWARD SAN FRANCISCO BAY

VIEW OF PLANNED OPEN SPACE AREA IN SOUTHERN PORTION OF SITE

HILLSIDE IN WESTERN PART OF SITE, FACING SOUTHWEST

PLOWED DIRT ROAD LEADING TO BACKYARDS OF HOUSES ON WILDFLOWER AVENUE

PLANNED OPEN SPACE PORTION OF SITE FACING WEST; INACCESSIBLE DUE TO MARSHY AREA

COPYRIGHT @2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

ENGEO Expect Excellence

SITE PHOTOGRAPHS
VALLEJO PROPERTIES - GLEN COVE
VALLEJO, CALIFORNIA

PROJECT NUMBER: 20164.000.001		FIGURE NO. 4A
SCALE: NO SCALE		
DRAWN BY: NLK	CHECKED BY: JAA	

ORIGINAL FIGURE PRINTED IN COLOR

DRAFT

CONCRETE DRAINAGE CANALS THAT CHANNEL WATER TOWARD MARSHY AREA

VIEW OF SITE FACING SOUTH

VIEW OF SITE FACING NORTHEAST; A MARSHY VEGETATED AREA SEPARATES TWO HILLS

NORTHWESTERN CORRIDOR OF SITE

WASTEWATER MAINTENANCE AREA NEAR ENTRANCE TO SITE AT WILDFLOWER AVENUE AND SHADY LANE

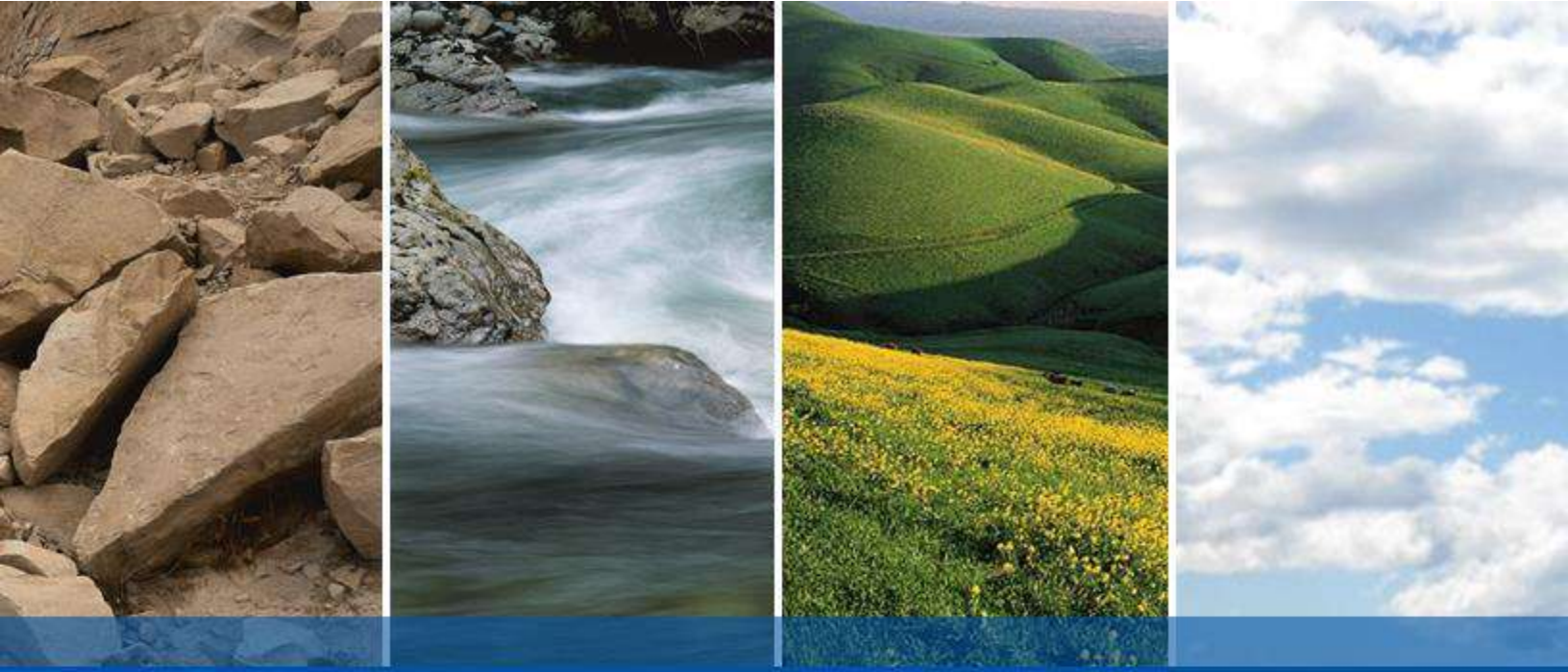
COPYRIGHT @2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

ENGEO Expect Excellence

SITE PHOTOGRAPHS
VALLEJO PROPERTIES - GLEN COVE
VALLEJO, CALIFORNIA

PROJECT NUMBER: 20164.000.001		FIGURE NO. 4B
SCALE: NO SCALE		
DRAWN BY: NLK	CHECKED BY: JAA	

ORIGINAL FIGURE PRINTED IN COLOR



DRAFT

APPENDIX A

ENVIRONMENTAL DATA RESOURCES, INC.

Radius Map Report

Vallejo Properties - Glen Cove
Not Reported
Vallejo, CA 94591

Inquiry Number: 06938050.2r
April 13, 2022

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-LBC-TYS

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	9
Orphan Summary	90
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-10
Physical Setting Source Map Findings	A-12
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2020 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

NOT REPORTED
VALLEJO, CA 94591

COORDINATES

Latitude (North):	38.0815680 - 38ˆ 4' 53.64''
Longitude (West):	122.2010370 - 122ˆ 12' 3.73''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	570071.4
UTM Y (Meters):	4214960.5
Elevation:	117 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	12008089 BENICIA, CA
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
NOT REPORTED
VALLEJO, CA 94591

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	SHADY LANE SANITARY	198 WILDFLOWER AVE	CERS HAZ WASTE, CERS	Higher	30, 0.006, NNW
A2	CALIFORNIA HIGHWAY P	1551 BENICIA RD	RCRA NonGen / NLR	Lower	175, 0.033, NE
A3	CALIFORNIA HIGHWAY P	1551 BENICIA RD	UST	Lower	175, 0.033, NE
A4	CA HIGHWAY PATROL GO	1551 BENICIA ROAD	UST	Lower	175, 0.033, NE
A5	CALIF. DEPT. OF HIGH	1551 BENICIA RD	UST	Lower	175, 0.033, NE
A6	CA HIGHWAY PATROL GO	1551 BENICIA ROAD	CERS HAZ WASTE, CERS TANKS, CERS	Lower	175, 0.033, NE
B7	ECOLAB INC.	1500 BENICIA ROAD	RCRA NonGen / NLR	Lower	367, 0.070, North
B8	ST PATRICK ST VINCEN	1500 BENICIA RD	RCRA NonGen / NLR	Lower	367, 0.070, North
C9	BIG 4 RENTS INC	1600 BENICIA	LUST, HIST UST, HIST CORTESE, CERS	Lower	756, 0.143, NE
C10	CRUSADER FENCE CO IN	1600 BENICIA RD	RCRA NonGen / NLR	Lower	756, 0.143, NE
C11	BIG 4 RENTS, INC.	1600 BENICIA RD	SWEEPS UST, HIST UST, CA FID UST	Lower	756, 0.143, NE
C12	CRUSADER FENCE CO. I	1600 BENICIA RD	UST	Lower	756, 0.143, NE
C13	CRUSADER FENCE CO IN	1600 BENICIA RD	CERS HAZ WASTE, CERS, HWTS	Lower	756, 0.143, NE
C14	BIG 4 RENTS INC	1600 BENICIA RD	LUST, Cortese	Lower	756, 0.143, NE
C15	BIG 4 RENTS VALLEJO	1600 BENICIA RD	RCRA-SQG, FINDS, ECHO, HAZNET, HWTS	Lower	756, 0.143, NE
C16	SIRI CONSTRUCTION CO	1855 BENICIA ROAD	HIST UST	Lower	992, 0.188, ENE
17	SIRI CONSTRUCTION	1855 BENICIA RD	UST	Lower	1233, 0.234, ENE
18	GREENMONT SANITARY P	230 GREENMONT DR	CERS HAZ WASTE, CERS	Lower	1268, 0.240, NNE
D19	ST VINCENT'S CEMETER	550 GLEN COVE RD	LUST, UST	Higher	2405, 0.455, NW
D20	ALL SOULS CEMETERY	550 GLEN COVE RD	LUST, Cortese, HIST CORTESE, NPDES, CIWQS, CERS	Higher	2405, 0.455, NW
21	ROLLINGWOOD MIDDLE S	ROLLINGWOOD DRIVE/BE	ENVIROSTOR, SCH	Higher	2539, 0.481, NW
22	SHADOW RIDGE	GLEN COVE ROAD	RESPONSE, ENVIROSTOR, HIST Cal-Sites, CERS	Higher	2937, 0.556, West
23	SOUTHAMPTON/COMPANY/	ROSE DRIVE/BLAKE COU	RESPONSE, ENVIROSTOR, HIST Cal-Sites	Higher	4194, 0.794, ENE
24	WEBER PROPERTY	1100 BLOCK OF WARREN	RESPONSE, ENVIROSTOR, CERS	Higher	4267, 0.808, WNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List

US INST CONTROLS Institutional Controls Sites List

Federal ERNS list

ERNS Emergency Response Notification System

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF Solid Waste Information System

Lists of state and tribal leaking storage tanks

INDIAN LUST Leaking Underground Storage Tanks on Indian Land
CPS-SLIC Statewide SLIC Cases

Lists of state and tribal registered storage tanks

FEMA UST Underground Storage Tank Listing
AST Aboveground Petroleum Storage Tank Facilities
INDIAN UST Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

INDIAN VCP Voluntary Cleanup Priority Listing
VCP Voluntary Cleanup Program Properties

Lists of state and tribal brownfield sites

BROWNFIELDS Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT Waste Management Unit Database
SWRCY Recycler Database
HAULERS Registered Waste Tire Haulers Listing
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
ODI Open Dump Inventory
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register
SCH School Property Evaluation Program
CDL Clandestine Drug Labs
Toxic Pits Toxic Pits Cleanup Act Sites
US CDL National Clandestine Laboratory Register
AQUEOUS FOAM Former Fire Training Facility Assessments Listing

PFAS ..... PFAS Contamination Site Location Listing

Local Land Records

LIENS ..... Environmental Liens Listing
LIENS 2 ..... CERCLA Lien Information
DEED ..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
CHMIRS ..... California Hazardous Material Incident Report System
LDS ..... Land Disposal Sites Listing
MCS ..... Military Cleanup Sites Listing
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ..... Formerly Used Defense Sites
DOD ..... Department of Defense Sites
SCRD DRYCLEANERS ..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ..... Financial Assurance Information
EPA WATCH LIST ..... EPA WATCH LIST
2020 COR ACTION ..... 2020 Corrective Action Program List
TSCA ..... Toxic Substances Control Act
TRIS ..... Toxic Chemical Release Inventory System
SSTS ..... Section 7 Tracking Systems
ROD ..... Records Of Decision
RMP ..... Risk Management Plans
RAATS ..... RCRA Administrative Action Tracking System
PRP ..... Potentially Responsible Parties
PADS ..... PCB Activity Database System
ICIS ..... Integrated Compliance Information System
FTTS ..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ..... Material Licensing Tracking System
COAL ASH DOE ..... Steam-Electric Plant Operation Data
COAL ASH EPA ..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ..... PCB Transformer Registration Database
RADINFO ..... Radiation Information Database
HIST FTTS ..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ..... Incident and Accident Data
CONSENT ..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV ..... Indian Reservations
FUSRAP ..... Formerly Utilized Sites Remedial Action Program
UMTRA ..... Uranium Mill Tailings Sites
LEAD SMELTERS ..... Lead Smelter Sites
US AIRS ..... Aerometric Information Retrieval System Facility Subsystem
US MINES ..... Mines Master Index File
ABANDONED MINES ..... Abandoned Mines
FINDS ..... Facility Index System/Facility Registry System
DOCKET HWC ..... Hazardous Waste Compliance Docket Listing
UXO ..... Unexploded Ordnance Sites
ECHO ..... Enforcement & Compliance History Information
FUELS PROGRAM ..... EPA Fuels Program Registered Listing

CA BOND EXP. PLAN - Bond Expenditure Plan
CUPA Listings - CUPA Resources List
DRYCLEANERS - Cleaner Facilities
EMI - Emissions Inventory Data
ENF - Enforcement Action Listing
Financial Assurance - Financial Assurance Information Listing
HAZNET - Facility and Manifest Data
ICE - ICE
HWP - EnviroStor Permitted Facilities Listing
HWT - Registered Hazardous Waste Transporter Database
MINES - Mines Site Location Listing
MWMP - Medical Waste Management Program Listing
NPDES - NPDES Permits Listing
PEST LIC - Pesticide Regulation Licenses Listing
PROC - Certified Processors Database
Notify 65 - Proposition 65 Records
UIC - UIC Listing
UIC GEO - UIC GEO (GEOTRACKER)
WASTEWATER PITS - Oil Wastewater Pits Listing
WDS - Waste Discharge System
WIP - Well Investigation Program Case List
MILITARY PRIV SITES - MILITARY PRIV SITES (GEOTRACKER)
PROJECT - PROJECT (GEOTRACKER)
WDR - Waste Discharge Requirements Listing
CIWQS - California Integrated Water Quality System
CERS - CERS
NON-CASE INFO - NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS - OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS - PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT - SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ - Well Stimulation Project (GEOTRACKER)
HWTS - Hazardous Waste Tracking System
MINES MRDS - Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP - EDR Proprietary Manufactured Gas Plants
EDR Hist Auto - EDR Exclusive Historical Auto Stations
EDR Hist Cleaner - EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF - Recovered Government Archive Solid Waste Facilities List
RGA LUST - Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA generators

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 02/28/2022 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS VALLEJO	***1600 BENICIA RD***	***NE 1/8 - 1/4 (0.143 mi.)***	***C15***	***47***
EPA ID:: CAD983647595				

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, has revealed that there are 3 RESPONSE sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHADOW RIDGE	***GLEN COVE ROAD***	***W 1/2 - 1 (0.556 mi.)***	***22***	***66***
Database: RESPONSE, Date of Government Version: 10/25/2021 Facility Id: 48990005 Status: Certified				
SOUTHAMPTON/COMPANY/	***ROSE DRIVE/BLAKE COU***	***ENE 1/2 - 1 (0.794 mi.)***	***23***	***70***
Database: RESPONSE, Date of Government Version: 10/25/2021 Facility Id: 48490011 AWP Facility Id: 48490011 Status: Certified				
WEBER PROPERTY	***1100 BLOCK OF WARREN***	***WNW 1/2 - 1 (0.808 mi.)***	***24***	***86***
Database: RESPONSE, Date of Government Version: 10/25/2021 Facility Id: 48880001 Status: Certified				

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/25/2021 has revealed that there are 4 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ROLLINGWOOD MIDDLE S	***ROLLINGWOOD DRIVE/BE***	***NW 1/4 - 1/2 (0.481 mi.)***	***21***	***63***
Facility Id: 48780001				
Status: Inactive - Withdrawn				
SHADOW RIDGE	***GLEN COVE ROAD***	***W 1/2 - 1 (0.556 mi.)***	***22***	***66***
Facility Id: 48990005				
Status: Certified				
SOUTHAMPTON/COMPANY/	***ROSE DRIVE/BLAKE COU***	***ENE 1/2 - 1 (0.794 mi.)***	***23***	***70***
Facility Id: 48490011				
Status: Certified				
WEBER PROPERTY	***1100 BLOCK OF WARREN***	***WNW 1/2 - 1 (0.808 mi.)***	***24***	***86***
Facility Id: 48880001				
Status: Certified				

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 4 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ST VINCENT'S CEMETER	***550 GLEN COVE RD***	***NW 1/4 - 1/2 (0.455 mi.)***	***D19***	***57***
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019				
Facility Id: 10840				
Facility Status: I				
ALL SOULS CEMETERY	***550 GLEN COVE RD***	***NW 1/4 - 1/2 (0.455 mi.)***	***D20***	***58***
Database: LUST REG 2, Date of Government Version: 09/30/2004				
Database: LUST, Date of Government Version: 12/06/2021				
Facility Id: 48-0255				
Facility Status: Case Closed				
Global Id: T0609500235				

Status: Completed - Case Closed
date9: 8/10/1994

Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS INC	***1600 BENICIA***	***NE 1/8 - 1/4 (0.143 mi.)***	***C9***	***33***
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019 Database: LUST, Date of Government Version: 12/06/2021 Facility Id: 10176 Global Id: T0609500271 Status: Completed - Case Closed Facility Status: I				
BIG 4 RENTS INC	***1600 BENICIA RD***	***NE 1/8 - 1/4 (0.143 mi.)***	***C14***	***46***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Facility Id: 48-0295 Facility Status: Case Closed date9: 11/7/1995				

Lists of state and tribal registered storage tanks

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 5 UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CALIFORNIA HIGHWAY P	1551 BENICIA RD	NE 0 - 1/8 (0.033 mi.)	A3	13
Database: SOLANO CO. UST, Date of Government Version: 09/15/2021 Facility Status: A Facility Id: 10815				
CA HIGHWAY PATROL GO	1551 BENICIA ROAD	NE 0 - 1/8 (0.033 mi.)	A4	14
Database: UST, Date of Government Version: 12/06/2021 Facility Id: 48-000-010815				
CALIF. DEPT. OF HIGH	1551 BENICIA RD	NE 0 - 1/8 (0.033 mi.)	A5	14
Database: UST, Date of Government Version: 12/06/2021 Facility Id: 10815				
CRUSADER FENCE CO. I	1600 BENICIA RD	NE 1/8 - 1/4 (0.143 mi.)	C12	40
Database: SOLANO CO. UST, Date of Government Version: 09/15/2021 Facility Status: I Facility Id: 10176				
SIRI CONSTRUCTION	1855 BENICIA RD	ENE 1/8 - 1/4 (0.234 mi.)	17	55
Database: SOLANO CO. UST, Date of Government Version: 09/15/2021 Facility Status: I Facility Id: 80057				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 2 HIST Cal-Sites sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHADOW RIDGE	*GLEN COVE ROAD*	*W 1/2 - 1 (0.556 mi.)*	*22*	*66*
SOUTHAMPTON/COMPANY/	*ROSE DRIVE/BLAKE COU*	*ENE 1/2 - 1 (0.794 mi.)*	*23*	*70*

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 01/18/2022 has revealed that there are 4 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHADY LANE SANITARY	*198 WILDFLOWER AVE*	*NNW 0 - 1/8 (0.006 mi.)*	*1*	*9*

Lower Elevation	Address	Direction / Distance	Map ID	Page
CA HIGHWAY PATROL GO	*1551 BENICIA ROAD*	*NE 0 - 1/8 (0.033 mi.)*	*A6*	*15*
CRUSADER FENCE CO IN	*1600 BENICIA RD*	*NE 1/8 - 1/4 (0.143 mi.)*	*C13*	*41*
GREENMONT SANITARY P	*230 GREENMONT DR*	*NNE 1/8 - 1/4 (0.240 mi.)*	*18*	*55*

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS, INC.	*1600 BENICIA RD*	*NE 1/8 - 1/4 (0.143 mi.)*	*C11*	*38*
Status: A				
Tank Status: A				
Comp Number: 18312				

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS INC	***1600 BENICIA***	***NE 1/8 - 1/4 (0.143 mi.)***	***C9***	***33***
Facility Id: 00000018312				
BIG 4 RENTS, INC.	***1600 BENICIA RD***	***NE 1/8 - 1/4 (0.143 mi.)***	***C11***	***38***
SIRI CONSTRUCTION CO	1855 BENICIA ROAD	ENE 1/8 - 1/4 (0.188 mi.)	C16	54
Facility Id: 00000010581				

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS, INC.	***1600 BENICIA RD***	***NE 1/8 - 1/4 (0.143 mi.)***	***C11***	***38***
Facility Id: 48001263				
Status: A				

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 01/18/2022 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CA HIGHWAY PATROL GO	***1551 BENICIA ROAD***	***NE 0 - 1/8 (0.033 mi.)***	***A6***	***15***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 02/28/2022 has revealed that there are 4 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CALIFORNIA HIGHWAY P	1551 BENICIA RD	NE 0 - 1/8 (0.033 mi.)	A2	11
EPA ID:: CAL000046134				
ECOLAB INC.	1500 BENICIA ROAD	N 0 - 1/8 (0.070 mi.)	B7	28
ST PATRICK ST VINCEN	1500 BENICIA RD	N 0 - 1/8 (0.070 mi.)	B8	31

EPA ID:: CAC003023091

CRUSADER FENCE CO IN EPA ID:: CAL000409506	1600 BENICIA RD	NE 1/8 - 1/4 (0.143 mi.)	C10	36

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 12/16/2021 has revealed that there are 2 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALL SOULS CEMETERY	***550 GLEN COVE RD***	***NW 1/4 - 1/2 (0.455 mi.)***	***D20***	***58***
Cleanup Status: COMPLETED - CASE CLOSED				

Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS INC	***1600 BENICIA RD***	***NE 1/8 - 1/4 (0.143 mi.)***	***C14***	***46***
Cleanup Status: COMPLETED - CASE CLOSED				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALL SOULS CEMETERY	***550 GLEN COVE RD***	***NW 1/4 - 1/2 (0.455 mi.)***	***D20***	***58***
Reg Id: 48-0255				

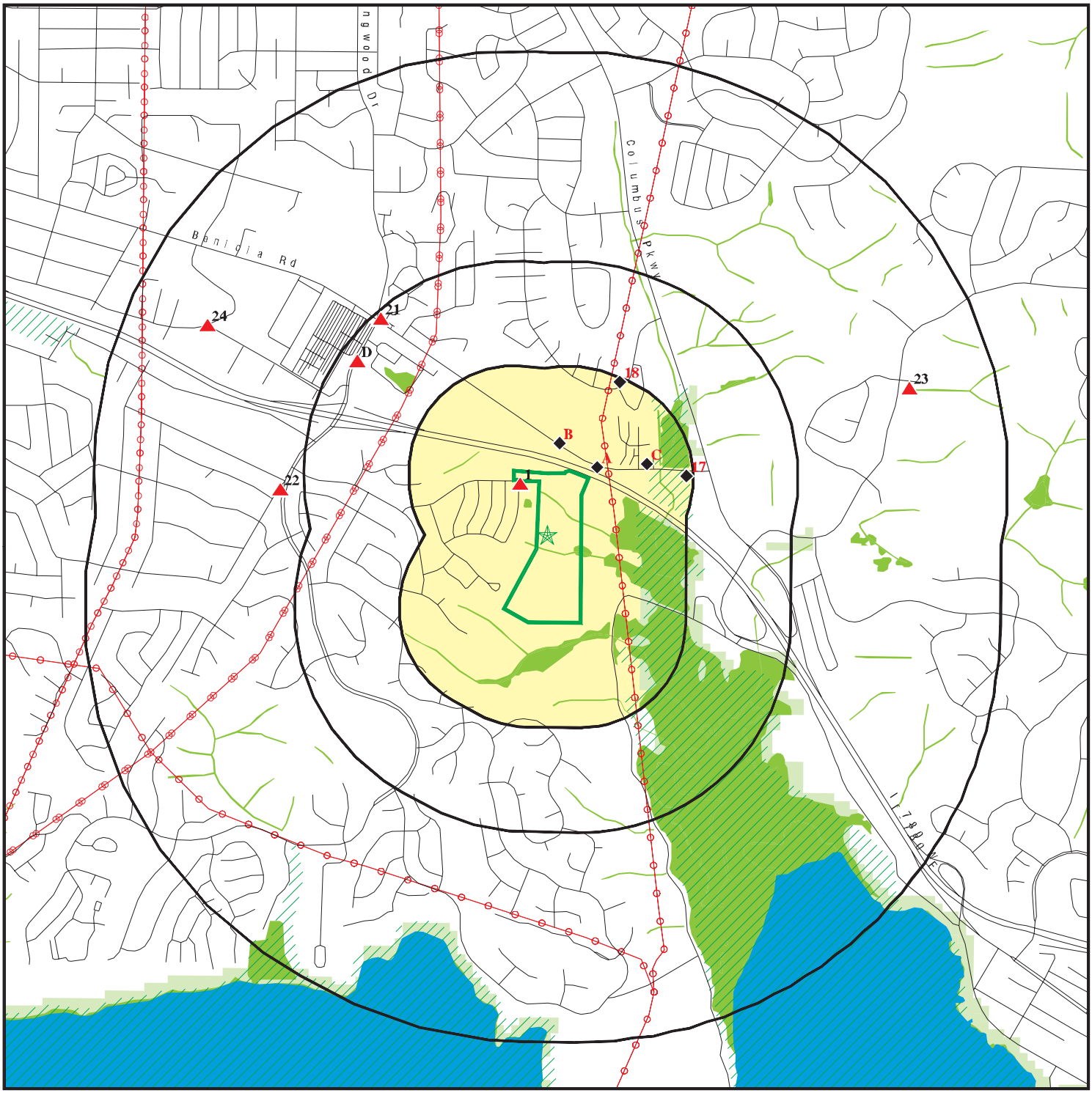
Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS INC	***1600 BENICIA***	***NE 1/8 - 1/4 (0.143 mi.)***	***C9***	***33***
Reg Id: 48-0295				

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
BENICIA STATE REC AREA/SOUTH HAMPT	SWF/LF

OVERVIEW MAP - 06938050.2R



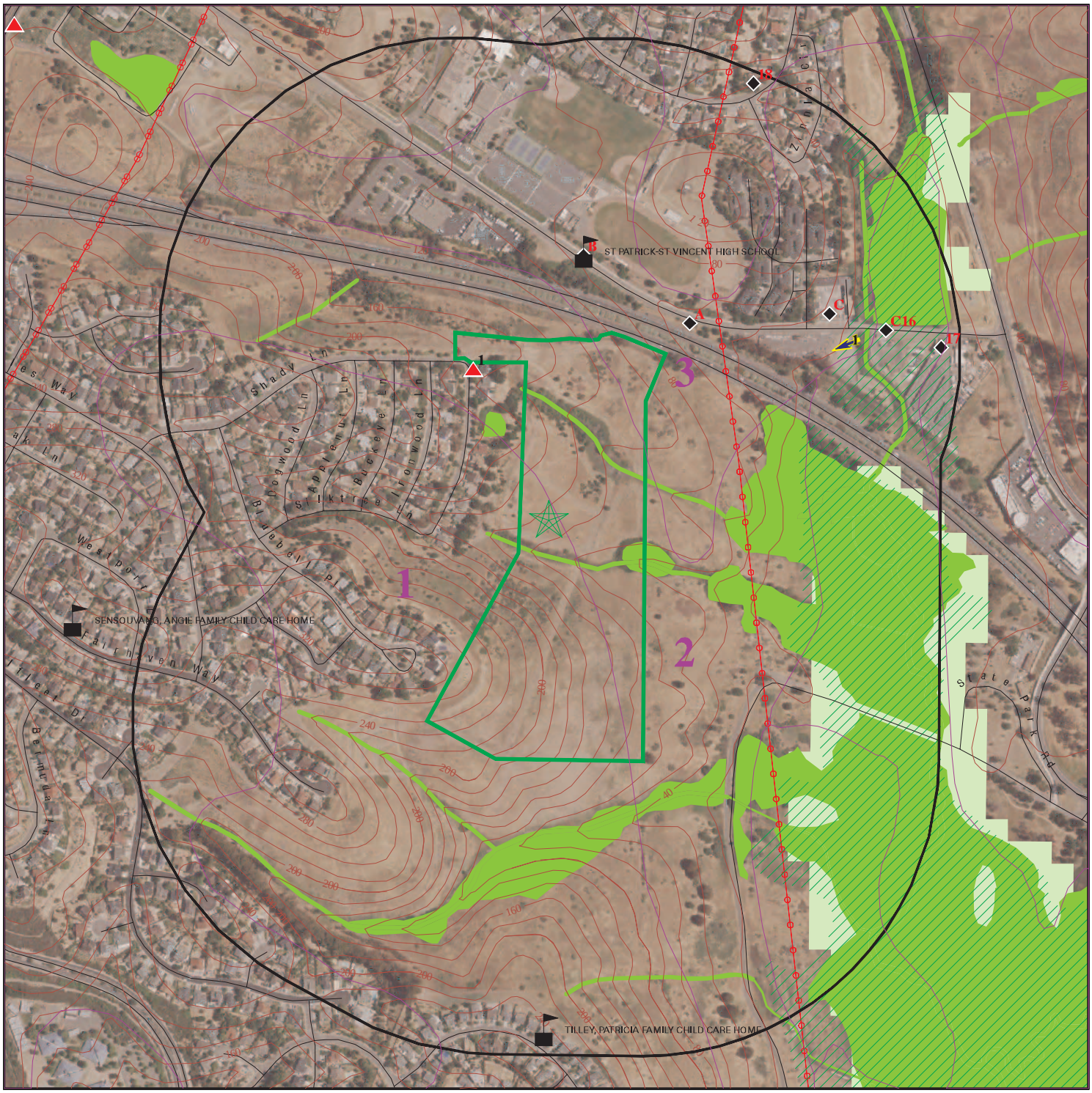
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vallejo Properties - Glen Cove	CLIENT: Engeo Inc.
ADDRESS: Not Reported	CONTACT: Jenna Keith
Vallejo CA 94591	INQUIRY #: 06938050.2r
LAT/LONG: 38.081568 / 122.201037	DATE: April 13, 2022 11:50 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

DETAIL MAP - 06938050.2R



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vallejo Properties - Glen Cove	CLIENT: Engeo Inc.
ADDRESS: Not Reported Vallejo CA 94591	CONTACT: Jenna Keith INQUIRY #: 06938050.2r
LAT/LONG: 38.081568 / 122.201037	DATE: April 13, 2022 11:50 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	3	NR	3
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	1	3	NR	4
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	2	2	NR	NR	4
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		3	2	NR	NR	NR	5
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	2	NR	2
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		2	2	NR	NR	NR	4
US CDL	TP		NR	NR	NR	NR	NR	0
AQUEOUS FOAM	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	1	NR	NR	NR	1
HIST UST	0.250		0	3	NR	NR	NR	3
CA FID UST	0.250		0	1	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CERS TANKS	0.250		1	0	NR	NR	NR	1
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		3	1	NR	NR	NR	4
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	1	1	NR	NR	2
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	1	1	NR	NR	2
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	9	15	5	8	0	37

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
NNW
< 1/8
0.006 mi.
30 ft.

SHADY LANE SANITARY PUMP STATION
198 WILDFLOWER AVE
VALLEJO, CA 94591

CERS HAZ WASTE
CERS

S121746783
N/A

Relative:
Higher

Actual:
166 ft.

CERS HAZ WASTE:

Name:	SHADY LANE SANITARY PUMP STATION
Address:	198 WILDFLOWER AVE
City,State,Zip:	VALLEJO, CA 94591
Site ID:	152813
CERS ID:	10402213
CERS Description:	Hazardous Waste Generator

CERS:

Name:	SHADY LANE SANITARY PUMP STATION
Address:	198 WILDFLOWER AVE
City,State,Zip:	VALLEJO, CA 94591
Site ID:	152813
CERS ID:	10402213
CERS Description:	Chemical Storage Facilities

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-03-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Solano County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS,

Coordinates:

Site ID:	152813
Facility Name:	Shady Lane sanitary pump station
Env Int Type Code:	HWG
Program ID:	10402213
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.,
Latitude:	38.083340
Longitude:	-122.202200

Affiliation:

Affiliation Type Desc:	Environmental Contact
Entity Name:	Jennifer Harrington
Entity Title:	Not reported
Affiliation Address:	450 Ryder St.
Affiliation City:	Vallejo
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94590
Affiliation Phone:	,
Affiliation Type Desc:	Document Preparer
Entity Name:	Jennifer Harrington
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported

SHADY LANE SANITARY PUMP STATION (Continued) **S121746783**

Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	450 Ryder St.
Affiliation City:	Vallejo
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94590
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Vallejo Sanitation & Flood Control District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 644-8948,
Affiliation Type Desc:	Identification Signer
Entity Name:	Jennifer Harrington
Entity Title:	Environmental Services Director
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	CUPA District
Entity Name:	Solano County Env Health
Entity Title:	Not reported
Affiliation Address:	675 Texas Street, Suite 5500
Affiliation City:	Fairfield
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94533
Affiliation Phone:	(707) 784-6765,
Affiliation Type Desc:	Legal Owner
Entity Name:	Public Entity, Special District
Entity Title:	Not reported
Affiliation Address:	450 Ryder St.
Affiliation City:	Vallejo
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94590
Affiliation Phone:	(707) 644-8949,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Vallejo Sanitation & Flood Control District

SHADY LANE SANITARY PUMP STATION (Continued) **S121746783**

Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

A2 **CALIFORNIA HIGHWAY PATROL #301 GOLDEN GATE DIVISIO** **RCRA NonGen / NLR** **1024788493**
NE **1551 BENICIA RD** **CAL000046134**
< 1/8 **VALLEJO, CA 94591**
0.033 mi.
175 ft. **Site 1 of 5 in cluster A**

Relative: RCRA NonGen / NLR:
Lower

Date Form Received by Agency:	19910215
Handler Name:	CALIFORNIA HIGHWAY PATROL #301 GOLDEN GATE DIVISION VALLEJO
Handler Address:	1551 BENICIA RD
Handler City,State,Zip:	VALLEJO, CA 94591-7568
EPA ID:	CAL000046134
Contact Name:	BETH DEPAOLA
Contact Address:	PO BOX 942898
Contact City,State,Zip:	SACRAMENTO, CA 94298-0001
Contact Telephone:	916-843-3817
Contact Fax:	916-322-3172
Contact Email:	EDEPAOLA@CHP.CA.GOV
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 942898
Mailing City,State,Zip:	SACRAMENTO, CA 94298-0001
Owner Name:	CALIFORNIA HIGHWAY PATROL
Owner Type:	Other
Operator Name:	BETH DEPAOLA
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported

Actual:
50 ft.

CALIFORNIA HIGHWAY PATROL #301 GOLDEN GATE DIVISION VALLEJO (Continued) **1024788493**

Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	BETH DEPAOLA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 942898
Owner/Operator City,State,Zip:	SACRAMENTO, CA 94298-0001
Owner/Operator Telephone:	916-843-3817
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CALIFORNIA HIGHWAY PATROL

CALIFORNIA HIGHWAY PATROL #301 GOLDEN GATE DIVISION VALLEJO (Continued) **1024788493**

Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 942898
Owner/Operator City,State,Zip:	SACRAMENTO, CA 94298-0001
Owner/Operator Telephone:	916-843-3800
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19910215
Handler Name:	CALIFORNIA HIGHWAY PATROL #301 GOLDEN GATE DIVISION VALLEJO
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	92212
NAICS Description:	POLICE PROTECTION

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

A3 **CALIFORNIA HIGHWAY PATROL** **UST** **U003641233**
NE **1551 BENICIA RD** **N/A**
< 1/8 **VALLEJO, CA 94591**
0.033 mi.
175 ft. **Site 2 of 5 in cluster A**

Relative: SOLANO CO. UST:
Lower

Name:	CALIFORNIA HIGHWAY PATROL
Address:	1551 BENICIA RD
City,State,Zip:	VALLEJO, CA 94591
Facility Id:	10815
Facility Status:	Active
Decode for Facility Status:	Operating
Facility Phone:	707-648-4180

Actual:
50 ft.

Inventory Number:	1
Inventory Type:	State Government (170)
Inventory Description:	Not reported
Permit Expire/Last Service:	ROUTINE - INITIAL (INVENTORIED)\\ 10/31/21,\\ 10/31/21
Last Service Date:	1/12/2021
District:	SUP-DIST NO 3032

CALIFORNIA HIGHWAY PATROL (Continued) **U003641233**

Inspector:	Nicolet, Brad
Name:	CALIFORNIA HIGHWAY PATROL
Address:	1551 BENICIA RD
City,State,Zip:	VALLEJO, CA 94591
Inventory Number:	2
Inventory Type:	State Government (170)
Inventory Description:	Not reported
Permit Expire/Last Service:	ROUTINE - INITIAL (INVENTORIED)\\ 10/31/21,\\ 10/31/21
Last Service Date:	1/12/2021
District:	SUP-DIST NO 3032
Inspector:	Nicolet, Brad

A4 **CA HIGHWAY PATROL GOLDEN GATE DIVISION** **UST** **U004348659**
NE **1551 BENICIA ROAD** **N/A**
< 1/8 **VALLEJO, CA 94591**
0.033 mi.
175 ft. **Site 3 of 5 in cluster A**

Relative: UST:
Lower

Actual: Name:	CA HIGHWAY PATROL GOLDEN GATE DIVISION
50 ft. Address:	1551 BENICIA ROAD
City,State,Zip:	VALLEJO, CA 94591
Facility ID:	48-000-010815
Permitting Agency:	Solano County Environmental Health
CERSID:	10423576
Latitude:	38.08623
Longitude:	-122.20338

A5 **CALIF. DEPT. OF HIGHWAY PATROL** **UST** **U004343932**
NE **1551 BENICIA RD** **N/A**
< 1/8 **VALLEJO, CA 94591**
0.033 mi.
175 ft. **Site 4 of 5 in cluster A**

Relative: UST:
Lower

Actual: Name:	CALIF. DEPT. OF HIGHWAY PATROL
50 ft. Address:	1551 BENICIA RD
City,State,Zip:	VALLEJO, CA 94591
Facility ID:	10815
Permitting Agency:	SOLANO COUNTY
CERSID:	Not reported
Latitude:	38.0867154
Longitude:	-122.2014749

A6 **CA HIGHWAY PATROL GOLDEN GATE DIVISION** **CERS HAZ WASTE** **S121793371**
NE **1551 BENICIA ROAD** **CERS TANKS** **N/A**
< 1/8 **VALLEJO, CA 94591** **CERS**
0.033 mi.
175 ft. **Site 5 of 5 in cluster A**

Relative:
Lower

Actual:
50 ft.

CERS HAZ WASTE:

Name:	CA HIGHWAY PATROL GOLDEN GATE DIVISION
Address:	1551 BENICIA ROAD
City,State,Zip:	VALLEJO, CA 94591
Site ID:	87264
CERS ID:	10423576
CERS Description:	Hazardous Waste Generator

CERS TANKS:

Name:	CA HIGHWAY PATROL GOLDEN GATE DIVISION
Address:	1551 BENICIA ROAD
City,State,Zip:	VALLEJO, CA 94591
Site ID:	87264
CERS ID:	10423576
CERS Description:	Underground Storage Tank

CERS:

Name:	CA HIGHWAY PATROL GOLDEN GATE DIVISION
Address:	1551 BENICIA ROAD
City,State,Zip:	VALLEJO, CA 94591
Site ID:	87264
CERS ID:	10423576
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	10-27-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 05/07/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7, Section(s) 25284.2
Violation Description:	Failure to test the spill bucket annually.
Violation Notes:	Returned to compliance on 05/04/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	12-12-2019
Citation:	23 CCR 16 2712(b)(1)(F) - California Code of Regulations, Title 23,

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

	Chapter 16, Section(s) 2712(b)(1)(F)
Violation Description:	"Failure to conduct secondary containment testing, or one or more of the following requirements: Perform the test of the secondary containment system upon installation, within six months of installation and every 36 months thereafter. Perform the test of a secondary containment component within 30 days of a repair or discontinuing vacuum, pressure or hydrostatic monitoring. Use a procedure that demonstrates the system works as well as at installation. Use applicable manufacturer guidelines, industry codes, engineering standard, or professional engineer approval. Performed by a certified service technician. Maintain records of secondary containment testing for 36 months."
Violation Notes:	Not reported
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	11-15-2016
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 12/19/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)
Violation Description:	Failure to operate the UST system to prevent spills and/or overfills.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	12-12-2019
Citation:	HSC 6.7 25284, 25286 - California Health and Safety Code, Chapter 6.7, Section(s) 25284, 25286
Violation Description:	Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.
Violation Notes:	Returned to compliance on 01/10/2020.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Violation Date:	12-19-2018
Citation:	HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)
Violation Description:	Failure to operate the UST system to prevent unauthorized releases including leaks, spills, and/or overfills.
Violation Notes:	Not reported
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Description:	Failure to maintain on site an approved monitoring plan.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	10-27-2014
Citation:	HSC 6.11 25404(e)(4) - California Health and Safety Code, Chapter 6.11, Section(s) 25404(e)(4)
Violation Description:	Failure to report program data electronically.
Violation Notes:	Returned to compliance on 05/07/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Description:	Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	10-27-2014
Citation:	19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.
Violation Notes:	Returned to compliance on 05/07/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.7 25299 - California Health and Safety Code, Chapter 6.7, Section(s) 25299
Violation Description:	Failure to comply with one or more of the operating permit conditions.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	12-12-2019
Citation:	HSC 6.7 25284 - California Health and Safety Code, Chapter 6.7, Section(s) 25284
Violation Description:	Failure to obtain a valid permit to operate from the UPA including but not limited to unpaid permit fees.
Violation Notes:	Not reported
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	10-27-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 05/07/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	10-27-2014
Citation:	22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130
Violation Description:	Failure to properly handle, manage, label, and recycle used oil and fuel filters.
Violation Notes:	Returned to compliance on 04/25/2017.
Violation Division:	Solano County Environmental Health

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Violation Program:	HW
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 04/25/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	10-27-2014
Citation:	22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description:	Failure to obtain and/or maintain an Active EPA ID.
Violation Notes:	Returned to compliance on 04/25/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.11 25404(e)(4) - California Health and Safety Code, Chapter 6.11, Section(s) 25404(e)(4)
Violation Description:	Failure to report program data electronically.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	02-10-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 02/13/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Violation Description:	Failure to properly handle, manage, label, and recycle used oil and fuel filters.
Violation Notes:	Returned to compliance on 04/25/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.7 25284 - California Health and Safety Code, Chapter 6.7, Section(s) 25284
Violation Description:	Failure to obtain and maintain a valid operation permit from the CUPA.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	02-10-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Returned to compliance on 02/13/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	02-10-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate training program in safety procedures in the event of a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 02/13/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Violation Date:	10-27-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Returned to compliance on 05/07/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	11-15-2016
Citation:	HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22
Violation Description:	Failure to properly manage used oil and/or fuel filters in accordance with the requirements.
Violation Notes:	Returned to compliance on 12/19/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	11-15-2016
Citation:	HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description:	Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 02/13/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	02-10-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 02/13/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	02-10-2016
Citation:	HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description:	Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 02/13/2017.

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Other/Unknown
Eval Date: 05-04-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-22-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-15-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-15-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-15-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-19-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-06-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-27-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-27-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-19-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-19-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 01-14-2015
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Eval Date: 02-10-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-22-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-12-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-19-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-06-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-14-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-14-2015
Violations Found: Yes
Eval Type: Routine done by local agency

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 01-14-2015
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-27-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-19-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-19-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Enforcement Action:
Site ID: 87264
Site Name: CA Highway Patrol Golden Gate Division
Site Address: 1551 BENICIA ROAD
Site City: VALLEJO
Site Zip: 94591
Enf Action Date: 01-14-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Solano County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS,

Site ID: 87264
Site Name: CA Highway Patrol Golden Gate Division

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Site Address:	1551 BENICIA ROAD
Site City:	VALLEJO
Site Zip:	94591
Enf Action Date:	01-14-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Solano County Environmental Health
Enf Action Program:	HW
Enf Action Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Site Address:	1551 BENICIA ROAD
Site City:	VALLEJO
Site Zip:	94591
Enf Action Date:	01-14-2015
Enf Action Type:	Notice of Violation (Unified Program)
Enf Action Description:	Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:	Not reported
Enf Action Division:	Solano County Environmental Health
Enf Action Program:	UST
Enf Action Source:	CERS,

Affiliation:

Affiliation Type Desc:	Environmental Contact
Entity Name:	Karen Mejia
Entity Title:	Not reported
Affiliation Address:	PO Box 942898
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94298-0001
Affiliation Phone:	,

Affiliation Type Desc:	Identification Signer
Entity Name:	Simi Rapacon
Entity Title:	Staff Services Analyst, GGD
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Legal Owner
Entity Name:	Department of California Highway Patrol
Entity Title:	Not reported
Affiliation Address:	PO Box 942898
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94298-0001
Affiliation Phone:	(916) 843-3800,

Affiliation Type Desc:	CUPA District
Entity Name:	Solano County Env Health

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Entity Title: Not reported
Affiliation Address: 675 Texas Street, Suite 5500
Affiliation City: Fairfield
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94533
Affiliation Phone: (707) 784-6765,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1551 Benicia Road
Affiliation City: Vallejo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94591
Affiliation Phone: ,

Affiliation Type Desc: Operator
Entity Name: Chief Chris Costigan #301 Golden Gate Division
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (707) 917-4300,

Affiliation Type Desc: UST Tank Operator
Entity Name: California Highway Patrol - Golden Gate Division
Entity Title: Not reported
Affiliation Address: 1551 Beneica Road
Affiliation City: Vallejo
Affiliation State: Ca
Affiliation Country: United States
Affiliation Zip: 94591
Affiliation Phone: (707) 648-4180,

Affiliation Type Desc: Parent Corporation
Entity Name: Department of California Highway Patrol
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: UST Permit Applicant
Entity Name: Donna Robinson
Entity Title: Business Services Officer
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (707) 373-3062,

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Affiliation Type Desc:	UST Property Owner Name
Entity Name:	California Highway Patrol
Entity Title:	Not reported
Affiliation Address:	PO Box 942898
Affiliation City:	Sacramento
Affiliation State:	Ca
Affiliation Country:	United States
Affiliation Zip:	942898-
Affiliation Phone:	(916) 843-3800,
Affiliation Type Desc:	UST Tank Owner
Entity Name:	California Highway Patrol
Entity Title:	Not reported
Affiliation Address:	PO Box 942898
Affiliation City:	Sacramento
Affiliation State:	Ca
Affiliation Country:	United States
Affiliation Zip:	942898
Affiliation Phone:	(916) 843-3800,
Affiliation Type Desc:	Document Preparer
Entity Name:	Simi Rapacon
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

B7 **ECOLAB INC.** **RCRA NonGen / NLR** **1026473464**
North **1500 BENICIA ROAD** **CAC003079131**
< 1/8 **VALLEJO, CA 94591**
0.070 mi.
367 ft. **Site 1 of 2 in cluster B**

Relative: **Lower**

Actual: **76 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20200813
Handler Name:	ECOLAB INC.	
Handler Address:		1500 BENICIA ROAD
Handler City,State,Zip:		VALLEJO, CA 94591
EPA ID:		CAC003079131
Contact Name:		GARRETT LOWE
Contact Address:		ONE ECOLAB PLACE
Contact City,State,Zip:		ST PAUL, MN 55102
Contact Telephone:		651-250-2600
Contact Fax:		Not reported
Contact Email:		GARRETT.LOWE@ECOLAB.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported

ECOLAB INC. (Continued) **1026473464**

State District:	Not reported
Mailing Address:	ONE ECOLAB PLACE
Mailing City,State,Zip:	ST PAUL, MN 55102
Owner Name:	GARRETT LOWE
Owner Type:	Other
Operator Name:	GARRETT LOWE
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200814
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No

ECOLAB INC. (Continued) **1026473464**

Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	GARRETT LOWE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	ONE ECOLAB PLACE
Owner/Operator City,State,Zip:	ST PAUL, MN 55102
Owner/Operator Telephone:	651-250-2600
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	GARRETT LOWE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	ONE ECOLAB PLACE
Owner/Operator City,State,Zip:	ST PAUL, MN 55102
Owner/Operator Telephone:	651-250-2600
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20200813
Handler Name: ECOLAB INC.	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

B8 **ST PATRICK ST VINCENT HIGH SCHOOL** **RCRA NonGen / NLR** **1025843476**
North **1500 BENICIA RD** **CAC003023091**
< 1/8 **VALLEJO, CA 95476**
0.070 mi.
367 ft. **Site 2 of 2 in cluster B**

Relative: **Lower**

Actual: **76 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	20190709
Handler Name:	ST PATRICK ST VINCENT HIGH SCHOOL
Handler Address:	1500 BENICIA RD
Handler City,State,Zip:	VALLEJO, CA 95476
EPA ID:	CAC003023091
Contact Name:	JASON MCCABE
Contact Address:	1500 BENICIA RD
Contact City,State,Zip:	VALLEJO, CA 95476
Contact Telephone:	707-644-4425
Contact Fax:	Not reported
Contact Email:	J.MCCABE@SPSV.ORG
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1500 BENICIA RD
Mailing City,State,Zip:	VALLEJO, CA 95476
Owner Name:	JASON MCCABE
Owner Type:	Other
Operator Name:	JASON MCCABE
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

ST PATRICK ST VINCENT HIGH SCHOOL (Continued) **1025843476**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190729
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JASON MCCABE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1500 BENICIA RD
Owner/Operator City,State,Zip:	VALLEJO, CA 95476
Owner/Operator Telephone:	707-644-4425
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	JASON MCCABE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1500 BENICIA RD
Owner/Operator City,State,Zip:	VALLEJO, CA 95476
Owner/Operator Telephone:	707-644-4425
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

ST PATRICK ST VINCENT HIGH SCHOOL (Continued) **1025843476**

Historic Generators:
- Receive Date: 20190709
- Handler Name: ST PATRICK ST VINCENT HIGH SCHOOL
- Federal Waste Generator Description: Not a generator, verified
- State District Owner: Not reported
- Large Quantity Handler of Universal Waste: No
- Recognized Trader Importer: No
- Recognized Trader Exporter: No
- Spent Lead Acid Battery Importer: No
- Spent Lead Acid Battery Exporter: No
- Current Record: Yes
- Non Storage Recycler Activity: Not reported
- Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
- NAICS Code: 56299
- NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
- Violations: No Violations Found

Evaluation Action Summary:
- Evaluations: No Evaluations Found

C9 **BIG 4 RENTS INC** **LUST** **U001598783**
NE **1600 BENICIA** **HIST UST** **N/A**
1/8-1/4 **VALLEJO, CA 94591** **HIST CORTESE**
0.143 mi. **CERS**
756 ft. **Site 1 of 8 in cluster C**

Relative: Lower
Actual: 34 ft.

SOLANO CO. LUST:
- Name: CRUSADER FENCE CO. INC
- Address: 1600 BENICIA RD
- City,State,Zip: VALLEJO, CA 94591
- Region: SOLANO
- Facility ID: 10176
- Facility Status: I
- Facility Status Desc: Inactive
- Facility Phone: 707-656-6101
- Program: 29S
- Inventory Number: 1
- Inventory Type: LOP - Closed Site (128)
- Inventory Description: Not reported
- Last service/permit exp: Not reported
- Last service date: Not reported
- District: SUP-DIST NO 3037
- Inspector: Kaltreider, Misty
- Call Back: Not reported

LUST:
- Name: BIG 4 RENTS INC
- Address: 1600 BENICIA RD
- City,State,Zip: VALLEJO, CA 94591
- Lead Agency: SOLANO COUNTY LOP

BIG 4 RENTS INC (Continued) **U001598783**

Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500271
Global Id:	T0609500271
Latitude:	38.084258
Longitude:	-122.19658
Status:	Completed - Case Closed
Status Date:	11/07/1995
Case Worker:	Not reported
RB Case Number:	48-0295
Local Agency:	SOLANO COUNTY
File Location:	Not reported
Local Case Number:	10176
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0609500271
Contact Type:	Local Agency Caseworker
Contact Name:	SOLANO COUNTY
Organization Name:	SOLANO COUNTY
Address:	675 TEXAS STREET, SUITE 2500
City:	FAIRFIELD
Email:	Not reported
Phone Number:	Not reported

LUST:

Global Id:	T0609500271
Action Type:	Other
Date:	05/04/1995
Action:	Leak Discovery

Global Id:	T0609500271
Action Type:	Other
Date:	08/24/1995
Action:	Leak Reported

Global Id:	T0609500271
Action Type:	Other
Date:	05/04/1995
Action:	Leak Stopped

Global Id:	T0609500271
Action Type:	ENFORCEMENT
Date:	11/03/1995
Action:	Closure/No Further Action Letter

LUST:

Global Id:	T0609500271
Status:	Open - Case Begin Date
Status Date:	05/04/1995

Global Id:	T0609500271
Status:	Completed - Case Closed
Status Date:	11/07/1995

BIG 4 RENTS INC (Continued) **U001598783**

HIST UST:

Name:	BIG 4 RENTS, INC.
Address:	1600 BENICIA RD
City,State,Zip:	VALLEJO, CA 94590
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000018312
Facility Type:	Other
Other Type:	RENTAL YARD
Contact Name:	MIKE SUTLIFF
Telephone:	7075548030
Owner Name:	BIG 4 RENTS, INC.
Owner Address:	7613 SO. SANTA ROSA AVENUE
Owner City,St,Zip:	COTATI, CA 94928
Total Tanks:	0003
Tank Num:	001
Container Num:	#1
Year Installed:	Not reported
Tank Capacity:	00004000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Visual
Tank Num:	002
Container Num:	#2
Year Installed:	Not reported
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Visual
Tank Num:	003
Container Num:	#3
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Visual

HIST CORTESE:

edr_fname:	BIG 4 RENTS INC
edr_fadd1:	1600 BENICIA
City,State,Zip:	VALLEJO, CA 94591
Region:	CORTESE
Facility County Code:	48
Reg By:	LTNKA
Reg Id:	48-0295

CERS:

Name:	BIG 4 RENTS INC
Address:	1600 BENICIA RD

BIG 4 RENTS INC (Continued) **U001598783**

City,State,Zip:	VALLEJO, CA 94591
Site ID:	254308
CERS ID:	T0609500271
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	SOLANO COUNTY - SOLANO COUNTY
Entity Title:	Not reported
Affiliation Address:	675 TEXAS STREET, SUITE 2500
Affiliation City:	FAIRFIELD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

C10 **CRUSADER FENCE CO INC** **RCRA NonGen / NLR** **1024851206**
NE **1600 BENICIA RD** **CAL000409506**
1/8-1/4 **VALLEJO, CA 94591**
0.143 mi.
756 ft. **Site 2 of 8 in cluster C**

Relative: **Lower**

Actual: **34 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20150821
Handler Name:	CRUSADER FENCE CO INC	
Handler Address:		1600 BENICIA RD
Handler City,State,Zip:		VALLEJO, CA 94591-7500
EPA ID:		CAL000409506
Contact Name:		JEFF PETERSON
Contact Address:		1600 BENICIA RD
Contact City,State,Zip:		VALLEJO, CA 94591-7500
Contact Telephone:		707-645-9191
Contact Fax:		707-645-8989
Contact Email:		JEFF@CRUSADERFENCE.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		3115 GOLD VALLEY DRIVE
Mailing City,State,Zip:		RANCHO CORDOVA, CA 95742
Owner Name:		CRUSADER FENCE CO INC
Owner Type:		Other
Operator Name:		JEFF PETERSON
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No

CRUSADER FENCE CO INC (Continued) **1024851206**

Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20181120
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	JEFF PETERSON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1600 BENICIA RD

CRUSADER FENCE CO INC (Continued) **1024851206**

Owner/Operator City,State,Zip: VALLEJO, CA 94591-7500
Owner/Operator Telephone: 707-645-9191
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: CRUSADER FENCE CO INC
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 3115 GOLD VALLEY DR
Owner/Operator City,State,Zip: RANCHO CORDOVA, CA 95742-6588
Owner/Operator Telephone: 916-631-9191
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20150821
Handler Name: CRUSADER FENCE CO INC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: Not reported
Recognized Trader Exporter: Not reported
Spent Lead Acid Battery Importer: Not reported
Spent Lead Acid Battery Exporter: Not reported
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56291
NAICS Description: REMEDIATION SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C11 **BIG 4 RENTS, INC.** **SWEEPS UST** **S101624194**
NE **1600 BENICIA RD** **HIST UST** **N/A**
1/8-1/4 **VALLEJO, CA 94590** **CA FID UST**
0.143 mi.
756 ft. **Site 3 of 8 in cluster C**

Relative: **Lower**
Actual: **34 ft.**

SWEEPS UST:
Name: BIG 4 RENTS, INC.
Address: 1600 BENICIA RD
City: VALLEJO
Status: Active
Comp Number: 18312
Number: 1

BIG 4 RENTS, INC. (Continued) **S101624194**

Board Of Equalization: 44-013746
Referral Date: 10-03-89
Action Date: 10-03-89
Created Date: 02-29-88
Owner Tank Id: #1
SWRCB Tank Id: 48-087-018312-000001
Tank Status: A
Capacity: 4000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 3

Name: BIG 4 RENTS, INC.
Address: 1600 BENICIA RD
City: VALLEJO
Status: Active
Comp Number: 18312
Number: 1
Board Of Equalization: 44-013746
Referral Date: 10-03-89
Action Date: 10-03-89
Created Date: 02-29-88
Owner Tank Id: #2
SWRCB Tank Id: 48-087-018312-000002
Tank Status: A
Capacity: 2000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Name: BIG 4 RENTS, INC.
Address: 1600 BENICIA RD
City: VALLEJO
Status: Active
Comp Number: 18312
Number: 1
Board Of Equalization: 44-013746
Referral Date: 10-03-89
Action Date: 10-03-89
Created Date: 02-29-88
Owner Tank Id: #3
SWRCB Tank Id: 48-087-018312-000003
Tank Status: A
Capacity: Not reported
Active Date: 07-01-85
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: Not reported

HIST UST:
Name: BIG 4 RENTS INC
Address: 1600 BENICIA ROAD

BIG 4 RENTS, INC. (Continued) **S101624194**

City,State,Zip:	VALLEJO, CA 94590
File Number:	000211C1
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000211C1.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	48001263
Regulated By:	UTNKA
Regulated ID:	00018312
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	P O BOX
Mailing Address 2:	Not reported
Mailing City,St,Zip:	VALLEJO 94590
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

C12 **CRUSADER FENCE CO. INC** **UST** **U003895710**
NE **1600 BENICIA RD** **N/A**
1/8-1/4 **VALLEJO, CA 94591**
0.143 mi.
756 ft. **Site 4 of 8 in cluster C**

Relative: **Lower**

Actual: **34 ft.**

SOLANO CO. UST:

Name:	CRUSADER FENCE CO. INC
Address:	1600 BENICIA RD
City,State,Zip:	VALLEJO, CA 94591
Facility Id:	10176
Facility Status:	Inactive
Decode for Facility Status:	Closed

CRUSADER FENCE CO. INC (Continued) **U003895710**

Facility Phone: 707-656-6101

Inventory Number: 1
Inventory Type: Underground Storage Tank (1)
Inventory Description: Not reported
Permit Expire/Last Service: Not reported
Last Service Date: Not reported
District: SUP-DIST NO 3032
Inspector: Nicolet, Brad

Name: CRUSADER FENCE CO. INC
Address: 1600 BENICIA RD
City,State,Zip: VALLEJO, CA 94591

Inventory Number: 2
Inventory Type: Underground Storage Tank (1)
Inventory Description: Not reported
Permit Expire/Last Service: Not reported
Last Service Date: Not reported
District: SUP-DIST NO 3032
Inspector: Nicolet, Brad

Name: CRUSADER FENCE CO. INC
Address: 1600 BENICIA RD
City,State,Zip: VALLEJO, CA 94591

Inventory Number: 3
Inventory Type: Underground Storage Tank (1)
Inventory Description: Not reported
Permit Expire/Last Service: Not reported
Last Service Date: Not reported
District: SUP-DIST NO 3032
Inspector: Nicolet, Brad

C13 **CRUSADER FENCE CO INC** **CERS HAZ WASTE** **S123103598**
NE **1600 BENICIA RD** **CERS** **N/A**
1/8-1/4 **VALLEJO, CA 94591** **HWTS**
0.143 mi.
756 ft. **Site 5 of 8 in cluster C**

Relative:
Lower

Actual:
34 ft.

CERS HAZ WASTE:
Name: CRUSADER FENCE CO INC
Address: 1600 BENICIA RD
City,State,Zip: VALLEJO, CA 94591
Site ID: 443759
CERS ID: 10727503
CERS Description: Hazardous Waste Generator

CERS:
Name: CRUSADER FENCE CO INC
Address: 1600 BENICIA RD
City,State,Zip: VALLEJO, CA 94591
Site ID: 443759
CERS ID: 10727503
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 443759

CRUSADER FENCE CO INC (Continued) **S123103598**

Site Name:	Crusader Fence Co Inc
Violation Date:	11-30-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 06/04/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	443759
Site Name:	Crusader Fence Co Inc
Violation Date:	11-30-2016
Citation:	HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description:	Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 06/04/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	443759
Site Name:	Crusader Fence Co Inc
Violation Date:	11-30-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Returned to compliance on 06/04/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	443759
Site Name:	Crusader Fence Co Inc
Violation Date:	11-30-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 06/04/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-30-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Solano County Environmental Health

CRUSADER FENCE CO INC (Continued) **S123103598**

Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-30-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Coordinates:
Site ID: 443759
Facility Name: Crusader Fence Co Inc
Env Int Type Code: HWG
Program ID: 10727503
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 38.084290
Longitude: -122.196690

Affiliation:
Affiliation Type Desc: Identification Signer
Entity Name: Sharie Martin
Entity Title: Office Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: Crusader Fence Co., Inc
Entity Title: Not reported
Affiliation Address: 3115 Gold Valley Drive
Affiliation City: Rancho Cordova
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95742
Affiliation Phone: (916) 631-9191,

Affiliation Type Desc: Document Preparer
Entity Name: Sharie Martin
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact
Entity Name: Brent Henderson
Entity Title: Not reported

CRUSADER FENCE CO INC (Continued) **S123103598**

Affiliation Address:	3115 Gold Valley Drive
Affiliation City:	Rancho Cordova
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	5742
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1600 Benicia Rd
Affiliation City:	Vallejo
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94591
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Brent Henderson
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(916) 631-9191,
Affiliation Type Desc:	Parent Corporation
Entity Name:	CRUSADER FENCE CO INC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	CUPA District
Entity Name:	Solano County Env Health
Entity Title:	Not reported
Affiliation Address:	675 Texas Street, Suite 5500
Affiliation City:	Fairfield
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94533
Affiliation Phone:	(707) 784-6765,
Affiliation Type Desc:	Property Owner
Entity Name:	Robin Masters Group, LLC
Entity Title:	Not reported
Affiliation Address:	9616 Wexford Circle
Affiliation City:	Granite Bay
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95746
Affiliation Phone:	(916) 631-9191,

CRUSADER FENCE CO INC (Continued) **S123103598**

HWTS:

Name:	CRUSADER FENCE CO INC
Address:	1600 BENICIA RD
Address 2:	Not reported
City,State,Zip:	VALLEJO, CA 945917500
EPA ID:	CAL000409506
Inactive Date:	06/30/2020
Create Date:	08/21/2015
Last Act Date:	01/04/2021
Mailing Name:	Not reported
Mailing Address:	3115 Gold Valley Drive
Mailing Address 2:	Not reported
Mailing City,State,Zip:	Rancho Cordova, CA 95742
Owner Name:	CRUSADER FENCE CO INC
Owner Address:	3115 GOLD VALLEY DR
Owner Address 2:	Not reported
Owner City,State,Zip:	RANCHO CORDOVA, CA 957426588
Contact Name:	Jeff Peterson
Contact Address:	1600 BENICIA RD
Contact Address 2:	Not reported
City,State,Zip:	VALLEJO, CA 945917500

NAICS:

EPA ID:	CAL000409506
Create Date:	2015-08-21 08:22:53.263
NAICS Code:	56291
NAICS Description:	Remediation Services
Issued EPA ID Date:	2015-08-21 08:22:53.25700
Inactive Date:	2020-06-30 00:00:00
Facility Name:	CRUSADER FENCE CO INC
Facility Address:	1600 BENICIA RD
Facility Address 2:	Not reported
Facility City:	VALLEJO
Facility County:	Not reported
Facility State:	CA
Facility Zip:	945917500

Name:	CRUSADER FENCE CO INC
Address:	1600 BENICIA RD
Address 2:	Not reported
City,State,Zip:	VALLEJO, CA 945917500
EPA ID:	CAC002651552
Inactive Date:	09/12/2010
Create Date:	03/15/2010
Last Act Date:	03/15/2010
Mailing Name:	Not reported
Mailing Address:	3115 GOLD VALLEY DR
Mailing Address 2:	Not reported
Mailing City,State,Zip:	RANCHO CORDOVA, CA 957426588
Owner Name:	CRUSADER FENCE CO INC
Owner Address:	3115 GOLD VALLEY DR
Owner Address 2:	Not reported
Owner City,State,Zip:	RANCHO CORDOVA, CA 957426588
Contact Name:	COLEBE MASSIE
Contact Address:	3115 GOLD VALLEY DR
Contact Address 2:	Not reported

CRUSADER FENCE CO INC (Continued) **S123103598**

City,State,Zip: RANCHO CORDOVA, CA 957426588

C14 **BIG 4 RENTS INC** **LUST** **S105033817**
NE **1600 BENICIA RD** **Cortese** **N/A**
1/8-1/4 **VALLEJO, CA 94591**
0.143 mi.
756 ft. **Site 6 of 8 in cluster C**

Relative:
Lower

Actual:
34 ft.

LUST REG 2:

Region:	2
Facility Id:	48-0295
Facility Status:	Case Closed
Case Number:	10176
How Discovered:	Tank Closure
Leak Cause:	Overfill
Leak Source:	Tank
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

CORTESE:

Name:	BIG 4 RENTS INC
Address:	1600 BENICIA RD
City,State,Zip:	VALLEJO, CA 94591
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0609500271
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

C15 **BIG 4 RENTS VALLEJO** **RCRA-SQG** **1000818845**
NE **1600 BENICIA RD** **FINDS** **CAD983647595**
1/8-1/4 **VALLEJO, CA 94591** **ECHO**
0.143 mi. **HAZNET**
756 ft. **Site 7 of 8 in cluster C** **HWTS**

Relative: **Lower**
Actual: **34 ft.**

RCRA-SQG:

Date Form Received by Agency:		19920909
Handler Name:	BIG 4 RENTS VALLEJO	
Handler Address:		1600 BENICIA RD
Handler City,State,Zip:		VALLEJO, CA 94591
EPA ID:		CAD983647595
Contact Name:		MARDELL SARKELA
Contact Address:		P O BOX 2939
Contact City,State,Zip:		ROHNERT PARK, CA 94927
Contact Telephone:		707-586-4413
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		09
Land Type:		Private
Federal Waste Generator Description:		Small Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1600 BENICIA RD
Mailing City,State,Zip:		VALLEJO, CA 94591
Owner Name:		CHARLES BRADLEY
Owner Type:		Private
Operator Name:		Not reported
Operator Type:		Not reported
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		NN
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

BIG 4 RENTS VALLEJO (Continued) **1000818845**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20020627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CHARLES BRADLEY
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	P O BOX 2939
Owner/Operator City,State,Zip:	ROHNERT PARK, CA 94927
Owner/Operator Telephone:	707-586-4413
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19920909
Handler Name: BIG 4 RENTS VALLEJO	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

BIG 4 RENTS VALLEJO (Continued) **1000818845**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002884120

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000818845
Registry ID: 110002884120
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002884120
Name: BIG 4 RENTS VALLEJO
Address: 1600 BENICIA RD
City,State,Zip: VALLEJO, CA 94591

HAZNET:
Name: BIG 4 RENTS VALLEJO
Address: 1600 BENICIA RD
Address 2: Not reported
City,State,Zip: VALLEJO, CA 945910000
Contact: INACTIVE PER '96 FEES
Telephone: 7075864444
Mailing Name: Not reported
Mailing Address: PO BOX 2939

Year: 1995
Gepaid: CAD983647595
TSD EPA ID: CAD083166728
CA Waste Code: 223 - Unspecified oil-containing waste
Disposal Method: R01 - Recycler
Tons: 15.846

Year: 1995

BIG 4 RENTS VALLEJO (Continued) **1000818845**

Gepaid:	CAD983647595
TSD EPA ID:	CAD980883177
CA Waste Code:	223 - Unspecified oil-containing waste
Disposal Method:	R01 - Recycler
Tons:	8.34
Year:	1995
Gepaid:	CAD983647595
TSD EPA ID:	CAD004771168
CA Waste Code:	-
Disposal Method:	R01 - Recycler
Tons:	0.075
Year:	1995
Gepaid:	CAD983647595
TSD EPA ID:	CAD004771168
CA Waste Code:	512 - Other empty containers 30 gallons or more
Disposal Method:	R01 - Recycler
Tons:	3.5
Year:	1994
Gepaid:	CAD983647595
TSD EPA ID:	CAD980887418
CA Waste Code:	221 - Waste oil and mixed oil
Disposal Method:	R01 - Recycler
Tons:	15.2

Additional Info:

Year:	1994
Gen EPA ID:	CAD983647595
Shipment Date:	19941123
Creation Date:	3/28/1996 0:00:00
Receipt Date:	19941123
Manifest ID:	92856118
Trans EPA ID:	CAD980695761
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980887418
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD980887418
TSDF Alt Name:	Not reported
Waste Code Description:	221 - Waste oil and mixed oil
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	15.2
Waste Quantity:	4000
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

BIG 4 RENTS VALLEJO (Continued) **1000818845**

Additional Info:

Year:	1995
Gen EPA ID:	CAD983647595
Shipment Date:	19950526
Creation Date:	4/2/1996 0:00:00
Receipt Date:	19950531
Manifest ID:	95208193
Trans EPA ID:	CAD004771168
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD083166728
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD083166728
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	15.846
Waste Quantity:	3800
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950504
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950504
Manifest ID:	95208064
Trans EPA ID:	CAD004771168
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD004771168
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD004771168
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	2
Waste Quantity:	4000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950504
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950504
Manifest ID:	95208064
Trans EPA ID:	CAD004771168

BIG 4 RENTS VALLEJO (Continued) **1000818845**

Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD004771168
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD004771168
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	1
Waste Quantity:	2000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19950504
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950504
Manifest ID:	95208064
Trans EPA ID:	CAD004771168
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD004771168
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD004771168
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19950504
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950504
Manifest ID:	95208064
Trans EPA ID:	CAD004771168
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD004771168
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD004771168
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported

BIG 4 RENTS VALLEJO (Continued) **1000818845**

Meth Code:	R01 - Recycler
Quantity Tons:	0.5
Waste Quantity:	1000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950503
Creation Date:	10/23/1995 0:00:00
Receipt Date:	19950508
Manifest ID:	95208051
Trans EPA ID:	CAD004771168
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980883177
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD980883177
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	8.34
Waste Quantity:	2000
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	BIG 4 RENTS VALLEJO
Address:	1600 BENICIA RD
Address 2:	Not reported
City,State,Zip:	VALLEJO, CA 945910000
EPA ID:	CAD983647595
Inactive Date:	06/30/1996
Create Date:	09/09/1992
Last Act Date:	08/10/2004
Mailing Name:	Not reported
Mailing Address:	PO BOX 2939
Mailing Address 2:	Not reported
Mailing City,State,Zip:	ROHNERT PARK, CA 949280000
Owner Name:	CORP
Owner Address:	P O BOX 2939
Owner Address 2:	Not reported
Owner City,State,Zip:	ROHNERT PARK, CA 949280000
Contact Name:	INACTIVE PER '96 FEES
Contact Address:	5500 COMMERCE BLVD/PO BOX 2939
Contact Address 2:	Not reported
City,State,Zip:	ROHNERT PARK, CA 949280000

NAICS:

BIG 4 RENTS VALLEJO (Continued) **1000818845**

EPA ID:	CAD983647595
Create Date:	2002-03-14 16:36:27.000
NAICS Code:	2349
NAICS Description:	Other Heavy Construction
Issued EPA ID Date:	1992-09-09 00:00:00
Inactive Date:	1996-06-30 00:00:00
Facility Name:	BIG 4 RENTS VALLEJO
Facility Address:	1600 BENICIA RD
Facility Address 2:	Not reported
Facility City:	VALLEJO
Facility County:	Not reported
Facility State:	CA
Facility Zip:	945910000

C16 **SIRI CONSTRUCTION CO** **HIST UST** **U001596300**
ENE **1855 BENICIA ROAD** **N/A**
1/8-1/4 **BENICIA, CA 94510**
0.188 mi.
992 ft. **Site 8 of 8 in cluster C**

Relative: HIST UST:
Lower

Actual: Name:	SIRI CONSTRUCTION CO
8 ft. Address:	1855 BENICIA ROAD
City,State,Zip:	BENICIA, CA 94510
File Number:	0002119A
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002119A.pdf
Region:	STATE
Facility ID:	00000010581
Facility Type:	Other
Other Type:	CONSTRUCTION CO.
Contact Name:	Not reported
Telephone:	7075523464
Owner Name:	ANDREW F. SIRI
Owner Address:	716 WEST H STREET
Owner City,St,Zip:	BENICIA, CA 94510
Total Tanks:	0001
Tank Num:	001
Container Num:	A
Year Installed:	1979
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

17
ENE
1/8-1/4
0.234 mi.
1233 ft.

SIRI CONSTRUCTION
1855 BENICIA RD
VALLEJO, CA 94591

UST **U003530558**
N/A

Relative:
Lower

Actual:
9 ft.

SOLANO CO. UST:

Name:	SIRI CONSTRUCTION
Address:	1855 BENICIA RD
City,State,Zip:	VALLEJO, CA 94591
Facility Id:	80057
Facility Status:	Inactive
Decode for Facility Status:	Closed
Facility Phone:	707-552-3496
Inventory Number:	1
Inventory Type:	Underground Storage Tank (1)
Inventory Description:	Not reported
Permit Expire/Last Service:	Not reported
Last Service Date:	Not reported
District:	SUP-DIST NO 3032
Inspector:	Nicolet, Brad

18
NNE
1/8-1/4
0.240 mi.
1268 ft.

GREENMONT SANITARY PUMP STATION
230 GREENMONT DR
VALLEJO, CA 94591

CERS HAZ WASTE **S121763737**
CERS **N/A**

Relative:
Lower

Actual:
61 ft.

CERS HAZ WASTE:

Name:	GREENMONT SANITARY PUMP STATION
Address:	230 GREENMONT DR
City,State,Zip:	VALLEJO, CA 94591
Site ID:	34386
CERS ID:	10402201
CERS Description:	Hazardous Waste Generator

CERS:

Name:	GREENMONT SANITARY PUMP STATION
Address:	230 GREENMONT DR
City,State,Zip:	VALLEJO, CA 94591
Site ID:	34386
CERS ID:	10402201
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	34386
Site Name:	Greenmont Sanitary Pump Station
Violation Date:	04-28-2016
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 06/05/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection

GREENMONT SANITARY PUMP STATION (Continued) **S121763737**

Eval Date: 04-28-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Coordinates:
Site ID: 34386
Facility Name: Greenmont Sanitary Pump Station
Env Int Type Code: HWG
Program ID: 10402201
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 38.087170
Longitude: -122.197400

Affiliation:
Affiliation Type Desc: CUPA District
Entity Name: Solano County Env Health
Entity Title: Not reported
Affiliation Address: 675 Texas Street, Suite 5500
Affiliation City: Fairfield
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94533
Affiliation Phone: (707) 784-6765,

Affiliation Type Desc: Document Preparer
Entity Name: Jennifer Harrington
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 450 Ryder St.
Affiliation City: Vallejo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94590
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: Public Entity, Special District
Entity Title: Not reported
Affiliation Address: 450 Ryder St.
Affiliation City: Vallejo
Affiliation State: CA
Affiliation Country: United States

GREENMONT SANITARY PUMP STATION (Continued) **S121763737**

Affiliation Zip:	94590
Affiliation Phone:	(707) 644-8949,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Jennifer Harrington
Entity Title:	Not reported
Affiliation Address:	450 Ryder St.
Affiliation City:	Vallejo
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94590
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Vallejo Sanitation & Flood Control District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 644-8948,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Vallejo Sanitation & Flood Control District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Jennifer Harrington
Entity Title:	Environmental Services Director
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

D19 **ST VINCENT'S CEMETERY** **LUST U003895720**
NW **550 GLEN COVE RD** **UST N/A**
1/4-1/2 **VALLEJO, CA 94591**
0.455 mi.
2405 ft. **Site 1 of 2 in cluster D**

Relative:
Higher

Actual:
199 ft.

SOLANO CO. LUST:

Name:	ST VINCENT'S CEMETERY
Address:	550 GLEN COVE RD
City,State,Zip:	VALLEJO, CA 94591
Region:	SOLANO
Facility ID:	10840
Facility Status:	I
Facility Status Desc:	Inactive

ST VINCENT'S CEMETERY (Continued) **U003895720**

Facility Phone: 707-644-5209
Program: 29S
Inventory Number: 1
Inventory Type: LOP - Closed Site (128)
Inventory Description: Not reported
Last service/permit exp: Not reported
Last service date: Not reported
District: SUP-DIST NO 3037
Inspector: Kaltreider, Misty
Call Back: Not reported

SOLANO CO. UST:
Name: ST VINCENT'S CEMETERY
Address: 550 GLEN COVE RD
City,State,Zip: VALLEJO, CA 94591
Facility Id: 10840
Facility Status: Inactive
Decode for Facility Status: Closed
Facility Phone: 707-644-5209

Inventory Number: 1
Inventory Type: Underground Storage Tank (1)
Inventory Description: Not reported
Permit Expire/Last Service: Not reported
Last Service Date: Not reported
District: SUP-DIST NO 3032
Inspector: Nicolet, Brad

D20 **ALL SOULS CEMETERY** **LUST** **S104493352**
NW **550 GLEN COVE RD** **Cortese** **N/A**
1/4-1/2 **VALLEJO, CA 94590** **HIST CORTESE**
0.455 mi. **NPDES**
2405 ft. **Site 2 of 2 in cluster D** **CIWQS**
CERS

Relative:
Higher

Actual:
199 ft.

LUST:
Name: ALL SOULS CEMETERY
Address: 550 GLEN COVE RD
City,State,Zip: VALLEJO, CA 94590
Lead Agency: SOLANO COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500235
Global Id: T0609500235
Latitude: 38.0834146
Longitude: -122.2125454
Status: Completed - Case Closed
Status Date: 08/10/1994
Case Worker: Not reported
RB Case Number: 48-0255
Local Agency: SOLANO COUNTY
File Location: Not reported
Local Case Number: 10840
Potential Media Affect: Under Investigation
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0609500235

ALL SOULS CEMETERY (Continued) **S104493352**

Contact Type: Local Agency Caseworker
Contact Name: SOLANO COUNTY
Organization Name: SOLANO COUNTY
Address: 675 TEXAS STREET, SUITE 2500
City: FAIRFIELD
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0609500235
Action Type: Other
Date: 03/09/1994
Action: Leak Discovery

Global Id: T0609500235
Action Type: Other
Date: 03/28/1994
Action: Leak Reported

Global Id: T0609500235
Action Type: ENFORCEMENT
Date: 06/06/1994
Action: Closure/No Further Action Letter

Global Id: T0609500235
Action Type: Other
Date: 03/02/1994
Action: Leak Stopped

LUST:
Global Id: T0609500235
Status: Open - Case Begin Date
Status Date: 03/02/1994

Global Id: T0609500235
Status: Open - Site Assessment
Status Date: 03/28/1994

Global Id: T0609500235
Status: Completed - Case Closed
Status Date: 08/10/1994

LUST REG 2:
Region: 2
Facility Id: 48-0255
Facility Status: Case Closed
Case Number: 10840
How Discovered: Tank Closure
Leak Cause: Corrosion
Leak Source: UNK
Date Leak Confirmed: 3/28/1994
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported

ALL SOULS CEMETERY (Continued) **S104493352**

Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

CORTESE:

Name:	ALL SOULS CEMETERY
Address:	550 GLEN COVE RD
City,State,Zip:	VALLEJO, CA 94590
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0609500235
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

HIST CORTESE:

edr_fname:	ALL SOULS CEMETERY
edr_fadd1:	550 GLEN COVE
City,State,Zip:	VALLEJO, CA 94591
Region:	CORTESE
Facility County Code:	48
Reg By:	LTNKA
Reg Id:	48-0255

NPDES:

Name:	ALL SOULS CEMETERY
Address:	550 GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94591
Facility Status:	Active
NPDES Number:	CAS000002
Region:	2
Agency Number:	0
Regulatory Measure ID:	535945
Place ID:	Not reported
Order Number:	2009-0009-DWQ
WDID:	2 48C394498
Regulatory Measure Type:	Enrollee
Program Type:	Construction
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	07/19/2021
Termination Date Of Regulatory Measure:	Not reported

ALL SOULS CEMETERY (Continued) **S104493352**

Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	2110 Broadway
Discharge Name:	Roman Catholic Bishop of Sacramento a Corp Sole
Discharge City:	Sacramento
Discharge State:	California
Discharge Zip:	95818
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

Name:	ALL SOULS CEMETERY
Address:	550 GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94591
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	2 48C394498
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	07/19/2021
Operator Name:	Roman Catholic Bishop of Sacramento a Corp Sole
Operator Address:	2110 Broadway
Operator City:	Sacramento
Operator State:	California
Operator Zip:	95818

CIWQS:

Name:	ALL SOULS CEMETERY
Address:	550 GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94591
Agency:	Roman Catholic Bishop of Sacramento a Corp Sole
Agency Address:	2110 Broadway 277, Sacramento, CA 95818
Place/Project Type:	Construction - Commercial
SIC/NAICS:	Not reported
Region:	2
Program:	CONSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ

ALL SOULS CEMETERY (Continued) **S104493352**

WDID:	2 48C394498
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	07/19/2021
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.08784
Longitude:	-122.2079

CERS:

Name:	ALL SOULS CEMETERY
Address:	550 GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94591
Site ID:	578519
CERS ID:	893816
CERS Description:	Construction Storm Water

Affiliation:

Affiliation Type Desc:	Owner/Operator
Entity Name:	Roman Catholic Bishop of Sacramento a Corp Sole
Entity Title:	Operator
Affiliation Address:	2110 Broadway277
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95818
Affiliation Phone:	,

Name:	ALL SOULS CEMETERY
Address:	550 GLEN COVE RD
City,State,Zip:	VALLEJO, CA 94590
Site ID:	254108
CERS ID:	T0609500235
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	SOLANO COUNTY - SOLANO COUNTY
Entity Title:	Not reported
Affiliation Address:	675 TEXAS STREET, SUITE 2500
Affiliation City:	FAIRFIELD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

21
NW
1/4-1/2
0.481 mi.
2539 ft.

ROLLINGWOOD MIDDLE SCHOOL
ROLLINGWOOD DRIVE/BENICIA ROAD
VALLEJO, CA 94591

ENVIROSTOR SCH | **S105628981 N/A**

Relative: Higher

Actual: 183 ft.

ENVIROSTOR:

Name:	ROLLINGWOOD MIDDLE SCHOOL
Address:	ROLLINGWOOD DRIVE/BENICIA ROAD
City,State,Zip:	VALLEJO, CA 94591
Facility ID:	48780001
Status:	Inactive - Withdrawn
Status Date:	11/18/2004
Site Code:	204098
Site Type:	School Cleanup
Site Type Detailed:	School
Acres:	32.13
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Kamili Siglowide
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Assembly:	14
Senate:	03
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	38.0891
Longitude:	-122.2083
APN:	NONE SPECIFIED
Past Use:	* MOTION PICTURES
Potential COC:	Arsenic
Confirmed COC:	Arsenic
Potential Description:	SOIL
Alias Name:	ROLLINGWOOD MIDDLE SCHOOL
Alias Type:	Alternate Name
Alias Name:	VALLEJO CITY UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	VALLEJO CITY USD-ROLLINGWOOD MID SCHOOL
Alias Type:	Alternate Name
Alias Name:	110033607014
Alias Type:	EPA (FRS #)
Alias Name:	204098
Alias Type:	Project Code (Site Code)
Alias Name:	48780001
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	09/25/2003
Comments:	DTSC approved the Preliminary Endangerment Assessment and determined that further investigation and or remediation is required at the proposed Rollingwood Middle School.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

ROLLINGWOOD MIDDLE SCHOOL (Continued) **S105628981**

Completed Document Type: Phase 1
Completed Date: 06/13/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 09/18/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 11/18/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 09/12/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 10/26/2007
Comments: The Phase 1, PEA Workplan and PEA report were loaded into EnvirStor.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 09/18/2002
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: ROLLINGWOOD MIDDLE SCHOOL
Address: ROLLINGWOOD DRIVE/BENICIA ROAD
City,State,Zip: VALLEJO, CA 94591
Facility ID: 48780001
Site Type: School Cleanup
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 32.13
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP

ROLLINGWOOD MIDDLE SCHOOL (Continued) **S105628981**

Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Kamili Siglowide
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Site Code:	204098
Assembly:	14
Senate:	03
Special Program Status:	Not reported
Status:	Inactive - Withdrawn
Status Date:	11/18/2004
Restricted Use:	NO
Funding:	School District
Latitude:	38.0891
Longitude:	-122.2083
APN:	NONE SPECIFIED
Past Use:	* MOTION PICTURES
Potential COC:	Arsenic
Confirmed COC:	Arsenic
Potential Description:	SOIL
Alias Name:	ROLLINGWOOD MIDDLE SCHOOL
Alias Type:	Alternate Name
Alias Name:	VALLEJO CITY UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	VALLEJO CITY USD-ROLLINGWOOD MID SCHOOL
Alias Type:	Alternate Name
Alias Name:	110033607014
Alias Type:	EPA (FRS #)
Alias Name:	204098
Alias Type:	Project Code (Site Code)
Alias Name:	48780001
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	09/25/2003
Comments:	DTSC approved the Preliminary Endangerment Assessment and determined that further investigation and or remediation is required at the proposed Rollingwood Middle School.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	06/13/2002
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	09/18/2002
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	11/18/2004
Comments:	Not reported

ROLLINGWOOD MIDDLE SCHOOL (Continued) **S105628981**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	09/12/2002
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	10/26/2007
Comments:	The Phase 1, PEA Workplan and PEA report were loaded into EnvirStor.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	09/18/2002
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

22
West
1/2-1
0.556 mi.
2937 ft.

SHADOW RIDGE
GLEN COVE ROAD
VALLEJO, CA 94951

RESPONSE **S101007153**
ENVIROSTOR **N/A**
HIST Cal-Sites
CERS

Relative:
Higher

Actual:
198 ft.

RESPONSE:

Name:	SHADOW RIDGE
Address:	GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94951
Facility ID:	48990005
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0
National Priorities List:	NO
Cleanup Oversight Agencies:	HWMP
Lead Agency Description:	DTSC - Hazardous Waste Management Program
Project Manager:	Not reported
Supervisor:	Daniel Murphy
Division Branch:	Cleanup Berkeley
Site Code:	Not reported
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	14
Senate:	03
Special Program Status:	Not reported
Status:	Certified
Status Date:	04/01/1985
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	38.0832

SHADOW RIDGE (Continued) **S101007153**

Longitude:	-122.2127
APN:	NONE SPECIFIED
Past Use:	UNKNOWN
Potential COC :	Lead, Organic (tetraethyl lead
Confirmed COC:	Lead, Organic (tetraethyl lead
Potential Description:	SOIL
Alias Name:	110033605640
Alias Type:	EPA (FRS #)
Alias Name:	48990005
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Certification
Completed Date:	04/01/1985
Comments:	Our records do not indicate the actual date this site was certified. Our records show 04/1985. We have used the date 04/01/1985 because this gives us the earliest statute of limitations.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

ENVIROSTOR:

Name:	SHADOW RIDGE
Address:	GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94951
Facility ID:	48990005
Status:	Certified
Status Date:	04/01/1985
Site Code:	Not reported
Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	0
NPL:	NO
Regulatory Agencies:	HWMP
Lead Agency:	HWMP
Program Manager:	Not reported
Supervisor:	Daniel Murphy
Division Branch:	Cleanup Berkeley
Assembly:	14
Senate:	03
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	38.0832
Longitude:	-122.2127
APN:	NONE SPECIFIED
Past Use:	UNKNOWN

SHADOW RIDGE (Continued) **S101007153**

Potential COC: Lead, Organic (tetraethyl lead
Confirmed COC: Lead, Organic (tetraethyl lead
Potential Description: SOIL
Alias Name: 110033605640
Alias Type: EPA (FRS #)
Alias Name: 48990005
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 04/01/1985
Comments: Our records do not indicate the actual date this site was certified.
Our records show 04/1985. We have used the date 04/01/1985 because this gives us the earliest statute of limitations.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Calsite:
Name: SHADOW RIDGE
Address: GLEN COVE ROAD
City: VALLEJO
Region: SACRAMENTO
Facility ID: 48990005
Facility Type: RP
Type: RESPONSIBLE PARTY
Branch: CC
Branch Name: CENTRAL CALIFORNIA
File Name: Not reported
State Senate District: 04011985
Status: CERTIFIED AS HAVING BEEN REMEDIED SATISFACTORILY UNDER DTSC OVERSIGHT
Status Name: CERTIFIED
Lead Agency: N/A
NPL: Not reported
SIC Code: 99
SIC Name: NONCLASSIFIABLE ESTABLISHMENTS
Access: Not reported
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Not reported
Staff Member Responsible for Site: Not reported
Supervisor Responsible for Site: Not reported
Region Water Control Board: Not reported
Region Water Control Board Name: Not reported
Lat/Long Direction: Not reported
Lat/Long (dms): 0 0 0 / 0 0 0
Lat/long Method: Not reported

SHADOW RIDGE (Continued) **S101007153**

Lat/Long Description:	Not reported
State Assembly District Code:	07
State Senate District Code:	02
Facility ID:	48990005
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04011985
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	GLEN COVE ROAD
Alternate City,St,Zip:	VALLEJO, CA 94951
Background Info:	Not reported
Comments Date:	01261996
Comments:	Our records do not indicate the actual date this site was
Comments Date:	01261996
Comments:	certified. Our records show 04/1985. We have used the date
Comments Date:	01261996
Comments:	04/01/1985 because this gives us the earliest statute of
Comments Date:	01261996
Comments:	limitations.
Comments Date:	04011985
Comments:	100 cubic yards of contaminated soil were removed.
Comments Date:	04011985
Comments:	This certification was confirmed by a report prepared by the
Comments Date:	04011985
Comments:	Auditor General. The Auditor General conducted an audit of
Comments Date:	04011985
Comments:	the Department's records to confirm a list of sites where
Comments Date:	04011985
Comments:	the Department was involved in the cleanup and the cleanup
Comments Date:	04011985
Comments:	had been completed. This Auditor General list became the
Comments Date:	04011985
Comments:	basis for our historical certification information. Many of
Comments Date:	04011985
Comments:	the sites on this list were handled by our Surveillance and
Comments Date:	04011985
Comments:	Enforcement Staff. Much of this work was in response to
Comments Date:	04011985

SHADOW RIDGE (Continued) **S101007153**

Comments:	complaints from the public or reports from industry and the
Comments Date:	04011985
Comments:	response action may have only addressed the immediate
Comments Date:	04011985
Comments:	problem and not the entire facility.
ID Name:	Not reported
ID Value:	Not reported
Alternate Name:	SHADOW RIDGE
Alternate Name:	Not reported
Special Programs Code:	Not reported
Special Programs Name:	Not reported

CERS:

Name:	SHADOW RIDGE
Address:	GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94951
Site ID:	342879
CERS ID:	48990005
CERS Description:	State Response

Affiliation:

Affiliation Type Desc:	Supervisor
Entity Name:	DANIEL MURPHY
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

---

23 **SOUTHAMPTON/COMPANY/BLAKE COURT** **RESPONSE** **S100714944**
ENE **ROSE DRIVE/BLAKE COURT** **ENVIROSTOR** **N/A**
1/2-1 **BENICIA, CA 94510** **HIST Cal-Sites**
0.794 mi.
4194 ft.

Relative:
Higher

Actual:
168 ft.

RESPONSE:

Name:	SOUTHAMPTON/COMPANY/BLAKE COURT
Address:	ROSE DRIVE/BLAKE COURT
City,State,Zip:	BENICIA, CA 94510
Facility ID:	48490011
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Darrell Nations
Supervisor:	Susan Fears
Division Branch:	Cleanup Legacy Landfills
Site Code:	200290
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	14
Senate:	03
Special Program Status:	Not reported
Status:	Certified

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Status Date:	07/01/2002
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	38.08670
Longitude:	-122.1852
APN:	NONE SPECIFIED
Past Use:	LANDFILL - HAZARDOUS WASTE
Potential COC :	* HALOGENATED SOLVENTS * OXYGENATED SOLVENTS * EMPTY PESTICIDE CONTAINERS, 30 GALLONS OR MORE * Sludge - Sewage * TANK BOTTOM WASTES * UNSPECIFIED OIL CONTAINING WASTE * FLY ASH, BOTTOM ASH & RETORT ASH * WASTE POTENTIALLY CONTAINING DIOXINS Lead Polychlorinated biphenyls (PCBs Chromium VI Cyanide (free Nickel
Confirmed COC:	* WASTE POTENTIALLY CONTAINING DIOXINS * Sludge - Sewage * TANK BOTTOM WASTES * UNSPECIFIED OIL CONTAINING WASTE
Potential Description:	SOIL, SV
Alias Name:	BLAKE COURT/ROSE DRIVE
Alias Type:	Alternate Name
Alias Name:	BRAITO DUMP
Alias Type:	Alternate Name
Alias Name:	BRAITO LANDFILL (NORTH CANYON)
Alias Type:	Alternate Name
Alias Name:	SOLANO COUNTY SANITARY LANDFILL
Alias Type:	Alternate Name
Alias Name:	110033616825
Alias Type:	EPA (FRS #)
Alias Name:	200290
Alias Type:	Project Code (Site Code)
Alias Name:	48490011
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation / Feasibility Study
Completed Date:	05/08/1997
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	03/07/1996
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	02/15/1996
Comments:	Removal Action: Tires - Approximately 150 cubic yards of investigation accumulated waste (including leather scraps and associated soil) were transported to BFI Keller Canyon Landfill in Pittsburg, California. Approximately 1,100 cubic yards of leather and associated soil were transported to Altamont Landfill in Livermore, California. Additionally, 154 tires were removed from the excavation and transported to Big Sky Enterprises, in Benicia California for recycling. The completed excavation was approximately 134 feet long by 30 feet wide by 10 feet at its deepest point. Removal Activities continued until background levels were achieved. Confirmation samples were collected 2 feet beyond observed waste (in each direction). 22

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

confirmation samples were collected (10 side wall samples and 12 bottom samples) and analyzed for total and hexavalent chromium.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Engineering Evaluation / Cost Analysis
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 09/27/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 12/11/1995
Comments: CEQA - Obtained negative declaration for removal of wastes from the "Tires and Hides" area within the Braito Landfill site. Removal action completed 2/15/96.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Order
Completed Date: 05/15/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Triage Meeting
Completed Date: 07/20/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 09/25/1994
Comments: Consent Order

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:
Name: SOUTHAMPTON/COMPANY/BLAKE COURT
Address: ROSE DRIVE/BLAKE COURT
City,State,Zip: BENICIA, CA 94510
Facility ID: 48490011
Status: Certified
Status Date: 07/01/2002
Site Code: 200290
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Darrell Nations
Supervisor: Susan Fears
Division Branch: Cleanup Legacy Landfills
Assembly: 14
Senate: 03
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 38.08670
Longitude: -122.1852
APN: NONE SPECIFIED
Past Use: LANDFILL - HAZARDOUS WASTE
Potential COC: * HALOGENATED SOLVENTS * OXYGENATED SOLVENTS * EMPTY PESTICIDE CONTAINERS, 30 GALLONS OR MORE * Sludge - Sewage * TANK BOTTOM WASTES * UNSPECIFIED OIL CONTAINING WASTE * FLY ASH, BOTTOM ASH & RETORT ASH * WASTE POTENTIALLY CONTAINING DIOXINS Lead Polychlorinated biphenyls (PCBs Chromium VI Cyanide (free Nickel
Confirmed COC: * WASTE POTENTIALLY CONTAINING DIOXINS * Sludge - Sewage * TANK BOTTOM WASTES * UNSPECIFIED OIL CONTAINING WASTE
Potential Description: SOIL, SV
Alias Name: BLAKE COURT/ROSE DRIVE
Alias Type: Alternate Name
Alias Name: BRAITO DUMP
Alias Type: Alternate Name
Alias Name: BRAITO LANDFILL (NORTH CANYON)
Alias Type: Alternate Name
Alias Name: SOLANO COUNTY SANITARY LANDFILL
Alias Type: Alternate Name
Alias Name: 110033616825
Alias Type: EPA (FRS #)
Alias Name: 200290
Alias Type: Project Code (Site Code)
Alias Name: 48490011
Alias Type: Envirostor ID Number

Completed Info:

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 05/08/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 03/07/1996
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 02/15/1996
Comments: Removal Action: Tires - Approximately 150 cubic yards of investigation accumulated waste (including leather scraps and associated soil) were transported to BFI Keller Canyon Landfill in Pittsburg, California. Approximately 1,100 cubic yards of leather and associated soil were transported to Altamont Landfill in Livermore, California. Additionally, 154 tires were removed from the excavation and transported to Big Sky Enterprises, in Benicia California for recycling. The completed excavation was approximately 134 feet long by 30 feet wide by 10 feet at its deepest point. Removal Activities continued until background levels were achieved. Confirmation samples were collected 2 feet beyond observed waste (in each direction). 22 confirmation samples were collected (10 side wall samples and 12 bottom samples) and analyzed for total and hexavalent chromium.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Engineering Evaluation / Cost Analysis
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 09/27/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Completed Date: 12/11/1995
Comments: CEQA - Obtained negative declaration for removal of wastes from the "Tires and Hides" area within the Braito Landfill site. Removal action completed 2/15/96.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Order
Completed Date: 05/15/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Triage Meeting
Completed Date: 07/20/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 09/25/1994
Comments: Consent Order

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Calsite:
Name: SOUTHAMPTON/COMPANY/BLAKE COURT
Address: ROSE DRIVE/BLAKE COURT
City: BENICIA
Region: BERKELEY
Facility ID: 48490011
Facility Type: RP
Type: RESPONSIBLE PARTY
Branch: ST
Branch Name: STRINGFELLOW
File Name: Not reported
State Senate District: 01261996
Status: ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name: ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL
NPL: Not Listed
SIC Code: 49
SIC Name: ELECTRIC, GAS & SANITARY SERVICES
Access: Controlled
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Not reported
Staff Member Responsible for Site: PRUFFIN

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Supervisor Responsible for Site:	Not reported
Region Water Control Board:	SF
Region Water Control Board Name:	SAN FRANCISCO BAY
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	08
State Senate District Code:	02
Facility ID:	48490011
Activity:	SS
Activity Name:	SITE SCREENING
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09271991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	METH1
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Facility ID:	48490011
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	DRUMS
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	REMOVAL OF 76 DRUMS OF SOIL CUTTING & RINSE WATER CONTAINING ELEVATEDCONCENTRATION LEVELS OF PB AND CU; AND 3 ROLL-OFF BINS CONTAINING SOIL& DEBRIS & ORGANIC MATTER.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	WELLS
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	X
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	CLOSURE OF AN "ABANDONED WELL" DISCOVERED IN CLOSE PROXIMITY TOSOUTHAMPTON SITE AND THE EAST CANYON LANDFILL.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Revised Due Date:	Not reported
Comments Date:	05151995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	TIRES
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	02151996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	1250
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	150 CUBIC YARDS OF INVESTIGATION ACCUMULATED WASTE TRANSPORTED-BFIKELLER CANYON LANDFILL. 1,100 CUBIC YARDS OF LEATHER & ASSOC SOILTRANSPORTED-ALTAMONT LANDFILL. 154 TIRES TRANSPORTED-BIG SKY ENTER.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	03041999
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	02181999
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	DES
Activity Name:	DESIGN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	06241999
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	06292000
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	09302000
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	TIRES
Proposed Budget:	0
AWP Completion Date:	Not reported

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Revised Due Date:	Not reported
Comments Date:	12111995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	TANK
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03071996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	1550
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	NO SIGNIFICANT GROUND WATER CONTAMINATION DETECTED.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05081997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	ROSE DRIVE/BLAKE COURT
Alternate City,St,Zip:	BENECIA, CA 94510
Alternate Address:	BLAKE COURT
Alternate City,St,Zip:	BENECIA, CA 94510
Alternate Address:	ROSE DRIVE/BLAKE COURT
Alternate City,St,Zip:	BENICIA, CA 94510
Background Info:	A portion of the Southampton community was formerly occupied by the Braito landfill, also referred to as the Solano County Sanitary Landfill. From about 1955 to 1978, the site was privately owned and operated, pursuant to permits issued by the Solano County Department of Environmental Management (SCDEM) and Bay Area Regional Water Quality Control Board (RWQCB), as a sanitary landfill. The landifll operated primarily in two areas: the 12.3 acre east canyon site and the 6.4 acre north canyon site. The area subject to this environmental investigation is the north canyon site. Historically the landfill was not classified as a hazardous or toxic materials disposal site, but rather a Class III landfill. However, historical records show that hazardous wastes (e.g. tannery wastes) were also disposed at the site, and that several related enforcement actions were taken. In the early 1980's, following transfer of site ownership to Southampton Comapny, excavation of most of the landfilled wastes, and RWQCB approved closure, houses were constructed at the site. Homes were never constructed on the Blake Court lots, however, apparently due to the high cost of stabilizing these prospective home sites, i.e., the costs of engineering measures to mitigate foundation conditions. During site excavation and grading activities, the decision had been made to leave wastes at Blake Court because the wastes appeared to be "substantially decomposed" In June of 1991, the discovery of subsidence in the backyard of one of the homes (Lot 50), led to the discovery of a soft "black material" (believed to be tannery wastes) buired beneath that home and adjacent lots. In the widening investigation that ensued, it has become apparent that approximately 24,000cy of hazardous waste (i.e. 22,000 cy of refuse and 2,200 cy of black material) remained buried at the site. Investigative work today has included soil and groundwater sampling and testing (for site characterization and waste classification purposes), soil gas testing, a geophysical survey, and slope stability study. The responsible parties completed the remedial investigation/feasibility study in March 1997. Not reported

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

	Not reported
	Not reported
	Not reported
Comments Date:	02151996
Comments:	yards of leather and associated soil were transported to
Comments Date:	02151996
Comments:	Altamont Landfill in Livermore, California. Additionally,
Comments Date:	02151996
Comments:	154 tires were removed from the excavation and transported
Comments Date:	02151996
Comments:	to Big Sky Enterprises, in Benicia California for recycling.
Comments Date:	02151996
Comments:	The completed excavation was approximately 134 feet long by
Comments Date:	02151996
Comments:	30 feet wide by 10 feet at its deepest point. Removal
Comments Date:	02151996
Comments:	Activities continued until background levels were achieved.
Comments Date:	02151996
Comments:	Confirmation samples were collected 2 feet beyond observed
Comments Date:	02151996
Comments:	waste (in each direction). 22 confirmation samples were
Comments Date:	02151996
Comments:	collected (10 side wall samples and 12 bottom samples) and
Comments Date:	02151996
Comments:	analyzed for total and hexavalent chromium.
Comments Date:	06051997
Comments:	Until 6/5/97, this site had been identified as being listed on
Comments Date:	06051997
Comments:	the Annual Workplan List as of 9/27/91 which was an error. When
Comments Date:	06051997
Comments:	the site was changed from Removal Required which is how it was
Comments Date:	06051997
Comments:	first listed in CalSites, the date was not changed. We have
Comments Date:	06051997
Comments:	reviewed our past hard copy printouts of the AWP lists and this
Comments Date:	06051997
Comments:	site does not appear on them until the FY 95/96 list. The date
Comments Date:	06051997
Comments:	of that list is 1/26/96 which is why we've use this status date.
Comments Date:	10071993
Comments:	The initial site investigation work was directed by the
Comments Date:	10071993
Comments:	SCDEM. The local agency relinquished project management
Comments Date:	10071993
Comments:	responsibility to DTSC-Region 2 when the magnitude of the
Comments Date:	10071993
Comments:	problem became apparent. Oversight responsibility was
Comments Date:	10071993
Comments:	subsequently transferred to HQ-PDTS Branch in January , 1993
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	Activities since that transfer have included soil and
Comments Date:	10071993
Comments:	groundwater sampling and testing, methane gas monitoring
Comments Date:	10071993
Comments:	within selected homes, a geophysical (GPR) survey, a slope

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Comments Date:	10071993
Comments:	stability investigation, and a subsurface methane migration
Comments Date:	10071993
Comments:	study. As a result of discoveries of characteristically
Comments Date:	10071993
Comments:	distinct wastes at different geographical locations, the
Comments Date:	10071993
Comments:	site has been divided into four operable units. These are:
Comments Date:	10071993
Comments:	OU1 - Lots 47, 59, 51 and portions of Parcel C1 (Black
Comments Date:	10071993
Comments:	Material Unit): OU2 - Lots 41 through 47 and portions of
Comments Date:	10071993
Comments:	Parcel C1 (Blake Court and Parcel C1 Refuse): OU3 - Lots 84
Comments Date:	10071993
Comments:	through 92 and 33 through 40 (Hydrocarbon Area); and OU4 -
Comments Date:	10071993
Comments:	principally lots 77 through 82 (Creek Bed Refuse). OU1
Comments Date:	10071993
Comments:	was fenced and posted following the appearance of a sinkhole
Comments Date:	10071993
Comments:	in the back yard of lot 50.
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	A consent order was signed on May 15, 1995 to complete the
Comments Date:	10071993
Comments:	remedial investigation and feasibility study.
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	The following is a breakdown of the above mentioned operable
Comments Date:	10071993
Comments:	units in terms of contamination.
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	Black Material Unit (OU1)
Comments Date:	10071993
Comments:	OU1 TTLC (mg/kg) MAX CONC DETECTED (mg/kg)
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	Cr 2,500 mg/k 15,000
Comments Date:	10071993
Comments:	Pb 1,000 2,800
Comments Date:	10071993
Comments:	Zn 5,000 4,600
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	Blake Court Refuse (OU2)
Comments Date:	10071993
Comments:	OU2 TTLC (mg/kg) MAX CONC DETECTED (mg/kg)
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Comments:	Cr 3,600
Comments Date:	10071993
Comments:	Pb 3,700
Comments Date:	10071993
Comments:	Zn 18,200
Comments Date:	10071993
Comments:	Cu 2,500 7,590
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	Hydrocarbon Area (OU3)
Comments Date:	10071993
Comments:	OU2 TTLC (mg/kg) MAX CONC DETECTED (mg/kg
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	PNAs max= phenanthrene,
Comments Date:	10071993
Comments:	13.0 mg/kg
Comments Date:	10071993
Comments:	TRPH 23,000 mg/kg
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	Not reported
Comments Date:	12111995
Comments:	CEQA - Obtained negative declaration for removal of wastes
Comments Date:	12111995
Comments:	from the "Tires and Hides" area within the Braito Landfill
Comments Date:	12111995
Comments:	site. Removal action completed 2/15/96.
Comments Date:	02151996
Comments:	Removal Action: Tires - Approximately 150 cubic yards of
Comments Date:	02151996
Comments:	investigation accumulated waste (including leather scraps
Comments Date:	02151996
Comments:	and associated soil) were transported to BFI Keller Canyon
Comments Date:	02151996
Comments:	Landfill in Pittsburg, California. Approximately 1,100 cubic
ID Name:	Not reported
ID Value:	Not reported
Alternate Name:	SOUTHAMPTON/COMPANY/BLAKE COURT
Alternate Name:	BRAITO LANDFILL (NORTH CANYON)
Alternate Name:	SOLANO COUNTY SANITARY LANDFILL
Alternate Name:	BRAITO DUMP
Alternate Name:	BLAKE COURT/ROSE DRIVE
Alternate Name:	Not reported
Special Programs Code:	Not reported
Special Programs Name:	Not reported

24
WNW
1/2-1
0.808 mi.
4267 ft.

WEBER PROPERTY
1100 BLOCK OF WARREN AVENUE
VALLEJO, CA 94590

RESPONSE
ENVIROSTOR
CERS

S106896801
N/A

Relative:
Higher

Actual:
139 ft.

RESPONSE:

Name:	WEBER PROPERTY
Address:	1100 BLOCK OF WARREN AVENUE
City,State,Zip:	VALLEJO, CA 94590
Facility ID:	48880001
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0.8
National Priorities List:	NO
Cleanup Oversight Agencies:	HWMP, SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Mark Piros
Division Branch:	Cleanup Berkeley
Site Code:	201485
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	14
Senate:	03
Special Program Status:	Not reported
Status:	Certified
Status Date:	02/15/2005
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	38.08888
Longitude:	-122.2158
APN:	74-140-540
Past Use:	RECYCLING - SCRAP METAL
Potential COC :	Arsenic Lead
Confirmed COC:	NONE SPECIFIED
Potential Description:	SOIL
Alias Name:	74-140-540
Alias Type:	APN
Alias Name:	110033614444
Alias Type:	EPA (FRS #)
Alias Name:	201485
Alias Type:	Project Code (Site Code)
Alias Name:	48880001
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	02/15/2005
Comments:	Approved Removal Action. Sample results detected arsenic, copper, lead, and zinc above regulatory levels. Other metals were observed. 33 cubic yards of ash material was removed and disposed off-site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Workplan
Completed Date:	02/23/2004
Comments:	Approved Workplan to remove contaminated ash

WEBER PROPERTY (Continued) **S106896801**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Notice
Completed Date:	03/05/2006
Comments:	Work Notice informing the surrounding residents of the ash removal work

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Certification
Completed Date:	02/15/2005
Comments:	Issued No Further Action letter.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date:	09/15/2003
Comments:	Issued I or SE Order.

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

ENVIROSTOR:

Name:	WEBER PROPERTY
Address:	1100 BLOCK OF WARREN AVENUE
City,State,Zip:	VALLEJO, CA 94590
Facility ID:	48880001
Status:	Certified
Status Date:	02/15/2005
Site Code:	201485
Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	0.8
NPL:	NO
Regulatory Agencies:	HWMP, SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Mark Piros
Division Branch:	Cleanup Berkeley
Assembly:	14
Senate:	03
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	38.08888
Longitude:	-122.2158
APN:	74-140-540
Past Use:	RECYCLING - SCRAP METAL
Potential COC:	Arsenic Lead

WEBER PROPERTY (Continued) **S106896801**

Confirmed COC: NONE SPECIFIED
Potential Description: SOIL
Alias Name: 74-140-540
Alias Type: APN
Alias Name: 110033614444
Alias Type: EPA (FRS #)
Alias Name: 201485
Alias Type: Project Code (Site Code)
Alias Name: 48880001
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 02/15/2005
Comments: Approved Removal Action. Sample results detected arsenic, copper, lead, and zinc above regulatory levels. Other metals were observed. 33 cubic yards of ash material was removed and disposed off-site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 02/23/2004
Comments: Approved Workplan to remove contaminated ash

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 03/05/2006
Comments: Work Notice informing the surrounding residents of the ash removal work

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 02/15/2005
Comments: Issued No Further Action letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 09/15/2003
Comments: Issued I or SE Order.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CERS:
Name: WEBER PROPERTY

WEBER PROPERTY (Continued) **S106896801**

Address:	1100 BLOCK OF WARREN AVENUE
City,State,Zip:	VALLEJO, CA 94590
Site ID:	344686
CERS ID:	48880001
CERS Description:	State Response

Affiliation:

Affiliation Type Desc:	Supervisor
Entity Name:	MARK PIROS
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BENICIA	S126984483	BENICIA STATE REC AREA/SOUTH HAMPT	BENICIA STATE REC AREA	94510	SWF/LF

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 06/24/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/16/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 84

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/01/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 9

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/22/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/25/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/14/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/25/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/14/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/08/2021
Date Data Arrived at EDR: 11/09/2021
Date Made Active in Reports: 01/28/2022
Number of Days to Update: 80

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 03/02/2022
Number of Days to Update: 85

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/06/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 02/09/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/25/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/14/2022
Number of Days to Update: 80
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/15/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 77
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/10/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 0
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/15/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 09/14/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 11/23/2021
Number of Days to Update: 12

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 11/16/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/25/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/14/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 11/16/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Quarterly

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 12/10/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 03/11/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 80

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/24/2022
Date Data Arrived at EDR: 02/25/2022
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 12

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78
Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/15/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 84
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 79
Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 10/26/2021
Date Data Arrived at EDR: 11/16/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 84

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/13/2021
Date Data Arrived at EDR: 12/17/2021
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/01/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/03/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/18/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/18/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/19/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/12/2021
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 22

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 64

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/29/2021
Date Data Arrived at EDR: 08/24/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 87

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 84
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 02/04/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/28/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/08/2022
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 70

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 23

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/03/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/21/2022
Date Data Arrived at EDR: 03/22/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 3

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/02/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/14/2021
Date Data Arrived at EDR: 12/15/2021
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 85

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/04/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 95

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/22/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 01/10/2022
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites
A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 34
Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 78
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/16/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 77
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 77

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 11/17/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 02/07/2022
Number of Days to Update: 81

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 78

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/18/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 84

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 03/03/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/18/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/07/2022
Number of Days to Update: 80

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 80

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/18/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 79
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 11/09/2021
Date Made Active in Reports: 01/27/2022
Number of Days to Update: 79
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 79
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/13/2021
Date Data Arrived at EDR: 12/14/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 79
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/09/2022
Next Scheduled EDR Contact: 06/26/2022
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 12/03/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/24/2022
Number of Days to Update: 79
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 79

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55
Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3
Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 07/13/2021
Date Data Arrived at EDR: 07/14/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 12/28/2021
Date Data Arrived at EDR: 12/28/2021
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 80

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 11/01/2021
Date Data Arrived at EDR: 11/02/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 83

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/28/2021
Date Data Arrived at EDR: 12/28/2021
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 80

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/17/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 10/22/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 85

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 10/01/2021
Date Data Arrived at EDR: 11/02/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 83

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 12/01/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 77

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/06/2022
Number of Days to Update: 82

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/12/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 82

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/12/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 82

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 03/24/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 80

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/11/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 83

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/21/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 80

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/12/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 82

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 01/07/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 11

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 09/14/2021
Number of Days to Update: 89

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/26/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/24/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 03/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 10/26/2021
Date Data Arrived at EDR: 10/27/2021
Date Made Active in Reports: 01/20/2022
Number of Days to Update: 85

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 10/08/2021
Date Data Arrived at EDR: 11/04/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 81

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 10/08/2021
Date Data Arrived at EDR: 11/02/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 10/29/2021
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/20/2022
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/29/2021
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 12/02/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 85

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 03/31/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 8

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 03/31/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 8

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 06/18/2021
Date Data Arrived at EDR: 09/28/2021
Date Made Active in Reports: 12/14/2021
Number of Days to Update: 77

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 11/02/2021
Number of Days to Update: 90

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 80

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 12/02/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 77

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 02/25/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/03/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 7

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/16/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 79

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/11/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/07/2022
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/11/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 11/23/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/06/2022
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 04/26/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 78

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 81

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/24/2022
Number of Days to Update: 79

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 73

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/24/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 10/26/2021
Date Data Arrived at EDR: 10/27/2021
Date Made Active in Reports: 01/20/2022
Number of Days to Update: 85

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/11/2021
Date Data Arrived at EDR: 11/12/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 81

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/07/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/14/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

Â© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

VALLEJO PROPERTIES - GLEN COVE
NOT REPORTED
VALLEJO, CA 94591

TARGET PROPERTY COORDINATES

Latitude (North):	38.081568 - 38ˆ 4’ 53.64’’
Longitude (West):	122.201037 - 122ˆ 12’ 3.73’’
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	570071.4
UTM Y (Meters):	4214960.5
Elevation:	117 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12008089 BENICIA, CA
Version Date:	2018

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

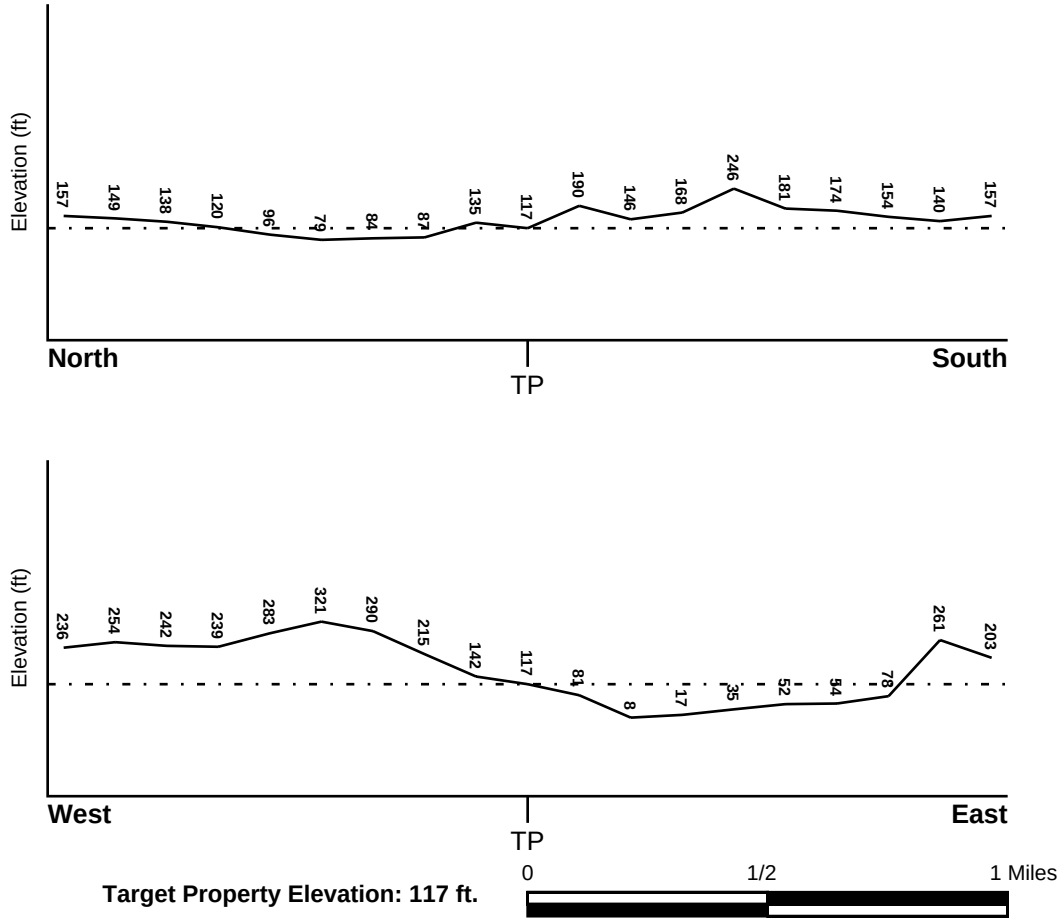
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 117 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06095C0630F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06095C0633E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
BENICIA	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1	1/4 - 1/2 Mile ENE	WSW
2	1/2 - 1 Mile West	SSE
1G	1/4 - 1/2 Mile ENE	WSW
2G	1/2 - 1 Mile West	SSE

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

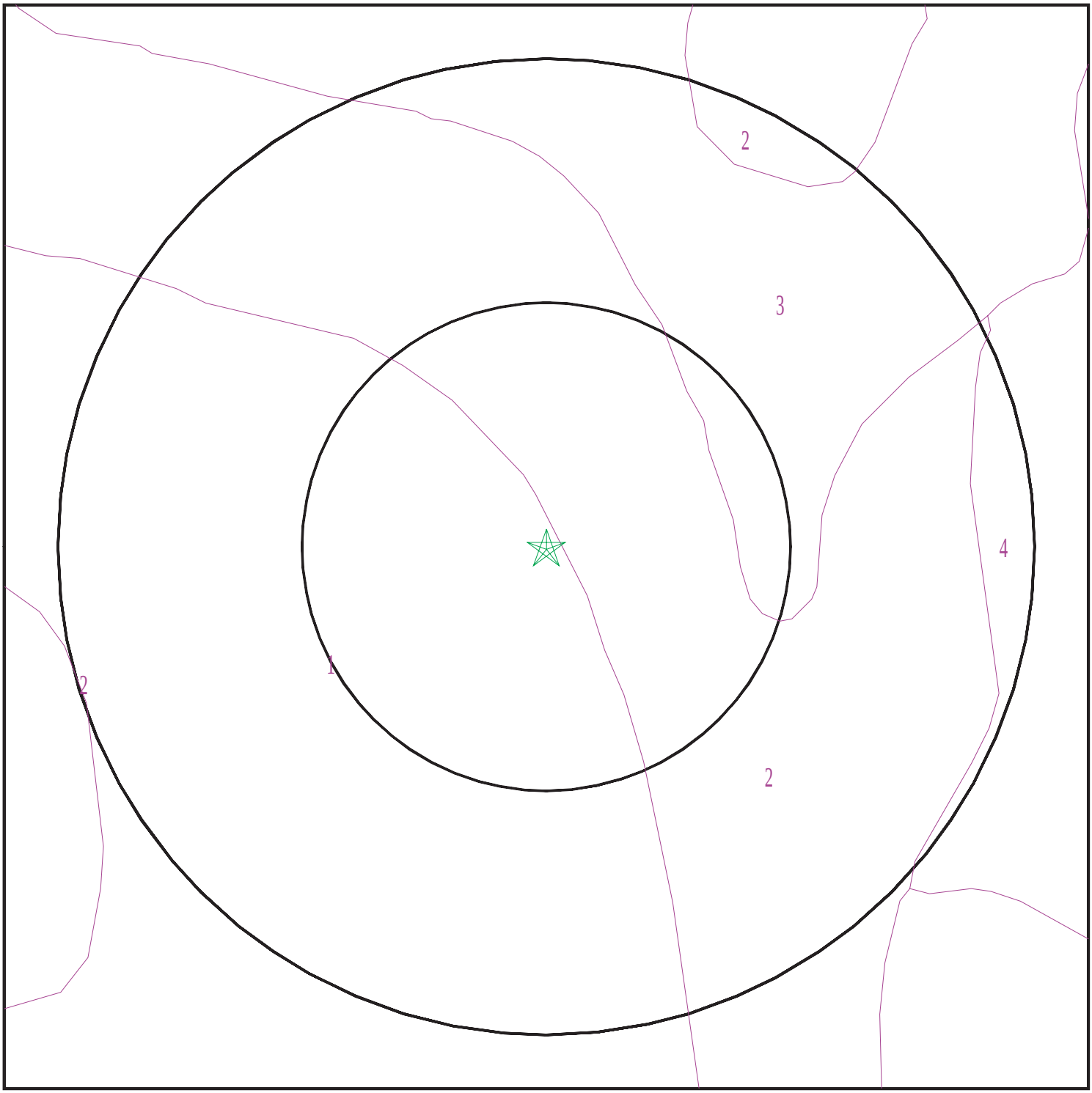
Era:	Mesozoic
System:	Cretaceous
Series:	Upper Cretaceous
Code:	uK *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 06938050.2r



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Vallejo Properties - Glen Cove	CLIENT:	Engeo Inc.
ADDRESS:	Not Reported Vallejo CA 94591	CONTACT:	Jenna Keith
		INQUIRY #:	06938050.2r
LAT/LONG:	38.081568 / 122.201037	DATE:	April 13, 2022 11:51 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Dibble

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:
2	3 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:
3	20 inches	24 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:

Soil Map ID: 2

Soil Component Name: Dibble

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:
2	12 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:
3	29 inches	33 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:

Soil Map ID: 3

Soil Component Name: Dibble

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:
2	12 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:
3	29 inches	33 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 4

Soil Component Name: Joice

Soil Surface Texture: muck

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Very poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 52 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	muck	A-8	Highly organic soils, Peat.	Max: 141 Min: 42	Max: Min:
2	20 inches	59 inches	muck	A-8	Highly organic soils, Peat.	Max: 141 Min: 42	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

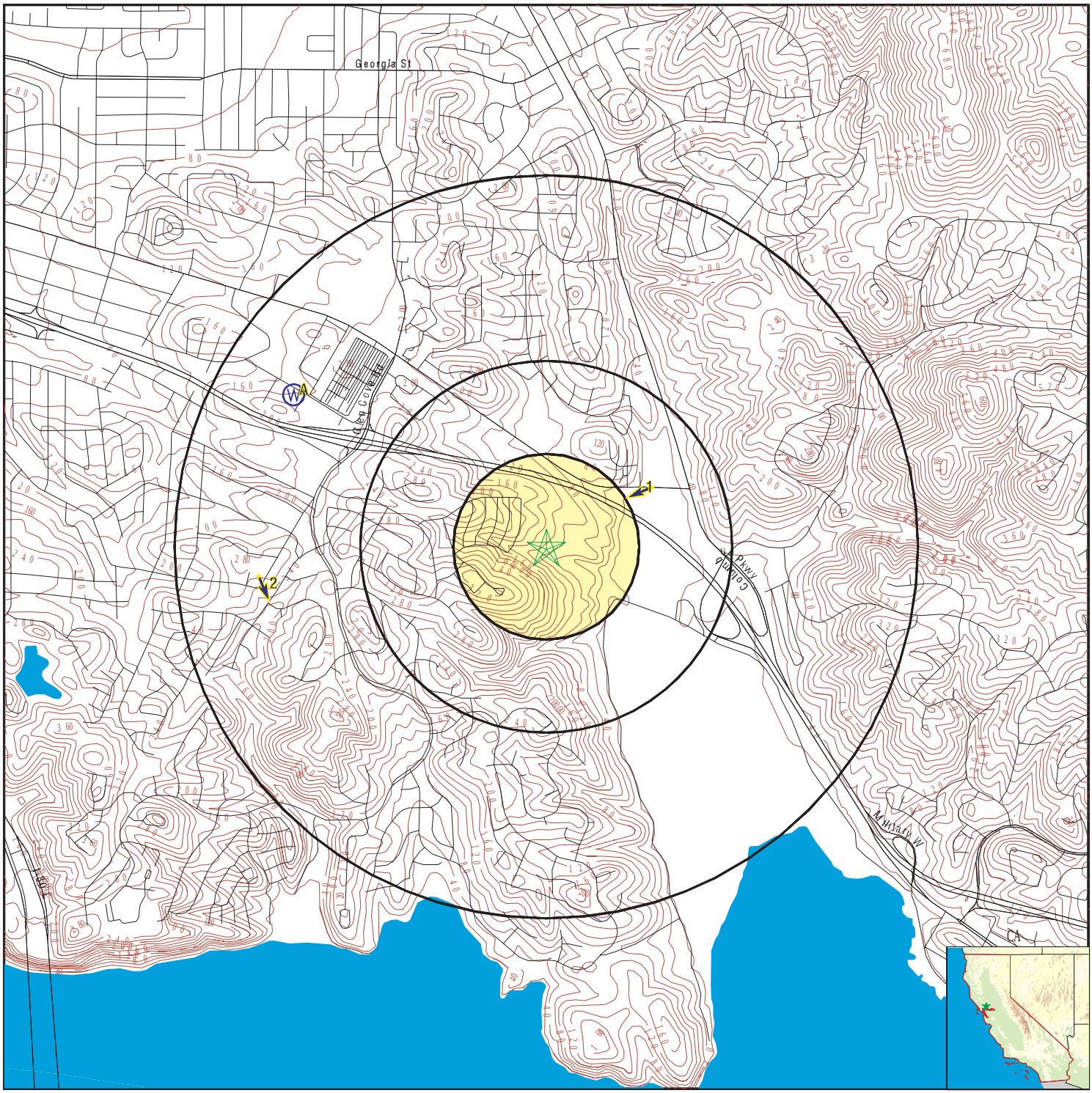
MAP ID	WELL ID	LOCATION FROM TP
A3	CAUSGS000002113	1/2 - 1 Mile WNW
A4	CAUSGS000001244	1/2 - 1 Mile WNW
A5	CAUSGSN00008707	1/2 - 1 Mile WNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

PHYSICAL SETTING SOURCE MAP - 06938050.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Vallejo Properties - Glen Cove	CLIENT:	Engeo Inc.
ADDRESS:	Not Reported	CONTACT:	Jenna Keith
	Vallejo CA 94591	INQUIRY #:	06938050.2r
LAT/LONG:	38.081568 / 122.201037	DATE:	April 13, 2022 11:51 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

			Database	EDR ID Number
1 **ENE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported WSW 15 25 Not Reported 10/16/1995	**AQUIFLOW**	**53629**
2 **West** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported SSE 6.5 9.0 Not Reported 07/20/1998	**AQUIFLOW**	**52294**
A3 **WNW** **1/2 - 1 Mile** **Higher**			**CA WELLS**	**CAUSGS000002113**
A4 **WNW** **1/2 - 1 Mile** **Higher**			**CA WELLS**	**CAUSGS000001244**
A5 **WNW** **1/2 - 1 Mile** **Higher**			**CA WELLS**	**CAUSGSN00008707**

Well ID: USGS-380515122124801 Well Type: UNK
Source: United States Geological Survey
Other Name: USGS-380515122124801 GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-380515122124801&store_num=
GeoTracker Data: Not Reported

			Database	EDR ID Number
1G **ENE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported WSW 15 25 Not Reported 10/16/1995	**AQUIFLOW**	**53629**
2G **West** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported SSE 6.5 9.0 Not Reported 07/20/1998	**AQUIFLOW**	**52294**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94591	13	2

Federal EPA Radon Zone for SOLANO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94591

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.500 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

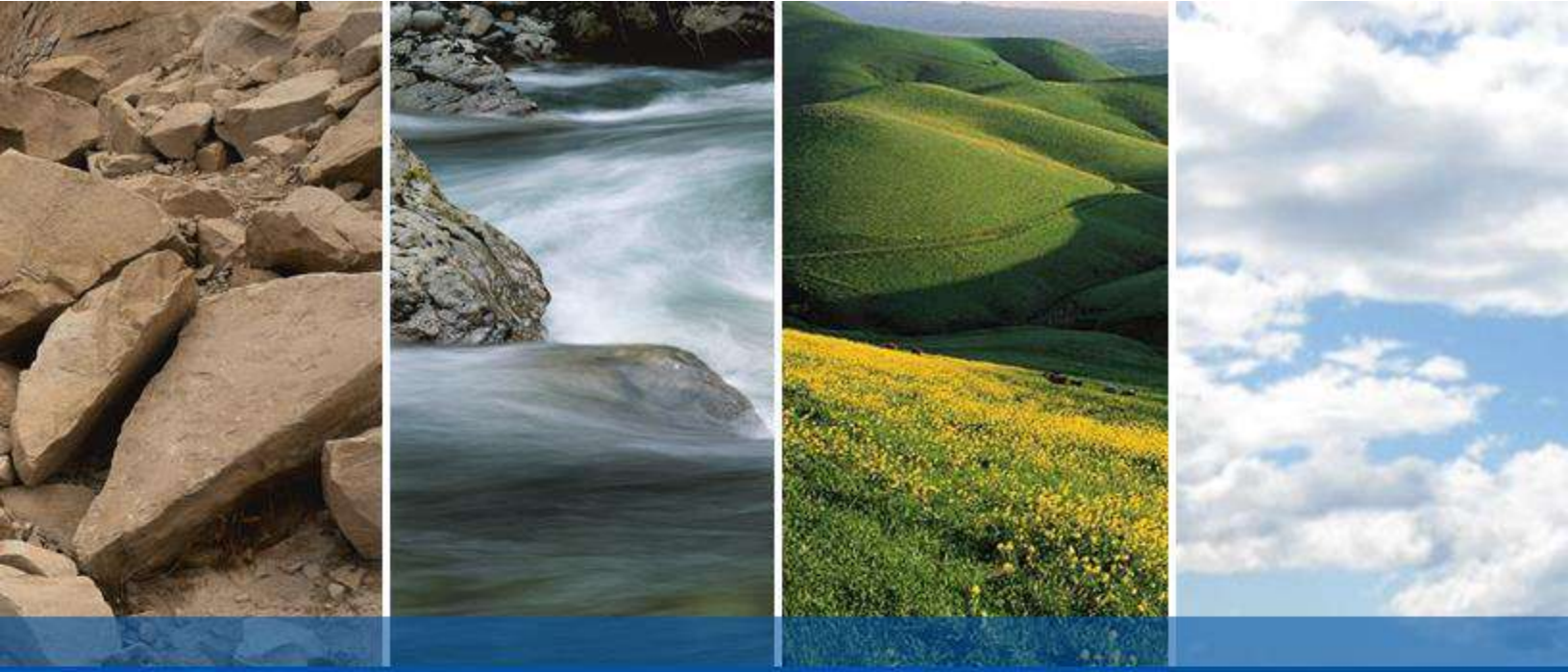
Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

Â© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.



DRAFT

APPENDIX B

FIRST AMERICAN TITLE COMPANY

Preliminary Title Report

First American Title

First American Title Company

1250 Corona Pointe Court, Suite 200
Corona, CA 92879

Customer Reference:

Order Number: OSA-6781631 (RA)

Title Officer: Ryan Achterberg
Phone: (949)299-4950
Fax No.: (714)824-5946
E-Mail: rachterberg@firstam.com

Escrow Officer: Jeanne Gould
Phone: (949)885-2405
Fax No.: (714)913-6372
E-Mail: jagould@firstam.com

Buyer:
Owner: The Timothy F. Wei Trust dated April 1, 2007 and The Terrence F. Wei Trust dated March 18, 2007 and The Tammy F. Dong Trust dated March 17, 2007 and The Tina T. Dong Trust dated February 26, 2007 and The Litton L. Chen Trust dated March 18, 2007 and The Tiffany L. Chen Trust dated April 3, 2007 and The Thomas L. Chen Trust dated March 14, 2007 and The Tyler C. Chuang Trust dated December 31, 2008 and The Troy Chuang Trust dated December 28, 2012

PRELIMINARY REPORT

In response to the above referenced application for a policy of title insurance, this company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a Policy or Policies of Title Insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an Exception below or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations of said Policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Exhibit A attached. *The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties*. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Exhibit A. Copies of the policy forms should be read. They are available from the office which issued this report.

Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Exhibit A of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

Please be advised that any provision contained in this document, or in a document that is attached, linked or referenced in this document, that under applicable law illegally discriminates against a class of individuals based upon personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or any other legally protected class, is illegal and unenforceable by law.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

Dated as of February 04, 2022 at 7:30 A.M.

The form of Policy of title insurance contemplated by this report is:

To Be Determined

A specific request should be made if another form or additional coverage is desired.

Title to said estate or interest at the date hereof is vested in:

TIMOTHY WEI, AS TRUSTEE OF THE TIMOTHY F. WEI TRUST DATED APRIL 1, 2007, AS TO AN UNDIVIDED 1/9 INTEREST; TERRENCE F. WEI, AS TRUSTEE OF THE TERRENCE F. WEI TRUST DATED MARCH 18, 2007; AS TO AN UNDIVIDED 1/9 INTEREST; TAMMY F. DONG, AS TRUSTEE OF THE TAMMY F. DONG TRUST DATED MARCH 17, 2007, AS TO AN UNDIVIDED 1/9 INTEREST; TINA T. DONG, AS TRUSTEE OF THE TINA T. DONG TRUST DATED FEBRUARY 26, 2007, AS TO AN UNDIVIDED 1/9 INTEREST; LITTON L. CHEN, AS TRUSTEE OF THE LITTON L. CHEN TRUST DATED MARCH 18, 2007, AS AMENDED, AS TO AN UNDIVIDED 1/9 INTEREST; TIFFANY CHEN HERRERO, AS TRUSTEE OF THE TIFFANY L. CHEN TRUST DATED APRIL 3, 2007, AS AMENDED, AS TO AN UNDIVIDED 1/9 INTEREST; THOMAS L. CHEN, AS TRUSTEE OF THE THOMAS L. CHEN TRUST DATED MARCH 14, 2007, AS TO AN UNDIVIDED 1/9 INTEREST; TYLER C. CHUANG, MIKE M. CHUANG AND MARIE W. CHUANG, AS CO-TRUSTEES OF THE TYLER C. CHUANG TRUST DATED DECEMBER 31, 2008, AS TO AN UNDIVIDED 1/9 INTEREST; TROY CHUANG, MIKE M. CHUANG AND MARIE W. CHUANG, AS CO-TRUSTEES OF THE TROY CHUANG TRUST DATED DECEMBER 28, 2012, AS TO AN UNDIVIDED 1/9 INTEREST; ALL AS TENANTS IN COMMON

The estate or interest in the land hereinafter described or referred to covered by this Report is:

A fee as to Parcel(s) One and Two, an easement as to Parcel(s) Three.

The Land referred to herein is described as follows:

(See attached Legal Description)

At the date hereof exceptions to coverage in addition to the printed Exceptions and Exclusions in said policy form would be as follows:

1. General and special taxes and assessments for the fiscal year 2022-2023, a lien not yet due or payable.

2. General and special taxes and assessments for the fiscal year 2021-2022.
First Installment: $1,845.49, PAID
Penalty: $0.00
Second Installment: $1,845.49, OPEN
Penalty: $0.00
Tax Rate Area: 7016
A. P. No.: 0079-120-100

Affects: Parcel One

3. General and special taxes and assessments for the fiscal year 2021-2022.
First Installment: $227.70, PAID
Penalty: $0.00
Second Installment: $227.70, OPEN
Penalty: $0.00
Tax Rate Area: 7047
A. P. No.: 0079-171-170

Affects: Parcel Two

4. The Land lies within the boundaries of proposed community facilities District No. 2014-1 (Clean Energy), as disclosed by a map filed August 27, 2015 in Book 0025, Page 55 of maps of assessment and community facilities districts and recorded August 27, 2015 as Instrument No. 201500078287 of Official Records.

5. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.

6. The fact that the land lies within the boundaries of the Southeast Vallejo Redevelopment Project Area, as disclosed by various documents of record.

7. Abutter's rights of ingress and egress to or from the freeway have been relinquished in the document recorded October 20, 1958 as Book 944, Page 392 of Official Records.

Affects Parcel One

8. A waiver of any claims for damages by reason of the location, construction, landscaping or maintenance of a contiguous freeway, highway or roadway, as contained in the document recorded October 20, 1958 as Instrument No. 17024, Book 944, Page 392 of Official Records.

Affects Parcel One

9. An easement for ingress and egress and incidental purposes, recorded August 6, 1973 as Book 1844, Page 331 of Official Records.
In Favor of: City of Vallejo
Affects: A Portion of Said Land

The location of the easement cannot be determined from record information.

10. Covenants, conditions, restrictions and easements in the document recorded May 16, 1979 as Book 1979, Page 38579 of Official Records, which provide that a violation thereof shall not defeat or render invalid the lien of any first mortgage or deed of trust made in good faith and for value, but deleting any covenant, condition, or restriction, if any, indicating a preference, limitation, or discrimination based on race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, familial status, marital status, disability, handicap, veteran or military status, genetic information, national origin, source of income as defined in subdivision (p) of Section 12955, or ancestry, to the extent that such covenants, conditions or restrictions violate applicable state or federal laws. Lawful restrictions under state and federal law on the age of occupants in senior housing or housing for older persons shall not be construed as restrictions based on familial status.

    Document(s) declaring modifications thereof recorded October 25, 1979 as Book 1979, Page 91941 of Official Records.

    Affects Parcel Two

11. An easement shown or dedicated on the Map as referred to in the legal description

    For: Access, Landscape maintenance and incidental purposes.

    Affects: Parcel Two

12. Abutter's rights of ingress and egress to or from Shady Lane, have been dedicated or relinquished on the filed Map.

    Affects: Parcel Two

13. The terms and provisions contained in the document entitled Agreement To Maintain Area Within Landscape Maintenance District recorded May 29, 1987 as Page 71802 of Official Records.

    Affects Parcel Two

14. Any easements and/or servitudes affecting easement parcel(s) Three herein described.

15. Any right, title or interest of the spouse (if any) of Litton Chen, Tiffany Chen aka Tiffany Herrero and Timothy Wei.

16. Water rights, claims or title to water, whether or not shown by the Public Records.

17. Rights of parties in possession.

Prior to the issuance of any policy of title insurance, the Company will require:

18. A deed from the spouse (if any) of Litton Chen, Tiffany Chen aka Tiffany Herrero and Timothy Wei be recorded in the public records, or the joinder of the spouse named herein on any conveyance, encumbrance or lease to be executed by said married person.
    The deed should contain the following statement:
    "It is the express intent of the grantor, being the spouse of the grantee, to convey all right, title and interest of the grantor, community or otherwise, in and to the herein described property to the grantee as his/her sole and separate property."

19. With respect to the trust referred to in the vesting:
a. A certification pursuant to Section 18100.5 of the California Probate Code in a form satisfactory to the Company.
b. Copies of those excerpts from the original trust documents and amendments thereto which designate the trustee and confer upon the trustee the power to act in the pending transaction.
c. Other requirements which the Company may impose following its review of the material required herein and other information which the Company may require.

INFORMATIONAL NOTES

Note: The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than the certain dollar amount set forth in any applicable arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. If you desire to review the terms of the policy, including any arbitration clause that may be included, contact the office that issued this Commitment or Report to obtain a sample of the policy jacket for the policy that is to be issued in connection with your transaction.

1. The property covered by this report is vacant land.

2. According to the public records, there has been no conveyance of the land within a period of twenty-four months prior to the date of this report, except as follows:

   None

3. We find no outstanding voluntary liens of record affecting subject property. Disclosure should be made concerning the existence of any unrecorded lien or other indebtedness which could give rise to any possible security interest in the subject property.

The map attached, if any, may or may not be a survey of the land depicted hereon. First American expressly disclaims any liability for loss or damage which may result from reliance on this map except to the extent coverage for such loss or damage is expressly provided by the terms and provisions of the title insurance policy, if any, to which this map is attached.

LEGAL DESCRIPTION

Real property in the City of Vallejo, County of Solano, State of California, described as follows:

PARCEL ONE: (APN: 0079-120-100)

BEGINNING AT A POINT AT THE INTERSECTION OF THE NORTHWESTERLY LINE OF THAT CERTAIN PARCEL OF LAND, DESCRIBED IN DEED TO FRANK SPENGER, ET UX, RECORDED JULY 26, 1954, OFFICIAL RECORDS, IN BOOK 724, PAGE 474, SOLANO COUNTY RECORDS, WITH THE GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND, DESCRIBED IN DEED TO THE STATE OF CALIFORNIA FOR INTERSTATE FREEWAY 680 RECORDED IN BOOK 944, OFFICIAL RECORDS, PAGE 392, SOLANO COUNTY RECORDS; THENCE ALONG SAID NORTHWESTERLY LINE OF SPENGER, SOUTH 21° 58' 48" WEST 266.80 FEET AND SOUTH 22° 16' 28" WEST, 1675.30 FEET TO THE EASTERLY TERMINUS OF THE COMMON BOUNDARY LINE DESCRIBED IN THAT CERTAIN BOUNDARY AGREEMENT EXECUTED BY MARY A. SILVA, ET AL, DATED MAY 11, 1972 AND RECORDED MAY 30, 1972 IN BOOK 1754 OF OFFICIAL RECORDS, PAGE 21, AS INSTRUMENT NO. 12027; THENCE ALONG SAID COMMON BOUNDARY NORTH 59° 00' 20" WEST, 453.83 FEET; THENCE LEAVING SAID COMMON BOUNDARY AND RUNNING ALONG THE FOLLOWING COURSES AND DISTANCES: NORTH 30° 52' 36" EAST, 819.08 FEET; NORTH 59° 07' 24" WEST, 488.00 FEET; NORTH 16° 36' 03" WEST, 541.10 FEET; NORTH 26° 48' 16" WEST, 500.00 FEET; TO THE INTERSECTION THEREOF WITH THE SAID GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND DESCRIBED IN DEED TO THE STATE OF CALIFORNIA; THENCE ALONG THE SAID GENERAL SOUTHERLY LINE THE FOLLOWING COURSES AND DISTANCES: NORTH 83° 15' 11" EAST 107.36 FEET; SOUTH 45° 09' 17"; EAST, 241.31 FEET; SOUTH 78° 53' 57" EAST, 676.07 FEET; NORTH 81° 38' 30" EAST, 324.45 FEET, AND SOUTH 64° 40' 59" EAST, 265.86 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM:

THAT PORTION DESCRIBED IN THE DEED OF PARTIAL RECONVEYANCE RECORDED JULY 26, 1973 IN BOOK 1842, PAGE 355 AS INSTRUMENT NO. 18396, SOLANO COUNTY RECORDS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT AT THE INTERSECTION OF THE SOUTHEASTERLY LINE OF COUNTY ROAD NO. 267, AS IT PRESENTLY EXISTS, 50 FEET IN WIDTH, SAID COUNTY ROAD NO. 267 ALSO KNOWN AS GLEN COVE ROAD, WITH THE GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF CALIFORNIA FOR INTERSTATE 680 FREEWAY BY DEED RECORDED IN BOOK 944 OF OFFICIAL RECORDS, PAGE 392, INSTRUMENT NO. 17024, SOLANO COUNTY RECORDS; THENCE ALONG THE SAID GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF CALIFORNIA, NORTH 71° 44' 04" EAST, 132.30 FEET TO THE BEGINNING OF A NON-TANGENT CURVE WHOSE RADIAL BEARS SOUTH 0° 48' 57" EAST FROM ITS CENTER; THENCE ALONG THE SAID NON-TANGENT CURVE TO THE LEFT, CONCAVED TO THE NORTHWEST, HAVING A RADIUS OF 310 FEET, THROUGH A CENTRAL ANGLE OF 47° 53' 56", FOR AN ARC LENGTH OF 259.16 FEET TO THE END OF THE NON-TANGENT CURVE WHOSE RADIAL BEARS SOUTH 48° 42' 53" EAST FROM ITS CENTER; THENCE CONTINUING ALONG THE SAID GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF CALIFORNIA, SOUTH 70° 17' 14" EAST, 628.79 FEET; NORTH 88° 35' 56" EAST, 306.96 FEET; SOUTH 66° 02' 26" EAST, 308.06 FEET; NORTH 83° 15' 11" EAST, 522.00 FEET TO THE TRUE POINT OF BEGINNING; THENCE LEAVING THE SAID GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF CALIFORNIA, SOUTH 26° 48' 16" EAST, 500.00 FEET; SOUTH 16° 36' 03" EAST, 541.1 FEET; SOUTH 59° 07' 24" EAST, 488.00 FEET; NORTH 3° 27' 42" EAST, 945.96 FEET TO THE INTERSECTION THEREOF WITH THE SAID GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF

CALIFORNIA; THENCE ALONG THE SAID GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF CALIFORNIA, NORTH 78° 53' 57" WEST, 589.34 FEET; NORTH 45° 09' 17" WEST, 241.31 FEET; SOUTH 83° 15' 11" WEST, 107.36 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL TWO: (APN: 0079-171-170)

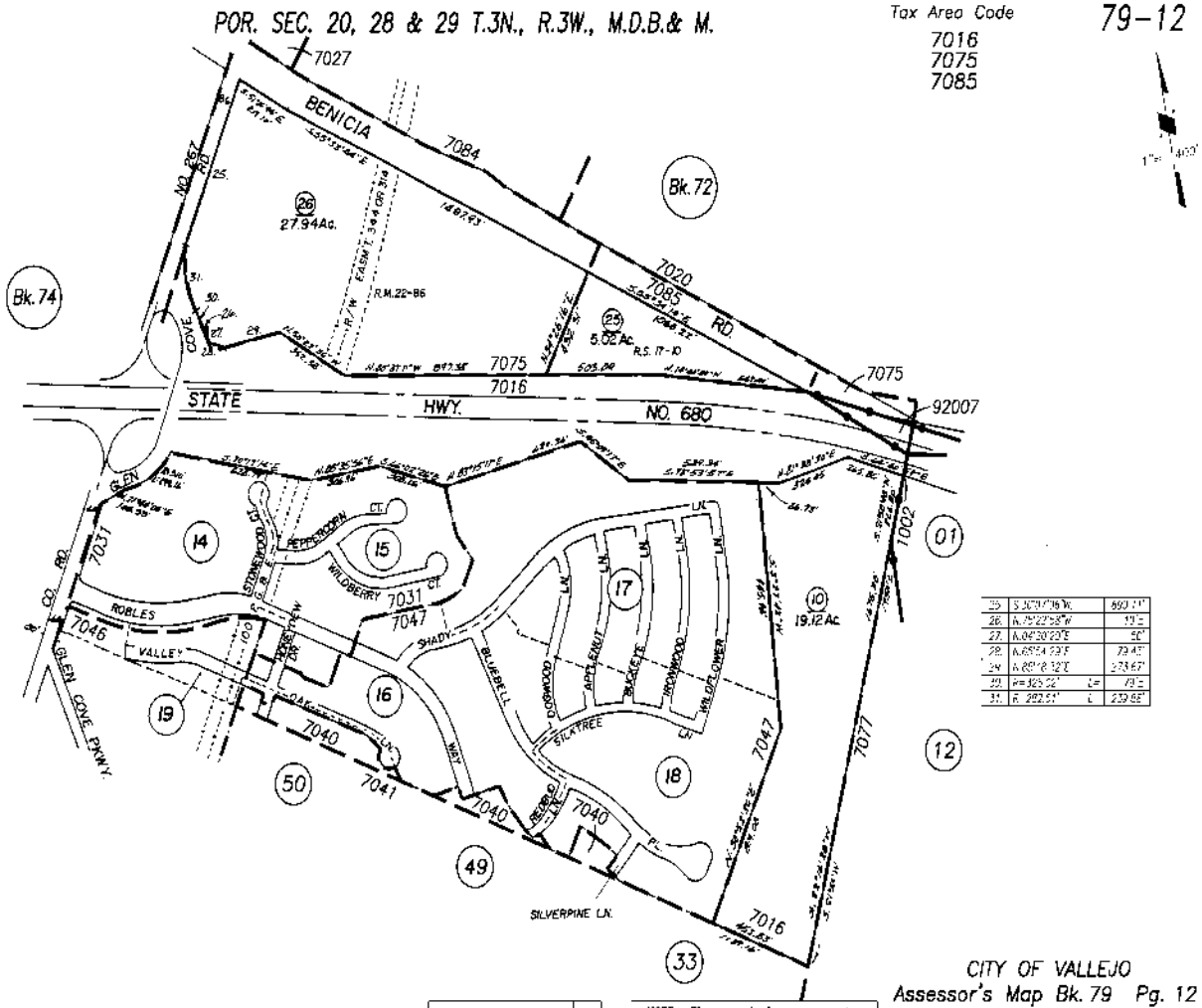
BEING A PORTION OF LOT 15, AS SAID LOT IS SHOWN UPON THE MAP OF GLEN COVE, UNIT II, RECORDED MAY 16, 1979, IN BOOK 36 OF MAPS AT PAGES 93 THROUGH 104, SOLANO COUNTY RECORDS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING ON THE NORTHERLY LINE OF SHADY LANE AT THE INTERSECTION THERETO WITH THE NORTHERLY PROLONGATION OF THE CENTERLINE OF IRONWOOD LANE, AS SAID LANES AND CENTERLINE ARE SHOWN UPON SAID MAP OF GLEN COVE, UNIT II; THENCE FROM SAID POINT OF BEGINNING ALONG SAID NORTHERLY LINE NORTH 88° 41' 10" WEST 37.00 FEET; THENCE LEAVING SAID NORTHERLY LINE AT RIGHT ANGLES NORTH 1° 18' 50" EAST 128 FEET, MORE OR LESS, TO THE NORTHERLY LINE OF SAID LOT 15; THENCE ALONG SAID NORTHERLY LINE OF LOT 15 SOUTH 78° 47' 27" EAST 450 FEET, MORE OR LESS TO THE NORTHEASTERLY CORNER THEREOF; THENCE ALONG THE EASTERLY LINE OF SAID LOT 15 SOUTH 3° 34' 12" WEST 69.26 FEET TO THE SOUTHEASTERLY CORNER THEREOF, ALSO BEING THE NORTHEASTERLY CORNER OF LOT 16, AS SAID LOT 16 IS SHOWN UPON SAID MAP; THENCE ALONG THE COMMON LINE BETWEEN SAID LOTS 15 AND 16 NORTH 88° 41' 10" WEST 213.67 FEET TO THE NORTHWEST CORNER OF SAID LOT 16 IN THE EASTERLY LINE OF WILDFLOWER AVENUE AS SHOWN UPON SAID MAP; THENCE ALONG THE NORTHEASTERLY LINE OF SAID WILDFLOWER AVENUE IN A NORTHWESTERLY DIRECTION ON A TANGENT CURVE TO THE LEFT, HAVING A RADIUS OF 20.00 FEET, THROUGH A CENTRAL ANGLE OF 90° 00' 00", AN ARC DISTANCE OF 31.42 FEET TO SAID NORTHERLY LINE OF SHADY LANE; THENCE ALONG SAID LAST DESCRIBED NORTHERLY LINE NORTH 88° 41' 10" WEST 172.71 FEET TO THE POINT OF BEGINNING.

PARCEL THREE:

AN ACCESS EASEMENT OVER THAT REAL PROPERTY BEING A PORTION OF LOT 16, UNIT II OF THE GLEN COVE TRACT, IN THE CITY OF VALLEJO, COUNTY OF SOLANO, STATE OF CALIFORNIA, MAP RECORDED IN BOOK 36 OF MAPS, PAGES 93 THROUGH 104, IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF SOLANO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 16; THENCE ALONG THE NORTHERLY LOT LINE SOUTH 88° 41' 10" EAST, 25.00 FEET; THENCE SOUTH 54° 04' 45" WEST, 31.40 FEET TO A POINT ON THE WESTERLY LOT LINE; THENCE ALONG SAID WESTERLY LINE NORTH 1° 18' 50" EAST, 19.00 FEET TO THE POINT OF BEGINNING, AS GRANTED IN THE DEED FROM DONALD L. BREN COMPANY, RECORDED NOVEMBER 19, 1982 AT PAGE 76541, SOLANO COUNTY RECORDS, INSTRUMENT NO. 43623.



First American Title

Order Number: OSA-6781631 (RA)
Page Number: 10

NOTICE

Section 12413.1 of the California Insurance Code, effective January 1, 1990, requires that any title insurance company, underwritten title company, or controlled escrow company handling funds in an escrow or sub-escrow capacity, wait a specified number of days after depositing funds, before recording any documents in connection with the transaction or disbursing funds. This statute allows for funds deposited by wire transfer to be disbursed the same day as deposit. In the case of cashier's checks or certified checks, funds may be disbursed the next day after deposit. In order to avoid unnecessary delays of three to seven days, or more, please use wire transfer, cashier's checks, or certified checks whenever possible.

EXHIBIT A
LIST OF PRINTED EXCEPTIONS AND EXCLUSIONS (BY POLICY TYPE)

CLTA STANDARD COVERAGE POLICY – 1990

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
   (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
   (c) resulting in no loss or damage to the insured claimant;
   (d) attaching or created subsequent to Date of Policy; or
   (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
   Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public, records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the public records at Date of Policy.

CLTA/ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)
EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
   a. building;
   b. zoning;
   c. land use;
   d. improvements on the Land;
   e. land division; and
   f. environmental protection.
   This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
4. Risks:
   a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
   b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
   c. that result in no loss to You; or
   d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
   a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
   b. in streets, alleys, or waterways that touch the Land.
   This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:
For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.
The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 16:	1% of Policy Amount Shown in Schedule A or $2,500 (whichever is less)	$10,000
Covered Risk 18:	1% of Policy Amount Shown in Schedule A or $5,000 (whichever is less)	$25,000
Covered Risk 19:	1% of Policy Amount Shown in Schedule A or $5,000 (whichever is less)	$25,000
Covered Risk 21:	1% of Policy Amount Shown in Schedule A or $2,500 (whichever is less)	$5,000

2006 ALTA LOAN POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to

   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;

(iii) the subdivision of land; or
(iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
(b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
(a) created, suffered, assumed, or agreed to by the Insured Claimant;
(b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
(c) resulting in no loss or damage to the Insured Claimant;
(d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
(e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
(a) a fraudulent conveyance or fraudulent transfer, or
(b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

[Except as provided in Schedule B - Part II,[t[or T]his policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

[PART I

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the Public Records at Date of Policy.

PART II

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:]

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to

(i) the occupancy, use, or enjoyment of the Land;
(ii) the character, dimensions, or location of any improvement erected on the Land;
(iii) the subdivision of land; or
(iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
(b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
(a) created, suffered, assumed, or agreed to by the Insured Claimant;
(b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
(c) resulting in no loss or damage to the Insured Claimant;
(d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 or 10); or
(e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
(a) a fraudulent conveyance or fraudulent transfer, or
(b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:
[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the Public Records at Date of Policy.
7. [Variable exceptions such as taxes, easements, CC&R's, etc. shown here.]

ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY (07-26-10)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to

(i) the occupancy, use, or enjoyment of the Land;
(ii) the character, dimensions, or location of any improvement erected on the Land;
(iii) the subdivision of land; or
(iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
(b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d),

14 or 16.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
   (a) a fraudulent conveyance or fraudulent transfer, or
   (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

First American Title™

Privacy Notice

Effective: October 1, 2019

Notice Last Updated: January 1, 2022

This Privacy Notice describes how First American Financial Corporation and its subsidiaries and affiliates (together referred to as "First American," "we," "us," or "our") collect, use, store, and share your information with the exception that a subsidiary or affiliate has their own privacy policy, that policy governs. This Privacy Notice applies to information we receive from you offline only, as well as from third parties, when you interact with us and/or use and access our services and products ("Products"). For more information about our privacy practices, including our online practices, please visit https://www.firstam.com/privacy-policy/. The practices described in this Privacy Notice are subject to applicable laws in the places in which we operate.

What Type Of Information Do We Collect About You? We collect a variety of categories of information about you. To learn more about the categories of information we collect, please visit https://www.firstam.com/privacy-policy/.

How Do We Collect Your Information? We collect your information: (1) directly from you; (2) automatically when you interact with us; and (3) from third parties, including business parties and affiliates.

How Do We Use Your Information? We may use your information in a variety of ways, including but not limited to providing the services you have requested, fulfilling your transactions, comply with relevant laws and our policies, and handling a claim. To learn more about how we may use your information, please visit https://www.firstam.com/privacy-policy/.

How Do We Share Your Information? We do not sell your personal information. We only share your information, including to subsidiaries, affiliates, and to unaffiliated third parties: (1) with your consent; (2) in a business transfer; (3) to service providers; and (4) for legal process and protection. To learn more about how we share your information, please visit https://www.firstam.com/privacy-policy/.

How Do We Store and Protect Your Information? The security of your information is important to us. That is why we take commercially reasonable steps to make sure your information is protected. We use our best efforts to maintain commercially reasonable technical, organizational, and physical safeguards, consistent with applicable law, to protect your information.

How Long Do We Keep Your Information? We keep your information for as long as necessary in accordance with the purpose for which it was collected, our business needs, and our legal and regulatory obligations.

Your Choices We provide you the ability to exercise certain controls and choices regarding our collection, use, storage, and sharing of your information. You can learn more about your choices by visiting https://www.firstam.com/privacy-policy/.

International Jurisdictions: Our Products are offered in the United States of America (US), and are subject to US federal, state, and local law. If you are accessing the Products from another country, please be advised that you may be transferring your information to us in the US, and you consent to that transfer and use of your information in accordance with this Privacy Notice. You also agree to abide by the applicable laws of applicable US federal, state, and local laws concerning your use of the Products, and your agreements with us.

We may change this Privacy Notice from time to time. Any and all changes to this Privacy Notice will be reflected on this page, and where appropriate provided in person or by another electronic method. **YOUR CONTINUED USE, ACCESS, OR INTERACTION WITH OUR PRODUCTS OR YOUR CONTINUED COMMUNICATIONS WITH US AFTER THIS NOTICE HAS BEEN PROVIDED TO YOU WILL REPRESENT THAT YOU HAVE READ AND UNDERSTOOD THIS PRIVACY NOTICE.**

Contact Us dataprivacy@firstam.com or toll free at 1-866-718-0097.

© 2022 First American Financial Corporation and/or its affiliates. All rights reserved. NYSE:FAF

First American Title™

For California Residents

If you are a California resident, you may have certain rights under California law, including but not limited to the California Consumer Privacy Act of 2018 ("CCPA"). All phrases used in this section shall have the same meaning as those phrases are used under California law, including the CCPA.

Right to Know. You have a right to request that we disclose the following information to you: (1) the categories of personal information we have collected about or from you; (2) the categories of sources from which the personal information was collected; (3) the business or commercial purpose for such collection and/or disclosure; (4) the categories of third parties with whom we have shared your personal information; and (5) the specific pieces of your personal information we have collected. To submit a verified request for this information, go to our online privacy policy at www.firstam.com/privacy-policy to submit your request or call toll-free at 1-866-718-0097. You may also designate an authorized agent to submit a request on your behalf by going to our online privacy policy at www.firstam.com/privacy-policy to submit your request or by calling toll-free at 1-866-718-0097

Right of Deletion. You also have a right to request that we delete the personal information we have collected from and about you. This right is subject to certain exceptions available under the CCPA and other applicable law. To submit a verified request for deletion, go to our online privacy policy at www.firstam.com/privacy-policy to submit your request or call toll-free at 1-866-718-0097. You may also designate an authorized agent to submit a request on your behalf by going to our online privacy policy at www.firstam.com/privacy-policy to submit your request or by calling toll-free at 1-866-718-0097.

Verification Process. For either a request to know or delete, we will verify your identity before responding to your request. To verify your identity, we will generally match the identifying information provided in your request with the information we have on file about you. Depending on the sensitivity of the information requested, we may also utilize more stringent verification methods to verify your identity, including but not limited to requesting additional information from you and/or requiring you to sign a declaration under penalty of perjury.

Notice of Sale. We do not sell California resident information, nor have we sold California resident information in the past 12 months. To the extent any First American affiliated entity has a different practice, it will be stated in the applicable privacy policy. We have no actual knowledge of selling the information of minors under the age of 16.

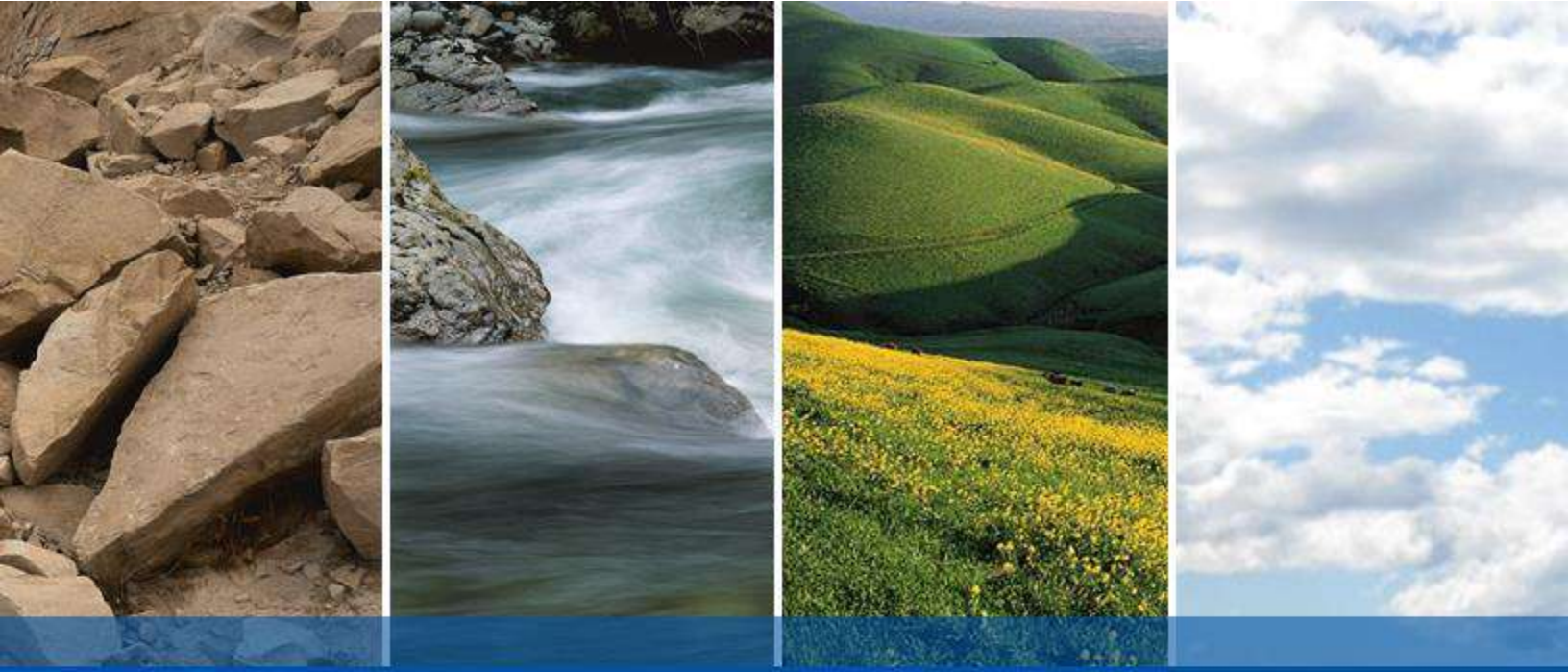
Right of Non-Discrimination. You have a right to exercise your rights under California law, including under the CCPA, without suffering discrimination. Accordingly, First American will not discriminate against you in any way if you choose to exercise your rights under the CCPA.

Notice of Collection. To learn more about the categories of personal information we have collected about California residents over the last 12 months, please see "What Information Do We Collect About You" in https://www.firstam.com/privacy-policy. To learn about the sources from which we have collected that information, the business and commercial purpose for its collection, and the categories of third parties with whom we have shared that information, please see "How Do We Collect Your Information", "How Do We Use Your Information", and "How Do We Share Your Information" in https://www.firstam.com/privacy-policy.

Notice of Sale. We have not sold the personal information of California residents in the past 12 months.

Notice of Disclosure. To learn more about the categories of personal information we may have disclosed about California residents in the past 12 months, please see "How Do We Use Your Information" and "How Do We Share Your Information" in https://www.firstam.com/privacy-policy.

© 2022 First American Financial Corporation and/or its affiliates. All rights reserved. NYSE:FAF



DRAFT

APPENDIX C

ENVIRONMENTAL DATA RESOURCES, INC.

Historical Topographic Map Report

Vallejo Properties - Glen Cove

Not Reported

Vallejo, CA 94591

Inquiry Number: 6938050.4

April 13, 2022

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

04/13/22

Site Name:	Client Name:
Vallejo Properties - Glen Cove	Engeo Inc.
Not Reported	2010 Crow Canyon Place
Vallejo, CA 94591	San Ramon, CA 94583
EDR Inquiry # 6938050.4	Contact: Jenna Keith

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Engeo Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		*Coordinates:*	
P.O.#	NA	**Latitude:**	38.081568 38° 4' 54" North
Project:	20164.000.001	**Longitude:**	-122.201037 -122° 12' 4" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	570069.60
		UTM Y Meters:	4215166.56
		Elevation:	110.86' above sea level

Maps Provided:

2018	1950
2015	1947
2012	1942
1980	1940
1973	1902
1968	1901
1959	1898
1952	1896

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2022 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets

Benicia
2018
7.5-minute, 24000

2015 Source Sheets

Benicia
2015
7.5-minute, 24000

2012 Source Sheets

Benicia
2012
7.5-minute, 24000

1980 Source Sheets

Benicia
1980
7.5-minute, 24000
Aerial Photo Revised 1979

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1973 Source Sheets

Benicia
1973
7.5-minute, 24000
Aerial Photo Revised 1968

1968 Source Sheets

Benicia
1968
7.5-minute, 24000
Aerial Photo Revised 1968

1959 Source Sheets

Benicia
1959
7.5-minute, 24000
Aerial Photo Revised 1958

1952 Source Sheets

Benicia
1952
7.5-minute, 24000
Aerial Photo Revised 1948

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1950 Source Sheets

Benicia
1950
7.5-minute, 24000
Aerial Photo Revised 1948

1947 Source Sheets

PORT CHICAGO
1947
15-minute, 50000

1942 Source Sheets

Carquinez
1942
15-minute, 62500
Aerial Photo Revised 1937

1940 Source Sheets

Carquinez Strait
1940
15-minute, 62500
Aerial Photo Revised 1940

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1902 Source Sheets

Napa
1902
30-minute, 125000

1901 Source Sheets

Carquinez
1901
15-minute, 62500

Karquines
1901
15-minute, 62500

1898 Source Sheets

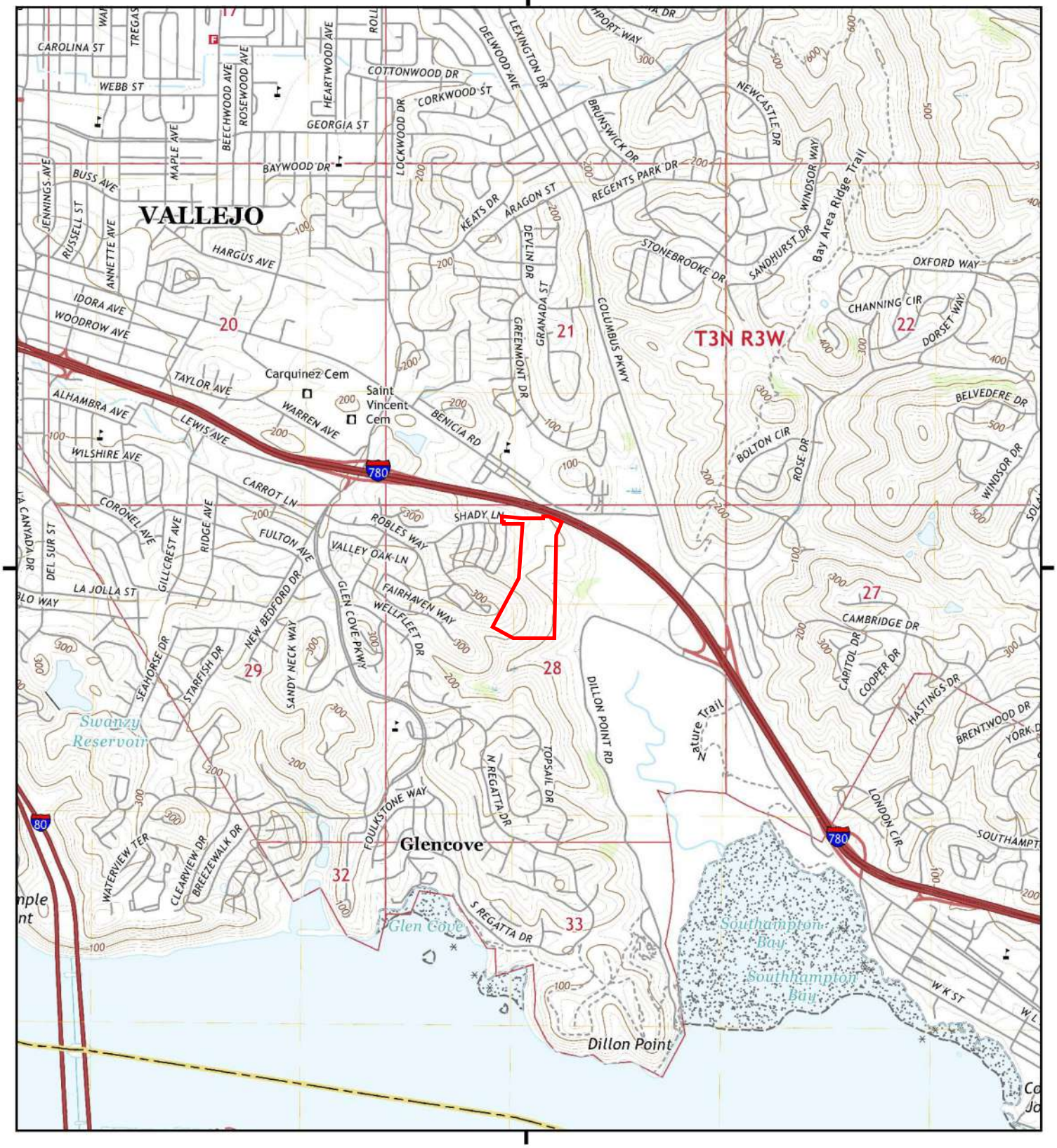
Karquines
1898
15-minute, 62500

1896 Source Sheets

Carquinez Strait
1896
15-minute, 62500

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Benicia, 2018, 7.5-minute

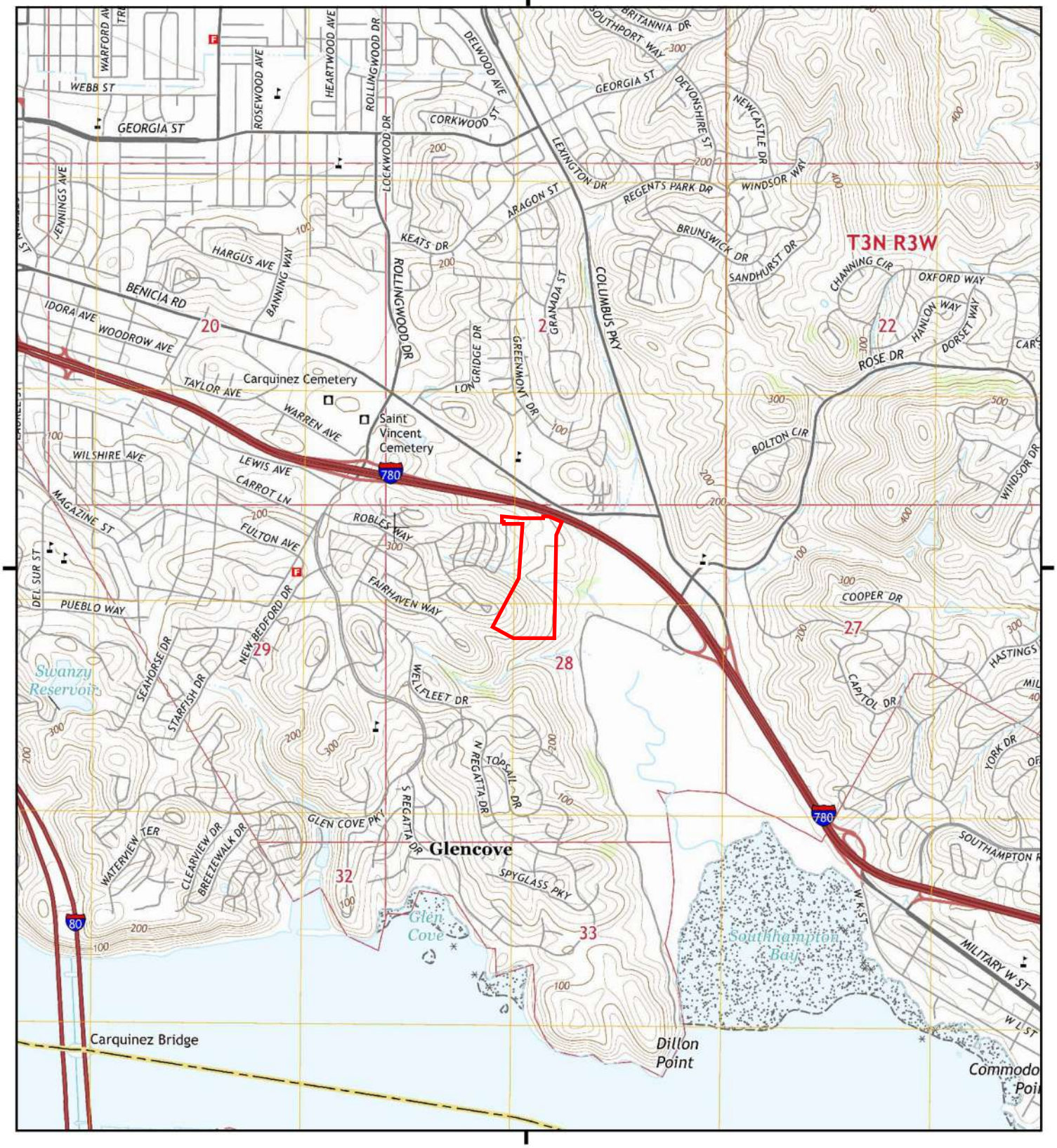
SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 7

Historical Topo Map

2015



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Benicia, 2015, 7.5-minute

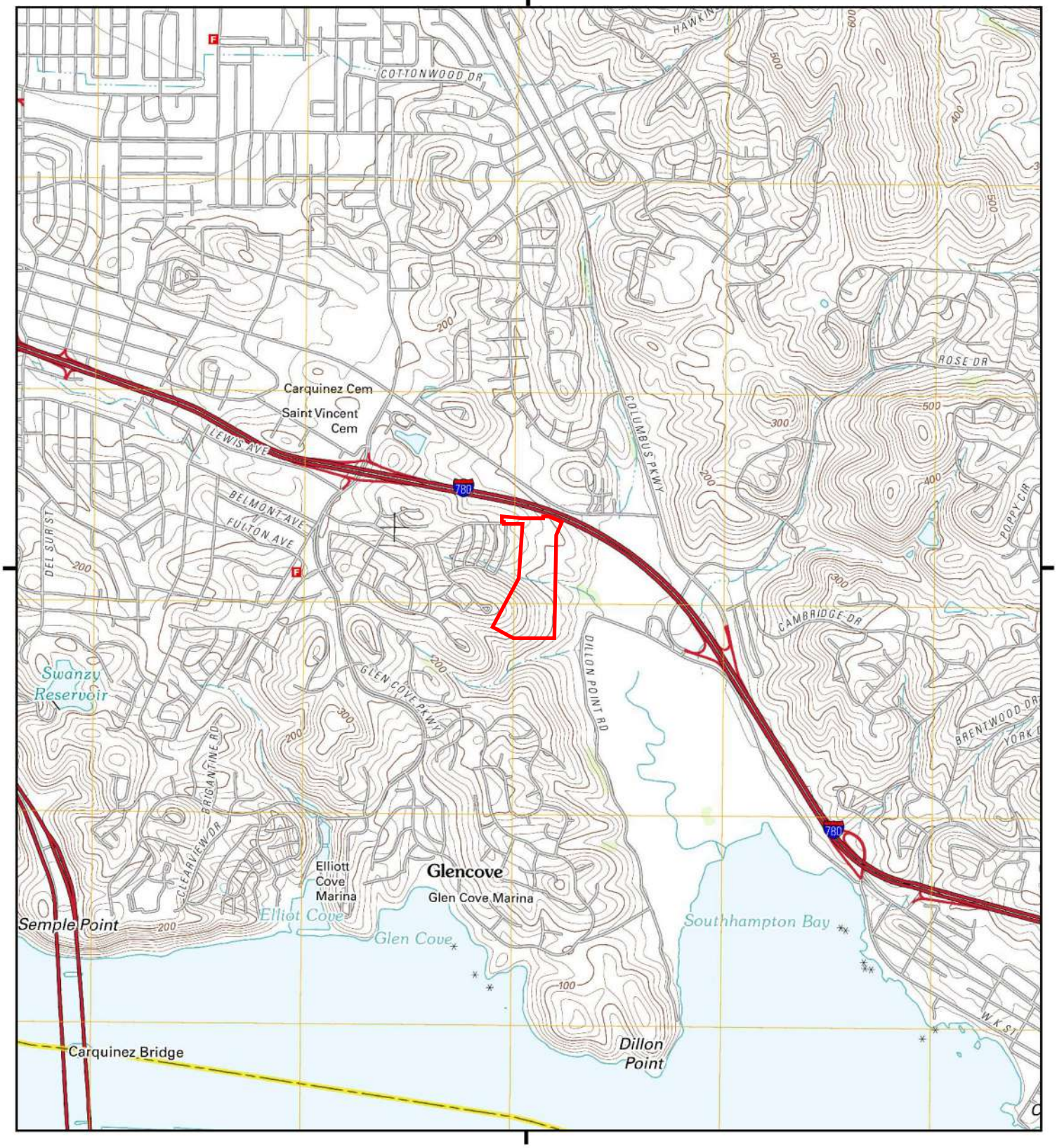
SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 8

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Benicia, 2012, 7.5-minute

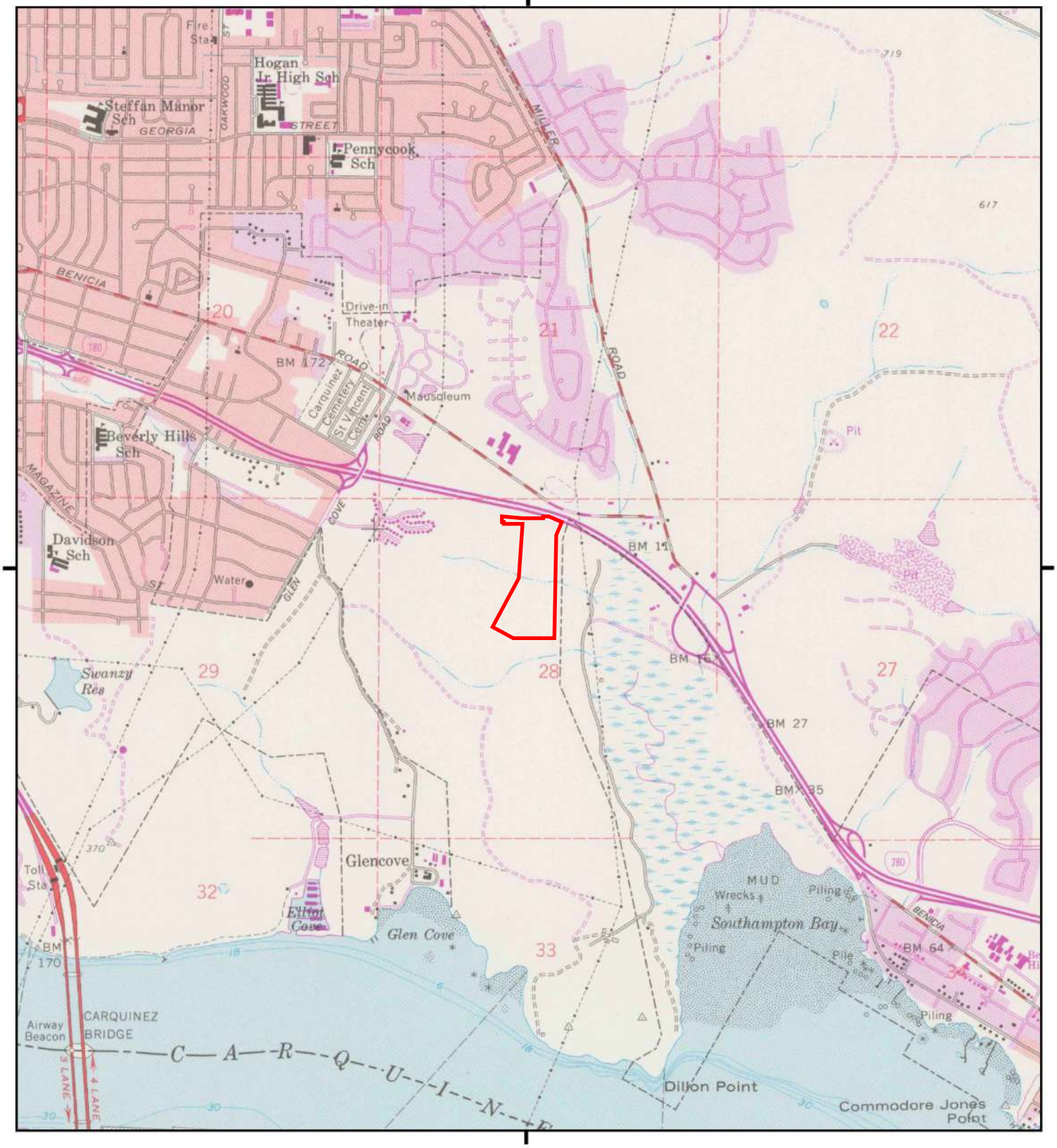
SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 8

Historical Topo Map

1980



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Benicia, 1980, 7.5-minute

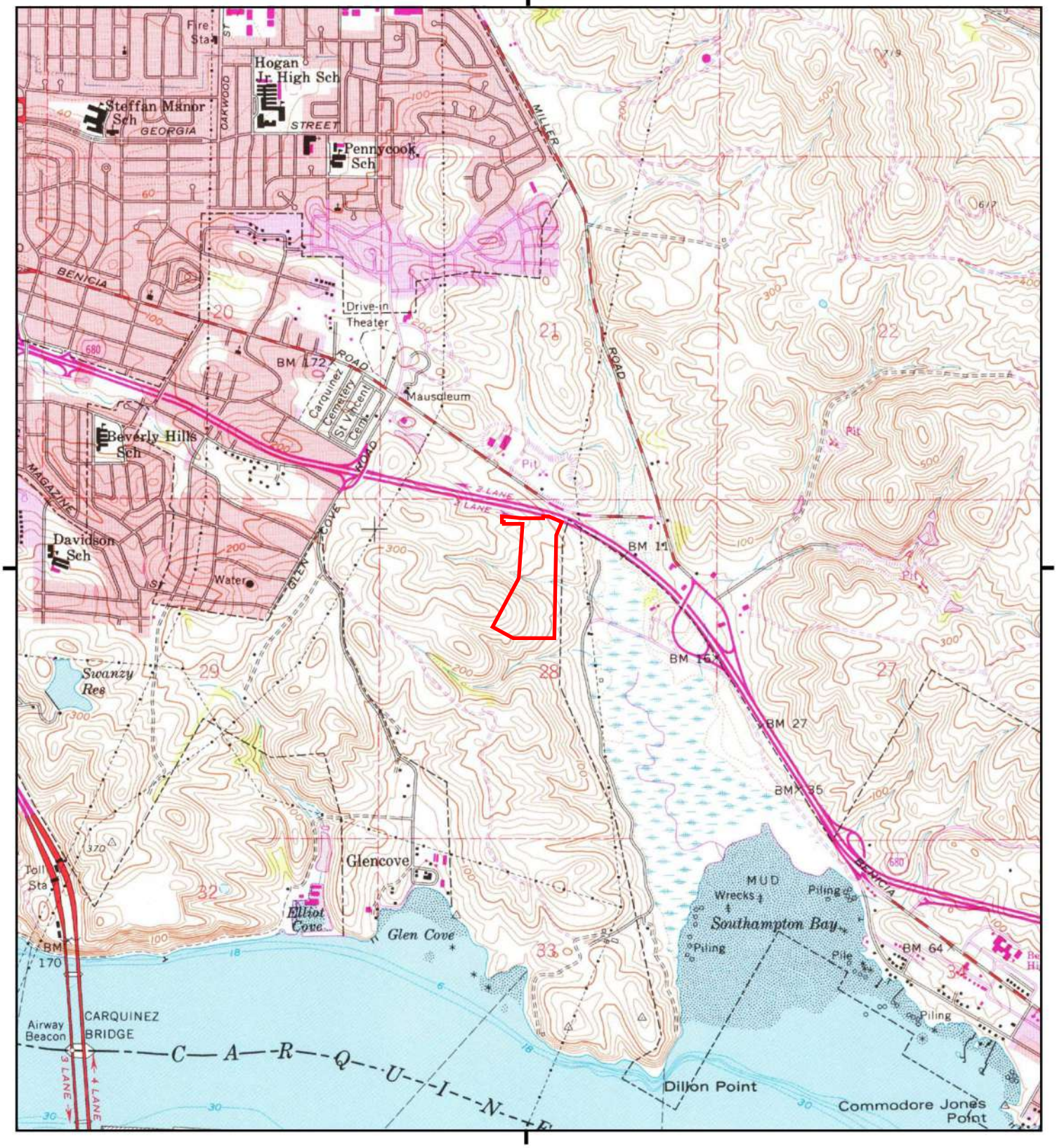
SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 10

Historical Topo Map

1973



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Benicia, 1973, 7.5-minute

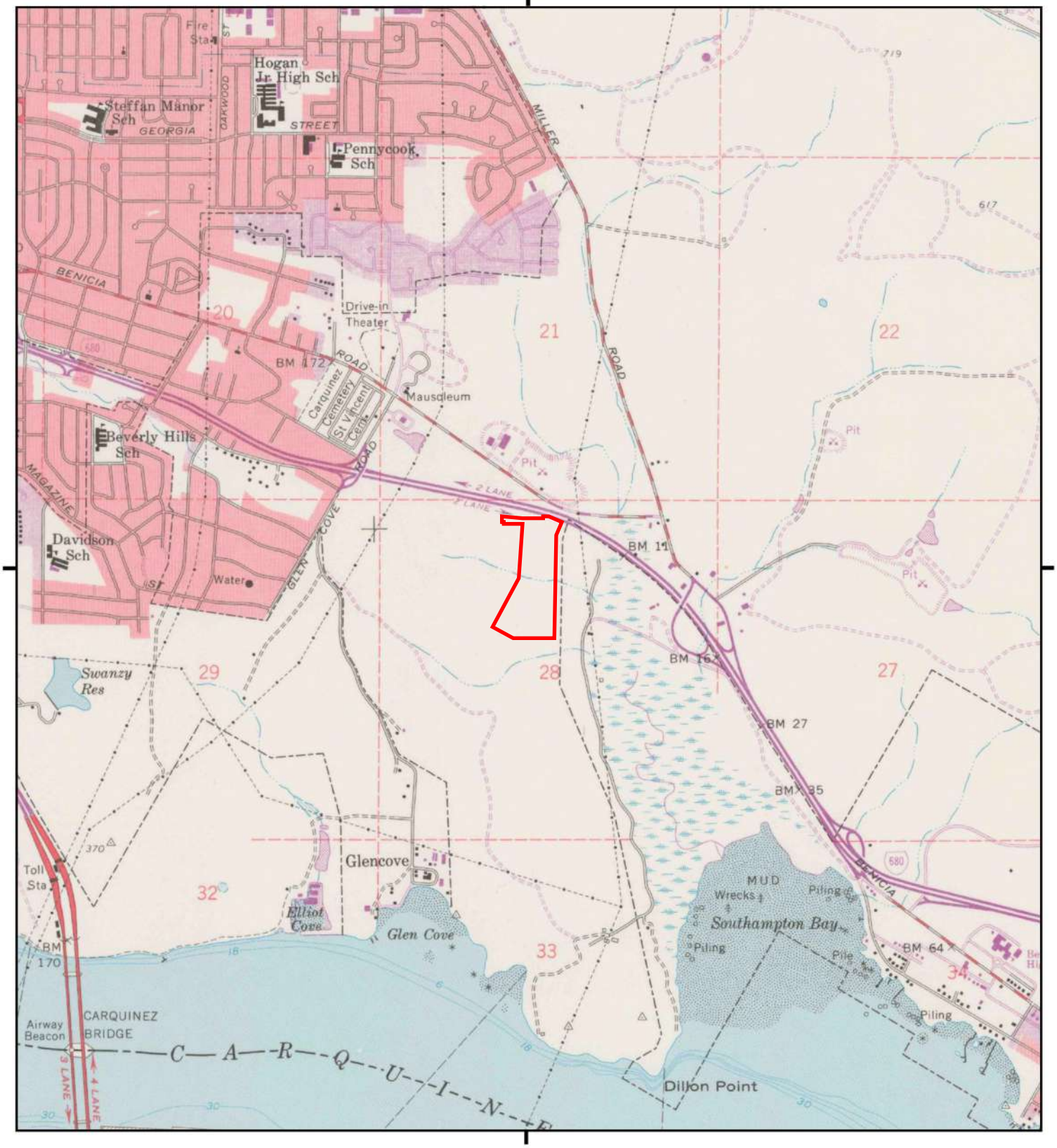
SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 11

Historical Topo Map

1968



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Benicia, 1968, 7.5-minute

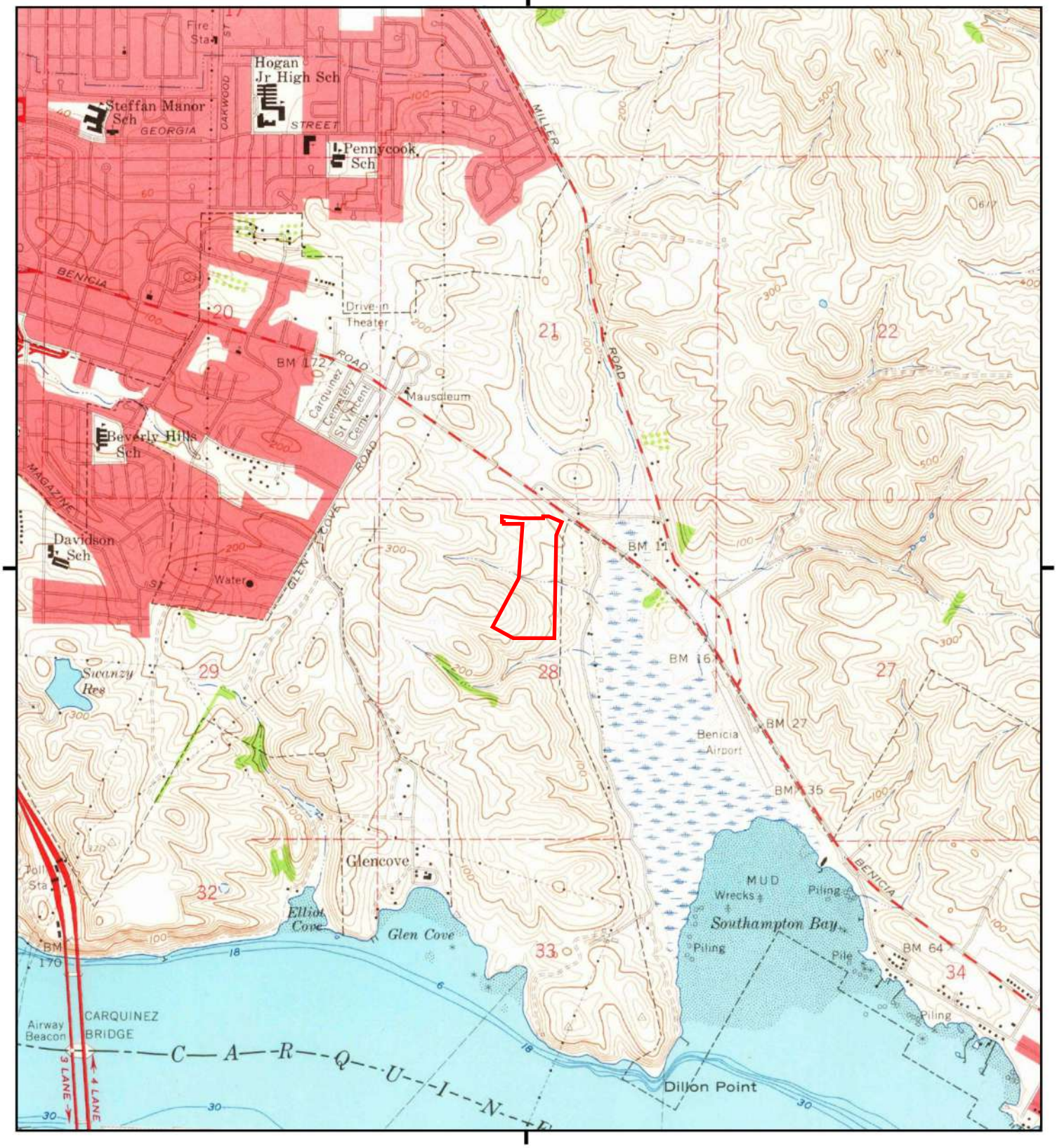
SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 12

Historical Topo Map

1959



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Benicia, 1959, 7.5-minute

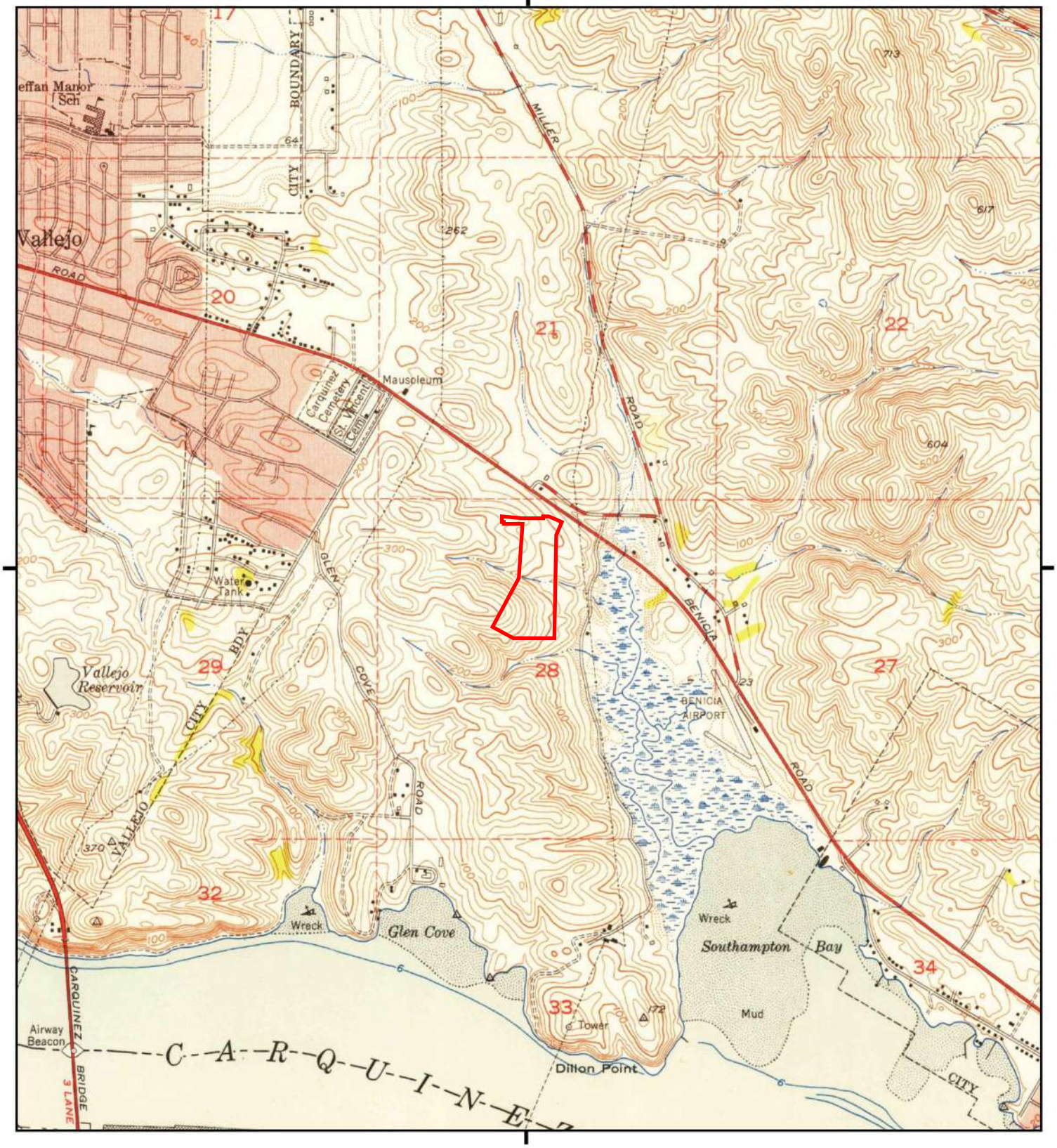
SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 13

Historical Topo Map

1952



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Benicia, 1952, 7.5-minute

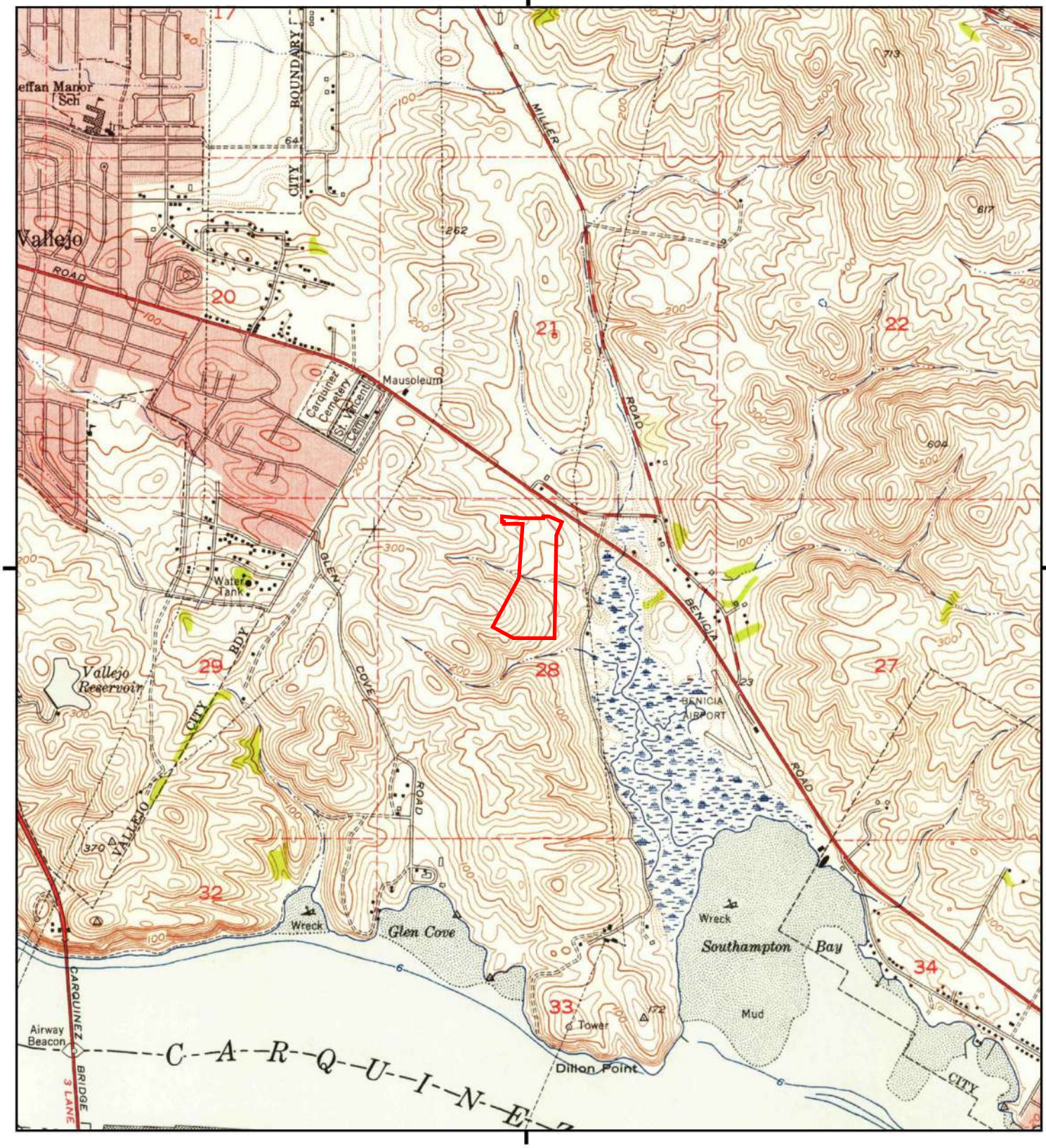
SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 14

Historical Topo Map

1950



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Benicia, 1950, 7.5-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 15

EDR

Historical Topo Map

1947

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

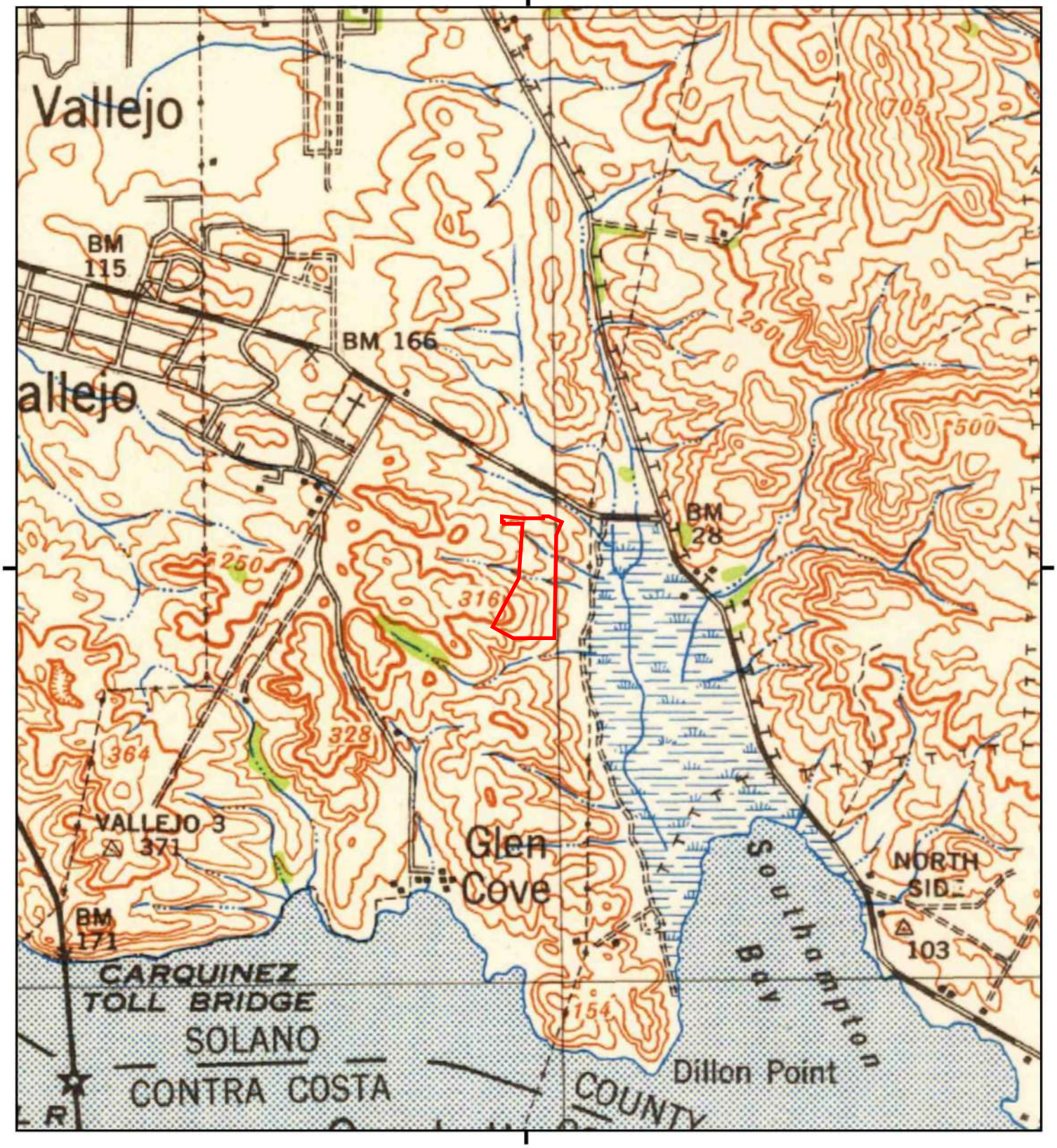
NW N NE
W E
SW S SE

TP, PORT CHICAGO, 1947, 15-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 16



This report includes information from the following map sheet(s).

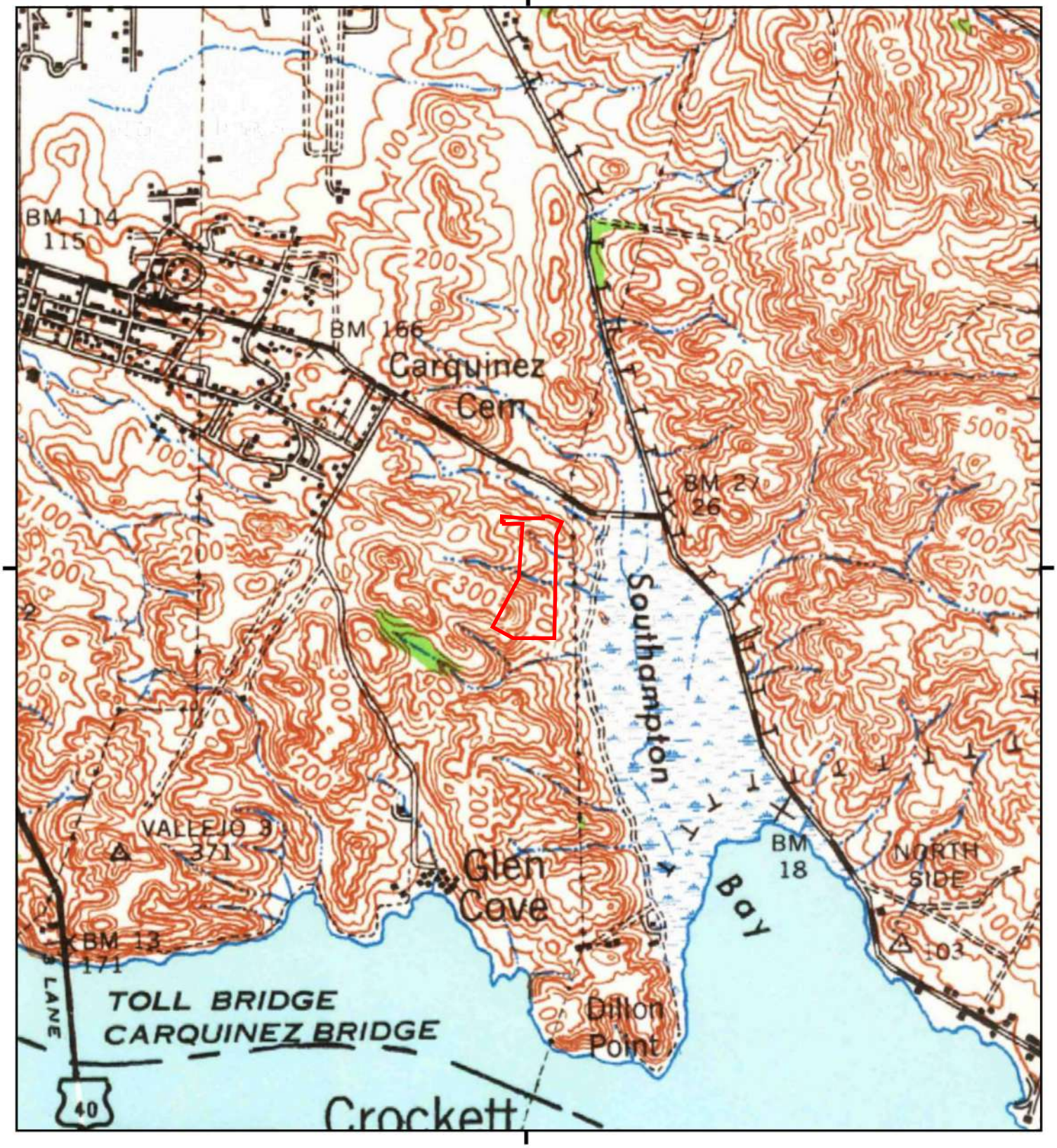
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Carquinez, 1942, 15-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Carquinez Strait, 1940, 15-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 18

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

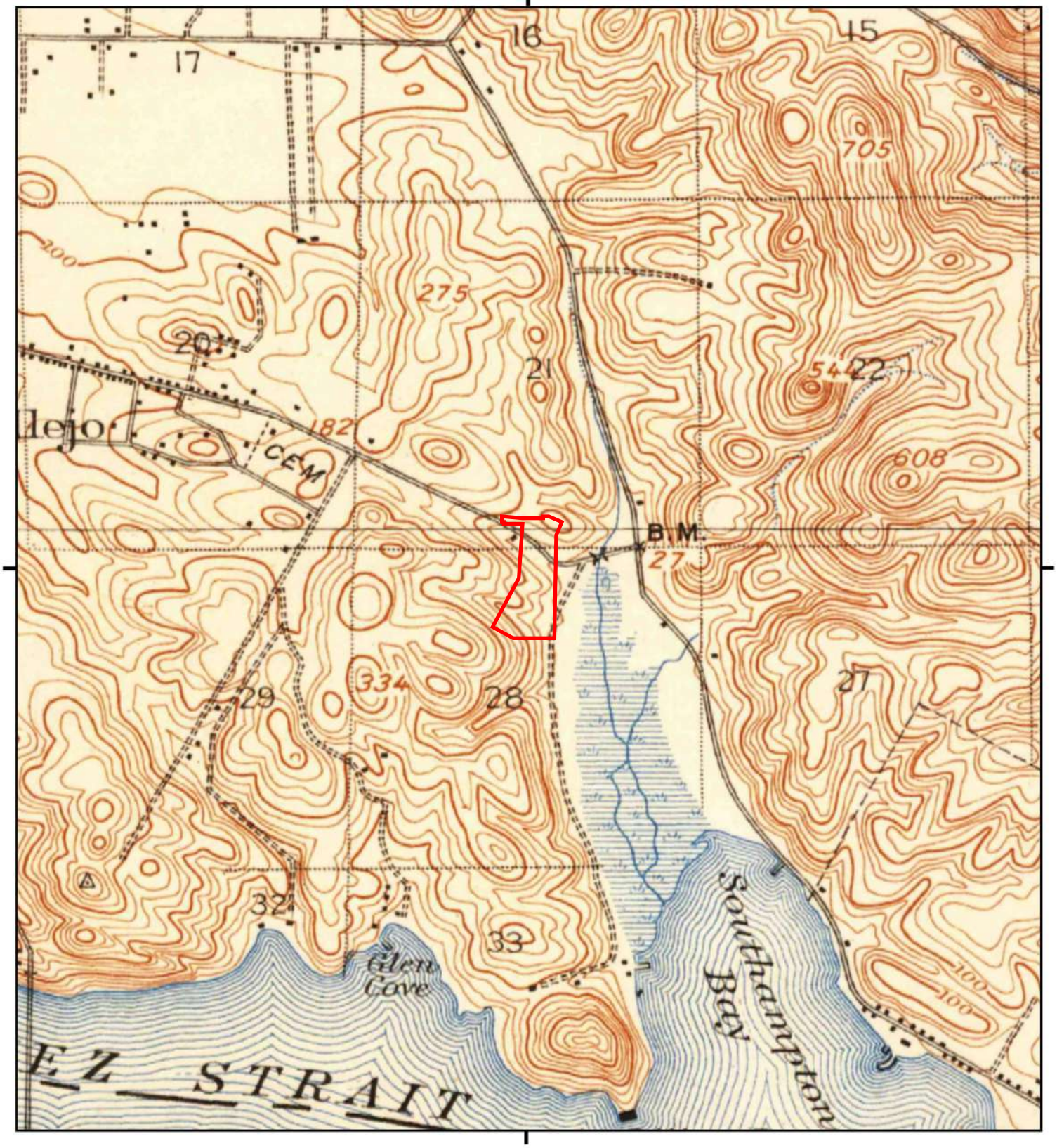
TP, Napa, 1902, 30-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

Historical Topo Map

1901



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Carquinez, 1901, 15-minute
TP, Karquines, 1901, 15-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

Historical Topo Map

1898

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Karquines, 1898, 15-minute

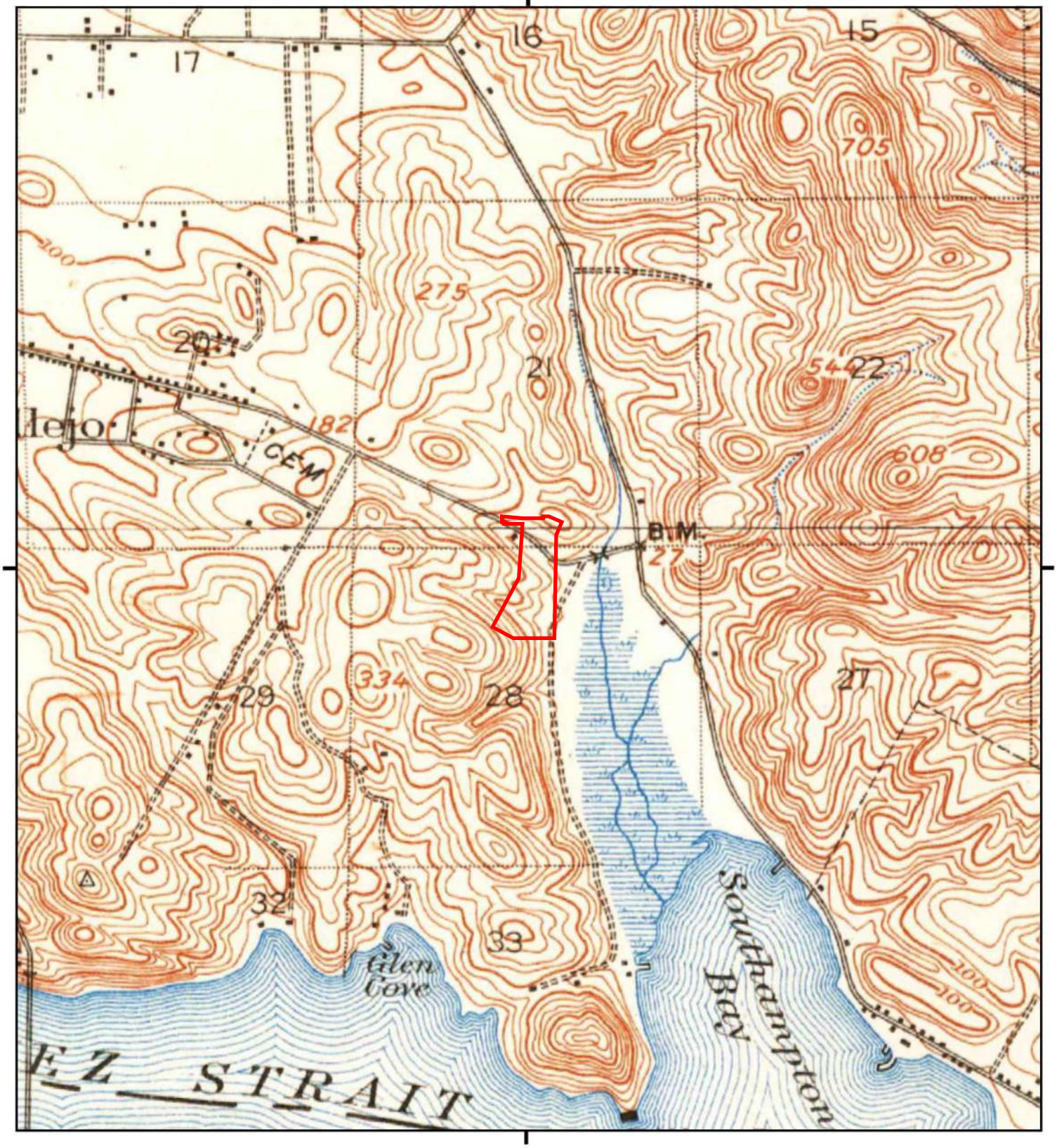
SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938950 - 4 page 21

Historical Topo Map

1896



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

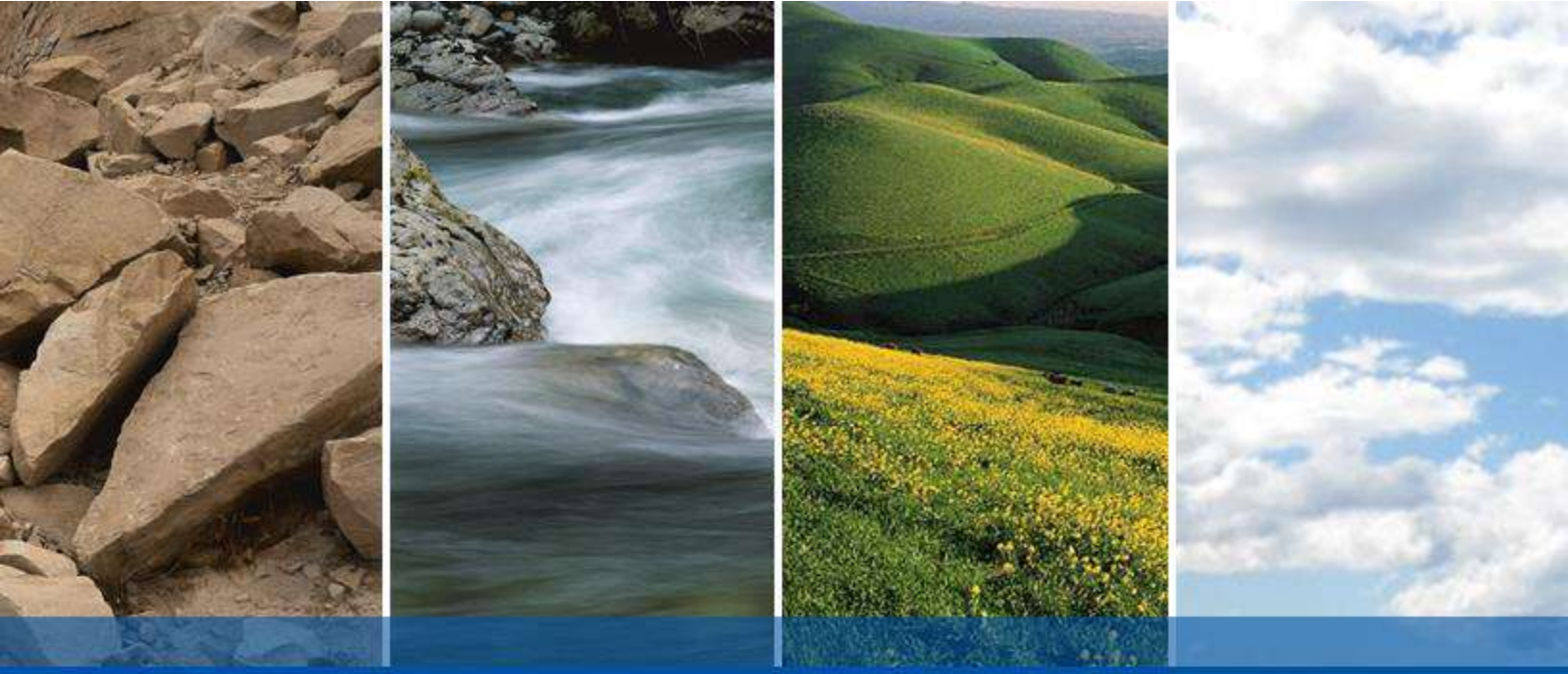
NW N NE
W E
SW S SE

TP, Carquinez Strait, 1896, 15-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 22



DRAFT

APPENDIX D

ENVIRONMENTAL DATA RESOURCES, INC.

Aerial Photo Decade Package

Vallejo Properties - Glen Cove

Not Reported

Vallejo, CA 94591

Inquiry Number: 6938050.8

April 13, 2022

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

04/13/22

Site Name:

Vallejo Properties - Glen Cove
Not Reported
Vallejo, CA 94591
EDR Inquiry # 6938050.8

Client Name:

Engeo Inc.
2010 Crow Canyon Place
San Ramon, CA 94583
Contact: Jenna Keith

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1993	1"=500'	Acquisition Date: January 01, 1993	USGS/DOQQ
1987	1"=500'	Acquisition Date: July 02, 1987	USGS/DOQQ
1982	1"=500'	Flight Date: July 05, 1982	USDA
1974	1"=500'	Flight Date: April 30, 1974	USGS
1968	1"=500'	Flight Date: April 22, 1968	USGS
1958	1"=500'	Flight Date: July 21, 1958	USGS
1952	1"=500'	Flight Date: August 03, 1952	USDA
1947	1"=500'	Flight Date: March 01, 1947	USGS
1939	1"=500'	Flight Date: August 02, 1939	USDA
1937	1"=500'	Flight Date: August 20, 1937	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2022 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

INQUIRY #: 6938050.8
YEAR: 2016
= 500'
N
EDR

INQUIRY #: 6938050.8
YEAR: 2012
= 500'
N
EDR

INQUIRY #: 6938050.8
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 6938050.8
YEAR: 2006
= 500'
N
EDR

INQUIRY #: 6938050.8
YEAR: 1993
= 500'
N
EDR

INQUIRY #: 6938050.8
YEAR: 1987
= 500'
N
EDR

INQUIRY #: 6938050.8
YEAR: 1982
= 500'
N
EDR

INQUIRY #: 6938050.8
YEAR: 1974
= 500'
N
EDR

INQUIRY #: 6938050.8
YEAR: 1968
= 500'
N
EDR

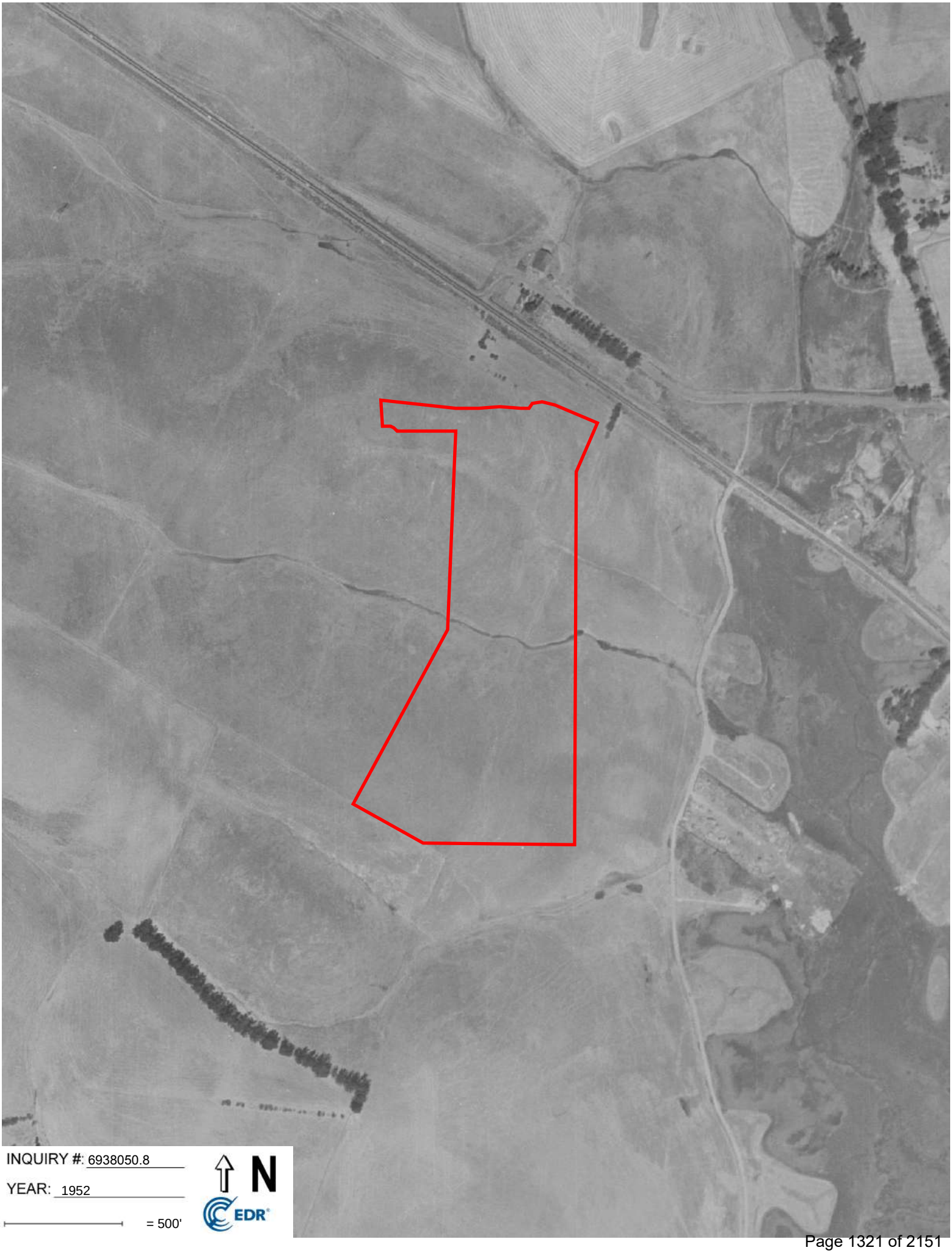
INQUIRY #: 6938050.8

YEAR: 1958

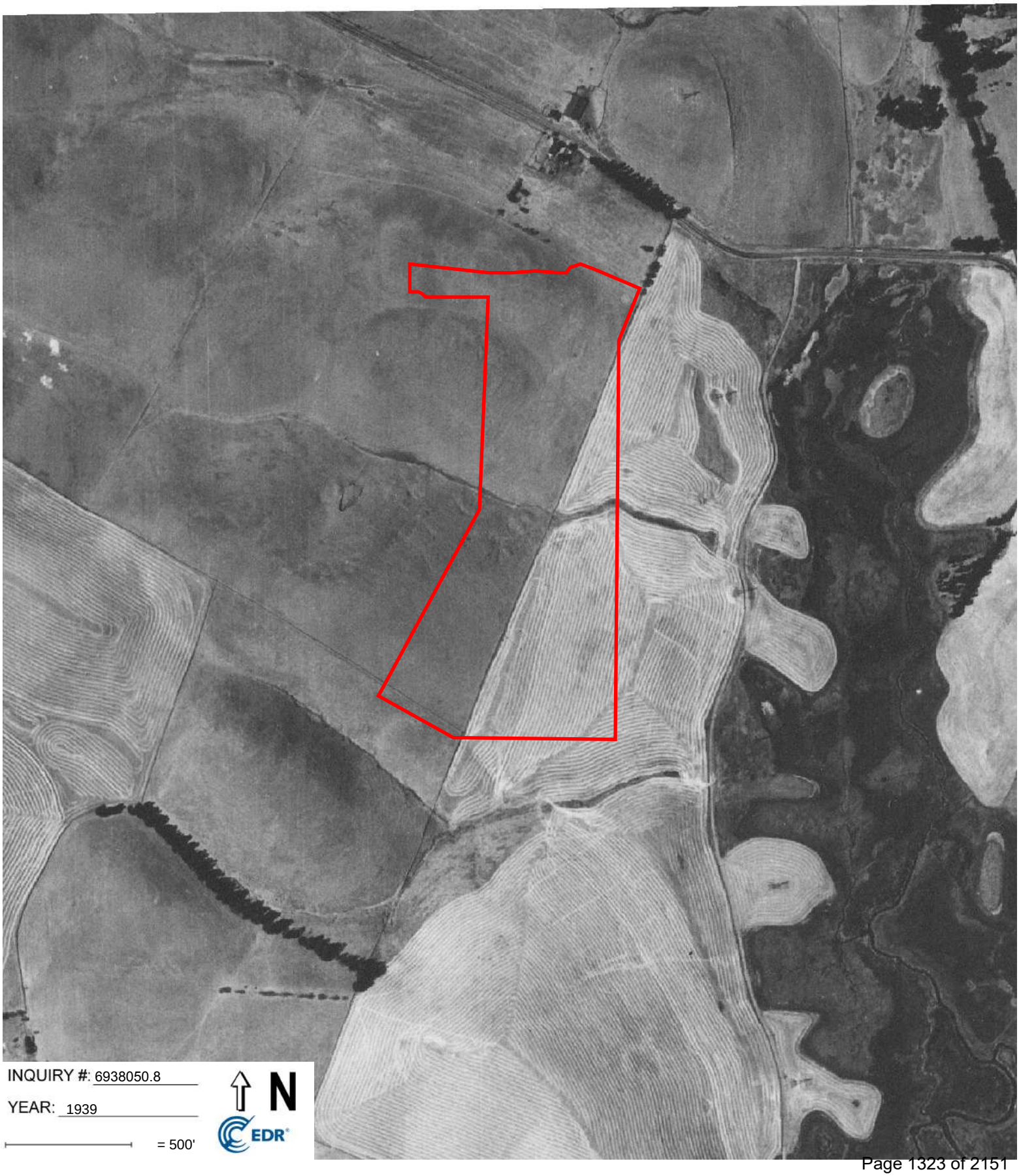
= 500'

N

EDR


INQUIRY #: 6938050.8
YEAR: 1952
= 500'
N
EDR

INQUIRY #: 6938050.8
YEAR: 1947
= 500'
N
EDR



INQUIRY #: 6938050.8

YEAR: 1939

= 500'

N

EDR

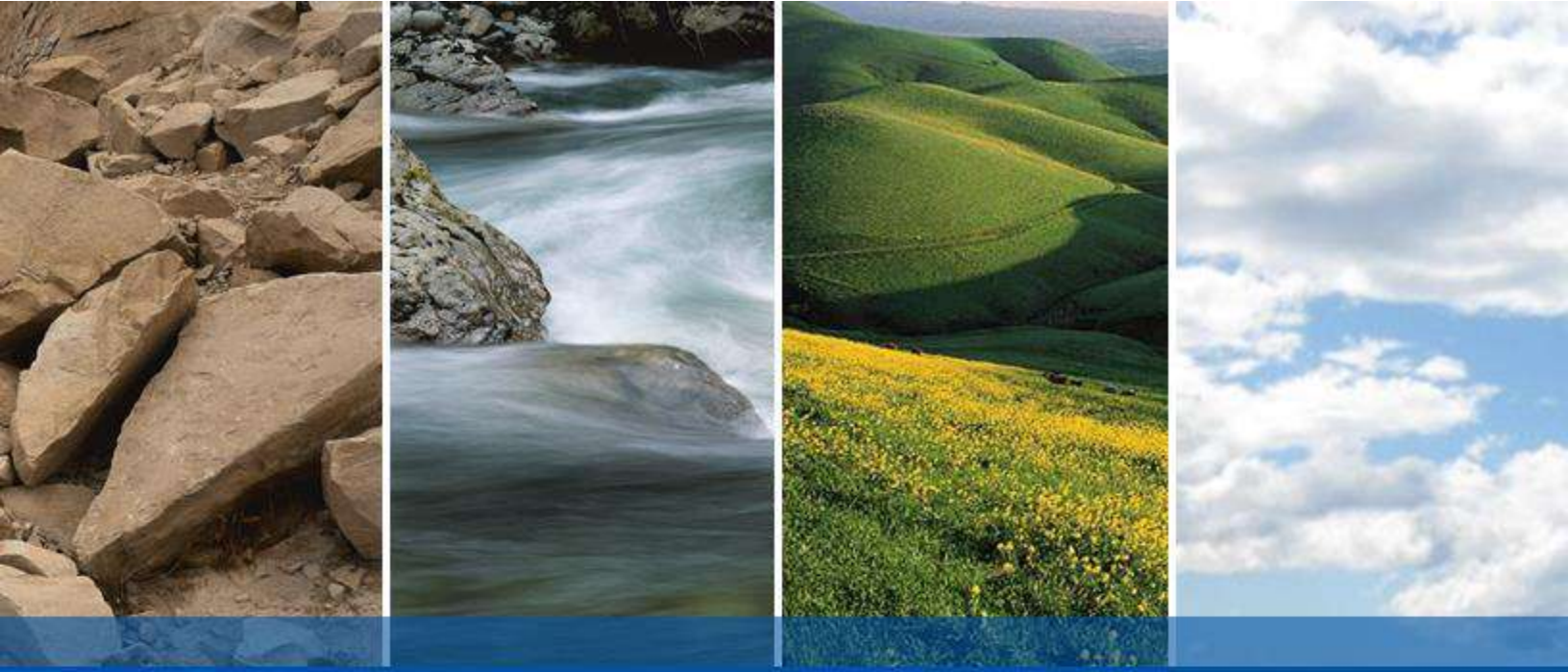
INQUIRY #: 6938050.8

YEAR: 1937

= 500'

N

EDR



DRAFT

APPENDIX E

ENVIRONMENTAL DATA RESOURCES, INC.

Sanborn Map Report

Vallejo Properties - Glen Cove

Not Reported

Vallejo, CA 94591

Inquiry Number: 6938050.3

April 13, 2022

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

04/13/22

Site Name:

Vallejo Properties - Glen Cove
Not Reported
Vallejo, CA 94591
EDR Inquiry # 6938050.3

Client Name:

Engeo Inc.
2010 Crow Canyon Place
San Ramon, CA 94583
Contact: Jenna Keith

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Engeo Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # B899-4BA0-870E

PO # NA

Project 20164.000.001

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: B899-4BA0-870E

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

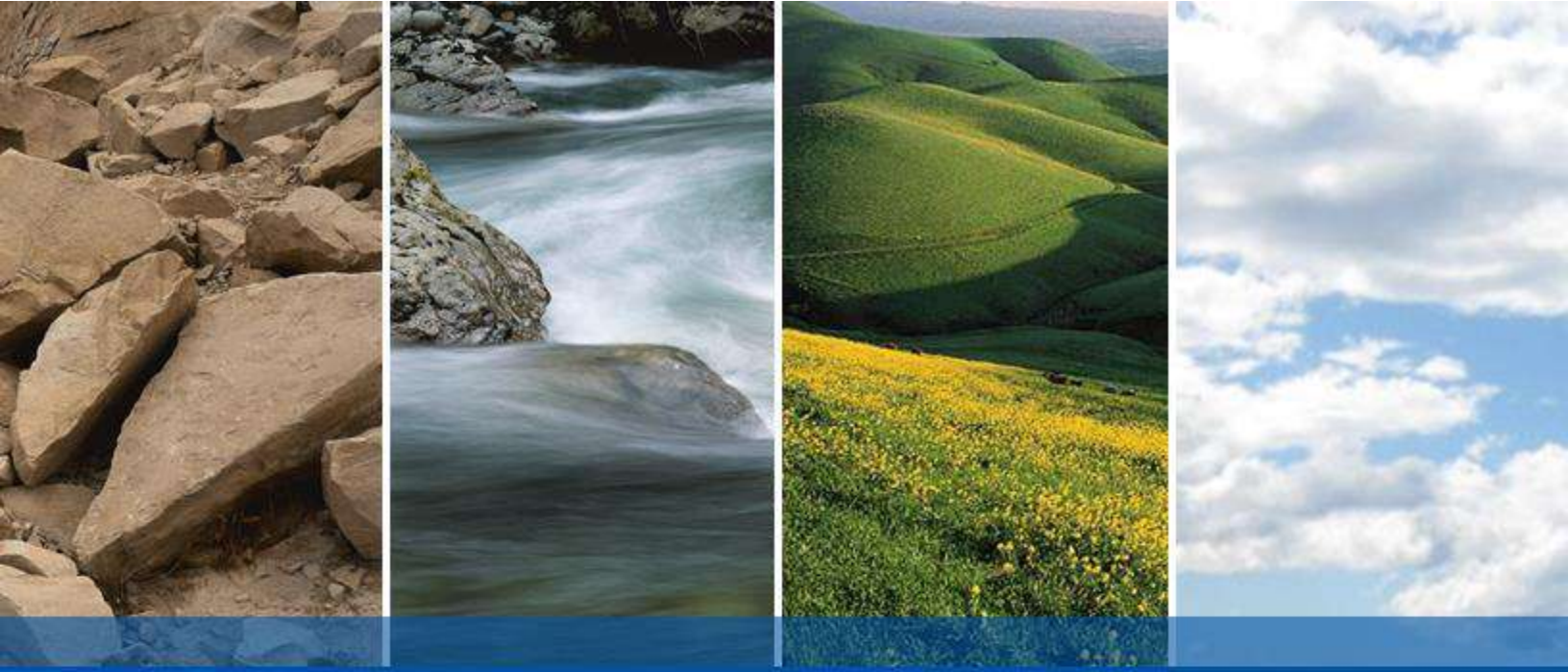
Engeo Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2022 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.



DRAFT

APPENDIX F

ENVIRONMENTAL DATA RESOURCES, INC.

City Directory

Vallejo Properties - Glen Cove
Not Reported
Vallejo, CA 94591

Inquiry Number: 6938050.5
April 14, 2022

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2020 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer. Reproduction of City Directories without permission of the publisher or licensed vendor may be a violation of copyright.

Data by
infoUSA®
Copyright©2008
All Rights Reserved

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☐	☑	EDR Digital Archive
2014	☐	☑	EDR Digital Archive
2010	☐	☑	EDR Digital Archive
2005	☐	☑	EDR Digital Archive
2000	☐	☑	EDR Digital Archive
1995	☐	☑	EDR Digital Archive
1992	☐	☑	EDR Digital Archive
1988	☑	☐	POLK DIRECTORY CO
1984	☑	☐	POLK DIRECTORY CO
1979	☑	☐	POLK DIRECTORY CO
1974	☑	☐	POLK DIRECTORY CO
1970	☑	☐	POLK DIRECTORY CO
1965	☑	☐	POLK DIRECTORY CO
1959	☑	☐	POLK DIRECTORY CO
1937	☑	☐	POLK DIRECTORY CO
1926	☑	☐	POLK DIRECTORY CO

EXECUTIVE SUMMARY

Year	*Target Street*	*Cross Street*	*Source*

FINDINGS

TARGET PROPERTY STREET

Not Reported
Vallejo, CA 94591

No Addresses Found

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
BENICIA RD			
2017	pg. A2	EDR Digital Archive	
2014	pg. A6	EDR Digital Archive	
2010	pg. A10	EDR Digital Archive	
2005	pg. A14	EDR Digital Archive	
2000	pg. A19	EDR Digital Archive	
1995	pg. A22	EDR Digital Archive	
1992	pg. A25	EDR Digital Archive	
1988	pg. A27	POLK DIRECTORY CO	
1988	pg. A28	POLK DIRECTORY CO	
1984	pg. A29	POLK DIRECTORY CO	
1984	pg. A30	POLK DIRECTORY CO	
1979	pg. A31	POLK DIRECTORY CO	
1979	pg. A32	POLK DIRECTORY CO	
1974	pg. A33	POLK DIRECTORY CO	
1974	pg. A34	POLK DIRECTORY CO	
1970	pg. A35	POLK DIRECTORY CO	
1970	pg. A36	POLK DIRECTORY CO	
1965	pg. A37	POLK DIRECTORY CO	
1965	pg. A38	POLK DIRECTORY CO	
1959	pg. A39	POLK DIRECTORY CO	
1959	pg. A40	POLK DIRECTORY CO	
1959	pg. A41	POLK DIRECTORY CO	
1937	pg. A42	POLK DIRECTORY CO	
1937	pg. A43	POLK DIRECTORY CO	
1926	pg. 0	POLK DIRECTORY CO	Target and Adjoining not listed in Source

City Directory Images

BENICIA RD 2017

650 GATEWAY MEMORIAL
GREEN LEAF SOLUTIONS
LIFE ENHANCEMENT SERVICES
656 CHRIS CLUB
700 MAGGIES HAMBURGERS
708 BALUGO, JEFF B
709 VARGAS, MAURICIO E
711 SANCHEZ, GERARDO F
713 VALENTINE, BRUCE
714 ARIAS, JOSE D
717 NDT ELECTRONICS
TAYLOR, ROBERT
720 WALLSH, STEPHEN M
723 LOPEZ, AGUILAR N
726 WOMBLE, DENNIS R
729 BUCHALTER, MARC Z
731 SMITH, TODD
732 RESTUCCIA, JOSEPH M
737 MOORE, RYAN B
738 FRAIRE, ADRY
739 JERNEY, STEVEN J
743 MERRITZ, PATSY R
744 HARVEY, KEVIN
745 LOPEZ, NICOLAS
750 VESS, CHERYL A
751 HENDERSON, CARL M
756 BROOKS, ROBERT B
762 PERIDO, MARIO A
786 WRIGHT, LARRY G
801 STEWART, KENA
802 KOSIERADZKI, ERYK
805 SURLES, EARLINE S
806 GONZALEZ, JUAN
809 VARGAS, JAQUELINE
810 ESPINOZA, DEBORAH A
813 EVERSOLE, MATTHEW
814 HAYDOCK, JONATHAN R
817 KISTLE, MARION Y
MCSHERRY, BARBARA J
RAMOS, SUSAN
818 DUNCAN, ELLIS
821 ROGERS, TRACY
822 JACKSON, NACHELE R
830 DENSON, GREGORY R
834 OJALA, SANNA B
PEREZ, JOSE L
ROTTER, MICHAEL
TODD, HEIDI M
835 SANTOS, RAOULEEN U
837 ARREOLA, ALMA I

BENICIA RD 2017 (Cont'd)

837	CLARK, DAVID
839	SANTO, TOM H
841	HEYMANS, KAYLEIGH A
843	DIGIORDANO, MATTHEW J
844	HENSON, MICHAEL
845	MESA, VIDAL C
849	JOHNSON, CHRISTI A
	NUNES, DARRYL
853	ELLIS, JEFF
854	HOLMES, LAURA
855	HARRIS, LISA L
857	ZUIDEMA, RICHARD D
860	WESTER, SEAN
900	BIBLE BAPTIST CHURCH
901	ZAMORA, CECILIO T
903	HERKENRATH, TERESA
909	MILLS, JOHN
911	SCUDDER, GRACE N
915	RUS, DALI
920	BIBLE BAPTIST CHURCH
921	SARAVIA, JAIRO
925	PALELEI, TOILEA
930	DONALDO, ALDWIN J
933	MCGILL, QUAIYAMA
	MITCHELL, BRENDA N
934	CELSA, GARCIA
937	THEOBALD, JAMES D
941	GANN, SEAN
945	VARGAS, MARIO M
946	EARLY, PATRICK T
948	BACOME, GARY A
949	JOHNS, GARY E
950	BERNARDINO, ELMER D
953	GUTIERREZ, IRENE
956	ALLISON, EARIN
	MIRABELLI, SARAH
	RICHMOND, DWANE A
	SIMMONS, CYRIL J
957	BURLA, DONNA K
960	TAYLOR, RASHONDA
	THOMAS, BRITNY
961	AHUMADA, VICENTE O
966	ART DURDEN E Z TREE SERVICE
	BARNETT, RAMONA B
	SALDIVAR, JEFFREY
969	MACK, NILES P
970	HAMILTON, JUMOKE P
971	HELEN, SOTELO
973	LISSICK, KENNETH I
1001	KRUSZKA, S M

BENICIA RD 2017 (Cont'd)

1013 LIFELINE INTERNATIONAL CHURCH
1016 JONES, KANTINA L
1017 TURNER, JEAN E
1020 CAPWELL, JERRY M
ODONNELL, FRANCISCA K
SIDHU, HARJINBER
1021 MENCHACA, NICHOLAS J
1025 JOHNS WELDING & MARINE PROPELLER RE
1026 GARRET, JAMIE
1030 RAMOS, JOVY V
1031 SCARROTT, JOHN E
1045 WEBER, EDWARD L
1049 DAVIS, HAROLD N
1050 PANGELINAN, MICHAEL G
SHOP N SAVE
1100 MERRILL, NORMAN L
1101 CORINTHIANS CHURCH OF GOD IN CHRIST
1117 TYLER, TY
1123 ELLIS, JEFFREY A
1125 AARDVARKS DOG TRAINING CENTER
1134 HILLARD, JONATHAN C
1138 DULAY, ENRIQUE R
1141 BALDRIDGE, ALFRED R
1144 ANDREWS, LARRY B
1145 SILVA, RICHARD A
1146 OVERBY, DONALD M
1150 TEVES, THOMAS D
1153 MCLAIN, TONI
NICHOLLS, JAMES
1154 BAUTISTA, ARTURO G
1161 BEIGHLEY, ARTHUR
DEVINE, KATHLENE L
KEENEY, JOANN A
LAM, ALYCIA
LOSTICA, ANTONINA
MCBRIDE, ELLEN
RILEY, DONALD A
WALLACE, JEREMY
1162 DEJESUS, CECILA
1164 BASCRACEA, MARIAN
1167 ALEXANDER, JAMES L
DAVIES, FLORENCE R
NEWELL, GUILLAUME
OHARA, DANIEL D
1170 SECOND BAPTIST CHURCH
1175 TRICITY FENCE COMPANY
1182 PANETTA, JOSEPH A
1191 GERMINO JIM LANDSCAPE
WEGLEITNER, JASON B
1195 PRICE, RICK S

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2017 (Cont'd)

1500 PATRICKS SAINT VINCENT HIGH SCHOOL
SUPERIOR SISTER
1551 CALIFORNIA HWY PATROL
STATE OF CALIFORNIA
1600 CRUSADER FENCE CO INC
1855 780 MINI STORAGE
1865 LEWS BRAKE SHOP

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2014

650	GATEWAY MEMORIAL
	GREEN LEAF SOLUTIONS
656	CHRIS CLUB
658	EARLS TEXAS BBQ
	UNCLE ZACS PIZZARIA
700	MAGGIES HAMBURGERS
707	OCCUPANT UNKNOWN,
708	BALUGO, JEFF B
709	VARGAS, BERTA D
711	SANCHEZ, GERARDO F
713	VALENTINE, BRUCE
714	TINKHAM, MIKE K
717	GANCH, WILLIAM
	NDT ELECTRONICS
720	WALLSH, STEPHEN M
723	DAVIS, JASON L
726	WOMBLE, DENNIS R
729	BRETHAUER, MORGAN
731	JOHNSON, CAIL
732	RESTUCCIA, JOSEPH M
737	MOORE, RYAN B
738	OCCUPANT UNKNOWN,
739	JERNEY, STEVEN J
744	HARVEY, KEVIN
745	JIMENEZ, NICOLAS L
750	OCCUPANT UNKNOWN,
751	HENDERSON, CARL M
756	BROOKS, ROBERT B
757	RINCON, KAREN
762	OCCUPANT UNKNOWN,
764	ROBERTS, JOHN N
778	OCCUPANT UNKNOWN,
782	REID, RU
786	WRIGHT, LARRY G
801	ZIMMERMAN, STANLEY R
802	KOSIERADZKI, ARKADIUSZ P
805	SURLES, EARUNE
809	BECK, CLIFFORD A
810	OCCUPANT UNKNOWN,
813	OCCUPANT UNKNOWN,
814	RUSSELL, WYCONDA D
817	DAVIDSON, JIM M
	MCSHERRY, BARBARA J
818	RIVERA, MELODIE
821	ROGERS, TRACY
822	DURAN, J J
826	CEPEDA, CANDICE
830	DENSON, GREGORY R
834	ERIC, CLAY
	OCCUPANT UNKNOWN,

BENICIA RD 2014 (Cont'd)

834 ROTTER, MICHAEL
835 OCCUPANT UNKNOWN,
837 WILSON, WANDA A
839 SANTO, TOM H
841 HAMNER, STEVEN
842 OCCUPANT UNKNOWN,
843 DIGIORDANO, MATTHEW J
844 HENSON, MICHAEL
845 CORTEZ, VIDAL
849 JOHNSON, CHRISTINA A
853 JONES, ASHLEY
854 SWEETING, SARAH
855 HARRIS, LISA L
OCCUPANT UNKNOWN,
856 OCCUPANT UNKNOWN,
857 ZUIDEMA, RICHARD D
860 WESTER, EVELYN
900 BIBLE BAPTIST CHURCH
MUSCATO, MICAH
901 AGUILAR, MARIA
MANZON, JAIME
OCCUPANT UNKNOWN,
ZAMORA, CECILIO T
903 HERKENRATH, TERESA
909 GLASER, JOHN W
911 SCUDDER, MATTHEW
915 OCCUPANT UNKNOWN,
921 SARAVIA, JAIRO
925 TAUTUIAKI, ANITA
930 DONALDO, ALDWIN J
933 MCGILL, QUAIYAMA
MITCHELL, BRENDA N
934 DESANTIAGO, ABEL D
936 OCCUPANT UNKNOWN,
937 OCCUPANT UNKNOWN,
941 SCARROTT, SHERRI A
945 DAVIDSON, D
NEWMAN, TEDI
946 OCCUPANT UNKNOWN,
948 BACOME, GARY A
949 JOHNS, GARY E
950 CM PLUMBING
OCCUPANT UNKNOWN,
953 GUTIERREZ, IRENE
956 BAZILE, BRENDA J
MCDONALD, JOHNATHAN L
WILLIAMS, LISA
957 BURLA, DONNA K
961 AHUMADA, VICENTE O
965 DUENIAS, JESSE

BENICIA RD 2014 (Cont'd)

966 HUDGINS, JESSICA
OCCUPANT UNKNOWN,
967 OCCUPANT UNKNOWN,
968 ZUIDEMA, RICHARD
969 LLOYD, CANDIS C
970 HAMILTON, JUMOKE
971 HELEN, SOTELO
973 LISSICK, KENNETH I
1001 KRUSZKA, FRANCIS B
1012 TOOR, GURMIT K
1013 LIFELINE INTERNATIONAL CHURCH
OCCUPANT UNKNOWN,
1016 JONES, KANTINA
1017 TURNER, BOOKER T
1020 OCCUPANT UNKNOWN,
SIDHU, HARJINBER
1021 DORNBURG, SAMANTHA
1025 JOHNS WELDING & MARINE PROPELLER RE
1026 WILLIAMS, JEFF M
1031 SCARROTT, JOHN E
1045 WEBBER, EDWARD L
1049 OCCUPANT UNKNOWN,
1050 PANGELINAN, MICHAEL G
SANDHU, BALBIR K
SHOP N SAVE
WINNING, BRIAN T
1100 MERRILL, NORMAN L
1101 CORINTHIANS CHURCH OF GOD IN CHRIST
1117 OCCUPANT UNKNOWN,
1123 ELLIS, JEFFREY A
OCCUPANT UNKNOWN,
1125 AARDVARKS & OTHERS PET SITTING
AARDVARKS DOG TRAINING CENTER
1134 LEWIS, ALLEN
1138 DULAY, ENRIQUE R
1141 BALDRIDGE, ALFRED R
1144 MARTINEZ, MELVYN A
1145 MOORE, MONIQUE Y
1146 BROOKS, CHRISTOPHER P
JOHNSTON, SHARON
MACIAS, ALEJANDRA
1150 OCCUPANT UNKNOWN,
TEVES, THOMAS D
1153 KARBO, CAROL
NICHOLLS, JAMES
1154 BAUTISTA, ARTURO G
DEFIESTA, MITCHELL L
MCKAY, DELIMAR T
PARTYNSKI, PHILLIP
1156 SCHWARTZ, DOLLY

BENICIA RD 2014 (Cont'd)

1161	DEVINE, KATHLENE L
	DUNCAN, DAVID L
	FROLANDER, CHARITY
	KEENEY, JOANN A
	MCBRIDE, CHARLOTTE
	MCWILLIAMS, ERIC W
	RILEY, DONALD A
	WALLACE, JEREMY
1162	DEJESUS, CECILA
1164	CHAN, RAMON
1165	BLACKWELL, FRAYDRA D
1167	CABRERA, CARLOS
	FEAGINS, ROBERT
1170	SECOND BAPTIST CHURCH OF VALLEJO
1175	RENT AFENCE FROM TRICITY FENCE CO
	TRICITY FENCE COMPANY
1182	PANETTA, JOSEPH A
1191	WEGLEITNER, JASON B
1193	OCCUPANT UNKNOWN,
1194	JOIE DE VI BOARDING KENNELS & PET SI
1195	PRICE, RICK S
1196	OCCUPANT UNKNOWN,
1300	OCCUPANT UNKNOWN,
1500	PATRICKS SAINT VINCENT HIGH SCHOOL
	SUPERIOR SISTER
1551	CALIFORNIA HWY PATROL
	STATE OF CALIFORNIA
1600	CRUSADERS FENCE CORPORATION INC
1855	780 MINI STORAGE
1865	LEWS BRAKE SHOP

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2010

650	VALLEJO MONUMENT CO
656	CHRIS CLUB
666	VALLEJO DISTRIBUTORS & SUPER
688	DECKER, THOMAS W
700	MAGGIES HAMBURGERS
707	NDT ELECTRONICS
	OCCUPANT UNKNOWN,
708	ABREGO, ANGELA D
711	SANCHEZ, GERARDO F
713	VALENTINE, DEBORAH F
714	ROACH, MICHAEL D
717	GANCH, WILLIAM
720	SORRELS, CAROL D
726	WOMBLE, DENNIS R
729	BUCHALTER, MARC A
731	RUSS, YVONNE
732	RESTUCCIA, JOSEPH M
733	LAWSON, GRAY
737	MOORE, RYAN B
738	GARCIA, ANTONIO A
739	JERNEY, STEVEN J
743	GLENN, PATSY R
744	HARVEY, CHARLES A
745	MONROE, JAMES F
750	VESS, CHERYL A
751	HENDERSON, CARL M
756	OCCUPANT UNKNOWN,
757	SANTIAGO, M
762	OCCUPANT UNKNOWN,
764	ROBERTS, JOHN N
782	REID, RU
786	WRIGHT, NOY M
801	REZA, DANIEL M
802	KOSIERADZKI, ARKADIUSZ P
805	SURLES, EARLINE S
809	BECK, CLIFFORD A
810	ESPINOZA, DEBORAH A
813	MORRIS, TIMOTHY S
814	RUSSELL, WYCONDA
817	JONES, ROLAND E
	MCSHERRY, BARBARA J
	RAMOS, LINDA J
	WOOD, JOHN D
818	OCCUPANT UNKNOWN,
821	MORENO, LUIS E
822	ANY DOG RESCUE OF VALLEJO
	WOLFE, MARTA L
826	IBARRA, DARIO
830	DENSON, GREGORY R
834	ERIC, CLAY

BENICIA RD 2010 (Cont'd)

834 OCCUPANT UNKNOWN,
ROTTER, MICHAEL
835 SANTOS, ROBERT D
839 SANTO, TOM
841 HAMNER, PAMELA A
842 OCCUPANT UNKNOWN,
843 MICHNA, KEN
844 HENSON, MICHAEL
845 SANCHEZ, JONATHAN
854 ROSALES, ADELA R
855 BRIGHT, LISA L
HARRISONS MOBILE AUTO DETAIL
OCCUPANT UNKNOWN,
856 OCCUPANT UNKNOWN,
857 ZUIDEMA, RICHARD D
860 WESTER, SEAN
900 BIBLE BAPTIST CHURCH
OCCUPANT UNKNOWN,
901 AGUILAR, MARIA
JAVIER ZARATE CONCRETE CONTR
OCCUPANT UNKNOWN,
RUBIO, VIDAL
909 MILLS, WILLIAMS H
911 SCUDDER, GRACE
921 ACHESON, HARRY H
925 TAUTUIAKI, TOILA F
927 OCCUPANT UNKNOWN,
930 DONALDO, ALDWIN J
933 HOBBS, SCOTT A
PLYTAS, O
934 DESANTIAGO, ABEL D
936 LOVE, DAMIEN
937 NESCI, LAURIE
OCCUPANT UNKNOWN,
941 OCCUPANT UNKNOWN,
945 CERVANTES, MARIANA
DAVIDSON, D
TAFOYA, R
946 OCCUPANT UNKNOWN,
948 BACOME, GARY A
949 JOHNS, GARY E
953 TUFTS, SHARON
956 DELGADO, ELLIA
MCDONALD, RUNAKO
MOORE, RANDY
PEREZ, JULIAN
SMITH, IDA D
957 BURLA, DAVID K
960 LANDRY, TAVIS
STRONG, KIMMIA

BENICIA RD 2010 (Cont'd)

961 DUENAS DUENAS CONCRETE
DUENAS, JESUS
965 OCCUPANT UNKNOWN,
966 BARRELL, RICHARD
DURDEN, ARTHUR L
EZ T
967 OCCUPANT UNKNOWN,
969 OCCUPANT UNKNOWN,
970 MAJETTE, MARIE A
971 NUNES, CLARK
973 LISSICK, KENNETH I
1001 KRUSZKA, FRANCIS B
1012 OCCUPANT UNKNOWN,
1013 LIFELINE INTERNATIONAL CHURCH
OCCUPANT UNKNOWN,
1017 TURNER, KENNETH W
1020 CULPEPPER, TY T
OCCUPANT UNKNOWN,
1021 DORNBURG, SAMANTHA
1025 JOHNS WELDING & MARINE PRPLR
1026 OCCUPANT UNKNOWN,
1030 OCCUPANT UNKNOWN,
1031 SCARROTT, JOHN E
1045 WEBBER, EDWARD L
1049 DAVIS, HAROLD N
1050 SANDHU, SURJIT K
SHOP N SAVE MARKET
1100 MERRIL, N
1101 CORINTHIANS CHURCH OF GOD
1117 OCCUPANT UNKNOWN,
1123 COWAN, MERRYLYNN
ELLIS, JEFFREY A
1125 AARDVARKS & OTHERS PET SITTING
AARDVARKS DOG TRAINING CTR
SIRIUS PUPPY TRAINING
1132 DUNCAN MOTORS
1134 STEVENS, BRENDA M
1138 DULAY, ENRIQUE R
1141 MARTIN, ALFRED R
1144 BANUELOS, SUSANA
1146 JOHNSTON, SHARON
1150 DELPH, PATRICIA U
TEVES, THOMAS D
USHER, WILLARD M
1153 OCCUPANT UNKNOWN,
1154 DEFIESTA, JONATHAN M
DOMINGO, FREDDIE R
1156 SCHWARTZ, DOLLY
1161 BURKE, DIANE
DAVENPORT, STEVE S

BENICIA RD 2010 (Cont'd)

1161	DEVINE, KATHLENE
	GINI, KENNETH L
	KEENEY, JOANN A
	KUHN, GEORGE
	LYONS, DOREANN
	MCBRIDE, CHARLOTTE
	WALLACE, JEFF L
1162	OCCUPANT UNKNOWN,
1164	VELAZQUEZ, RUBEN
1165	CRUZ, JOSEPH J
1167	WOODARD, ADELENE
1170	SECOND BAPTIST CHURCHVALLEJO
1175	CONSTRUCTION SITE RENTAL FNCNG
	TRICITY FENCE CO INC
1182	PANETTA, JOSEPH A
1191	FILL IN SOLUTIONS
	GERMINO, JAMES M
1193	OCCUPANT UNKNOWN,
1194	JOIE DE VI BOARDING KENNELS
1195	PRICE, RICK S
	RICK PRICE ROOFING CO
1196	OCCUPANT UNKNOWN,
1300	OCCUPANT UNKNOWN,
1490	DOMINICAN SISTERS
1500	ST PATRICKST VINCENT ATHLETIC
1529	MONROY, RAUL
1551	CALIFORNIA HIGHWAY PATROL
	GOLDEN GATE COMMUNICATION CTR
	HIGHWAY DEPT
	HIGHWAY PATROL
1600	SAM JIN
1855	780 MINI STORAGE
1865	LEWS BRAKE SHOP

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2005

648	ARTS & IMAGES
688	DECKER, THOMAS W
700	MAGGIES RESTAURANT
707	LA FORCE ENTERPRISES
	NDT ELECTRONICS
	OCCUPANT UNKNOWN,
709	VARGAS, BERTHA D
711	REEVES, STEVEN R
713	VALENTINE, DEBORAH F
714	ROACH, MICHAEL D
717	GANCH, WILLIAM
720	SORRELS, CAROL
726	WOMBLE, DENNIS R
729	BUCHALTER, MARC A
731	GIPSON, HORACE
732	RESTUCCIA, JOSEPH M
733	MYERS, ALPHONSO L
737	MOORE, RYAN B
738	HORST, KRISTA L
739	JERNEY, STEVEN J
743	OCCUPANT UNKNOWN,
744	HERNANDEZ, JENNIFER
745	MONROE, JAMES F
750	VESS, CHERYL A
751	HENDERSON, CARL
756	OCCUPANT UNKNOWN,
757	CAJUCOM, JOMERSAN
762	PERIDO, MARIO A
764	ROBERTS, JOHN N
778	HENRIQUEZ, JAIME
782	DIGIGEO
	EDMONDS, GEORGE
786	WRIGHT, NOY
801	REZA, DANIEL M
802	JOHNSON, ELIZABETH
805	SURLES, EARLINE S
806	FLORES, JOSE F
809	ROMERO, MARIA
810	ADELSTEIN, BRIAN W
813	OCCUPANT UNKNOWN,
814	MARTINEZ, ROSEMARY
817	GROSSER, NICHOLE M
	JAMES, C
	JONES, ROLAND E
	JUAREZ, TONY F
818	SUTTON, JEFFREY
821	URZUA, ROGELIO
822	WOLFE, MARTA L
826	IBARRA, DARIO
830	DENSON, GREGORY R

BENICIA RD 2005 (Cont'd)

834 OCCUPANT UNKNOWN,
ROTTER, MICHAEL
837 FOWLER, LAURA J
MURRIETA, EVA M
RUEGG, CHRISTOPHER
839 SANTO, ROBERT P
841 HAMNER, PAMELA A
842 RUIZ, PATRICIA R
843 MONTERROSA, JOSE A
844 MARR, FORREST
845 VAZQUEZ, OFELIA
849 IVES, STEVEN
853 REYES, ELEONORE S
854 BUI, TRINH
855 HARRISON, LISA L
JOHNSON, HARVEY
857 ZUIDEMA, RICHARD D
900 BIBLE BAPTIST CHURCH OF VALLEJO
901 OCCUPANT UNKNOWN,
QUITEVIS, FAUSTINO
903 LARSON, D
909 VICKERY, CALVIN D
911 OCCUPANT UNKNOWN,
921 ACHESON, HARRY H
925 PALELEI, TOILEA
933 ALLEN, NAOMI
934 DESANTIAGO, ABEL D
936 RIDGWAY, KEMP D
937 NESCI, LAURIE
OCCUPANT UNKNOWN,
941 OCCUPANT UNKNOWN,
942 COLON, CHARLETTA
945 JEREZANO, ANA
VARGAS, MARIO M
946 RUVALCABA, MARCO A
948 BACOME, GARY A
949 JOHNS, GARY E
950 AURE, ALLAN
953 GOLIAT, HENRY
956 DELGADO, ELLIA
GARROTT, SHANAY
JOHNSON, MICHAEL A
957 BURLA, DAVID K
960 DEVINE, JOHNNY
HENRY, PAMELA J
LANDRY, TAVIS
MARTIN, MARSHEL
MINIX, CHARLES
ROSS, JANICE
STANGLER, LINDA

BENICIA RD 2005 (Cont'd)

961 DUENAS, JESUS
966 DURDEN, ARTHUR L
SAUNDERS, MOSI F
967 HERNANDEZ, JAVIER
969 STAMPLEY, HENRY J
970 HAMILTON, MARIE A
971 NUNES, CLARK
973 LISSICK, KENNETH I
974 KAJUKENBO SELF DEFENSE INST
1001 KRUSZKA, FRANCIS B
1013 OCCUPANT UNKNOWN,
OUR LORD REIGNS COMMUNITY CHURCH
1016 HOUSE, WARDELL
JONES BLESSED ONES FAMILY CHILD CARE
1017 TURNER, JOYCE E
1020 CAPWELL, JERRY M
OCCUPANT UNKNOWN,
1021 ROXBERG, VALERIE J
1026 DIAZ, ERNESTO B
1030 JONES, DENNIS A
1031 SCARROTT, JOHN E
1045 WEBBER, EDWARD L
1049 DAVIS, HAROLD
1050 DAVIS, C
LIQUOR & CO
SHOP N SAVE MARKET
1100 MERRILL, NORMAN
1101 CORINTHIAN CHURCH OF GOD IN CHRIST
1117 HARRIS, DORLENE
1121 CALDWELL, ALBERTA
1123 OCCUPANT UNKNOWN,
1125 CERAMICS IN VALLEJO
VALLEJO CERAMIC SUPPLY CENTER
1132 DUNCAN MOTORS
DUNCAN, JONISH
STEVE N LARRYS AUTO BODY & CUSTOM
1134 LEWIS, ALLEN
1138 DULAY, WELBORN K
1141 MARTIN, ALFRED R
1145 PUTER FIXER
1146 HEART FELT HOME
LARA, MARIA
1148 MARKS, CATHERINE L
1150 GRIGG, STEPHEN W
TEVES, THOMAS D
USHER, WILLARD M
1152 TURNER, ROSE A
1153 COKER, ALBERT J
OCCUPANT UNKNOWN,
1154 BAUTISTA, ARTURO G

BENICIA RD 2005 (Cont'd)

1154 DEFIESTA, LUZ L
DOMINGO, LOUISA C
HIDALGO, JOSE
LIVING ROCK FELLOWSHIP FOURSQU
MARIANO, LUDIVICA D
1156 HERNANDEZ, JULIO
1160 OCCUPANT UNKNOWN,
1161 ARCHER, DOUG G
BAILEY, ARTHUR
BEIGHLEY, JOSEPH C
CHRISTOSILIS, CAROLYN A
DEVINE, KATHLENE
EDWARDS, LANSA
HAMBURG, JANET
JACKSON, KELLY
JONES, RANDY
KEENEY, JOANN A
KENNETH, LARRY
KUHN, GEORGE
LYONS, DOREANN
MATTHEWS, ROGER
OLSON, ELIZABETH C
OVERLY, LUPE
PADILLA, HUGO
PERRY, RONALD
SILVEY, GREG W
TREHAN, J D
WALLACE, JEFF L
ZURFLEY, MELVIN N
1162 OCCUPANT UNKNOWN,
1165 STANBERRY, LERAI L
1167 BLOUNT, MELANIE
HILLIARD, JAKE
NEWELL, LOWANNA R
REYES, REBECCA
SANTOS, MARIE
WILLIAMS, CHRIS
WOODARD, ADELENE
1170 SECOND BAPTIST CHURCH OF VALLEJO
1182 PANETTA, JOSEPH A
1191 FORSYTHE, IAN J
1193 OCCUPANT UNKNOWN,
1194 JOIE DEVISHOW & BOARDING KENL
1195 PRICE, RICK S
RICK PRICE ROOFING CO
1196 OCCUPANT UNKNOWN,
1197 BJ LEWIS
VALLEY EQUIPMENT REPAIR
1300 STOCKWELL, EPHRIAM J
1500 ROMAN CATHOLIC BSHPSCRMENTO

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2005 (Cont'd)

1500	SAINT PATRICK ST VINCENT HIGH SCHOOL SUPERIOR SISTER
1529	MONROY, RAUL
1551	CHP
1600	STEWART FENCE & LUMBER INC
1855	780 MINI STORAGE
1865	LEWS BRAKE SHOP

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2000

646	SILVAS MEMORIALS
	VALLEJO MONUMENT COMPANY
656	CHRIS' CLUB
658	RENEGADE PIZZA
666	VALLEJO DISTRIBUTORS & SUPER SAVE MARKET
700	MAGGIE'S HAMBURGERS
707	N D T ELECTRONICS
708	OCCUPANT UNKNOWN,
709	MORRISON, DOUGLAS M
713	KURTZ, DAN
714	ROACH, MICHAEL D
717	GANCH, WILLIAM
723	CORYELL, BRIAN
726	WOMBLE, DENNIS R
729	BRETHAUER, JOAN C
732	RESTUCCIA, JOSEPH M
733	MYERS, A
737	MOORE, RYAN
738	CLAXTON, MICHAEL J
739	RECKLEY, JEAN D
743	GLENN, PATSY R
744	MCCLURE, VANESSA A
745	KOENEN, R W
750	VESS, CHERYL A
751	NATALE, O J
756	OCCUPANT UNKNOWN,
762	TAYLOR, L
764	CHEDISTER, SABRINA
778	NEWCOMB, ELVA A
782	OCCUPANT UNKNOWN,
786	WRIGHT, LARRY
801	REZA, DANIEL M
805	SURLES, EARLINE
806	RAMOS, JOSE
809	BECK, C A
810	OCCUPANT UNKNOWN,
813	RUSHTON, DONALD W
814	CAMPBELL, ERIC
817	OCCUPANT UNKNOWN,
818	OCCUPANT UNKNOWN,
822	TRUJILLO, PETER P
826	PETERSON, EMILLY C
830	DENSON, GREGORY R
834	PAXTON, ANN P
835	OCCUPANT UNKNOWN,
839	NEBERGALL, ROBERT V
841	HAMNER, PAMELA A
842	VASQUEZ, P R
843	OCCUPANT UNKNOWN,
844	OCCUPANT UNKNOWN,

BENICIA RD 2000 (Cont'd)

845	OCCUPANT UNKNOWN,
849	BESSE, RICHARD
853	OCCUPANT UNKNOWN,
854	OCCUPANT UNKNOWN,
855	OCCUPANT UNKNOWN,
857	OCCUPANT UNKNOWN,
885	BORNSCHEIN, JUANITA
901	QUITEVIS, FAUSTIN
903	OCCUPANT UNKNOWN,
909	VICKERY, G
911	SCUDDER, BARBARA C
915	OCCUPANT UNKNOWN,
920	BIBLE BAPTIST CHURCH
925	TAUTUIAKI, TOILEA
	TUPOU LANDSCAPING & GARDENING
927	OCCUPANT UNKNOWN,
933	SMITH, TIFFANY N
934	DESANTIAGO, ABEL
936	OCCUPANT UNKNOWN,
937	STEVENS, MAUREEN
941	CYR, CAROLYN
942	SARABIA, ROBERTO C
945	OCCUPANT UNKNOWN,
946	RUVALCABA, MARCO
948	OCCUPANT UNKNOWN,
949	OCCUPANT UNKNOWN,
950	JAY, NATHAN L
953	SHINER, GARY D
956	BOGANS, BARBARA A
	BUTLER, SANDRA D
	JOHNSON, G
	WILSON, WILLIE
957	BURLA, DONNA K
960	HENRY, PAMELA J
970	MAJETTE, MARIE A
971	OCCUPANT UNKNOWN,
973	OCCUPANT UNKNOWN,
1001	KRUSZKA, FRANCIS B
1012	ROBINSON, M
1013	APOSTOLIC PENTECOSTAL CHURCH
1017	TURNER, BOOKER T
1020	OCCUPANT UNKNOWN,
1021	OCCUPANT UNKNOWN,
1024	VALLEY DIAZ CONSTRUCTION & DEVELOPMENT
1025	JOHNS WELDING & MARINE PROPELLER REPAIR
1050	LIQUOR & COMPANY
	OCCUPANT UNKNOWN,
1100	WADE, ROLAND
1101	CORINTHIANS CHURCH OF GOD ILN CHRIST MULTI PURPOSE
	CORINTHIANS CHURCH OF GOD ILN CHRIST OFFICE

BENICIA RD 2000 (Cont'd)

1117 HARRIS, CATRINA
1125 EVERGREEN COMMUNICATION SERVICES
1130 GRAPEVINE FORGE
1132 STEVE N LARRYS AUTO BODY & CUSTOM PAINTING
1134 HILLARD, J
1141 BALDRIDGE, ALFRED
MARTIN, MARY I
1146 UDOM, STEVE J
1148 MARKS, C
1150 OCCUPANT UNKNOWN,
1152 TURNER, GUY A
1153 KLINGENSMITH, CAROL A
1154 BAUTISTA, ARTURO
DEFIESTA, LUZ L
MARIANO, VICTOR A
1156 SALVADOR, ALBERTO
1161 BAYBADO, ROXANNE R
BIDWELL, AUDREY
COURTNEY, MARTIN
MILLER, LEE
SOUTHERLAND, BILLY T
VISTA VALLEJO TRAILER PARK & APARTMENTS
WALLACE, JEFF L
WOOLEY, EDWARD
YEUNG, GLENN
YOUNG, GLENN J
1162 REYNOLDS, RICKY
1164 SANDERS, TAMMY
1165 OCCUPANT UNKNOWN,
1167 BARBOSA, JOSE I
STPIERRE, SIMON P
VILAYSITH, PHO P
1170 SECOND BAPTIST CHURCH OF VALLEJO
1175 RENT A FENCE FROM TRI CITY FENCE COMPANY
TRI CITY FENCE COMPANY INCORPORATED
1194 JOIE DEVI SHOW & BOARDING KENNELS
1500 ST PATRICK ST VINCENT ATHLETIC DEPARTMENT
ST PATRICK ST VINCENT HIGH SCHOOL
SUPERIOR SISTER
1551 CALIFORNIA STATE OF
CALIFORNIA STATE OF HIGHWAY PATROL
1600 STEWART FENCE COMPANY
1855 780 MINI STORAGE
SIRI CONSTRUCTION COMPANY
1865 LEWS BRAKE SHOP

BENICIA RD 1995

646	VACAVILLE MONUMENT CO
	VALLEJO MONUMENT CO
656	CHRIS CLUB
	TANNER, EDWARD
666	AWAD, NAIM A
	VALLEJO DISTRIBUTORS SUPER SV
700	MAGGIES HAMBURGERS
709	MORRISON, DOUG M
711	LOVEDAY, ANDREA G
713	THOMPSON, CARLA
714	ROACH, MICHAEL D
717	GANCH, WILLIAM JR
723	OGBAH, PAUL
726	WOMBLE, DENNIS R
729	BRETHAUER, JOAN C
732	JOHNSTON, J
733	MCALLISTER, VINCENT J
737	CONOW, N L
738	CLAXTON, ANNETTE
739	RECKLEY, WILBUR A
743	OCCUPANT UNKNOWNN
744	OCCUPANT UNKNOWNN
745	KOENEN, GLENNA B
750	VESS, CHERYL A
751	NATALE, O J
756	LEMASTERS, GENE R
757	OCCUPANT UNKNOWNN
762	OCCUPANT UNKNOWNN
764	MCKELDIN, GORMAN F
778	SCITERN, COY C
782	OCCUPANT UNKNOWNN
786	WRIGHT, LARRY
801	REZA, SANDRA E
805	SURLES, EARLINE
806	MACE, ALFRED H
809	GAILLARD, DOROTHY M
810	ERICKSON, JOHN A
813	MONGIELLO, GAYLE
814	WALKER, NEWELL
817	TORRES, GEORGE
818	OCCUPANT UNKNOWNN
822	OCCUPANT UNKNOWNN
826	BROTHERS, RODNEY B
830	OCCUPANT UNKNOWNN
834	HUDIBURG, JOHN L
835	OCCUPANT UNKNOWNN
	VALLEY CLEANING SYSTEMS
837	PHAM, HIEN V
839	NEBERGALL, ROBERT V
841	OCCUPANT UNKNOWNN

BENICIA RD 1995 (Cont'd)

842 OCCUPANT UNKNOWNN
843 OCCUPANT UNKNOWNN
RUSTYS RECORDS
844 OCCUPANT UNKNOWNN
845 DANCO INTERIOR WALLBOARD SYSTS
OCCUPANT UNKNOWNN
849 JORDAN, RICHARD
STEPHENS, ELEANOR
853 OCCUPANT UNKNOWNN
854 OCCUPANT UNKNOWNN
855 ROHRS, SARAH J
857 ZUIDEMA, RICHARD D
901 QUITEVIS, FAYE
WILKES, WILKES
903 CAMPBELL, DEBORAH
909 VICKERY, G
911 OCCUPANT UNKNOWNN
915 LAPRADE, DAVID
920 BIBLE BAPTIST CHURCH
921 BURCH, JOSEPH N
925 TAUTUIAKI, TOILEA
927 OCCUPANT UNKNOWNN
933 OCCUPANT UNKNOWNN
934 OCCUPANT UNKNOWNN
936 OCCUPANT UNKNOWNN
941 OCCUPANT UNKNOWNN
942 OCCUPANT UNKNOWNN
948 CORBETT, BEULAH
OREILLY, DEANNA A
949 OCCUPANT UNKNOWNN
950 SHUSTA, CYNTHIA
953 SHINER, GARY
956 ZIMMERMAN, DIANA
957 BURLA, DONNA
960 HERNANDEZ, SIMON
965 OCCUPANT UNKNOWNN
966 HALL, BURL W
970 MAJETTE, MARIE A
971 OCCUPANT UNKNOWNN
973 SCHULTZ, ERIC P
1013 APOSTOLIC PENTECOSTAL CHURCH
1020 CAPWELL, JERRY
ODONNELL, IKE
TOOR, KARMEL
1025 JOHNS WELDING & MARINE PRPLR
1026 VALLEY DIAZ CONSTRUCTION
1030 OCCUPANT UNKNOWNN
1101 CORINTHIANS CHURCH OF GOD
1117 TURNER, BOOKER T
1123 ROMERO, BEN

BENICIA RD 1995 (Cont'd)

1125	B & D AUTO ELECTRIC
1132	R & R BODY WORKS
1134	JEFFERSON, C
1138	OCCUPANT UNKNOWNN
1141	BALDRIDGE, ALFRED
	MARTIN, MARY I
1144	OCCUPANT UNKNOWNN
1145	GREENE, MICHAEL
1146	ILOFF, MELISSA
1150	DELPH, P U
	USHER, MARVIN
1152	OCCUPANT UNKNOWNN
1153	SNYDER, JOANN
1154	DEFIESTA, ELIBETH
	MARIANO, VICTOR A
1156	OCCUPANT UNKNOWNN
1161	BROLLIAR, LESTER P
	BUTLER, GARY
	DOCKERY, THOMAS
	INGELS, CARL
	KING, TED
	LUKER, LISA A
	MILLER, LEE
	OLSON, E C
	PALMAYMESA, FRANK M
1162	SIMMONS, NORMA D
1163	OCCUPANT UNKNOWNN
1167	DAY, NATASHA
	HATHCOAT, MICHAEL
	SINGLETON, L J SR
1170	SECOND BAPTIST CHURCH
1175	TRI CITY CABINET & DOOR INC
	TRI CITY FENCE CO
	TRI CITY LANDSCAPE BORDERS
1182	SANGER, ALICE M
1191	OCCUPANT UNKNOWNN
1193	OCCUPANT UNKNOWNN
1194	JOIE DE VI BOARDING KENNELS
	PANETTA, FANNIE
1300	FEDERLE, STEVEN
1500	ST PATRICKS HIGH SCHOOL
1551	COMMUNICATIONS CENTER
	HIGHWAY PATROL
	SANCHEZ, ERNEST
1600	BIG 4 RENTS
1855	780 MINI STORAGE
	SIRI CONSTRUCTION CO
1865	LEWS BRAKE SHOP

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 1992

646	VALLEJO MONUMENT CO
648	A&R GLASS COMPANY
656	CHRIS CLUB
658	YANGS MARTIAL ARTS
666	VALLEJO DSTRBTRS
700	MAGGIES HAMBURGERS
707	N D T ELECTRONICS
713	LAWSON, CHRIS
717	GANCH, WILLIAM JR
723	SOUSA, GEORGE R
726	WOMBLE, DENNIS R
729	BRETHAUER, JOAN C
733	MCALLISTER, VINCENT J
744	TAYLOR, KEVIN
745	KOENEN, RALPH W
751	NATALE, O J
778	PEPER, DARVIN
786	WRIGHT, LARRY
801	REZA, S E
806	MACE, ALFRED H
809	GAILLARD, BERNARD K
810	ERICKSON, JOHN A
813	MITREA, GEORGE C
834	HUDIBURG, JOHN L
837	HERPY, B
	PHAM, HIEN V
839	NEBERGALL, ROBERT V
843	RUSTYS RECORDS
845	DANCO INTERIOR SYS
849	STEPHENS, ELEANOR
901	KING, DAVID R
	QUITEVIS, FAYE
909	VICKERY, G
915	LAPRADE, DAVID
920	BIBLE BAPTIST CH
948	CORBETT, BEULAH
950	RYSLINGE, LARS
953	HURST, JAMES
956	HALE, JOY
	MARKIET, EWALD
	OCAMPO, AUDON
960	BORGES, LUZ M
973	SCHULTZ, ERIC P
1001	KRUSZKA, FRANCIS B
1013	APOSTOLIC CHAPEL
1025	JOHNS WELDING&MRN
1050	LIQUID&CO
1101	CORINTHIANS CH GOD
1117	TURNER, BOOKER T
1125	B&D AUTO ELECTRIC

BENICIA RD 1992 (Cont'd)

1130	VALLEJO PLUMBING
1132	JERRYS AUTO BODY
1141	BALDRIDGE, ALFRED
	MARTIN, MARY I
1145	RIKKERS, LEE R
1150	USHER, MARVIN
1154	CASTILLO, LOUISA
	DEFIESTA, LUZ
	DEFIESTASAGUID, LYNETTE
	MARIANO, VICTOR A
1161	BROLLIAR, LESTER P
	DOCKERY, THOMAS
	INGELS, CARL
	JACKSON, ROBERT L JR
	KING, TED
	OLSON, E C
	VISTA VALLEJO HM PK
1170	SECOND BAPTIST CHRH
1175	RENT A FENCE
	TRI CITY CBNT&DOOR
1194	JOIE DE VI KENNELS
	PANETTA, FANNIE
1500	ST PATRICKS HI SCHL
1551	CA ST HIGHWAY PATRL
1600	BIG 4 CONTR RENTS
1855	780 MINI STORAGE
	SIRI CONSTRUCTION

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1988

1100 Vacant
1101 Corinthians Church Of God In Christ
554-1002
1117 Vacant
1121 Hatcher Mary L ◎
1123 Vacant
1124 Brewer Lonell 642-4655
1125 Vacant
1130 Vallejo Plumbing 553-9912
1132 R & R Body Works auto repr 552-5750
1138★Harding Steve D 553-8248
1141 Baldridge Alf
1141b★Jones Trudy
1144 Vacant
1145 Rikkers Lee R ◎ 643-4822
1146 Bickford James E ◎ 643-3815
1146a Nealson Debbie
1146b Snell Mike 553-8197
1148★Iloff Richd ◎
1150 Nicia B ◎
1150a Usher Ruth 644-1524
1152 Tanner Betty J Mrs ◎ 643-8063
1152b Turner Guy A ◎ 643-6388
1153 Vacant
1153½ Gilcrest Wm S
1154 Mariano Victor A ◎ 557-4468
1154b De Fiesta Luz L 557-4642
1156 Boyles Danny C
1161 Bailey Auto & Trailer Court 552-5075
Apartments
1★Woodruff Jothanthan
2 Davis Roy B
3 King Mark
4★Sheldon Violet M
5★Garrison Blanca
6★Day Geo
7 Vacant
Spaces
1 King Ted 644-5020

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1988

BENICIA RD–Contd

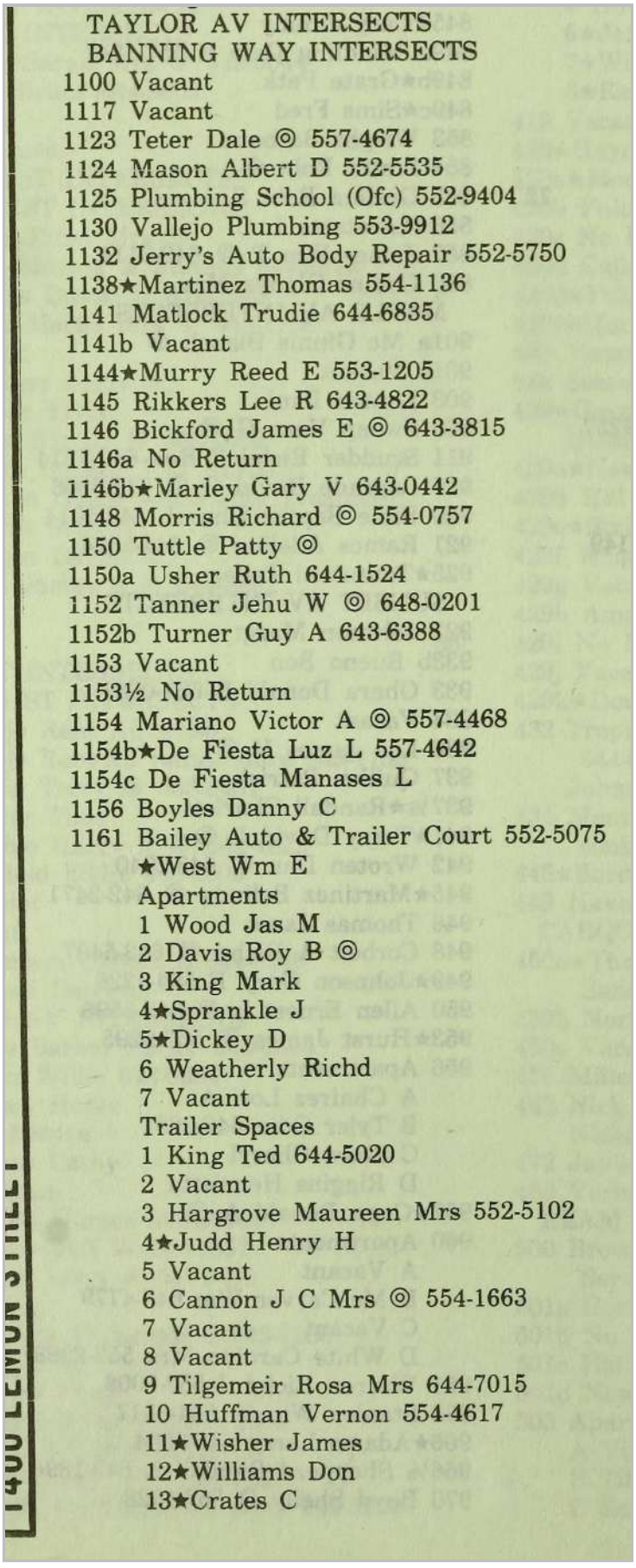
2★Hrzeck Jose
3 Ingels Carl
4★Hohman Frank
5 Green John
6★Gardner Charles
7★Caster Roy
8★William Jack
9★Williams Stan
10 Olson Eliz Mrs 554-4617
11 Jackson Robt L Jr
12 Williams Don
13★Bulkley Don
14 Lemon Lillian M Mrs ◎ 643-3917
15★Emerson Donald
16★Timmons Michl P
17★Redway David
18 Brophy Cecelia H Mrs 644-5392
19 Miller Lee A 557-5456
20 Vacant

1162 No Return
1164★Clark Candice M 644-6228
1165 Jones James
1167 Apartments
1 Vacant
2★Smith Ophelia
3★Zumwalt Paul A
4 Vacant
5★Young Kim R
6 Vacant
7★Barkley David

1170 Second Baptist Church 643-6496
1175 Tri-City Rent-A-Fence Co Inc 644-5764
Tri-City Fence Co Inc fence contrs 644-5764
Strange Chas E ◎ 642-7242
1182 Sanger Alice M Mrs ◎ 644-2744
1186 Vacant
1191 Reed Harold L ◎ 644-0376
1193 Houston Paul J 642-4142
1194 Pet Hotel pets grooming & boarding servs 644-8323
★Walker Daisy ◎ 554-6346
1195 Price Richd S ◎ 644-0936
1196 Vacant
1202 Vacant
1300 Vallejo Auto Movies 642-0615
Morales Robt 557-4024
ROLLINGWOOD DR INTERSECTS
GLEN COVE RD INTERSECTS
1500 St Vincent High School 644-4425
★Casey Danl
1600 Big 4 Rents equip rental 554-8030
WINDJAMMER DR BEGINS
COLUMBUS PKWY INTERSECTS

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1984



TAYLOR AV INTERSECTS
BANNING WAY INTERSECTS
1100 Vacant
1117 Vacant
1123 Teter Dale ◎ 557-4674
1124 Mason Albert D 552-5535
1125 Plumbing School (Ofc) 552-9404
1130 Vallejo Plumbing 553-9912
1132 Jerry's Auto Body Repair 552-5750
1138★Martinez Thomas 554-1136
1141 Matlock Trudie 644-6835
1141b Vacant
1144★Murry Reed E 553-1205
1145 Rikkers Lee R 643-4822
1146 Bickford James E ◎ 643-3815
1146a No Return
1146b★Marley Gary V 643-0442
1148 Morris Richard ◎ 554-0757
1150 Tuttle Patty ◎
1150a Usher Ruth 644-1524
1152 Tanner Jehu W ◎ 648-0201
1152b Turner Guy A 643-6388
1153 Vacant
1153½ No Return
1154 Mariano Victor A ◎ 557-4468
1154b★De Fiesta Luz L 557-4642
1154c De Fiesta Manases L
1156 Boyles Danny C
1161 Bailey Auto & Trailer Court 552-5075
★West Wm E
Apartments
1 Wood Jas M
2 Davis Roy B ◎
3 King Mark
4★Sprankle J
5★Dickey D
6 Weatherly Richd
7 Vacant
Trailer Spaces
1 King Ted 644-5020
2 Vacant
3 Hargrove Maureen Mrs 552-5102
4★Judd Henry H
5 Vacant
6 Cannon J C Mrs ◎ 554-1663
7 Vacant
8 Vacant
9 Tilgemeir Rosa Mrs 644-7015
10 Huffman Vernon 554-4617
11★Wisher James
12★Williams Don
13★Crates C

1400 LEMON STREET

BENICIA RD 1984

14 Lemon Lillian M Mrs ◎ 643-3917
15 Sackett Homer
16 Roberts Patsy Mrs ◎ 643-6746
17★Wolfe John
18 Brophy Cecelia H Mrs ◎ 644-5392
19★Aitken Ken J 554-2850
20★Torres F
21 Lashley John H 643-2921
1162 Vacant
1164 Whittington Wayne L ◎ 642-1247
1165★Ojascastro Alex
1167 Apartments
1 Barton Vida
2 Barrett Vanessa
3 Cruz Herbert H
4 Kaloczi Steve
5 Muller Colleen
6 No Return
7★Ortin Rosa S
1170 Second Baptist Church 643-6496
1175 Tri-City Rent-A-Fence Co 644-5764
Tri-City Fence Co fence contrs 644-5764
Strange Charles E ◎ 642-3457
1182 Sanger Alice M Mrs ◎ 644-2744
1186 Vacant
1191 Reed Harold L ◎
1193 Houston Paul J 642-4142
1194 Pet Hotel kennel 644-8323
★Walker Daisy I ◎ 554-6346
1195 Price Richd S ◎ 644-0936
1196★Jackson Michael A ◎ 643-8003
1202★Hertel Marilyn E ◎ 554-2291
1300 Vallejo Auto Movies 642-0615
ROLLINGWOOD DR INTERSECTS

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1979

Near Wolfe Al

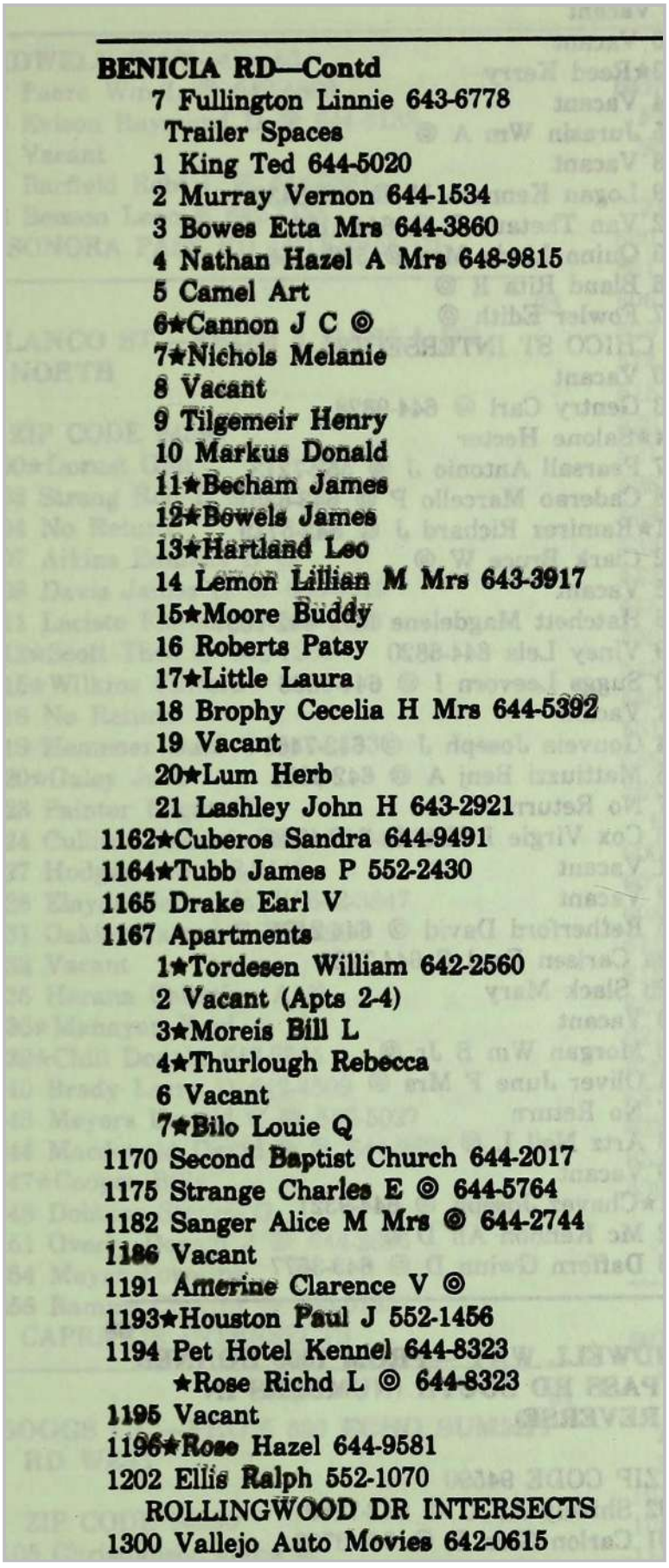
TAYLOR AV INTERSECTS

BANNING WAY INTERSECTS

1100 Bible Art F 642-5220
1117 Vacant
1121 Breedlove R 642-9653
1123★Hatcher
1124 No Return
1125 Vacant
1138 Bell Sylvester 644-4785
1141 Trujillo Martha L Mrs 644-6835
1141b Vacant
1144★Moseley Gladys
1145 Rikkers Lee R 643-4822
1146 Bickford James E ◎ 643-3815
1146a★Biggs Casey
1146b★Goodman Thomas
1148★Morris Richard ◎
1150 Tuttle Pauline ◎
1150a Usher Erma Mrs 644-1524
1152 Tanner Jehu W ◎ 648-0201
1152b Turner Guy A 643-6388
1153 Davis Rosalena Mrs ◎ 644-1760
1154 Vacant
1154a Vacant
1154b Vacant
1154c Vacant
1156 Vacant
1161 Bailey Auto & Trailer Court 642-9822
Apartments
★Miller Lee 642-9822
1 La Fontaine Lou
2 Vacant
3★Ladd Marsha
4 Frazekas Emory
5 Goff
6 Beadle Dosia 648-2492

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

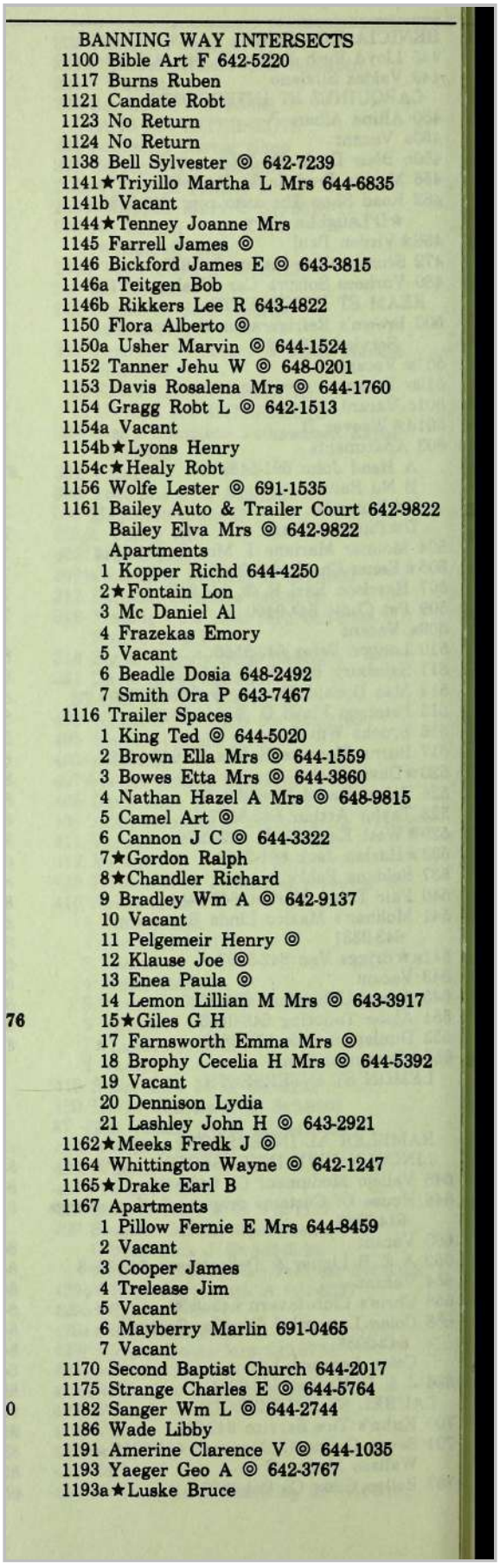
BENICIA RD 1979



BENICIA RD—Contd
7 Fullington Linnie 643-6778
Trailer Spaces
1 King Ted 644-5020
2 Murray Vernon 644-1534
3 Bowes Etta Mrs 644-3860
4 Nathan Hazel A Mrs 648-9815
5 Camel Art
6★Cannon J C ◎
7★Nichols Melanie
8 Vacant
9 Tilgemeir Henry
10 Markus Donald
11★Becham James
12★Bowels James
13★Hartland Leo
14 Lemon Lillian M Mrs 643-3917
15★Moore Buddy
16 Roberts Patsy
17★Little Laura
18 Brophy Cecelia H Mrs 644-5392
19 Vacant
20★Lum Herb
21 Lashley John H 643-2921
1162★Cuberos Sandra 644-9491
1164★Tubb James P 552-2430
1165 Drake Earl V
1167 Apartments
1★Tordesen William 642-2560
2 Vacant (Apts 2-4)
3★Moreis Bill L
4★Thurlough Rebecca
6 Vacant
7★Bilo Louie Q
1170 Second Baptist Church 644-2017
1175 Strange Charles E ◎ 644-5764
1182 Sanger Alice M Mrs ◎ 644-2744
1186 Vacant
1191 Amerine Clarence V ◎
1193★Houston Paul J 552-1456
1194 Pet Hotel Kennel 644-8323
★Rose Richd L ◎ 644-8323
1195 Vacant
1196★Rose Hazel 644-9581
1202 Ellis Ralph 552-1070
ROLLINGWOOD DR INTERSECTS
1300 Vallejo Auto Movies 642-0615

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

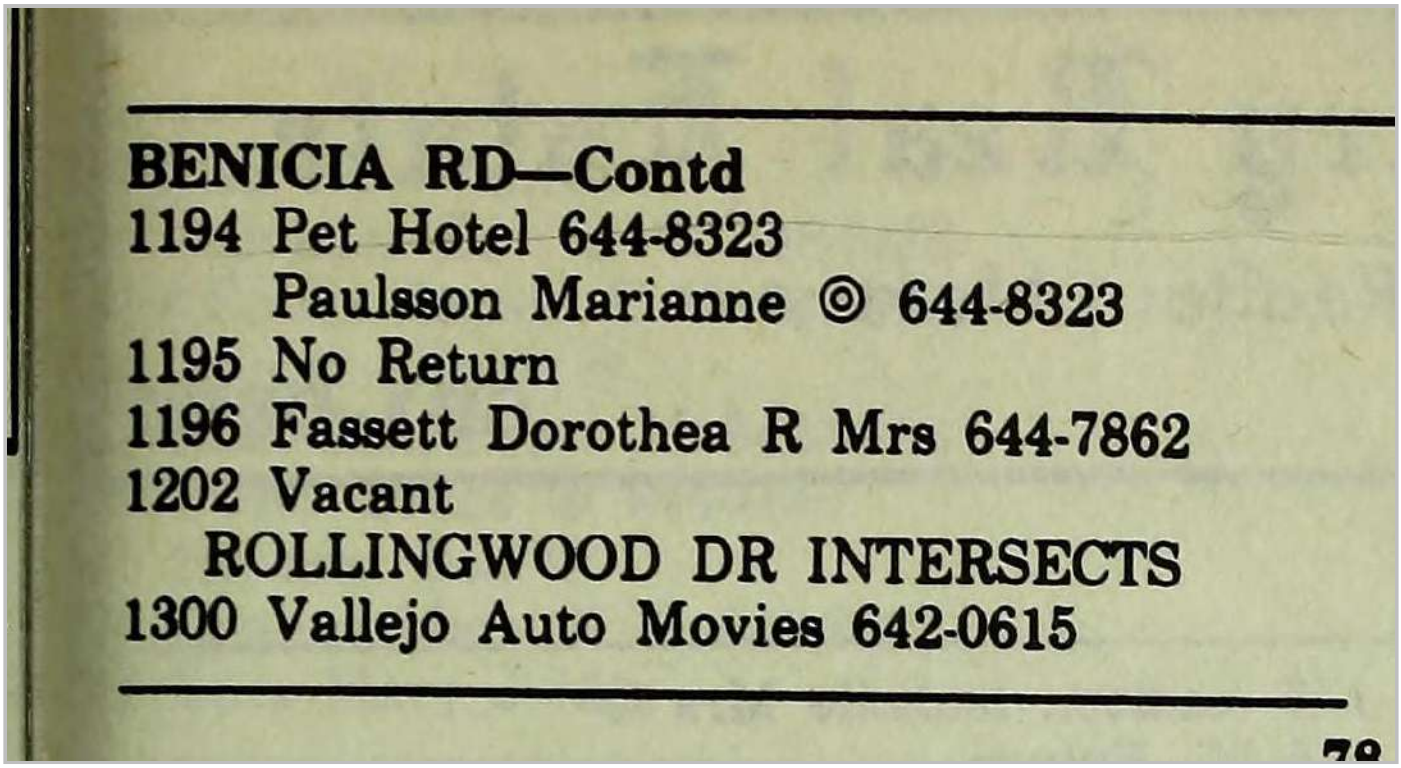
BENICIA RD 1974



BANNING WAY INTERSECTS
1100 Bible Art F 642-5220
1117 Burns Ruben
1121 Candate Robt
1123 No Return
1124 No Return
1138 Bell Sylvester ◎ 642-7239
1141★Triyillo Martha L Mrs 644-6835
1141b Vacant
1144★Tenney Joanne Mrs
1145 Farrell James ◎
1146 Bickford James E ◎ 643-3815
1146a Teitgen Bob
1146b Rikkers Lee R 643-4822
1150 Flora Alberto ◎
1150a Usher Marvin ◎ 644-1524
1152 Tanner Jehu W ◎ 648-0201
1153 Davis Rosalena Mrs ◎ 644-1760
1154 Gragg Robt L ◎ 642-1513
1154a Vacant
1154b★Lyons Henry
1154c★Healy Robt
1156 Wolfe Lester ◎ 691-1535
1161 Bailey Auto & Trailer Court 642-9822
Bailey Elva Mrs ◎ 642-9822
Apartments
1 Kopper Richd 644-4250
2★Fontain Lon
3 Mc Daniel Al
4 Frazekas Emory
5 Vacant
6 Beadle Dosia 648-2492
7 Smith Ora P 643-7467
1116 Trailer Spaces
1 King Ted ◎ 644-5020
2 Brown Ella Mrs ◎ 644-1559
3 Bowes Etta Mrs ◎ 644-3860
4 Nathan Hazel A Mrs ◎ 648-9815
5 Camel Art ◎
6 Cannon J C ◎ 644-3322
7★Gordon Ralph
8★Chandler Richard
9 Bradley Wm A ◎ 642-9137
10 Vacant
11 Pelgemeir Henry ◎
12 Klause Joe ◎
13 Enea Paula ◎
14 Lemon Lillian M Mrs ◎ 643-3917
76 15★Giles G H
17 Farnsworth Emma Mrs ◎
18 Brophy Cecelia H Mrs ◎ 644-5392
19 Vacant
20 Dennison Lydia
21 Lashley John H ◎ 643-2921
1162★Meeks Fredk J ◎
1164 Whittington Wayne ◎ 642-1247
1165★Drake Earl B
1167 Apartments
1 Pillow Fernie E Mrs 644-8459
2 Vacant
3 Cooper James
4 Trelease Jim
5 Vacant
6 Mayberry Marlin 691-0465
7 Vacant
1170 Second Baptist Church 644-2017
1175 Strange Charles E ◎ 644-5764
0 1182 Sanger Wm L ◎ 644-2744
1186 Wade Libby
1191 Amerine Clarence V ◎ 644-1035
1193 Yaeger Geo A ◎ 642-3767
1193a★Luske Bruce

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1974



BENICIA RD—Contd
1194 Pet Hotel 644-8323
Paulsson Marianne © 644-8323
1195 No Return
1196 Fassett Dorothea R Mrs 644-7862
1202 Vacant
ROLLINGWOOD DR INTERSECTS
1300 Vallejo Auto Movies 642-0615

78

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1970

Rear Wong Ah 642-1084
TAYLOR AV INTERSECTS
BANNING WAY INTERSECTS
1100 Dugas S G
1101 Bill's Time Service Station 648-1034
1117 Stephens Emma Mrs ◎ 643-2989
1123 Wiegenstien Jules R
1124 Fears Geo
1130 Vacant
1138 Bell Sylvester
1141 Vacant
1141b Brown Edw 644-7578
1144 Law Curtis L
1145 Farrell James
1146 Bickford James E ◎ 643-3815
1146a Gunsalus David
1146b Rikkers Lee R 643-4822
1150a Usher Marvin 644-1524
1152 Tanner Jehu W ◎ 648-0386
1153 Davis Rosalena Mrs ◎ 644-1760
Rear Rice Clyde L Jr
1154 Gragg Robt L ◎ 642-1513
1154a Reading Rolano 642-8185
1154b Beadle Robt R
1154c Vacant
1156 Doeur John
1161 Bailey Auto & Trailer Court 642-9822
Apartments
1 Kopper Richd
2 Lovan Cleo
3 Bailey Elva Mrs ◎ 642-9822
4 Frazekas Emory
5 Avilla Roger
6 Cruz Donald
7 Smith Ora 643-7467
Trailer Spaces
1 King Ted
2 Brown Ella Mrs
3 Bowes Etta Mrs
4 Nathan Wilfred J
5 Camel Art
6 Cannon J E
7 Glass Douglas
8 Farnsworth Emma Mrs ◎ 644-6849
9 Bradley W A ◎ 642-9137
10 Neal Ann
11 Blazer Jefferson
12 Webb Kevin
13 Brock Rick
14 Lemon Lillian M Mrs
15 Vacant
17 Phillips C C ◎ 642-6021
18 Brophy Cecilia Mrs
19 Denison Lydia Mrs
20 Moss Wayne
21 Lashley J H

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1970

BENICIA RD—Contd

1162 No Return
1164 Scheile Ronald L 644-3054
1165 Rhead Margt L Mrs 643-0189
1167 Apartments
1 Pillow Fernie E Mrs 644-8459
2 Gaviglio Glen
3 Adams Lawrence
4 Vacant
5 Vacant
6 Shallen James
7 Vaughn Richd 643-2000
1170 Second Baptist Church 644-2017
1175 Sprankle Richd A 642-3480
1182 Sanger Wm L ◎ 644-2744
1186 Vacant
1187 Sangar Willard
1191 Amerine Clarence V ◎ 644-1035
1193 Yaeger Geo A ◎ 644-8277
1193a Dobbs Wm J
1194 Pet Hotel 644-8323
Paulsson Marianne
1195 Ellis Le Roy E 642-4602
1196 Vacant
1202 Howington Le Roy H ◎ 644-2146
ROLLINGWOOD DR INTERSECTS
1300 Vallejo Auto Movies 642-0615
Creslewicz Eva Mrs 643-9951

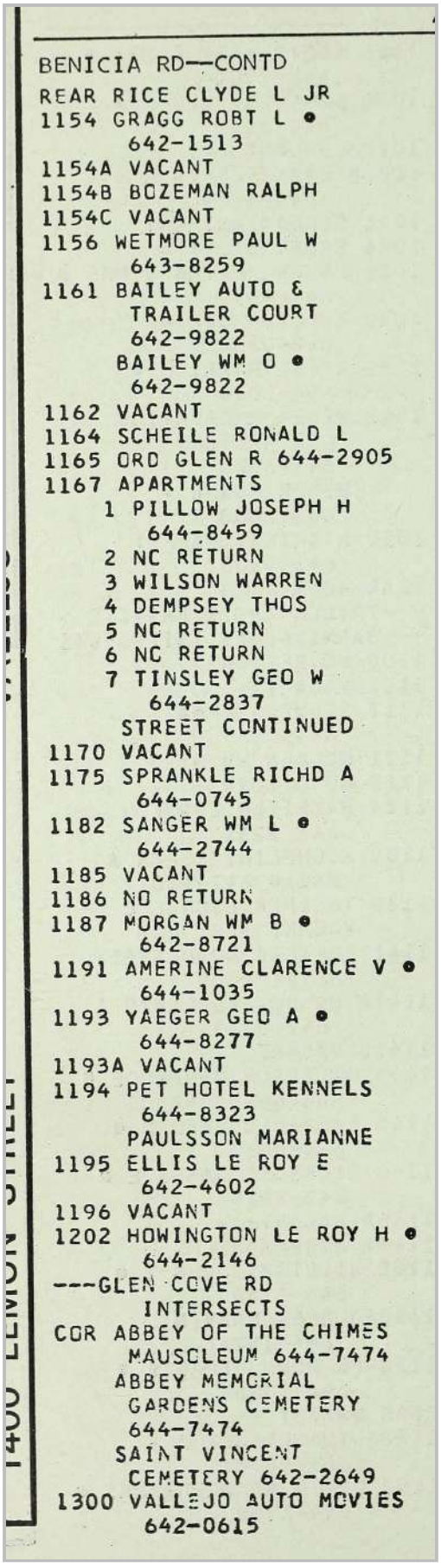
Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1965

---TAYLOR AV INTERSECTS
---BANNING WAY INTERSECTS
1100 NO RETURN
1101 VACANT
1117 STEVENS EMMA
643-2989
1121 HOLMEN WM H
1123 NO RETURN
1124 MAYFIELD EDW L
642-7231
1130 NICHELINI LEONA A
MRS • 642-1101
1138 THOLMER LIONEL C
VACANT
1141 BENICIA ROAD SHEET
METAL SHOP
1141A MC DOWELL LONZO A
642-6833
1141B VACANT
1144 ANDERSON GERTRUDE B
MRS 644-0242
1145 CAMPBELL FRED D •
644-0058
1146 BICKFORD JAMES E •
643-3815
1146A VACANT
1146B ALKEMA RICHD M
1150 WILLIAMS JOHN T •
644-1759
1150A USHER MARVIN
644-1524
1152 MC HUGH GEORGIA •
642-1995
REAR VACANT
1152B TURNER GUY A
643-6388
1153 DAVIS ROSALENA MRS •
644-1760

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1965



BENICIA RD--CONTD
REAR RICE CLYDE L JR
1154 GRAGG ROBT L •
642-1513
1154A VACANT
1154B BOZEMAN RALPH
1154C VACANT
1156 WETMORE PAUL W
643-8259
1161 BAILEY AUTO &
TRAILER COURT
642-9822
BAILEY WM O •
642-9822
1162 VACANT
1164 SCHEILE RONALD L
1165 ORD GLEN R 644-2905
1167 APARTMENTS
1 PILLOW JOSEPH H
644-8459
2 NC RETURN
3 WILSON WARREN
4 DEMPSEY THOS
5 NC RETURN
6 NC RETURN
7 TINSLEY GEO W
644-2837
STREET CONTINUED
1170 VACANT
1175 SPRANKLE RICHD A
644-0745
1182 SANGER WM L •
644-2744
1185 VACANT
1186 NO RETURN
1187 MORGAN WM B •
642-8721
1191 AMERINE CLARENCE V •
644-1035
1193 YAEGER GEO A •
644-8277
1193A VACANT
1194 PET HOTEL KENNELS
644-8323
PAULSSON MARIANNE
1195 ELLIS LE ROY E
642-4602
1196 VACANT
1202 HOWINGTON LE ROY H •
644-2146
---GLEN COVE RD
INTERSECTS
COR ABBEY OF THE CHIMES
MAUSOLEUM 644-7474
ABBEY MEMORIAL
GARDENS CEMETERY
644-7474
SAINT VINCENT
CEMETERY 642-2649
1300 VALLEJO AUTO MOVIES
642-0615

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1959

Taylor av intersects
Banning way inter-
sects

1100 Coleman Edw B
1101 Vacant
1109 Chuck Wagon restr
△MI3-9980
1117 Smith Ervin A ◎
△MI2-0697
1121 Green H D △MI2-5224
1123 Gillesby Chas C
1124 Nichols Ralph
1130 Nichelini Jos F ◎
△MI2-1101
1138 Johnson Fred R ◎
△MI4-3980
rear Vacant
1141 Benicia Road Sheet
Metal Shop
△MI2-6833
McDowell Lonza A
◎ MI2-6833
1141b McDowell Lonzo A
sht mtl wkr
MI2-6833
1144 Taylor Arth F
△MI2-8647
1145 Large C D Tobacco Co
whol △MI3-3394
Large Chas D ◎
△MI3-3394
1146 Bickford Jas E ◎
△MI3-3815

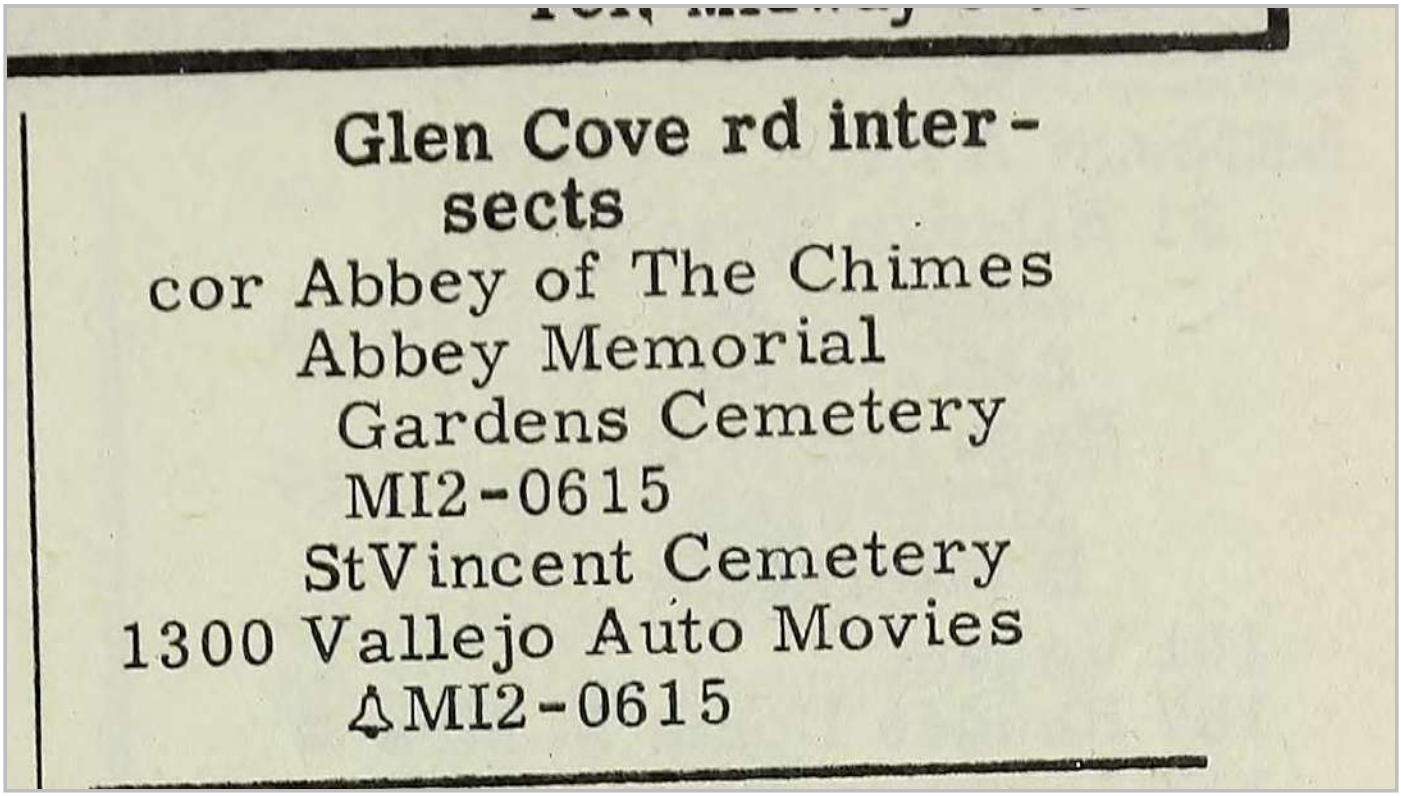
Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1959

BENICIA RD—Contd
1146a McIver John
1146b Vacant
1150 Dudley Anna E Mrs ◎
△MI2-8559
1150a Usher Marvin
MI4-1524
1152 McHugh Georgia Mrs ◎
△MI2-1995
rear Dunn Earl
1152b Turner Guy A ◎
△MI3-6388
1153 Davis Rosalena Mrs ◎
△MI4-1760
rear Erben Herman T
MI2-3757
1154 Gragg Robt L ◎
△MI2-1513
1154a Upholstery The
△MI4-0952
Buhl Bruce
1154b Sparks Sammy J
1154c Carter Gary J
MI3-4426
1156 Woodward O B ◎
△MI4-1627
1161 Bovey Auto & Trailer
Ct MI3-6636
Bovey Raymond P ◎
MI3-6073
1162 Lyon Howard A ◎
△MI4-8745
1164 McPherson Lester H
△MI2-5621
1165 Mantei Fred C
Lenet Norman H
McLean Justin C
Wright Wm L
1170 Lyon's Nursery
△MI2-5621
1175 Vacant
1182 Sanger Wm L ◎
△MI4-2744
1185 McGinnis Milton ◎
△MI2-7414
1186 Vacant
1187 Morgan Wm B ◎
1191 Amerine Clarence V ◎
MI4-1035
1193 Yaeger Geo A ◎
△MI4-8277
1193a Morgan Terral
1194 Pet Hotel kennels
△MI4-8323
Winsor Orville R ◎
△MI4-8323
1195 McClafferty James J
MI2-4890
1196 Ridenour Mack
△MI4-4723
1202 Vacant

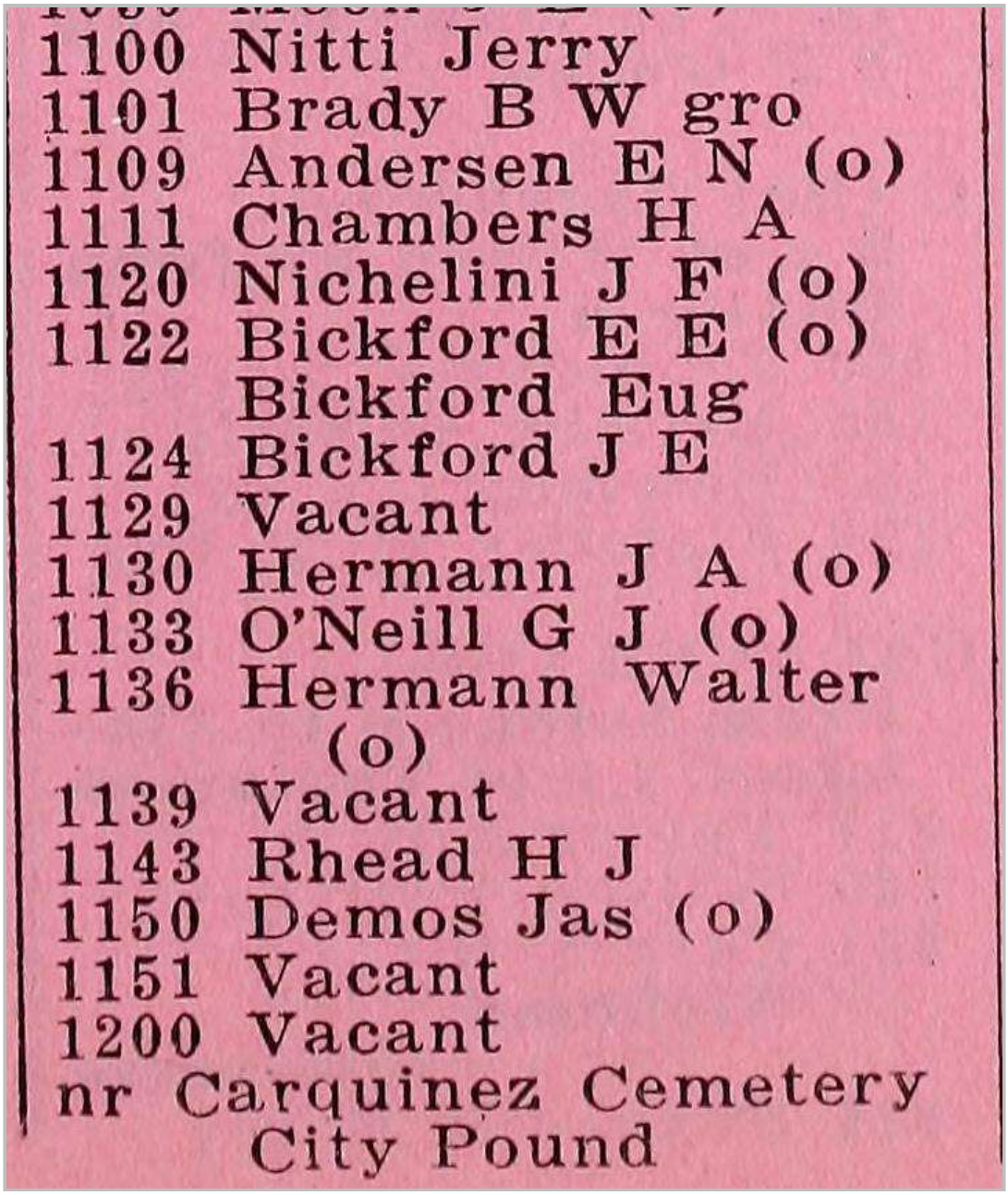
Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1959



Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

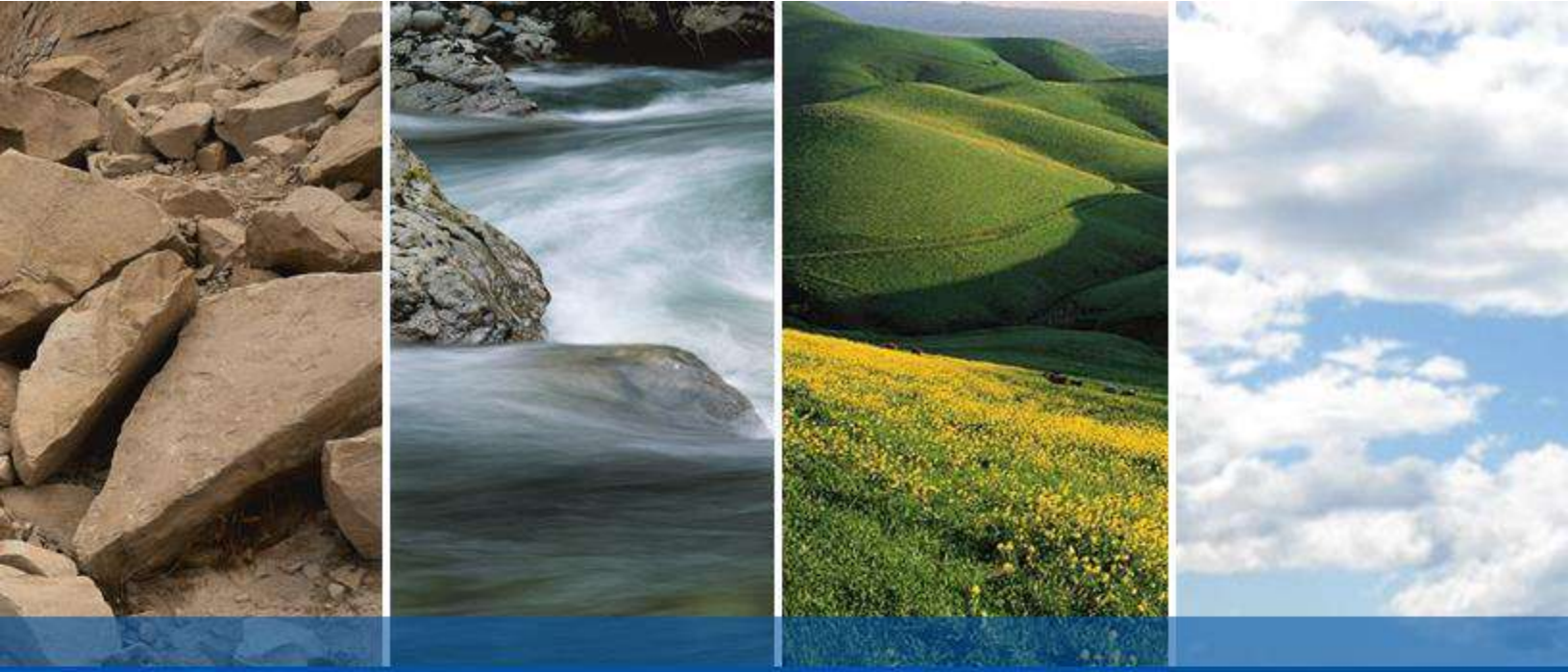
BENICIA RD 1937



1100 Nitti Jerry
1101 Brady B W gro
1109 Andersen E N (o)
1111 Chambers H A
1120 Nichelini J F (o)
1122 Bickford E E (o)
Bickford Eug
1124 Bickford J E
1129 Vacant
1130 Hermann J A (o)
1133 O'Neill G J (o)
1136 Hermann Walter (o)
1139 Vacant
1143 Rhead H J
1150 Demos Jas (o)
1151 Vacant
1200 Vacant
nr Carquinez Cemetery
City Pound

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1937



DRAFT

APPENDIX G

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE
FOR CLIENT

To evaluate the potential for possible environmentally related impacts and site contamination the following information is requested. This questionnaire is to be completed by the user of the phase one environmental site assessment, or their authorized representative.

PART I

1. Property address and Assessor's Parcel Number (APN):

   Property is located at the NEC of Shady lane and Wildflower Street.
   Assessor Parcels 0079-120-100 and 0079-171-170

2. Current property owner (name, address, voice/fax number):

   Susan Chen and Litton Chen for the Timothy Wei Trust
   3620 Ralston Avenue | Hillsborough, CA 94010

3. Date current property owner assumed title of property:

   Records indicate the Timothy Wei Trust assumed owership on 11/29/2013

4. Current property development/improvements:

   Property is undeveloped land.

5. Past property use, development/improvements:

   The property has remained unimproved, undelveoped land.

6. Neighboring property uses:

   Immediately adjacent to the subject site, to the west, is a residential subdivsion. Immediately adjacent, the the east, is Benicia State Park.

PART II

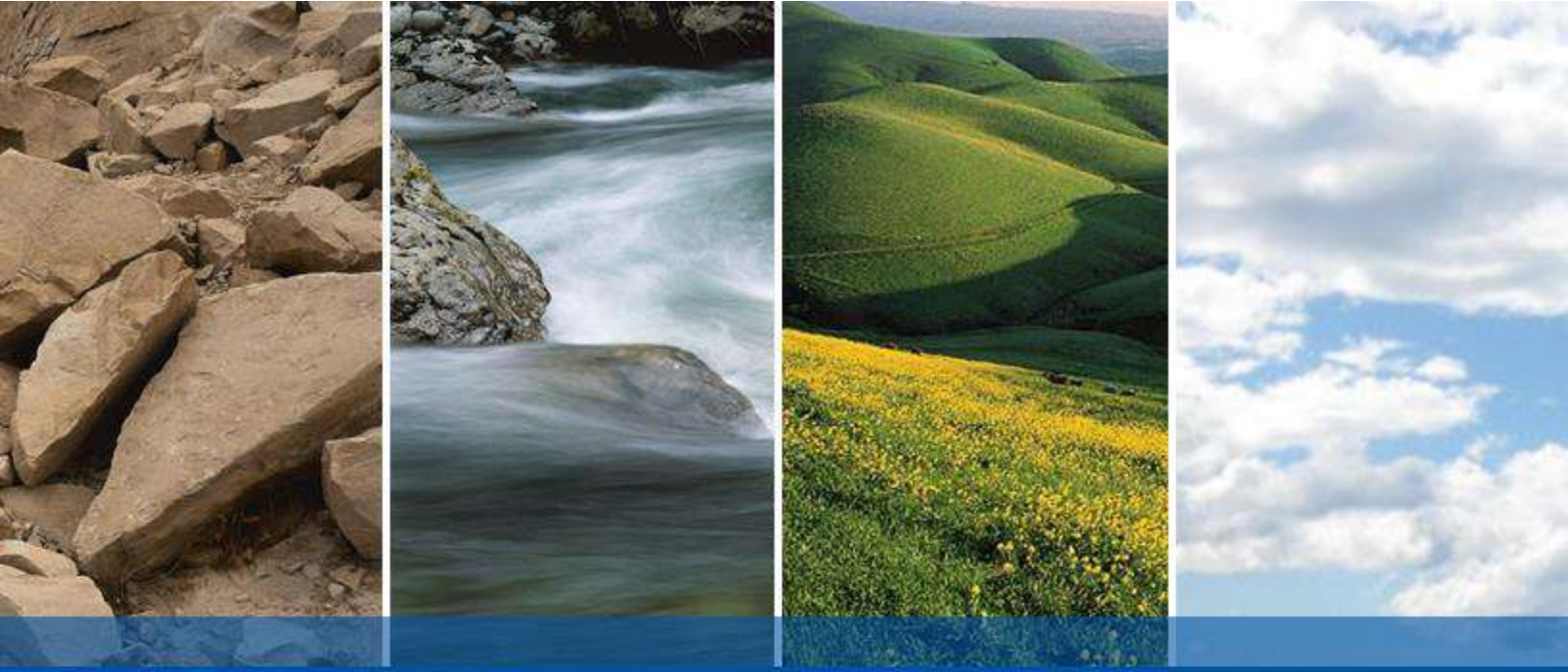
1. Are you aware of any environmental cleanup liens against the *property* that are filed under federal, tribal, local or state law?	☐ Yes	☑ No	
2. Are you aware of any activity and land use limitations, such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded in a registry under federal, tribal, state or local law?	☐ Yes	☑ No	
3. Do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the *property* or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?	☐ Yes	☑ No	
4. If a property transaction is occurring in conjunction with this environmental assessment, does the purchase price of this *property* reasonably reflect the fair market value of the *property*?	☑ Yes	☐ No	
5. If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property?*	☐ Yes	☑ No	☐ N/A
6. Are you aware of any commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, (a) do you know of specific chemicals that are present or once were present at the *property*? (b) do you know of spills or other chemical releases that have taken place at the *property*? (c) do you know of any environmental cleanups that have taken place at the *property*?	☐ Yes	☑ No	
7. Based on your knowledge and experience related to the *property* are there any obvious indicators that point to the presence or likely presence of contamination at the *property*?	☐ Yes	☑ No	

If a "Yes" response was provided to any of the above questions, please provide details below:

I certify that the information herein is true and correct to the best of my knowledge as of the date signed below.

Name (Printed/Typed): Adam Smith

Signature: Adam Smith Date: 4/6/22



DRAFT

APPENDIX H

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

EDUCATION
BS Civil Engineering University of Illinois at Chicago 1994

MS Civil Engineering University of Illinois at Chicago 1996

PhD Civil Engineering University of Illinois at Chicago 1999

MBA University of Washington 2004

EXPERIENCE
Years with ENGEO: 22
Years with Other Firms: 0

REGISTRATIONS & CERTIFICATIONS
Environmental Manager, NV 2150

Professional Engineer, CA 69633

Envision ENV SP Credentialed

SPECIALIZATIONS
- Environmental Assessments, Characterization, and Remediation
- Green and Sustainable Remediation (GSR)
- Resilient and Sustainable Infrastructure
- Geologic Hazard Abatement Districts (GHADs)

AFFILIATIONS
ASCE American Society of Civil Engineers

ASCE Geo-Institute

GRA - Groundwater Resource Association

JEFFREY ADAMS, PHD, PE
Principal

Jeff joined ENGEO in 1999. He leads environmental assessment, characterization, remediation projects, and Geologic Hazard Abatement District (GHAD) formation. He has contributed to a wide range of remediation and development projects in high-density and low-density urban and suburban settings redeveloped for a variety of uses.

Jeff's research interests include green and sustainable remediation (GSR), resilient and sustainable infrastructure solutions, environmental applications, and emerging public/private financial mechanisms to mitigate flood-related losses. He has authored and co-authored numerous environmental remediation-related textbooks, instructional materials, and research papers that have been presented worldwide and published in a diverse group of academic and professional journals.

SELECT PROJECT EXPERIENCE

Howard Terminal—Oakland, CA
Lead Environmental Principal. Jeff has provided ongoing technical leadership during several environmental studies for the redevelopment of the Howard Terminal site. The approximately 62.1-acre Property is a former container terminal along the Port of Oakland's Inner Harbor. The Property was originally a bulk-break terminal dating back to the early 1900s, with a manufactured gas plant located in the eastern portion of the Property. The terminal was expanded and converted to a container terminal in the 1980s. Improvements will include a Major League Baseball stadium as well as mid-rise and high-rise buildings to provide a mix of residential, retail, and other commercial uses. ENGEO performed a Phase I Environmental Site Assessment (ESA), Phase II ESAs consisting of soil, soil gas, and groundwater sampling across the property, EIR preparation support, the preparation of a human health and ecological risk assessment (HHERA), and is developing a removal action work plan (RAW).

Google San Jose Downtown West—San Jose, CA
Project Manager. Jeff provided technical leadership and review for a comprehensive ESA for various industrial and commercial properties over approximately 50 acres in downtown San Jose considered for acquisition by Google. The purpose of the assessment was to identify known and unknown environmental concerns and recommended appropriate actions to quantify potential risks to inform due diligence efforts. The risk assessment utilized an innovative

Geographic Information System (GIS) digital interactive platform that provides additional data beyond typical environmental information and is scalable for future project plans.

The South Lathrop Commerce Center—Tracy, CA
Lead Environmental Principal. Jeff provided technical leadership and review for a Phase I ESA for the approximately 245-acre master-planned industrial development. The 4.2-million-square-foot development includes nine tilt-up concrete buildings, ranging in size from 282,000 square feet to over 1,000,000 square feet. Additional improvements for the logistics center include detention and retention basins, paved streets, parking, and drive lanes, a stormwater pump station and outfall, and a sewer lift station. Site development activities include grading operations, primarily consisting of minor cuts and fills, for individual pads and roadways, underground utility installation, pump station and outfall structure construction, flexible and rigid pavement construction, and vertical construction.

Crown Chevrolet Property—Dublin, CA
Project Manager. Jeff provided comprehensive environmental consultation services for the project. Working on behalf of the purchaser, Jeff collaborated with a multi-firm consulting team to characterize and mitigate environmental impacts resulting from previous on-site automotive maintenance activities and off-site businesses. Jeff designed and managed a site characterization program that definitively demonstrated that groundwater and soil gas impacts at the site were the result of off-site releases. He peer reviewed the design and implementation of a permeable reactive barrier (PRB), which serves to remediate an encroaching groundwater plume, as well as vapor intrusion mitigation systems for the site. He also completed a Phase I ESA for a remnant parcel subsequently developed for housing for veterans. The site consists of a multi-story commercial and residential apartment/condominium "transit village" complex.

3512 Clayton Road—Concord, CA
Lead Environmental Principal. Jeff provided technical leadership and review for a Brownfields redevelopment project in Concord. Following the Phase I and Phase II ESAs that identified soil and soil gas impacts, he assisted in the development of a remediation program that included a comprehensive pre-characterization program, accurately delineating soil impacts from past light-industrial uses and soil gas impacts from off-site businesses, allowing for accelerated field implementation. Following active soil remediation and post-remediation soil gas sampling, Jeff and the ENGEO team performed a vapor intrusion risk assessment that confirmed the site did not require long-term vapor mitigation systems. The site was granted case closure from the oversight regulatory agency within an accelerated review and approval timeframe. The project consists of a high-density residential development.

Blacow Road Project—Fremont, CA
Environmental Principal. Jeff has provided technical assistance for project remediation activities and prepared a Phase I ESA for site. The site is an active, open remediation site under the regulatory oversight of the San Francisco Bay Regional Water Quality Control Board (RWQCB). Impacts resulted from a variety of on-site and off-site commercial and industrial land uses dating back over 50 years. ENGEO has performed numerous characterization, remediation design, and monitoring services for the Site. Remediation activities are underway at the site to address groundwater and soil gas impacts from volatile organic compounds (VOCs) and petroleum hydrocarbons. The remediation approach consists of several remedial and mitigative technologies, including soil vapor extraction (SVE), in-situ enhanced bioremediation, and post-remediation vapor intrusion mitigation systems to be installed in future residential structures. The project consists of a residential development.

Eastvale 79—Eastvale, CA
*Environmental Principal***.** Jeff served in an Environmental Principal role for environmental studies at the site. ENGEO performed a Phase I ESA and a subsequent ESA update that included regulatory file reviews, interviews with property owners and regulatory agencies, a site reconnaissance, and preparation of a report documenting our findings. The approximately 16-acre site was historically associated with a portion of a dairy dating to at least 1967. During grading activities, a localized area of stained and odoriferous soil was observed in the southeast corner of the site. ENGEO coordinated and managed remediation efforts, confirmation sampling, and coordination with Riverside County DEH. Approximately 4,115 tons petroleum-impacted soil were removed and disposed. The DEH issued "No Further Action" status for the site.

Alameda Landing—Alameda, CA
Project Manager. Project Manager, Lead Environmental Principal. Jeff has provided comprehensive environmental consultation services for the Alameda Landing project. He has prepared and managed the completion of Phase I ESA and ESA Update studies for subunits of the greater project area. He directed environmental characterization operations for the site, which was suspected of having been affected by naturally occurring methane deposits within the subsurface. Working closely with innovative protocols, Jeff was able to demonstrate to regulatory oversight officials that expensive vapor intrusion mitigation systems were not necessary for proposed residential structures, potentially saving millions of dollars to the site developer. Additionally, he has prepared several Remedial Action Completion Reports (RACRs) of development phases to achieve regulatory case closure. The project consists of a multi-phased residential housing community built as part of a master-planned redevelopment of a former United States Navy facility.

VTA BART Silicon Valley Berryessa Extension Design-Build Project—San Jose, CA
Project Manager. As the lead project team member with respect to hazardous materials, Jeff provided a range of value engineering consulting services relating to existing soils, groundwater, and building materials. ENGEO provided a range of value engineering consulting services to address existing soils, hydrology resources, SWPPP, and building materials.

Following a complex right-of-way that extended through numerous developed areas and paralleled an existing rail line, the project generated hundreds of thousands of cubic yards of excavated soil with potential toxic and hazard concerns. The right-of-way intersected several groundwater plumes emanating from former industrial and commercial sources. Further, a number of structures in the project footprint harbored lead-based paint and asbestos-containing building materials. ENGEO led the effort to accurately quantify these materials and devise strategies to effectively manage and mitigate these materials to drive overall project cost savings.

Foster City Civic Center Lots—Foster City, CA
Assistant Project Manager. Jeff provided technical oversight for a Phase I ESA for the Foster City Civic Center site and environmental characterization operations for the site, which was suspected of having been affected by unauthorized petroleum hydrocarbon releases within the subsurface. Following the completion of a soil gas survey, Jeff and team demonstrated that vapor intrusion mitigation systems were not necessary for proposed development, providing a significant cost savings to the project. The project consists of a multi-use urban infill development.

Macedo Property Environmental Consultation—Livermore, CA
Project Manager. Jeff provided comprehensive environmental consultation services for a Brownfields redevelopment project in Livermore. The project included several challenges, including ongoing business activities at the site and complex contaminant conditions resulting

from a long history of site operation of an automotive service station. Following a comprehensive site characterization plan that he developed, Jeff developed a cost-effective remedial plan to address hydrocarbon-contaminated soil. Jeff worked closely with the design team to rapidly remediate the site contamination using a soil excavation program that minimized disturbance to the active businesses at the site. Through Jeff's project oversight, the characterization and remediation activities were completed on time and under budget. Because of his effective work with various project stakeholders, the site was granted case closure from the oversight regulatory agency within an accelerated timeframe, allowing redevelopment to occur on schedule. The project consists of a residential subdivision. The project consists of a residential subdivision.

1511 Jefferson—Oakland, CA
Project Manager. Jeff provided environmental and geotechnical consultation services for a Brownfields redevelopment project in downtown Oakland. The project included several challenges, including limited site access due to on-site business activities, environmental impact related to previous site use, and the presence of several adjacent mid-rise structures. Jeff developed efficient remedial value engineering solutions to mitigate the presence of geotechnical and environmental development constraints. Jeff worked with the design team to establish cost-effective retaining wall and foundation systems, designed and observed a subsurface environmental mitigation program, and assisted in the design of a structure-wide vapor barrier. The project, serving as a cornerstone of the revitalization of downtown Oakland, consists of a multi-story residential condominium structure.

Alamo Creek—Danville, CA
Project Manager. Jeff prepared guidance documents and helped to form a transit-focused County Service Area (CSA). The transit-focused CSA, believed to be the first in Contra Costa County, helped to establish commuter transit service for a recently constructed residential development. Utilizing market analysis research provided by other consultants, he prepared an Engineer's Report that outlined a three-part phased implementation of transit, beginning with vanpools and ultimately resulting in an airporter-style fleet of bus service to and from an existing Bay Area Rapid Transit station. Jeff also prepared a long-range budget and confirmed a yearly assessment to ensure financial solvency of the CSA over the lifetime of the development. The CSA serves the Alamo Creek development and vicinity in Contra Costa County, California.

Alcosta Boulevard/Interstate 680 Interchange Project—San Ramon, CA
Project Engineer. Jeff performed an Aerially Deposited Lead (ADL) assessment program for the Alcosta Boulevard/Interstate 680 Interchange Improvement. The purpose of the investigation was to determine existing lead levels in surface soils. The scope of services included the recovery of soil samples from the surface to a depth of 3 feet below the ground surface, analytical testing of the samples to determine hydrogen ion content (pH testing), total lead, STLC WET soluble lead, and STLC TCLP soluble lead analyses, and a statistical analysis to determine Confidence Intervals (CI) of soil lead concentrations. An innovative, risk-based statistical analysis was performed to assure site soils were suitable for on-site reuse in accordance with Caltrans/State of California regulations. The project consists of a rehabilitation and realignment of the interstate highway interchange.

Arroyo Crossing—Livermore, CA
Project Engineer. Jeff contributed to the award-winning project, which included an extensive scope of work, including supplemental geotechnical exploration, Phase I and II ESAs, underground storage tank removal and groundwater monitoring. Jeff provided environmental analysis of existing subsurface conditions, helping the design team to implement a comprehensive yet innovative geotechnical and environmental mitigation program. Following

completion of environmental remediation activities, Jeff was able to secure a substantial federal corporate income tax rebate on behalf of the client through the EPA's Brownfields Tax Incentive program. The project consists of a residential subdivision re-use of a former quarry.

Brookside - Guadalupe Mines Road—San Jose, CA
Senior Engineer. Jeff performed a review of existing environmental documents by others, consultation with the client, and peer review document preparation. This 16-acre commercial property is planned for redevelopment into a roughly 95-lot single-family residential development. Site challenges include pre-existing environmental impacts, existing fills, creek bank stability/meander, and faulting.

East Garrison Development - Operations and Maintenance Plan—Carmel, CA
Project Engineer. Jeff prepared an Operations and Maintenance Plan (OMP) that included an assemblage of projected capital and maintenance costs from a range of consultants into working 50-year budgets for both a County Service District (CSD) and a homeowner's association (HOA). He worked to reach agreement with a number of project stakeholders, including the developer, other consultants, and local government agencies. In addition to assisting in the preparation of capital expenditure projections, Jeff developed the two operating and maintenance budgets, maintenance activity schedules and checklists, and the governing document for the two maintenance entities. The project consists of a redevelopment from a former military facility to a residential subdivision.

Highlands Ranch, Unit 3 - Environmental T&O—Pittsburg, CA
Project Engineer. Jeff managed the remediation of a former petroleum tank farm located in a rural/exurban setting. The extensive remediation program was in support of a conversion of industrial site usage into residential site usage. At this prototypical Brownfield site, Jeff personally oversaw all field operations involving a series of subcontractors, including an innovative ex-situ enhanced bioremediation program of impacted soils. Following excavation, Jeff worked closely with California Department of Toxic Substances Control (DTSC) personnel to determine the suitability of the intended site reuse. Jeff implemented an innovative statistical procedure in accordance with State and Federal Environmental Agency Best Practices to assure the site was safe for residential use. The project consists of a large-scale residential subdivision.

Highway 4 Bypass - Lime Treatment Consultation—Brentwood, CA
Project Manager. Jeff served as Project Manager. He provided consultation services that consisted of a variety of forensic analyses pertaining to the lime treatment of sub-base soils. Jeff worked closely with the project contractor as well as a diverse range of stakeholders to determine if lime treatment materials used in construction had met project specification. Following several protocols, including ASTM methods, Jeff demonstrated the absence of a statistical correlation that would confirm the use of substandard materials. Jeff's work was used to produce an opinion on behalf of the project team that the treated materials would be expected to adequately perform over the design life of the project, saving significant cost overruns. The project consists of a multi-lane highway constructed within a rapidly growing region of Eastern Contra Costa County. The project consists of a multi-lane highway constructed within a rapidly growing region of Eastern Contra Costa County.

Lockheed Martin Storm Water Pond No 4—Sunnyvale, CA
Project Manager. Jeff provided permitting consultation services, including the federal and state permitting required for the maintenance of a stormwater detention system. Jeff has also provided geotechnical and environmental support to evaluate the geotechnical conditions of the site. He also determined the absence of environmentally impacted materials within the site area. The site

consists of a stormwater detention basin measuring approximately 4.5 acres in area and located adjacent to sensitive habitat.

New Farm Agricultural and Meteorological Assessment—Contra Costa County, CA
Project Manager. Jeff managed an agricultural suitability evaluation. As part of the project, a portion of hillside open space is to be devoted to cultivation as olive groves. Jeff led the effort to review USDA soil maps and to test onsite soils for the ability to support olive cultivation. The soils were compared to active olive orchards in other locations of Contra Costa County. The project consists of a residential development with agricultural-intensive open space. Jeff managed an agricultural suitability evaluation. As part of the project, a portion of hillside open space is to be devoted to cultivation as olive groves. Jeff led the effort to review USDA soil maps and to test on-site soils for the ability to support olive cultivation. The soils were compared to active olive orchards in other locations of Contra Costa County. The project consists of a residential development with agricultural-intensive open space.

San Ramon Village Plaza - Environmental Consultation—Dublin, CA
Project Manager. Jeff contributed to an environmental peer review of previous land uses, which included a former dry cleaner. Further investigation identified impact due to former site operations. Jeff assisted in a remediation program, closely collaborating with other consultants representing different parties of the property transaction. The site was efficiently remediated, allowing for redevelopment. The project consists of a high-density residential development within the 4.68-acre mixed-use San Ramon Village Plaza site.

Schaefer Ranch - GHAD Consultation—Dublin, CA
Project Engineer. Jeff assisted with the scoping, Plan of Control preparation, budget, and formation processes of a Geologic Hazard Abatement District (GHAD). The scope of the GHAD includes maintenance of slopes, water conveyance features, habitat, and other features. Proactive maintenance, assessment, repair and replacement are also the responsibility of the GHAD subject to the limitations of the Plan of Control. The project consists of a large-scale residential subdivision in the East Bay hills west of Dublin.

Sparklizing Cleaners and Laundry—Fremont, CA
Project Engineer. Jeff provided review and data analysis for this former dry cleaning facility that had released tetrachloroethylene (PCE) to site soil and groundwater. Work included site characterizations using direct push borings, soil gas surveys, well installations, and a remedial alternatives evaluation. He has also assisted in the development of a remedial program for the site. The project site consists of a dry-cleaning facility located within a commercial/retail center. Dry-cleaning operations occurred at the facility since 1974 and resulted in chlorinated solvent impacts to soil and groundwater beneath the site. As a result, the RWQCB opened a Spills, Leaks, Investigations, and Cleanups (SLIC) case and the site was referred to the Alameda County Water District (ACWD) for lead agency oversight. A series of soil and groundwater investigations identified a source area beneath the drycleaner suite and an adjoining retail suite. ENGEO prepared a Corrective Action Plan (CAP) and coordinated the in-situ chemical oxidation program that consisted of injecting 35,000 gallons of potassium permanganate to the subsurface to oxidize chlorinated solvents. The project is currently in the post-remediation monitoring phase.

Stone Lock District Development - Consulting Services—West Sacramento, CA
Project Engineer. Jeff prepared a pro forma analysis of infrastructure-related costs for a preliminary development concept of the property. The analysis included a cost estimate for all site improvements, grading, utilities, and non-structural facilities. Included in the analysis was an evaluation of the existing adjacent levee system. Jeff worked with other team members to provide

a preliminary assessment of the existing levee condition and prepared a cost estimate for levee rehabilitation and reconstruction. The project consists of a proposed mixed-use redevelopment as part of a city revitalization plan.

Torian Parcels - Additional Phase II Environmental Site Assessment—Newark, CA
Project Manager. Jeff served as Project Manager and Project Engineer. He provided comprehensive geotechnical and environmental evaluation. Several significant geotechnical and environmental conditions existed at the property, including compressible soils, liquefiable soils, and significant deposits of non-engineered fill and debris. Several areas of soil and groundwater environmental impact were present due to historic industrial use at and in the vicinity of the site. Jeff performed a financial analysis of several mitigation alternatives to identify the most cost effective remedial solution, one in which a single remedial program in several locations addressed both environmental and geotechnical impact. Additionally, Jeff worked closely with the environmental oversight agency to develop a work plan to assess potential environmental impact. In developing and implementing the work plan, Jeff was able to demonstrate that environmental impact at the property was not as extensive as previously believed. This allowed for an alteration of the proposed site plan to avoid areas of potential impact, saving significant projected redevelopment costs. The project consists of a residential redevelopment of a 40-acre property formerly used for industrial purposes. The project consists of a residential redevelopment of a 40-acre property formerly used for industrial purposes.

Los Banos Airport - Phase I ESA—Los Banos, CA
Project Engineer. Jeff provided a Phase I ESA, prepared a soil and groundwater characterization program, and developed a conceptual soil remediation work plan as part of a multi-phase development. The Los Banos Airport project measures approximately 112 acres in area.

Navlet's Garden Center Concord - Phase I ESA—Concord, CA
Project Manager. Jeff prepared a Phase I ESA for the site. Jeff was able to effectively navigate through the complex historic records and ownership legacy associated with the property. He prepared a report that satisfied the demands and deadline of both the ownership entity and the financial institutions associated with the property. The project consists of a Navlet's Garden Center.

Mare Island, 3rd and Connelly Utility Corridor Environmental Services—Vallejo, CA
Project Engineer. Jeff provided environmental consultation support. During excavation of the utility corridor, zones of impacted soil were identified and removed from an approximate 9,300-square-foot footprint area and depths from 5 to 10½ feet below existing grade. The project consisted of utility demolition and soil excavation activities required to prepare for construction of a 300-foot water and sewer utility corridor along Connelly Street between 3rd Street and Azuar Drive.

Maggiore Property - Soil Remediation—Brentwood, CA
Project Engineer. Jeff directed field remediation operations for the site, which had been affected by an unauthorized subsurface petroleum product release. He managed a site plume delineation and groundwater-monitoring program. Additionally, Jeff performed RBCA Tier I and Tier II assessments to determine feasibility of residential development of property. The project consists of a small residential subdivision.

Cree Court Slide Repair—San Ramon, CA
Project Engineer. Jeff assisted in the development and implementation of a custom-tailored "top-down" construction procedure, allowing the project to be constructed on time and under

budget. Additionally, Jeff helped develop an innovative non-structural grouting procedure to verify proper structural tieback performance. The project consisted of an integrated structural and grading-related repair for the mitigation of a large active landslide in proximity to existing homes. A 70-foot-high retaining wall is now in place to stabilize a major, active landslide.

Sequoia/Conifer Terrace - Structural Repair Design—Danville, CA
Project Engineer. Jeff assisted in the design of a structural repair system for a landslide remediation project within a residential setting. He provided recommendations to help optimize construction of system and lessen financial burden of project. The project consisted of a unique structural repair for the mitigation of a large active landslide in close proximity to existing homes.

PUBLICATIONS

Books and Book Chapters

Reddy, K.R., Cameselle, C., and Adams, J.A., Sustainable Engineering: Drivers, Metrics, Tools, and Applications, John Wiley and Sons, Inc., Hoboken, New Jersey, 2019 (ISBN: 9781119493938).

Reddy, K.R., and Adams, J.A., Sustainable Remediation of Contaminated Sites, Momentum Press, New York, New York, 2015 (ISBN: 9781606505205).

Adams, J.A., Property Evaluations and Environmental Compliance Audits, Chapter 3 in Environmental Health and Safety Issues, D. Aldrich (ed.), BOMI International, 2013, pp.3.1-3.42 (ISBN: 978-1-933138-38-1).

Reddy, K.R., and Adams, J.A., Cleanup of Chemical Spills Using Air Sparging, Chapter 14 in the Handbook of Hazardous Materials Spill Technology, M. Fingas (ed.), McGraw-Hill Company, 2001, pp.14.1-14.29 (ISBN: 0-07-135171-X).

Conference Papers

Adams, J.A., and Reddy, K.R., “State-of-the-practice of characterization and remediation of contaminated sites.” Proc.Geotechnical Engineering State of the Art and Practice-Geotechnical Special Publication No.226, ASCE, 2012, pp.423-442.

Reddy, K.R., and Adams, J.A., "Remediation of Hydrocarbon Contamination in Groundwater Using In-Situ Biosparging," Recent Advances in Groundwater Engineering, Nishigaki and Kmatsu (eds.), Japan, May 2003, pp.329-333.

Reddy, K.R., and Adams, J.A., "Effect of Pulsed Air Injection During In-Situ Air Sparging for Groundwater Remediation," Proceedings of the ASCE Conference on In-Situ Remediation of the Geoenvironment, Minneapolis, Minnesota, October 1997, pp.68-82.

Reddy, K.R., and Adams, J.A., Towards Green and Sustainable Remediation of Contaminated Sites, 6th International Congress on Environmental Geotechnics, New Delhi, India, November 7, 2010.

Journal Papers

Adams, J.A., Reddy, K.R., and Tekola, L., “Remediation of Chlorinated Solvent Plumes Using In-Situ Air Sparging,” International Journal of Environmental Research and Public Health, Vol.8, No.6, 2011, pp.2226-2239.

Adams, J.A., and Reddy, K.R., "Extent of Benzene Biodegradation in Saturated Soil Columns During Air Sparging," Ground Water Monitoring and Remediation, Vol.23, No.3, 2003, pp.85-94.

Reddy, K.R., and Adams, J.A., "Effects of Soil Heterogeneity on Air Flow Patterns and Hydrocarbon Removal During In-Situ Air Sparging," Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol.127, No.3, 2001, pp.234-247.

Adams, J.A., and Reddy, K.R., "Removal of Dissolved and NAPL-Phase Benzene Pools from Groundwater Using In-Situ Air Sparging," Journal of Environmental Engineering, ASCE, Vol.126, No.8, 2000, pp.697-707.

Adams, J.A., and Reddy, K.R., "Laboratory Study of Air Sparging of TCE-Contaminated Saturated Soils and Groundwater," Ground Water Monitoring and Remediation, Vol.19, No.3, 1999, pp.182-190.

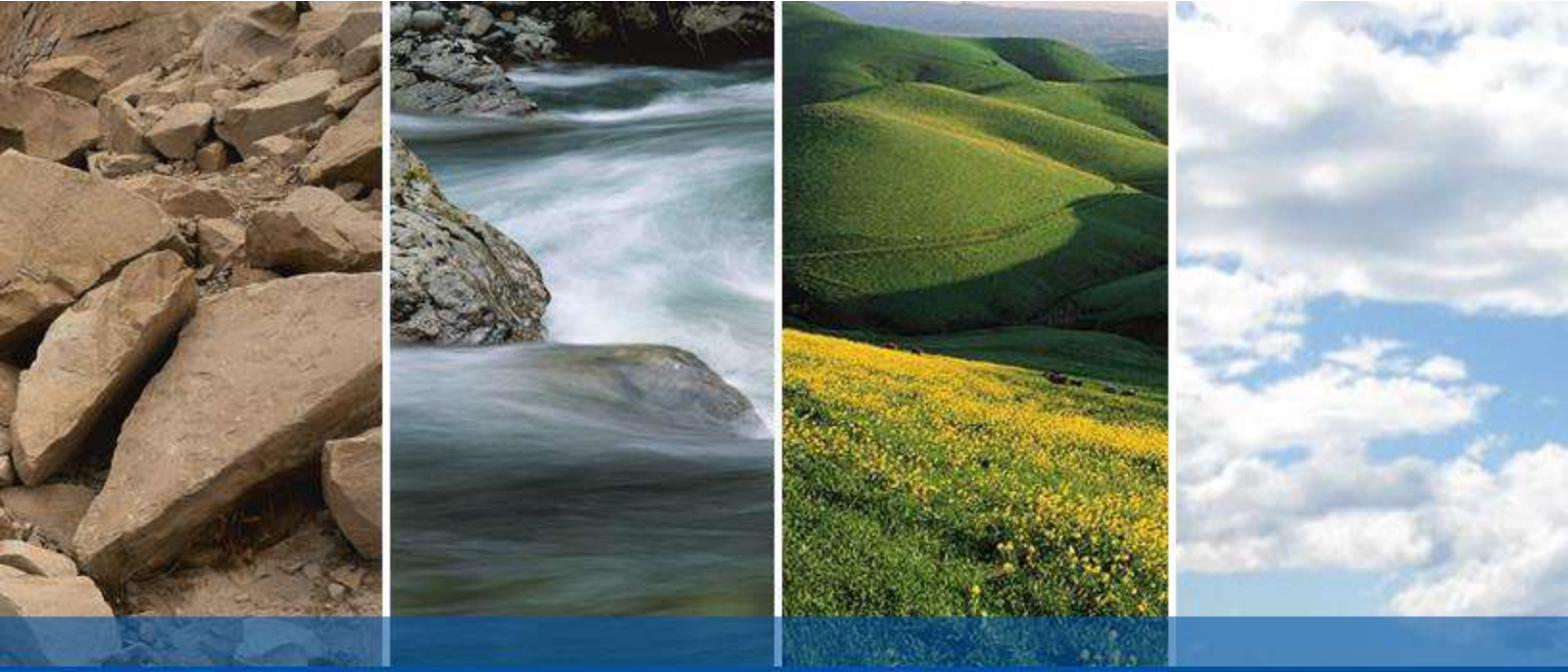
Reddy, K.R., and Adams, J.A., "Effect of Groundwater Flow on Remediation of Dissolved-Phase VOC Contamination Using Air Sparging," Journal of Hazardous Materials, Vol.72, No.2-3, 2000, pp.147-165.

Reddy, K.R., Adams, J.A., and Richardson, C., "Potential Technologies for Remediation of Brownfields," Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management, ASCE, Vol.3, No.2, 1999.

Reddy, K.R., Semer, R., and Adams, J.A., "Air Flow Optimization and Surfactant Enhancement to Remediate Toluene-Contaminated Saturated Soils Using Air Sparging," Environmental Management & Health, Special Issue on Groundwater, Vol.10, No.1, 1999.

Reddy, K.R., and Adams, J.A., "System Effects on Benzene Removal from Saturated Soils and Groundwater Using Air Sparging," Journal of Environmental Engineering, ASCE, Vol.124, No.3, 1998.

Semer, R., Adams, J.A., and Reddy, K.R., "An Experimental Investigation of Air Flow Patterns in Saturated Soils During Air Sparging," Geotechnical and Geological Engineering Journal, Vol.16, No.1, 1998, pp.59-75.



DRAFT

ENGEO
Expect Excellence

MEMORANDUM

Date: March 25, 2025 **Job No.:** 24217-00

To: Florentina Craciun, LSA

From: Cem Atabek, Baseline Environmental Consulting

Subject: **Peer Review of Phase I Environmental Site Assessment, Vista Cove Planned Development Project, Vallejo, California**

Baseline Environmental Consulting (Baseline) has performed a peer review of the Phase I Environmental Site Assessment (ESA) prepared by ENGEO and dated April 26, 2022, for the approximately 29-acre property identified by Assessor's Parcel Numbers (APNs) 0079-171-170, 0079-120-100, and a portion of 0079-220-070 in Vallejo, California (Site). Baseline noted that the Vista Cove Planned Development Project (project) is located only on APNs 0079-171-170 and 0079-120-100 (project site) and does not include the southeastern portion of the Site evaluated in the Phase I ESA. Baseline's peer review was performed to evaluate whether the Phase I ESA was prepared in accordance with the ASTM International[1] Standard for Phase I ESAs and adequately evaluates the Site history, existing observable conditions, current Site use, and current and former uses of surrounding properties to identify the potential presence of Recognized Environmental Conditions (RECs) and other environmental concerns at the Site.

Compliance with ASTM Standard for Phase I ESA

Based on our review, we believe that the Phase I ESA was prepared in general accordance with ASTM E1527-21, which is the most current ASTM Standard for Phase I ESAs. Assumptions, limitations, and deviations from ASTM Standards are presented on pages 9 to 11 of the Phase I ESA and include the description of data gaps which ENGEO indicated do not affect the conclusions as to the presence or lack of presence of RECs at the Site. Baseline concurs that the data gaps should not affect the conclusions as to the presence or lack of presence of RECs at the Site.

Identification of RECs and Other Environmental Concerns

Based on our review, we believe that the Phase I ESA adequately evaluated the Site history, existing observable conditions, current Site use, and current and former uses of surrounding properties to identify the potential presence of RECs at the Site. Based on our review of the Phase I ESA, Baseline has not identified RECs or other environmental concerns at the project site.

[1] Formerly known as American Society for Testing and Materials (ASTM).

This page intentionally left blank

APPENDIX G

DRAINAGE MEMORANDUM, PRELIMINARY STORMWATER CONTROL PLAN, AND DRAINAGE STUDY

ENGINEERING
SURVEYING • PLANNING

MEMORANDUM

To: Adam Smith, Sancerra

From: Andrew D. Palffy, P.E., dk Engineering

Date: May 3, 2023, Revised November 17, 2023

Subject: Drainage Study for Vista Cove in Vallejo, California

---

The existing property at the intersection of Wildflower Ave and Shady Lane in Vallejo, California is 20.13 acres and consists of an undeveloped grassy hillside. The proposed project covers the northern 11.78 acres of the 20.13 acre property, consisting of 51 single-family homes complete with roadways and sidewalk areas. Please refer to the Development Review, Minor Use, Small-Lot Subdivision and Tentative Map Package prepared by dk Engineering on May 3, 2023 for the existing conditions and proposed site plans.

To accommodate the City of Vallejo's requirements for stormwater detention, Contra Costa Clean Water Program's C.3 guidebook, City of Vallejo Appendix A: Local Exceptions and Additional Requirements, the City of Vallejo Final Hydromodification Management Plan and the Solano County Water Agency Hydrology Manual were referred to for the site design. Per the City of Vallejo Final Hydromodification Report, the project uses the HEC-HMS software to design on-site hydromodification controls that provide flow duration control. To run the HEC-HMS simulation for the site, the Solano County Water Agency Report Chapter 3 guidelines were used. As shown on the proposed project site plan, the project is proposed with 2 detention basins that have treatment-only bioretention at the basin base.

The existing site has 3 ridges which split the existing drainage direction (show in Attachment A). Ultimately, all the existing drainage is directed downhill to the Benicia State Park, where the stormwater runoff converges and is directed to the Carquinez Strait. For the HEC-HMS simulation, all three existing drainage areas used the Solano County Water Agency Hydrology Manual recommended initial losses for Open Fields with Minimal vegetation, a value of 0.2 inches.

The proposed developed project has 2 drainage areas (Attachment B) that converge at one outfall where the stormwater runoff is directed to a detention basin and then treated with bioretention. For the HEC-HMS simulation, the drainage areas use the weighted average of the Solano County Water Agency Hydrology Manual recommended initial losses for Paved Areas and Lawn Grass (see Table 1). The Average for DA 2A is 0.172 inches and for DA 2B is 0.183 inches. Proposed Basin 2A is 3.33 feet deep. Proposed Basin 2B is 5.5 feet deep. The privately-owned basins are sized to have a minimum of one (1) foot of freeboard in the 100-year storm event and utilize side slopes of 3:1. Table 2 below summarizes the design flows for the 15 year and 100 year storm events. The project's storm water is directed to the detention basin via a storm drain pipe system as well as sheet flow over landscaped areas. The basins have an overflow inlet which has orifices sized to control the outfall flow rates. From the overflow inlet, the water runs through an 18" storm drain pipe to the east side of the property where it outfalls into the existing marshland area that is adjacent to the Benicia State Park. Please see attachment C for the existing drainage pathway.

Hydrology and basin sizing will be finalized during the final design phase of this project.

1931 San Miguel Drive, Suite 100, Walnut Creek, CA 94596 Tel: (925) 932-6868 www.dkEngin.com

Table 1. HEC-HMS coefficients from the Solano County Water Agency Hydrology Manual Chapter 3

Hydrologic Soil Type: D	Recommended Constant Loss Rate: 0.02 in/hour
Recommend Initial Losses: Existing	*"Open Fields with Minimal vegetation"* = 0.2 inches
Recommended Initial Losses: DA 2A	Weighted average of *"Paved Area: 0.0 inches" and "Lawn Grass: 0.3 inches"* = 0.172 inches
Recommended Initial Losses: DA 2B	Weighted average of *"Paved Area: 0.0 inches" and "Lawn Grass: 0.3 inches"* = 0.183 inches
Snyder Standard Lag Times	(Equation 3-6) See Attachment A and Attachment B for specific lag times used.

Table 2. Project Flow Rates

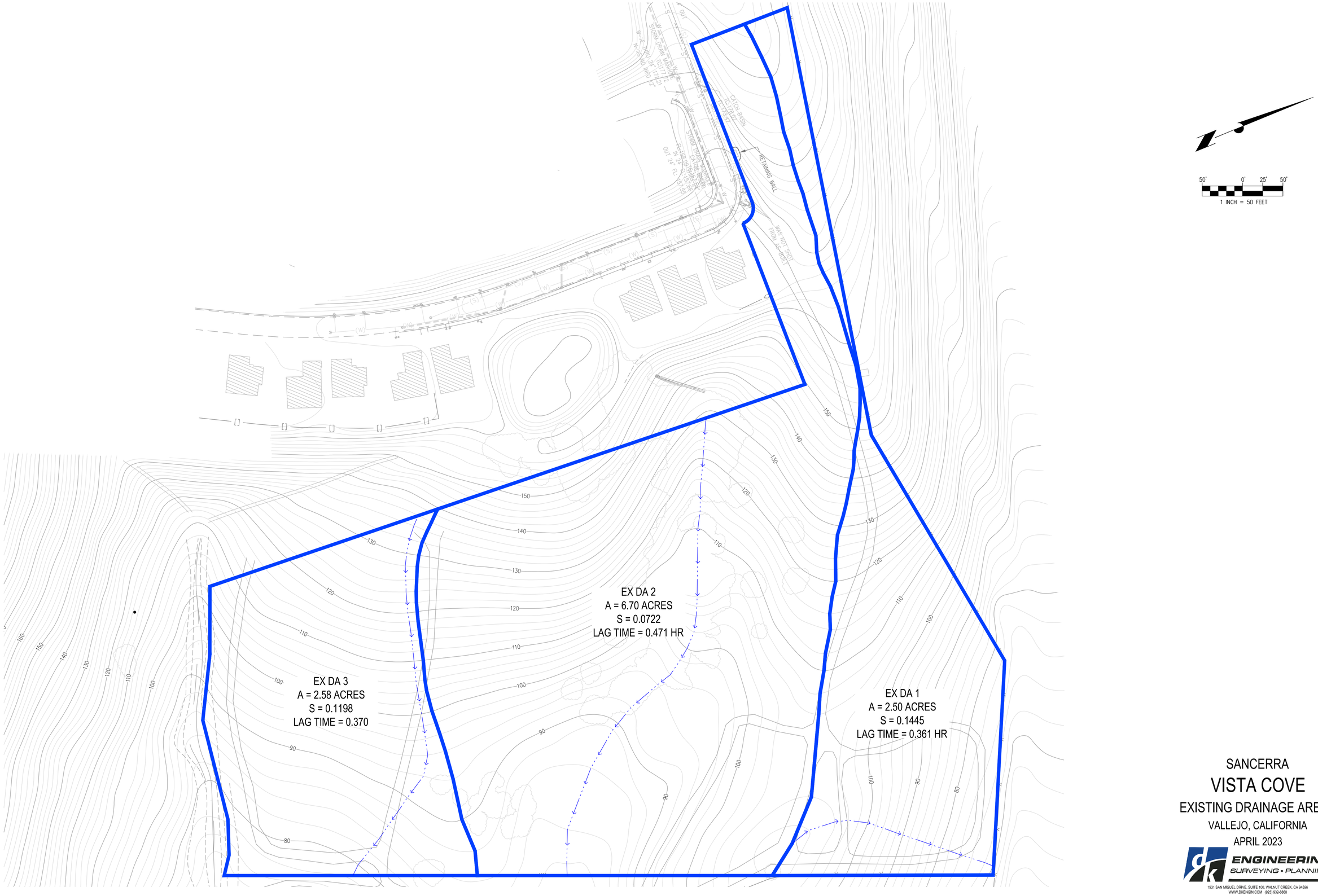
Pre-Development (cfs)				
	EX DA 1	EX DA 2	EX DA 3	**Total**
15-year, 24-hour	2.7	6.2	2.7	**11.6**
100-year, 24-hour	3.7	8.5	3.8	**16.0**

Post-Development (cfs)					
	Proposed DA 1	Combined DA 2A after Detention	Combined DA 2B after Detention	Proposed DA 3	**Total**
15-year, 24-hour	0.7	1.8	7.9	1.2	**11.6**
100-year, 24-hour	0.9	2.2	11.1	1.7	**15.9**

Appendix

Attachment A: Existing Drainage Areas
Attachment B: Proposed Drainage Areas
Attachment C: Existing Drainage Pathway

1931 San Miguel Drive, Suite 100, Walnut Creek, CA 94596 Tel: (925) 932-6868 www.dkEngin.com



SANCERRA

VISTA COVE

EXISTING DRAINAGE AREAS

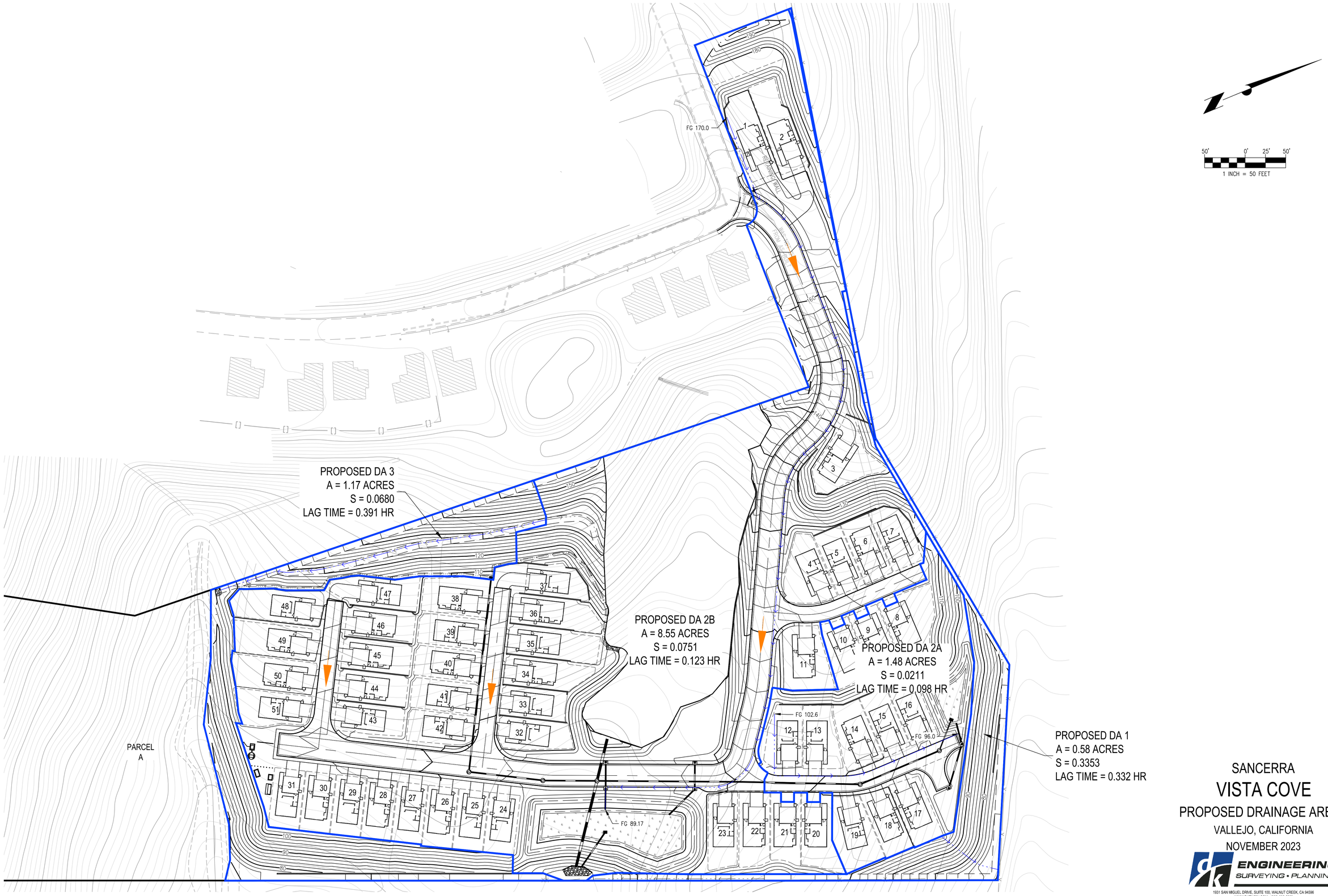
VALLEJO, CALIFORNIA

APRIL 2023

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

I:\PROJECTS\2021\21-1008 VISTA COVE - VALLEJO\CIVIL\HYDROLOGY\DRAINAGE AREAS - EX-COND.DWG 5/1/2023

dk JOB# 22-1008



SANCERRA

VISTA COVE

PROPOSED DRAINAGE AREAS

VALLEJO, CALIFORNIA

NOVEMBER 2023

dk ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

dk JOB# 22-1008

SHEET 1 OF 1

ADJACENT EXISTING TOPOGRAPHY
SCALE: 1"=300'

ADJACENT EXISTING TOPOGRAPHY WITH FLOW DIRECTION
SCALE: 1"=300'

IMAGE SOURCE: NEAR MAPS
CONTOURS: TOPOGRAPHIC FEATURES SHOWN GENERATED FROM USGS AND ARE APPROXIMATE.
CONTOUR INTERVAL:
EXISTING: 2 FOOT AND 10 FOOT

DRAFT

300' 0' 150' 300'
1 INCH = 300 FEET

SANCERRA
VISTA COVE
EXISTING DRAINAGE PATHWAY
VALLEJO, CALIFORNIA
NOVEMBER 17, 2023

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

dk JOB# 22-1008

SHEET 1 OF 1

PRELIMINARY STORMWATER CONTROL PLAN

for

VISTA COVE

November 2023

Sancerra
Adam Smith
asmith@sancerra.com
(949) 466-9604

prepared by:

dk Engineering
(925) 932-6868

TABLE OF CONTENTS

I. Project Data....1

II. Setting....2

II.A. Project Location and Description....2

II.B. Existing Site Features and Conditions....2

II.C. Opportunities for Stormwater Control....2

III. Low Impact Development Design Strategies....2

III.A. Optimization of Site Layout....2

III.A.1. Limitation of development envelope 2

III.A.2. Preservation of natural drainage features 2

III.A.3. Setbacks from creeks, wetlands, and riparian habitats 2

III.A.4. Minimization of imperviousness 2

III.A.5. Use of drainage as a design element 2

III.B. Use of Permeable Pavements....3

III.C. Dispersal of Runoff to Pervious Areas....3

III.D. Bioretention or other Integrated Management Practices....3

IV. Documentation of Drainage Design....3

IV.A. Descriptions of each Drainage Management Area....3

IV.A.1. Table of Drainage Management Areas 3

IV.A.2. Drainage Management Area Descriptions 3

IV.B. Integrated Management Practice Descriptions....3

IV.C. Tabulation and Sizing Calculations....4

V. Source Control Measures....4

V.A. Site activities and potential sources of pollutants....4

V.B. Source Control Table....4

V.C. Features, Materials, and Methods of Construction of Source Control BMPs....5

VI. Stormwater Facility Maintenance....5

VI.A. Ownership and Responsibility for Maintenance in Perpetuity....5

VI.B. Summary of Maintenance Requirements for Each Stormwater Facility....5

VII. Construction Plan C.3 Checklist....5

VIII. Certifications....5

Tables

Table 1. Project Data....1

Table 2. Drainage Management Areas....3

Table 3. Sources and Source Control Measures....4

Table 4. Construction Plan C.3 Checklist....5

Attachments

Vicinity Map

Stormwater Control Plan Exhibit with IMP Sizing Calculator Output

This Stormwater Control Plan was prepared using the template dated February 2023.

I. PROJECT DATA

Table 1. Project Data

Project Name/Number	Vista Cove
Application Submittal Date	November 2023
Project Location	A portion of 0079-120-100, 0079-171-170, 0079-220-070; Shady Lane and Wildflower Road Vallejo, CA
Name of Developer	Sancerra
Project Phase No.	NA
Project Type and Description	Residential development with 51 single family homes
Project Watershed	Glen Cove
Total Project Site Area (acres)	Total Site Area (Lot 1): 10.395 Ac Parcel A: 8.356 Ac Parcel B: 1.381 Ac
Total Area of Land Disturbed (acres)	10.49 acres
Total New Impervious Surface Area (sq. ft.)	171, 896 sf
Total Replaced Impervious Surface Area	0 sf
Total Pre-Project Impervious Surface Area	0 sf
Total Post-Project Impervious Surface Area	171, 868 sf
50% Rule[*]	Applies
Project Density	2.53 units/acre
Applicable Special Project Categories	None.
Percent LID and non-LID treatment	100% LID treatment
HM Compliance [†]	Applies

[*50% rule applies if:
Total Replaced Impervious Surface Area > 0.5 x Pre-Project Impervious Surface Area]

[†HM required (unless project meets one of the exemptions on *Guidebook* p. 11) if:
(Total New Impervious Surface Area + Total Replaced Impervious Surface Area) ≥ 1 acre]

II. SETTING

II.A. Project Location and Description

The Vista Cove project site is located in the city of Vallejo, California at the intersection of Shady Lane and Wildflower Ave. The project plans to have 51 single family residential units with access roadways, bioretention areas and site landscaping. The site will have 51 lots and various sized landscaped parcels. The project's zoning is mix of Housing Types/Medium Density which requires lots to have front, corner side and rear yards and maximum lot coverage of 60% of the lot. The project is not anticipated to be phased. The property is located adjacent to the Glen Cove subdivision that consists of single-family homes. A vicinity map is provided as a supplemental attachment to this report.

II.B. Existing Site Features and Conditions

The existing undeveloped property is 20.13 acres and currently sits as fully vegetative covered area that slopes downhill to the southeastern side of the property. The property ranges in elevation from 75 to 155. There are currently no impervious areas on the site. There are 2 existing hydrologic features on the site, identified as a riparian area and a freshwater marsh. No existing municipal storm drain features exist on the property. The existing drainage for the site sheet flows off the site toward the adjacent 780 highway to the northeast, the riparian area in the property, the freshwater marsh in the property and off site to the adjacent City owned parcel to the southeast of the property. The existing soil type on the site includes lean clay with sand and sandstone and siltstone, the hydrologic soil group is category D and ground water was not encountered when borings were performed.

II.C. Opportunities for Stormwater Control

This site utilities 100% LID treatment via bioretention areas. The existing site drains to the southeastern boundary of the site. The natural direction of the flow is maintained to allow for prime bioretention space opportunities. The large difference in elevation for the site encourages the stormwater to flow via gravity to these bioretention areas and be treated prior to out falling to the existing water way location.

III. LOW IMPACT DEVELOPMENT DESIGN STRATEGIES

III.A. Optimization of Site Layout

III.A.1. Limitation of development envelope
The developable area consists of 11.78 acres of the property boundary. Parcel A is not a part of the project. The existing riparian area is to be avoided.

III.A.2. Preservation of natural drainage features
The riparian area in the middle of the developed area is preserved on the site as an enhanced feature of the site.

III.A.3. Setbacks from creeks, wetlands, and riparian habitats
The riparian limits clarified by the project biologists are accounted for in the site plan.

III.A.4. Minimization of imperviousness
Project pathways are designed to minimum widths but offer a walkable environment and landscaped areas are provided in lieu of potential impervious beautification features.

III.A.5. Use of drainage as a design element
Bioretention facilities are incorporated into the site as a design element to the site landscaping.

III.B. Use of Permeable Pavements

Permeable pavement material is not used at the site. The bioretention features meet the treatment sizing requirements for stormwater control.

III.C. Dispersal of Runoff to Pervious Areas

Where feasible, drainage from impervious areas is directed to pervious spaces. Ultimately, drainage from the site is all directed to pervious bioretention areas that are placed throughout the site.

III.D. Bioretention or other Integrated Management Practices

Bioretention areas have been designed per the IMP sizing calculator requirements. The site is graded to drain to low points, which is where the bioretention spaces are located throughout the site.

IV. DOCUMENTATION OF DRAINAGE DESIGN

IV.A. Descriptions of each Drainage Management Area

IV.A.1. Table of Drainage Management Areas

Table 2. Drainage Management Areas

DMA Name	*Area (SF)*	*Surface Type/Description*	*DMA Type/Drains to*
DMA 1	59,945	Impervious area and pervious area	Drains to bioretention area IMP 1
DMA 2	282,178	Impervious area and pervious area	Drains to bioretention area IMP 2
Self-Treating	101,865	Pervious Area	Self-Treating Area

IV.A.2. Drainage Management Area Descriptions

DMA 1, totaling 59,945 square feet, drains towards the northwest corner of the property. DMA 1, with 27,427 sf impervious area and 32,518 sf pervious area, drains to IMP 1, a bioretention area that has a treatment area of 1,228 sf.

DMA 2, totaling 282,178 square feet, drains towards the northwest corner of the property. DMA 2, with 144,462 sf impervious area and 137,716 sf pervious area, drains to IMP 2, a bioretention area that has a treatment area of 6,390 sf.

Self-treating DMA, totaling 101,865 square feet, consists of pervious area and drains to adjacent pervious space at the northeastern side of the property and the southeastern side of the property.

IV.B. Integrated Management Practice Descriptions

The bioretention areas are designed for treatment only. Flow control measures are incorporated via detention basins that sit above the bioretention area. The base rock layer of the bioretention is 12" deep. The overflow structure is also set at 1' below freeboard of the 100-year storm event. to allow for ponding prior to being treated and then traveling directly into the storm drain system. The facilities are sized per the Contra Costa IMP calculator and the results are included on the Stormwater Control Plan attached. Refer to the separate drainage study memo prepared by dk Engineering, Revised November 2023 for discussion on the hydromodification element of the proposed basins.

IV.C. Tabulation and Sizing Calculations

See IMP calculator results on the Stormwater Control Plan sheet (Attachment B).

V. SOURCE CONTROL MEASURES

V.A. Site activities and potential sources of pollutants

Potential sources of pollutants may include on-site dumping into storm drain inlets, the need for future or structural pest control, landscape/outdoor pesticide use, streets and sidewalks debris. To account for these potential sources, the source control table below lists control opportunities.

V.B. Source Control Table

Table 3. Source Controls

Potential source of runoff pollutants	Permanent source control BMPs	Operational source control BMPs
On-site dumping into storm drain inlets	All accessible on-site inlets require stainless steel markers with statement "No Dumping – Drains to Bay" or similar	Markings will be periodically replaced. Inlets and pipes conveying stormwater to BMPs will be inspected and maintained as part of BMP Operation and Maintenance Plan.
Need for future indoor or structural pest control		Integrated Pest Management (IPM) information will be provided to property owners.
Landscape/outdoor pesticide use	Final landscape plans will: Be designed to minimize irrigation and runoff and to minimize use of fertilizers and pesticides that can contribute to stormwater pollution. Specific plantings within bioretention areas and swales that are tolerant of the sandy loam soil and periodic inundation. Include pest-resistant plants. Include plantings appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	Landscape will be maintained using minimum or no pesticides. IPM information will be provided to property owners
Streets and Sidewalks		Sweep streets and sidewalks to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect wash water containing any cleaning agent or degreaser and discharge to the sanitary sewer, not to the storm drain.

V.C. Features, Materials, and Methods of Construction of Source Control BMPs

Source control BMPs will be designed and implemented per the CASQA BMP fact sheets and project construction specifications.

VI. STORMWATER FACILITY MAINTENANCE

VI.A. Ownership and Responsibility for Maintenance in Perpetuity

The ownership and responsibility for maintenance of the facilities will be determined when approved project improvements are available.

VI.B. Summary of Maintenance Requirements for Each Stormwater Facility

The maintenance requirements will be provided when approved project improvements are available.

VII. CONSTRUCTION PLAN C.3 CHECKLIST

Table 4. Construction Plan C.3 Checklist

Stormwater Control Plan Page #	*BMP Description*	*See Plan Sheet #*
Attachment B	IMP & DMA 1-2 *Bioretention facility* Self-Treating Area *Pervious Area*	

VIII. CERTIFICATIONS

The selection, sizing, and preliminary design of stormwater treatment and other control measures in this plan meet the requirements of Regional Water Quality Control Board Order R2-2015-0049.

Andrew D. Palffy, P.E.
RCE #43704

Print Name

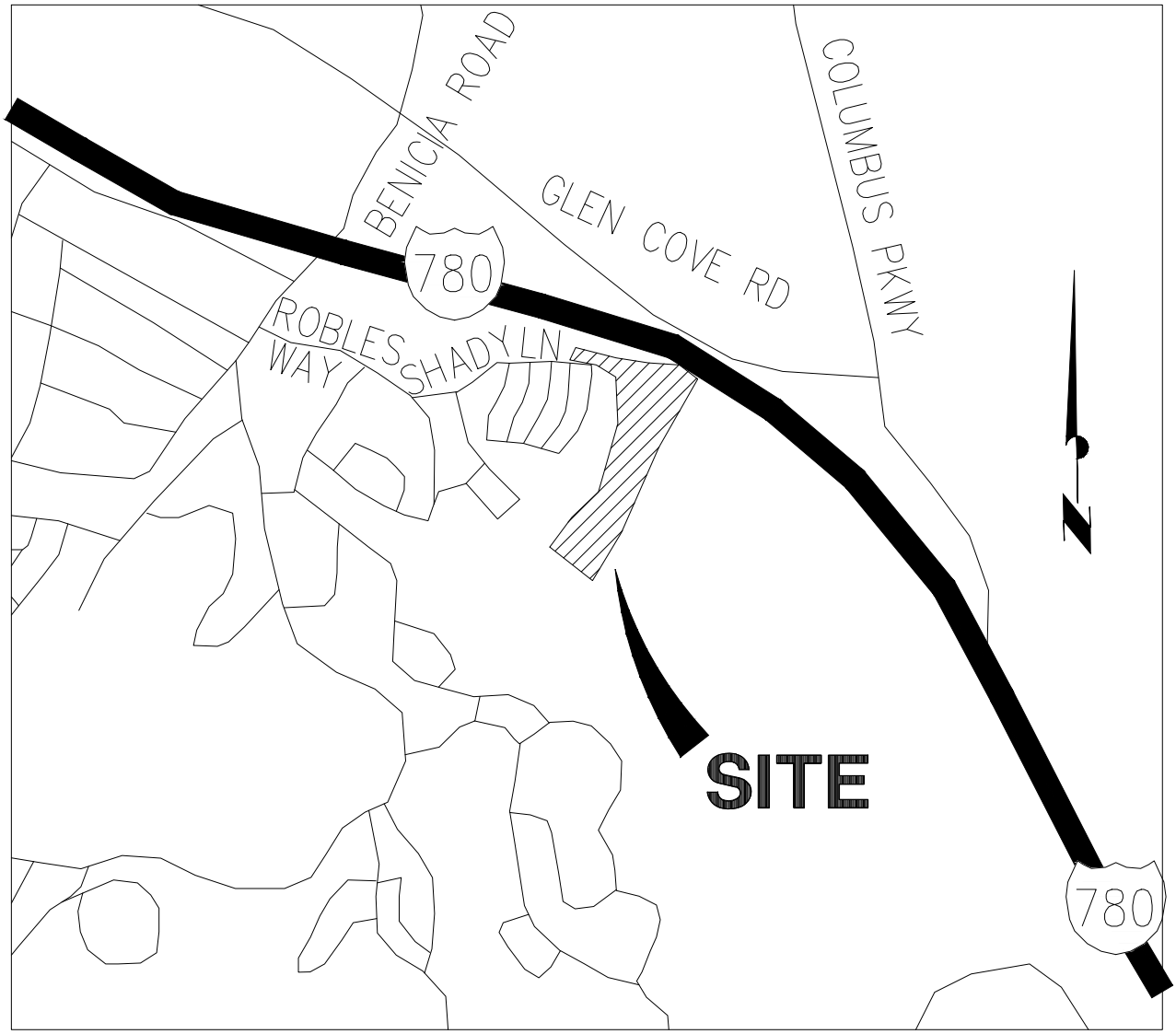
SANCERRA

VISTA COVE

VICINITY MAP

NOT TO SCALE

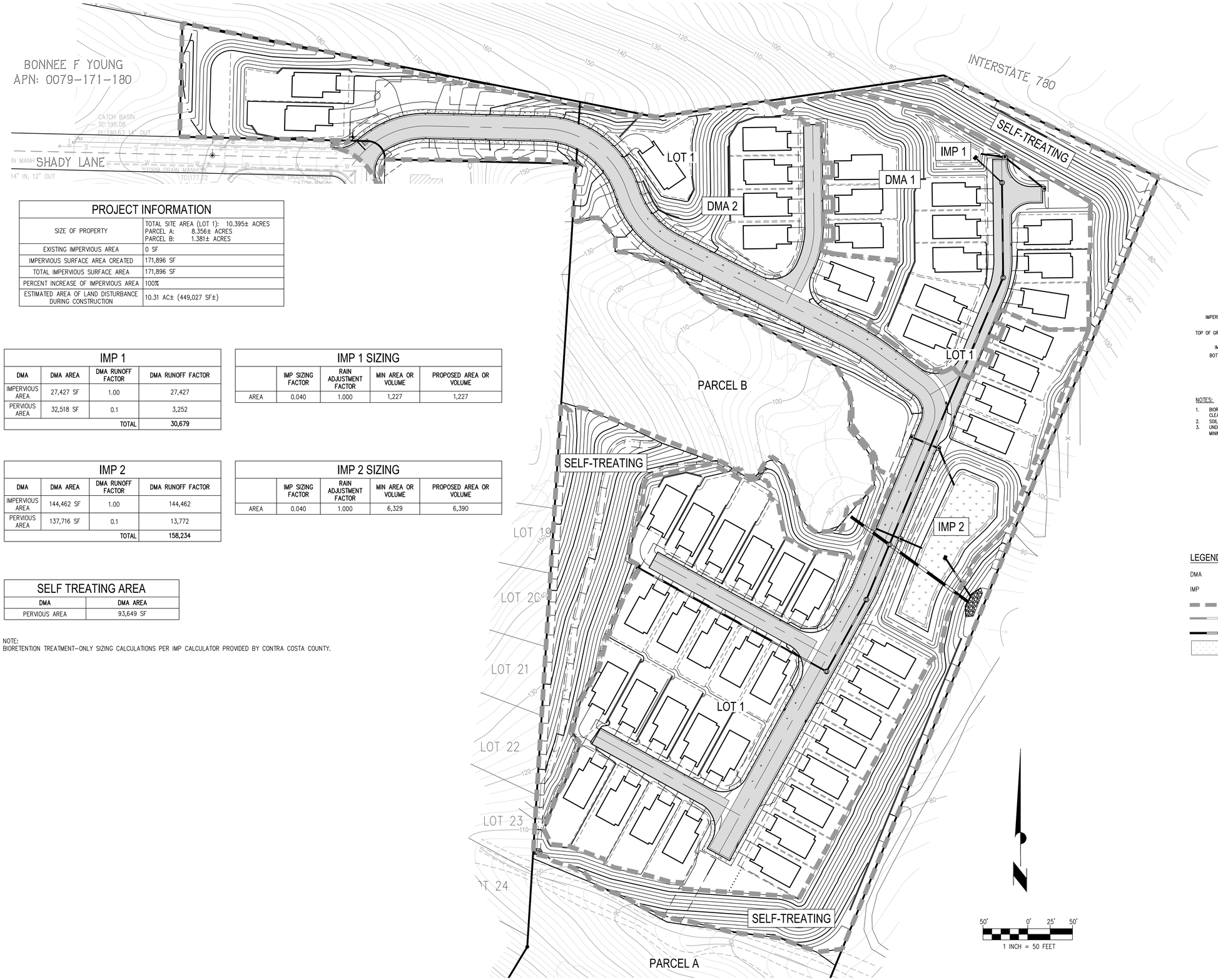
VALLEJO, CALIFORNIA



ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

F:\PROJECTS\2022\22-1008 VISTA COVE - VALLEJO\DWG\EXHIBIT\VICINITY MAP-2208.DWG 3/22/2023

dk JOB# 22-1008-20



PROJECT INFORMATION	
SIZE OF PROPERTY	TOTAL SITE AREA (LOT 1): 10.395± ACRES PARCEL A: 8.356± ACRES PARCEL B: 1.381± ACRES
EXISTING IMPERVIOUS AREA	0 SF
IMPERVIOUS SURFACE AREA CREATED	171,896 SF
TOTAL IMPERVIOUS SURFACE AREA	171,896 SF
PERCENT INCREASE OF IMPERVIOUS AREA	100%
ESTIMATED AREA OF LAND DISTURBANCE DURING CONSTRUCTION	10.31 AC± (449,027 SF±)

IMP 1			
DMA	DMA AREA	DMA RUNOFF FACTOR	DMA RUNOFF FACTOR
IMPERVIOUS AREA	27,427 SF	1.00	27,427
PERVIOUS AREA	32,518 SF	0.1	3,252
		TOTAL	30,679

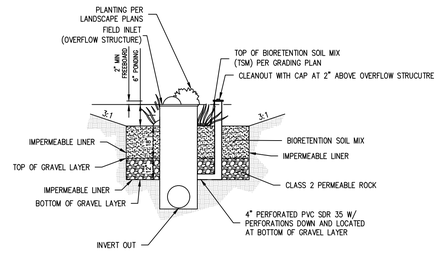
IMP 1 SIZING				
	IMP SIZING FACTOR	RAIN ADJUSTMENT FACTOR	MIN AREA OR VOLUME	PROPOSED AREA OR VOLUME
AREA	0.040	1.000	1,227	1,227

IMP 2			
DMA	DMA AREA	DMA RUNOFF FACTOR	DMA RUNOFF FACTOR
IMPERVIOUS AREA	144,462 SF	1.00	144,462
PERVIOUS AREA	137,716 SF	0.1	13,772
		TOTAL	158,234

IMP 2 SIZING				
	IMP SIZING FACTOR	RAIN ADJUSTMENT FACTOR	MIN AREA OR VOLUME	PROPOSED AREA OR VOLUME
AREA	0.040	1.000	6,329	6,390

SELF TREATING AREA	
DMA	DMA AREA
PERVIOUS AREA	93,649 SF

NOTE:
BIORETENTION TREATMENT-ONLY SIZING CALCULATIONS PER IMP CALCULATOR PROVIDED BY CONTRA COSTA COUNTY.



NOTES:
1. BIORETENTION FACILITY SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT CONTRA COSTA CLEAN WATER PROGRAM, C.3 GUIDEBOOK AND CITY OF VALLEJO APPENDIX A.
2. SOIL MIX SHALL HAVE A MINIMUM PERCOLATION RATE OF 5"/HOUR.
3. UNDERDRAIN SHALL HAVE CLEANOUTS CONSISTING OF RIGID, NON-PERFORATED PVC PIPE WITH A MINIMUM DIAMETER OF 4" AND A WATERTIGHT CAP.

TYPICAL BIORETENTION DETAIL
NOT TO SCALE

LEGEND

DMA	DRAINAGE MANAGEMENT AREA
IMP	INTEGRATED MANAGEMENT PRACTICE
	DMA BOUNDARY
	EXISTING STORM DRAIN PIPE
	PROPOSED STORM DRAIN PIPE
	BIORETENTION

SANCERRA

VISTA COVE

DEVELOPMENT REVIEW,
TENTATIVE MAP FOR CONDOMINIUM PURPOSES

FOR CREATING 51 CONDOMINIUM UNITS, OPEN SPACE PARCELS A AND B

STORMWATER CONTROL PLAN

NOVEMBER 17, 2023

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

F:\PROJECTS\2022\22-1008 VISTA COVE - VALLEJO\CAD\TENTATIVE MAP\C3 STORMWATER CONTROL PLAN.DWG 11/15/2023

This page intentionally left blank

APPENDIX H

NOISE IMPACT ANALYSIS

Vista Cove

NOISE IMPACT ANALYSIS

CITY OF VALLEJO

PREPARED BY:

Bill Maddux, INCE
bmaddux@urbanxroads.com
(619) 788-1971

MARCH 27, 2025

TABLE OF CONTENTS

TABLE OF CONTENTS I
APPENDICES II
LIST OF EXHIBITS III
LIST OF TABLES III
LIST OF ABBREVIATED TERMS IV
EXECUTIVE SUMMARY 1
Off-Site Traffic Noise 3
Operational Noise 3
Construction Noise Analysis 3
Construction Vibration Analysis 3
Summary of Significance Findings 4
1 INTRODUCTION 5
1.1 Site Location 5
1.2 Project Description 5
2 FUNDAMENTALS 9
2.1 Range of Noise 9
2.2 Noise Descriptors 10
2.3 Sound Propagation 10
2.4 Noise Control 12
2.5 Noise Barrier Attenuation 12
2.6 Land Use Compatibility With Noise 12
2.7 Vibration 12
3 REGULATORY SETTING 15
3.1 State of California Noise Requirements 15
3.2 State of California Building Code 15
3.3 City of Vallejo General Plan Noise Standards 15
3.4 Operational Noise Standards 17
3.5 Construction Noise Standards 18
3.6 Construction Vibration Standards 19
4 SIGNIFICANCE CRITERIA 21
4.1 CEQA Guidelines Not Further Analyzed 21
4.2 Noise-Sensitive Receivers 21
4.3 Significance Criteria Summary 22
5 EXISTING ON-SITE NOISE LEVELS 25
6 TRAFFIC NOISE METHODS AND PROCEDURES 27
6.1 FHWA Traffic Noise Prediction Model 27
7 ON-SITE TRANSPORTATION NOISE IMPACTS 29
7.1 Exterior Noise Analysis 29
7.2 Interior Noise Analysis 31
8 OFF-SITE TRANSPORTATION NOISE IMPACTS 35
9 SENSITIVE RECEIVER LOCATIONS 37
10 OPERATIONAL NOISE IMPACTS 39

10.1 Operational Noise Sources 39
10.2 Reference Noise Levels 39
10.3 CadnaA Noise Prediction Model 41
10.4 Project Operational Noise Levels 41
10.5 Project Operational Noise Level Compliance 42
11 CONSTRUCTION IMPACTS 43
11.1 Construction Noise Levels 43
11.2 Construction Reference Noise Levels 43
11.3 CadnaA Noise Prediction Model 45
11.4 Typical Construction Noise Analysis 46
11.5 Typical Construction Noise Level Compliance 46
11.6 Typical Construction Vibration Impacts 47
12 REFERENCES 49
13 CERTIFICATION 51

APPENDICES

APPENDIX 3.1: CITY OF VALLEJO MUNICIPAL CODE
APPENDIX 4.1: PROJECT SITE PLAN
APPENDIX 7.1: ON-SITE TRAFFIC NOISE LEVEL CALCULATIONS
APPENDIX 10.1: OPERATIONAL NOISE LEVEL CALCULATIONS
APPENDIX 11.1: CONSTRUCTION NOISE LEVEL CALCULATIONS

LIST OF EXHIBITS

EXHIBIT ES-A: RECOMMENDED BARRIER LOCATIONS 2
EXHIBIT 1-A: LOCATION MAP 6
EXHIBIT 1-B: SITE PLAN 7
EXHIBIT 2-A: TYPICAL NOISE LEVELS 9
EXHIBIT 2-B: TYPICAL LEVELS OF GROUND-BORNE VIBRATION 14
EXHIBIT 3-A: LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS 17
EXHIBIT 3-B: CITY OF VALLEJO EXTERIOR AND INTERIOR NOISE LIMITS 18
EXHIBIT 3-C: CITY OF VALLEJO MAXIMUM NOISE LEVEL ADJUSTMENT 18
EXHIBIT 3-D: CITY OF VALLEJO CONSTRUCTION NOISE STANDARDS 19
EXHIBIT 7-A: ON-SITE RECEIVER LOCATIONS 30
EXHIBIT 8-A: RECEIVER LOCATIONS 38
EXHIBIT 9-A: OPERATIONAL NOISE SOURCE LOCATIONS 40
EXHIBIT 11-A: CONSTRUCTION ACTIVITY 44

LIST OF TABLES

TABLE ES-1: SUMMARY OF SIGNIFICANCE FINDINGS 4
TABLE 4-1: SIGNIFICANCE CRITERIA SUMMARY 23
TABLE 6-1: ON-SITE ROADWAY PARAMETERS 28
TABLE 6-2: TIME OF DAY VEHICLE SPLITS 28
TABLE 6-3: DISTRIBUTION OF TRAFFIC FLOW BY VEHICLE TYPE (VEHICLE MIX) 28
TABLE 7-1: EXTERIOR TRAFFIC NOISE LEVELS (DBA CNEL) 31
TABLE 7-2: FIRST-FLOOR INTERIOR TRAFFIC NOISE IMPACTS (CNEL) 32
TABLE 7-3: SECOND-FLOOR INTERIOR TRAFFIC NOISE IMPACTS (CNEL) 33
TABLE 10-1: REFERENCE NOISE LEVELS 39
TABLE 10-2: PROJECT OPERATIONAL NOISE LEVELS 41
TABLE 10-4: OPERATIONAL NOISE LEVEL COMPLIANCE 42
TABLE 11-1: TYPICAL CONSTRUCTION REFERENCE NOISE LEVELS 45
TABLE 11-2: TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY 46
TABLE 11-3: TYPICAL CONSTRUCTION NOISE LEVEL COMPLIANCE 47
TABLE 11-4: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT 47
TABLE 11-5: PROJECT CONSTRUCTION VIBRATION LEVELS 48

LIST OF ABBREVIATED TERMS

(#)	Reference
ANSI	American National Standards Institute
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HVAC	Heating, Ventilation, and Air Conditioning
IEC	International Electrotechnical Commission
INCE	Institute of Noise Control Engineering
I-780	Interstate 780
L_{eq}	Equivalent continuous (average) sound level
L_{max}	Maximum level measured over the time interval
L_{min}	Minimum level measured over the time interval
mph	Miles per hour
PPV	Peak Particle Velocity
Project	Vista Cove
RMS	Root-mean-square
VdB	Vibration Decibels

EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to identify noise impacts and any necessary noise mitigation measures for the Vista Cove development ("Project") located at Shady Lane and Wildflower Road (APN's 0037-030-200, 0037-030-210, 0037-060-480), in the City of Vallejo. The proposed Project would subdivide 20.13 acres and develop 51 single-family detached homes on approximately 10 acres, with the remaining area being open space. This study has been prepared to satisfy the applicable City of Vallejo standards and thresholds of significance based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (1)

EXTERIOR NOISE ABATEMENT

To satisfy the City of Vallejo exterior noise level standard of 60 dBA L_{dn} for single-family residential land uses, the construction of a noise barrier is recommended for the outdoor living area (backyards) of Lots 8 and 16, adjacent to Interstate 780 (I-780). With the recommended noise barriers shown in Exhibit ES-A, the future exterior noise levels will range from 26.9 to 59.5 dBA CNEL. This noise analysis shows that the recommended noise barrier will satisfy the City of Vallejo 60 dBA L_{dn} exterior noise level standards for single-residential land uses. The effective noise barrier height recommendations represent the minimum wall and/or berm combination height required to satisfy the City of Vallejo exterior noise level standards.

The recommended noise control barriers shall be constructed so that the top of each wall and /or berm combination extends to the planned height above the pad elevation of the lot it is shielding. When the road is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the road. The barrier shall provide a surface area weight of at least 4 pounds per square foot with no decorative cutouts or line-of-sight openings between shielded areas and the roadways or a minimum transmission loss of 20 dBA. (2) The noise barrier shall be constructed using the following materials:

- Masonry block;
- Stucco veneer over wood framing (or foam core), or 1-inch-thick tongue and groove wood of sufficient weight per square foot;
- Glass (1/4-inch-thick), or other transparent material with sufficient weight per square foot capable of providing a minimum transmission loss of 20 dBA;
- Earthen berm;
- Any combination of these construction materials.
- The barrier shall consist of a solid face from top to bottom. Unnecessary openings or decorative cutouts shall not be made. All gaps (except for weep holes) should be filled with grout or caulking.

EXHIBIT ES-A: RECOMMENDED BARRIER LOCATIONS

INTERIOR NOISE ABATEMENT

Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." (3) The interior noise level analysis shows that the City of Vallejo 45 dBA CNEL interior noise standard can be satisfied using standard windows and mechanical ventilation (e.g., air conditioning) being provided for all units. Since Project architectural plans are unavailable at this time, the Project should submit a final interior noise analysis to the building department during the final plan check.

OFF-SITE TRAFFIC NOISE

The expected Project is anticipated to generate approximately 510 trips per day. The location where the greatest chance of an impact occurs is at the residence near the Project site entrance and at Shady Lane and Wildflower Avenue. Without consideration of any barriers, the Project is predicted to generate a noise level of 50.2 dBA CNEL at the nearest building façade. Therefore, the Project would not expose existing noise-sensitive receivers to excessive noise levels, and the off-site traffic noise level impacts due to the Project are considered *less than significant*.

OPERATIONAL NOISE

The Project's primary noise sources would be air conditioners. Project operational noise levels at off-site receiver locations are expected to range from 23.7 to 33.3 dBA $L_{eq.}$ Project operational noise levels will satisfy Section 16.502.09 of the City of Vallejo Municipal Code daytime and nighttime noise standards of 60 dBA and 50 dBA L_{eq}, respectively, at all residential receivers. Therefore, Project-related operational noise impacts would be *less than significant*.

CONSTRUCTION NOISE ANALYSIS

Construction noise levels are expected to create temporary and intermittent high noise levels at receivers surrounding the Project site when activities occur at the closest point to the nearby receiver locations from the edge of Project construction activity. Using reference noise levels to represent the construction activities at the Project site, this analysis estimates the Project-related construction noise levels at nearby sensitive receiver locations. The results of the analysis show the highest construction noise levels at the potentially impacted receiver locations are expected to approach 65.0 dBA L_{eq}.

The Project related construction equipment noise levels are anticipated to satisfy the City of Vallejo Municipal Code construction noise level standards of 80 dBA for mobile equipment during typical Project construction activities at all receiver locations. Therefore, the short-term Project construction impacts are considered a *less than significant.*

CONSTRUCTION VIBRATION ANALYSIS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent,

localized intrusion. Project construction vibration velocity levels are expected to approach 0.07 in/sec PPV at the nearby receiver locations, and will therefore, not exceed the vibration threshold of 0.10 in/sec PPV. Therefore, construction related vibration impacts would be *less than significant*.

SUMMARY OF SIGNIFICANCE FINDINGS

The results of this Vista Cove Noise Impact Analysis are summarized below based on the significance criteria in Section 4 of this report. Table ES-1 shows the findings of significance for each potential noise and/or vibration impact before and after incorporation of Project design features.

TABLE ES-1: SUMMARY OF SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
On-Site Traffic Noise	7	-	--
Off-Site Traffic Noise	8	*Less Than Significant*	-
Operational Noise	10	*Less Than Significant*	-
Construction Noise	11	*Less Than Significant*	-
Construction Vibration		*Less Than Significant*	-

1 INTRODUCTION

This noise analysis has been completed to determine the noise impacts associated with the development of the Vista Cove ("Project"). This noise study describes the Project, provides information regarding noise and vibration fundamentals, outlines the local regulatory setting, provides the study methods and procedures for performing noise analysis, evaluates potential noise impacts from the project, and identifies mitigation measures to reduce impacts, as necessary.

1.1 SITE LOCATION

The Project is located at Shady Lane and Wildflower Road in the City of Vallejo. APN's 0037-030-200, 0037-030-210, 0037-060-480, in the City of Vallejo. The Project's location in relation to the surrounding area is shown in Exhibit 1-A. The surrounding land use designations are Residential (Primarily Single Gamily) to the west, Saint Patrick Saint Vincent High School (Public Facilities and Institutions) to the north across Interstate 780 (I-780), and Parks, Recreation and Open Space to the south and east.

1.2 PROJECT DESCRIPTION

The proposed Project would subdivide 20.13 acres and develop 51 single-family detached homes on approximately 10 acres, with the remaining area being open space. At Buildout the Project is anticipated to generate 510 trips per day. The primary operational noise sources are air conditioning units.

EXHIBIT 1-A: LOCATION MAP

EXHIBIT 1-B: SITE PLAN

This page intentionally left blank.

2 FUNDAMENTALS

Noise has been simply defined as "unwanted sound." Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm or when it has adverse effects on health. Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. Exhibit 2-A presents a summary of the typical noise levels and their subjective loudness and effects that are described in more detail below.

EXHIBIT 2-A: TYPICAL NOISE LEVELS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

Source: Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.

2.1 RANGE OF NOISE

Since the range of intensities that the human ear can detect is so large, the scale frequently used to measure intensity is a scale based on multiples of 10, the logarithmic scale. The scale for measuring intensity is the decibel scale. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. (4) The most common sounds vary between 40 dBA (very quiet) to 100 dBA (very loud). Normal conversation at three feet is roughly at 60 dBA, while loud jet engine noises equate to 110 dBA

at approximately 100 feet, which can cause serious discomfort. (5) Another important aspect of noise is the duration of the sound and the way it is described and distributed in time.

2.2 NOISE DESCRIPTORS

Environmental noise descriptors are generally based on averages, rather than instantaneous, noise levels. The most commonly used figure is the equivalent level (L_{eq}). Equivalent sound levels are not measured directly but are calculated from sound pressure levels typically measured in A-weighted decibels (dBA). The equivalent sound level (L_{eq}) represents a steady state sound level containing the same total energy as a time varying signal over a given sample period and is commonly used to describe the "average" noise levels within the environment.

To describe the time-varying character of environmental noise, the statistical or percentile noise descriptors L_{50}, L_{25}, L_8 and L_2, are commonly used. The percentile noise descriptors are the noise levels equaled or exceeded during 50 percent, 25 percent, 8 percent, and 2 percent of a stated time. Sound levels associated with the L_2 and L_8 typically describe transient or short-term events, while levels associated with the L_{50} describe the steady state (or median) noise conditions. While the L_{50} describes the median noise levels occurring 50 percent of the time, the L_{eq} accounts for the total energy (average) observed for the entire hour. Therefore, the L_{eq} noise descriptor is generally 1-2 dBA higher than the L_{50} noise level.

Peak hour or average noise levels, while useful, do not completely describe a given noise environment. Noise levels lower than peak hour may be disturbing if they occur during times when quiet is most desirable, namely evening and nighttime (sleeping) hours. To account for this, the Community Noise Equivalent Level (CNEL), representing a composite 24-hour noise level is utilized. The CNEL is the weighted average of the intensity of a sound, with corrections for time of day, and averaged over 24 hours. The time-of-day corrections require the addition of 5 decibels to dBA L_{eq} sound levels in the evening from 7:00 p.m. to 10:00 p.m., and the addition of 10 decibels to dBA L_{eq} sound levels at night between 10:00 p.m. and 7:00 a.m. These additions are made to account for the noise sensitive time periods during the evening and night hours when sound appears louder. CNEL does not represent the actual sound level heard at any time, but rather represents the total sound exposure. The City of Vallejo relies on the 24-hour CNEL level to assess land use compatibility with transportation related noise sources.

2.3 SOUND PROPAGATION

When sound propagates over a distance, it changes in level and frequency content. The way noise reduces with distance depends on the following factors.

2.3.1 GEOMETRIC SPREADING

Sound from a localized source (i.e., a stationary point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source. (4)

2.3.2 GROUND ABSORPTION

The propagation path of noise from a highway to a receptor is usually very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Traditionally, the excess attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 ft. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receptor such as soft dirt, grass, or scattered bushes and trees), an excess ground attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the cylindrical spreading, the excess ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance from a line source. (6)

2.3.3 ATMOSPHERIC EFFECTS

Receptors located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels. Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects. (4)

2.3.4 SHIELDING

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an “out of sight, out of mind” effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearby resident. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. The FHWA does not consider the planting of vegetation to be a noise abatement measure. (6)

2.4 NOISE CONTROL

Noise control is the process of obtaining an acceptable noise environment for an observation point or receptor by controlling the noise source, transmission path, receptor, or all three. This concept is known as the source-path-receptor concept. In general, noise control measures can be applied to these three elements.

2.5 NOISE BARRIER ATTENUATION

Effective noise barriers can reduce noise levels by 10 to 15 dBA, cutting the loudness of traffic noise in half. A noise barrier is most effective when placed close to the noise source or receptor. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source. (6)

2.6 LAND USE COMPATIBILITY WITH NOISE

Some land uses are more tolerant of noise than others. For example, schools, hospitals, churches, and residences are more sensitive to noise intrusion than are commercial or industrial developments and related activities. As ambient noise levels affect the perceived amenity or livability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process. The FHWA encourages State and Local government to regulate land development in such a way that noise-sensitive land uses are either prohibited from being located adjacent to a highway, or that the developments are planned, designed, and constructed in such a way that noise impacts are minimized. (7)

2.7 VIBRATION

Per the Federal Transit Administration (FTA) *Transit Noise and Vibration Impact Assessment Manual* (8), vibration is the periodic oscillation of a medium or object. The rumbling sound caused by the vibration of room surfaces is called structure-borne noise. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

Additionally, in contrast to airborne noise, ground-borne vibration outdoors is not a common environmental problem and annoyance from ground-borne vibration is almost exclusively an indoor phenomenon (9). Therefore, the effects of vibrations should only be evaluated at a structure and the effects of the building structure on the vibration should be considered. Wood-frame buildings, such as typical residential structures, are more easily excited by ground vibration than heavier buildings. In contrast, large masonry buildings with spread footings have a low response to ground vibration (9). In general, the heavier a building is, the lower the response will

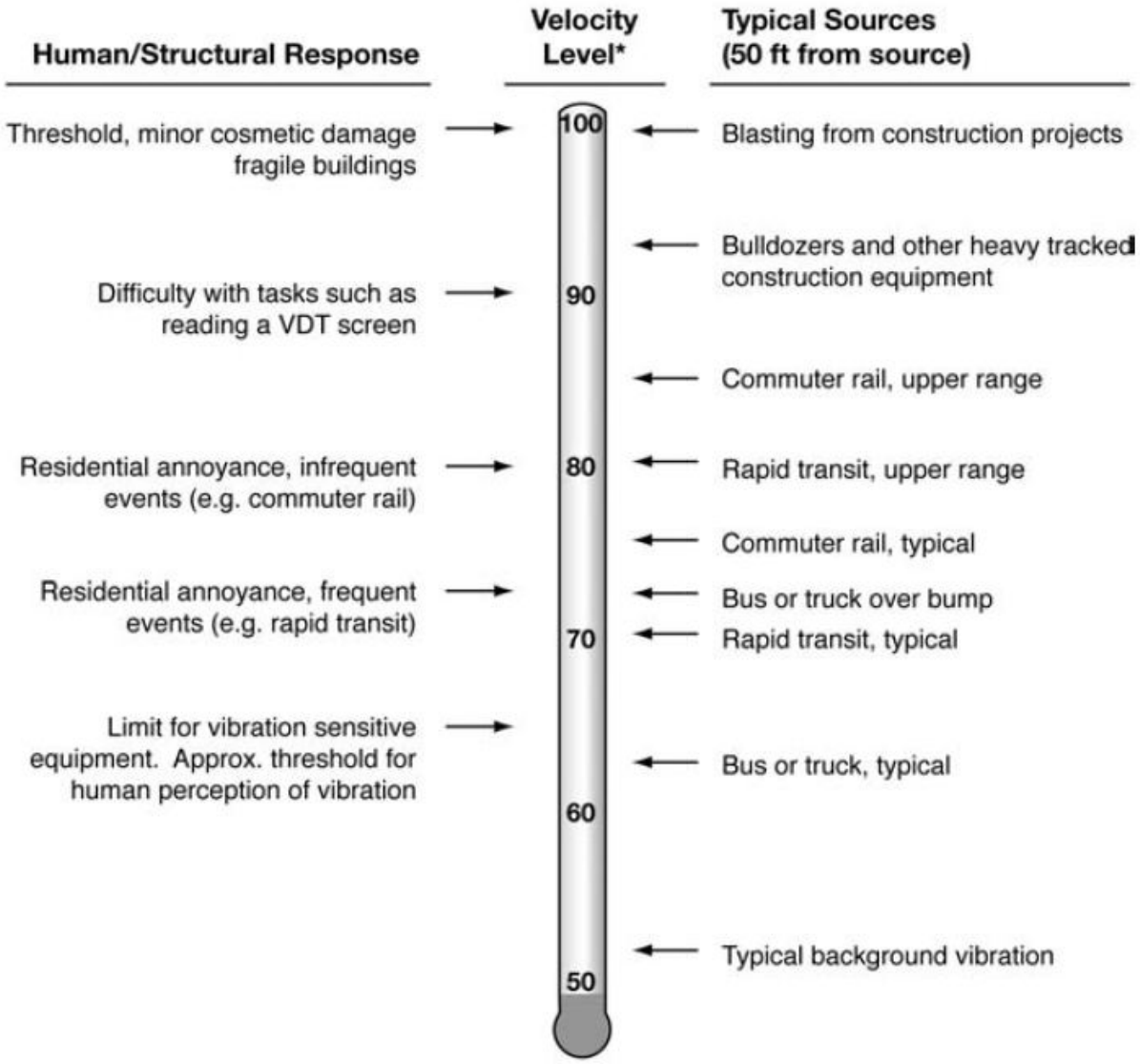
be to the incident vibration energy. However, all structurers reduce vibration levels due to the coupling of the building to the soil.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal (9). The PPV is most frequently used to describe vibration impacts to buildings but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body (9). However, the RMS amplitude and PPV are related mathematically, and the RMS amplitude of equipment is typically calculated from the PPV reference level. The RMS amplitude is approximately 70% of the PPV (10). Thus, thus either can be used on the description of vibration impacts.

While not universally accepted, vibration decibel notation (VdB) is another vibration notation developed and used by the FTA in their guidance manual to describe vibration levels and provide a background of common vibration levels and set vibration limits (8). Decibel notation (VdB) serves to reduce the range of numbers used to describe vibration levels and is used in this report to describe vibration levels.

As stated in the FTA guidance manual, the background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels (9). Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings. Exhibit 2-B illustrates common vibration sources and the human and structural response to ground-borne vibration.

EXHIBIT 2-B: TYPICAL LEVELS OF GROUND-BORNE VIBRATION



** RMS Vibration Velocity Level in VdB relative to 10^{-6} inches/second*

Source: Federal Transit Administration (FTA) Transit Noise Impact and Vibration Assessment.

3 REGULATORY SETTING

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element, which is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research. (11) The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

3.2 STATE OF CALIFORNIA BUILDING CODE

The State of California's noise insulation standards for dwelling and sleeping units are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Chapter 12, Section 1206 Sound Control. These noise standards are applied to new construction in California for controlling interior noise levels resulting from exterior noise sources within habitable rooms of dwelling and sleeping units. For new construction, the acceptable interior noise limit is 45 dBA CNEL in habitable rooms (12).

3.3 CITY OF VALLEJO GENERAL PLAN NOISE STANDARDS

The City of Vallejo has adopted a noise standards specifying land use compatibility standards in the Nature & Built Environment Chapter of the General Plan to limit exposure to noise and to minimize adverse effects on sensitive receptors like homes and schools. (13) The General Plan specifies the exterior noise levels, described in L_{dn}, allowable for new developments impacted by transportation noise sources such as arterial roads, freeways, airports and railroads. (13) To ensure compatible noise levels at noise sensitive receivers the City of Vallejo General Plan contains the following policies and actions related to the Project:

POLICY NBE-5.13 Noise Control. Ensure that noise does not affect quality of life in the community.

Action NBE-5.13C Update City regulations to restrict the allowable hours to between 7 AM and 7 PM on weekdays for construction, demolition, maintenance, and loading/unloading activities that may impact noise-sensitive land uses.

POLICY NBE-5.14 *Vibration Control. Ensure that vibration does not affect quality of life in the community.*

Action NBE-5.14A *Update City regulations to establish quantified vibration level limits similar to commonly used guidelines found in the Federal Transit Administration document "Transit Noise and Vibration Impact Assessment" (2006)*

POLICY NBE-5.15 *Noise Compatibility Standards. Apply the General Plan noise and land use compatibility standards to all new residential, commercial, and mixed-use development and redevelopment*

Action NBE-5.15A *For new single-family residential projects, use a standard of 60 L_{dn} for exterior noise in private use areas, and require appropriate impact mitigation.*

Action NBE-5.15D *Require maximum interior noise levels at 45 L_{dn} in all new residential units, and require appropriate impact mitigation*

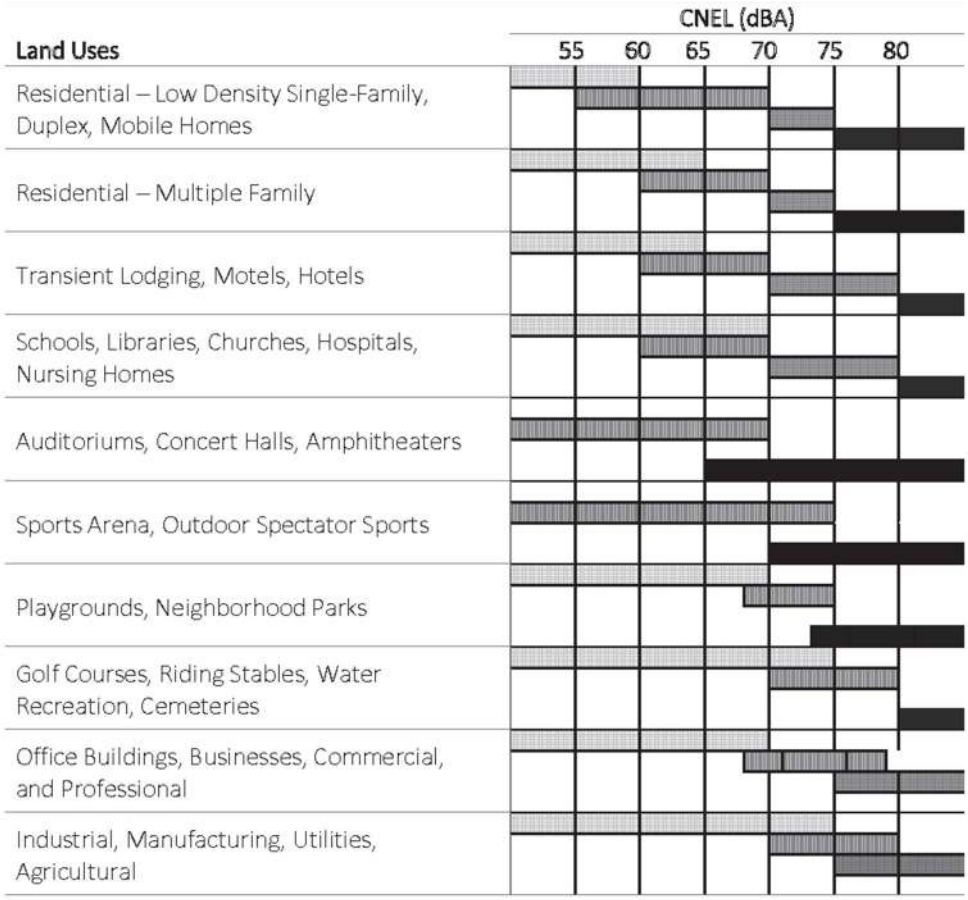
Action NBE-5.15E *When approving new development, limit project-related noise increases to the following for permanent stationary and transportation-related noise sources:*

- *no more than 10 dB in non-residential areas;*
- *no more than 5 dB in residential areas where the with-project noise level is less than the maximum "normally acceptable" level in the Noise and Land Use Compatibility figure; and*
- *no more than 3 dB where the with-project noise level exceeds the "normally acceptable" level in Noise and Land Use Compatibility figure.*

Action NBE-5.15F *Require acoustical studies with appropriate mitigation measures for projects that are likely to be exposed to noise levels that exceed the 'normally acceptable' standard and for any other projects that are likely to generate noise in excess of these standards.*

The noise policies consider land use compatibility and identify exterior noise level compatibility standards for transportation related noise. Table NBE-1 of the City of Vallejo General Plan, *California Land Use Compatibility for Community Noise Environments* matrix shown on Exhibit 3-A, provides the City of Vallejo with a planning tool to gauge the compatibility of new sensitive land uses relative to existing and future exterior noise levels. To limit exposure to noise and to minimize adverse effects on sensitive receptors (Policy NBE.515), Table NBE-1 identifies a 60 dBA CNEL as a *normally acceptable* and 70 dBA CNEL as *conditionally acceptable* noise levels for single-family residential land uses impacted by transportation noise sources. According to Table NBE-1, noise levels in excess of *normally acceptable* levels require that *a detailed analysis of the noise reduction requirements must be made and needed noise-insulation features must be included in the design.*

EXHIBIT 3-A: LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENTS



Source: Governor's Office of Planning and Research, General Plan Guidelines, November 2003.

3.4 OPERATIONAL NOISE STANDARDS

To analyze noise impacts originating from the operation of the Project, noise from operational activities are typically limited to the hours of operation established under the Municipal Code. The Municipal Code noise standards for operational sources are described below for the City of

Vallejo to determine the potential noise impacts at the nearby sensitive receiver locations. The operational-related noise standards are summarized in Exhibit 3-B and Exhibit 3-C shows the maximum noise level adjustments by time and type.

The City of Vallejo has established maximum exterior and interior noise levels for Project operational noise sources. Section 16.502.09(C)(2) of the Municipal Code identifies limits on noise levels from operational activities as shown on Exhibits 3-C. The nearest noise-sensitive receivers to the Project site consist of existing single-family residential homes. For single-family residential development, operational exterior noise levels may not exceed 60 dBA during the daytime hours (7:00 a.m. to 10:00 p.m.). (14) The standard limits in Exhibit-B shall be adjusted by 5 decibels for any noise that contains a steady, pure tone such as a whine, screech or hum, or an impulsive sound such as hammering or riveting, or contains music or speech. The City of Vallejo Municipal Code is included in Appendix 3.1.

EXHIBIT 3-B: CITY OF VALLEJO EXTERIOR AND INTERIOR NOISE LIMITS

TABLE 16.502-C: MAXIMUM NOISE LEVEL BY NOISE ZONE			
Noise Zoning districts	Maximum Noise Level in dBA (level not to be exceeded more than 30 minutes in any hour)		Maximum Noise Level in dBA (level not to be exceeded more than 5 minutes in any hour)
	Measured at Property Line or District Boundary	Measured at Any Boundary of a Residential Zone	Between 10 PM and 7AM, Measured at Any Boundary of a Residential Zone
Single-Unit Residential	60	60	-
Multiple-Unit Residential	65	65	-
Commercial and Mixed-Use, Medical, Office	70	60	50 or ambient noise level
Light Industrial	75	65	50 or ambient noise level
General Industrial	75	65	50 or ambient noise level
Public Facilities and Community Use	65	60	50 or ambient noise level
Open Space and Recreational Districts	65	60	50 or ambient noise level

EXHIBIT 3-C: CITY OF VALLEJO MAXIMUM NOISE LEVEL ADJUSTMENT

TABLE 16.502-D : MAXIMUM NOISE LEVEL ADJUSTMENT BY TIME AND TYPE	
TIME AND TYPE OF NOISE	ADJUSTMENT (DECIBELS)
Any type other than construction and related activities between 7 am and 10 pm	+5
Noise of unusual impulsive character (e.g., hammering or drilling)	-5
Noise of unusual periodic character (e.g., hammering or screeching)	-5

3.5 CONSTRUCTION NOISE STANDARDS

To analyze noise impacts originating from the construction of the Project, noise from construction activities are typically limited to the hours of operation established under the Municipal Code. The Municipal Code noise standards for construction are described below for

the City of Vallejo to determine the potential noise impacts at the nearby sensitive receiver locations. The construction-related noise standards are summarized in Exhibit 3-D.

The City of Vallejo has established maximum noise levels for mobile and stationary construction equipment. Table 16.502-E of Section 16.502, Performance Standards, of the Municipal Code identifies limits on noise levels from construction activities as shown on Exhibits 3-C for mobile and stationary equipment. The nearest noise-sensitive receivers to the Project site consist of existing single-family residential homes. For single-family residential development, mobile equipment noise levels may not exceed 80 dBA and stationary equipment noise levels may not exceed 65 dBA during the daytime hours. (14) In addition, the Municipal Code identifies hours during which mobile and stationary equipment may operate, between 7:00 a.m. to 6:00 p.m. weekdays, between 9:00 a.m. to 6:00 p.m. Saturdays, and no activity allowed on Sundays or holidays (City of Vallejo Municipal Code, Section 16.502.099(D)(1). The City of Vallejo Municipal Code is included in Appendix 3.1.

EXHIBIT 3-D: CITY OF VALLEJO CONSTRUCTION NOISE STANDARDS

TABLE 16.502-E: MAXIMUM NOISE LEVEL FOR TEMPORARY CONSTRUCTION ACTIVITY			
Time	**RR, RLD**	**RMD, RHD, NMX, NC**	**Commercial (Including medical and office) and Industrial**
Mobile construction equipment—non-scheduled, intermittent, and short-term for less than 15 days			
Weekdays 7am to 6pm	75 dBA	80 dBA	85 dBA
Saturdays 9am to 6pm	60 dBA	65 dBA	70 dBA
Sundays and legal holidays	None	None	None
Stationary construction equipment			
Weekdays 7am to 6pm	60 dBA	65 dBA	70 dBA
Saturdays 9am to 6pm	60 dBA	65 dBA	70 dBA
Sundays and legal holidays	None	None	None

3.6 CONSTRUCTION VIBRATION STANDARDS

Construction activity can result in varying degrees of ground-borne vibration, depending on the equipment and methods used, distance to the affected structures and soil type. Construction

vibration is generally associated with pile driving and rock blasting. Other construction equipment, such as air compressors, light trucks, hydraulic loaders, etc., generates little or no ground vibration. (9)

To analyze vibration impacts originating from the operation and construction of the Vista Cove, vibration-generating activities are appropriately evaluated against standards established under a City's Municipal Code, if such standards exist. However, City of Vallejo General Plan noise policy NBE-5.14 and Section 16.502.08, Vibration, of the Municipal Code do not identify specific vibration level limits. Therefore, for analysis purposes, the Caltrans *Transportation and Construction Vibration Guidance Manual*, (10 p. 38) Tables 19 and 20 are used in this noise study to assess potential temporary construction-related impacts at adjacent building locations. The construction vibration damage potential criteria include consideration of the building conditions. (5 p. 182) The existing buildings adjacent to the Project site can best be described as "older residential structures" with a maximum acceptable continuous vibration threshold of 0.3 PPV (in/sec). The construction vibration annoyance potential criteria include consideration of the perception of vibration, which indicates a maximum acceptable continuous vibration threshold of 0.1 PPV (in/sec) would be considered strongly perceptible. While vibration impacts are only assessed within structures and temporary annoyance is not generally considered a substantial effect on the environment, for purposes of this analysis, the more conservative 0.1 PPV (in/sec) threshold is used to evaluate potential construction vibration impacts at nearby receivers.

4 SIGNIFICANCE CRITERIA

The following significance criteria are based on currently adopted guidance provided by Appendix G of the California Environmental Quality Act (CEQA) Guidelines. (15) For the purposes of this report, impacts would be potentially significant if the Project results in or causes:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

B. Generation of excessive ground-borne vibration or ground-borne noise levels?

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

While the City of Vallejo General Plan Guidelines provide direction on noise compatibility and establish noise standards by land use type that are sufficient to assess the significance of noise impacts, they do not define the levels at which increases are considered substantial for use under Guideline A. CEQA Appendix G Guideline C applies to nearby public and private airports, if any, and the Project's land use compatibility. Table 4-1 shows the significance criteria summary matrix.

4.1 CEQA GUIDELINES NOT FURTHER ANALYZED

The Project site is not located within two miles of an airport or airstrip. The closest major airport is the Buchanan Field Airport and Napa County Airport are located roughly 9.6 miles southeast and northwest, respectively, of the Project site. As such, the Project site would be located outside the 55 dBA CNEL airport noise contour for both airports, and therefore, impacts are considered *less than significant,* and no further noise analysis is conducted in relation to Appendix G to the CEQA Guidelines, Noise Threshold C.

4.2 NOISE-SENSITIVE RECEIVERS

Noise level increases resulting from the Project are evaluated based on the Appendix G CEQA Guidelines described above at the closest sensitive receiver locations. Under CEQA, consideration must be given to the magnitude of the increase, the existing ambient noise levels, and the location of noise-sensitive receivers to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes *that there is no single noise increase that renders the noise impact significant.* (16)

Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding human reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted—the so-called *ambient* environment. In general, the more a new noise exceeds the previously existing

ambient noise level, the less acceptable the new noise will typically be judged. The Federal Interagency Committee on Noise (FICON) (17) developed guidance to be used for the assessment of project-generated increases in noise levels that consider the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (CNEL) and equivalent continuous noise level (L_{eq}).

As previously stated, the approach used in this noise study recognizes *that there is no single noise increase that renders the noise impact significant*, based on a 2008 California Court of Appeal ruling on Gray v. County of Madera. (16) For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur if the noise criteria may be exceeded. Therefore, for this analysis, FICON identifies a *readily perceptible* 5 dBA or greater project-related noise level increase is considered a significant impact when the noise criteria for a given land use is exceeded. Per the FICON, in areas where the without project noise levels range from 60 to 65 dBA, a 3 dBA *barely perceptible* noise level increase appears to be appropriate for most people. When the without project noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if the noise criteria for a given land use is exceeded, since it likely contributes to an existing noise exposure exceedance.

The FICON guidance provides an established source of criteria to assess the impacts of substantial temporary or permanent increase in ambient noise levels. Based on the FICON criteria, the amount to which a given noise level increase is considered acceptable is reduced when the without Project noise levels are already shown to exceed certain land-use specific exterior noise level criteria. The specific levels are based on typical responses to noise level increases of 5 dBA or *readily perceptible*, 3 dBA or *barely perceptible*, and 1.5 dBA depending on the underlying without Project noise levels for noise-sensitive uses. These levels of increases and their perceived acceptance are consistent with guidance provided by both the Federal Highway Administration (18 p. 9) and Caltrans (19 p. 2_48).

4.3 SIGNIFICANCE CRITERIA SUMMARY

Noise impacts shall be considered significant if any of the following occur as a direct result of the proposed Project. Table 4-1 shows the significance criteria summary matrix.

TABLE 4-1: SIGNIFICANCE CRITERIA SUMMARY

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site	Noise-Sensitive[1]	Residential areas where with project is less than maximum "normally acceptable" level in Exhibit 3-A[2]	≥ 5 dBA CNEL Project increase	
		Project exceeds "normally acceptable" level in Exhibit 3-A[2]	≥ 3 dBA CNEL Project increase	
	Non-Noise Sensitive[1,3]	Ambient[2]	≥ 10 dBA CNEL Project increase	
On-Site[3]	Noise Sensitive	Exterior Noise Level Standard	60 dBA L_{dn}	
		Interior Noise Level Standard	45 dBA L_{dn}	
Operational	Noise-Sensitive	Residential areas where with project is less than maximum "normally acceptable" level in Exhibit 3-A[2]	≥ 5 dBA CNEL Project increase	
		Project exceeds "normally acceptable" level in Exhibit 3-A[2]	≥ 3 dBA CNEL Project increase	
		Residential[4]	60 dBA L_{eq}	
Construction		Noise Level Threshold[5]	80 dBA L_{eq}	n/a
		Vibration Level Threshold[6]	0.30 PPV (in/sec)	

[1] FICON, 1992.
[2] City of Vallejo General Plan Action NBE-5.15E.
[3] City of Vallejo General Plan Nature & Built Environment Element.
[4] City of Vallejo Municipal Code, Section 16.502.09(C)(2) (Appendix 3.1).
[5] City of Vallejo Municipal Code, Section 16.502.09(D)(1) (Appendix 3.1).
[6] Caltrans Transportation and Construction Vibration Manual, April 2020 Table 19.
"Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.

This page intentionally left blank.

5 EXISTING ON-SITE NOISE LEVELS

To assess the existing noise level environment, noise levels are referenced from the *Propel Vallejo General Plan 2040 and Sonoma Boulevard Specific Plan Draft EIR*. (20) Based on Figure 4.10-1, the Project lies within the 70 dBA CNEL traffic noise contour of I-780. In addition, Table 4.10-13 shows that the freeway segment from Columbus Parkway to Glen Cove Parkway exposes adjacent land uses to 77.7 dBA CNEL at 100 feet from the centerline. However, these noise levels are likely over-exaggerated since they are intended to be used for planning and generally do not consider the actual topography. The background ambient noise levels in the Project study area are considered to be dominated by the transportation-related noise associated with I-780.

Wklv#sdjh#lqwhqwlrqdoo|#bniw#eodqn1# #

6 TRAFFIC NOISE METHODS AND PROCEDURES

The following section outlines the methods and procedures used to model and analyze the future traffic noise environment.

6.1 FHWA TRAFFIC NOISE PREDICTION MODEL

The estimated roadway noise impacts from vehicular traffic were calculated using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model- FHWA-RD-77-108. (21) The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. (22) Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site condition" ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period.

6.2 ON-SITE TRAFFIC NOISE PREDICTION MODEL INPUTS

The on-site roadway parameters, including the ADT volumes used for this analysis, are presented in Table 6-1. Based on the City of Vallejo General Plan Circulation Element Map MTC-3, I-780 is classified as a four (4) lane divided Freeway. (23) Future average daily traffic volumes, shown on Table 6-1, were obtained from the City of Vallejo General Plan Update and Sonoma Boulevard Specific Plan EIR (24), and reflect future long-range traffic conditions needed to assess the on-site traffic noise environment and to identify the appropriate noise mitigation measures that address the worst-case future noise conditions.

Table 6-2 presents the time-of-day vehicle splits by vehicle type and roadway classification, and Table 6-3 presents the total traffic flow distributions (vehicle mixes) used for this analysis (25). The vehicle mix provides the hourly distribution percentages of automobiles, medium trucks, and heavy trucks for input into the FHWA Model based on roadway types. The vehicle splits shown in Table 6-2 are reported as a percentage of the overall percentage.

For the purposes of this analysis, soft site conditions were used to analyze the on-site traffic noise impacts for the Project study area. Soft site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. A conservative -3dBA offset was applied to future 1-780 traffic noise levels to account for shielding of the western and northern portion of the Project site that would be provided by existing knoll, reducing full exposure to 1-780 traffic noise levels. Research by Caltrans has shown that the use of soft site conditions and applying a shielding offset to account for intervening topographic features is appropriate for the application of the FHWA traffic noise prediction model used in this analysis. (26)

TABLE 6-1: ON-SITE ROADWAY PARAMETERS

Roadway Segment	Lanes	Classification[1]	Future ADT Volume[2]	Speed (mph)[3]	Site Condition
I-780	4	Freeway	80,200	65	15

[1] City of Vallejo General Plan Mobility, Transportation, and Connectivity Element.
[2] Based on Table 4.14-5 of Propel Vallejo General Plan Update and Sonoma Boulevard Specific Plan Draft EIR, 4.14 Transportation and Traffic.
[3] Posted speed limit.

TABLE 6-2: TIME OF DAY VEHICLE SPLITS

Time Period	Vehicle Type		
	Autos	Medium Trucks	Heavy Trucks
Daytime (7am-7pm)	77.5%	84.8%	86.5%
Evening (7pm-10pm)	12.9%	4.9%	2.7%
Nighttime (10pm-7am)	9.6%	10.3%	10.8%
Total:	100.0%	100.0%	100.0%

Source: Fairview at Northgate Project Draft Environmental Impact Report, SCH 2018102007, Appendix I, January 2020.

TABLE 6-3: DISTRIBUTION OF TRAFFIC FLOW BY VEHICLE TYPE (VEHICLE MIX)

Roadway Classification	Total % Traffic Flow[1]			Total
	Autos	Medium Trucks	Heavy Trucks	
I-780	95.62%	2.13%	2.25%	100.00%

[1] Source: Typical Interstate 780 (I-780) vehicle mix.

To predict the future noise environment at each building within the Project site, coordinate information was collected to identify the noise transmission path between the noise source and receiver. The coordinate information is based on the Project site plan showing the location of each building, as shown in Exhibit 1-B. The site plan is used to identify the relationship between the roadway centerline elevation, the pad elevation and the centerline distance to any intervening noise barriers or topography, and the building façade. The exterior noise level impacts were placed five feet above the finished floor elevation at the outdoor living areas and proposed building façades. Second-floor receivers were located 14 feet above the finished floor elevation. Appendix 4-1 shows the scaled site plan.

7 ON-SITE TRANSPORTATION NOISE IMPACTS

An on-site exterior noise impact analysis has been completed to determine the noise exposure levels that would result from adjacent traffic noise sources in the Project study area, and to identify potential noise control measures that would achieve acceptable Project exterior and interior noise levels. The primary source of traffic noise affecting the Project site is anticipated to be from I-780. The Project will experience some background traffic noise from the Project's internal local streets, however, due to low traffic volume/speed, traffic noise from these roads will not make a significant contribution to the noise environment. Modeled receiver locations are shown in Exhibit 7-A.

7.1 EXTERIOR NOISE ANALYSIS

Using the FHWA traffic noise prediction model and the parameters outlined in Tables 6-1 to 6-3, the expected future exterior noise levels were calculated at the private outdoor living spaces (backyards) and at the residential building façades. Table 7-1 presents a summary of future exterior noise levels at the private outdoor living spaces (backyards) and at the residential building façades. The on-site transportation analysis indicates that the unmitigated exterior noise levels for on-site receivers are estimated to range from 46.5 to 68.8 dBA CNEL. The Exterior traffic noise analysis calculations are provided in Appendix 7.1.

To satisfy the City of Vallejo exterior noise level standard of 60 dBA L_{dn} for single-family residential land uses, the construction of a noise barrier is recommended for the outdoor living area (backyards) of Lots 3, 7 through 9, 16, and 17 through 20, adjacent to I-780. Specifically, a minimum 4-foot-high noise barrier is recommended for Lot 9, 5-foot minimum height barriers for Lots 8, 16, and 18 through 20, and 6-foot minimum height barriers for Lots 3, 7, and 9. With the recommended noise barriers shown in Exhibit ES-A, the future exterior noise levels will range from 46.5 to 60.0 dBA CNEL. This noise analysis shows that the recommended noise barrier will satisfy the City of Vallejo exterior noise level standards for residential land uses adjacent to I-780. The effective noise barrier height recommendations represent the minimum wall and/or berm combination height required to satisfy the City of Vallejo exterior noise level standards. As such, the future on-site traffic noise impacts at the private outdoor living spaces (backyards) are considered *less than significant* impacts.

EXHIBIT 7-A: ON-SITE RECEIVER LOCATIONS

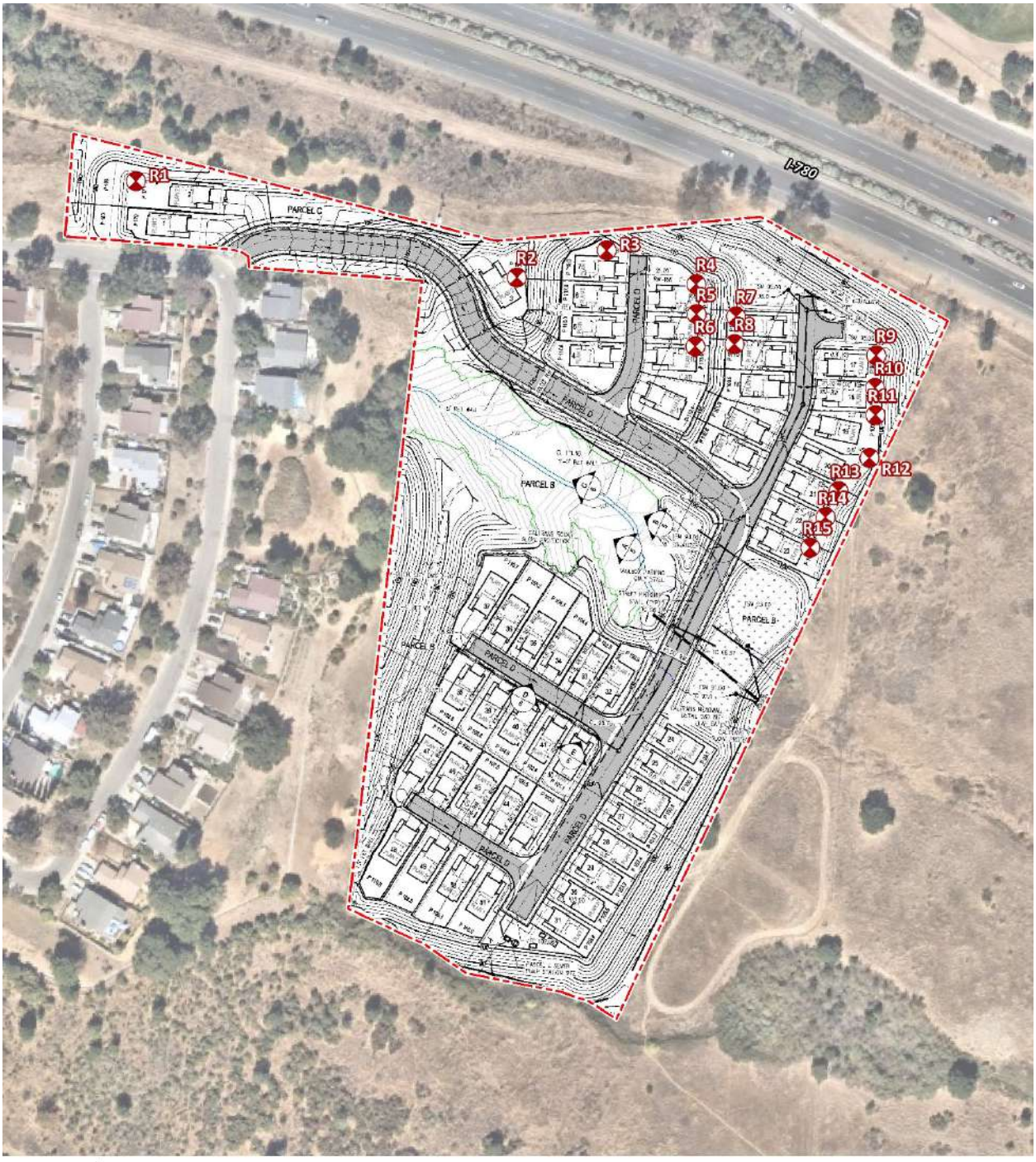


TABLE 7-1: EXTERIOR TRAFFIC NOISE LEVELS (DBA CNEL)

Receiver Number[1]	Lot Number	Source	Unmitigated Noise Level (dBA CNEL)	Mitigated Noise Level (dBA CNEL)	Barrier Height (Feet)	Does the Project exceed the exterior limit?
R01	2	I-780	46.5	46.1	0.0	No
R02	3	I-780	**61.2**	59.7	6.0	No
R03	7	I-780	**66.4**	59.9	6.0	No
R04	8	I-780	**68.3**	58.9	5.0	No
R05	9	I-780	**62.3**	55.7	4.0	No
R06	10	I-780	59.1	54.1	0.0	No
R07	16	I-780	**60.9**	56.0	5.0	No
R08	15	I-780	57.1	54.0	0.0	No
R09	17	I-780	**68.8**	57.6	6.0	No
R10	18	I-780	**66.1**	57.3	5.0	No
R11	19	I-780	**64.6**	57.2	5.0	No
R12	20	I-780	**62.1**	60.0	5.0	No
R13	21	I-780	57.3	58.6	0.0	No
R14	22	I-780	53.0	54.8	0.0	No
R15	23	I-780	49.5	48.9	0.0	No

Bold numbers indicate an exceedance of the standard.
[1] See Exhibit 5-A for the analysis locations.
[2] Exterior noise calculations are included in Appendix 7.1.

7.2 INTERIOR NOISE ANALYSIS

To ensure that the interior noise levels comply with the City of Vallejo interior noise level standard of 45 dBA CNEL, future noise levels were calculated at the estimated building façade locations. It should be noted that Project architectural plans are unavailable and the Project should provide a final interior noise analysis as part of the plan check process.

7.2.1 NOISE REDUCTION METHODOLOGY

The interior noise level is the difference between the predicted exterior noise level at the building facade and the noise reduction of the structure. Typical building construction will provide a Noise Reduction (NR) of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." (3) However, sound leaks, cracks and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve interior noise reduction, including: (1) weather-stripped solid core exterior doors; (2) upgraded dual glazed windows; (3) mechanical ventilation/air conditioning; and (4) exterior wall/roof assembles free of cut outs or openings.

7.2.2 INTERIOR NOISE LEVEL ASSESSMENT

Tables 7-2 to 7-3 show that the buildings adjacent to I-780 will experience future unmitigated noise levels ranging from 46.1 to 60.0 dBA CNEL at first-floor building façades and 51.3 to 69.9 dBA CNEL at second-floor building façades.

The interior noise level analysis shows that the City of Vallejo 45 dBA CNEL interior noise standard can be satisfied at most locations with no requirements, with a windows closed condition and a means of mechanical ventilation (e.g., air conditioning). Therefore, standard construction without upgraded windows or doors will comply with the City of Vallejo interior noise level standard of 45 dBA CNEL.

TABLE 7-2: FIRST-FLOOR INTERIOR TRAFFIC NOISE IMPACTS (CNEL)

Receiver Number	Noise Level at Façade[1]	Required Interior NR[2]	Estimated Interior NR[3]	Upgraded Windows[4]	Interior Noise Level[5]	Threshold	Threshold Exceeded?
R01	46.1	1.1	25.0	No	21.1	45.0	No
R02	59.7	14.7	25.0	No	34.7	45.0	No
R03	59.9	14.9	25.0	No	34.9	45.0	No
R04	58.9	13.9	25.0	No	33.9	45.0	No
R05	55.7	10.7	25.0	No	30.7	45.0	No
R06	54.1	9.1	25.0	No	29.1	45.0	No
R07	56.0	11.0	25.0	No	31.0	45.0	No
R08	54.0	9.0	25.0	No	29.0	45.0	No
R09	57.6	12.6	25.0	No	32.6	45.0	No
R10	57.3	12.3	25.0	No	32.3	45.0	No
R11	57.2	12.2	25.0	No	32.2	45.0	No
R12	60.0	15.0	25.0	No	35.0	45.0	No
R13	58.6	13.6	25.0	No	33.6	45.0	No
R14	54.8	9.8	25.0	No	29.8	45.0	No
R15	48.9	3.9	25.0	No	23.9	45.0	No

[1] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).
[2] Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.
[3] Estimated minimum interior noise reduction.
[4] Does the required interior noise reduction trigger upgraded with a minimum STC rating of greater than 27?
[5] Estimated interior noise level with minimum STC rating for all windows.
"NR" = Noise reduction

TABLE 7-3: SECOND-FLOOR INTERIOR TRAFFIC NOISE IMPACTS (CNEL)

Receiver Number	Noise Level at Façade[1]	Required Interior NR[2]	Estimated Interior NR[3]	Upgraded Windows[4]	Interior Noise Level[5]	Threshold	Threshold Exceeded?
R01	51.3	6.3	25.0	No	26.3	45.0	No
R02	64.1	19.1	25.0	No	39.1	45.0	No
R03	68.7	23.7	25.0	No	43.7	45.0	No
R04	69.5	24.5	25.0	No	44.5	45.0	No
R05	66.8	21.8	25.0	No	41.8	45.0	No
R06	63.3	18.3	25.0	No	38.3	45.0	No
R07	66.4	21.4	25.0	No	41.4	45.0	No
R08	62.0	17.0	25.0	No	37.0	45.0	No
R09	69.9	24.9	25.0	No	44.9	45.0	No
R10	68.2	23.2	25.0	No	43.2	45.0	No
R11	66.6	21.6	25.0	No	41.6	45.0	No
R12	64.3	19.3	25.0	No	39.3	45.0	No
R13	60.2	15.2	25.0	No	35.2	45.0	No
R14	58.1	13.1	25.0	No	33.1	45.0	No
R15	55.7	10.7	25.0	No	30.7	45.0	No

[1] Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).
[2] Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.
[3] Estimated minimum interior noise reduction.
[4] Does the required interior noise reduction trigger upgraded with a minimum STC rating of greater than 27?
[5] Estimated interior noise level with minimum STC rating for all windows.
"NR" = Noise reduction

This page intentionally left blank.

8 OFF-SITE TRANSPORTATION NOISE IMPACTS

The expected Project is anticipated to generate approximately 510 trips per day. The location where the greatest chance of an impact occurs is at the residence near the Project site entrance and at Shady Lane and Wildflower Avenue. Assuming a typical speed of 25 mph, a predominately automobile traffic mix, and without no barriers, the Project is predicted to generate a noise level of 50.2 dBA CNEL at the nearest building façade of 196 Wildflower Avenue. Therefore, the Project would not expose existing noise-sensitive receivers to excessive noise levels, and the off-site traffic noise level impacts due to the Project are considered *less than significant*.

This page intentionally left blank.

9 SENSITIVE RECEIVER LOCATIONS

To assess the potential for long-term operational and short-term construction noise impacts, the following sensitive receiver locations, as shown on Exhibit 9-A, were identified as representative locations for analysis. Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

To describe the potential off-site Project noise levels, six receiver locations in the vicinity of the Project site were identified. All distances are measured from the Project site boundary to the outdoor living areas (e.g., private backyards) or at the building façade, whichever is closer to the Project site. The selection of receiver locations is based on FHWA guidelines and is consistent with additional guidance provided by Caltrans and the FTA, as previously described in Section 5.2. Other sensitive land uses in the Project study area that are located at greater distances than those identified in this noise study will experience lower noise levels than those presented in this report due to the additional attenuation from distance and the shielding of intervening structures. Distance is measured in a straight line from the project boundary to each receiver location.

R1: Location R1 represents existing noise sensitive single-family residence at 190 Buckeye Lane, approximately 90 feet southwest of the Project site. Receiver R1 is placed near the private outdoor living area (backyard) facing the Project site.

R2: Location R2 represents the existing noise sensitive single-family residence at 180 Ironwood Lane, approximately 80feet south of the Project site. Receiver R2 is placed near the private outdoor living area (backyard) facing the Project site.

R3: Location R3 represents the existing noise sensitive single-family residence at 196 Shady Lane, approximately 30 feet south of the Project site. Receiver R3 is placed near the private outdoor living area (backyard) facing the Project site.

R4: Location R4 represents the existing noise sensitive single-family residence at 156 Wildflower Avenue, approximately 114 feet west of the Project site. Receiver R4 is placed near the private outdoor living area (backyard) facing the Project site.

R5: Location R5 represents the existing noise sensitive single-family residence at 124 Shady Lane, approximately 188 feet west of the Project site. Receiver R5 is placed near the private outdoor living area (backyard) facing the Project site.

R6: Location R6 represents the existing noise sensitive Saint Patrick Saint Vincent High School at 1500 Benicia Road and the multi-family uses to the east of the school, approximately 339 feet north of the Project site. Receiver R6 is representative of an outdoor area and the building façade, in terms of distance.

EXHIBIT 8-A: RECEIVER LOCATIONS

10 OPERATIONAL NOISE IMPACTS

This section analyzes the potential stationary-source operational noise impacts at the nearest receiver locations, identified in Section 9, resulting from the operation of the proposed Vista Cove Project. Exhibit 10-A identifies the representative noise source locations used to assess the operational noise levels.

10.1 OPERATIONAL NOISE SOURCES

This operational noise analysis is intended to describe noise level impacts associated with the expected typical of daytime and nighttime activities at the Project site. To present the potential worst-case noise conditions, this analysis assumes the Project would be operational 24 hours per day, seven days per week. The on-site Project-related noise sources are expected to include: air conditioning units.

AIR CONDITIONING UNITS

To assess the noise levels created by the air conditioning units, reference noise levels were taken from equipment specifications for a 3-ton residential packaged air conditioning unit (Carrier Model: R4A4S18AKANA). Each air conditioning unit was modeled as operating 60 minutes per hour during the daytime and nighttime. For this noise analysis, the air conditioning units are expected to be ground-mounted adjacent to the proposed buildings. The air conditioning units are anticipated to be located 3 feet above the ground level. According to the manufacturer's specification sheets, the Carrier R4A4S18AKANA generates a maximum sound power level of 76 dBA L_w for 4 to 5-ton units or approximately 44.4 dBA L_{max} at 50 feet.

10.2 REFERENCE NOISE LEVELS

To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. This section provides a detailed description of the reference noise level measurements shown in Table 10-1 used to estimate the Project operational noise impacts. These sources of noise activity will likely vary throughout the day.

TABLE 10-1: REFERENCE NOISE LEVELS

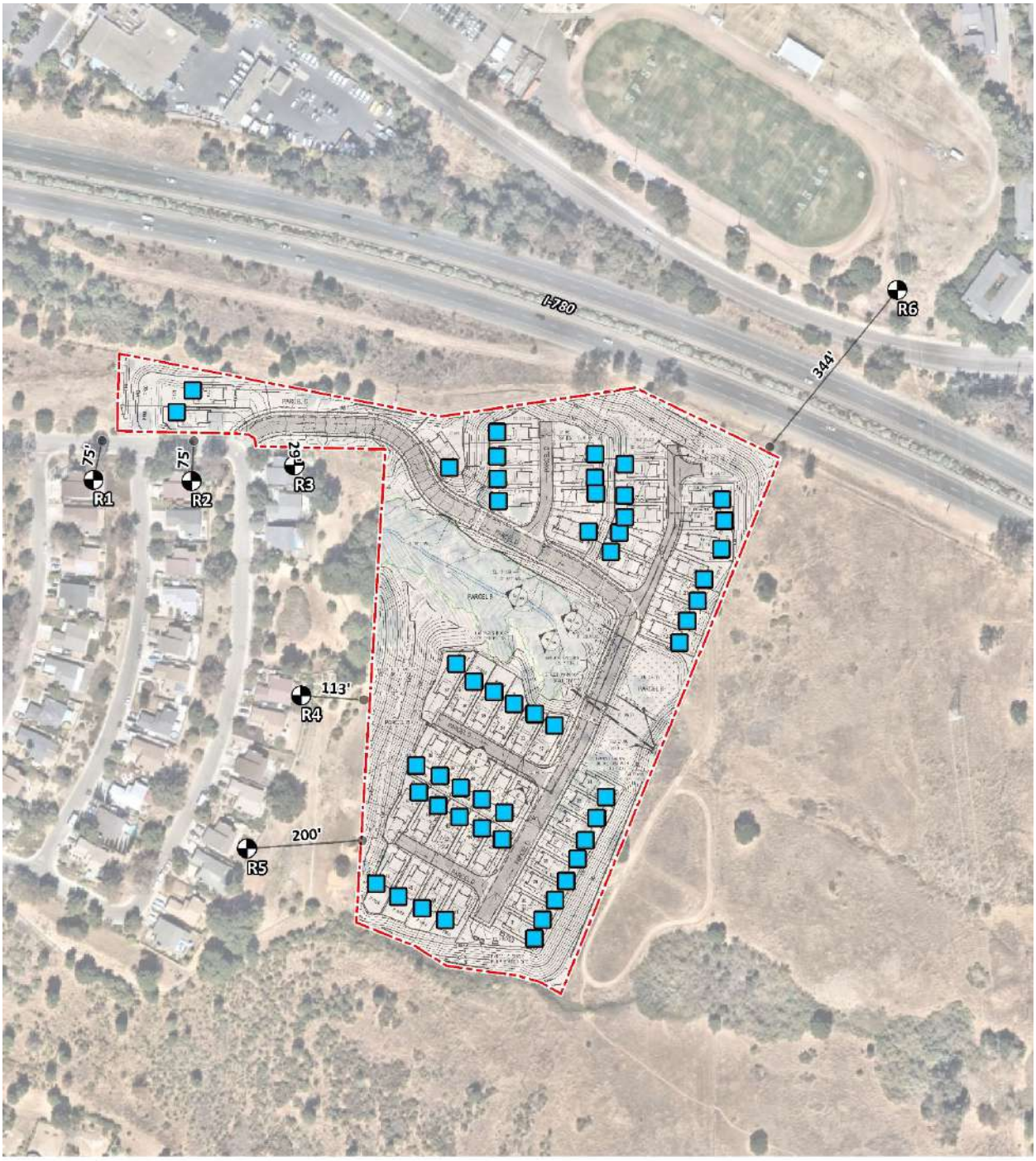
Noise Source	Noise Source Height (Feet)	Min./Hour[2]		Reference Noise Level (dBA L_{eq}) '@ 50 Feet	Sound Power Level (dBA)[3]
		Day	Night		
Air Conditioning Units[1]	3'	60	60	44.4	76.0

[1] Carrier Model R4A4S18AKANA, Appendix 10.1.

[2] Anticipated duration (minutes within the hour) of noise activity during typical hourly conditions expected at the Project site. "Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.

[3] Sound power level represents the total amount of acoustical energy (noise level) produced by a sound source independent of distance or surroundings. Sound power levels calculated using the CadnaA noise model at the reference distance to the noise source.

EXHIBIT 9-A: OPERATIONAL NOISE SOURCE LOCATIONS



10.3 CADNAA NOISE PREDICTION MODEL

To fully describe the exterior operational noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels.

Using the ISO 9613 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise level at each receiver and the partial noise level contributions by noise source. Consistent with the ISO 9613 protocol, the CadnaA noise prediction model relies on the reference sound power level (L_w) to describe individual noise sources. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment.

The operational noise level calculations provided in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the CadnaA noise analysis to account for mixed ground representing a combination of hard and soft surfaces. Appendix 10.1 includes the detailed noise model inputs used to estimate the Project operational noise levels presented in this section.

10.4 PROJECT OPERATIONAL NOISE LEVELS

Using the reference noise levels to represent the proposed Project operations that include air conditioning units, Urban Crossroads, Inc. calculated the operational source noise levels that are expected to be generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. Table 10-2 shows the Project operational noise levels during the daytime hours of 7:00 a.m. to 10:00 p.m. The daytime hourly noise levels at the off-site receiver locations are expected to range from 24.6 to 34.3 dBA L_{eq}.

TABLE 10-2: PROJECT OPERATIONAL NOISE LEVELS

Noise Source[1]	Operational Noise Levels by Receiver Location (dBA Leq)					
	R1	R2	R3	R4	R5	R6
Air Conditioning Units	29.8	32.5	29.7	31.6	33.3	23.7
Total (All Noise Sources)	**29.8**	**32.5**	**29.7**	**31.6**	**33.3**	**23.7**

[1] See Exhibit 10-A for the noise source locations. CadnaA noise model calculations are included in Appendix 10.2.

10.5 PROJECT OPERATIONAL NOISE LEVEL COMPLIANCE

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the City of Vallejo exterior noise level standards at nearby noise-sensitive receiver locations. Table 10-4 shows the operational noise levels associated with Vista Cove Project will satisfy the City of Vallejo daytime 60 dBA L_{eq} and nighttime 50 dBA L_{eq} exterior noise level standards at all nearby noise sensitive receiver locations. Therefore, the operational noise impacts are considered *less than significant* at the nearby noise-sensitive receiver locations.

TABLE 10-4: OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location[1]	Project Operational Noise Levels (dBA Leq)[2]	Noise Level Standards (dBA Leq)[3]		Noise Level Standards Exceeded?[4]	
		Daytime	Nighttime	Daytime	Nighttime
R1	29.8	60	50	No	No
R2	32.5	60	50	No	No
R3	29.7	60	50	No	No
R4	31.6	60	50	No	No
R5	33.3	60	50	No	No
R6	23.7	60	50	No	No

[1] See Exhibit 9-A for the receiver locations.
[2] Proposed Project operational noise levels as shown in Tables 10-2 and 10-3.
[3] Exterior noise level standards for source (residential) land use, as shown in Table 4-1.
[4] Do the estimated Project operational noise source activities exceed the noise level standards? "Daytime" = 7:00 a.m. - 10:00 p.m.; "Nighttime" = 10:00 p.m. - 7:00 a.m.

# #

11 CONSTRUCTION IMPACTS

This section analyzes potential impacts resulting from the short-term construction activities associated with the development of the Project. Exhibit 11-A shows the construction noise source locations in relation to the nearby sensitive receiver locations previously described in Section 9.

11.1 CONSTRUCTION NOISE LEVELS

Noise generated by the Project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high levels. The number and mix of construction equipment is expected to occur in the following stages:

- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

11.2 CONSTRUCTION REFERENCE NOISE LEVELS

To describe peak construction noise activities, this construction noise analysis was prepared using reference noise level measurements published in the *Update of Noise Database for Prediction of Noise on Construction and Open Sites* by the Department for Environment, Food and Rural Affairs (DEFRA). (27). The DEFRA database provides the most recent and comprehensive source of reference construction noise levels. Table 11-1 provides a summary of the DEFRA construction reference noise level measurements expressed in hourly average dBA L_{eq} using the estimated FHWA Roadway Construction Noise Model (RCNM) usage factors (28) to describe the typical construction activities for each stage of Project construction.

EXHIBIT 11-A: CONSTRUCTION ACTIVITY

TABLE 11-1: TYPICAL CONSTRUCTION REFERENCE NOISE LEVELS

Construction Stage	Reference Construction Equipmnet[1]	Reference Noise Level @ 50 Feet (dBA L_{eq})	Composite Reference Noise Level (dBA L_{eq})	Reference Power Level (dBA L_w)
Site Preparation	Dozer	78.0	83.4	115.1
	Front End Loader	75.0		
	Grader	81.0		
Grading	Excavator	77.0	84.0	115.6
	Tractor	80.0		
	Scraper	80.0		
Building Construction	Crane	73.0	77.4	109.1
	Backhoe	74.0		
	Generator (<25kVA)	70.0		
Paving	Paver	74.0	77.8	109.5
	Dump Truck	72.0		
	Roller	73.0		
Architectural Coating	Man Lift	68.0	76.2	107.8
	Compressor (air)	74.0		
	Generator (<25kVA)	70.0		

[1] FHWA Road Construction Noise Model.

11.3 CADNAA NOISE PREDICTION MODEL

To fully describe the construction noise levels from the Project, Urban Crossroads, Inc. developed a noise prediction model using the CadnaA (Computer Aided Noise Abatement) computer program. CadnaA can analyze multiple types of noise sources using the spatially accurate Project site plan, georeferenced Nearmap aerial imagery, topography, buildings, and barriers in its calculations to predict outdoor noise levels.

Using the ISO 9613 protocol, CadnaA will calculate the distance from each noise source to the noise receiver locations, using the ground absorption, distance, and barrier/building attenuation inputs to provide a summary of noise level at each receiver and the partial noise level contributions by noise source. Consistent with the ISO 9613 protocol, the CadnaA noise prediction model relies on the reference sound power level (L_w) to describe individual noise sources. While sound pressure levels (e.g., L_{eq}) quantify in decibels the intensity of given sound sources at a reference distance, sound power levels (L_w) are connected to the sound source and are independent of distance. Sound pressure levels vary substantially with distance from the source and diminish because of intervening obstacles and barriers, air absorption, wind, and other factors. Sound power is the acoustical energy emitted by the sound source and is an absolute value that is not affected by the environment.

The construction noise level calculations provided in this noise study account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source

(i.e., a point source) propagates uniformly outward in a spherical pattern. A default ground attenuation factor of 0.5 was used in the noise analysis to account for mixed ground representing a combination of hard and soft surfaces.

11.4 TYPICAL CONSTRUCTION NOISE ANALYSIS

Using the reference construction equipment noise levels and the CadnaA noise prediction model, calculations of the Project construction noise level impacts at the nearest sensitive receiver locations were completed. To assess the worst-case construction noise levels, the Project construction noise analysis relies on the highest noise level impacts when the equipment with the highest reference noise level is operating at the closest point from the edge of primary construction activity (Project site boundary) to each receiver location. As shown on Table 11-2, the construction noise levels are expected to range from 45.5 to 65.0 dBA L_{eq}, and the highest construction levels are expected to range from 53.3 to 65.0 dBA L_{eq} at the nearest receiver locations. Appendix 11.1 includes the detailed CadnaA construction noise model inputs.

TABLE 11-2: TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVEL SUMMARY

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})					
	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	Highest Levels[2]
R1	58.8	59.3	52.7	53.2	51.5	59.3
R2	61.3	61.8	55.2	55.7	54.0	61.8
R3	64.5	65.0	58.4	58.9	57.2	65.0
R4	59.6	60.1	53.5	54.0	52.3	60.1
R5	58.9	59.4	52.8	53.3	51.6	59.4
R6	52.8	53.3	46.7	47.2	45.5	53.3

[1] Noise receiver locations are shown in Exhibit 11-A.
[2] Construction noise level calculations based on distance from the construction activity, which is measured from the Project site boundary to the nearest receiver locations. CadnaA construction noise model inputs are included in Appendix 11.1.

11.5 TYPICAL CONSTRUCTION NOISE LEVEL COMPLIANCE

To evaluate whether the Project will generate potentially significant short-term noise levels at nearest receiver locations, a construction-related daytime noise level threshold of 80 dBA L_{eq} is used as a reasonable threshold to assess the daytime construction noise level impacts. The construction noise analysis shows that the nearest receiver locations will satisfy the reasonable daytime 80 dBA L_{eq} significance threshold during Project construction activities as shown on Table 11-3. Therefore, the noise impacts due to Project construction noise is considered *less than significant* at all receiver locations.

TABLE 11-3: TYPICAL CONSTRUCTION NOISE LEVEL COMPLIANCE

Receiver Location[1]	Construction Noise Levels (dBA L_{eq})		
	Highest Construction Noise Levels[2]	Threshold[3]	Threshold Exceeded?[4]
R1	59.3	80	No
R2	61.8	80	No
R3	65.0	80	No
R4	60.1	80	No
R5	59.4	80	No
R6	53.3	80	No

[1] Noise receiver locations are shown in Exhibit 11-A.
[2] Highest construction noise level calculations based on distance from the construction noise source activity to the nearest receiver locations.
[3] Construction noise level thresholds as shown in Table 4-1.
[4] Do the estimated Project construction noise levels exceed the construction noise level threshold?

11.6 TYPICAL CONSTRUCTION VIBRATION IMPACTS

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. Ground-borne vibration levels resulting from typical construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration (FTA). (26) However, while vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used. Ground vibration levels associated with various types of construction equipment are summarized on Table 11-4. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the potential Project construction vibration levels using the following vibration assessment methods defined by Caltrans. To describe the human response (annoyance) associated with vibration impacts Caltrans provides the following equation: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.1}$

TABLE 11-4: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual

Using the vibration source level of construction equipment provided on Table 11-4 and the construction vibration assessment methodology published by the FTA, it is possible to estimate the Project vibration impacts. Table 11-5 presents the expected Project related vibration levels at the nearby receiver locations. At distances ranging from 29 to 344 feet from the Project construction activities to the nearest adjacent off-site structure, construction vibration velocity levels are estimated to range from less than 0.02 to 0.07 in/sec PPV. Based on maximum acceptable continuous vibration threshold of 0.10 in/sec PPV, the typical Project construction vibration levels will not exceed the vibration thresholds at any local receiver. Additionally, since the vibration levels would be well below 0.30 in/sec PPV, there would be no structural vibration impacts. Therefore, the Project-related vibration impacts associated with construction activities are considered *less than significant*.

TABLE 11-5: PROJECT CONSTRUCTION VIBRATION LEVELS

Receiver Location[1]	Distance to Const. Activity (Feet)[2]	Typical Construction Vibration Levels PPV (in/sec)[3]					Thresholds PPV (in/sec)[4]	Thresholds Exceeded?[5]
		Small bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer	Highest Vibration Level		
R1	90'	0.00	0.01	0.02	0.02	0.02	0.10	No
R2	80'	0.00	0.01	0.02	0.02	0.02	0.10	No
R3	30'	0.00	0.03	0.06	0.07	0.07	0.10	No
R4	114'	0.00	0.01	0.01	0.02	0.02	0.10	No
R5	188'	0.00	0.00	0.01	0.01	0.01	0.10	No
R6	339'	0.00	0.00	0.00	0.01	0.01	0.10	No

[1] Construction receiver locations are shown in Exhibit 11-A.
[2] Distance from receiver location to Project construction boundary.
[3] Based on the Vibration Source Levels of Construction Equipment (Table 11-4).
[4] Construction vibration level thresholds as shown in Table 4-1.
[5] Does the peak vibration exceed the acceptable vibration thresholds?
"PPV" = Peak Particle Velocity

12 REFERENCES

1. **State of California.** *California Environmental Quality Act, Appendix G.* 2019.
2. **U.S. Department of Transportation Federal Highway Administration.** Acoustical Consideration. *Noise Barrier Design Handbook.* [Online] [Cited: November 28, 2016.] https://www.fhwa.dot.gov/environment/noise/noise_barriers/design_construction/design/design03.cfm.
3. **California Department of Transportation.** *Traffic Noise Analysis Protocol.* May 2011.
4. **California Department of Transportation Environmental Program.** *Technical Noise Supplement - A Technical Supplement to the Traffic Noise Analysis Protocol.* Sacramento, CA : s.n., September 2013.
5. **Environmental Protection Agency Office of Noise Abatement and Control.** *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety.* March 1974. EPA/ONAC 550/9/74-004.
6. **U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch.** *Highway Traffic Noise Analysis and Abatement Policy and Guidance.* June, 1995.
7. **U.S. Department of Transportation, Federal Highway Administration.** *Highway Traffic Noise in the United States, Problem and Response.* April 2000. p. 3.
8. **U.S. Department of Transportation, Federal Transit Administration.** *Transit Noise and Vibration Impact Assessment Manual, FTA-VA-90-1003-06.* May 2006.
9. —. *Transit Noise and Vibration Impact Assessment Manual, FTA Report No. 0123.* September 2018.
10. **California Department of Transportation.** *Transportation and Construction Vibration Guidance Manual.* April 2020.
11. **Office of Planning and Research.** *State of California General Plan Guidlines 2003.* October 2003.
12. **State of California.** *the California Code of Regulations, Title 24, Building Standards Administrative Code, Chapter 12, Section 1206 Sound Control.* 2019. https://up.codes/viewer/california/ibc-2018/chapter/12/interior-environment#12.
13. **City of Vallejo.** *Propel Vallejo General Plan 2040.* August 29, 2017.
14. —. *Municipal Code, Chapter 16.502 Performance Standards.*
15. **State of California.** *California Environmental Quality Act, Appendix G.* 2018.
16. **California Court of Appeal.** *Gray v. County of Madera, F053661.* 167 Cal.App.4th 1099; - Cal.Rptr.3d, October 2008.
17. **Federal Interagency Committee on Noise.** *Federal Agency Review of Selected Airport Noise Analysis Issues.* August 1992.
18. **U.S. Department of Transportation, Federal Highway Administration, Office of Environment and Planning, Noise and Air Quality Branch.** *Highway Traffic Noise Analysis and Abatement Policy and Guidance.* December 2011.
19. **California Department of Transportation.** *Technical Noise Supplement.* November 2009.
20. **Vallejo, City of.** *Propel Vallejo General Plan 2040 and Sonoma Boulevard Specific Plan Draft EIR.* July 2016.

21. **U.S. Department of Transportation, Federal Highway Administration.** *FHWA Highway Traffic Noise Prediction Model.* December 1978. FHWA-RD-77-108.

22. **California Department of Transportation Environmental Program, Office of Environmental Engineering.** *Use of California Vehicle Noise Reference Energy Mean Emission Levels (Calveno REMELs) in FHWA Highway Traffic Noise Prediction.* September 1995. TAN 95-03.

23. **City of Vallejo.** *General Plan Mobility, Transportation, & Connectivity Element.* August 2017.

24. —. Propel Vallejo General Plan Update and Sonoma Boulevard Specific Plan Draft EIR. [Online] July 2016. https://www.jurupavalley.org/DocumentCenter/View/221/04-2019-2017-General-Plan-Appendices-PDF.

25. **Fairview at Northgate Project Draft Environmental Impact Report, SCH 2018102007, Appendix I. [Online] January 2020. https://www.vallejo.gov/common/pages/DisplayFile.aspx?itemId=17964871.**

26. U.S. Department of Transportation, Federal Transit Administration. *Transit Noise and Vibration Impact Assessment Manual.* September 2018.

27. Department of Environment, Food and Rural Affiars (Defra). *Update of Noise Database for Prediction of Noise on Construction and Open Sites.* 2004.

28. FHWA. *Roadway Construction Noise Model.* January 2006.

29. American National Standards Institute (ANSI). *Specification for Sound Level Meters ANSI S1.4-2014/IEC 61672-1:2013.*

30. Harris, Cyril M. *Noise Control in Buildings.* s.l. : McGraw-Hill, Inc., 1994.

13 CERTIFICATION

The contents of this noise study report represent an accurate depiction of the noise environment and impacts associated with the proposed Vista Cove Project. The information contained in this noise study report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (619) 788-1971.

William Maddux, INCE
Senior Associate
URBAN CROSSROADS, INC.
(619) 788-1971
bmaddux@urbanxroads.com

EDUCATION

Bachelor of Science in Urban and Regional Planning
California Polytechnic State University, Pomona • June 2000

PROFESSIONAL AFFILIATIONS

ASA – Acoustical Society of America
AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
INCE – Institute of Noise Control Engineers

PROFESSIONAL CERTIFICATIONS

Approved Acoustical Consultant • County of San Diego
FHWA Traffic Noise Model of Training • November 2004
CadnaA Basic and Advanced Training Certificate • October 2008.

This page intentionally left blank.

APPENDIX 3.1:

CITY OF VALLEJO MUNICIPAL CODE

APPENDIX 3.1:

CITY OF VALLEJO MUNICIPAL CODE

This page intentionally left blank

16.502.08 - Vibration.

No use shall be operated in a manner that produces vibrations discernible without instruments at any point on the property line of the lot on which the use is located.

16.502.09 - Noise.

A. Purpose. The purpose of these regulations is to implement the general plan policies on noise exposure and land use compatibility policies. More specifically, the purpose of the noise standards is to:
   1. Establish the principles and context for the application of noise limits, standards for noise exposure and land use compatibility, and requirements for reasonable noise attenuation measures;
   2. Protect noise sensitive uses from excessive noise exposure from other uses;
   3. Establish regulations for maximum noise limits and procedures for enforcing them
   4. Prevent any land use from generating sound that exceeds specific maximum levels based on the type uses and the type of noise.

B. Exemptions. The following facilities and uses are exempt from these regulations:
   1. Emergencies. The emission of sound for the purpose of alerting persons to the existence of an emergency, the performance of emergency work, or the operation of emergency equipment including, but not limited to, generators.
   2. Warning Devices. Warning devices necessary for the protection of the public safety, such as police, fire, and ambulance sirens.
   3. Special Events. Occasional outdoor gatherings, public dances, shows, and sporting and entertainment events, provided that such events are conducted pursuant to a permit or license issued by the city.
   4. Religious Institutions and Other Similar Organizations. Unamplified bells, chimes, or other similar devices used by religious institutions and other houses of religious worship.
   5. Time signals. Signals produced by places of employment or worship and school recess signals providing no one sound exceeds five seconds in duration and no one series of sounds exceeds twenty-four seconds in duration.
   6. Municipal Solid Waste Collection. Collection of solid waste, vegetative waste, and recyclable materials by the city or under contract with the city.
   7. Public Works Construction Projects, Maintenance, and Repair. Street, utility, and similar construction projects undertaken by or under contract to or direction of the city, or the state of California or a public utility regulated by the California Public Utilities Commission,

as well as maintenance and repair operations conducted by such parties, including street sweeping, debris and litter removal, removal of downed wires, restoring electrical service, repairing traffic signals, unplugging sewers, vacuuming catch basins, repairing of damaged poles, removal of abandoned vehicles, repairing of water hydrants and mains, gas lines, oil lines, sewers, storm drains, roads, and sidewalks.

8. Transportation equipment. Sounds from transportation equipment such as trucks and buses used primarily in the movement of goods and people to and from given premises and in connection with temporary construction or demolition work.
9. Utility Facilities. Facilities including without limitation sixty-cycle electric power transformers and related equipment, sewer lift stations, municipal wells, and pumping stations.

C. General Requirements.

1. No person shall make, or cause to suffer, or permit to be made upon any public property, public right-of-way or private property, any excessive noise, annoying noise, amplified sound or vibrations that are physically annoying to reasonable persons of normal sensitivity or that are so harsh or so prolonged or unnatural or unusual in their use, time or place as to cause or contribute to the unnecessary and unreasonable discomfort of any persons of normal sensitivity located at the lot line of the property from which these noises emanate or that interfere with the peace and comfort of residents or their guests, or the operators or customers in places of business in the vicinity, or that may detrimentally or adversely affect such residences or places of business.
2. Noise standards. Table 16.502-C classifies uses and facilities and establishes exterior and interior noise standards applicable to all uses and facilities in each classification that is not exempt from these requirements pursuant to Subsection B. The requirements impose limits on regularly occurring noise for the specified time periods, averaged over an hour, and do not apply to incidental, infrequent, or unexpected noise, which are subject to Vallejo Municipal Code Chapter 7.84, Regulations of Noise Disturbances. The prohibitions contained in Municipal Code Chapter 7.84, apply to all land uses and activities in the city, and, in the case of a conflict, the more restrictive provisions apply.

TABLE 16.502-C: MAXIMUM NOISE LEVEL BY NOISE ZONE		
Noise Zoning districts	Maximum Noise Level in dBA (level not to be exceeded more than 30 minutes in any hour)	Maximum Noise Level in dBA (level not to be exceeded more than 5 minutes in any hour)

	Measured at Property Line or District Boundary	Measured at Any Boundary of a Residential Zone	Between 10 PM and 7AM, Measured at Any Boundary of a Residential Zone
Single-Unit Residential	60	60	-
Multiple-Unit Residential	65	65	-
Commercial and Mixed-Use, Medical, Office	70	60	50 or ambient noise level
Light Industrial	75	65	50 or ambient noise level
General Industrial	75	65	50 or ambient noise level
Public Facilities and Community Use	65	60	50 or ambient noise level
Open Space and Recreational Districts	65	60	50 or ambient noise level

3. The standard limits in Table 16.502-D shall be adjusted by five decibels for any noise that contains a steady, pure tone such as a whine, screech or hum, or an impulsive sound such as hammering or riveting, or contains music or speech, as described in the following table.

TABLE 16.502-D: MAXIMUM NOISE LEVEL ADJUSTMENT BY TIME AND TYPE	
TIME AND TYPE OF NOISE	ADJUSTMENT (DECIBELS)

Any type other than construction and related activities between 7 am and 10 pm	+5
Noise of unusual impulsive character (e.g., hammering or drilling)	-5
Noise of unusual periodic character (e.g., hammering or screeching)	-5

D. Additional Regulations. In addition to the following restrictions, hours may be modified with condition imposed by any conditional use permit or variance. The most restrictive hours shall apply.

1. Construction hours. Construction, demolition, and related loading/unloading activities that may generate noise exceeding levels in Table 16.502.E shall be limited to hours between 7:00 a.m. and 7:00 p.m. in residential zoning districts and in any mixed-use district.

TABLE 16.502-E: MAXIMUM NOISE LEVEL FOR TEMPORARY CONSTRUCTION ACTIVITY			
Time	RR, RLD	RMD, RHD, NMX, NC	Commercial (Including medical and office) and Industrial
Mobile construction equipment—non-scheduled, intermittent, and short-term for less than 15 days			
Weekdays 7 a.m. to 6 p.m.	75 dBA	80 dBA	85 dBA
Saturdays 9 a.m. to 6 p.m.	60 dBA	65 dBA	70 dBA
Sundays and legal holidays	None	None	None
Stationary construction equipment			
Weekdays 7 a.m. to 6 p.m.	60 dBA	65 dBA	70 dBA

Saturdays 9 a.m. to 6 p.m.	60 dBA	65 dBA	70 dBA
Sundays and legal holidays	None	None	None

2. Noise measurement. In determining whether any noise exceeds the maximum exterior noise limits set forth in this chapter, measurements shall be taken at the property line of the property from which the noise emanates, except that for noise emanating from property in a IG Zoning District, measurement shall be taken at boundary of the zoning district in which the property is located. Residential noise levels.
    a. Interior. No person shall operate or cause to be operated within a dwelling unit, any source of sound that causes the sound level when measured inside a neighboring receiving dwelling unit to exceed the allowable noise level, for any period of time.
    b. Exterior. The exterior noise limits for any source of noise within any residential zone shall be reduced by ten dBA between 10:00 p.m. and 7:00 a.m. The exterior noise limits for any source of noise in any zone other than a residential zone shall be reduced between 10:00 p.m. and 7:00 a.m. so that when the noise measured at the property line of a "noise-sensitive use" does not exceed fifty dBA. The interior noise level for steady state continuous noise from exterior sources in any residential bedroom with windows open between 10:00 p.m. and 7:00 a.m. shall not exceed thirty dBA.
    c. Mitigation required. New single-unit residential projects shall be located and designed so the noise levels in private use areas does not exceed sixty Ldn. For new multiple-unit residential projects a standard of sixty-five Ldn shall apply to outdoor areas excluding balconies.
    d. Noise from sources not under local jurisdiction such as freeways and aircraft shall be exempt.
    e. Developers of mixed-use projects that include residential development shall notify all potential residents that they may be exposed to noise from adjacent and nearby commercial, retail, entertainment, and circulation activity.

E. Noise level measurement. The following provisions establish a means for measuring noise levels. Where these provisions conflict with other requirements of the Vallejo Municipal Code, the following shall remain applicable for purposes of the Zoning Code:
    1. Setting of Meter. Any sound or noise level measurement made pursuant to the provisions of this title shall be measured with a sound level meter using an A-weighting and "slow"

response pursuant to applicable manufacturer's instructions, except that for sounds of a duration of two seconds or less, the "fast" response shall be used and the average level during the occurrence of the sound reported.

2. Calibration of Meter. The sound level meter shall be approximately calibrated and adjusted as necessary by means of an acoustical calibrator of the coupler-type to assure meter accuracy within the tolerances set forth in American National Standards ANSI-SI.4-1971.
3. Location of Microphone. All measurements shall be taken at any lot line of a lot within the applicable zoning district. The measuring microphone shall not be less than four feet above the ground, at least four feet distant from walls or other large reflecting surfaces and shall be protected from the effects of wind noises by the use of appropriate wind screens. In cases when the microphone shall be located within ten feet of walls or similar large reflecting surfaces, the actual measured distances and orientation of sources, microphone and reflecting surfaces shall be noted and recorded. In no case shall a noise measurement be taken within five feet of the noise source.
4. Measured Sound Levels. The measurement of sound level limits shall be the average sound level for a period of one hour.

F. Compliance. The director may require the applicant for a building permit, prior to the issuance of such permit, to submit such information with respect to proposed machinery, processes, products, or environmental impacts as may be necessary to demonstrate the ability of the proposed uses to comply with the requirements of this chapter.
   1. Acoustic studies that include assessment of noise levels and recommend mitigation measures shall be required for projects that are likely to be exposed to noise levels exceeding the standards in this chapter based on project location and surrounding uses.
   2. The California Land Use Compatibility standards for community noise environments published by the Governor's Office of Planning and Research shall be used as a basis for review of any new residential, commercial and mixed-use development.
   3. Whenever an environmental impact report has been submitted and determined to be adequate under state and city guidelines, no further information shall be required.

a. Locating air intakes away from high volume roadways and/or truck loading zones.

b. Ensuring that building heating, ventilation, and air conditioning systems include appropriately sized maximum efficiency rating (MERV) filters

5. Measures identified in the HRA shall be included in the environmental document and/or incorporated into the site development plan as a component of the proposed project. The air intake design and MERV filter requirements shall be noted and/or reflected on all building plans submitted to the City for review and verification by the Director and the City Building Official.

16.502.08 VIBRATION

No use shall be operated in a manner that produces vibrations discernible without instruments at any point on the property line of the lot on which the use is located.

16.502.09 NOISE

A. **Purpose.** The purpose of these regulations is to implement the General Plan policies on noise exposure and land use compatibility policies. More specifically, the purpose of the noise standards is to:

1. Establish the principles and context for the application of noise limits, standards for noise exposure and land use compatibility, and requirements for reasonable noise attenuation measures;
2. Protect noise sensitive uses from excessive noise exposure from other uses;
3. Establish regulations for maximum noise limits and procedures for enforcing them
4. Prevent any land use from generating sound that exceeds specific maximum levels based on the type uses and the type of noise.

B. **Exemptions.** The following facilities and uses are exempt from these regulations:

1. **Emergencies.** The emission of sound for the purpose of alerting persons to the existence of an emergency, the performance of emergency work, or the operation of emergency equipment including, but not limited to, generators.
2. **Warning Devices.** Warning devices necessary for the protection of the public safety, such as police, fire, and ambulance sirens.
3. **Special Events.** Occasional outdoor gatherings, public dances, shows, and sporting and entertainment events, provided that such events are conducted pursuant to a permit or license issued by the City.
4. **Religious Institutions and Other Similar Organizations.** Unamplified bells, chimes, or other similar devices used by religious institutions and other houses of religious worship.
5. **Time signals.** Signals produced by places of employment or worship and school recess signals providing no one sound exceeds 5 seconds in duration and no one series of sounds exceeds 24 seconds in duration.
6. **Municipal Solid Waste Collection.** Collection of solid waste, vegetative waste, and recyclable materials by the City or under contract with the City.
7. **Public Works Construction Projects, Maintenance, and Repair.** Street, utility, and similar construction projects undertaken by or under contract to or direction of the City, or the State of California or a public utility regulated by the California Public Utilities Commission, as well as maintenance and repair operations conducted by such parties, including street sweeping, debris and litter removal, removal of downed wires, restoring electrical service, repairing traffic signals, unplugging sewers, vacuuming catch basins, repairing of damaged poles, removal of abandoned vehicles, repairing of water hydrants and mains, gas lines, oil lines, sewers, storm drains, roads, and sidewalks.
8. **Transportation equipment.** Sounds from transportation equipment such as trucks and buses used primarily in the movement of goods and people to and from given premises and in connection with temporary construction or demolition work.
9. **Utility Facilities.** Facilities including without limitation 60-cycle electric power transformers and related equipment, sewer lift stations, municipal wells, and pumping stations.

C. **General Requirements.**

1. No person shall make, or cause to suffer, or permit to be made upon any public property, public right-of-way or private property, any excessive noise, annoying noise, amplified sound or vibrations that are physically annoying to reasonable persons of normal sensitivity or that are so harsh or so prolonged or unnatural or unusual in their use, time or place as to cause or contribute to the unnecessary and unreasonable discomfort of any persons of normal sensitivity located at the lot line of the property from which these noises emanate or that interfere with the peace and comfort of residents or their guests, or the operators or customers in places of business in the vicinity, or that may detrimentally or adversely affect such residences or places of business.
2. **Noise standards. Table 16.502-C** classifies uses and facilities and establishes exterior and interior noise standards applicable to all uses and facilities in each classification that is not exempt from these requirements pursuant to Subsection B. The requirements impose limits on regularly occurring noise for the specified time periods, averaged over an hour, and do not apply to incidental, infrequent, or unexpected noise, which are subject to Vallejo Municipal Code Chapter 7.84, Regulations of Noise Disturbances. The prohibitions contained in Municipal Code Chapter 7.84, apply to all land uses and activities in the City, and, in the case of a conflict, the more restrictive provisions apply.

TABLE 16.502-C: MAXIMUM NOISE LEVEL BY NOISE ZONE

Noise Zoning districts	Maximum Noise Level in dBA (level not to be exceeded more than 30 minutes in any hour)		Maximum Noise Level in dBA (level not to be exceeded more than 5 minutes in any hour)
	Measured at Property Line or District Boundary	Measured at Any Boundary of a Residential Zone	Between 10 PM and 7AM, Measured at Any Boundary of a Residential Zone
Single-Unit Residential	60	60	-
Multiple-Unit Residential	65	65	-
Commercial and Mixed-Use, Medical, Office	70	60	50 or ambient noise level
Light Industrial	75	65	50 or ambient noise level
General Industrial	75	65	50 or ambient noise level
Public Facilities and Community Use	65	60	50 or ambient noise level
Open Space and Recreational Districts	65	60	50 or ambient noise level

3. The standard limits in **Table 16.502-D** shall be adjusted by 5 decibels for any noise that contains a steady, pure tone such as a whine, screech or hum, or an impulsive sound such as hammering or riveting, or contains music or speech, as described in the following table.

TABLE 16.502-D : MAXIMUM NOISE LEVEL ADJUSTMENT BY TIME AND TYPE

TIME AND TYPE OF NOISE	ADJUSTMENT (DECIBELS)
Any type other than construction and related activities between 7 am and 10 pm	+5
Noise of unusual impulsive character (e.g., hammering or drilling)	-5
Noise of unusual periodic character (e.g., hammering or screeching)	-5

D. **Additional Regulations.** In addition to the following restrictions, hours may be modified with condition imposed by any conditional use permit or variance. The most restrictive hours shall apply.

1. **Construction hours.** Construction, demolition, and related loading/unloading activities that may generate noise exceeding levels in **Table 16.502.E** shall be limited to hours between 7 am and 7 pm in Residential Zoning Districts and in any mixed-use district.

TABLE 16.502-E: MAXIMUM NOISE LEVEL FOR TEMPORARY CONSTRUCTION ACTIVITY

Time	RR, RLD	RMD, RHD, NMX, NC	Commercial (Including medical and office) and Industrial
Mobile construction equipment—non-scheduled, intermittent, and short-term for less than 15 days			
Weekdays 7am to 6pm	75 dBA	80 dBA	85 dBA
Saturdays 9am to 6pm	60 dBA	65 dBA	70 dBA
Sundays and legal holidays	None	None	None
Stationary construction equipment			
Weekdays 7am to 6pm	60 dBA	65 dBA	70 dBA
Saturdays 9am to 6pm	60 dBA	65 dBA	70 dBA
Sundays and legal holidays	None	None	None

2. **Noise measurement.** In determining whether any noise exceeds the maximum exterior noise limits set forth in this Chapter, measurements shall be taken at the property line of the property from which the noise emanates, except that for noise emanating from property in a IG Zoning District, measurement shall be taken at boundary of the zoning district in which the property is located. **Residential noise levels.**

a. **Interior.** No person shall operate or cause to be operated within a dwelling unit, any source of sound that causes the sound level when measured inside a neighboring receiving dwelling unit to exceed the allowable noise level, for any period of time.

b. **Exterior.** The exterior noise limits for any source of noise within any residential zone shall be reduced by 10 dBA between 10:00 p.m. and 7:00 a.m. The exterior noise limits for any source of noise in any zone other than a residential zone shall be reduced between 10:00 p.m. and 7:00 a.m. so that when the noise measured at the property line of a "noise-sensitive use" does not exceed 50 dBA. The interior noise level for steady state continuous noise from exterior sources in any residential bedroom with windows open between 10:00 p.m. and 7:00 a.m. shall not exceed 30 dBA.

c. **Mitigation required.** New single-unit residential projects shall be located and designed so the noise levels in private use areas does not exceed 60 Ldn. For new multiple-unit residential projects a standard of 65 Ldn shall apply to outdoor areas excluding balconies.

d. Noise from sources not under local jurisdiction such as freeways and aircraft shall be exempt.

e. Developers of mixed-use projects that include residential development shall notify all potential residents that they may be exposed to noise from adjacent and nearby commercial, retail, entertainment, and circulation activity.

E. **Noise level measurement.** The following provisions establish a means for measuring noise levels. Where these provisions conflict with other requirements of the Vallejo Municipal Code, the following shall remain applicable for purposes of the Zoning Code:

1. **Setting of Meter.** Any sound or noise level measurement made pursuant to the provisions of this title shall be measured with a sound level meter using an A-weighting and "slow" response pursuant to applicable manufacturer's instructions, except that for sounds of a duration of 2 seconds or less, the "fast" response shall be used and the average level during the occurrence of the sound reported.

2. **Calibration of Meter.** The sound level meter shall be approximately calibrated and adjusted as necessary by means of an acoustical calibrator of the coupler-type to assure meter accuracy within the tolerances set forth in American National Standards ANSI-SI.4-1971.

3. **Location of Microphone.** All measurements shall be taken at any lot line of a lot within the applicable zoning district. The measuring microphone shall not be less than 4 feet above the ground, at least 4 feet distant from walls or other large reflecting surfaces and shall be protected from the effects of wind noises by the use of appropriate wind screens. In cases when the microphone shall be located within 10 feet of walls or similar large reflecting surfaces, the actual measured distances and orientation of sources, microphone and reflecting surfaces shall be noted and recorded. In no case shall a noise measurement be taken within 5 feet of the noise source.
4. **Measured Sound Levels.** The measurement of sound level limits shall be the average sound level for a period of one hour.

F. **Compliance.** The Director may require the applicant for a building permit, prior to the issuance of such permit, to submit such information with respect to proposed machinery, processes, products, or environmental impacts as may be necessary to demonstrate the ability of the proposed uses to comply with the requirements of this Chapter.

1. Acoustic studies that include assessment of noise levels and recommend mitigation measures shall be required for projects that are likely to be exposed to noise levels exceeding the standards in this Chapter based on project location and surrounding uses.
2. The California Land Use Compatibility standards for community noise environments published by the Governor's Office of Planning and Research shall be used as a basis for review of any new residential, commercial and mixed-use development.
3. Whenever an environmental impact report has been submitted and determined to be adequate under state and city guidelines, no further information shall be required.

16.503 TRIP-REDUCTION MEASURES

16.503.01 PURPOSE AND APPLICABILITY

These regulations are established to make Vallejo a more attractive and healthful place to live, work, visit, and do business by reducing traffic congestion, demand for parking and associated air pollution noise, fuel consumption. More specifically, the provisions of this Chapter are intended to:

A. Implement State requirements requiring cities to address greenhouse gas emissions contributing to climate change and General Plan policies to decrease dependence on single-occupant vehicles by requiring development to incorporate measures to reduce Vehicle Miles Traveled (VMT);

B. Improve the mobility and general efficiency of circulation and transportation systems by increasing reliance on public transit, ridesharing, walking, car-sharing, cycling and focusing development in areas close to transit and employment;

C. Reduce traffic impacts within the community and region, vehicular air pollutant emissions, energy usage, and ambient noise levels through a reduction in the number of per capita vehicle miles traveled and management of traffic congestion;

D. Inform residents, workers, employers and other business owners about travel options and the impacts of travel choices;

E. Coordinate transportation system management, TDM, and transportation facility development strategies Citywide, with other cities in the region and through regional agencies; and,

F. Support local and regional efforts to relieve traffic congestion in and around the City.

G. The requirements of this Chapter apply to:

1. New multi-unit development of 10 units or more;
2. New non-residential development of 10,000 square feet or more; and
3. Employers with 50 or more employees at a single worksite within the City except for employers subject to Bay Area Air Quality Management District (BAAQMD) Regulation 13, Rule 1, Trip Reduction Requirements for Large Employers.

This page intentionally left blank

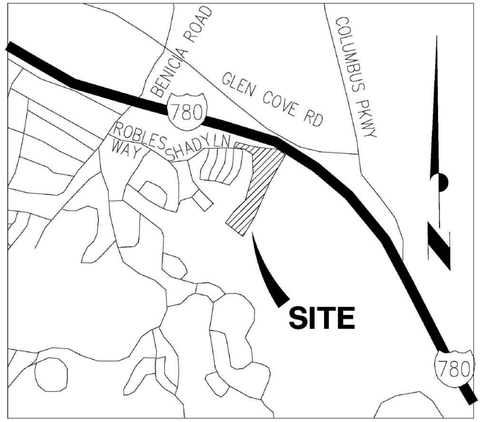
APPENDIX 4.1:

PROJECT SITE PLAN

This page intentionally left blank

VISTA COVE CONCEPTUAL LAND USE PLAN

CITY OF VALLEJO SB-330 HOUSING DEVELOPMENT APPLICATION



VICINITY MAP

NOT TO SCALE

LEGEND

DESCRIPTION	
PROJECT BOUNDARY	
PROPERTY LINE	
RIGHT OF WAY	
FACE AND BACK OF CURB, BACK OF WALK	
ADJOINING LOT LINE	
STORMWATER BASIN	
LOT NUMBER	32

DEVELOPMENT SUMMARY

SITE ADDRESS:
SHADY LANE AND WILDFLOWER ROAD
VALLEJO, CA

BENCHMARK:
VERTICAL DATUM NAVD88 GEOID 12B DERIVED FROM OPUS SOLUTION

ASSESSORS PARCEL NUMBERS:
0037-030-200, 0037-030-210, 0037-060-480

PROJECT SITE AREA:
TOTAL SITE ACREAGE: 20.13± ACRES
DISTURBED AREA: 10.52± ACRES
UNDISTURBED AREA: 9.61± ACRES

PROJECT FLOOD ZONE:
ZONE X

EXISTING ZONING:
RESIDENTIAL MEDIUM DENSITY

EXISTING USE:
UNDEVELOPED LAND

PROPOSED USE:
51 LOT SINGLE FAMILY SUBDIVISION

PROJECT TEAM

OWNER/APPLICANT:
SANCERRA VISTA COVE, LLC
2618 SAN MIGUEL DRIVE, SUITE 1223
NEWPORT BEACH, CA 92660
(949) 466-9604
CONTACT: ADAM SMITH

CIVIL ENGINEER:
dk ENGINEERING
1931 SAN MIGUEL DR, SUITE 100
WALNUT CREEK, CA 94596
(925) 932-6868
PROJECT MANAGER: ANGELA PEDRONCELLI

ARCHITECT:
ROBERT HIDEY ARCHITECTS
3337 MICHELSON DRIVE, SUITE 170
IRVINE, CA 92612
(949) 655-1550
CONTACT: DAN WEIBEL

ENVIRONMENTAL:
WRA ENVIRONMENTAL CONSULTANTS
2169-G EAST FRANCISCO BLVD
SAN RAFAEL, CA 94901
(949) 524-7542
CONTACT: PATRICIA VALCARCEL

GEOTECHINCAL ENGINEER:
ENGEO
2010 CROW CANYON PLACE, SUITE 250
SAN RAMON, CA 94583
(925) 866-9000
CONTACT: JACOB WHITE

SHEET INDEX	
Sheet Number	Sheet Title
C1.0	COVER SHEET
C2.0	EXISTING BOUNDARY AND TOPOGRAPHY
C3.0	CONCEPTUAL GRADING AND SITE PLAN

CITY OF VALLEJO SB-330
HOUSING DEVELOPMENT APPLICATION

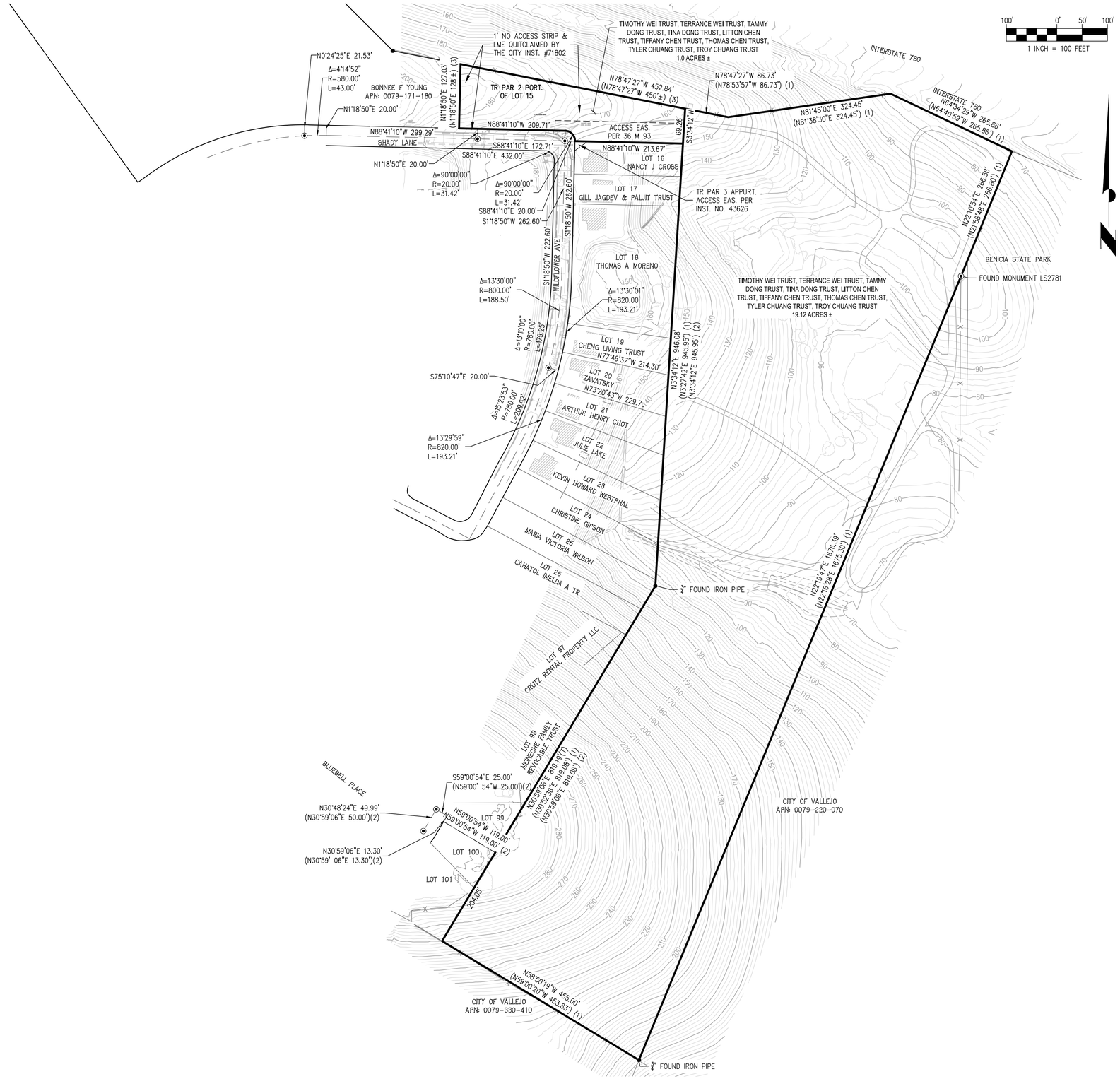
VISTA COVE

COVER SHEET

APNS: 0079-120-100,0079-171-170, 0079-220-070
VALLEJO, CALIFORNIA
FOR
SANCERRA
NOVEMBER 2022

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGR.COM (925) 932-6868

OWNER/DEVELOPER/SUBDIVIDER RESERVES THE RIGHT TO FILE MULTIPLE FINAL MAPS.



TITLE REPORT

FIRST AMERICAN TITLE COMPANY
APN: 0079-120-100; 0079-171-170
DATED: JUNE 21, 2022

BENCHMARK

VERTICAL DATUM NAVD88 GEOID 12B DERIVED FROM OPUS SOLUTION

BASIS OF BEARINGS

BEARING SHOWN HEREON ARE ON CALIFORNIA STATE PLANE COORDINATE SYSTEM, ZONE 2 (GRID), HORIZONTAL DATUM USING THE NAD83 (2011) (EPOCH 2010.0000), US SURVEY FEET.

TOPOGRAPHIC SURVEY

TOPOGRAPHIC FEATURES SHOWN HEREON GENERATED BY A DRONE FLIGHT BY ALL POINTS SURVEYING & MAPPING, INC. ON JUNE 22, 2022. SUPPLEMENTAL FIELD SURVEY CONDUCTED BY dk FIELD CREW.

CONTOUR INTERVAL

EXISTING: 2 FOOT AND 10 FOOT

NOTE

COORDINATE SYSTEM IS NAD83 CALIFORNIA STATE PLANE ZONE II, US SURVEY FOOT

REFERENCES

(1) 7 PM 58
(2) 36 M 93
(3) 1987-35791 & 2018-21819

LEGEND

DESCRIPTION	
PROPERTY LINE	
EASEMENT LINE	
MAJOR CONTOUR	90
MINOR CONTOUR	
BACK OF CURB, FACE OF CURB, LIP OF GUTTER	
DIRT TRAIL	
FOUND MONUMENT	
FOUND IRON PIPE	
TREE DRIPLINE	
FENCE	X
FLOW LINE	
WATER MAIN	W
SANITARY SEWER MAIN, MANHOLES, CLEAN OUT	S
STORM DRAIN LINE	
ADJOINING PROPERTY LINE	

ABBREVIATIONS

APN	ACCESSOR'S PARCEL NUMBER
APPURT.	APPURTENANT
EAS.	EASEMENT
INST.	INSTRUMENT
L	LENGTH
LME	LANDSCAPE MAINTENANCE EASEMENT
NO.	NUMBER
PAR	PARCEL
PORT.	PORTION
R	RADIUS
TR	TITLE REPORT

CITY OF VALLEJO SB-330
HOUSING DEVELOPMENT APPLICATION
VISTA COVE
EXISTING BOUNDARY AND TOPOGRAPHY

APNS: 0079-120-100,0079-171-170, 0079-220-070
VALLEJO, CALIFORNIA
FOR
SANCERRA
NOVEMBER 2022

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C:\PROJECTS\2022\22-1008 VISTA COVE - VALLEJO\DRAWINGS\2.0 EXISTING BOUNDARY AND TOPOGRAPHY.DWG 11/1/2022

OWNER/DEVELOPER/SUBDIVIDER RESERVES THE RIGHT TO FILE MULTIPLE FINAL MAPS.

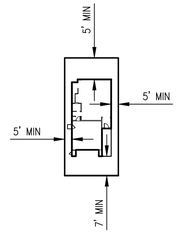
LEGEND

EXISTING	DESCRIPTION	PROPOSED
	PROJECT BOUNDARY	
	RIGHT OF WAY	
	PROPERTY LINE	
	EASEMENT LINE	
90	MAJOR CONTOUR	90
	MINOR CONTOUR	
	BACK OF CURB, FACE OF CURB, LIP OF GUTTER	
	CONCRETE SIDEWALK	
	PAVEMENT	
	DRAINAGE LOCATION	
◉	FOUND MONUMENT	
●	FOUND IRON PIPE	
	TREE DRIPLINE	
X	FENCE	
	FLOW LINE	
	STORM DRAIN LINE, CATCH BASIN, FIELD INLET, MAINTENANCE HOLE	
	BENCH	
	PAD LIMIT	
	RETAINING WALL	
	STORMWATER BASIN	
	INTERMITTENT STREAM*	
	SEASONAL WETLAND*	
	FRESHWATER MARSH*	
	RIPARIAN AREA*	
	TOYON CHAPARRAL	
	BUILDING PLAN TYPE	PLAN 1

* NOTE: MAY BE SUBJECT TO SECTION 1600 OF THE FISH & GAME CODE.

ABBREVIATIONS

APN	ACCESSOR'S PARCEL NUMBER
CL	CENTERLINE ELEVATION
KB	KICKERBOARD
MIN	MINIMUM
P	PAD ELEVATION
RET	RETAINING WALL
SF	SQUARE FEET
TC	TOP OF CURB ELEVATION
TSM	TOP OF SOIL MIX



TYPICAL LOT SETBACKS

NOT TO SCALE

FLOOR AREA RATIO

PLAN TYPE	FLOOR AREA	NUMBER PROPOSED	TOTAL FLOOR AREA
PLAN 1	2329 SF	25	58,225 SF
PLAN 2	2499 SF	26	64,974 SF
		TOTAL	123,199 SF

50' 0' 25' 50'

1 INCH = 50 FEET

CITY OF VALLEJO SB-330

HOUSING DEVELOPMENT APPLICATION

VISTA COVE

CONCEPTUAL GRADING AND SITE PLAN

APNS: 0079-120-100,0079-171-170, 0079-220-070

VALLEJO, CALIFORNIA

FOR

SANCERRA

NOVEMBER 2022

ENGINEERING SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGR.COM (925) 932-6868

I:\PROJECTS\2021\21-1008 VISTA COVE - VALLEJO\CAD\SB330 PACKAGE\C3.0 SITE PLAN.DWG 1/19/2022

OWNER/DEVELOPER/SUBDIVIDER RESERVES THE RIGHT TO FILE MULTIPLE FINAL MAPS.

This page intentionally left blank

APPENDIX 7.1:

ON-SITE TRAFFIC NOISE LEVEL CALCULATIONS

This page intentionally left blank

15304 - Vista Cove

CadnaA Noise Prediction Model: 15304-07_2nd.cna
Date: 25.02.25
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (ft)	**6561.70**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (ft)	**3280.80**
Min. Length of Section (ft)	**3.30**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**328.08**
Search Radius Rcvr	**328.08**
Max. Distance Source - Rcvr	**3280.84 3280.84**
Min. Distance Rvcr - Reflector	**3.28 3.28**
Min. Distance Source - Reflector	**0.33**
Industrial (ISO 9613 (1996))	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (°F)	**50**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (mph)	**6.7**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R01		R01	53.2	37.8	51.3	0.0	0.0	0.0		x	Total	14.00	r	6503316.70	1792391.47	185.95
R02		R02	66.0	50.7	64.1	0.0	0.0	0.0		x	Total	14.00	r	6503792.08	1792298.97	155.27
R03		R03	70.6	55.3	68.7	0.0	0.0	0.0		x	Total	14.00	r	6503900.65	1792338.20	131.69
R04		R04	71.4	56.0	69.5	0.0	0.0	0.0		x	Total	14.00	r	6504013.17	1792302.44	129.00
R05		R05	68.7	53.4	66.8	0.0	0.0	0.0		x	Total	14.00	r	6504015.36	1792265.83	128.34
R06		R06	65.2	49.8	63.3	0.0	0.0	0.0		x	Total	14.00	r	6504016.16	1792226.02	127.00
R07		R07	68.3	52.9	66.4	0.0	0.0	0.0		x	Total	14.00	r	6504064.23	1792265.71	113.44
R08		R08	63.9	48.5	62.0	0.0	0.0	0.0		x	Total	14.00	r	6504064.20	1792231.57	113.89
R09		R09	71.8	56.5	69.9	0.0	0.0	0.0		x	Total	14.00	r	6504239.40	1792227.25	113.07
R10		R10	70.1	54.7	68.2	0.0	0.0	0.0		x	Total	14.00	r	6504240.03	1792187.25	114.07
R11		R11	68.5	53.2	66.6	0.0	0.0	0.0		x	Total	14.00	r	6504242.39	1792153.76	114.18
R12		R12	66.2	50.8	64.3	0.0	0.0	0.0		x	Total	14.00	r	6504238.04	1792100.50	115.39
R13		R13	62.1	46.7	60.2	0.0	0.0	0.0		x	Total	14.00	r	6504201.92	1792057.79	116.39
R14		R14	60.0	44.7	58.1	0.0	0.0	0.0		x	Total	14.00	r	6504187.97	1792024.62	116.78
R15		R15	57.6	42.2	55.7	0.0	0.0	0.0		x	Total	14.00	r	6504171.19	1791986.27	114.93

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height			Coordinates			
				left	right		horz.	vert.	Begin		End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
B01			B01	1.00	1.00				6.00	r		6504175.34	1792232.09	105.00	99.00
												6504253.76	1792232.70	105.00	99.00
B02			B02	1.00	1.00				6.00	r		6504253.76	1792232.70	105.00	99.00
												6504250.02	1792193.18	106.00	100.00
B03			B03	1.00	1.00				5.00	r		6504249.97	1792193.38	105.00	100.00
												6504251.92	1792112.28	105.00	100.00
B04			B04	1.00	1.00							6503898.82	1792355.22	124.02	118.02
												6503936.90	1792339.69	124.02	118.02
B05			B05	1.00	1.00				5.00	r		6503955.25	1792333.41	120.92	115.92
												6504032.68	1792304.73	120.00	115.00
B06			B06	1.00	1.00				5.00	r		6504032.68	1792304.73	120.00	115.00
												6504033.70	1792265.82	119.41	114.41
B07			B07	1.00	1.00				5.00	r		6504033.70	1792265.82	119.41	114.41
												6504034.73	1792226.91	118.00	113.00
B08			B08	1.00	1.00				6.00	r		6504061.39	1792272.27	108.06	102.06
												6504132.68	1792272.43	105.00	99.00
B09			B09	1.00	1.00							6503803.37	1792340.98	146.00	140.00
												6503810.85	1792336.28	146.00	140.00

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates			
							Begin	x	y	z	Ground
							(ft)	(ft)	(ft)	(ft)	(ft)

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)
I-780 WB			0	72.8	62.6	57.4			2503.0	237.0	73.0	2.3	2.3	2.3	65	55	14	0.0	1	0.0	0.0		
I-780 EB			0	72.8	62.6	57.4			2503.0	237.0	73.0	2.3	2.3	2.3	65	55	14	0.0	1	0.0	0.0		

RoadsGeo

Name	Height			Coordinates				Dist	LSlope
	Begin		End	x	y	z	Ground	(ft)	(%)
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)		
I-780 WB	0.00	r		6505292.14	1791898.17	24.96	24.96		
				6505194.63	1791966.53	28.00	28.00		
				6505048.81	1792061.64	32.96	32.96		
				6504955.18	1792117.35	36.99	36.99		
				6504802.81	1792204.88	41.01	41.01		
				6504695.59	1792261.57	46.00	46.00		
				6504585.80	1792316.04	52.01	52.01		
				6504386.01	1792404.15	62.99	62.99		
				6504275.66	1792451.35	69.00	69.00		
				6504087.19	1792521.97	78.99	78.99		
				6503958.31	1792565.84	85.97	85.97		
				6503839.79	1792601.54	91.97	91.97		
				6503666.79	1792650.21	100.99	100.99		
				6503552.44	1792679.71	106.98	106.98		
				6503113.49	1792768.36	128.01	128.01		
				6502805.54	1792827.84	142.55	142.55		
I-780 EB	0.00	r		6502808.06	1792753.64	138.51	138.51		
				6503359.28	1792648.86	114.95	114.95		
				6503494.04	1792621.36	107.99	107.99		
				6503665.68	1792579.25	98.99	98.99		
				6503781.79	1792547.69	92.98	92.98		
				6503912.11	1792506.35	86.00	86.00		
				6504063.11	1792455.67	78.00	78.00		
				6504176.31	1792413.84	72.00	72.00		
				6504364.80	1792337.05	62.00	62.00		
				6504614.81	1792222.35	47.97	47.97		
				6504750.94	1792156.22	41.00	41.00		
				6504992.42	1792021.73	32.00	32.00		
				6505179.81	1791901.72	25.98	25.98		
				6505226.21	1791868.04	23.87	23.87		

15304 - Vista Cove

CadnaA Noise Prediction Model: 15304-07_On-Site.cna
Date: 25.02.25
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (ft)	**6561.70**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (ft)	**3280.80**
Min. Length of Section (ft)	**3.30**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**7.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**328.08**
Search Radius Rcvr	**328.08**
Max. Distance Source - Rcvr	**3280.84 3280.84**
Min. Distance Rvcr - Reflector	**3.28 3.28**
Min. Distance Source - Reflector	**0.33**
Industrial (ISO 9613 (1996))	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (°F)	**50**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (mph)	**6.7**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R01		R01	48.4	33.0	46.5	0.0	0.0	0.0		x	Total	5.00	r	6503316.70	1792391.47	176.95
R02		R02	63.0	47.7	61.2	0.0	0.0	0.0		x	Total	5.00	r	6503792.08	1792298.97	146.27
R03		R03	68.3	52.9	66.4	0.0	0.0	0.0		x	Total	5.00	r	6503900.65	1792338.20	122.69
R04		R04	70.2	54.9	68.3	0.0	0.0	0.0		x	Total	5.00	r	6504013.17	1792302.44	120.00
R05		R05	64.2	48.8	62.3	0.0	0.0	0.0		x	Total	5.00	r	6504015.36	1792265.83	119.34
R06		R06	61.0	45.7	59.1	0.0	0.0	0.0		x	Total	5.00	r	6504016.16	1792226.02	118.00
R07		R07	62.8	47.5	60.9	0.0	0.0	0.0		x	Total	5.00	r	6504064.23	1792265.71	104.44
R08		R08	59.0	43.7	57.1	0.0	0.0	0.0		x	Total	5.00	r	6504064.20	1792231.57	104.89
R09		R09	70.7	55.4	68.8	0.0	0.0	0.0		x	Total	5.00	r	6504239.40	1792227.25	104.07
R10		R10	68.0	52.6	66.1	0.0	0.0	0.0		x	Total	5.00	r	6504240.03	1792187.25	105.07
R11		R11	66.5	51.2	64.6	0.0	0.0	0.0		x	Total	5.00	r	6504242.39	1792153.76	105.18
R12		R12	64.0	48.7	62.1	0.0	0.0	0.0		x	Total	5.00	r	6504238.04	1792100.50	106.39
R13		R13	59.2	43.8	57.3	0.0	0.0	0.0		x	Total	5.00	r	6504201.92	1792057.79	107.39
R14		R14	54.9	39.6	53.0	0.0	0.0	0.0		x	Total	5.00	r	6504187.97	1792024.62	107.78
R15		R15	51.4	36.1	49.5	0.0	0.0	0.0		x	Total	5.00	r	6504171.19	1791986.27	105.93

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates				
							Begin	x	y	z	Ground	
							(ft)	(ft)	(ft)	(ft)	(ft)	

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data							Speed Limit		SCS	Surface		Gradient	Mult. Reflection			
				Day	Evening	Night	DTV	Str.class.	M			p (%)				Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night		(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)
I-780 WB			0	72.8	62.6	57.4			2503.0	237.0	73.0	2.3	2.3	2.3		65	55	14	0.0	1	0.0	0.0		
I-780 EB			0	72.8	62.6	57.4			2503.0	237.0	73.0	2.3	2.3	2.3		65	55	14	0.0	1	0.0	0.0		

RoadsGeo

Name	Height				Coordinates				Dist	LSlope
	Begin		End		x	y	z	Ground	(ft)	(%)
	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)		
I-780 WB	0.00	r			6505292.14	1791898.17	24.97	24.97		
					6505194.63	1791966.53	28.00	28.00		
					6505048.81	1792061.64	32.96	32.96		
					6504955.18	1792117.35	36.99	36.99		
					6504802.81	1792204.88	41.01	41.01		
					6504695.59	1792261.57	46.00	46.00		
					6504585.80	1792316.04	52.01	52.01		
					6504386.01	1792404.15	62.99	62.99		
					6504275.66	1792451.35	69.00	69.00		
					6504087.19	1792521.97	78.99	78.99		
					6503958.31	1792565.84	85.97	85.97		
					6503839.79	1792601.54	91.97	91.97		
					6503666.79	1792650.21	100.99	100.99		
					6503552.44	1792679.71	106.98	106.98		

Name	Height				Coordinates				Dist	LSlope
	Begin		End		x	y	z	Ground	(ft)	(%)
	(ft)		(ft)		(ft)	(ft)	(ft)	(ft)		
					6503113.49	1792768.36	128.01	128.01		
					6502805.54	1792827.84	142.57	142.57		
I-780 EB	0.00	r			6502808.06	1792753.64	138.73	138.73		
					6503359.28	1792648.86	114.95	114.95		
					6503494.04	1792621.36	107.99	107.99		
					6503665.68	1792579.25	98.99	98.99		
					6503781.79	1792547.69	92.98	92.98		
					6503912.11	1792506.35	86.00	86.00		
					6504063.11	1792455.67	78.00	78.00		
					6504176.31	1792413.84	72.00	72.00		
					6504364.80	1792337.05	62.00	62.00		
					6504614.81	1792222.35	47.97	47.97		
					6504750.94	1792156.22	41.00	41.00		
					6504992.42	1792021.73	32.00	32.00		
					6505179.81	1791901.72	25.98	25.98		
					6505226.21	1791868.04	23.91	23.91		

15304 - Vista Cove

CadnaA Noise Prediction Model: 15304-07_On-Site_Mitigated.cna
Date: 25.02.25
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (ft)	**6561.70**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (ft)	**3280.80**
Min. Length of Section (ft)	**3.30**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**0.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**328.08**
Search Radius Rcvr	**328.08**
Max. Distance Source - Rcvr	**3280.84 3280.84**
Min. Distance Rvcr - Reflector	**3.28 3.28**
Min. Distance Source - Reflector	**0.33**
Industrial (ISO 9613 (1996))	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (°F)	**50**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (mph)	**6.7**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R01		R01	48.0	32.7	46.1	0.0	0.0	0.0		x	Total	5.00	r	6503316.70	1792391.47	176.95
R02		R02	61.6	46.3	59.7	0.0	0.0	0.0		x	Total	5.00	r	6503792.08	1792298.97	146.27
R03		R03	61.8	46.5	59.9	0.0	0.0	0.0		x	Total	5.00	r	6503900.65	1792338.20	122.69
R04		R04	60.7	45.4	58.9	0.0	0.0	0.0		x	Total	5.00	r	6504013.17	1792302.44	120.00
R05		R05	57.6	42.2	55.7	0.0	0.0	0.0		x	Total	5.00	r	6504015.36	1792265.83	119.34
R06		R06	56.0	40.7	54.1	0.0	0.0	0.0		x	Total	5.00	r	6504016.16	1792226.02	118.00
R07		R07	57.9	42.5	56.0	0.0	0.0	0.0		x	Total	5.00	r	6504064.23	1792265.71	104.84
R08		R08	55.9	40.6	54.0	0.0	0.0	0.0		x	Total	5.00	r	6504064.20	1792231.57	105.76
R09		R09	59.5	44.2	57.6	0.0	0.0	0.0		x	Total	5.00	r	6504239.40	1792227.25	104.00
R10		R10	59.2	43.9	57.3	0.0	0.0	0.0		x	Total	5.00	r	6504240.03	1792187.25	104.14
R11		R11	59.1	43.8	57.2	0.0	0.0	0.0		x	Total	5.00	r	6504242.39	1792153.76	104.70
R12		R12	61.9	46.5	60.0	0.0	0.0	0.0		x	Total	5.00	r	6504238.04	1792100.50	106.39
R13		R13	60.5	45.2	58.6	0.0	0.0	0.0		x	Total	5.00	r	6504201.92	1792057.79	107.39
R14		R14	56.7	41.4	54.8	0.0	0.0	0.0		x	Total	5.00	r	6504187.97	1792024.62	107.78
R15		R15	50.8	35.4	48.9	0.0	0.0	0.0		x	Total	5.00	r	6504171.19	1791986.27	105.93

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height			Coordinates			
				left	right		horz.	vert.	Begin		End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
R9 North			L17	1.00	1.00				6.00	r		6504175.34	1792232.09	105.00	99.00
												6504253.76	1792232.70	105.00	99.00
R9 East			L17	1.00	1.00				6.00	r		6504253.76	1792232.70	105.00	99.00
												6504250.02	1792193.18	105.00	99.00
R10-R11			L17	1.00	1.00				5.00	r		6504249.97	1792193.38	104.00	99.00
												6504251.92	1792112.28	105.05	100.05
R03 NE			L 8	1.00	1.00							6503898.82	1792355.22	124.02	118.02
												6503936.90	1792339.69	124.02	118.02
R4 NE			L 8	1.00	1.00				5.00	r		6503955.25	1792333.41	120.92	115.92
												6504032.68	1792304.73	120.00	115.00
R4 E			L 8	1.00	1.00				5.00	r		6504032.68	1792304.73	120.00	115.00
												6504033.70	1792265.82	119.41	114.41
R5			L 8	1.00	1.00				4.00	r		6504033.70	1792265.82	118.41	114.41
												6504034.73	1792226.91	117.00	113.00
R7 N			L 8	1.00	1.00							6504061.39	1792272.27	105.00	100.00
												6504132.68	1792272.43	105.00	100.00
R02			L 8	1.00	1.00							6503803.37	1792340.98	146.00	140.00
												6503810.85	1792336.28	146.00	140.00

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates			
							Begin	x	y	z	Ground
							(ft)	(ft)	(ft)	(ft)	(ft)

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)
I-780 WB			0	72.8	62.6	57.4			2503.0	237.0	73.0	2.3	2.3	2.3	65	55	14	0.0	1	0.0	0.0		
I-780 EB			0	72.8	62.6	57.4			2503.0	237.0	73.0	2.3	2.3	2.3	65	55	14	0.0	1	0.0	0.0		

RoadsGeo

Name	Height			Coordinates				Dist	LSlope
	Begin		End	x	y	z	Ground	(ft)	(%)
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)		
I-780 WB	0.00	r		6505292.14	1791898.17	24.96	24.96		
				6505194.63	1791966.53	28.00	28.00		
				6505048.81	1792061.64	32.96	32.96		
				6504955.18	1792117.35	36.99	36.99		
				6504802.81	1792204.88	41.01	41.01		
				6504695.59	1792261.57	46.00	46.00		
				6504585.80	1792316.04	52.01	52.01		
				6504386.01	1792404.15	62.99	62.99		
				6504275.66	1792451.35	69.00	69.00		
				6504087.19	1792521.97	78.99	78.99		
				6503958.31	1792565.84	85.97	85.97		
				6503839.79	1792601.54	91.97	91.97		
				6503666.79	1792650.21	100.99	100.99		
				6503552.44	1792679.71	106.98	106.98		
				6503113.49	1792768.36	128.01	128.01		
				6502805.54	1792827.84	142.55	142.55		
I-780 EB	0.00	r		6502808.06	1792753.64	138.51	138.51		
				6503359.28	1792648.86	114.95	114.95		
				6503494.04	1792621.36	107.99	107.99		
				6503665.68	1792579.25	98.99	98.99		
				6503781.79	1792547.69	92.98	92.98		
				6503912.11	1792506.35	86.00	86.00		
				6504063.11	1792455.67	78.00	78.00		
				6504176.31	1792413.84	72.00	72.00		
				6504364.80	1792337.05	62.00	62.00		
				6504614.81	1792222.35	47.97	47.97		
				6504750.94	1792156.22	41.00	41.00		
				6504992.42	1792021.73	32.00	32.00		
				6505179.81	1791901.72	25.98	25.98		
				6505226.21	1791868.04	23.87	23.87		

This page intentionally left blank

APPENDIX 10.1:

OPERATIONAL NOISE LEVEL CALCULATIONS

This page intentionally left blank

15304 - Vista Cove

CadnaA Noise Prediction Model: 15304-03_Operation.cna
Date: 25.02.25
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (ft)	**6561.70**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (ft)	**3280.80**
Min. Length of Section (ft)	**3.30**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**7.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**328.08**
Search Radius Rcvr	**328.08**
Max. Distance Source - Rcvr	**3280.84 3280.84**
Min. Distance Rvcr - Reflector	**3.28 3.28**
Min. Distance Source - Reflector	**0.33**
Industrial (ISO 9613 (1996))	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (°F)	**50**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (mph)	**6.7**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates			
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)	
R1		R1	29.8	29.8	36.5	0.0	0.0	0.0		x	Total	5.00	r	6503195.07	1792238.17	203.86	
R2		R2	32.5	32.5	39.2	0.0	0.0	0.0		x	Total	5.00	r	6503356.55	1792236.21	186.21	
R3		R3	29.7	29.7	36.4	0.0	0.0	0.0		x	Total	5.00	r	6503526.26	1792261.78	171.00	
R4		R4	31.6	31.6	38.2	0.0	0.0	0.0		x	Total	5.00	r	6503537.30	1791883.32	168.35	
R5		R5	33.3	33.3	40.0	0.0	0.0	0.0		x	Total	5.00	r	6503448.24	1791631.50	172.00	
R6		R6	23.7	23.7	30.4	0.0	0.0	0.0		x	Total	5.00	r	6504520.65	1792550.76	54.26	

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC001		AC001	76.0	76.0	76.0	Lw	76					3.00	r	6503331.76	1792349.37	173.00
AC002		AC002	76.0	76.0	76.0	Lw	76					3.00	r	6503358.01	1792385.64	175.82
AC003		AC003	76.0	76.0	76.0	Lw	76					3.00	r	6503781.49	1792258.40	144.00
AC004		AC004	76.0	76.0	76.0	Lw	76					3.00	r	6503862.56	1792203.03	118.00
AC005		AC005	76.0	76.0	76.0	Lw	76					3.00	r	6503861.39	1792240.00	118.86
AC006		AC006	76.0	76.0	76.0	Lw	76					3.00	r	6503860.26	1792276.33	119.87
AC007		AC007	76.0	76.0	76.0	Lw	76					3.00	r	6503860.33	1792316.93	120.54
AC008		AC008	76.0	76.0	76.0	Lw	76					3.00	r	6504022.10	1792280.50	118.00
AC009		AC009	76.0	76.0	76.0	Lw	76					3.00	r	6504021.73	1792241.40	116.52
AC010		AC010	76.0	76.0	76.0	Lw	76					3.00	r	6504023.14	1792215.83	115.83
AC011		AC011	76.0	76.0	76.0	Lw	76					3.00	r	6504010.82	1792152.94	115.00
AC012		AC012	76.0	76.0	76.0	Lw	76					3.00	r	6504047.64	1792119.96	105.20
AC013		AC013	76.0	76.0	76.0	Lw	76					3.00	r	6504061.86	1792151.33	104.31
AC014		AC014	76.0	76.0	76.0	Lw	76					3.00	r	6504071.05	1792176.44	103.84

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)
AC015		AC015	76.0	76.0	76.0	Lw	76					3.00	r	6504070.64	1792212.29	102.81
AC016		AC016	76.0	76.0	76.0	Lw	76					3.00	r	6504070.74	1792264.11	102.38
AC017		AC017	76.0	76.0	76.0	Lw	76					3.00	r	6504230.75	1792206.09	102.67
AC018		AC018	76.0	76.0	76.0	Lw	76					3.00	r	6504234.76	1792170.96	103.25
AC019		AC019	76.0	76.0	76.0	Lw	76					3.00	r	6504230.04	1792124.44	103.46
AC020		AC020	76.0	76.0	76.0	Lw	76					3.00	r	6504201.67	1792074.53	104.86
AC021		AC021	76.0	76.0	76.0	Lw	76					3.00	r	6504190.62	1792039.09	105.78
AC022		AC022	76.0	76.0	76.0	Lw	76					3.00	r	6504173.64	1792005.93	105.26
AC023		AC023	76.0	76.0	76.0	Lw	76					3.00	r	6504160.52	1791970.38	103.41
AC024		AC024	76.0	76.0	76.0	Lw	76					3.00	r	6503792.48	1791935.18	113.00
AC025		AC025	76.0	76.0	76.0	Lw	76					3.00	r	6503821.63	1791906.11	111.51
AC026		AC026	76.0	76.0	76.0	Lw	76					3.00	r	6503854.79	1791889.21	109.53
AC027		AC027	76.0	76.0	76.0	Lw	76					3.00	r	6503888.09	1791869.73	106.62
AC028		AC028	76.0	76.0	76.0	Lw	76					3.00	r	6503922.29	1791852.89	105.00
AC029		AC029	76.0	76.0	76.0	Lw	76					3.00	r	6503954.53	1791833.86	103.52
AC030		AC030	76.0	76.0	76.0	Lw	76					3.00	r	6503726.80	1791768.16	111.48
AC031		AC031	76.0	76.0	76.0	Lw	76					3.00	r	6503765.69	1791751.06	109.77
AC032		AC032	76.0	76.0	76.0	Lw	76					3.00	r	6503800.05	1791731.11	107.84
AC033		AC033	76.0	76.0	76.0	Lw	76					3.00	r	6503835.40	1791712.26	105.83
AC034		AC034	76.0	76.0	76.0	Lw	76					3.00	r	6503871.60	1791690.51	104.75
AC035		AC035	76.0	76.0	76.0	Lw	76					3.00	r	6503798.17	1791683.27	109.59
AC036		AC036	76.0	76.0	76.0	Lw	76					3.00	r	6503731.49	1791723.80	113.73
AC037		AC037	76.0	76.0	76.0	Lw	76					3.00	r	6503762.83	1791702.12	108.88
AC038		AC038	76.0	76.0	76.0	Lw	76					3.00	r	6503835.49	1791664.78	107.88
AC039		AC039	76.0	76.0	76.0	Lw	76					3.00	r	6503868.71	1791646.85	106.25
AC040		AC040	76.0	76.0	76.0	Lw	76					3.00	r	6503660.47	1791573.38	113.77
AC041		AC041	76.0	76.0	76.0	Lw	76					3.00	r	6503697.48	1791552.54	111.35
AC042		AC042	76.0	76.0	76.0	Lw	76					3.00	r	6503736.51	1791532.85	109.75
AC043		AC043	76.0	76.0	76.0	Lw	76					3.00	r	6503774.48	1791513.62	107.74
AC044		AC044	76.0	76.0	76.0	Lw	76					3.00	r	6503921.62	1791483.23	106.00
AC045		AC045	76.0	76.0	76.0	Lw	76					3.00	r	6503935.00	1791514.12	106.00
AC046		AC046	76.0	76.0	76.0	Lw	76					3.00	r	6503955.55	1791546.96	106.00
AC047		AC047	76.0	76.0	76.0	Lw	76					3.00	r	6503974.12	1791578.13	105.71
AC048		AC048	76.0	76.0	76.0	Lw	76					3.00	r	6503992.91	1791614.51	104.76
AC049		AC049	76.0	76.0	76.0	Lw	76					3.00	r	6504005.26	1791645.34	103.94
AC050		AC050	76.0	76.0	76.0	Lw	76					3.00	r	6504024.05	1791681.73	103.30
AC051		AC051	76.0	76.0	76.0	Lw	76					3.00	r	6504039.85	1791715.86	102.83

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates				
							Begin	x	y	z	Ground	
							(ft)	(ft)	(ft)	(ft)	(ft)	

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height		Coordinates				Dist	LSlope
	Begin	End	x	y	z	Ground	(ft)	(%)
	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)		

This page intentionally left blank

APPENDIX 11.1:

CONSTRUCTION NOISE LEVEL CALCULATIONS

This page intentionally left blank

15304 - Vista Cove

CadnaA Noise Prediction Model: 15304-07_Construction.cna
Date: 25.02.25
Analyst: B. Maddux

Calculation Configuration

Configuration	
Parameter	**Value**
General	
Max. Error (dB)	**0.00**
Max. Search Radius (ft)	**6561.70**
Min. Dist Src to Rcvr	**0.00**
Partition	
Raster Factor	**0.50**
Max. Length of Section (ft)	**3280.80**
Min. Length of Section (ft)	**3.30**
Min. Length of Section (%)	**0.00**
Proj. Line Sources	**On**
Proj. Area Sources	**On**
Ref. Time	
Daytime Penalty (dB)	**0.00**
Recr. Time Penalty (dB)	**5.00**
Night-time Penalty (dB)	**10.00**
DTM	
Standard Height (m)	**7.00**
Model of Terrain	**Triangulation**
Reflection	
max. Order of Reflection	**2**
Search Radius Src	**328.08**
Search Radius Rcvr	**328.08**
Max. Distance Source - Rcvr	**3280.84 3280.84**
Min. Distance Rvcr - Reflector	**3.28 3.28**
Min. Distance Source - Reflector	**0.33**
Industrial (ISO 9613 (1996))	
Lateral Diffraction	**some Obj**
Obst. within Area Src do not shield	**On**
Screening	**Incl. Ground Att. over Barrier**
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	**3.0 20.0 0.0**
Temperature (°F)	**50**
rel. Humidity (%)	**70**
Ground Absorption G	**0.50**
Wind Speed for Dir. (mph)	**6.7**
Roads (TNM)	
Railways (FTA/FRA)	
Aircraft (???)	
Strictly acc. to AzB	

Receiver Noise Levels

Name	M.	ID	Level Lr			Limit. Value			Land Use			Height		Coordinates		
			Day	Night	CNEL	Day	Night	CNEL	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)				(ft)		(ft)	(ft)	(ft)
R1		R1	59.3	-40.7	56.3	0.0	0.0	0.0		x	Total	5.00	r	6503195.07	1792238.17	203.86
R2		R2	61.8	-38.2	58.8	0.0	0.0	0.0		x	Total	5.00	r	6503356.55	1792236.21	186.21
R3		R3	65.0	-35.0	62.0	0.0	0.0	0.0		x	Total	5.00	r	6503526.26	1792261.78	171.00
R4		R4	60.1	-39.9	57.0	0.0	0.0	0.0		x	Total	5.00	r	6503537.30	1791883.32	168.35
R5		R5	59.4	-40.6	56.4	0.0	0.0	0.0		x	Total	5.00	r	6503448.24	1791631.50	172.00
R6		R6	53.3	-46.7	50.3	0.0	0.0	0.0		x	Total	5.00	r	6504520.65	1792550.76	54.26

Point Source(s)

Name	M.	ID	Result. PWL			Lw / Li			Operating Time			Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Special	Night			X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	(ft)		(ft)	(ft)	(ft)

Line Source(s)

Name	M.	ID	Result. PWL			Result. PWL'			Lw / Li			Operating Time			Moving Pt. Src				Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	Number			Speed		
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)	Day	Evening	Night	(mph)	(ft)	

Name	ID	Height		Coordinates			
		Begin	End	x	y	z	Ground
		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Area Source(s)

Name	M.	ID	Result. PWL			Result. PWL''			Lw / Li			Operating Time			Height	
			Day	Evening	Night	Day	Evening	Night	Type	Value	norm.	Day	Special	Night	(ft)	
			(dBA)	(dBA)	(dBA)	(dBA)	(dBA)	(dBA)			dB(A)	(min)	(min)	(min)		
CA1		CA1	116.6	16.6	16.6	69.6	-30.4	-30.4	PWL-Pt	116.6					8	r

Name	ID	Height			Coordinates			
		Begin		End	x	y	z	Ground
		(ft)		(ft)	(ft)	(ft)	(ft)	(ft)
CA1	CA1	8.00	r		6503210.20	1792311.50	193.08	185.08
					6503204.52	1792440.12	197.51	189.51
					6503742.16	1792343.49	160.28	152.28
					6504059.96	1792395.18	86.92	78.92
					6504303.45	1792284.95	78.29	70.29
					6503984.95	1791380.87	79.43	71.43
					6503930.15	1791412.37	84.08	76.08
					6503893.86	1791422.29	86.35	78.35
					6503802.39	1791431.35	92.34	84.34
					6503733.25	1791467.62	99.06	91.06
					6503645.53	1791502.94	108.75	100.75
					6503653.51	1792290.88	159.11	151.11
					6503438.72	1792290.09	172.88	164.88
					6503436.62	1792303.14	174.00	166.00
					6503427.30	1792308.87	174.00	166.00
					6503409.87	1792310.69	175.35	167.35

Barrier(s)

Name	Sel.	M.	ID	Absorption		Z-Ext.	Cantilever		Height		Coordinates			
				left	right		horz.	vert.	Begin	End	x	y	z	Ground
						(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)

Building(s)

Name	Sel.	M.	ID	RB	Residents	Absorption	Height	Coordinates				
							Begin	x	y	z	Ground	
							(ft)	(ft)	(ft)	(ft)	(ft)	

Ground Absorption(s)

Name	Sel.	M.	ID	G	Coordinates	
					x	y
					(ft)	(ft)

Vertical Area Source(s)

Name	ID	Height			Coordinates			
		Begin		End	x	y	z	Ground
		(ft)		(ft)	(ft)	(ft)	(ft)	(ft)

Rail

Name	Sel.	M.	ID	Lw'		Train Class	Correct.	Vmax
				Day	Night		Track	
				(dBA)	(dBA)		(dB)	(km(mph)

Sound Level Spectra

Name	ID	Type	Oktave Spectrum (dB)											Source
			Weight.	31.5	63	125	250	500	1000	2000	4000	8000	A	lin	

Roads

Name	Sel.	M.	ID	Lme			Count Data		exact Count Data						Speed Limit		SCS	Surface		Gradient	Mult. Reflection		
				Day	Evening	Night	DTV	Str.class.	M			p (%)			Auto	Truck	Dist.	Dstro	Type		Drefl	Hbuild	Dist.
				(dBA)	(dBA)	(dBA)			Day	Evening	Night	Day	Evening	Night	(mph)	(mph)		(dB)		(%)	(dB)	(ft)	(ft)

RoadsGeo

Name	Height			Coordinates				Dist	LSlope
	Begin		End	x	y	z	Ground	(ft)	(%)
	(ft)		(ft)	(ft)	(ft)	(ft)	(ft)		

This page intentionally left blank

APPENDIX I

TRANSPORTATION ANALYSIS AND LOS WORKSHEETS

CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: January 9, 2025

TO: Cesar Orozco, City of Vallejo

FROM: Arthur Black, Principal

SUBJECT: Transportation Analysis for the Vista Cove Project (LSA Project No. 20241845)

LSA reviewed the proposed construction of 51 single family residential dwelling units at the northeast corner of Shady Lane and Wildflower Street (Vista Cove Project or proposed project) to determine if the project would conflict with or create inconsistency with California Environmental Quality Act (CEQA) Guidelines Section 15064.3, subdivision (b), as required. This memorandum provides supporting evidence that the project would be consistent with the State's priorities of reducing greenhouse gas (GHG) emissions and encouraging housing development, which is the intent of Senate Bill (SB) 743.

The project would be located south of Interstate 780 (I-780) on the southeast border of Vallejo, California. Residential land uses are west and south of the project site. The project site is currently vacant land immediately adjacent to an existing residential neighborhood.

PROJECT TRIP GENERATION

As stated previously, the Vista Cove project would construct 51 single-family homes. The Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition (2021) provides trip generation rates for this land use. These trip rates are based on data collected at more than 150 single-family residential communities between the 1980s and 2010s, which were pre-pandemic and prior to the rise in prevalence of remote work. As such, these trip rates may be higher than current residential trip production, and are therefore a conservative approach. Table A summarizes the projected project trip generation for the proposed project. As Table A indicates, the proposed project is anticipated to generate 481 new daily trips.

Table A: Trip Generation

Land Use (ITE Land Use Code)	Size	Unit	ADT	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates[1]									
Single-Family Detached Housing (210)		DU	9.43	0.17	0.53	0.70	0.59	0.35	0.94
Proposed Project Trip Generation									
Proposed Project	51	DU	481	9	26	35	30	18	48
Total Trip Generation			**481**	**9**	**26**	**35**	**30**	**18**	**48**

[1] Trip rates based on the Institute of Transportation Engineers (ITE) *Trip Generation* Manual, 11th Edition (2021).
ADT = average daily traffic
DU = dwelling unit

ANALYSIS THRESHOLD

The State revised its *State CEQA Guidelines* in January 2019. Among the revisions, vehicle delay and level of service analysis have been removed from consideration under CEQA consistent with SB 743. The current *State CEQA Guidelines* prescribe the evaluation of transportation impacts on a project's effect on vehicle miles traveled (VMT). At the time of this revision, a deadline of July 1, 2020 was established for jurisdictions to adopt thresholds for evaluation of transportation impacts according to VMT. Staff at the City of Vallejo (City) prepared draft *CEQA Transportation Impact Analysis Guidelines* in July 2020, which were revised in October 2020; however, they have not been formally adopted. Prior to the revised *State CEQA Guidelines,* the City adopted the *City of Vallejo Traffic Impact Analysis/Study Guidelines*, which established that small projects that would add fewer than 500 daily two-way trips or 100 peak period two-way trips were below the threshold for requiring transportation analysis.

State CEQA Guidelines Section 15064.7(c) states:

> When adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies or recommended by experts, provided the decision of the lead agency is supported by substantial evidence.

In addition, Solano County has also not adopted guidelines regarding VMT or thresholds of significance. In the absence of formally adopted thresholds the City, as the lead agency, may consider a threshold of significance supported by substantial evidence.

Simultaneous with clearance of the revised *State CEQA Guidelines*, the Governor's Office of Planning and Research (OPR), now known as Governor's Office of Land Use and Climate Innovation (LCI) released the *Technical Advisory for Evaluating Transportation Impacts under CEQA*, December 2018 (Technical Advisory). The Technical Advisory states that the document's purpose is "to provide advice and recommendations, which agencies and other entities may use at their discretion." The Technical Advisory goes on to state that it "does not alter lead agency discretion in preparing environmental documents subject to CEQA" and "should not be construed as legal advice."

The Technical Advisory suggests that small projects generating fewer than 110 trips per day, residential and office projects in VMT efficient areas, projects near high-quality transit, affordable residential development, and local-serving retail uses may be presumed to have a less than significant impact on VMT. As shown in Table A, the project would generate more than 110 trips per day. While the Technical Advisory recommends a threshold of 110 trips per day for a small project this recommendation is not relevant to the original intent of modifications to the *State CEQA Guidelines*, which was to reduce GHG emissions. In addition, the recommendation is not specific to residential development as it solely references office development (see footnote 19 of the Technical Advisory).

The State has prioritizes the reduction of GHG emissions while also encourages housing development. To this end, Section 1(b)(2) of SB 743 identifies that support of infill development was an intent of the Legislature when passing SB 743. This memorandum provides analysis and evidence demonstrating that the recommended 110-daily-trip threshold is not appropriate to meet the State's simultaneous priorities of reducing GHG emissions and encouraging housing development or the intent of the Legislature when passing SB 743 to support infill development. Infill development is generally situated within existing city boundaries and is surrounded by urban development. The project site is located within the existing city boundary, is adjacent to an existing residential neighborhood and interstate highway with additional urban development located north, south, and east of the project site beyond the interstate highway.

SMALL PROJECT EFFECT ON GHG EMISSIONS

One of the stated goals of SB 743 is to reduce GHG emissions. The California Emissions Estimator Model (CalEEMod) is provided by the California Air Resources Board to be used Statewide for developing project-level GHG emissions. LSA used results from this model to correlate the effect of changes in residential project-related daily trips to the resulting GHG emissions. CalEEMod was used with built-in default trip lengths and types to show the vehicular GHG emissions from incremental amounts of daily trips. Table B shows the resulting annual VMT and GHG emissions from the incremental daily trips.

Table B: Representative VMT and GHG Emissions from CalEEMod

Daily Trips	Annual Vehicle Miles Traveled (VMT)	GHG Emissions (Metric Tons CO2e per year)
200	683,430	258
300	1,021,812	386
400	1,386,416	514
500	1.703,020	643
600	2,043,623	771

Source: CalEEMod version 2016.3.2.
CalEEMod = California Emissions Estimator Model
CO_2e = carbon dioxide equivalent
GHG = greenhouse gas

A common GHG emission threshold is 3,000 metric tons (MT) of carbon dioxide equivalent (CO_2e) per year. The vehicle emissions are typically more than 50 percent of the total project GHG

emissions, the other 50 percent coming from on-site and project-related activities (e.g., electricity generation). Thus, a project with 500 daily trips (i.e., the City's pre-existing screening threshold for transportation analysis) would generally have total project emissions that could be less than 1,300 MT CO_2e/year (i.e., 50 percent or 643 MT CO_2e/year coming from vehicle emissions and the other 50 percent coming from other project activities). As this level of GHG emissions would be less than 3,000 MT CO_2e/year, the emissions of GHG from a project up to 500 ADT would typically be less than significant.

The CalEEMod analysis described above is consistent with guidance from the Bay Area Air Quality Management District (BAAQMD). BAAQMD provides guidelines for jurisdictions in the Bay Area (such as Vallejo) in regard to analysis, mitigation, and management of air pollutant and GHG under CEQA. Table 4-4 of the *California Environmental Quality Act Air Quality Guidelines* (BAAQMD, 2022) provides screening levels for single land use projects. These guidelines state that up to 421 single family homes would be appropriately screened from analysis as they would operate below the GHG emissions thresholds. The project proposes about 12 percent of the 421 single family homes that would be presumed to have a less than significant impact on GHG according to BAAQMD guidelines. If a residential project producing fewer than 500 daily trips produces fewer GHG emissions according to CalEEMod than the emissions threshold and is below the screening threshold of the BAAQMD guidelines and one of the stated goals of the VMT enabling legislation is to reduce GHG emissions, then the City's pre-existing threshold of 500 daily trips is still valid to determine when small projects would have a less than significant impact on transportation.

PROJECT SIGNIFICANCE

The Vista Cove project is immediately adjacent to an existing residential neighborhood and would construct 51 dwelling units extending that existing residential neighborhood within the city limits of Vallejo. Section 1(b)(2) of SB 743 identifies that support of infill development was an intent of the Legislature when passing SB 743. Another stated goal is to reduce GHG emissions. CEQA allows a lead agency discretion to use a threshold supported by substantial evidence. Given that the proposed project's 51 dwelling units is below the 421 dwelling unit screening level identified by BAAQMD and the 481 daily trips would produce GHG emissions at a level below a common threshold of significance, the City could apply these findings as substantial evidence for a determination of less than significant.

The proposed project extends existing residential development and would have a less than significant impact on GHG emissions because it is a small project, and as such would not conflict or be inconsistent with *State CEQA Guidelines* section 15064.3, subdivision (b).

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	19	138	862	29	127	569
Future Volume (veh/h)	19	138	862	29	127	569
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	166	1039	35	153	686
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	253	225	1387	47	200	2220
Arrive On Green	0.14	0.14	0.40	0.40	0.11	0.62
Sat Flow, veh/h	1781	1585	3601	118	1781	3647
Grp Volume(v), veh/h	23	166	526	548	153	686
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1849	1781	1777
Q Serve(g_s), s	0.4	3.9	9.8	9.8	3.2	3.5
Cycle Q Clear(g_c), s	0.4	3.9	9.8	9.8	3.2	3.5
Prop In Lane	1.00	1.00		0.06	1.00	
Lane Grp Cap(c), veh/h	253	225	703	731	200	2220
V/C Ratio(X)	0.09	0.74	0.75	0.75	0.76	0.31
Avail Cap(c_a), veh/h	831	740	829	863	485	3040
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	15.9	10.0	10.0	16.6	3.4
Incr Delay (d2), s/veh	0.2	4.7	3.2	3.1	5.9	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.5	3.3	3.4	1.4	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.5	20.5	13.2	13.1	22.6	3.4
LnGrp LOS	B	C	B	B	C	A
Approach Vol, veh/h	189		1074			839
Approach Delay, s/veh	19.8		13.1			6.9
Approach LOS	B		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.8	19.8			28.6	10.0
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	10.5	18.0			33.0	18.0
Max Q Clear Time (g_c+I1), s	5.2	11.8			5.5	5.9
Green Ext Time (p_c), s	0.2	3.4			5.2	0.4

Intersection Summary	
HCM 7th Control Delay, s/veh	11.3
HCM 7th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	79	209	589	57	273	774
Future Volume (veh/h)	79	209	589	57	273	774
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	84	222	627	61	290	823
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	341	303	934	91	357	2110
Arrive On Green	0.19	0.19	0.29	0.29	0.20	0.59
Sat Flow, veh/h	1781	1585	3366	318	1781	3647
Grp Volume(v), veh/h	84	222	340	348	290	823
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1813	1781	1777
Q Serve(g_s), s	1.7	5.5	7.1	7.1	6.5	5.1
Cycle Q Clear(g_c), s	1.7	5.5	7.1	7.1	6.5	5.1
Prop In Lane	1.00	1.00		0.18	1.00	
Lane Grp Cap(c), veh/h	341	303	507	518	357	2110
V/C Ratio(X)	0.25	0.73	0.67	0.67	0.81	0.39
Avail Cap(c_a), veh/h	766	682	764	780	447	2802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.4	15.9	13.2	13.2	16.0	4.5
Incr Delay (d2), s/veh	0.4	3.4	1.5	1.5	8.8	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.0	2.5	2.5	3.1	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.7	19.3	14.8	14.7	24.8	4.6
LnGrp LOS	B	B	B	B	C	A
Approach Vol, veh/h	306		688			1113
Approach Delay, s/veh	18.1		14.7			9.9
Approach LOS	B		B			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	12.9	16.4				29.3	12.5
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	10.5	18.0				33.0	18.0
Max Q Clear Time (g_c+I1), s	8.5	9.1				7.1	7.5
Green Ext Time (p_c), s	0.2	2.8				6.4	0.7

Intersection Summary		
HCM 7th Control Delay, s/veh		12.7
HCM 7th LOS		B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	23	160	862	30	135	569
Future Volume (veh/h)	23	160	862	30	135	569
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	28	193	1039	36	163	686
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	291	259	1349	47	213	2187
Arrive On Green	0.16	0.16	0.39	0.39	0.12	0.62
Sat Flow, veh/h	1781	1585	3597	121	1781	3647
Grp Volume(v), veh/h	28	193	527	548	163	686
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1849	1781	1777
Q Serve(g_s), s	0.5	4.7	10.5	10.5	3.6	3.7
Cycle Q Clear(g_c), s	0.5	4.7	10.5	10.5	3.6	3.7
Prop In Lane	1.00	1.00		0.07	1.00	
Lane Grp Cap(c), veh/h	291	259	684	712	213	2187
V/C Ratio(X)	0.10	0.75	0.77	0.77	0.77	0.31
Avail Cap(c_a), veh/h	789	702	787	818	460	2885
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	16.2	10.9	10.9	17.3	3.7
Incr Delay (d2), s/veh	0.1	4.3	4.1	3.9	5.6	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.7	3.8	3.9	1.6	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	14.6	20.5	15.0	14.9	23.0	3.8
LnGrp LOS	B	C	B	B	C	A
Approach Vol, veh/h	221		1075			849
Approach Delay, s/veh	19.7		14.9			7.5
Approach LOS	B		B			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.4	20.2			29.5	11.1
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	10.5	18.0			33.0	18.0
Max Q Clear Time (g_c+I1), s	5.6	12.5			5.7	6.7
Green Ext Time (p_c), s	0.2	3.1			5.2	0.5

Intersection Summary	
HCM 7th Control Delay, s/veh	12.5
HCM 7th LOS	B

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	82	224	589	62	299	774
Future Volume (veh/h)	82	224	589	62	299	774
Initial Q (Qb), veh	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	87	238	627	66	318	823
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	356	317	910	96	381	2119
Arrive On Green	0.20	0.20	0.28	0.28	0.21	0.60
Sat Flow, veh/h	1781	1585	3338	341	1781	3647
Grp Volume(v), veh/h	87	238	343	350	318	823
Grp Sat Flow(s),veh/h/ln	1781	1585	1777	1809	1781	1777
Q Serve(g_s), s	1.8	6.2	7.6	7.6	7.5	5.4
Cycle Q Clear(g_c), s	1.8	6.2	7.6	7.6	7.5	5.4
Prop In Lane	1.00	1.00		0.19	1.00	
Lane Grp Cap(c), veh/h	356	317	498	507	381	2119
V/C Ratio(X)	0.24	0.75	0.69	0.69	0.83	0.39
Avail Cap(c_a), veh/h	726	646	724	737	423	2654
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.9	16.6	14.2	14.2	16.6	4.7
Incr Delay (d2), s/veh	0.4	3.6	1.7	1.7	12.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.3	2.8	2.8	3.9	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	15.2	20.2	15.9	15.9	29.0	4.8
LnGrp LOS	B	C	B	B	C	A
Approach Vol, veh/h	325		693			1141
Approach Delay, s/veh	18.9		15.9			11.5
Approach LOS	B		B			B

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	14.0	16.9				30.9	13.3
Change Period (Y+Rc), s	4.5	4.5				4.5	4.5
Max Green Setting (Gmax), s	10.5	18.0				33.0	18.0
Max Q Clear Time (g_c+I1), s	9.5	9.6				7.4	8.2
Green Ext Time (p_c), s	0.1	2.8				6.3	0.8

Intersection Summary	
HCM 7th Control Delay, s/veh	14.0
HCM 7th LOS	B

This page intentionally left blank

CARLSBAD
CLOVIS
EMERYVILLE
IRVINE
LOS ANGELES
PALM SPRINGS
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: January 15, 2026

TO: Cesar Orozco, Planning Manager, City of Vallejo

FROM: Theresa Wallace, AICP, Principal
Florentina Craciun, Senior Environmental Planner

SUBJECT: Vista Cove Planned Development Project Subsequent Initial Study/Mitigated Negative Declaration Text Revisions

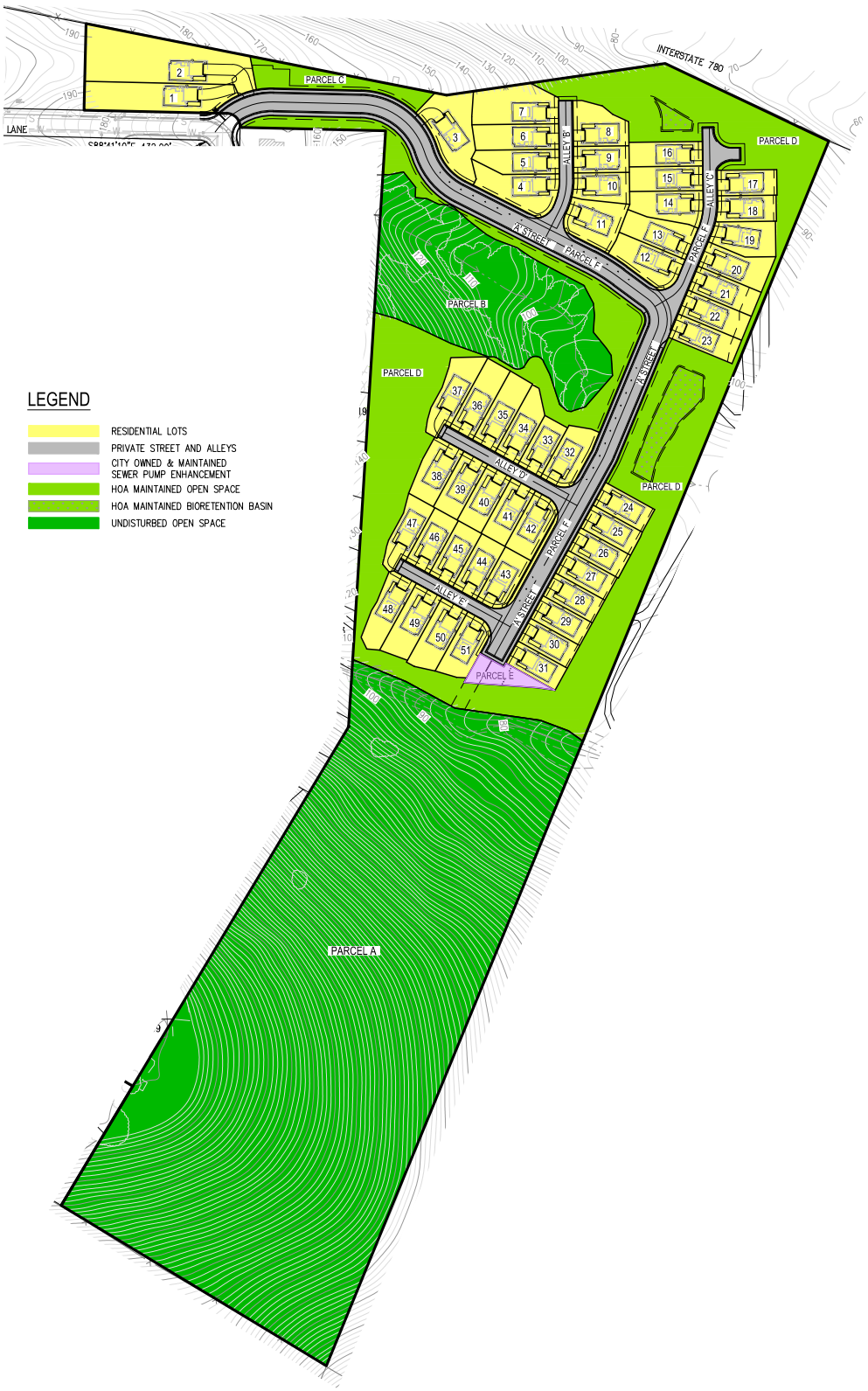
This memorandum presents specific changes to the text of the Subsequent Initial Study/Mitigated Negative Declaration (IS/MND) that are being made to clarify and supplement materials in the Subsequent IS/MND. The revised text does not provide new information that would result in any new significant impact not already identified in the Subsequent IS/MND or a substantial increase in the severity of an impact identified in the Subsequent IS/MND that cannot be mitigated to a less than significant level with implementation of mitigation measures agreed to by the project sponsor. Thus, none of the text revisions would require recirculation pursuant to *State CEQA Guidelines* Section 15088.5. The text revisions identified below are incorporated into the Final Subsequent IS/MND for the Vista Cove Planned Development Project. In the revisions shown below, added text is indicated with double underlined text. Text deleted is shown in ~~strikeout~~.

SUBSEQUENT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION TEXT REVISIONS

Revisions to Chapter 2.0, Project Description

Based on comments received from the Vallejo Flood and Wastewater District (VFWD), the City has revised Section 2.2.5.2, Wastewater, and Section 2.2.6, Operations and Maintenance, in Chapter 2.0, Project Description, of the Subsequent IS/MND to add mention of the 6-inch sewer force main to connect the lift station to the existing sewer force main located in Shady Lane and to clarify that only the sanitary sewer would be publicly maintained, while the storm drains would be privately maintained. Text has also been added to state that the current lift station would be relocated and upsized.

In addition, Figure 2-4, Conceptual Site Plan, has been revised to show that Parcel E would be a VFWD-owned and maintained Sewer Pump Station. The original and revised Figure 2-4 are provided on the following pages.



LSA

FIGURE 2-4
Sheet 1 of 2

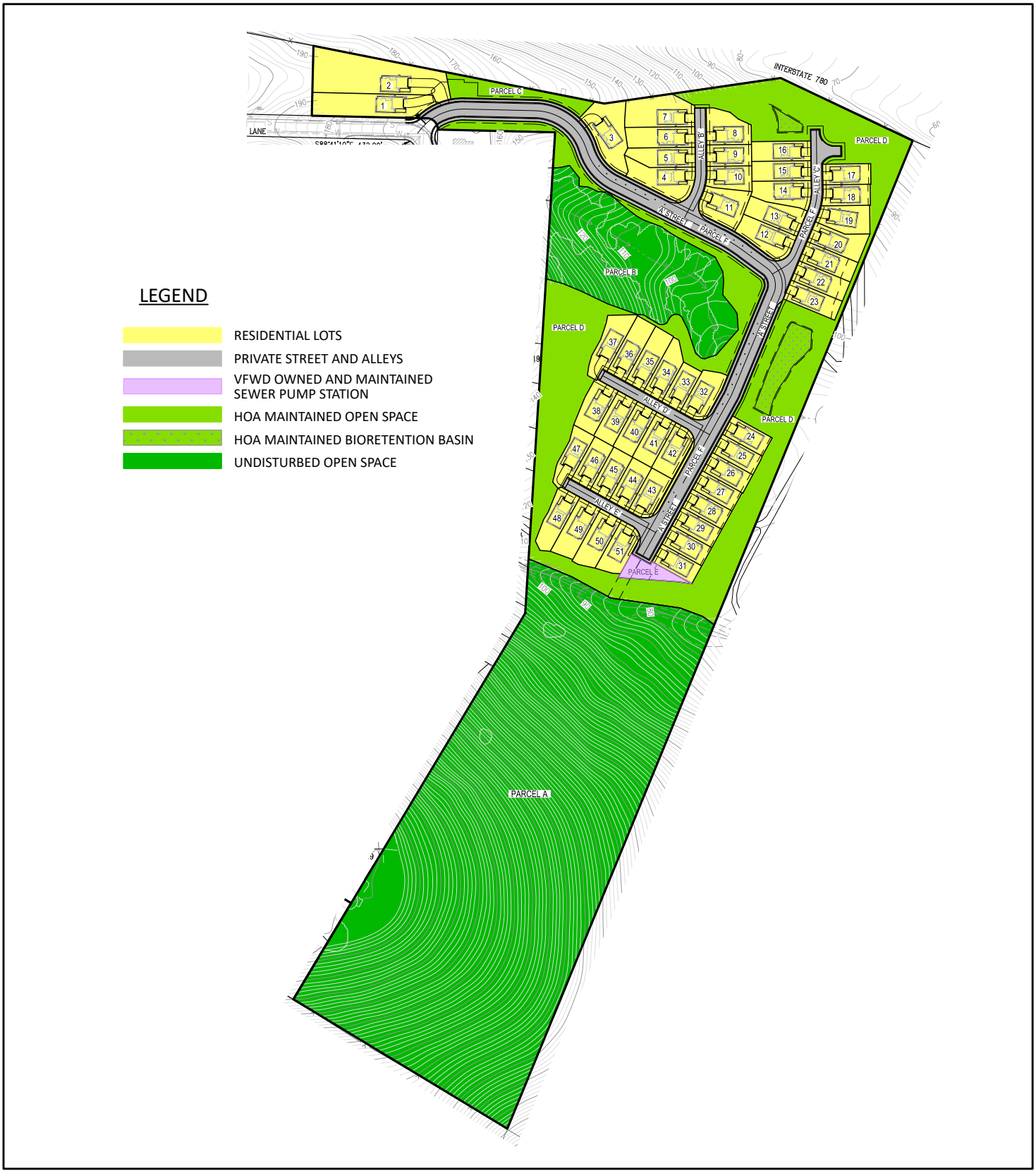
N

0 125 250
FEET

SOURCE: DK Engineering

I:\2024\20241845\G\Site_Plan.ai (12/22/2025)

Vista Cove Planned Development Project
Original Conceptual Site Plan



LSA

FIGURE 2-4
Sheet 2 of 2

SOURCE: DK Engineering

I:\2024\20241845\G\Site_Plan.ai (12/22/2025)

Vista Cove Planned Development Project
Revised Conceptual Site Plan

Section 2.2.5.2, Wastewater, Page 2-20

The Vallejo Flood and Wastewater District (VFWD) maintains existing sanitary sewer lines within the vicinity of the project site. A new 8-inch sewer lateral would connect to the existing 8-inch public sanitary sewer main line located in Shady Lane at the northwestern corner of the project site. The sanitary sewer would be designed and installed to VFWD standards. The project would also include the replacement of the existing sewer lift station that currently serves the 141 single-family home development to the west of the proposed project site with an upgraded system to serve both communities and a new 6-inch sewer force main to connect the lift station to the existing sewer force main located in Shady Lane. The new lift station would be owned and maintained by the VFWD and the existing lift station would be relocated and upsized.

Section 2.2.6, Operations and Maintenance, Page 2-2

Within the residential areas, the individual lots, open space, common open space areas, and water quality basin would be privately owned by a dedicated homeowners association (HOA). The streets that serve the residential lots would also be dedicated to the HOA for private ownership and maintenance. The other remaining 10 acres of open space would be privately owned, managed, and maintained by the HOA.

All ~~U~~utility infrastructure located within the private streets, except for stormwater infrastructure, would be dedicated and maintained by the City/VFWD.~~, while~~ Stormwater infrastructure and utility infrastructure within the private alleys/paseos would be owned and maintained by the HOA.

Revisions to Section 4.3, Air Quality

Based on comments received from the VFWD, the City has revised Section 4.3, Air Quality, to discuss potential odor impacts associated with the proposed sewer lift station.

Section 4.3.3, Impact Analysis, Page 4-30

d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? ***(Less than Significant Impact, No New Impact)***

During project construction, some odors may be present due to diesel exhaust. However, these odors would be temporary and limited to the construction period. Once operational, the proposed project would generally not include any activities or operations that would generate objectionable odors and once operational, the project would not be a source of odors. However, the proposed sewer lift station may generate odors due to the presence of hydrogen sulfides, volatile organic compounds, and other factors. The lift station would be owned and maintained by the VFWD and would be subject to VFWD standards. In addition, the proposed sewer lift station is not a new facility, but rather a replacement and upgrade to the existing lift station that currently serves the 141 single-family residences located west of the project site. The proposed lift station would continue to serve the existing community while also accommodating the development proposed under the project. Therefore, the proposed lift station would not introduce a new odor source to the area that would adversely affect a substantial number of people.

Furthermore, odor emissions are regulated under California Health and Safety Code Section 41700, which prohibits the discharge of air contaminants in quantities that cause a nuisance or annoyance to the public, as well as by the Bay Area Air District Regulation 7, Odorous Substances. Should the Air Pollution Control Officer receive ten or more odor complaints within a 90-day period, then the applicant would be subject to enforcement and corrective action, such as the installation of further odor control features. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. This impact would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Revisions to Section 4.4, Biological Resources

Based on comments received from the California Department of Fisha and Wildlife (CDFW), Section 4.4, Biological Resources, has been updated to include a discussion of Swainson's hawk and tricolored blackbird, and include recommended mitigation measures related to burrowing owl.

Section 4.4.3, Impact Analysis, Page 4-39

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? ***(Less than Significant with Mitigation Incorporated, No New Impact)***

Special-status species are defined as follows:

1. Species that are listed, formally proposed, or designated as candidates for listing as threatened or endangered under the federal Endangered Species Act or California Endangered Species Act.

1. Plant species assigned to California Rare Plant Ranks (CRPR) 1A, 1B, 2A, 2B, or 3.

2. Animal species designated as Species of Special Concern or Fully Protected Species by the California Department of Fish and Wildlife (CDFW).

3. Species that meet the definition of rare, threatened, or endangered under Section 15380 of the *State CEQA Guidelines*.

4. Species considered as a taxon of special concern by local agencies.

As discussed in Section 4.4.2.1, 65 special-status plant species have been documented in the vicinity of the project site; however, no special-status plant species were observed on site during the habitat assessments completed for the Biological Resources Report and the species documented in the greater vicinity have unlikely or no potential to occur on the project site. Therefore, the proposed project would result in no impacts to special-status plant species.

As discussed in Section 4.4.2.1, 52 special-status wildlife species have been documented in the vicinity of the project site. Of the 52 special-status species known from the region, five species were determined to have a moderate or high potential to occur within the project site, including the following: white-tailed kite (*Elanus leucurus*), northern harrier (*Circus hudsonius [cyaneus]*), short-eared owl (*Asio flammeus*), silver-haired bat (*Lasionycteris noctivagans*), and hoary bat (*Lasiurus cinereus*). Although Swainson's hawk (*Buteo swainsoni*) is known to occur within the region, the project site is located outside of the breeding range of Swainson's hawk document in literature and Swainson's hawk is deemed to have potential to occur on the [project site for seasonal migratory stopover only. Similarly, although the tricolor blackbird (*Agelaius tricolor*) is known to occur within the region, the seasonal wetland in the project area does not form reed or tule cover thick enough to support a tricolored blackbird breeding colony is the area is dominated by low growing (less than two feet tall) vegetation. In addition, the freshwater marsh wetland on the southern end of the project site, which would be avoided, is linear and less than the minimum 15-meter width of covered wetland habitat that tricolored blackbird requires to establish breeding colonies. Further, the dense vegetation along the southern tributary is a well-developed riparian canopy and does not support suitable vegetation for a breeding colony.

Construction activities associated with the proposed project could result in direct mortality of white-tailed kite, northern harrier, short-eared owl, and other native bird species nests, which would be considered a potentially significant impact. Impacts to active nests of this species and their eggs, chicks and young could occur during the removal of trees, vegetation, or other ground-disturbing activities. These activities could result in the direct removal or destruction of active nests, as well as generate audible, vibratory and/or visual disturbances that might indirectly result in nest abandonment. To reduce potential impacts to white-tailed kite, northern harrier, short-eared owl, and other native nesting birds to a less than significant level, **Project Specific Mitigation Measures BIO-1a** and **BIO-1b** would be implemented, which require the completion of pre-construction bird surveys should construction activities occur during the nesting bird season.

Project Specific Mitigation Measure BIO-1a	**Avoidance of Nesting Bird Season.** To avoid adverse effects to the active nests of special-status and other native bird species, tree removal, vegetation removal, and initial ground disturbance should be prioritized to occur during the non-nesting season, between September 1 through January 31.
Project Specific Mitigation Measure BIO-1b	**Pre-Construction Nesting Bird Surveys.** A pre-construction nest survey for white-tailed kite, northern harrier, short-eared owl, and other native bird species shall be conducted prior to initial ground disturbance, including tree removal or vegetation removal if it begins during the nesting bird season (defined as February 1 through August 31). If active nests (containing eggs, chicks or young) are discovered during these surveys, a qualified

biologist shall establish a species-specific no-work buffer around the active nest. Work may resume in the buffer after the nesting season ends, or a qualified biologist confirms the nest is inactive.

Project Specific Mitigation Measure BIO-1b would be implemented in compliance with state and federal regulations. Buffers would be implemented on a "species-specific" basis and special status species with potential for nesting, such as white-tailed kite, would have more substantial avoidance buffers implemented in the case of observance of active nests. Because potential impacts to special-status species would be avoided, no Incidental Take Permit (ITP) would be required.

As discussed in the *Biological Resources Impact Analysis*[1] prepared for the proposed project, there is no potential for the project site to support breeding burrowing owl and the project site represents poor wintering habitat, indicating that burrowing owl presence is unlikely. In addition to the lack of burrows, the project site is characterized by steeply sloping hillsides dominated by tall, unmanaged vegetation, conditions that are not conducive to burrowing owl presence. Nevertheless, in an abundance of caution, the proposed project would implement **Project Specific Mitigation Measures BIO-5a** and **BIO-5b** to ensure that potential impacts to burrowing owls would be less than significant.

Project Specific Mitigation Measure BIO-5a **Burrowing Owl Habitat Assessment, Surveys, and Protection.** A qualified biologist shall conduct a habitat assessment and surveys for wintering burrowing owl prior to construction if construction starts during the burrowing wintering season (September 1 to January 31). Surveys shall be conducted if warranted based on the habitat assessment and shall begin on or within three days of August 1. The habitat assessment and surveys shall follow the Department of Fish and Game Staff Report on Burrowing Owl Mitigation methodology and the qualified biologist shall prepare a report documenting the survey results. The habitat assessment and surveys shall encompass the project site and a sufficient buffer zone to detect owls nearby that may be impacted, which is up to 500 meters (1,640 feet) around the project site pursuant to the above methodology. Habitat assessments and surveys shall occur annually for the duration of the project, as conditions may change annually and suitable refugia for burrowing owl, such as small mammal burrows, can be created

[1] WRA, Inc. 2024. *Biological Resources Technical Report Vista Cove Project, Vallejo, Solano County, California.* February.

	within a few hours or days, unless otherwise approved in writing by CDFW. Surveys for non-breeding burrowing owl shall be spread over four visits during the nonbreeding season (i.e., wintering) and shall start on or within 3 days of August 1 and continue to January 31, unless otherwise approved in writing by CDFW. Time lapses between surveys or project activities shall trigger subsequent surveys including, but not limited to, a final survey within 24 hours prior to ground disturbance. The qualified biologist shall have a minimum of two years of experience implementing the above methodology. The project applicant shall immediately notify CDFW if burrowing owl is detected and implement a construction avoidance buffer around any detected burrowing owl pursuant to the buffer distances outlined in the Department of Fish and Game Staff Report on Burrowing Owl Mitigation, which may be up to 500 meters (1,640 feet). Any detected owl shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities. If take of burrowing owl cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP before Project activities may commence.
Project Specific Mitigation Measure BIO-5b	**Covering of Entrapment Hazards.** To prevent burrowing owl from sheltering or nesting in exposed material; all construction pipes, culverts, hoses or similar materials greater than two inches in diameter stored at the project site shall be capped or covered before the end of each workday and shall be inspected thoroughly for wildlife before the pipe or similar structure is buried, capped, used, or moved.

With implementation of **Project Specific Mitigation Measure BIO-5a**, which requires a burrowing owl habitat assessment and surveys for wintering burrowing owl prior to construction if construction starts during the burrowing owl wintering season (September 1 to January 31), and **Project Specific Mitigation Measure BIO-5b,** which requires all construction pipes, culverts, hoses or similar materials be capped or covered to prevent burrowing owl from shelter or nesting in exposed materials, potential impacts on burrowing owl would be reduced to less than significant.

The removal of 69 trees from the northern half of the project site could result in direct mortality of silver-haired bat and hoary bat adults and maternity roosts, which would be considered a potentially significant impact. Impacts to active maternity roosts of this species and their pups could occur during the removal of trees, vegetation, or other ground-disturbing activities in proximity to roost sites. These activities could result in the direct removal or destruction of active roosts, as well as generate audible, vibratory and/or visual disturbances that might indirectly result in roost abandonment. To reduce potential impacts to the silver-haired bat and hoary bat to a less than significant level, **Project Specific Mitigation Measures BIO-2a** and **BIO-2b** would be implemented, which require the completion of a bat roost assessment should construction activities occur during the maternity roost season.

Project Specific Mitigation Measure BIO-2a

Avoidance of Maternity Roosting Season. To avoid adverse effects to maternity roosts of special-status and other bat species, tree removal, vegetation removal, and initial ground disturbance should be prioritized to occur outside the maternity roosting season, between September 1 through April 30. Large trees (diameter at breast height [DBH] > 24 inches) removed during this season (September 1–April 30) shall be cut using a two-phased system where branches and limbs are cut and left on the ground overnight prior to chipping or removal from the site.

Project Specific Mitigation Measure BIO-2b

Pre-Construction Roost Surveys. During the maternity roost season (May 1–August 31), at least 30 days prior to the removal of any large tree (DBH > 24 inches) a bat roost assessment shall be conducted by a qualified biologist to determine if potential roost habitat is present.

If no maternity roost habitat is present, trees shall be removed using a two-phased cut. Cut branches and limbs shall be left on the ground overnight prior to chipping or removal from the site.

If potential maternity roosting habitat is present, the qualified biologist shall conduct an emergence survey to determine if the roost is occupied or assume the roost is occupied and establish a no-work buffer. If an emergence survey is conducted and does not detect bats, the tree may be removed with no further measures required to protect roosting bats. If roosting bats are detected, or the tree is assumed to be an active roost, the tree shall be given a 100-foot no work buffer and shall be

avoided until after the maternity roosting season is complete. Once the maternal roosting season is complete, tree removal shall follow the two-phase approach for tree removal.

With implementation of **Project Specific Mitigation Measures BIO-1a, BIO-1b, BIO-2a,** ~~and~~ **BIO-2b**, **BIO-5a**, and **BIO-5b**, the proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Impacts would be less than significant with mitigation incorporated. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Revisions to Section 4.7, Geology and Soils

The City has updated Section 4.7, Geology and Soils, to reference the memorandum prepared by ENGEO that states that the conclusions and recommendations provided in the *Preliminary Geotechnical Exploration* prepared for the proposed project are still valid.

Section 4.7.2, Background, Page 4-65

Unless otherwise noted, the following analysis is based on the *Preliminary Geotechnical Exploration* prepared for the proposed project[1] and the peer review conducted as part of the environmental review process[2]. Although the *Preliminary Geotechnical Exploration* was prepared in 2022 and is only valid for two years, ENGEO has prepared a memorandum[3] that indicates the conclusions and recommendations provided in the *Preliminary Geotechnical Exploration* are still valid. A copy of the *Preliminary Geotechnical Exploration*, ~~and~~ peer review, and memorandum stating the conclusions and recommendations provided in the *Preliminary Geotechnical Exploration* are still valid are included in **Appendix E** of this Initial Study.

Revisions to Section 4.13, Noise

Based on comments received from the VFWD, the City has revised Section 4.13, Noise, to discuss potential operational noise impacts associated with the proposed sewer lift station.

Section 4.13.3, Impact Analysis, Page 4-120

Off-Site Operational Noise Impacts. Adjacent off-site land uses would potentially be exposed to stationary-source noise impacts from the proposed ground mounted air conditioning units. These units are anticipated to operate intermittently throughout the day and night. The analysis considered worst-case conditions, assuming 24-hour operation, seven days per week. Based on the

---

1 ENGEO. 2022a. *Vallejo Properties – Vista Cove, Vallejo, California, Preliminary Geotechnical Exploration.* September 12.

2 Baseline Environmental Consulting. 2025. *Peer Review of Preliminary Geotechnical Exploration, Vista Cove Planned Development Project, Vallejo, California.* March 26.

3 ENGEO. 2026. Geotechnical Report Clarification. January 7.

reference noise levels detailed in the Noise Impact Analysis,[1] the highest operational noise level would average 33.3 dBA L_{eq} at the sensitive receiver locations, which would not exceed the daytime or nighttime noise level thresholds of 60 dBA L_{eq} or 50 dBA L_{eq}, respectively, at any receiver location. As such, the air conditioning units, which represent the primary source of operational noise, would not exceed the City's established thresholds for residential areas. In addition, periodic testing of the proposed lift station during operation would also generate some noise. However, noise levels would meet the VFWD's requirements for limited noise to ensure that this noise would be less than 4 dBA along the nearest residential property line. Therefore, the operational noise generated by the proposed project would not result in a substantial permanent increase in ambient noise levels in excess of local standards as the project noise impacts were within the noise impacts evaluated in the General Plan EIR. Impacts would be less than significant. No new impacts or substantially more severe significant impacts would result with implementation of the proposed project when compared to those analyzed in the General Plan EIR.

Revisions to Section 4.18, Tribal Cultural Resources

Based on comments received from the Confederated Villages of Lisjan Nation, the City has revised Section 4.18, Tribal Cultural Resources, to add an additional mitigation measure related to the inadvertent discovery of tribal cultural resources.*Section 4.18.3, Impact Analysis, Page 4-147*

In the event that cultural items or human remains determined to be of Native American origin are encountered during project ground disturbing activities, **Project Specific Mitigation Measures TCR-1** and **TCR-2** shall be implemented.

Project Specific Mitigation Measure TCR-1

Protocol for Discovery of Native American Human Remains ~~Cultural Items.~~ The preferred protocol upon the discovery of Native American human remains is to secure the area, stop work within 25 feet of the find, cover any exposed human remains or other cultural items and avoid further disturbances in the area. All parties are advised to treat the remains with appropriate dignity, as provided in Public Resources Code (PRC) Section 5097.98. All parties shall treat tribal representatives and the event itself with appropriate respect.

If, after the appropriate Tribal representative has been granted access to the site and it is determined that avoidance is not feasible, an examination of the human remains will be conducted to confirm they are human and to determine the position, posture, and orientation of the remains. The following procedures shall be followed:

[1] Urban Crossroads. 2025. *Vista Cove Noise Impact Analysis, City of Vallejo.* April.

- All excavation in the vicinity of the human remains shall be conducted using fine hand tools and fine brushes to sweep loose dirt free from the exposure.

- In order to determine the nature and extent of the grade and its contents, controlled excavation should extend to a full buffer zone around the perimeter of the remains.

- To initiate the exposure, a perimeter balk (especially, a shallow trench) should be excavated, representing a reasonable buffer a minimum of 10 centimeters around the maximum extent of the known skeletal remains, with attention to counterintuitive discoveries or unanticipated finds relating to this or other remains. The dirt from the perimeter balk should be bucketed, distinctly labeled, and screened for cultural materials.

- Excavation should then proceed inward from the walls of the balk as well as downward from the surface of the exposure. Loose dirt should be scooped out and brushed off into a dustpan or other collective device. Considerable care should be given to ensure that human remains are not further impacted by the process of excavation.

- Buckets, collection bags, notes, and tags should be fully labeled per provenience, and a distinction should be made between samples collected from: (1) Perimeter Balk (described above), (2) Exposure (dirt removed in exposing the exterior/burial plan and associations, and (3) Matrix (dirt from the interstices between bones or associations). Thus, each burial may have three bags, “Burial 1 Perimeter Balk,” “Burial 1 Exposure Balk,” “Burial 1 Matrix.”

- The following records should be compiled in the field: (1) a detailed scale drawing of the burial, including the provenience of and full for all human remains, associated artifacts, and the

configuration of all associated phenomena such as burial pits, evidence for pre-interment grave pit burning, soil variability, and intrusive disturbance, (2) complete a formal burial record using the consultants proprietary form or other standard form providing information on site #, unit or other proveniences, level depth, depth and location of the burial from a fixed datum, workers, date(s), artifact list, skeletal inventory, and other pertinent observations, (3) crew chief and worker field notes that may supplement or supersede information contained in the burial recording form, and (4) photographs, including either standard photography or high-quality (400-500 DPI or 10 MP recommended) digital imaging.

- Photographs and images may be used only for showing location or configuration of questionable formation or for the position of the skeleton. They are not to be duplicated for publication unless a written release is obtained from the Tribe.

- Association between the remains and other cultural materials should be determined in the field in consultation with an authorized Tribal representative and may be amended per laboratory findings. Records of provenience and sample labels should be adequate to determine association or degree of likelihood of association of human remains and other cultural materials.

- For each burial, all Perimeter Balk soil is to be 1/8”-screened. All Exposure soil is to be 1/8”-screened, and a minimum of one 5-gallon bucket of excavated but unscreened Exposure soil is to be collected, placed in a plastic garbage bag in the bucket. All Matrix soil is to be carefully excavated, screened as appropriate, and then collected in plastic bags placed in 5-gallon buckets.

- Human remains are not to be cleaned in the field.

- Prior to any physical action related to human remains, a designated tribal representative will conduct prayers and blessings over the remains. The archaeological consultant will be responsible for insuring that individuals and tools involved in the action are available for traditional blessings and prayers, as necessary.

- No laboratory studies are permitted without consultation with the tribe. Lab methods are determined on a project-specific basis in consultation with Confederated Villages of Lisjan Nation representatives. The following procedures shall be implemented:

- The primary archaeological consultant shall be responsible for insuring that all lab procedures follow stipulations made by the Tribe.

- Prior to any laboratory activities related to the remains, a designated tribal representative will conduct prayers and blessings over the remains. The archaeological consultant shall be responsible for ensuring that individuals and tools involved in the action are available for traditional blessings and prayers, as necessary.

- To the extent possible, all remains, associations, samples, and original records are to be kept together throughout the laboratory process. In particular, Matrix dirt is to be kept in buckets and shall accompany the remains to the lab. The primary archaeological consultant shall be responsible for copying all field records and images and ensuring that the original notes and records accompany the remains throughout the process.

- Laboratory study should be done making every effort to identify unanticipated finds or materials missed in the field, such as objects encased in dirt or human remains misidentified

as faunal remains in the field. In the event of discovery of additional remains, materials, and other associations the tribal representatives are to be contacted immediately.

- No laboratory studies are permitted on human remains and funerary objects. The preferred treatment preference for exhumed Native American human remains is reburial in an area not subject to further disturbance. Any objects associated with remains will be reinterred with the remains. Laboratory study should be done making every effort to identify unanticipated finds or materials missed in the field, such as objects encased in dirt or human remains misidentified as faunal remains in the field. In the event of discovery of additional remains, materials, and other associations the tribal representatives are to be contacted immediately.

- Should all, or a sample, of any archaeological materials collected during the data recovery activities – with the exception of human remains – need to be curated, an inventory and location information of the curation facility shall be given to the Tribe for their records.

Project Specific Mitigation Measure TCR-2 **Inadvertent Discovery of Tribal Cultural Resources:** If cultural resources of Native American origin are identified during grading or excavation of the proposed project, all ground disturbing activities within 25 feet shall cease until a representative from the appropriate Tribal representative (consulting Tribe(s)) is consulted by the government agency. If the entity in consultation with the consulting Tribe(s), determines that the resource is a Tribal Cultural Resource and thus significant under CEQA, the entity shall retain a Tribal representative and, if applicable, a qualified archaeologist, at the applicant's expense, to prepare a mitigation plan, which shall be implemented in consultation with the consulting Tribe. The mitigation plan shall include avoidance of the resource or, if avoidance of the resource is not feasible, the plan shall outline

appropriate treatment of the resource in coordination with the consulting Tribe. Examples of appropriate mitigation for Tribal Cultural Resources include, but are not limited to, protecting the cultural character and integrity of the resources, protecting traditional use of the resources, protecting the confidentiality of the resources, or heritage recovery.

[…] Nevertheless, implementation of **Project Specific Mitigation Measures CUL-1, CUL-2,** and **Project Specific Mitigation Measures TCR-1** and **TCR-2**, are required to address the potential impacts to unanticipated tribal cultural resources, human remains, and associated funerary or ceremonial objects, the implementation of which would reduce impacts to less than significant with mitigation.

Revisions to Section 4.19, Utilities and Service Systems

Based on comments received from the VFWD, the City has revised Section 4.19, Utilities and Service Systems, to describe the installation of a new 6-inch sewer force main extending from the new lift station to tie into the existing sewer force main.

Section 4.19.3, Impact Analysis, Page 4-156

Wastewater. The VFWD provides wastewater collection and treatment services for Vallejo. A new 8-inch sewer lateral would connect to the existing 8-inch public sanitary sewer main line located in Shady Lane at the northwestern corner of the project site. The project would also include the replacement of the existing sewer lift station that currently serves the 141 single-family-home development to the west of the proposed project site with an upgraded system to serve both communities and a new 6-inch sewer force main to connect the lift station to the existing sewer force main located in Shady Lane. The new lift station would be owned and maintained by the VFWD ~~City of Vallejo~~ and the sanitary sewer and lift station would be designed and installed to VFWD standards. Utility installation would occur within the project footprint and there would be no impacts unique to infrastructure installation that would result in significant effects beyond those evaluated in the Initial Study.

Revisions to Appendix F, Phase I Environmental Site Assessment (ESA)

In response to comments received, **Appendix F** has been replaced to include the final version of the Phase I Environmental Site Assessment (ESA). The content and conclusions of the replaced Phase I ESA is the same as the draft version circulated as part of the Subsequent IS/MND. T

MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Subsequent Initial Study/Mitigated Negative Declaration (IS/MND) prepared for the Vista Cove Planned Development Project (proposed project).

The MMRP, which is provided in Table A, lists mitigation measures that would be applicable to the proposed project and identifies monitoring requirements. As the Lead Agency, the City of Vallejo is responsible for ensuring full compliance with all mitigation measures adopted for the proposed project. The City will monitor and report on all mitigation activities. Mitigation measures will be implemented at different stages of development throughout the project area. In this regard, the responsibilities for implementation have been assigned to the Applicant, Contractor, or a combination thereof. If during the course of project implementation, any of the mitigation measures identified herein cannot be successfully implemented, the City shall be immediately informed, and the City will then inform any affected responsible agencies. The City, in conjunction with any affected responsible agencies, will then determine if modification to the project is required and/or whether alternative mitigation is appropriate.

This MMRP has been prepared to comply with the requirements of State law (Public Resources Code Section 21081.6). State law requires the adoption of an MMRP when mitigation measures are required to avoid significant impacts. The MMRP is intended to ensure compliance during implementation of the proposed project and the conceptual development project. The MMRP must be adopted when the City Council makes a final decision on the project.

This page intentionally left blank

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
Aesthetics						
No Mitigation Measures required.						
Agriculture and Forestry Resources						
No Mitigation Measures required.						
Air Quality						
General Plan EIR Mitigation Measure AQ 2b.1	As part of the City's development approval process, the City shall require applicants for future development projects to comply with the current Bay Area Air Quality Management District's basic control measures for reducing construction emissions of PM_{10} (Table 8-1, Basic construction Mitigation Measures Recommended for All Proposed Projects, of the BAAQMD CEQA Guidelines).	During development approval process	Construction Contractor/City	City/BAAQMD	During development approval process	Implementation of BAAQMD basic control measures for reducing construction emissions of PM_{10}.
Project Specific Mitigation Measure AIR-1	**Tier 4 Final Emissions Standards.** During construction of the proposed project, the project contractor shall ensure all off-road, diesel-powered construction equipment of 50 horsepower or more used for the project construction meets, at a minimum, the California Air Resources Board Tier 4 Final emissions standards or the equivalent.	During Construction	Project Contractor	Project Contractor	Daily monitoring during all construction activities using diesel-powered equipment	Implementation of the California Air Resources Board Tier 4 Final emissions standards or the equivalent during construction activities.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
Biological Resources						
Project Specific Mitigation Measure BIO-1a	**Avoidance of Nesting Bird Season**. To avoid adverse effects to the active nests of special-status and other native bird species, tree removal, vegetation removal, and initial ground disturbance should be prioritized to occur during the non-nesting season, between September 1 through January 31.	During the non-nesting season, between September 1 through January 31	Qualified Biologist	Qualified Biologist	During the non-nesting season, between September 1 through January 31	Implementation of the avoidance measures during the non-nesting season, between September 1 through January 31.
Project Specific Mitigation Measure BIO-1b	**Pre-Construction Nesting Bird Surveys.** A pre-construction nest survey for white-tailed kite, northern harrier, short-eared owl, and other native bird species shall be conducted prior to initial ground disturbance, including tree removal or vegetation removal if it begins during the nesting bird season (defined as February 1 through August 31). If (containing eggs, chicks or young) are discovered during these surveys, a qualified biologist shall establish a species-specific no-work buffer around the active nest. Work may resume in the buffer after the nesting season ends, or a qualified biologist confirms the nest is inactive.	During the nesting bird season (defined as February 1 through August 31)	Qualified Biologist	Qualified Biologist	One-time pre-construction nest survey during the nesting bird season (defined as February 1 through August 31). Continued monitoring if active nests are found.	Implementation of pre-construction nest survey for white-tailed kite, northern harrier, short-eared owl, and other native bird species during the nesting bird season (defined as February 1 through August 31). If active nests are found the Qualified Biologist.
Project Specific Mitigation Measure BIO-2a	**Avoidance of Maternity Roosting Season.** To avoid adverse effects to maternity roosts of special-status and	Outside the maternity roosting	Qualified Biologist	Qualified Biologist	One time pre construction verification plus	Implementation of the seasonal avoidance ensures no disturbance

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	other bat species, tree removal, vegetation removal, and initial ground disturbance should be prioritized to occur outside the maternity roosting season, between September 1 through April 30. Large trees (diameter at breast height [DBH] > 24 inches) removed during this season (September 1–April 30) shall be cut using a two-phased system where branches and limbs are cut and left on the ground overnight prior to chipping or removal from the site.	season, between September 1 through April 30			monitoring during removal if it occurs near the end of season.	occurs to active bat maternity roosts.
Project Specific Mitigation Measure BIO-2b	**Pre-Construction Roost Surveys.** During the maternity roost season (May 1–August 31), at least 30 days prior to the removal of any large tree (DBH > 24 inches) a bat roost assessment shall be conducted by a qualified biologist to determine if potential roost habitat is present. If no maternity roost habitat is present, trees shall be removed using a two-phased cut. Cut branches and limbs shall be left on the ground overnight prior to chipping or removal from the site. If potential maternity roosting habitat is present, the qualified biologist shall conduct an emergence survey to	During the maternity roost season (May 1–August 31), at least 30 days prior to the removal of any large tree	Qualified Biologist	Project Contractor/ Qualified Biologist	One time pre-construction survey per tree prior to removal; if maternity roost habitat is present, continued monitoring during emergence surveys until trees can be removed safely.	Implementation of pre-construction roost surveys to ensure that potential and active maternity roosts are identified and protected throughout the entire maternity season, with no tree removal occurring in active roosts until the season is complete.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	determine if the roost is occupied or assume the roost is occupied and establish a no-work buffer. If an emergence survey is conducted and does not detect bats, the tree may be removed with no further measures required to protect roosting bats. If roosting bats are detected, or the tree is assumed to be an active roost, the tree shall be given a 100-foot no work buffer and shall be avoided until after the maternity roosting season is complete. Once the maternal roosting season is complete, tree removal shall follow the two-phase approach for tree removal.					
Project Specific Mitigation Measure BIO-3a	**Compensatory Mitigation for Loss of Seasonal Wetland.** Compensatory mitigation for permanent loss of 0.49 acre of the seasonal wetland shall be required. Mitigation may be satisfied through purchase of mitigation bank credits from an approved mitigation bank, payment of in-lieu fees to an approved public agency or conservation organization (e.g., local land trust), for implementation of compensatory mitigation projects, or via a permittee responsible mitigation involving creation, restoring, or enhancing analogous habitat. The ratio	Prior to or concurrent with construction	Qualified Biologist / Project Applicant	Project Applicant	Prior to or concurrent with construction	Implementation of compensatory mitigation to ensure permanent wetland loss is offset and the mitigation ratio of 1:1 is achieved, with restored or preserved habitat maintained per agency-approved requirements.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	for acres of mitigation to acres impacted shall be 1:1.					
Project Specific Mitigation Measure BIO-4a	**Construction Fencing.** Prior to ground-disturbing activities, construction fencing or flagging shall be installed to delineate the riparian and freshwater marsh boundaries. The fencing will be checked regularly during construction activities to ensure that the fencing remains intact and functional, and that encroachment has not occurred into the sensitive habitat or boundary; any repairs to the fence or encroachment correction will be conducted immediately. At the end of the project all temporary flagging, fencing, or other materials would be removed from the work areas and vicinity of the channel.	Prior to ground disturbance	Qualified Biologist	Qualified Biologist/ Project Contractor	Regular checks during construction; repairs as needed.	Implementation of construction fencing to delineate sensitive habitats and prevent encroachment throughout construction.
Project Specific Mitigation Measure BIO-4b	**Construction Best Management Practices.** Erosion control measures would be utilized throughout all phases of the Project where sediment runoff from construction may potentially enter nearby waters. Appropriate sediment and erosion control BMPs (e.g., use of silt fencing and/or straw waddles around the perimeter of the construction zone) will be implemented during and following construction to minimize	Throughout all phases of construction	Qualified Biologist	Qualified Biologist/ Project Contractor	Daily/ongoing monitoring for erosion, spills, and equipment maintenance.	Implementation of BMPs, including erosion and sediment control, spill prevention, and invasive species avoidance, to protect water quality during construction.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	surface runoff originating from the Project and thereby protect water quality of the freshwater marsh. Erosion control structures would be monitored for effectiveness and would be repaired or replaced as needed. i. Prior to construction, a Stormwater Pollution Prevention Plan (SWPPP) would be developed. The plan would include the implementation and maintenance of erosion control measures. ii. Prior to construction, an Accidental Spill Prevention and Cleanup Plan would be prepared. This plan would include required spill control absorbent material, for use beneath stationary equipment, to be present on-site and available at all times. iii. No fueling, cleaning, or maintenance of vehicles or equipment would take place within any areas where an accidental discharge may cause hazardous materials to enter waterways. iv. Any equipment or vehicles used for the Project would be checked and maintained daily to prevent					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	leaks of fluids that could be deleterious to aquatic habitats. v. All equipment would be cleaned before arriving on the site and before removal from the site to prevent spread of invasive plants. vi. To avoid establishment of invasive, non-native plant species on or adjacent to the Project Area, the following measures will be implemented: a. Vegetation disturbances will be limited to those areas identified on construction plans and maps as slated for development or construction staging. b. Erosion and sediment control materials will be certified as weed-free. vii. Staging and storage areas for equipment, materials, fuels, lubricants and solvents, would be located outside of the stream channel banks and outside of nearby waters. viii. Stationary equipment such as motors, pumps, and generators, located adjacent to aquatic features would be positioned over secondary containment					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	sufficient to arrest a catastrophic failure. **ix.** Stockpiles of excavated soil or other materials would be covered when not in active use (i.e., would not be used or moved for 72 hours). All trucks hauling soil, sand, and other loose materials would be covered.					
Project Specific Mitigation Measure BIO-4c	**Tree Protection Measures.** In order to protect trees adjacent to the project area: In order to protect trees adjacent to the Project Area: i. Trees not proposed for removal but adjacent to Project activities shall have orange construction fencing installed at the dripline. This shall be known as the tree protection zone (TPZ). ii. Work within the TPZ shall be minimized to the maximum extent feasible. iii. If work must occur within the TPZ, the fence can be removed temporarily, the tree trunk shall be wrapped in a waddle, and the fence shall be placed back as soon as work is completed.	During construction	Qualified Biologist	Qualified Biologist/ Project Contractor	Continuous monitoring for work within tree protection zones (TPZs)	Implementation of tree protection measures, including fencing, pruning standards, and TPZ management, to protect trees adjacent to the project area.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	iv. All equipment and stockpiles must be in designated staging areas away from all TPZ. v. All trees to be removed shall be felled away from any trees to be avoided. vi. If trees not proposed for removal require pruning, pruning shall follow ANSI A300 standards or be performed by a certified arborist. **vii.** If any roots are exposed from trees to be avoided, roots can be pruned up to the diameter of 2 inches and pruned at 90-degree angles. The roots shall be covered by a damp burlap sack or damp towel while exposed.					
Project Specific Mitigation Measures BIO-5a	**Burrowing Owl Habitat Assessment, Surveys, and Protection.** A qualified biologist shall conduct a habitat assessment and surveys for wintering burrowing owl prior to construction if construction starts during the burrowing wintering season (September 1 to January 31). Surveys shall be conducted if warranted based on the habitat assessment and shall begin on or within three days of August 1. The habitat assessment and surveys shall follow the *Department of*	Prior to Construction; During the burrowing wintering season (September 1 to January 31)	Qualified Biologist	Qualified Biologist	One time habitat assessment and surveys prior to the start of construction; annual habitat assessment and surveys for the duration of the construction; if any owl is determined to be present, continued	Implementation of habitat assessment and surveys to ensure that burrowing owls are identified and protected.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	Fish and Game Staff Report on Burrowing Owl Mitigation methodology and the qualified biologist shall prepare a report documenting the survey results. The habitat assessment and surveys shall encompass the project site and a sufficient buffer zone to detect owls nearby that may be impacted, which is up to 500 meters (1,640 feet) around the project site pursuant to the above methodology. Habitat assessments and surveys shall occur annually for the duration of the project, as conditions may change annually and suitable refugia for burrowing owl, such as small mammal burrows, can be created within a few hours or days, unless otherwise approved in writing by CDFW. Surveys for non-breeding burrowing owl shall be spread over four visits during the nonbreeding season (i.e., wintering) and shall start on or within 3 days of August 1 and continue to January 31, unless otherwise approved in writing by CDFW. Time lapses between surveys or project activities shall trigger subsequent surveys including, but not limited to, a final survey within 24 hours prior to ground disturbance. The				monitoring during construction activities.	

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	qualified biologist shall have a minimum of two years of experience implementing the above methodology. The project applicant shall immediately notify CDFW if burrowing owl is detected and implement a construction avoidance buffer around any detected burrowing owl pursuant to the buffer distances outlined in the *Department of Fish and Game Staff Report on Burrowing Owl Mitigation*, which may be up to 500 meters (1,640 feet). Any detected owl shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities. If take of burrowing owl cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP before Project activities may commence.					
Project Specific Mitigation Measures BIO-5b	**Covering of Entrapment Hazards.** To prevent burrowing owl from sheltering or nesting in exposed material; all construction pipes, culverts, hoses or similar materials greater than two inches in diameter stored at the project site shall be capped or covered before the end of each workday and shall be inspected thoroughly for wildlife before the pipe or similar	During Construction	Construction Contractor	Construction Contractor	At the end of each workday.	Inspections of and the covering/capping of all construction pipes, culverts, hoses or similar materials greater than two inches in diameter stored at the project site to prevent burrowing owl from sheltering or nesting in exposed material.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	structure is buried, capped, used, or moved.					
Cultural Resources						
Project Specific Mitigation Measure CUL-1	**Unknown Discovery of Archaeological Resources**. Should an archaeological deposit be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology contacted to assess the situation, determine if the deposit qualifies as a historical resource, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If the deposit is found to be significant (i.e., eligible for listing in the California Register of Historical Resources), the project applicant shall be responsible for funding and implementing appropriate mitigation measures. Mitigation measures may include recording the archaeological deposit, data recovery and analysis, and public outreach regarding the scientific and cultural importance of the discovery. Upon completion of the selected	During Ground Disturbance	Construction Contractor/Qualified Archaeologist	Construction Contractor / Qualified Archaeologist	Monitoring would occur continuously during all ground-disturbing activities within 25 feet of any discovered archaeological resources.	Implementation of discovery protocol and assessment of archaeological finds, with work halted within 25 feet until evaluation is complete.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	mitigations, a report documenting methods, findings, and recommendations shall be prepared by the qualified archaeologist and submitted to the City of Vallejo for review, and the final report shall be submitted to the Northwest Information Center at Sonoma State University. Significant archaeological materials shall be submitted to an appropriate local curation facility and used for future research and public interpretive displays, as appropriate.					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
Project Specific Mitigation Measure CUL-2	**Protocol for Human Remains Discovery.** If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to State PRC Section 5097.98. The County Coroner and the City must be notified of the find immediately. If the remains are determined to be Native American, the County Coroner would notify the Native American Heritage Commission (NAHC), which would determine and notify a Most Likely Descendant (MLD) and the following provisions shall apply: ● The Medical Examiner shall immediately be notified, ground disturbing activities in that location shall cease within 25 feet of the discovery and the Tribe shall be allowed, pursuant to California Public Resources Code (PRC) Section 5097.98(a) to inspect the site of the discovery and make determinations as to how the human remains and grave goods	During ground disturbance	Construction Contractor/Qualified Archaeologist	City / County Coroner/Tribe	If remains are discovered monitoring would occur during ground disturbing activities.	Implementation of human remains discovery procedures per State law and tribal consultation, including site protection and culturally appropriate treatment.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	should be treated and disposed of with appropriate dignity. ● The Tribe shall complete its inspection and make its MLD recommendation within forty-eight (48) hours of getting access to the site. The Tribe shall have the final determination as to the disposition and treatment of human remains and grave goods. Said determination may include avoidance of the human remains, reburial on-site or reburial on tribal or other lands that will not be disturbed in the future. ● The Tribe may wish to rebury said remains and grave goods or ceremonial and cultural items on or near the site of their discovery, in an area which will not be subject to future disturbances over a prolonged period of time. Reburial of human remains shall be accomplished in compliance with California PRC Sections 5097.98(a) and (b). The term "human remains" encompasses more than human bones because the Tribe's traditions call for the burial of associated cultural items with the deceased (funerary objects), and/or					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	the ceremonial burning of Native American human remains, funerary objects, grave goods, and animals. Ashes, soils, and other remnants of these burning ceremonies, as well as associated funerary objects and unassociated funerary objects buried with or found near the Native American remains are to be treated in the same manner as bones or bone fragments that remain intact. ● Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act (California Government Code Section 6250 et. seq). The Medical Examiner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254(r). The Tribe will require that the location for reburial is recorded with the California Historic Resources Inventory System (CHRIS) on a form that is acceptable to the CHRIS					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	center. The Tribe may also suggest that the landowner enter into an agreement regarding the confidentiality of site information that will run with title on the property. ● Treatment of all cultural items, including ceremonial items and archaeological items will reflect the religious beliefs, customs, and practices of the Tribe. All cultural items, including ceremonial items and archaeological items, which may be found at a Project site should be turned over to the Tribe for appropriate treatment, unless otherwise ordered by a court of agency of competent jurisdiction. The project applicant should waive any and all claims to ownership of Tribal ceremonial and cultural items, including archaeological items, which may be found on a project site in favor of the Tribe. If any intermediary (e.g., an archaeological retained by the project applicant) is necessary, said entity or individual shall not possess those items for longer than is reasonably necessary, as determined solely by the Tribe.					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	● If additional significant sites or sites not identified as significant in the environmental review process, but later determined to be significant are located within a project impact area, such sites will be subjected to further archaeological and cultural significance evaluation by the project applicant, Solano County and the Tribe to determine if additional mitigation measures are necessary to treat sites in a culturally appropriate manner consistent with CEQA requirements for mitigation of impacts to cultural resources. If there are human remains present that have been identified as Native American, all work will cease for a period of up to 30 days in accordance with Federal Law.					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
Energy						
	No Mitigation Measures required.					
Geology and Soils						
Project Specific Mitigation Measure GEO-1	**Design-Level Geotechnical Review.** A licensed Geotechnical Engineer or their representative shall be retained to perform a design-level geotechnical investigation once site development plans are final. The design-level geotechnical investigation shall include further evaluation of potential geologic hazards related to landslides, stability of graded slopes, corrective grading for planned building sites, and the presence of moderate to highly expansive soil and bedrock. The design-level investigation findings shall be used to address all the geotechnical concerns described in the Preliminary Geotechnical Exploration and to develop detailed recommendations for design and construction. The recommendations of the Preliminary Geotechnical Exploration and any recommendations included in the required design-level geotechnical investigation for the project shall be incorporated into all design and engineering plans. At the end of construction, the Geotechnical Engineer shall provide a letter	Pre-Construction/ During Construction/ Post-Construction	Applicant / Geotechnical Engineer	**City**	One investigation before design; oversight during grading; certification at completion.	Implementation of all geotechnical recommendations in design and construction, verified by letter of compliance upon project completion.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	regarding contractor compliance with project plans and specifications and with the recommendations of the Geotechnical Investigation and any supplemental recommendations issued during construction. The letter shall be submitted for review to the City of Vallejo Building Division and confirmed prior to issuance of a certificate of occupancy.					
Project Specific Mitigation Measure GEO-2	**Discovery of Paleontological Resources.** Should paleontological resources be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. For purposes of this mitigation, a "qualified paleontologist" shall be an individual with the following qualifications: (1) a graduate degree in paleontology or geology and/or a person with a demonstrated publication record in peer-reviewed paleontological journals; (2) at least 2 years of professional experience related to paleontology; (3) proficiency	During project subsurface construction activities	Qualified Paleontologist	Project Contractor /Qualified Paleontologist	Continuous monitoring during all ground-disturbing construction activities within 25 feet of any discovered paleontological resources.	Implementation of discovery protocol; if fossils are encountered, work within 25 feet is redirected and a qualified paleontologist assesses the find, with mitigation measures applied as necessary to ensure protection and documentation of paleontological resources.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	in recognizing fossils in the field and determining their significance; (4) expertise in local geology, stratigraphy, and biostratigraphy; and (5) experience collecting vertebrate fossils in the field. If the paleontological resources are found to be significant and project activities cannot avoid them, measures shall be implemented to ensure that the project does not cause a substantial adverse change in the significance of the paleontological resource. Measures may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the City of Vallejo for review. If paleontological materials are recovered, this report also shall be submitted to a paleontological repository, such as the University of California Museum of Paleontology, along with significant paleontological materials. Public					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	educational outreach may also be appropriate. The project sponsor shall inform its contractor(s) of the sensitivity of the project site for paleontological resources and shall verify that the following directive has been included in the project grading plans: *"The subsurface of the construction site may be sensitive for fossils. If fossils are encountered during project subsurface construction, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any paleontological materials. Fossils can include plants and animals, and such trace fossil evidence of past life as tracks or plant imprints. Ancient marine sediments may contain invertebrate fossils such as snails, clam and oyster shells, sponges, and protozoa; and vertebrate fossils such as fish, whale, and sea lion bones. Contractor acknowledges and*					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	understands that excavation or removal of paleontological material is prohibited by law and constitutes a misdemeanor under California Public Resources Code, Section 5097.5."					
Greenhouse Gas Emissions						
General Plan EIR Mitigation Measure AQ-2b.1	Please refer to **General Plan EIR Mitigation Measure AQ-2b.1** as detailed above in Air Quality.					
Hazards and Hazardous Materials						
Project Specific Mitigation Measure HAZ-1	**Emergency Response and Cleanup Plan.** Prior to commencement of construction activities, the construction contractor shall prepare an Emergency Response and Cleanup Plan. The construction contractor shall implement the plan during construction. The plan shall detail the methods to be used to contain and clean up a spill of petroleum products or other hazardous materials in the work area.	Prior to Construction/ During Construction	Construction Contractor	City/Construction Contractor	One-time submittal before work; ongoing implementation.	Preparation and implementation of the Emergency Response and Cleanup Plan and verification of proper spill containment and cleanup during construction.
Project Specific Mitigation Measure HAZ-2	**Construction Equipment Maintenance, Refueling, and Washing Activities.** During construction, the construction contractor shall ensure that all equipment maintenance, refueling, and storage are conducted on level ground outside the aquatic features within the project site, away from concentrated flows of	During Construction	Construction Contractor	City/Construction Contractor	Daily inspections during construction.	Implementation of BMPs for equipment maintenance and refueling, including use of spill kits and secondary containment to prevent contamination.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	stormwater and drainage courses. Drip pans or absorbent pads shall be used during equipment refueling and maintenance activities. Adequate quantities of absorbent spill cleanup material and spill kits shall be kept in the refueling and maintenance area and on fuel trucks. Spill cleanup materials shall be disposed of immediately after use.					
Hydrology and Water Quality						
No Mitigation Measures required.						
Land Use and Planning						
No Mitigation Measures required.						
Mineral Resources						
No Mitigation Measures required.						
Noise						
No Mitigation Measures required.						
Population and Housing						
No Mitigation Measures required.						
Public Services						
No Mitigation Measures required.						
Recreation						
No Mitigation Measures required.						
Transportation						
No Mitigation Measures required.						
Tribal Cultural Resources						
Project Specific Mitigation Measure TCR-1	**Protocol for Discovery of Native American Human Remains.** The preferred protocol upon the discovery	During Ground Disturbance	Construction Contractor/Consulting Tribes	Construction Contractor/Consulting Tribes	Monitoring would occur continuously during all ground-	Implementation of discovery protocol for human remains, with work

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	of Native American human remains is to secure the area, stop work within 25 feet of the find, cover any exposed human remains or other cultural items and avoid further disturbances in the area. All parties are advised to treat the remains with appropriate dignity, as provided in Public Resources Code (PRC) Section 5097.98. All parties shall treat tribal representatives and the event itself with appropriate respect. If, after the appropriate Tribal representative has been granted access to the site and it is determined that avoidance is not feasible, an examination of the human remains will be conducted to confirm they are human and to determine the position, posture, and orientation of the remains. The following procedures shall be followed: • All excavation in the vicinity of the human remains shall be conducted using fine hand tools and fine brushes to sweep loose dirt free from the exposure. • In order to determine the nature and extent of the grade and its contents, controlled excavation should				disturbing activities within 25 feet of any discovered human remains.	halted within 25 feet until evaluation is complete.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	extend to a full buffer zone around the perimeter of the remains. • To initiate the exposure, a perimeter balk (especially, a shallow trench) should be excavated, representing a reasonable buffer a minimum of 10 centimeters around the maximum extent of the known skeletal remains, with attention to counterintuitive discoveries or unanticipated finds relating to this or other remains. The dirt from the perimeter balk should be bucketed, distinctly labeled, and screened for cultural materials. • Excavation should then proceed inward from the walls of the balk as well as downward from the surface of the exposure. Loose dirt should be scooped out and brushed off into a dustpan or other collective device. Considerable care should be given to ensure that human remains are not further					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	impacted by the process of excavation. • Buckets, collection bags, notes, and tags should be fully labeled per provenience, and a distinction should be made between samples collected from: (1) Perimeter Balk (described above), (2) Exposure (dirt removed in exposing the exterior/burial plan and associations, and (3) Matrix (dirt from the interstices between bones or associations). Thus, each burial may have three bags, "Burial 1 Perimeter Balk," "Burial 1 Exposure Balk," "Burial 1 Matrix." • The following records should be compiled in the field: (1) a detailed scale drawing of the burial, including the provenience of and full for all human remains, associated artifacts, and the configuration of all associated phenomena such as burial pits, evidence for pre-interment grave pit					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	burning, soil variability, and intrusive disturbance, (2) complete a formal burial record using the consultants proprietary form or other standard form providing information on site #, unit or other proveniences, level depth, depth and location of the burial from a fixed datum, workers, date(s), artifact list, skeletal inventory, and other pertinent observations, (3) crew chief and worker field notes that may supplement or supersede information contained in the burial recording form, and (4) photographs, including either standard photography or high-quality (400-500 DPI or 10 MP recommended) digital imaging. • Photographs and images may be used only for showing location or configuration of questionable formation or for the position of the skeleton. They are not to be					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	duplicated for publication unless a written release is obtained from the Tribe. • Association between the remains and other cultural materials should be determined in the field in consultation with an authorized Tribal representative and may be amended per laboratory findings. Records of provenience and sample labels should be adequate to determine association or degree of likelihood of association of human remains and other cultural materials. • For each burial, all Perimeter Balk soil is to be 1/8"-screened. All Exposure soil is to be 1/8"-screened, and a minimum of one 5-gallon bucket of excavated but unscreened Exposure soil is to be collected, placed in a plastic garbage bag in the bucket. All Matrix soil is to be carefully excavated, screened as appropriate, and					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	then collected in plastic bags placed in 5-gallon buckets. • Human remains are not to be cleaned in the field. • Prior to any physical action related to human remains, a designated tribal representative will conduct prayers and blessings over the remains. The archaeological consultant will be responsible for insuring that individuals and tools involved in the action are available for traditional blessings and prayers, as necessary. • No laboratory studies are permitted without consultation with the tribe. Lab methods are determined on a project-specific basis in consultation with Confederated Villages of Lisjan Nation representatives. The following procedures shall be implemented: • The primary archaeological consultant shall be responsible for insuring that					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	all lab procedures follow stipulations made by the Tribe. • Prior to any laboratory activities related to the remains, a designated tribal representative will conduct prayers and blessings over the remains. The archaeological consultant shall be responsible for ensuring that individuals and tools involved in the action are available for traditional blessings and prayers, as necessary. • To the extent possible, all remains, associations, samples, and original records are to be kept together throughout the laboratory process. In particular, Matrix dirt is to be kept in buckets and shall accompany the remains to the lab. The primary archaeological consultant shall be responsible for copying all field records and images and ensuring that the original notes and records					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	accompany the remains throughout the process. • Laboratory study should be done making every effort to identify unanticipated finds or materials missed in the field, such as objects encased in dirt or human remains misidentified as faunal remains in the field. In the event of discovery of additional remains, materials, and other associations the tribal representatives are to be contacted immediately. • No laboratory studies are permitted on human remains and funerary objects. The preferred treatment preference for exhumed Native American human remains is reburial in an area not subject to further disturbance. Any objects associated with remains will be reinterred with the remains. Laboratory study should be done making every effort to identify unanticipated finds					

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	or materials missed in the field, such as objects encased in dirt or human remains misidentified as faunal remains in the field. In the event of discovery of additional remains, materials, and other associations the tribal representatives are to be contacted immediately. • Should all, or a sample, of any archaeological materials collected during the data recovery activities – with the exception of human remains – need to be curated, an inventory and location information of the curation facility shall be given to the Tribe for their records.					
Project Specific Mitigation Measure TCR-2	**Inadvertent Discovery of Tribal Cultural Resources:** If cultural resources of Native American origin are identified during grading or excavation of the proposed project, all ground disturbing activities within 25 feet shall cease until a representative from the appropriate Tribal representative (consulting Tribe(s)) is consulted by the government agency.	During Ground Disturbance	Construction Contractor/Consulting Tribes	Construction Contractor/Consulting Tribes	Monitoring would occur continuously during all ground-disturbing activities within 25 feet of any discovered tribal cultural resources.	Implementation of discovery protocol and assessment of archaeological finds, with work halted within 25 feet until evaluation is complete.

Table A: Mitigation Monitoring and Reporting Program

Project Specific Mitigation Measure/General Plan EIR Mitigation Measures	Avoidance and Minimization Measure	Timing	Monitoring Party	Implementing Party	Frequency and Duration of Monitoring	Performance Criteria
	If the entity in consultation with the consulting Tribe(s), determines that the resource is a Tribal Cultural Resource and thus significant under CEQA, the entity shall retain a Tribal representative and, if applicable, a qualified archaeologist, at the applicant's expense, to prepare a mitigation plan, which shall be implemented in consultation with the consulting Tribe. The mitigation plan shall include avoidance of the resource or, if avoidance of the resource is not feasible, the plan shall outline appropriate treatment of the resource in coordination with the consulting Tribe. Examples of appropriate mitigation for Tribal Cultural Resources include, but are not limited to, protecting the cultural character and integrity of the resources, protecting traditional use of the resources, protecting the confidentiality of the resources, or heritage recovery.					
Utilities and Service Systems						
No Mitigation Measures required.						
Wildfire						
No Mitigation Measures required.						

CARLSBAD
CLOVIS
EMERYVILLE
IRVINE
LOS ANGELES
PALM SPRINGS
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

MEMORANDUM

DATE: January 16, 2026

TO: Cesar Orozco, Planning Manager, City of Vallejo

FROM: Theresa Wallace, AICP, Principal
Florentina Craciun, Senior Environmental Planner

SUBJECT: Vista Cove Planned Development Project Subsequent Initial Study/Mitigated Negative Declaration - Response to Comments

In accordance with Section 15074 of the *State CEQA Guidelines*, prior to approving a project, the decision-making body of the lead agency shall consider the proposed environmental document together with any comments received during the public review process. Although there is no legal requirement to formally respond to comments on a proposed Mitigated Negative Declaration (MND) as there is for an Environmental Impact Report (EIR), this memorandum provides a response to the written and verbal comments received on the Vista Cove Planned Development Project Subsequent Initial Study/Mitigated Negative Declaration (IS/MND) to aid the City of Vallejo decision-makers in their review of the project.

The Subsequent IS/MND was initially circulated for public review for a period of 30 days, from November 10, 2025, to December 10, 2025. Copies of the IS/MND were made available for public review on the City's website on November 10, 2025. A total of 17 comment letters from agencies, organizations, and interested individuals were received during the public review period.

Per CEQA Guidelines Section 15088, applicable to responses to comments on EIRs, this document focuses primarily on responding to comments that relate to the adequacy of the information and environmental analysis provided in the IS/MND. In addition to responses to individual comments, this memorandum also identifies text changes to the Supplemental IS/MND, provided in Attachment B. These include revisions resulting from written comments received, as well as staff-initiated changes as they relate to mitigation measures for Tribal Cultural Resources and Biological Resources. The changes included herein do not provide new information that would result in any new significant impact not already identified in the subsequent IS/MND or a substantial increase in the severity of an impact identified in the subsequent IS/MND that cannot be mitigated to a less than significant level with implementation of mitigation measures agreed to by the project sponsor. Thus, none of the text revisions would require recirculation pursuant to *State CEQA Guidelines* Section 15088.5.

COMMENTS AND RESPONSES

This section includes responses to each substantive CEQA-related comment. Table A provides a list of the agencies, organizations, and interested individuals that commented on the IS/MND prior to the close of the public comment period. The comments received have been organized in a manner that facilitates a comprehensive response to a particular comment or set of comments. Each comment letter received is indexed with an alphanumeric code in Table A, below.

Table A: Comment Letter Index

Comment Code	Signatory	Date
Agencies		
A-1	California Department of Fish and Wildlife (CDFW), Bay Delta Region, Erin Chappell, Regional Manager	December 4, 2025
A-2	Vallejo Flood and Wastewater District (VFWD), Alan Mitchell, P.E., VFWD – Ponticello Enterprises	December 5, 2025
A-3	California Department of Transportation (Caltrans), District 4, Yunsheng Luo, Branch Chief, Local Development Review, Office of Regional and Community Planning	December 9, 2025
Organizations		
O-1	Confederated Villages of Lisjan Nation (Lucy Beyhan, Cultural Resource Manager II)	November 14, 2025
O-2	Wilton Rancheria, Department of Cultural Preservation	November 14, 2025
O-3	Yocha Dehe Wintun Nation, Yvonne Perkins, Tribal Historic Preservation Officer	December 4, 2025
Individuals		
I-1	Alison Egan	-
I-2	Marty	November 14, 2025
I-3	Christine Gipson	November 16, 2025
I-4	Rick Zavatsky	November 19, 2025
I-5	Don Spilman	November 20, 2025
I-6	Sandra Zarate	November 21, 2025
I-7	Gina Blair	November 21, 2025
I-8	Annette Hilts	November 21, 2025
I-9	Carol and Kay McKenzie	December 5, 2025
I-10	Linda Zupan-McKenna	December 8, 2025
I-11	Sabrina Cardoso and David Ingalls	December 9, 2025

Source: Compiled by LSA (2026).

The comment letter index number is provided at the top of the comment letter and each comment is bracketed and keyed to the category identified in Table B, below. Specifically, the comments and responses are organized by subject and generally appear in the same order as presented in the IS/MND. Table B provides an overview of the comments and responses in this memorandum, including section numbers, topic code prefixes, and corresponding page numbers.

Table B: Comment Organization

Topic	Topic Code	Page No.
Project Description	PD	3
Aesthetics	AES	4
Air Quality	AIR	6
Biological Resources	BIO	7
Cultural Resources	CUL	13
Geology and Soils	GEO	14
Hazards	HAZ	15
Hydrology and Water Quality	HYD	18
Noise	NOI	21
Population and Housing	POP	23
Public Services	PS	24
Transportation	TRA	25
Tribal Cultural Resources	TCR	30
Utilities and Service Systems	UTL	31
Cumulative Impacts	CUM	33
Non-CEQA Issues	NON	34

Within each topic, similar comments are grouped together under subheadings, designated by a topic code and sequential number. For example, the comments in Cultural Resources, coded as "CUL,", are organized under subheading CUL-1.

Under each subheading, the applicable comment letters are listed by comment letter index number, as provided below, with the full comment letters provided in Attachment A. Each individual comment within the letters is bracketed with the corresponding subheading (PD-1, PD-2, etc.). A comprehensive response is provided to address environmental issues raised in the comments and clarify or augment information in the IS/MND, as appropriate.

PROJECT DESCRIPTION

The comments and corresponding responses in this section relate to the proposed project description. The comment topics include:

- **PD-1**: Project Access and Amenities
- **PD-2**: Construction Timeline

Response to Comment PD-1: Project Access and Amenities

This response addresses comments in the following letter:

- Carol and Kay McKenzie, 12/05/2025 (I-9)

As discussed in Section 2.0, Project Description (page 2-21), the proposed development would be owned and maintained by a dedicated Home Owners Association (HOA). In Section 4.16, Recreation (page 4-134), the proposed project would include the construction and development of various outdoor amenities within the project site, including 3.55 acres of common open space, walkways, a

loop walk around a flexible-use turf area, and a vista overlook for residents. These private amenities would be for use by residents of the development and not for public recreational use. While the project site may currently be used informally by members of the public for recreation, such use does not constitute a designated, improved, or maintained public recreational facility. The proposed project does not include the construction, expansion, or improvement of any public recreational facilities that could result in an adverse physical effect on the environment. Although the proposed development would not be constructed as a gated community, this does not convert privately owned open space into public recreational facilities under CEQA.

Response to Comment PD-2: Construction Timeline

This response addresses comments in the following letter:

- Alison Egan, 11/12/2025 (I-1)

As stated in Section 2.0, Project Description (page 2-22), construction of the proposed project is anticipated to begin in June 2026 and would occur over an approximately one-year period. Construction is expected to include site preparation, grading, building construction, paving, and architectural coating. As detailed in **Appendix A**, California Emissions Estimator Model (CalEEMod) Outputs, of the Subsequent IS/MND, the durations for individual construction phases (e.g., five days for site preparation and 25 days for grading) were assumed for the purpose of air quality and greenhouse gas emissions modeling, based on information provided by the project sponsor and as recommended by the Bay Area Air District (Air District). These phase durations represent conservative modeling assumptions used to estimate daily construction emissions and do not represent a detailed or final construction schedule. The overall construction duration analyzed in CalEEMod is consistent with the approximately one-year construction period as detailed in the Project Description.

AESTHETICS

The comments and corresponding responses in this section address comments received related to aesthetics. The comment topics include:

- **AES-1**: Visual Character
- **AES-2**: Scenic Vistas

Response to Comment AES-1: Visual Character

This response addresses comments in the following letters:

- Christine Giposon, 11/16/2025 (I-3)
- Gina Blair, 11/21/2025 (I-7)
- Annette Hilts, 11/21/2025 (I-8)

Although the project site is currently undeveloped and therefore perceived as open space, the project site is designated for residential development and future development of the project site with residential uses has been contemplated and planned for through the City's General Plan and

zoning process. In addition, as detailed in Section 4.1, Aesthetics (page 4-10) of the Subsequent IS/MND, the proposed project would have a consistent architectural style of a modern farmhouse design. The proposed project would be required to undergo Development Review and Design Review consistent with Chapters 16.604 and 16.605 of the Vallejo Municipal Code (VMC), which would provide for the review of the physical improvements to the project site, to ensure compatibility and compliance with City requirements. In addition, the proposed development would be consistent with the existing General Plan land use designations and would not exceed the allowable densities associated with the Mix of Housing Types/Medium Density (R-MH) and Primarily Single Family (R-SF) designations. The proposed project would also be consistent with the development regulations of the Planned Development (PD) Zoning District upon approval of the proposed rezone from Residential Medium Density (RMD) and Residential Low Density (RLD) to PD. These procedures are mandatory for new construction and ensure that all proposed physical improvements to the site—including building orientation, architectural design, grading, landscaping, and lighting—are evaluated for consistency with the City's zoning regulations, design objectives, and adopted plans.

Pursuant to VMC Section 16.604.02, Design Review evaluates projects for compatibility with adjacent development in terms of scale, massing, materials, and overall visual character, as well as conformance with the City's adopted design guidelines. Approval of the project through these processes is required prior to the issuance of any building permits. The proposed project must comply with all applicable standards and any conditions of approval imposed during the review process. The proposed project would have a less than significant impact related to conflicts with applicable zoning and other regulations governing scenic quality.

Further, the proposed project would be consistent with, and would represent a continuation of, the existing residential development in the surrounding area and there would be an approximately 0.3-mile visual buffer between the proposed project and the BSRA. Therefore, implementation of the proposed project would not result in a degraded transition between the recreational area and development.

For these reasons, redevelopment of the project site would not result in substantial impacts related to aesthetics, and the proposed project would be consistent with the visual character of the area and surrounding neighborhood.

Response to Comment AES-2: Scenic Vistas

This response addresses comments in the following letter:

- Alison Egan, 11/12/2025 (I-1)

As detailed in Section 4.1, Aesthetics (page 4-9) of the Subsequent IS/MND, the area surrounding the project site is characterized by urban development with some open space and recreational uses in the nearby vicinity. In addition, although the proposed project site is located approximately 0.85 mile northwest of the Carquinez Strait and 0.3 mile southeast of the Benicia State Recreation Area, none of these features are identified as a scenic vista or significant visual resource in the City's General Plan. San Pablo Bay, Mare Island Strait, the Vallejo Waterfront, Sulphur Springs Mountain,

Vaca Mountains, White Slough, Napa River Wetlands, and Sky Valley, the resources designated as scenic vistas, are not visible from the project site or nearby vicinity. These features are located over two miles from the project site and views of these resources are obstructed by intervening development, topography, and mature trees. The project site and surrounding areas are not located within the residential view district and would not impact scenic vistas of designated views; therefore, no impact would occur. In addition, as stated above, the proposed project would also be consistent with the development regulations of the PD Zoning District and would be subject to Development Review and Design Review as required by VMC Sections 16.604 and 16.605. These procedures are mandatory for new construction and ensure that all proposed physical improvements to the site—including building orientation, architectural design, grading, landscaping, and lighting—are evaluated for consistency with the City's zoning regulations, design objectives, and adopted plans. For these reasons, development of the project site with the proposed project would not result in substantial impacts related to aesthetics or scenic vistas, and the proposed project would be consistent with the surrounding neighborhood.

AIR QUALITY

The comments and corresponding responses in this section address comments received related to air quality. The comment topics include:

- **AIR-1**: Odors
- **AIR-2**: Construction Health Risk Impacts

Response to Comment AIR-1: Odors

This response addresses comments in the following letter:

- VFWD, 12/05/2025 (A-2)

As discussed in Section 4.3, Air Quality (page 4-30), once operational, the proposed project would generally not include any activities or operations that would generate objectionable odors.

Vallejo Flood and Wastewater (VFWD) expressed concerns related to potential operations odors from the proposed sewer lift station due to the presence of hydrogen sulfides, volatile organic compounds, and other factors. The lift station would be owned and maintained by the VFWD and would be subject to VFWD standards. It is noted that the proposed sewer lift station is not a new facility, but rather a replacement and upgrade to the existing lift station that currently serves the 141 single-family residences located west of the project site. The existing lift station located at the end of Shady Lane and Wildflower Avenue will be relocated to the end of the new private street and would continue to serve the existing community while also accommodating the proposed development. Therefore, the lift station would not introduce a new odor source to the area.

Furthermore, odor emissions are regulated under California Health and Safety Code Section 41700, which prohibits the discharge of air contaminants in quantities that cause a nuisance or annoyance to the public, as well as by the Bay Area Air District Regulation 7, Odorous Substances. Should the Air Pollution Control Officer receive ten or more odor complaints within a 90-day period, then VFWD would need to take corrective action, such as the installation of further odor control features.

Therefore, impacts related to objectional odors would remain less than significant, as identified in the Subsequent IS/MND. Section 4.3, Air Quality, has been revised to include this additional information (refer to **Attachment B** of this Response to Comments memorandum).

Response to Comment AIR-2: Construction Health Risk Impacts

This response addresses comments in the following letters:

- Alison Egan, 11/12/2025 (I-1)
- Christine Giposon, 11/16/2025 (I-3)
- Gina Blair, 11/21/2025 (I-7)
- Linda Zupan-McKenna, 12/08/2025 (I-10)

As discussed in Section 4.3, Air Quality (pages 4-24 through 4-27), although the proposed project would include short-term construction emissions through the release of particulate matter (i.e., fugitive dust) generated by grading, hauling, and other activities, the proposed project would be required to implement **General Plan EIR Mitigation Measure AQ-2b.1**, which requires development projects to implement the Air District Basic Best Management Practices (BMPs). These measures include watering exposed surfaces, covering haul trucks, limiting vehicle speeds on unpaved roads, using wet power sweepers, and suspending work during high winds. Additional requirements involve paving surfaces promptly, washing vehicles before site exit, stabilizing unpaved access roads, and posting contact information for dust complaints. These measures would ensure that short-term impacts associated with the generation of particulate matter and fugitive dust would be reduced to the extent feasible and would ensure that this impact would be less than significant. Impacts related to material import and export were adequately evaluated in the emissions modeling prepared for the project.

Because the proposed project is located in proximity to existing single-family residential uses, construction activities could result in temporary exposure of nearby sensitive receptors to diesel exhaust emissions. Therefore, a construction Health Risk Assessment (HRA) was prepared to evaluate potential acute, chronic, and carcinogenic health risks to off-site receptors associated with construction-related diesel particulate matter (DPM) emissions. The construction HRA considered impacts to the most sensitive members of the population, including the maximally exposed residential receptor, schoolchild receptor, and worker receptor. For the maximally exposed residential receptor, a worst-case scenario was modeled wherein exposure lasts for the entire construction period. This conservative approach to analysis encompasses all sensitive receptor types and is consistent with HRA guidance issued by the State
Office of Environmental Health Hazard Assessment. Further, the meteorological dataset from the Vallejo meteorological site from years 2013 to 2017 is the most recent available data for that site from the Air District and is appropriate for use in the construction HRA.[1]

[1] Bay Area Air District. AERMOD-Ready Meteorological Data. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/ceqa-tools/ceqa-modeling-data (accessed January 2026).

To determine whether construction emissions would result in a significant air quality impact, the project's health risks were compared to the Air District's significance thresholds and as outlined in Section 4.3, Air Quality, of the IS/MND, construction of the proposed project would not exceed applicable Air District thresholds and would not expose nearby sensitive receptors to substantial pollutant concentrations.

BIOLOGICAL RESOURCES

The comments and corresponding responses in this section address comments received related to biological resources. The comment topics include:

- **BIO-1**: Wildlife Impacts and Mitigation
- **BIO-2**: Riparian and Wetland Impacts and Mitigation
- **BIO-3**: Tree Removal
- **BIO-4**: Habitat Fragmentation and Wildlife Movement
- **BIO-5:** Consistency with City Policies

Response to Comment BIO-1: Wildlife Impacts and Mitigation

This response addresses comments in the following letteers:

- California Department of Fish and Wildlife (CDFW), 12/4/2025 (A-1)
- Alison Egan, 11/12/2025 (I-1)
- Christine Gipson, 11/16/2025 (I-3)
- Sandra Zarate, 11/21/2025 (I-6)
- Carol and Kay McKenzie, 12/05/2025 (I-9)
- Linda Zupan-McKenne, 12/08/2025 (I-10)

Section 4.4, Biological Resources (page 4-39), of the Subsequent IS/MND detailed potential impacts on wildlife and special-status species and identified mitigation measures to reduce these potential impacts to less than significant. As discussed in Section 4.4, implementation of **Project Specific Mitigation Measures BIO-1a** and **BIO-1b** related to nesting birds and **Project Specific Mitigation Measures BIO-2a** and **BIO-2b** related to roosting bats would ensure that implementation of the proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or United States Fish and Wildlife Service (USFWS).

Further, additional mitigation measures recommended by CDFW related to special-status species have been incorporated into the Subsequent IS/MND, as discussed below. These mitigation measures would be implemented by the project sponsor and construction contractor and would be performed and verified by a quality biologist as required by the Mitigation Monitoring and Reporting Program (MMRP) prepared for the proposed project. Implementation of the MMRP is required pursuant to Public Resources Code Section 21081.6 and *State CEQA Guidelines* Section 15097 and the City as the Lead Agency is responsible for ensuring compliance with the MMRP through its discretionary approval authority.

White-tailed Kite, Northern Harrier, Short-Eared Owl, Swainson Hawk, and Tricolored Blackbird

As discussed in Section 4.4 Biological Resources (page 4-38), of the Subsequent IS/MND, of the 52 special-status wildlife species known to occur in the region, five species were determined to have a moderate or high potential to occur within the project site, including the following: white-tailed kite (*Elanus leucurus*), northern harrier (*Circus hudsonius [cyaneus]*), short-eared owl (*Asio flammeus*), silver-haired bat (*Lasionycteris noctivagans*), and hoary bat (*Lasiurus cinereus*). Although Swainson's hawk (*Buteo swainsoni*) is known to occur within the region, the project site is located outside of the breeding range of Swainson's hawk as documented in literature, and Swainson's hawk is deemed to have potential to occur on the project site for seasonal migratory stopover only. Similarly, although the tricolor blackbird (*Agelaius tricolor*) is known to occur within the region, the seasonal wetland in the project area does not form reed or tule cover thick enough to support a tricolored blackbird breeding colony, and the area is dominated by low growing (less than two feet tall) vegetation. In addition, the freshwater marsh wetland on the southern end of the project site, which would be avoided, is linear and less than the minimum 15-meter width of covered wetland habitat that tricolored blackbird requires to establish breeding colonies. Further, the dense vegetation along the southern tributary is a well-developed riparian canopy and does not support suitable vegetation for a breeding colony. Therefore, **Project Specific Mitigation Measures BIO-1a** and **BIO-1b** identified in the Subsequent IS/MND, which prohibit tree removal, vegetation removal, and initial ground disturbance during the nesting bird season (September 1 through January 31) and requires pre-construction nest survey for bird species and buffers during construction (if necessary), would adequately reduce potential impacts special-status bird species, including white-tailed kite, northern harrier, short-eared owl, Swainson hawk, and tricolored blackbird, as well as other nesting birds.

Specific mitigation measures related to Swainson's hawk and tricolored blackbird are unnecessary as it is highly unlikely for either species to breed on the project site and there is no nexus to require such measures. As such, no additional mitigation is necessary.

Project Specific Mitigation Measure BIO-1b would be implemented in compliance with state and federal regulations. Buffers would be implemented on a "species-specific" basis and special status species with potential for nesting, such as white-tailed kite, would have more substantial avoidance buffers implemented in the case of observance of active nests. Because potential impacts to special-status species would be avoided, no Incidental Take Permit (ITP) would be required.

Burrowing Owl

As discussed in the Biological Resources Impact Analysis[2] (**Appendix C** of the Subsequent IS/MND) prepared for the proposed project, there is no potential for the project site to support breeding burrowing owl and the project site represents poor wintering habitat, indicating that burrowing owl presence is unlikely. In addition to the lack of burrows, the project site is characterized by steeply sloping hillsides dominated by tall, unmanaged vegetation, conditions that are not conducive to burrowing owl presence. Nevertheless, in an abundance of caution, the proposed project would

[2] WRA, Inc. 2024. *Biological Resources Technical Report Vista Cove Project, Vallejo, Solano County, California.* February.

implement **Project Specific Mitigation Measures BIO-5a** and **BIO-5b**, as recommended by the CDFW, to ensure that potential impacts to burrowing owls would be less than significant.

Project Specific Mitigation Measure BIO-5a requires a burrowing owl habitat assessment and surveys for wintering burrowing owl prior to construction, if construction starts during the burrowing owl wintering season (September 1 to January 31) and **Project Specific Mitigation Measure BIO-5b** requires all construction pipes, culverts, hoses or similar materials be capped or covered to prevent burrowing owl from shelter or nesting in exposed materials. Section 4.4., Biological Resources, of the Subsequent IS/MND has been revised to include these mitigation measures (refer to **Attachment B** of this Response to Comments memorandum). These additional mitigation measures are included in an abundance of caution and are not considered new mitigation that would address a new or substantially more severe environmental impact that was not previously disclosed and analyzed in the Subsequent IS/MND. As such, the environmental effects of the proposed project related to burrowing owl remain within the scope of impacts disclosed in the Subsequent IS/MND.

Although the CDFW also recommended additional mitigation that details provisions for potential impacts to an unoccupied wintering burrowing owl burrow (as determined by the burrowing owl habitat assessment and surveys), this measure was determined to be unnecessary as implementation of **Project Specific Mitigation Measures BIO-5a** would sufficiently cover avoidance of wintering burrowing owl in the highly unlikely event that a wintering burrow is observed on the project site.

As previously discussed, it is highly unlikely that burrowing owl would use the project site for any extended period of time as the topography of the project site and absence of suitable burrows indicates that the species would not be drawn to the project site for overwintering. This is supported by the fact that high quality overwintering habitat exists near the project site in the form of flat expansive saltmarsh areas within the Benecia State Recreation Area (BSRA), where wintering burrowing owls have been observed on several recent occasions.

Similarly, although the CDFW also recommended additional mitigation related to burrowing owl foraging habitat, this mitigation measure was determined to be unnecessary as there is no scientific basis for considering the project site as suitable for or consisting of sensitive foraging habitat for burrowing owl that warrants compensatory mitigation. Burrowing owls prefer to forage within 600 meters of their wintering areas and have a strong preference for open areas with sparse vegetation, such as flat open grasslands, agricultural fields, and saltmarshes. As this habitat is not present on the project site, it is unlikely that burrowing owls would use the project site for foraging, and **Project Specific Mitigation Measures BIO-5a** is sufficient to avoid impacts to burrowing owl.

Common Wildlife Species

Under CEQA, the analysis of potential impacts on biological resources focuses on the protection of rare, threatened, endangered, or otherwise designated special-status species and sensitive natural communities, as well as impacts that would substantially reduce the long-term viability of wildlife populations or habitat. CEQA does not require detailed analysis of project effects on common or widely distributed wildlife species that are not afforded special protection under state or federal

law. Impacts to common wildlife species that are abundant, resilient, and not locally or regionally declining are generally considered less than significant, provided that the proposed project would not result in a substantial reduction in habitat, disrupt breeding in a manner that affects population sustainability, or otherwise cause a meaningful adverse change to biological resources, as defined in *State CEQA Guidelines* Appendix G. As the proposed project would not result in a substantial reduction in habitat, disruption of breeding in a manner that affects population sustainability or otherwise cause a meaningful adverse change to the populations of common wildlife species that may be present at the project site, impacts on common wildlife species would be less than significant.

Response to Comment BIO-2: Riparian and Wetland Impacts and Mitigation

This response addresses comments in the following letters:

- CDFW, 12/4/2025 (A-1)
- Alison Egan, 11/12/2025 (I-1)
- Christine Gipson, 11/16/2025 (I-3)
- Carol and Kay McKenzie, 12/05/2025 (I-9)

As discussed in Section 4.4, Biological Resources (page 4-42), of the Subsequent IS/MND, the project site contains freshwater marsh habitat, an intermittent stream and a seasonal wetland, and the proposed project has been designed to avoid and minimize impacts to these sensitive natural communities to the greatest extent feasible. The design plans account for the avoidance of the intermittent stream, freshwater marsh, and riparian vegetation; however, the proposed project would convert 0.49 acre of the seasonal wetland into a stormwater basin on the project site. Although the stormwater basin would be vegetated and seasonally inundated, it would result in permanent loss of the seasonal wetland on the project site. As such, the Subsequent IS/MND identified **Project Specific Mitigation Measure BIO-3a**, which would require compensatory mitigation for permanent loss of 0.49 acre of the seasonal wetland and would be satisfied through purchase of mitigation bank credits from an approved mitigation bank, payment of in-lieu fees to an approved public agency or conservation organization (e.g., local land trust), for implementation of compensatory mitigation projects, or via a permittee responsible mitigation involving creation, restoring, or enhancing analogous habitat. Further, the stormwater treatment facilities incorporated into the proposed project would ensure that the proposed project would not adversely affect the hydrology of the Southampton Bay wetlands.

While off-site mitigation banking for wetlands does not provide local/site-specific ecological replacement, under CEQA, mitigation is considered adequate where it avoids, minimizes, rectifies, reduces, or compensates for a project's significant environmental effects in a manner that is feasible, enforceable, and effective, consistent with Public Resources Code Section 21002 and *State CEQA Guidelines* Sections 15126.4 and 15370. Compensatory mitigation is an accepted and appropriate form of mitigation under CEQA when impacts cannot be fully avoided or reduced on-site, and when the compensatory measures are designed to offset the loss of resources or functions affected by the project. In this case, the compensatory mitigation measures are specifically tailored to the impacted resource (i.e., seasonal wetland), are based on established performance standards, and are subject to monitoring and reporting requirements through the adopted MMRP. Therefore,

implementation of **Project Specific Mitigation Measure BIO-3a** would offset the proposed project's impacts on seasonal wetlands by ensuring no net loss of biological function or value. Accordingly, the use of compensatory mitigation complies with CEQA requirements and provides a legally sufficient basis for concluding that the project's impacts would be adequately mitigated to less than significant levels.

In addition, to reduce potential project specific impacts to the riparian and freshwater marsh and riparian trees to a less than significant level, **Project Specific Mitigation Measures**, **BIO-4a**, **BIO-4b**, and **BIO-4c** would be implemented during project construction which require installation of construction fencing or flagging to delineate the riparian and freshwater marsh boundaries, utilization of erosion control measures, and implementation of tree protection measures.

Therefore, implementation of the proposed project would not result in significant impacts on wetland and riparian habitats with implementation of identified mitigation.

Response to Comment BIO-3: Tree Removal

This response addresses comments in the following letters:

- Alison Egan, 11/12/2025 (I-1)
- Christine Gipson, 11/16/2025 (I-3)

The proposed project includes the removal of 69 trees from the northern half of the project site and the planting of 141 new 15 gallon replacement trees,. As discussed in Section 4.4, Biological Resources, of the Subsequent IS/MND (pages 4-47 through 4-49), the removal of 69 trees from the northern half of the project site could result in impacts on nesting birds and the direct mortality of silver-haired bat and hoary bat adults and maternity roosts, which would be considered a potentially significant impact. As such, the Subsequent IS/MND identified **Project Specific Mitigation Measures BIO-1a** and **BIO-1b** and **Project Specific Mitigation Measures BIO-2a** and **BIO-2b.** As previously discussed, **Project Specific Mitigation Measures BIO-1a** and **BIO-1b** prohibit tree removal, vegetation removal, and initial ground disturbance during the nesting bird season (September 1 through January 31) and requires pre-construction nest survey for bird species and buffers during construction (if necessary). **Project Specific Mitigation Measures BIO-2a** and **BIO-2b** would require the completion of a bat roost assessment should construction activities occur during the maternity roost season. Implementation of these mitigation measures would ensure that tree removal as part of the proposed project would not result in significant impacts on nesting birds and bat species.

In addition, although proposed tree removal and replanting may result in an interim loss of mature tree canopy, tree removal would not occur during the nesting bird season (**Project Specific Mitigation Measures BIO-1a**), and this interim loss of mature tree canopy is not expected to result in substantial adverse impacts on wildlife species.

Therefore, tree removal associated with implementation of the proposed project would not result in a significant impact on biological resources, as identified in the Subsequent IS/MND.

Response to Comment BIO-4: Habitat Fragmentation and Wildlife Movement

This response addresses comments in the following letters:

- Christine Gipson, 11/16/2025 (I-3)
- Carol and Kay McKenzie, 12/05/2025 (I-9)

As discussed in Section 4.4, Biological Resources, of the Subsequent IS/MND (pages 4-46 through 4-47), the project site is not within a designated wildlife corridor.[3] Further, the project site is located adjacent to a larger tract of housing developments intersected by several highways and non-native grasslands in Solano County, and development of the proposed project would represent a continuation of existing residential development in the surrounding area. Therefore, the proposed project would not fragment habitat in a manner that would substantially affect biological resources, including wildlife species.

Although the BSRA is approximately 1,000 feet southeast of the project site, the project site does not provide connection to other tidal marsh habitats, nor does it contain such habitat. While common wildlife species presumably utilize the site to some degree for movement at a local scale, the project site itself does not provide corridor functions beyond connecting similar ruderal grassland parcels to surrounding areas. Therefore, implementation of the proposed project would not interfere with the movement of any native resident or migratory fish or wildlife species or impede the use of migratory wildlife corridors. Impacts would be less than significant, as identified in the Subsequent IS/MND.

Response to Comment BIO-5: Consistency with City Policies

This response addresses comments in the following letter:

- Carol and Kay McKenzie, 12/05/2025 (I-9)

As described in Section 4.4, Biological Resources of the Subsequent IS/MND (pages 4-31 through 4-49), the City's General Plan includes goals, policies, and actions related to biological resources that are intended to protect and enhance natural resources, sensitive biological resources, and open space. Specifically, Policy NBE-1.1 (Natural Resources) provides for the protection and enhancement of hillsides, waterways, wetlands, occurrences of special-status species and sensitive natural communities, and aquatic and important wildlife habitat through land use decisions that avoid and mitigate potential environmental impacts on these resources to the extent feasible and Policy NBE-1.2 (Sensitive Resources) requires that adverse impacts on sensitive biological resources, including special-status species, sensitive natural communities, and wetlands are avoided and mitigated to the greatest extent feasible as development takes place. As discussed above, the proposed project would not result in significant impacts to special-status species with implementation of **Project Specific Mitigation Measures BIO-1a** and **BIO-1b, Project Specific Mitigation Measures BIO-2a** and **BIO-2b,** and **Project Specific Mitigation Measures BIO-5a** and

[3] WRA, Inc. 2024. *Biological Resources Technical Report Vista Cove Project, Vallejo, Solano County, California.* February.

BIO-5b. In addition, the proposed project would not result in significant impacts related to sensitive natural communities, aquatic resources, or wetlands with implementation of **Project Specific Mitigation Measures BIO-3a**, **BIO-4a**, **BIO-4b**, and **BIO-4c.**

Therefore, implementation of the proposed project would be consistent with City policies related to the protection of biological resources.

CULTURAL RESOURCES

The comments and corresponding responses in this section relate to cultural resources. The comment topics relate to:

- **CUL-1**: Inadvertent Discovery of Cultural Resources

Response to Comment CUL-1: Inadvertent Discovery of Cultural Resources

This response addresses comments in the following letter:

- Christine Gipson, 11/16/2025 (I-3)

As discussed in Section 4.5, Cultural Resources, of the Subsequent IS/MND (page 4-53), no cultural resources were recorded by the Northwestern Information Center (NWIC) of the California Historical Resources Information System (CHRIS) at Sonoma State University within the project site and no cultural resources including prehistoric or historic archaeological sites or historic-period buildings were identified during the archaeological pedestrian field survey of the project site conducted on January 20, 2025. Based on these results, and given that the project site consists of severe slopes and is adjacent to existing developments, the Cultural Resources Assessment determined that the project site has a low potential for in situ subsurface cultural resources. However, construction activities, such as grading and other ground- disturbing activities, have the potential to uncover previously unknown or unidentified cultural resources. As such, the proposed project would implement standard measures to address the potential to disturb subsurface archaeological resources consistent with the General Plan EIR mitigation measures, as detailed in **Project Specific Mitigation Measure CUL-1**, to mitigate the impact to a level of less than significant.

Project Specific Mitigation Measure CUL-1 outlines procedures if archaeological resources are discovered during construction, such as work stoppage within 25 feet of the find, and a qualified archaeologist must evaluate the discovery. If the deposit is determined to be a significant historical resource, the project sponsor must implement standard measures for the treatment of archaeological resources, which may include documentation, excavation, analysis, and public outreach. A final report would be required to be submitted to the City and archived at the NWIC with significant materials curated for future research or public display. With the implementation of **Project Specific Mitigation Measure CUL-1,** the proposed project would not result in significant impacts to previously undiscovered archaeological resources, as the resources would be avoided, recovered, and evaluated, as needed. These are standard measures applied to all construction projects throughout the Bay Area and the State.

At the completion of project construction, the proposed project would not result in further disturbance of native soils on the project site and, therefore, project operations would have no potential to impact previously undiscovered archaeological resources.

GEOLOGY AND SOILS

The comments and corresponding responses in this section relate to geology and soils. The comment topics relate to:

- **GEO-1**: Slope Stability
- **GEO-2:** Geotechnical Report

Response to Comment GEO-1: Slope Stability

This response addresses comments in the following letteers:

- Alison Egan, 11/12/2025 (I-1)
- Christine Gipson 11/16/2025 (I-3)
- Rick Zavatsky, 11/19/2025 (I-4)
- Sabrina Cardoso and David 12/09/2025 (I-11)

As discussed in Section 4.7, Geology and Soils (page 4-69), of the Subsequent IS/MND, due to the steep slopes at the project site, the Preliminary Geotechnical Exploration[4] includes corrective grading recommendations to ensure the stability of graded slopes, including removal of compressible colluvium, excavation of buttress keyways, cut and cut-fill lot excavation, differential fill excavation, and construction of subsurface drainage facilities. In addition, a design-level geotechnical investigation would be prepared prior to construction of the proposed project, as required and detailed in **Project Specific Mitigation Measure GEO-1,** which may identify additional slope stability measures to be applied during construction, if necessary. Additional slope stability measures could include the monitoring of grading and foundation construction work or retaining walls, if deemed necessary by a licensed Geotechnical Engineer.

To address potential impacts associated with slope instability, the project sponsor would be required to implement all of the recommendations of the Preliminary Geotechnical Exploration and any recommendations included in a design-level geotechnical investigation into the project development plans, as required and detailed in **Project Specific Mitigation Measure GEO-1.** As specified in **Project Specific Mitigation Measure GEO-1**, at the end of construction, a licensed Geotechnical Engineer shall provide a letter regarding contractor compliance with project plans and specifications and with the recommendations of the geotechnical investigations and any supplemental recommendations issued during construction. The letter would be submitted for review to the City of Vallejo Building Division and the City Engineer and confirmed prior to issuance of a certificate of occupancy. As such, the implementation of slope stability measures detailed in the Preliminary Geotechnical Exploration, including corrective grading recommendations to ensure the

[4] ENGEO. 2022. *Vallejo Properties – Vista Cove, Vallejo, California, Preliminary Geotechnical Exploration.* September 12.

stability of graded slopes, removal of compressible colluvium, excavation of buttress keyways, cut and cut-fill lot excavation, and differential fill excavation, and any recommendations included in a design-level geotechnical investigation would be verified by both the licensed Geotechnical Engineer and the City.

In addition, as required by Chapter 12.40, Excavations, Grading, and Filling, of the City's Municipal Code, a grading permit would be required before any grading, clearing, brushing, or grubbing can occur. As outlined the City's Grading Permit Guidelines, which implements Chapter 12.40 of the City's Municipal Code, the grading plans, erosion control plans, and geotechnical reports required as part of the grading permit application would be reviewed and approved by the City of Vallejo Engineer for compliance with the City's Municipal Code and applicable standards prior to issuance of the grading permit.

With implementation of **Project Specific Mitigation Measure GEO-1** and adherence to the City's Municipal Code, potential impacts related to slope stability would be less than significant, as identified in Section 4.7, Geology and Soils, of the Subsequent IS/MND.

Response to Comment GEO-2: Geotechnical Report

This response addresses comments in the following letter:

- Rick Zavatsky, 11/19/2025 (I-4)
- Linda Zupan-McKenne, 12/08/2025 (I-10)

As stated in the Preliminary Geotechnical Exploration prepared for the proposed project, the conclusions and recommendations contained in the report are valid for a period of no more than 2 years from the date of report issuance. As the report was prepared in September 2022, ENGEO has prepared a memorandum, dated January 7, 2026, indicating that the conclusions and recommendations provided in the Preliminary Geotechnical Exploration are still valid. Section 4.7, Geology and Soils, has been updated to include this memorandum (refer to **Attachment B** of this Response to Comments memorandum).

HAZARDS

The comments and corresponding responses in this section relate to hazards. The comment topics relate to:

- **HAZ-1**: Emergency Access and Evacuation

Response to Comment HAZ-1: Emergency Access and Evacuation

This response addresses comments in the following letters:

- Marty, 11/16/2025 (I-2)
- Christine Gipson, 11/16/2025 (I-3)
- Rick Zavatsky, 11/19/2025 (I-4)
- Gina Blair, 11/21/2025 (I-7)

- Annette Hilts, 11/21/2025 (I-8)
- Carol and Kay McKenzie, 12/05/2025 (I-9)
- Linda Zupan-McKenna, 12/08/2025 (I-10)

As discussed in Section 4.9 Hazards and Hazardous Materials (pages 4-95 through 4-96) of the Subsequent IS/MND, the proposed project was reviewed for consistency with the policies outlined in the Solano County General Plan Public Health and Safety chapter, the City of Vallejo General Plan Nature and Built Environment chapter, the Solano County Emergency Operations Plan (EOP), and the Solano County Multi-Jurisdictional Hazard Mitigation Plan (MJHMP). The proposed project was found to be consistent with these policies.

Additionally, the proposed project would be designed to meet State and local standards regarding turning radius, road width, and emergency vehicle access. Accordingly, the proposed project would not alter or block adjacent roadways, and implementation of the proposed project would not be expected to impair the function of nearby emergency evacuation routes. In addition, operation of the proposed project would not cause permanent alterations to vehicle circulation routes or patterns, nor would it impede public access or travel on public rights-of-way, as the proposed internal roadways would be accessible to neighborhood users and would terminate at the project site. Furthermore, prior to approval of final maps and improvement plans for any development project within Vallejo, including the proposed project, plan review and approval by the Vallejo Fire Department would be required. For these reasons, the proposed project would have a less than significant impact on an adopted emergency response plan or emergency evacuation plan and would be consistent with applicable policies related to emergency evacuation.

Moreover, according to the City of Vallejo General Plan 2040, there are no Very High Fire Hazard Areas in or adjacent to Vallejo. Although the project site is located within a moderate- to high-risk wildfire area,[5] operation of the proposed project would be consistent with adjacent residential uses and allowable zoning for the project site. The project would be subject to applicable design standards and guidelines outlined in the City of Vallejo Municipal Code and would undergo Development Review to ensure that proposed structures conform to all applicable regulations. The proposed project would also be subject to the requirements of Section 13000 et seq. of the California Health and Safety Code, the California Building Standards Code, and the California State Fire Code, which include regulations addressing the following: building standards for fire protection; fire protection and notification systems such as extinguishers and smoke alarms; safety for firefighters and emergency responders during emergency operations; minimum standards for hazardous vegetation and fuel management, defensible space, and building construction; and minimum standards for emergency access and water supply for fire response.

Additionally, on October 27, 2025, a supplemental Evacuation Assessment[6] (refer to **Attachment D** of this memorandum) was prepared in support of the proposed project. This supplemental assessment evaluated the project's likelihood of mass evacuation, the viability of evacuation routes, existing alert and warning systems, vehicle demand, proximity to public safety resources, and

5 Vallejo, City of. 2017. *Propel Vallejo General Plan 2040, Map NBE-4.* August 29.

6 CAS Safety Consulting, LLC. 2025. *Vista Cove Evacuation Assessment.* October 27.

operational demand to assess whether the proposed project would materially degrade evacuation operations or create a substantial impediment to emergency egress or ingress.

The Evacuation Assessment determined that, in this setting, the proposed project would not present a substantial evacuation concern and would be compatible with evacuation operations for the surrounding community. This determination is based on (1) the project site's low likelihood of mass evacuation from natural hazards, as it is located outside mapped Wildland–Urban Interface (WUI) fire-hazard areas and the tsunami hazard area, has no wildfire history, and is not subject to other natural events that commonly trigger mass evacuations; (2) the availability of two viable evacuation routes, including a primary route located near the front of the neighborhood outflow with a short, direct connection to Interstate 780, and an alternate, less favorable route available if the primary route is compromised; (3) the presence of established alert and warning systems, including Solano County's Alert Solano with Wireless Emergency Alerts/Integrated Public Alert & Warning System (WEA/ IPAWS), law-enforcement hi-lo sirens as an audible redundancy, and pre-determined evacuation zones under the County's Emergency Operations Plan; (4) operationally manageable vehicle demand supported by traffic control points and short-term staging while preserving responder ingress when conditions allow; (5) the project's reduced 51-unit scale, which is favorable from an evacuation-management standpoint; (6) the project site's location within evacuation zone VLJ-1236 and its proximity to Vallejo Fire Department Station 26, located at 1335 Fulton Avenue, and the California Highway Patrol local area office, located at 1551 Benicia Road; and (7) the availability of County and State mutual aid to support evacuation operations during significant incidents.

For these reasons, the proposed project's potential impacts to an adopted emergency response plan or emergency evacuation plan would be less than significant.

Response to Comment HAZ-2: Phase I Environmental Site Assessment

This response addresses comments in the following letter:

- Linda Zupan-McKenna, 12/9/2025 (I-10)

In response to this comment, **Appendix F** of the Subsequent IS/MND has been replaced to include the final version of the Phase I Environmental Site Assessment (ESA). The content and conclusions of the replaced Phase I ESA is the same as the draft version circulated as part of the Subsequent IS/MND.

HYDROLOGY AND WATER QUALITY

The comments and corresponding responses in this section address comments received related to hydrology and water quality. The comment topics include:

- **HYD-1**: Drainage Patterns
- **HYD-2**: Stormwater Management and Treatment – Construction and Operation
- **HYD-3**: Erosion and Sediment Control
- **HYD-4**: Flooding

Response to Comment HYD-1: Drainage Patterns

This response addresses comments in the following letter:

- VFWD, 12/05/2025 (A-2)

As discussed in Section 4.10, Hydrology and Water Quality, a *Drainage Study*[7] was prepared for the proposed project by Qualus Engineering CA, LLP. The *Drainage Study* identified both the existing and proposed drainage pattern at the project site. Qualus Engineering CA, LLP reviewed the comment from VFWD, which requested revisions to the existing drainage areas (DA) 2 and 3 as provided in the *Drainage Study* to include contributing areas to the west. Based on Qualus Engineering CA, LLP's review of the existing drainage conditions, the inclusion of the property to the west in DAs 2 and 3 will be provided in the final engineering and improvement plans for the proposed project, as part of the final entitlement package for the proposed project. The inclusion of this additional area within DAs 2 and 3 does not result in any changes to the proposed project's impacts on drainage conditions as evaluated and documented in the *Drainage Study* and the Subsequent IS/MND.

Response to Comment HYD-2: Stormwater Management and Treatment – Construction and Operation

This response addresses comments in the following letters:

- VFWD, 12/05/2025 (A-2)
- Alison Egan, 11/12/2025 (I-1)
- Christine Gipson, 11/16/2025 (I-3)
- Carol and Kay McKenzie, 12/05/2025 (I-9)
- Linda Zupan-McKenne, 12/08/2025 (I-10)

As discussed in Section 4.10, Hydrology and Water Quality (page 4-100), of the Subsequent IS/MND, the proposed project would be required to comply with the State Water Resources Control Board (SWRCB) National Pollution Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities, Order No. 2022-0057-DWQ, NPDES No. CAS000002 (CGP) during construction and the California Regional Water Quality Control Board (RWQCB) San Francisco Bay Region's Municipal Regional Stormwater (MRP) NPDES Permit, Order No. R2-2022-0018, as amended by Order No. R2-2023-0019, NPDES Permit No. CAS612008 during operation.

Pursuant to the CGP, a Stormwater Pollution Protection Plan (SWPPP) would be prepared that identifies the Construction Best Management Practices (BMPs) that would be implemented during construction activities. Construction BMPs would include, but not be limited to, Erosion Control and Sediment Control BMPs designed to minimize erosion and retain sediment on site, as well as Good Housekeeping BMPs to prevent spills, leaks, and discharge of construction debris and waste into receiving waters. As such, adherence to the CGP and implementation of Construction BMPs, specifically the Good Housekeeping BMPs, would ensure that stormwater runoff from the project

[7] DK Engineering. 2023. Op. cit.

site during construction would not contaminate receiving waters, including the Carquinez Strait. In addition, the Erosion Control and Sediment Control BMPs would ensure that grading and construction activities near the riparian/wetland area of the project site would not result in significant hydrological changes or sedimentation impacts to the riparian/wetland area or the Benecia State Recreation Area (BSRA).

As discussed in Chapter 2.0, Project Description (page 2-21), of the Subsequent IS/MND, implementation of the proposed project would result in approximately 3.95 acres of impervious surface area (19.6 percent of the project site), which represents an increase in impervious surface area at the project site from existing conditions, which would increase stormwater runoff from the project site and more effectively transport pollutants to receiving waters. As discussed in Section 4.10, Hydrology and Water Quality (page 4-102), of the Subsequent IS/MND, required by the MRP, a Stormwater Control Plan and Stormwater Facility Operation and Maintenance Plan would be prepared and implemented during operation of the proposed project. These plans would be reviewed and approved by the City prior to issuance of any grading or building permits for the proposed project.

Pursuant to Provision C.3 of the MRP, the Stormwater Control Plan would detail the site-specific source control, site design, and stormwater treatment measures for new and redevelopment projects to address both soluble and insoluble stormwater runoff pollutant discharges and prevent increases in runoff flows from new projects. Source control BMPs are preventative measures that are implemented to prevent the introduction of pollutants into stormwater. Site design BMPs are stormwater management strategies that emphasize conservation and use of existing site features to reduce the amount of runoff and pollutant loading generated from a project site. Stormwater treatment Control BMPs are structural BMPs, which typically include Low Impact Design (LID) BMPs, designed to treat and reduce pollutants in storm water runoff prior to releasing it to receiving waters. LID BMPs mimic a project site's natural hydrology by using design measures that capture, filter, store, evaporate, detain, and infiltrate runoff.

According to the Preliminary Stormwater Control Plan[8] prepared for the proposed project, the proposed project would include two detention basins and approximately 7,617 square feet of bioretention space that would act as stormwater treatment BMPs and be used for stormwater control and treatment to reduce pollutants of concern in stormwater prior to release into the marshland area adjacent to Benicia State Park. The two detention basins would be designed and sized to treat stormwater runoff from the entire project sized, as required by the MRP.

In addition, the two detention basins would be designed and sized to detain the design capture volume (DCV) of the project site and gradually release to receiving waters in order to ensure that increased stormwater runoff from an increase in impervious surface area would not result in impacts to downstream receiving waters, including sedimentation. Further, the Stormwater Facility Operation and Maintenance Plan would ensure that the post-construction stormwater treatment system would be monitored and properly maintained to ensure that the stormwater runoff is adequately addressed throughout operation of the proposed project. As such, adherence to the

[8] Sancerre. 2023. *Preliminary Stormwater Control Plan. Vista Cove.* November

MRP and implementation of source control, site design, and stormwater treatment measures (i.e., detention basins), would ensure that increased stormwater runoff from the project site during operation would not contaminate receiving waters or result in significant downstream sedimentation.

Overall, as discussed in Section 4.10, Hydrology and Water Quality, of the Subsequent IS/MND, and summarized above, the proposed project would meet all applicable NPDES permit requirements pursuant to the SWRCB and San Francisco RWQCB, which would ensure that stormwater runoff is properly managed and treated during construction and operation of the proposed project. Therefore, hydrology and water quality impacts associated with the proposed project would be less than significant during construction and operation.

Response to Comment HYD-3: Erosion and Sediment Control

This response addresses comments in the following letters:

- Christine Gipson, 11/16/2025 (I-3)
- Carol and Kay McKenzie, 12/05/2025 (I-9)

As discussed in Section 4.10, Hydrology and Water Quality (page 4-103), of the Subsequent IS/MND, exposed soil during construction of the proposed project would result in an increased potential for soil erosion and siltation compared to existing conditions. Additionally, during a storm event, soil erosion and siltation could occur at an accelerated rate. However, as discussed above, the proposed project would be subject to the requirements of the CGP, including preparation of a SWPPP and implementation of Construction BMPs, including Erosion Control and Sediment Control BMPs. The Erosion Control and Sediment Control BMPs would be designed to minimize erosion and retain sediment on site and would ensure that grading and construction activities near the riparian/wetland area of the project site would not result in significant hydrological changes or sedimentation impacts to the riparian/wetland area or the BSRA.

In addition, as discussed in Section 4.10, Hydrology and Water Quality (page 4-103), of the Subsequent IS/MND, operation of the proposed project would result in an increase in impervious surfaces on the project site from 0 acres to approximately 3.95 acres, which would result in a net increase in stormwater runoff that could lead to downstream erosion in receiving waters. However, as discussed above, the proposed project includes two detention basins and approximately 7,617 square feet of bioretention space which would be used for stormwater control and treatment pursuant to the MRP. The two detention basins would be designed and sized to treat stormwater runoff from the entire project sized, as required by the MRP. In addition, the two detention basins would be designed and sized to detain the design capture volume (DCV) of the project site and gradually release to receiving waters in order to ensure that increased stormwater runoff from an increase in impervious surface area would not result in impacts to downstream receiving waters, including sedimentation.

Further, the Stormwater Facility Operation and Maintenance Plan would ensure that the post-construction stormwater treatment system would be monitored and properly maintained to ensure that the stormwater runoff is adequately addressed throughout operation of the proposed project.

As such, adherence to the MRP and implementation of source control, site design, and stormwater treatment measures (i.e., detention basins), would ensure that increased stormwater runoff from the project site during operation would not result in significant downstream erosion impacts, including on the riparian/wetland area and the BSRA.

Response to Comment HYD-4: Flooding

This response addresses comments in the following letter:

- Linda Zupan-McKenne, 12/08/2025 (I-10)
- Christine Gipson, 11/16/2025 (I-3)

As discussed in Section 4.10, Hydrology and Water Quality (page 4-105), of the Subsequent IS/MND, and according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 06095C0629G, the project site is located in Zone X, which is identified as an area of minimal flood hazard.[9] Although FEMA FIRM Map No. 06095C0629G depicts Special Flood Hazard Areas located east of the project site, associated with the unnamed creek and marshland within the BSRA that extends north along Columbus Parkway, this area is outside the project site. Therefore, flooding in this area would not impact the proposed project or its future residents.

Although the Drainage Study[10] *p*repared for the proposed project did not include an analysis of sea level rise, rising tides are not anticipated to be a concern for the proposed project and its future residents. According to the National Oceanic and Atmospheric Administration (NOAA) Sea Level Rise Viewer,[11] which depicts community-level impacts from coastal flooding or sea level rise (up to 10 feet above average high tides), the proposed project would not become inundated even if tides rise 10 feet. Therefore, impacts related to flooding associated with rising sea levels or tides would be less than significant.

NOISE

The comments and corresponding responses in this section address comments received related to noise. The comment topics include:

- **NOI-1**: Construction and Operational Noise

Response to Comment NOI-1: Noise - Construction and Operation

This response addresses comments in the following letters:

- VFWD, 12/05/2025 (A-2)

---

9 Federal Emergency Management Agency (FEMA). 2016. Flood Insurance Rate Map No. 06095C0629G. Map Revised August 3, 2016. Website: https://msc.fema.gov/portal/search (accessed January 5, 2026).

10 DK Engineering. 2023. *Drainage Study for Vista Cove in Vallejo, California*. November.

11 National Oceanic and Atmospheric Administration (NOAA). Sea Level Rise Viewer. Website: https://coast.noaa.gov/slr/#/layer/slr/10/-13603198.473069413/4590765.801025945/14.367/satellite/none/0.8/2050/interHigh/noAccretion/NOS_Minor (accessed January 5, 2026).

- Alison Egan, 11/12/2025 (I-1)
- Sandra Zarate, 11/21/2025 (I-6)
- Gina Blair, 11/21/2025 (I-7)
- Annette Hilts, 11/21/2025 (I-8)
- Linda Zupan-McKenne, 12/08/2025 (I-10)

As discussed in Section 4.13, Noise (page 4-120), of the Subsequent IS/MND, construction of the proposed project would result in increased noise associated with construction equipment, which would include a combination of trucks, power tools, concrete mixers, and portable generators that when combined can reach high noise levels. In addition, during operation, the proposed project would generate increased noise associated with transportation (i.e., vehicles traveling to and from the project site) and stationary-source noise impacts from the proposed ground mounted air conditioning units.

However, based on the construction noise levels provided in the *Noise Impact Analysis* (**Appendix H** of the Subsequent IS/MND) prepared for the proposed project, the highest anticipated noise levels during construction, occurring when the loudest equipment operates closest to the nearest sensitive receptor, would average approximately 65 A-weighted decibel (dBA) equivalent continuous sound level (L_{eq}). This is below the City's daytime construction noise threshold of 80 dBA L_{eq} at all sensitive receptor locations. In addition, the project would be required to comply with noise-related provisions of the City of Vallejo Municipal Code, Chapters 12.40 and 16.502, which establish allowable hours of construction activity and prohibit construction noise that exceeds established performance standards. During construction, construction activities shall be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Friday, and 9:00 a.m. to 6:00 p.m. on Saturdays. Construction is prohibited on Sundays and City-observed holidays, unless a special permit is issued by the City. Compliance with these existing regulatory requirements would ensure that construction activities occur only during permitted hours and would not generate excessive noise levels. Therefore, as construction noise would be below the City's established noise threshold, the proposed project would not result in significant noise impacts during construction.

In addition, according to the *Noise Impact Analysis* prepared for the proposed project, off-site transportation noise impacts associated with the proposed project are predicted to generate a noise level of 50.2 dBA CNEL at the nearest building façade of 196 Wildflower Avenue. Further, the highest operational noise level would average 33.3 dBA L_{eq} at the nearest sensitive receiver locations. These noise levels would be below the City's maximum exterior noise level of 55 dBA for resource conservation and rural residential development and the maximum exterior noise level of 60 dBA for all other residential uses, as provided in Section 16.72.030, Performance Standards/Noise, of the City's Municipal Code.

In addition, as identified by the VFWD, periodic testing of the proposed lift station during operation would also generate some noise. However, noise levels would meet the VFWD's requirements for limited noise to ensure that this noise would be less than 4 dBA along the nearest residential property line. Section 4.13, Noise, has been updated to include this discussion of potential noise impacts associated with periodic testing of the proposed lift station (refer to **Attachment B** of this Response to Comments memorandum). Based on the above discussion and because operational

noise would be below the City's and the VFWD's established noise thresholds, the proposed project would not result in significant noise impacts during operation and would not require any noise mitigation. There is no nexus to require additional noise-reduction measures, such as soundwalls.

POPULATION AND HOUSING

The comments and corresponding responses in this section address comments received related to population and housing. The comment topics include:

- **POP-1**: Impacts on Essential Services and Businesses

Response to Comment POP-1: Impacts on Essential Services and Businesses

This response addresses comments in the following letter:

- Alison Egan, 11/12/2025 (I-1)

As stated in Section 4.14 Population and Housing (pages 4-123 through 4-124) of the Subsequent IS/MND, the proposed project would increase the local population by approximately 143 persons, based on the City of Vallejo's average household size (2019–2023) of 2.79 persons per household. [12] Given that the City's population was estimated to be approximately 122,807 persons as of July 1, 2023,[13] the anticipated population growth associated with the proposed project represents less than a 1 percent increase in the City's current population. Furthermore, the City's population is projected to grow by 24,826 persons to a total of 142,744 persons by 2040.[14] Therefore the proposed project represents approximately 0.6 percent of the population growth anticipated through 2040.

Although the proposed project would incrementally increase the number of residents in the City, this increase would not be substantial or unplanned. The project is consistent with the City's General Plan land use and zoning designations for the site and is therefore consistent with population growth assumed under General Plan buildout. As a result, the proposed project would not induce substantial unplanned population growth.

With respect to essential services such as grocery stores and other businesses, CEQA requires evaluation of whether a project would result in substantial adverse physical impacts associated with the need for new or expanded public facilities, such as schools, police protection, or fire protection. CEQA does not require analysis of economic effects on individual private businesses, such as grocery stores or neighborhood retail establishments, nor does it require analysis of market competition or changes in demand for private services. Because the proposed project would not result in

---

12 United States Census Bureau. *QuickFacts, Vallejo city, California; United States.*2024. Website: https://www.census.gov/quickfacts/fact/table/vallejocitycalifornia,US/PST045224 (accessed February 28, 2025).

13 Ibid.

14 City of Vallejo. 2016. Propel Vallejo General Plan Update and Sonoma Boulevard Specific Plan EIR for the City of Vallejo. July.

substantial unplanned population growth or require the construction of new or expanded public facilities, impacts related to population growth would be less than significant.

PUBLIC SERVICES

The comments and corresponding responses in this section address comments received related to public services. The comment topics include:

- **PS-1**: Police Protection Services
- **PS-2**: School Services

Response to Comment PS-1: Police Protection Services

This response addresses comments in the following letter:

- Rick Zavatsky, 11/19/2025 (I-4)

As discussed in Section 4.15, Public Services, under Impact Threshold 4.15.3 (ii) (pages 4-128 through 4-129), although development of the proposed project would generate an incremental increase in demand for police services, this increase would be consistent with existing population growth contemplated under the City's General Plan and would not require the construction of new police facilities or the expansion of existing facilities. Additionally, the Vallejo Polce Department (VPD) would continue to provide service to the project site and would not require additional officers to serve the proposed project, considering the negligible increase in population that would result from the proposed project (less than 1 percent of the City's current population). Furthermore, the project sponsor would be required to pay Solano County public facilities impact mitigation fees used to fund capital costs associated with constructing new public facilities and purchasing equipment for new public facilities. Payment of public facilities impact mitigation fees commensurate with the increased demand for services in the City would offset any increase in demand for police protection services.

Police services would continue to be provided citywide and to the proposed project, and current staffing levels would be addressed through the City's ongoing budgeting and service planning processes. Therefore, the proposed project would not result in a substantial increase in demand such that police services could not serve the project, and impacts would remain less than significant.

Response to Comment PS-2: School Services

This response addresses comments in the following letter:

- Sandra Zarate, 11/21/2025 (I-5)

As discussed in Section 4.15, Public Services, under Impact Threshold 4.15.3 (iii) (pages 4-129 through 4-130), the estimated number of students the proposed project would generate is derived by multiplying the number of students per dwelling unit (the student yield factor) by the number of dwelling units in the proposed project (51 new units). The California State Allocation Board Office of Public School Construction reports that the Statewide student yield factor of 0.7 student per

dwelling unit is applicable for unified school districts. Applying the statewide average student yield factor, the proposed project would generate 36 students.

The commenters expressed concern regarding increased demand or congestion at existing schools however, pursuant to State law (Senate Bill [SB] 50), the project sponsor would be required to pay school impact fees prior to issuance of building permits to mitigate impacts on school facilities. Payment of these fees is deemed full mitigation for impacts to school facilities under CEQA. Therefore, impacts associated with increased demand on schools would remain less than significant.

TRANSPORTATION

The comments and corresponding responses in this section address comments received related to transportation and traffic. The comment topics include:

- **TRA-1**: VMT Methodology
- **TRA-2**: Traffic Analysis Methodology
- **TRA-3**: Road Conditions and Maintenance
- **TRA-4**: Safety and Emergency Access
- **TRA-5**: Increased Traffic and Congestion
- **TRA-6**: Alternative Modes of Transportation
- **TRA-7**: Cumulative Transportation Impacts
- **TRA-8**: Site Access

Response to Comment TRA-1: VMT Methodology

This response addresses comments in the following letter:

- Caltrans, 12/3/2025 (A-3)
- Christine Gipson, 11/16/2025 (I-3)

As discussed in the Transportation Analysis[15] in **Appendix I** of the Subsequent IS/MND, the City has adopted transportation thresholds under which small projects that would generate fewer than 500 daily two-way vehicle trips are considered to result in less than significant transportation impacts. Solano County likewise has not adopted VMT thresholds of significance.

As explained in the Transportation Analysis, it is not appropriate to rely solely on the Governor's Office of Planning and Research *Technical Advisory on Evaluating Transportation Impacts under CEQA* (December 2018). Instead, the Transportation Analysis provides independent substantial evidence supporting the application of the City's small-project threshold. Subsequent to preparation of the Transportation Analysis, a California Court of Appeal decision, *Cleveland National Forest Foundation v. County of San Diego (2025)*, confirmed that reliance on the Technical Advisory's small-

[15] LSA Associates, Inc. 2025. *Transportation Analysis for the Vista Cove Project* (LSA Project No. 20241845). January 9.

project screening threshold, without additional supporting evidence, is improper. Consistent with that decision, the Transportation Analysis does not rely exclusively on the Technical Advisory.

One of the stated objectives of SB 743 is the reduction of greenhouse gas (GHG) emissions. The Transportation Analysis established relationship between VMT and GHG emissions and, using adopted GHG thresholds, demonstrates that projects generating fewer than 500 daily two-way trips would result in negligible GHG effects. While the Transportation Analysis does not rely on the Bay Area Air Quality Management District's CEQA Air Quality Guidelines as a threshold of significance, it notes that the project's estimated transportation-related emissions are below the thresholds identified in those guidelines as an additional point of reference. *State CEQA Guidelines* Section 15064.7(c) allows a lead agency to consider thresholds of significance adopted or recommended by other public agencies or experts, provided the lead agency's determination is supported by substantial evidence. Furthermore, the Transportation Analysis provides independent substantial evidence that is consistent with, but not dependent upon, previously adopted thresholds of significance.

Response to Comment TRA-2: Traffic Analysis Methodology

This response addresses comments in the following letters:

- Alison Egan, 11/12/2025 (I-1)
- Christine Gipson, 11/16/2025 (I-3)
- Linda Zupan-McKenna, 12/08/2025 (I-10)

As stated in Section 4.17, Transportation (pages 4-140 through 4-142) of the Subsequent IS/MND, the Transportation Analysis for the proposed project (**Appendix I**) was prepared in January 2025 and applied trip generation rates published in the latest version of ITE *Trip Generation Manual*. The 11th Edition was published in 2021 and, for single family homes, includes data collected nationwide (including in California) between the 1990s and 2020s. In August 2025 the 12th edition of the ITE *Trip Generation Manual* was published. This latest version includes additional data collected between 2021 and 2025. As the result of including more recent data, the trip generation rate for single family housing decreased (e.g., from 9.43 daily trips per home to 9.09 daily trips per home). Therefore, estimates of the daily trip generation for the proposed project included in the Subsequent IS/MND are more conservative than current rates.

Response to Comment TRA-3: Road Conditions and Maintenance

This response addresses comments in the following letters:

- Alison Egan, 11/12/2025 (I-1)
- Christine Gipson, 11/16/2025 (I-3)

As stated in Section 4.17, Transportation and Circulation (page 4-142) of the Subsequent IS/MND, the design, construction, and maintenance of project access points and on-site roads would be required to comply with the City's Municipal Code and applicable City standards. In addition, West of Dogwood Lane, Shady Lane is approximately 35 to 40 feet wide and accommodates parallel parking on both sides of the street. East of Dogwood Lane, the roadway begins to narrow, and east

of Applenut Lane, Shady Lane is approximately 25 to 30 feet wide and is signed to prohibit on-street parking. Even in its narrowest segments, Shady Lane meets applicable design standards and exceeds the minimum 24-foot width necessary to accommodate two-way vehicle traffic without on-street parking.

Pursuant to *State CEQA Guidelines* Section 15064(b), a project is responsible only for its incremental effects on the environment, and existing roadway conditions alone do not constitute a significant impact. In addition, *State CEQA Guidelines* Section 15064.3(b) requires that transportation impacts be evaluated based on the project's effect on VMT, rather than pre-existing roadway design characteristics. Accordingly, the project applicant is not required to repair or upgrade off-site roadways.

Response to Comment TRA-4: Safety and Emergency Access

This response addresses comments in the following letters:

- Marty 11/16/2025 (I-2)
- Christine Gipson 11/16/2025 (I-3)
- Rick Zavatsky, 11/19/2025 (I-4)
- Gina Blair 11/21/2025 (I-7)
- Annette Hilts, 11/21/2025 (I-8)
- Carol and Kay McKenzie, 12/05/2025 (I-9)
- Linda Zupan-McKenna 12/08/2025 (I-10)

Please refer to Comment HAZ-1 for a discussion of emergency access. Additionally, as discussed in Section 4.17 Transportation (page 4-142), the design of the proposed project does not include any hazardous geometric design features, such as sharp horizontal curves, sudden curve transitions, or offset intersections, or incompatible uses that could substantially increase circulation/traffic hazards. Vehicular access to the project site would be provided by one full access residential street through an established community to the west off the intersection of Shady Lane and Wildflower Avenue. The proposed project would include new private internal residential streets that would be 28 feet wide curb-to-curb with parking on one side, and a 4.5-foot attached sidewalk. The project would also include private alleys which would be smaller in scale than the private residential streets and would include shared vehicular access to houses with garages fronting them. Private alleys would include a 33-foot public utility easement/planting easement, and a 10-foot travel way in each direction with no parking allowed. Accordingly, the design, construction, and maintenance of project access locations and on-site roads would be required to comply with the City's Municipal Code and relevant City standards.

Response to Comment TRA-5: Increased Traffic and Congestion

This response addresses comments in the following letters:

- Alison Egan, 11/12/2025 (I-1)
- Marty, 11/16/2025 (I-2)
- Christine Gipson, 11/16/2025 (I-3)

- Rick Zavatsky, 11/19/2025 (I-4)
- Don Spilman, 11/20/2025 (I-5)
- Sandra Zarate, 11/21/2025 (I-6)
- Gina Blair, 11/21/2025 (I-7)
- Annette Hilts, 11/21/2025 (I-8)
- Carol and Kay McKenzie, 12/05/2025 (I-9)
- Linda Zupan-McKenna, 12/08/2025 (I-10)
- Sabrina Cardoso and David Ingalls, 12/09/2025 (I-11)

As stated in Section 4.17, Transportation, the *City of Vallejo Public Works Department Traffic Impact Analysis/Study Guidelines* identify thresholds for determining if the contribution of project traffic to an intersection would be significant. The significance thresholds identify whether project traffic volume would increase the volume-to-capacity ratio of key intersections. The significance threshold is lower for intersections at or near full capacity and higher for intersections performing at a better level of service, but no significant impact would occur at any intersection operating at the best levels of service (i.e., level of service [LOS] A and B). The guidelines also provide a screening threshold of 100 peak hour trips for determining when a traffic impact analysis should be prepared. For a project below 100 peak hour trips, project volume at key intersections would not trigger the established significance threshold. The proposed project peak hour trip generation is 48, less than half of the established screening threshold for peak hour trips. The proposed project daily trip generation is also less than the established screening threshold for daily trips. Even though the proposed project trip generation is less than the established screening thresholds, an analysis of the traffic impacts at the key intersection of Glen Cove Parkway/Robles Way was prepared. This intersection was found to operate at LOS B even with the addition of project traffic and the project would not have a significant impact. Intersections along neighborhood streets do not operate near their capacity limit, would similarly have a good LOS, would continue to operate well below their capacity with the addition of project traffic volume, and the established thresholds of significance would not be crossed by the project's low traffic volume.

Further, the trip generation for the proposed project was developed using rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (2021)[16] for Land Use Code 210 (Single-Family Detached Housing), the proposed project is anticipated to generate 481 daily trips of which 35 would occur in the AM peak hour and 48 would occur in the PM peak hour. As such, the project's trip generation is below the thresholds established by the City's guidelines and the preparation of a traffic analysis is not required for the proposed project. The project traffic is included within the traffic generated by the General Plan build out, and the project would not result in a new significant impact or in a substantial in Because the project would generate fewer trips than the threshold for review established by the City and in the Congestion Management Program (CMP), and because project traffic was not found to degrade the operation of the intersection of Glen Cove Parkway/ Robles Way to below LOS E, it is determined that the project does not have the potential to significantly affect roadway operations, and the project would not conflict with General Plan policies regarding LOS.

[16] Institute of Transportation Engineers (ITE). 2021. *Trip Generation Manual,* 11th Edition.

Additionally, although traffic construction phase traffic impacts were not modeled for the proposed project, the traffic volumes generated by project construction would be less than 500 trips per day and would not exceed the operational traffic as discussed above.

Response to Comment TRA-6: Alternative Modes of Transportation

This response addresses comments in the following letters:

- Christine Gipson, 11/16/2025 (I-3)
- Annette Hilts, 11/21/2025 (I-8)
- Carol and Kay McKenzie, 12/05/2025 (I-9)

As discussed in Section 4.17, Transportation, of the Subsequent IS/MND (pages 4-138 through 4-143) and in the Transportation Analysis prepared for the project (**Appendix I)**, the project site is served by an existing network of streets, sidewalks, transit routes, and bikeways. The project would construct 4.5-foot-wide attached sidewalks along internal residential streets, connecting homes to common open space areas and linking to existing sidewalks along Shady Lane, Wildflower Avenue, and nearby streets. The increase in pedestrian activity generated by the project is expected to be minimal and would not exceed the capacity of the existing facilities.

Bicycle access is available via existing Class II bikeways along Glen Cove Parkway, approximately 0.5 mile from the project site. The project would not remove or interfere with existing bicycle facilities, nor would it require new off-site bicycle infrastructure.

Transit service in the project vicinity is provided by SolTrans Routes 3 and 8, with stops approximately 0.5 mile west along Glen Cove Parkway. Pedestrian connections to these stops are available via existing sidewalks. The project is not expected to generate a volume of transit trips that would exceed the capacity of existing transit service or interfere with planned service.

Furthermore, because the proposed project would not significantly affect roadway operations and would not conflict with or be inconsistent with *State CEQA Guidelines* Section 15064.3, subdivision (b), the project is not required to implement a Transportation Demand Management (TDM) plan. CEQA requires mitigation measures only for significant environmental impacts (Public Resources Code [PRC] Section 21002.1(a); *State CEQA Guidelines* Section 15126.4(a): “Mitigation measures shall be feasible, and shall be adopted, if the measure is capable of reducing the significant effects on the environment to a less than significant level”). As the proposed project would have less than significant impacts on vehicle to VMT, roadways, pedestrian and bicycle facilities, and transit service no additional TDM strategies are necessary to reduce impacts to a less than significant level.

Response to Comment TRA-7: Cumulative Transportation Impacts

This response addresses comments in the following letter:

- Christine Gipson, 11/16/2025 (I-3)

The Vallejo Design Review Board made recommendations to the Planning Commission to approve the design and landscape of the Rollingwood Subdivision project, which now is preparing an

environmental review. Appropriate analysis of the Rollingwood Drive subdivision project potential transportation impacts would be included in that environmental review and the proposed project would be a cumulative project.

Please also refer to Comment TRA-5 which details the intersection analysis. The proposed project would generate less traffic than the established threshold for providing a quantitative analysis of intersection level of service.

Response to Comment TRA-8: Site Access

- Alison Egan, 11/12/2025 (I-1)
- Christine Gipson, 11/16/2025 (I-3)
- Don Spilman, 11/20/2025 (I-5)
- Gina Blair, 11/21/2025 (I-7)
- Annette Hilts, 11/21/2025 (I-8)
- Carol and Kay McKenzie, 12/05/2025 (I-9)
- Linda Zupan-McKenna, 12/08/2025 (I-10)

TRIBAL CULTURAL RESOURCES

The comments and corresponding responses in this section address comments received related to tribal cultural resources. The comment topics include:

- **TCR-1**: Inadvertent Discovery of Tribal Cultural Resources and Human Remains
- **TCR-2**: Tribal Consultation

Response to Comment TCR-1: Inadvertent Discovery of Tribal Cultural Resources and Human Remains

This response addresses comments in the following letters:

- Christine Gipson, 11/16/2025 (I-3)
- Lisjan Nation, 11/14/2025 (O-1)

As discussed in Section 4.18, Tribal Cultural Resources, of the Subsequent IS/MND (page 4-147), no information regarding specific known tribal cultural resources on the project site was provided to the City and no human remains are known to be on the project site or are anticipated to be discovered during project construction. In addition, no cultural resources, including tribal cultural resources were identified during the archaeological pedestrian field survey of the project site conducted on January 20, 2025. Based on these results, the Cultural Resources Assessment[17] (**Appendix D** of the Subsequent IS/MND) determined that the project site has a low potential for in situ subsurface cultural resources and the potential for encountering unknown buried cultural resources, including tribal cultural resources, during project construction is low. However,

[17] LSA Associates, Inc. (LSA). 2025. *Cultural Resources Assessment, Vista Cove Development Project, Vallejo, Solano County, California.* March.

construction activities, such as grading and other ground-disturbing activities, has the potential to uncover previously unknown or unidentified tribal cultural resources. In addition, as detailed on page 4-148, of the Subsequent IS/MND, **Project Specific Mitigation Measure TCR-1**, which requires immediate cessation of work within 25 feet of a discovery, securing and protecting the find, and treatment of the resource in accordance with applicable sections of the California Public Resources (PRC) Section 5097.98. These regulations establish the process the process for the immediate cessation of work, securing and protecting the discovery area, providing Tribal access to the site, and ensuring the culturally appropriate and respectful treatment of Native American human remains and associated cultural materials.

The Lisjan Nation requests that work be halted within 100 feet of a potential Tribal Cultural Resource and that the Subsequent IS/MND modify **Project Specific Mitigation Measure TCR-1** and adopt a separate tribal cultural resources-specific mitigation measure to provide two separate mitigation measures, one for tribal cultural items and one for human remains, as well as to name the Lisjan Nation as a consulting entity.

As no additional substantial evidence has been provided that demonstrates a 100-foot buffer would be required in order to avoid or reduce a significant environmental impact, beyond the protections already afforded by state law and the performance standards contained in **Project Specific Mitigation Measures CUL-1, CUL-2,** and **TCR-1,** increasing the avoidance buffer from 25 feet to 100 feet is not warranted. The 25-foot buffer is established based on the archaeological field survey results and the site-specific likelihood of intact resources documented in the project's Cultural Resources Assessment in **Appendix D**. In addition, background research at the project site returned a negative result for the project site's potential to contain tribal cultural resources. The existing stop work measures fully comply with the procedural requirements for the treatment of archaeological resources, Tribal Cultural Resources, and human remains under State law. If a consulting Tribe provides credible evidence that a larger buffer is warranted for a specific find, the City shall implement a larger buffer (up to 100 feet) pending evaluation and agreement with the consulting Tribe(s).

However, the City acknowledges the need for two separate mitigation measures to establish procedures as requested by the Tribe for specific identification of tribal cultural resources, and as such **Project Specific Mitigation Measure TCR-1** has been modified and **Project Specific Mitigation Measures TCR-2** has been added to address potential impacts of previously undiscovered tribal cultural resources (refer to **Attachment B** of this Response to Comments memorandum).

Project Specific Mitigation Measure TCR-1 outlines procedures if tribal cultural resources are discovered during construction and **Project Specific Mitigation Measure TCR-2** outlines procedures if human remains are discovered during construction, such as work stoppage within 25 feet of the find and coordination with tribal representatives. With the implementation of **Project Specific Mitigation Measures TCR-1** and **TCR-2,** the proposed project would not result in significant impacts to previously undiscovered tribal cultural resources.

At the completion of project construction, the proposed project would not result in further disturbance of native soils on the project site and, therefore, project operations would have no potential to impact previously undiscovered archaeological resources.

Response to Comment TCR-2: Tribal Consultation

This response addresses comments in the following letters:

- Wilton Rancheria, 11/14/2025 (O-2)
- Yocha Dehe, 12/4/2025 (O-3)
- Linda Zupan-McKenna, 12/8/2025 (I-10)

As discussed in Section 4.18, Tribal Cultural Resources (page 146), of the Subsequent IS/MND, the City provided notice of the proposed project to the Native American contacts provided by the Native American Heritage Commission (NAHC) and the tribes that had previously requested notification, pursuant to Assembly Bill (AB) 52 provisions, in August 2024. On October 10, 2024, the Confederated Villages of Lisjan Nation responded to the City's notice and requested a copy of the final California Historic Resources Inventory System (CHRIS) records search, the EIR, the Sacred Lands File (SLF) search results from the NAHC, and a copy of any additional archaeological reports. The City provided a response on February 10, 2025, providing the Confederated Villages of Lisjan Nation with the database searches and available information. No further responses were received.

The Yocha Dehe Wintun Nation reached out to request consultation on the proposed project on October 24, 2024. The City responded on November 18, 2024, and a meeting took place on December 9, 2024. As part of the consultation process, the City provided the Yocha Dehe Wintun Nation with draft Tribal Monitoring Mitigations on January 17, 2025. The City resent this information on February 13, 2025, and March 17, 2025, and no additional responses were received.

As no additional or further requests for tribal consultation were received, the City officially closed tribal consultation pursuant to AB 52 in March 2025.

UTILITIES AND SERVICE SYSTEMS

The comments and corresponding responses in this section address comments received related to utilities and service systems. The comment topics include:

- **UTL-1**: Sewer System and Lift Station
- **UTL-2**: Permits and Approvals

Response to Comment UTL-1: Sewer System and Lift Station

This response addresses comments in the following letter:

- VFWD, 12/05/2025 (A-2)

In response to the comments received from the VFWD, the City has revised Section 2.2.5.2, Wastewater, and Section 2.2.6, Operations and Maintenance, in Chapter 2.0, Project Description (page 2-21), of the Subsequent IS/MND to add mention of the 6-inch sewer force main to connect the lift station to the existing sewer force main located in Shady Lane and to clarify that only the sanitary sewer would be publicly maintained, while the storm drains would be privately maintained. In addition, Section 4.19, Utilities and Service Systems (page 4-156), of the Subsequent IS/MND has

been updated to describe the installation of a new 6-inch sewer force main extending from the new lift station to tie into the existing sewer force main. Text has also been added to state that the current lift station would be relocated and upsized. Refer to **Attachment B** of this Response to Comments memorandum.

In addition, Figure 2-4, Conceptual Site Plan, has been revised to show that Parcel E would be a VFWD-owned and maintained Sewer Pump Station (refer to **Attachment C** of this memorandum).

Response to Comment UTL-2: Permits and Approvals

This response addresses comments in the following letter:

- VFWD, 12/05/2025 (A-2)

In response to the comments received from the VFWD, Table 2.A: Potential Permits and Approvals in Section 2.0, Project Description, of the Subsequent IS/MND has been revised to include City of Vallejo Public Works approvals for grading, water quality, and road improvements, as well as for VFWD, which issues permits and approves sewer, storm drain, and lift station improvements. Similarly, Section 4.19, of Utilities and Services Systems, has been revised to clarify that the storm drain system will be privately maintained by the Home Owners Association (HOA). Refer to **Attachment B** of this Response to Comments document.

CUMULATIVE IMPACTS

The comments and corresponding responses in this section address comments received related to cumulative impacts. The comment topics include:

- **CUM-1**: Rezoning Action

Response to Comment CUM-1: Rezoning Action

This response addresses comments in the following letters:

- Alison Egan, 11/12/2025 (I-1)
- Christine Gipson, 11/16/2025 (I-3)

Population growth associated with the project is approximately 143 persons, representing less than 1 percent of the current City population and 0.6 percent of the projected growth through 2040. As such, the incremental increase in the number of residents in the City would not be substantial or unplanned. In addition, the proposed project is consistent with the City's General Plan land use and zoning designations for the site and is therefore consistent with population growth assumed under General Plan buildout. As a result, the proposed project would not induce substantial unplanned population growth

Additionally, rezoning to PD does not authorize development of adjacent parcels or additional development outside of project area and any future projects on nearby land would require separate

CEQA review and City approvals. Cumulative impacts, including population, housing, and land use, were analyzed in the General Plan EIR, which anticipated residential development in this area.

NON-CEQA ISSUES

The comments and corresponding responses in this section address comments received related to non-CEQA issues. The comment topics include:

- **NON-1**: Parking

Response to Comment NON-1: Parking

This response addresses comments in the following letters:

- Carol and Kay McKenzie, 12/05/2025 (I-9)
- Marty, 11/ 14/2025 (I-2)
- Christine Gipson, 11/16/2025 (I-3)

As Stated in Section 2.2.4 Proposed Access, Circulation, and Parking of the Project Description (page 2-20) in the Subsequent IS/MND, the proposed project would provide 102 covered garage spaces (2 per unit), 102 driveway stalls (2 per unit), 24 on-street stalls, and 1 mailbox parking stall, for a total of 229 parking spaces. In addition, the proposed project would also include new private internal residential streets that would be 28 feet wide curb-to-curb with parking on one side. As discussed in Section 4.1 Aesthetics (pages 4-11 through 4-12), the proposed project would be required to undergo Development Review and Design Review consistent with Sections 16.604 and 16.605 of the City of Vallejo Municipal Code (VMC), which would provide for the review of the physical improvements to the project site, to ensure compatibility and compliance with City requirements. In addition, VMC Section 16.508 establishes standards for off-street parking and loading facilities that meet the urban design objectives of the General Plan. The proposed project meets the requirements established in Table 16.508-B.

Attachments:
- A: Comment Letters
- B: Errata
- C: Updated Figure 2-4
- D: Geotechnical Report Updated Memorandum
- E: Evacuation Assessment
- F: Phase I ESA

ATTACHMENT A

COMMENT LETTERS

ATTACHMENT B

ERRATA

ATTACHMENT C

UPDATED FIGURE 2-4

ATTACHMENT D

GEOTECHNICAL REPORT UPDATE MEMORANDUM

ATTACHMENT E

EVACUATION ASSESSMENT

ATTACHMENT F

PHASE I ESA

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Bay Delta Region
2825 Cordelia Road, Suite 100
Fairfield, CA 94534
(707) 428-2002
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Comment Letter A-1

December 4, 2025

Cesar Orozco
City of Vallejo
555 Santa Clara Street
Napa, CA 95490
Cesar.Orozco@cityofvallejo.net

Subject: Vista Cove Planned Development Project, Subsequent Initial Study/Mitigated Negative Declaration, SCH No. 2025030788, Solano County

Dear Cesar Orozco:

The California Department of Fish and Wildlife (CDFW) received a Subsequent Initial Study/Mitigated Negative Declaration (IS/MND) from the City of Vallejo (City) for the Vista Cove Planned Development Project (Project) pursuant the California Environmental Quality Act (CEQA) and CEQA Guidelines. The IS/MND was preceded by a Notice of Preparation (NOP) for a Draft Environmental Report (EIR), for which CDFW provided comments in a letter dated April 18, 2025. However, rather than prepare an EIR it appears that the Lead Agency changed course and prepared a Subsequent IS/MND tiered from the General Plan 2040 and Sonoma Boulevard Specific Plan Draft Environmental Impact Report.

CDFW is submitting comments on the IS/MND to inform the City as the Lead Agency, of potentially significant impacts to biological resources associated with the Project. The comments in this letter are similar to those provided in CDFW's NOP comment letter.

CDFW ROLE

CDFW is a **Trustee Agency** with responsibility under CEQA pursuant to CEQA Guidelines section 15386 for commenting on projects that could impact fish, plant, and wildlife resources. CDFW is also considered a **Responsible Agency** if a project would require discretionary approval, such as permits issued under the California Endangered Species Act (CESA), the Lake and Streambed Alteration (LSA) Program, or other provisions of the Fish and Game Code that afford protection to the state's fish and wildlife trust resources.

PROJECT DESCRIPTION SUMMARY

Proponent: Sancerra Vista Cove, LLC

Objective: The Project would rezone, subdivide, and develop the 20.13-acre Project area, of which approximately 10 acres would be developed, while the remaining

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

acreage would be retained as undeveloped open space. The residential portion of the Project would include approximately 10.39 acres of residential space and 51 single-family residential units and associated improvements, including front and rear yards, front driveways, two-car garages, fencing, and landscaping.

The Project would include 9.74 acres of undisturbed open space, to remain undeveloped. The Project would remove or potentially remove several trees within the riparian zone of two unnamed tributaries to Southampton Creek within the Project area, and would result in the permanent loss of a 0.49-acre seasonal on-stream wetland located on the northern unnamed tributary and the conversion of this wetland to a stormwater basin.

Location: The Project is located near the northeast corner of Shady Lane and Wildflower Avenue; Assessor's Parcel Numbers 0079-171-170 and 0079-120-100; in the City of Vallejo, CA 945490, Solano County; with a Project area center at approximately 38.08128 °N, -122.20112 °W.

REGULATORY REQUIREMENTS

California Fully Protected Species

California Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except as follows:

- Take is for necessary scientific research;
- Efforts to recover a fully protected, endangered, or threatened species, live capture and relocation of a bird species for the protection of livestock; or
- They are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (Fish & G. Code, §§ 3511, 4700, 5050, & 5515).

Specified types of infrastructure projects may be eligible for an Incidental Take Permit (ITP) for unavoidable impacts to fully protected species if certain conditions are met (Fish & G. Code, § 2081.15). Project proponents should consult with CDFW early in the project planning process. **The Project has the potential to impact nesting white-tailed kite (*Elanus leucurus*), as further described below.**

California Endangered Species Act

Please be advised that a CESA ITP must be obtained if the Project has the potential to result in "take" of plants or animals listed or candidate species under CESA, either during construction or over the life of the Project. **The Project has the potential to impact Swainson's hawk (*Buteo swainsoni*), CESA listed as threatened; tricolored**

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

blackbird (*Agelaius tricolor*), CESA listed as threatened; and burrowing owl (*Athene cunicularia*), a CESA candidate species, as further described below. Issuance of an ITP is subject to CEQA documentation; the CEQA document must specify impacts, mitigation measures, and a mitigation monitoring and reporting program. If the Project will impact CESA listed species, early consultation is encouraged, as significant modification to the Project and mitigation measures may be required in order to obtain an ITP.

CEQA requires a Mandatory Finding of Significance if a project is likely to substantially restrict the range or reduce the population of a threatened or endangered species. (Pub. Resources Code, §§ 21001, subd. (c) & 21083; CEQA Guidelines, §§ 15380, 15064, & 15065.). Impacts must be avoided or mitigated to less-than-significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with CESA.

Lake and Streambed Alteration

An LSA Notification, pursuant to Fish and Game Code section 1600 et. seq. is required for Project activities affecting lakes or streams and associated riparian habitat. Notification is required for any activity that will substantially divert or obstruct the natural flow; change or use material from the bed, channel, or bank including associated riparian or wetland resources; or deposit or dispose of material where it may pass into a river, lake or stream. **It appears the Project would impact two unnamed tributaries to Southampton Creek, including a seasonal on-stream wetland connected to the northern unnamed tributary; therefore, an LSA Notification is likely warranted as further described below**. Work within ephemeral streams, washes, wetlands hydrologically connected to streams, watercourses with a subsurface flow, and floodplains are subject to LSA Notification requirements. CDFW, as a Responsible Agency under CEQA, would consider the CEQA document for the Project and may issue an LSA Agreement. CDFW may not execute the final LSA Agreement until it has complied with CEQA as a Responsible Agency.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Based on the Project's avoidance of significant impacts on biological resources with implementation of mitigation measures, including those CDFW recommends below and included in **Attachment 1** Draft Mitigation Monitoring and Reporting Program, CDFW concludes that an MND is appropriate for the Project.

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

I. MANDATORY FINDING OF SIGNIFICANCE. Does the Project have potential to substantially reduce the number or restrict the range of an endangered, rare, or threatened species?

And,

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or U.S. Fish and Wildlife Service (USFWS)?

COMMENT 1: Burrowing Owl, Environmental Setting and Related Impact Shortcoming

Issue: The IS/MND does not adequately evaluate potential impacts to wintering burrowing owl. Page 22 of Appendix C states that burrowing owl has been documented numerous times within 5 miles of the Project area but dismisses the species due to no ground squirrel burrows being observed on February 28, 2022.

Specific impacts, why they may occur and be potentially significant: The absence of burrows in 2022 does not preclude the potential for fossorial animals to excavate new burrows and for burrowing owl to occupy them in later years. If the Project proceeds without assessing whether burrowing owl currently uses the Project area or adjacent habitat, the Project could result in injury or mortality of adult burrowing owl wintering in burrows or other suitable refugia on or within up to 500 meters (1,640 feet) of the Project site, and permanent wintering (i.e., non-nesting) habitat loss. Burrowing owl have been extirpated from 16 percent of their former range and are at risk of being extirpated from another 13 percent of their range in the State (CDFW 2024). Information indicates a decline in burrowing owl's range over time, burrowing owl has experienced population declines in regions of California and threats to BUOW, coupled with long-term population declines, suggest a high degree and immediacy of threat to burrowing owl in California (CDFW 2024). Burrowing owl population viability and survival are adversely affected by risk factors such as precipitous declines from habitat loss, fragmentation, and degradation; evictions from nesting sites without habitat mitigation; wind turbine mortality; human disturbance; and eradication of California ground squirrels resulting in a loss of suitable burrows required by burrowing owl for nesting, protection from predators, and shelter (Shuford and Gardali 2008; Department of Fish and Game Staff Report on Burrowing Owl Mitigation (2012); personal communication, CDFW Statewide Burrowing Owl Coordinator Esther Burkett, May 13, 2022). Preliminary analyses of regional patterns for breeding populations of burrowing owl have detected declines both locally in their central and southern coastal breeding areas, and statewide where the species has experienced breeding range retraction (Department of Fish and Game Staff Report on Burrowing

BIO-1

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

Owl Mitigation 2012). Burrowing owl is a candidate species under CESA. Based on the foregoing, if burrowing owl are wintering on or within up to 500 meters of the Project site, Project impacts to burrowing owl would be *potentially significant.*

The Project area appears to overlap with Valley Floor Grassland habitat which may be used by burrowing owl for foraging according to the Draft Solano Habitat Conservation Plan (HCP). The HCP includes mitigating burrowing owl foraging habitat at a minimum 1:1 ratio according to the Draft Solano HCP Mitigation Measure BO 2 for burrowing owl (see Section 6.4.9 and Figure 4-22 of the draft Solano HCP at: https://www.scwa2.com/solano-multispecies-habitat-conservation-plan/).

Recommended Mitigation Measures: To reduce potential impacts to burrowing owl to less-than-significant and comply with CESA and Fish and Game Code section 3500 et seq., CDFW recommends including the below mitigation measures in the MND.

Mitigation Measure BIO-5a: Burrowing Owl Habitat Assessment, Surveys, and Protection: A qualified biologist shall conduct a habitat assessment and surveys for wintering burrowing owl prior to construction if construction starts during the burrowing wintering season (September 1 to January 31). Surveys shall be conducted if warranted based on the habitat assessment and shall begin on or within three days of August 1. The habitat assessment and surveys shall follow the *Department of Fish and Game Staff Report on Burrowing Owl Mitigation* (2012) methodology (https://wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds) and the qualified biologist shall prepare a report documenting the survey results. The habitat assessment and surveys shall encompass the Project site and a sufficient buffer zone to detect owls nearby that may be impacted, which is up to 500 meters (1,640 feet) around the Project site pursuant to the above methodology. Habitat assessments and surveys shall occur annually for the duration of the Project, as conditions may change annually and suitable refugia for burrowing owl, such as small mammal burrows, can be created within a few hours or days, unless otherwise approved in writing by CDFW. Surveys for non-breeding burrowing owl shall be spread over four visits during the nonbreeding season (i.e., wintering) and shall start on or within 3 days of August 1 and continue to January 31, unless otherwise approved in writing by CDFW. Time lapses between surveys or Project activities shall trigger subsequent surveys including, but not limited to, a final survey within 24 hours prior to ground disturbance. The qualified biologist shall have a minimum of two years of experience implementing the above methodology. The Project shall immediately notify CDFW if burrowing owl is detected and implement a construction avoidance buffer around any detected burrowing owl pursuant to the buffer distances outlined in the *Department of Fish and Game Staff Report on Burrowing Owl Mitigation* (2012), which may be up to 500 meters (1,640 feet). Any

BIO-1

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

detected owl shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities. If take of burrowing owl cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP before Project activities may commence.

Mitigation Measure 5b: Covering of Entrapment Hazards: To prevent burrowing owl from sheltering or nesting in exposed material; all construction pipes, culverts, hoses or similar materials greater than two inches in diameter stored at the Project site shall be capped or covered before the end of each workday and shall be inspected thoroughly for wildlife before the pipe or similar structure is buried, capped, used, or moved.

Mitigation Measure 5c: Burrowing Owl Wintering Burrow Mitigation: If the Project would impact an unoccupied wintering burrowing owl burrow or burrow surrogate (i.e., a burrow known to have been used in the past three years for wintering), the following habitat mitigation shall be implemented prior to Project construction.

Impacts to each unoccupied burrowing owl wintering site shall be mitigated by permanent preservation of two burrowing owl occupied wintering sites with appropriate foraging habitat, unless otherwise approved by CDFW, through a conservation easement and implementing and funding a long-term management plan in perpetuity. If the Project would impact burrowing owl and obtains an ITP, any more rigorous requirements of the ITP shall apply. BIO-1

The Project may implement alternative methods for preserving habitat with written acceptance from CDFW.

Mitigation Measure 5d: Burrowing Owl Foraging Habitat Mitigation: Impacts to burrowing owl foraging habitat shall be quantified by a qualified biologist based on the final Project design plans, and the Project shall obtain written acceptance of the acreage of habitat impacts from CDFW. Prior to Project construction, the Project shall provide burrowing owl foraging habitat mitigation at a minimum 1:1 ratio, which shall include: 1) permanent preservation of the species' foraging habitat through a conservation easement and implementing and funding a long-term management plan in perpetuity, or 2) purchase of burrowing owl foraging habitat credits at a CDFW-approved mitigation bank, unless otherwise approved in writing by CDFW. If the Project would impact burrowing owl and obtains an ITP, any more rigorous requirements of the ITP shall apply.

COMMENT 2: General Nesting Birds, Swainson's Hawk, Tricolored Blackbird, and White-Tailed Kite, Mitigation Measure and Related Impact Shortcoming.

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

Issue: MM BIO-1a of the IS/MND does not specify nesting bird survey distances nor does it specify response and/or agency coordination actions if Swainson's hawk, tricolored blackbird, or white-tailed kite may be impacted by the Project.

Specific impacts and why they may occur and be significant: The Project has the potential to impact nesting Swainson's hawk through auditory or visual disturbances above ambient levels within 0.5 miles of Project activities, or through direct removal of an active nest site. The Project area is within the mapped summer range of Swainson's hawk and includes tree removal. Disturbances from Project activities may result in Swainson's hawk nest abandonment and loss of eggs or reduced health and vigor and loss of young. Swainson's hawk is CESA listed as a threatened species and therefore is considered to be a threatened species pursuant to CEQA Guidelines section 15380. Therefore, if an active Swainson's hawk nest is disturbed by the Project, the Project may result in a substantial reduction in the number of a threatened species, which is considered a *mandatory finding of significance* pursuant to CEQA Guidelines section 15065, subdivision (a)(1).

Page C-16 of the Biological Resources Reports and Peer Reviews (Appendix C) states that tricolored blackbird is unlikely to occur on the Project area, despite the Project's impact to 0.42 acres of seasonal wetland onsite because "The seasonal wetland lacks riparian thickets or tall, dense emergent vegetation suitable to support nesting for this species." However, according to aerial imagery, there is a patch of dense vegetation growing from the southern tributary less than 500 feet from the Project area shown in Figure 2-2 of the IS/MND. The IS/MND does not address potential disturbances to nesting tricolored blackbird that could result from Project activities within 500 feet of suitable habitat, including the vegetation patch. BIO-1

Human activity and removal of habitat has contributed to the loss of a significant proportion of the total number of birds in the United States and Canada since the 1970s (Rosenburg et al. 2019). Nesting birds such as white-tailed kite, a California Fully Protected species for which take is prohibited except in limited circumstances as described above, may be disturbed by habitat removal, Project noise and visual disturbances, which could result in active nest loss or abandonment or reduced health and vigor of young, *a potentially significant impact.*

Recommended Mitigation Measures: To reduce impacts to Swainson's hawk, tricolored blackbird, white-tailed kite and other nesting birds to less-than-significant and comply with Fish and Game Code sections 3500 et seq. and the federal Migratory Bird Treaty Act (MBTA), CDFW recommends replacing the current Mitigation Measures BIO-1a and BIO-1b with the following mitigation measures:

Mitigation Measure BIO-1a: Nesting Bird Surveys. If construction, grading, vegetation removal, or other Project-related activities are scheduled during the

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

avian nesting season, February 1 to September 15, a qualified biologist shall conduct a survey for active bird nests within 7 days prior to the beginning of Project-related activities. The survey shall cover the entire Project site and a minimum 500-foot buffer around the Project site. If a lapse in Project-related work of 7 days or longer occurs, another survey shall be conducted before Project work can be reinitiated. If an active nest is found during surveys, the qualified biologist shall immediately notify the CDFW contact below, or if unavailable another CDFW representative, and establish site- and species-specific no-work buffers to ensure the nest is not disturbed. The buffer distances shall be specified to protect the bird's normal behavior to prevent nesting failure or abandonment and comply with Fish and Game Code section 3500 et seq. and the federal MBTA. Abnormal nesting behaviors which may cause reproductive harm include, but are not limited to, defensive flights/vocalizations directed towards Project personnel, standing up from a brooding position, and flying away from the nest. The qualified biologist shall have authority to order the cessation of all nearby Project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established.

The qualified biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by Project work. Nest monitoring shall continue during Project work until the young have fully fledged (have completely left the nest site and are no longer being fed by the parents), as determined by the qualified biologist, unless otherwise approved in writing by CDFW. BIO-1

Mitigation Measure BIO-1b: Tricolored Blackbird Avoidance. If nesting tricolored blackbird or evidence of their presence is found during nesting bird surveys, CDFW shall be notified immediately, and work shall not occur without written approval from CDFW allowing the Project to proceed. Project activities shall not occur within 500 feet of an active nest unless otherwise approved in writing by CDFW. If take of tricolored blackbird cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP.

Mitigation Measure BIO-1c: Swainson's Hawk Avoidance. If active Swainson's hawk nests are detected during nesting bird surveys or otherwise, the Project shall immediately notify CDFW and implement a 0.5-mile construction avoidance buffer around the nest until the nest is no longer active as determined by a Qualified Biologist, unless otherwise approved by CDFW in writing. Any detected nesting Swainson's hawk shall be monitored by the Qualified Biologist to ensure it is not disturbed during construction activities, unless otherwise approved in writing by CDFW. If take of Swainson's hawk cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP.

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

II. Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or the USFWS?

COMMENT 3: Impacts to Unnamed Tributaries to Southampton Creek and Connected Seasonal Wetland, Environmental Setting and Related Impact Shortcoming

Issue: The Project would result in permanent impacts to stream and riparian habitat including the removal of a 0.49-acre on-stream seasonal wetland along the northern unnamed tributary to Southampton Creek (IS/MND page 4-42; Appendix C, Figure 2); and removal of riparian trees along both unnamed tributaries within the Project area (IS/MND Appendix C, Figure 4). However, the IS/MND does not clearly indicate stream habitat would be impacted or include a mitigation measure for notifying CDFW for impacts to the streams and connected wetland.

Specific impacts and why they may occur and be significant: Project activities would result in permanent loss of stream habitat from removal and conversion of the on-stream seasonal wetland habitat, and riparian tree removal. Removal of the on-stream wetland could result in reduction or loss of stream flows, loss of stream connectivity, and desiccation of existing stream habitat. Impacts could also include inputs of deleterious materials, obstructions, and disturbances to riparian corridors, special status wildlife and their habitats, and nesting birds. Due to the ecological importance and sensitivity of stream and connected wetland habitat, the above impacts would be *potentially significant*.

BIO-2

Recommended Mitigation Measure: To comply with Fish and Game Code section 1600 et seq., the Clean Water Act, and the Porter Cologne Water Quality Control Act, CDFW recommends including the below mitigation measure in the IS/MND.

Mitigation Measure BIO-6: Impacts to Stream. Prior to the commencement of Project activities, the Project shall notify CDFW for Project impacts to the stream resulting from riparian tree and seasonal wetland removal and any additional Project impacts to stream and riparian habitat. More information for the notification process is available at https://wildlife.ca.gov/Conservation/Environmental-Review/LSA.The Project shall comply with all measures of the Lake and Streambed Alteration (LSA) Agreement, if issued, and shall not commence activities with the potential to impact the stream until the LSA Agreement process is completed. Restoration to mitigate impacts to any stream shall include a qualified biologist preparing and implementing a restoration plan with permanent impacts restored at a minimum 3:1 restoration to impact ratio, temporary impacts restored, success criteria, a minimum of five years of monitoring and maintenance, and achieving success criteria, unless otherwise approved in writing by CDFW. CDFW may consider the purchase of wetland or stream creation credits from an approved

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

mitigation bank at a reduced ratio. The Project shall also obtain any necessary authorization from the U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) pursuant to the Clean Water Act and Porter Cologne Water Quality Control Act.

Please be advised that a Streambed Alteration Agreement, if issued for the Project, would likely include the above recommended mitigation measures, as applicable, and may include additional measures to protect fish and wildlife resources, such as protocol level plant surveys pursuant to *Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (https://wildlife.ca.gov/Conservation/Survey-Protocols#377281280-plants). BIO-2

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNDDB field survey form can be filled out and submitted online at the following link: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals.

ENVIRONMENTAL DOCUMENT FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of environmental document filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the environmental document filing fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

CDFW appreciates the opportunity to comment on the subsequent IS/MND to assist the City in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Nicholas Magnuson, Environmental Scientist, at (707) 815-4166 or Nicholas.Magnuson@wildlife.ca.gov; or Melanie Day, Senior Environmental Scientist (Supervisory), at (707) 210-4415 or Melanie.Day@wildlife.ca.gov.

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

Sincerely,

DocuSigned by:
Erin Chappell
B77E9A6211EF486...

Erin Chappell
Regional Manager
Bay Delta Region

Attachment 1: Draft Mitigation Monitoring and Reporting Program

ec: Office of Land Use and Climate Innovation (SCH No. 2025030788)

REFERENCES

California Department of Fish and Wildlife (CDFW). 2024. Petition Evaluation for Western Burrowing Owl (Athene cunicularia hypugaea). Report to the Fish and Game Commission. California Department of Fish and Wildlife, P.O. Box 944209, Sacramento, CA.

California Department of Fish and Wildlife (CDFW). 2012. Department of Fish and Game Staff Report on Burrowing Owl Mitigation. State of California Natural Resources Agency, Sacramento, CA.

Rosenburg, Kenneth V.; Dokter, Adriaan M.; Blancher, Peter J.; Sauer, John R.; Smith, Adam C.; Smith, Paul A.; Stanton, Jessica C.; Panjabi, Avrind; Helft, Laura; Parr, Michael; and Marra, Peter P. 2019. Decline of the North American Avifauna. Science: 120-124.

Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

ATTACHMENT 1

Draft Mitigation Monitoring and Reporting Program (MMRP)

CDFW provides the following language to be incorporated into the MMRP for the Project.

Biological Resources (BIO)			
Mitigation Measure	**Description**	**Timing**	**Responsible Party**
MM BIO-1a, 1b, & 1c	Mitigation Measure BIO-1a: Nesting Bird Surveys. If construction, grading, vegetation removal, or other Project-related activities are scheduled during the avian nesting season, February 1 to September 15, a qualified biologist shall conduct a survey for active bird nests within 7 days prior to the beginning of Project-related activities. The survey shall cover the entire Project site and a minimum 500-foot buffer around the Project site. If a lapse in Project-related work of 7 days or longer occurs, another survey shall be conducted before Project work can be reinitiated. If an active nest is found during surveys, the qualified biologist shall immediately notify the CDFW contact below, or if unavailable another CDFW representative, and establish site- and species-specific no-work buffers to ensure the nest is not disturbed. The buffer distances shall be specified to protect the bird's normal behavior to prevent nesting failure or abandonment and comply with Fish and Game Code section 3500 et seq. and the federal MBTA. Abnormal nesting behaviors which may cause reproductive harm include, but are not limited to, defensive flights/vocalizations directed towards Project personnel, standing up from a brooding position, and flying away from the nest. The qualified biologist shall have authority to order the cessation of all nearby Project activities if the nesting birds exhibit abnormal behavior which may cause reproductive failure (nest abandonment and loss of eggs and/or young) until an appropriate buffer is established. The qualified biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by Project work. Nest monitoring shall continue during Project work until the young have fully fledged (have completely left the nest site and are no longer being fed by the parents),	Prior to Ground Disturbance and for Duration of Project	Project Applicant

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

	as determined by the qualified biologist, unless otherwise approved in writing by CDFW. Mitigation Measure BIO-1b: Tricolored Blackbird Avoidance. If nesting tricolored blackbird or evidence of their presence is found during nesting bird surveys, CDFW shall be notified immediately, and work shall not occur without written approval from CDFW allowing the Project to proceed. Project activities shall not occur within 500 feet of an active nest unless otherwise approved in writing by CDFW. If take of tricolored blackbird cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP. Mitigation Measure BIO-1c: Swainson's Hawk Avoidance. If active Swainson's hawk nests are detected during nesting bird surveys or otherwise, the Project shall immediately notify CDFW and implement a 0.5-mile construction avoidance buffer around the nest until the nest is no longer active as determined by a Qualified Biologist, unless otherwise approved by CDFW in writing. Any detected nesting Swainson's hawk shall be monitored by the Qualified Biologist to ensure it is not disturbed during construction activities, unless otherwise approved in writing by CDFW. If take of Swainson's hawk cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP.		
MM BIO-5a, 5b, 5c, & 5d	Mitigation Measure BIO-5a: Burrowing Owl Habitat Assessment, Surveys, and Protection: A qualified biologist shall conduct a habitat assessment and surveys for wintering burrowing owl prior to construction if construction starts during the burrowing wintering season (September 1 to January 31). Surveys shall be conducted if warranted based on the habitat assessment and shall begin on or within three days of August 1. The habitat assessment and surveys shall follow the *Department of Fish and Game Staff Report on Burrowing Owl Mitigation* (2012) methodology (https://wildlife.ca.gov/Conservation/Survey-Protocols#377281284-birds) and the qualified biologist shall prepare a report documenting the survey results. The habitat assessment and surveys shall encompass the Project site and a sufficient buffer zone to detect owls nearby that may be impacted, which is up to 500 meters (1,640 feet) around the Project site pursuant to the above methodology. Habitat assessments and surveys shall occur annually for the duration of the Project, as conditions may change annually and suitable refugia for burrowing owl, such as small	Prior to Ground Disturbance and for Duration of Project	Project Applicant

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

	mammal burrows, can be created within a few hours or days, unless otherwise approved in writing by CDFW. Surveys for non-breeding burrowing owl shall be spread over four visits during the nonbreeding season (i.e., wintering) and shall start on or within 3 days of August 1 and continue to January 31, unless otherwise approved in writing by CDFW. Time lapses between surveys or Project activities shall trigger subsequent surveys including, but not limited to, a final survey within 24 hours prior to ground disturbance. The qualified biologist shall have a minimum of two years of experience implementing the above methodology. The Project shall immediately notify CDFW if burrowing owl is detected and implement a construction avoidance buffer around any detected burrowing owl pursuant to the buffer distances outlined in the *Department of Fish and Game Staff Report on Burrowing Owl Mitigation* (2012), which may be up to 500 meters (1,640 feet). Any detected owl shall be monitored by the qualified biologist to ensure it is not disturbed during construction activities. If take of burrowing owl cannot be avoided, the Project shall consult with CDFW pursuant to CESA and obtain an ITP before Project activities may commence. Mitigation Measure 5b: Covering of Entrapment Hazards: To prevent burrowing owl from sheltering or nesting in exposed material; all construction pipes, culverts, hoses or similar materials greater than two inches in diameter stored at the Project site shall be capped or covered before the end of each workday and shall be inspected thoroughly for wildlife before the pipe or similar structure is buried, capped, used, or moved. Mitigation Measure 5c: Burrowing Owl Wintering Burrow Mitigation: If the Project would impact an unoccupied wintering burrowing owl burrow or burrow surrogate (i.e., a burrow known to have been used in the past three years for wintering), the following habitat mitigation shall be implemented prior to Project construction. Impacts to each unoccupied burrowing owl wintering site shall be mitigated by permanent preservation of two burrowing owl occupied wintering sites with appropriate foraging habitat, unless otherwise approved by CDFW, through a conservation easement and implementing and funding a long-term management plan in perpetuity. If the Project would impact burrowing owl and obtains an ITP, any more rigorous requirements of the ITP shall apply.		

Docusign Envelope ID: B09B4C6E-97F8-4733-9358-FEF4F3B0B082

	The Project may implement alternative methods for preserving habitat with written acceptance from CDFW. Mitigation Measure 5d: Burrowing Owl Foraging Habitat Mitigation: Impacts to burrowing owl foraging habitat shall be quantified by a qualified biologist based on the final Project design plans, and the Project shall obtain written acceptance of the acreage of habitat impacts from CDFW. Prior to Project construction, the Project shall provide burrowing owl foraging habitat mitigation at a minimum 1:1 ratio, which shall include: 1) permanent preservation of the species' foraging habitat through a conservation easement and implementing and funding a long-term management plan in perpetuity, or 2) purchase of burrowing owl foraging habitat credits at a CDFW-approved mitigation bank, unless otherwise approved in writing by CDFW. If the Project would impact burrowing owl and obtains an ITP, any more rigorous requirements of the ITP shall apply.		
MM BIO-6	Mitigation Measure BIO-6: Impacts to Stream. Prior to the commencement of Project activities, the Project shall notify CDFW for Project impacts to the stream resulting from riparian tree and seasonal wetland removal and any additional Project impacts to stream and riparian habitat. More information for the notification process is available at https://wildlife.ca.gov/Conservation/Environmental-Review/LSA. The Project shall comply with all measures of the LSA Agreement, if issued, and shall not commence activities with the potential to impact the stream until the LSA Agreement process is completed. Restoration to mitigate impacts to any stream shall include a qualified biologist preparing and implementing a restoration plan with permanent impacts restored at a minimum 3:1 restoration to impact ratio, temporary impacts restored, success criteria, a minimum of five years of monitoring and maintenance, and achieving success criteria, unless otherwise approved in writing by CDFW. CDFW may consider the purchase of wetland or stream creation credits from an approved mitigation bank at a reduced ratio. The Project shall also obtain any necessary authorization from the USACE and RWQCB pursuant to the Clean Water Act and Porter Cologne Water Quality Control Act.	Prior to Ground Disturbance and for Duration of Project	Project Applicant

(707) 644-8949
www.VallejoWastewater.org
450 Ryder Street
Vallejo, CA 94590

VALLEJO FLOOD AND WASTEWATER DISTRICT
(VFWD)

INITIAL STUDY/SUBSEQUENT MND REVIEW

December 5, 2025

SUBJECT: Vista Cove Subdivision and Vesting TM

LOCATION: East end of Shady Lane

PERMIT NO.: DVR23-0042

FROM: Alan Mitchell, P.E., VFWD – Ponticello Enterprises

TO: Cesar Orozco, Planning Manager, City of Vallejo

THRU: David Espinoza, P.E., Senior Engineer, VFWD

VFWD has reviewed the IS/SMND, dated November 2025, and offers the following comments for your consideration.

Figure 2-4, Conceptual Site Plan

Parcel E will be a VFWD owned and maintained Sewer Pump Station

2.2.6 Operations and Maintenance

Only SS will be publicly maintained. Not SD.

UTL-1

Table 2.A: Potential Permits and Approvals

City of Vallejo Public Works - Consider adding grading, water quality, roads

Add Vallejo Flood and Wastewater: issues permit for sewer and storm drain, and will approve those improvements and the lift station improvements

UTL-2

4.3.3 Impact Analysis; para d.

The proposed sewer lift station may generate odors. The presence of hydrogen sulfides, volatile organic compounds and other factors can contribute to wastewater odors for the SSPS.

AIR-1

4.9.3 Impact Analysis; para b.

Is it prudent to mention the unlikely potential for a sewer spill from the sewer lift station? HYD-2

4.10.3 Impact Analysis; para c. iii. Stormwater Drainage System Capacity

excerpt from VFWD COA: Based on the existing contours, EX DA 3 and EX DA 2 appear to have more contributing areas to the west. Revise the existing and developed conditions drainage areas accordingly. Update the drainage study calculations and confirm compliance with all VFWD Standards. HYD-1

4.13.3 Impact Analysis; para a. Operation

Periodic testing of the lift station standby generator will produce noise pollution. The standby engine-generator set will meet the VFWD requirements for limiting noise to 70dBA maximum along the nearby property lines and ensure that the generator noise is less than 50dBA along the nearest residential property line. NOI-1

4.19.3 Impact Analysis; para a. Wastewater

Also installing a new 6" sewer force main which will extend from new lift station to tie into the existing sewer force main.

The current lift station will be relocated and upsized, and new lift station owned and maintained by VFWF UTL-1

4.19.3 Impact Analysis; para a. Stormwater

The storm drain system will be privately maintained by the HOA. UTL-1

Hydrology and basin sizing will be finalized during the final design phase of this project. HYD-1

End of Comments

California Department of Transportation

DISTRICT 4
OFFICE OF REGIONAL AND COMMUNITY PLANNING
P.O. BOX 23660, MS–10D | OAKLAND, CA 94623-0660
www.dot.ca.gov

Comment Letter A-3

December 9, 2025

SCH #: 2025030788
GTS #: 04-SOL-2025-00440
GTS ID: 35915
Co/Rt/Pm: SOL/780/5.428

Cesar Orozco, Planning Manager
City of Vallejo
555 Santa Clara Street
Vallejo, CA 95490

Re: Vista Cove Planned Development Project – Mitigated Negative Declaration (MND)

Dear Cesar Orozco:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Vista Cove Planned Development Project. The Local Development Review (LDR) Program reviews land use projects and plans to ensure consistency with our mission and state planning priorities. The following comments are based on our review of the November 2025 MND.

Please note this correspondence does not indicate an official position or approval by Caltrans on this project and is for informational purposes only.

Project Understanding
The proposed project would result in the subdivision of a 20.13-acre site near Interstate (I)-780, of which approximately 10 acres would be developed with 51 residential lots, while the remaining acreage would be retained as undeveloped open space.

Travel Demand Analysis
Caltrans requests the Lead Agency to provide further justification of its vehicle miles traveled (VMT)-related methodology, particularly as it relates to the use of the Bay Area Air District's California Environmental Quality Act Air Quality Guidelines in evaluating VMT thresholds for this project. TRA-1

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Llisel Ayon, Associate Transportation Planner, via LDR-D4@dot.ca.gov. For future early coordination

opportunities or project referrals, please visit Caltrans LDR website (*link*) or contact LDR-D4@dot.ca.gov.

Sincerely,

YUNSHENG LUO
Branch Chief, Local Development Review
Office of Regional and Community Planning

c: State Clearinghouse

Public Comment on Vista Cove SMND

Introduction

My name is Alison Egan, and I have lived at 196 Wildflower Avenue since 1987. My home is the closest residence to the proposed entry point for the Vista Cove Planned Development Project. After reviewing both the Mitigated Negative Declaration (MND) and the Supplemental Mitigated Negative Declaration (SMND) for the Vista Cove project, I have identified significant risks and concerns that suggest the project may not be suitable for approval at this time or may require additional review.

Environmental Review Limitations and Ecological Concerns

The Environmental Impact Report (EIR) from 2015 was used to inform aspects of the current risk assessment, but it was not specifically focused on the Vista Cove area. Over the years, I have witnessed environmental changes here, such as the recent appearance of bobcats and a noticeable shift in the bird population, including an increase in raptors. Residents have witnessed seasonal weather-related changes, as well. Accurately assessing which animal and bird species depend on this environment and assessing the impacts of seasonal weather variances requires a more focused and updated study. BIO-1

The project would permanently remove 0.49 acres of seasonal wetland. The effectiveness of proposed mitigation for this wetland depends heavily on the quality of implementation and ongoing agency oversight. There is no certainty that ecological functions will be fully replaced, and if mitigation or long-term maintenance is insufficient, local biodiversity will suffer. It is unclear whether the City of Vallejo has the necessary resources to commit to this long-term responsibility. BIO-2

Impacts on Adjacent Public Lands and Scenic Views

The proposed development is adjacent to the Benicia State Recreation Area (BSRA), which would be affected both visually and ecologically. The General Plan 2040 emphasizes the need to preserve scenic views and green spaces. All new homes would be visible from the recreation area, and construction and grading would disrupt park users, the green space corridor, and wildlife, particularly bird populations. There is no clear plan to ensure the continued viability of these animal populations following construction, raising concerns about permanent ecological disruption. AES-2 BIO-1

Unique Ecosystems and Wetland Vulnerability

According to information from the BSRA brochure, the rare and endangered wetland near the site supports salt grass, pickleweed, coyote bush, and the endangered soft bird's-beak. Native plant communities such as chaparral, valley grassland, and coastal scrub thrive on the hillsides that would be altered by the project. Discharge of stormwater from the development into the existing marshland could impact this rare wetland, and there is uncertainty about the long-term safety of the marsh and the broader ecosystem. A longer-term seasonal study is necessary to monitor rainfall impacts, marsh changes, and to provide for adaptive management based on climate and weather variations. Oversight and responsibility for the ongoing safety of the marshland remain unclear.

BIO-2

HYD-2

Tree Removal and Habitat Loss

The project will clear many mature trees, and while new trees will be planted, these will be small and will not immediately compensate for lost habitat. The interim loss of mature tree canopy will have a long-term negative effect on birds and other wildlife. The incremental loss of open space and mature trees further degrades regional habitat quality.

BIO-3

Reliance on Mitigation and Agency Resources

Many mitigation measures depend on effective implementation, long-term monitoring, and enforcement by city and agency staff. There is concern that current resources and staffing levels may not be adequate to ensure these measures are successful. Therefore, the effectiveness of mitigation outlined in the MND is not guaranteed.

BIO-1

BIO-2

Residual Impacts and Recommendations for Further Study

Despite the MND's identification of sensitive resources and proposed mitigation, the permanent loss of wetland and mature trees, as well as the presence of special-status species, create lasting and potentially significant harms. Stronger, enforceable mitigation measures and increased scrutiny are warranted. The Planning Commission should consider requiring a focused Environmental Impact Report (EIR) and specific on-site avoidance measures before approving the project.

Rezoning to Planned Development (PD) allows for coordinated development across multiple parcels and could open adjacent lands to future development. The MND does not limit the scale of future projects, setting a precedent for further loss of open space toward Benicia State Park. Given the rarity and fragility of the marsh ecosystem, this is a serious concern.

CUM-1

Traffic and Neighborhood Impacts

The project is projected to generate 481 to 520 new daily vehicle trips, a significant increase from the current fewer than 30 daily trips past my residence. This change will cause additional wear and tear on Shady Lane. It is unclear whether there is a plan to address road maintenance. The traffic analysis only included the Glen Cove Parkway & Robles Way intersection, omitting other critical access points such as Robles Way & Shady Lane, Wildflower Avenue, and Silktree Lane. These quiet residential streets will experience years of heavy construction traffic and increased long-term use, which may alter the character of the neighborhood and create safety risks for residents, especially children and pets. TRA-5

The increase in residents will also strain already limited local resources, as grocery stores and other businesses in Vallejo have been closing. There is concern about how increased population will affect access to these essential services. POP-1

Construction Impacts: Noise and Timeline Concerns

Prolonged use of heavy equipment during construction will raise noise levels for existing residents. Although these levels may be deemed below the City of Vallejo Municipal Code thresholds, they will still be significant and disruptive to those living nearby. NOI-1

The construction schedule lists the site preparation phase as lasting five days and the grading phase as twenty-five days. These timelines appear to be underestimated, particularly for grading which has some challenges because of unstable soils and slope instability. PD-2

Geotechnical and Environmental Safety Measures

There must be verification of slope stability measures and an independent review of the final grading plan. Post-construction monitoring for erosion and sediment control is necessary, and a long-term stormwater system maintenance plan should be established. Oversight by a certified geotechnical engineer during grading and foundation work is essential.

Although the MND claims that all geological and environmental hazards can be mitigated to less-than-significant levels, the site's hillside setting, clay soils, and potential regional seismic activity present ongoing risks. Strong oversight during construction, maintenance of drainage systems, and adherence to geotechnical recommendations are critical for ensuring long-term stability. GEO-1

Key Unresolved Issues

- Uncertainty regarding the sufficiency of wetland loss mitigation
- Spill prevention and water quality protection during construction
- Construction-phase noise and dust may create health risks to residents

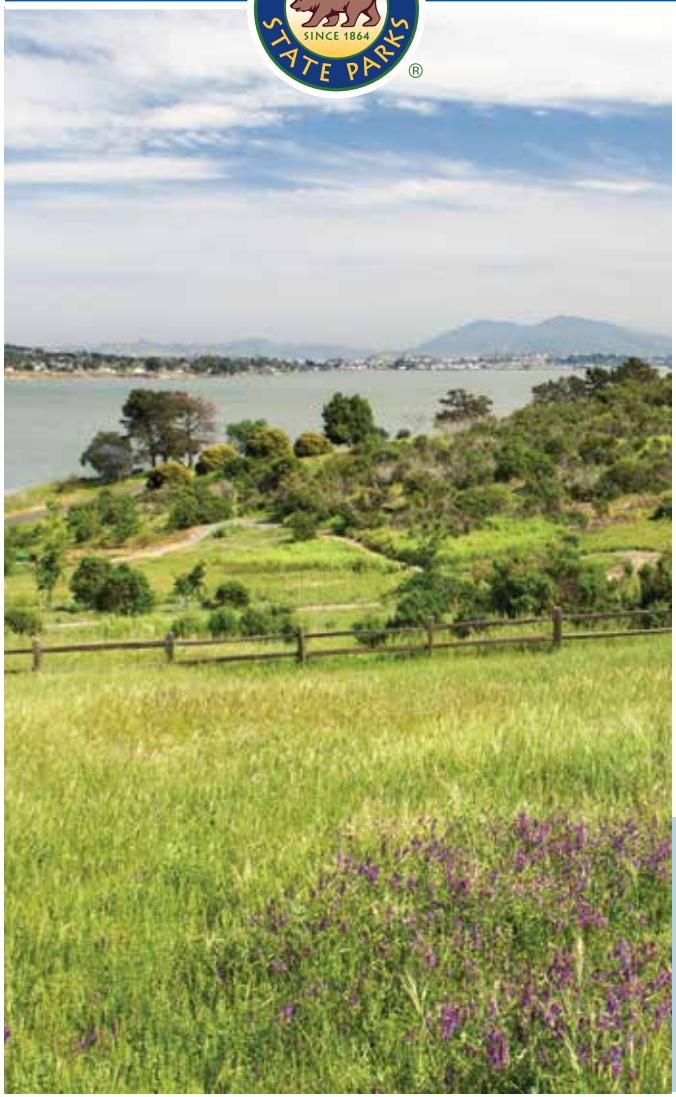
- Reliance on outdated environmental analyses without a full EIR update
- Significant increase in daily vehicle trips and potential traffic impacts
- Permanent loss of 0.49 acre of seasonal wetland, with proposed 1:1 mitigation unlikely to fully restore ecological function
- Removal of 69 trees (47 significant), with 3:1 replacement not immediately restoring mature habitat
- Presence of special-status birds and animals, with proposed surveys and buffers reducing but not eliminating risks
- Sedimentation and hydrology risks to adjacent riparian and marsh areas

Conclusion and Recommendations

The scale of ecological and visual impacts, along with the reliance on outdated environmental review, are significant causes for concern. The City should reject the current Mitigated Negative Declaration and instead require a full Environmental Impact Report. Alternatively, the site should be preserved as open space and integrated into a regional habitat and recreation corridor adjacent to Benicia State Park.

Benicia

State Recreation Area



Our Mission

The mission of California State Parks is to provide for the health, inspiration and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation.

California State Parks supports equal access. Prior to arrival, visitors with disabilities who need assistance should contact the park at **(707) 648-1911.** If you need this publication in an alternate format, contact **interp@parks.ca.gov**.

CALIFORNIA STATE PARKS
P.O. Box 942896
Sacramento, CA 94296-0001
For information call: (800) 777-0369
(916) 653-6995, outside the U.S.
711, TTY relay service

www.parks.ca.gov

Benicia State Recreation Area
1 State Park Road
Benicia, CA 94510
(707) 648-1911

© 2009 California State Parks (Rev. 2018)

Printed on Recycled Paper

The tidal marsh—where the rivers meet the bay—forms a unique habitat, home to rare and endangered plants and wildlife.

The combined waters of fourteen tributaries of the Sacramento and San Joaquin rivers surge through the Carquinez Strait, past Benicia State Recreation Area, and west into San Pablo Bay on their way to the Pacific Ocean.

Over the past 150 years, these waters have carried silt and clay from historic hydraulic gold mines and timber logging sites of the Sierra and deposited the particles where fresh water meets salt water at Southampton Bay. The mudflat and marsh make up most of the recreation area, providing habitat for some unusual and endangered species.

The climate may be windy and cool year-round, with frequent fog. Summer temperatures may reach 101 degrees; in winter, average rainfall is 3 inches with temperatures dipping to 40 degrees.

PARK HISTORY

Native Americans

Today's Solano County was first settled by the Patwin, who spoke the Southern Wintuan language. Historians estimate that about 3,300 Southern Patwin lived in the area before European encroachment.

From 1800 through the 1820s, Spanish Franciscan padres from Mission Dolores, Mission San José, and Mission San Francisco Solano tried to convert the Southern Patwin to Catholicism.

After the mission era ended in 1834, Mexican commandant General Mariano Guadalupe Vallejo used these new converts, called neophytes, as a labor force to work on his vast land holdings—nearly 175,000 acres.

A century later, only about 200 Patwin were left—lost to deprivation and unfamiliar European diseases.

Doña Francisca Benicia Carrillo de Vallejo

Euro-American Settlement

The city of Benicia was founded in 1847 by General Vallejo, Dr. Robert Semple, and Thomas O. Larkin. Benicia was originally named "Francisca" in honor of Vallejo's wife, Doña Francisca Benicia Carrillo.

Francisca's founders changed the town's name to Benicia on June 12, 1847, after nearby Yerba Buena was officially renamed San Francisco. With its strategic location skirting Southampton Bay and the Carquinez Strait, Benicia built the area's first deep-water harbor capable of docking large ships.

Park Property

The sandstone point at Benicia SRA has been known as Rocky Point, Quarry Point, and now Dillon Point. Stonecutter Patrick Dillon came to California from Tipperary, Ireland, during the 1849 gold rush. He settled in Benicia in 1851. General Vallejo leased Dillon the tidal flat at Southampton Bay and Rocky Point peninsula for a sandstone quarry.

Dillon eventually purchased the property; he built a brick kiln and began making red clay bricks. Sandstone and raw materials for the bricks were eventually exhausted. The Dillon family and subsequent owners tried sheep ranching and raising grapes until the State acquired the property for the Benicia State Recreation Area in 1967.

NATURAL HISTORY

Geology and Habitat

Nearly 70 percent of the parkland is tidal marsh wetland, ringed by grassy hills and open water. The Southampton mudflat formed by upriver silt and clay deposits is more than 1,000 feet thick. The principal habitats here are brackish marsh, saltwater marsh, and freshwater marsh.

Plants and Wildlife

This rare and endangered wetland ecosystem is covered with marsh plants such as salt grass, pickleweed, coyote bush, and soft bird's-beak. Bird's-beak is an endangered gray-green annual herb in the snapdragon family. Non-native trees provide light shade at the park entrance and picnic table areas. Native plant communities such as chaparral, valley grassland, and coastal scrub bloom on the hillsides.

Native Plant Botanic Garden

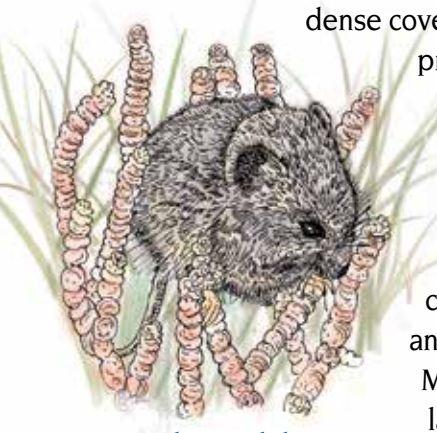
The Forrest Deaner Native Plant Botanic Garden represents over 250 species on 3.5 acres overlooking Southampton Bay.

The garden pays tribute to the late Forrest Deaner, founder of the Willis Linn Jepson Chapter (Solano County) of the California Native Plant Society. In spring, colorful magenta redbuds, golden poppies, blue lupines, and pink-flowered currants bloom. Summer and early fall deepen native plant foliage into russets and browns.

Several demonstration gardens—Memorial, Residential/Sensory, Native American, Butterfly/Hummingbird, Wildflower Meadow, and Riparian—display flora varieties, each marked with color-coded labels. The Botanic Garden is fully maintained by volunteers and funded through grants and individual donations. For more information, visit **www.cnpsjepsonchapter.org**.

Wildlife

Endangered northern salt marsh harvest mice depend on the park's pickleweed for its dense cover. Marsh erosion, predators, and severe habitat loss have reduced this mouse population. Other park mammals include coyote, beaver, otter, and muskrat.



Salt marsh harvest mouse in pickleweed

Marine birds float lazily on thermal updrafts at this designated Important Bird Area, which provides essential habitat for bird species. Virginia rails, endangered California clapper rails, and black rails hide in marsh vegetation. Visitors may see herons and egrets fishing or pelicans and terns diving. The marsh resounds with Suisun song sparrows and saltmarsh common yellowthroats. On their journey along the Pacific Flyway, many waterfowl winter in the park, such as Canada geese or canvasback and goldeneye ducks.

Sweeping marsh and bay views

RECREATION

The park has 2.25 miles of paved road and bike paths. Dogs and bicycles are allowed on the Benicia Bay Trail, part of the Bay Area Ridge Trail. California State Parks built the Benicia Bay Trail in collaboration with the Bay Area Ridge Trail Coalition and the San Francisco Bay Trail Foundation.

Dillon Point offers prime shore fishing for sturgeon, starry flounder, and striped bass. Anglers age 16 and over must carry a valid California fishing license.

ACCESSIBLE FEATURES

The Mike Taugher Trail—a dual-direction, paved, accessible trail—begins near the Military West entrance and runs 0.75 miles to the main park entrance, joining Dillon Point Road for 1.5 miles.

A portable restroom at Military West is designated accessible. For updates, see **http://access.parks.ca.gov**.

PLEASE REMEMBER

- Park is open from 8 a.m. to sunset daily.
- Pay the day-use vehicle fee at entrance.
- Dogs must be on a leash no more than six-feet long. Dogs and bikes are not allowed on marsh nature trails.
- Tent camping is not permitted. For a fee, RVs may camp *en route* for one night, space permitting, near the park entrance.

NEARBY STATE PARKS

- Benicia Capitol State Historic Park
  115 West G St., Benicia (707) 745-3385
- Sonoma State Historic Park
  363 Third Street West (at the Mission), Sonoma (707) 938-9560

This park receives support in part from the nonprofit Benicia State Parks Association, P.O. Box 404, Benicia, CA 94510 (707) 745-3385

Benicia
State Recreation Area
Legend
Freeway
Paved Road
Trail: Accessible
Trail: Hike
Trail: Hike & Bike
Intermittent Stream
Natural Preserve
Garden Area
Accessible Feature
Dogs Allowed on Leash
Fishing
Locked Gate
Marsh Area
No Dogs Allowed
Parking
Picnic Area
Restrooms
Viewpoint
to Vallejo
780
Rose Dr
Columbus Pkwy
Maintenance Yard
Park Buildings
(No Public Access)
State Park Road
Dillon Point Road
Pay Station
Park Entrance
Mike Taugher Trail
Pay Station
to Downtown Benicia
780
Military West
K Street
Bay Area Ridge Trail
SOUTHAMPTON BAY WETLAND NATURAL PRESERVE
NO PUBLIC ACCESS
Trespassing on fragile salt marsh areas is prohibited by law.
Approved study permits are required.
For information/application, visit
http://www.parks.ca.gov/studypermits
0 400 800 1,200 Feet
0 100 200 300 400 Meters
BENICIA STATE RECREATION AREA
Bay Area Ridge Trail
Benicia Bay Trail
FORREST DEANER NATIVE PLANT BOTANIC GARDEN
Southampton
Bay
to Carquinez Bridge
Glen Cove
PG&E Power Transmission Tower
Dillon Point
Carquinez Strait
N
Sonoma SHP
Petaluma Adobe SHP
Sonoma
Napa
Petaluma
Tomales Bay SP
Olompali SHP
Novato
Samuel P. Taylor SP
Benicia SRA
Vallejo
Benicia Capitol SHP
China Camp SP
San Pablo Bay
San Rafael
Benicia
Mt Tamalpais SP
Tiburon
Berkeley
Angel Island SP
Eastshore SP
Oakland
Pacific Ocean
Golden Gate NRA
SAN FRANCISCO
Candlestick Point SRA
0 5 10 Miles
0 5 10 15 Kilometers
© 2009 California State Parks (Rev. 2018)
Map by Eureka Cartography, Berkeley, CA

From: Me
To: Cesar Orozco
Subject: Vista Cove
Date: Friday, November 14, 2025 3:43:34 PM

This Message Is From an External Sender
This message came from outside your organization.

Mitigated Negative Declaration
Vista Cove Planned Development Project

My concern is that Shady Lane isn't wide enough for the increased traffic. It now is parking on the South side, which narrows it down to one safe lane. There could be widening of and additional drive lane plus parking lane with ADA sidewalk, right now you have to walk in the street. The side walk on the south side is not maintained. TRA-5
I do not see any over flow parking in the plan. The first set of houses could be devoted for that or in the undeveloped area. NON-1

thanks
Marty

From: Christine G
To: Cesar Orozco
Subject: Vista Cove – Public Comment on SMND
Date: Sunday, November 16, 2025 3:40:02 PM

This Message Is From an External Sender
This message came from outside your organization.

Thank you for this opportunity to share input on the recent documentation provided in the Subsequent Mitigated Negative Declaration for the proposed Vista Cove Planned Development Project. While the City's Mitigated Negative Declaration (MND) concludes that environmental impacts are less than significant with mitigation, a review of the documentation reveals multiple areas of unresolved risk, insufficient
mitigation, and irreversible loss of valuable open space.

Loss of Open Space and Visual Character
The site is one of the last remaining undeveloped hillside parcels adjacent to Benicia State Recreation Area. Development would permanently alter scenic views identified as valuable in the General Plan 2040, disrupting natural vistas and degrading the visual transition between the park and residential neighborhoods. The housing will be highly visible from many areas of the state part, the 780 freeway and act as a visually disruptive entrance to Vallejo from Benicia. AES-1

Conversion of the site to housing reduces local open space and could fragment habitat corridors between the study area and Benicia State Recreation Area, potentially reducing regional habitat connectivity over time. The MND asserts no substantial corridor impacts, but this finding depends on mitigations and off-site compensation that may not preserve local landscape function. BIO-4

Wetland and Habitat Degradation
The MND confirms the project will fill or disturb nearly half an acre of seasonal wetland and discharge stormwater into an existing marshland connected to the Carquinez Strait. The marshland contained in Southampton Bay is considered "endangered" and mitigation through off-site banking does not ensure local ecological replacement or sustained hydrological function. BIO-2

Permanent Loss of Seasonal Wetland (0.49 acre)
The project would permanently convert approximately 0.49 acre of seasonal wetland to a stormwater basin. Compensatory mitigation is proposed at a 1:1 ratio via mitigation banking or restoration. A 1:1 ratio is commonly considered minimal and may not fully replace lost wetland function and hydrology, especially when lost wetlands provide local connectivity to downstream marshes. BIO-2

Removal of Mature Trees and Canopy (69 trees; 47 protected)
The project proposes removal of 69 trees, including 47 'significant' trees protected under Vallejo's ordinance. Although replacement at a 3:1 ratio is required, replacement plantings do not compensate for the immediate and long-term ecological functions of mature trees (roosting, shading, erosion control, and habitat). Loss of trees increases risk to bat and raptor roosting and nesting resources. Tree replacement and habitat restoration may deliver benefits in future decades but the large-scale destruction of the existing landscape will leave an immediate and long-term ecological deficit. BIO-3

Impacts to Special-status Birds and Raptors (White-tailed kite; Northern harrier; Short-eared owl)
White-tailed kite were observed on-site during the brief study of the land. I can confirm they have been a regular presence in the 5 years we have lived here, we see them every year with a suspicion they have nested in trees surrounding the development site. According to the study provided, northern harriers and short-eared owls have moderate potential to nest. Construction, tree removal, and grading during nesting season could result in nest destruction or abandonment without strong protections. The MND relies on seasonal avoidance and pre-construction surveys (BIO-1a/BIO-1b) to reduce impacts. There is no guarantee of enforcement or monitoring during construction. While useful, these measures are procedural and do not fully remove the risk of disturbance or long-term habitat loss. I would seek the plan to implement strict timing and construction controls: prohibit tree removal and major grading during nesting and maternity seasons unless a qualified biologist clears specific trees; require phased removal with supervised hand-felling for trees with potential roosts. Additionally, requiring an independent peer review of the mitigation plan and a performance-based monitoring program with clear stop-work triggers if monitoring shows restoration failure. BIO-1

Bat Roosting and Maternity Colony Risk (Silver-haired and Hoary bats)
Large oak trees present on-site provide potential maternity/roosting habitat. The MND prescribes bat roost assessments and 100-foot no-work buffers if roosts are detected, plus phased tree removal. Nonetheless, direct loss of roost trees and the potential for undetected maternity colonies during removal remains a significant biological concern. BIO-1

Sedimentation, Hydrology, and Proximity Effects to Riparian and Freshwater Marsh Areas
Grading and construction adjacent to riparian and freshwater marsh features risks increased sedimentation and root damage. The MND proposes fencing, erosion control, and tree protection zones; however, proximity of heavy grading and stormwater changes could alter hydrology in ways not fully mitigated by standard BMPs. HYD-3

Require verification of slope stability measures and independent review of the final grading plan. GEO-1
Implement post-construction monitoring for erosion and sediment control performance. HYD-2
Establish a stormwater system maintenance plan to ensure long-term function of basins and drains.
Require construction oversight by a certified geotechnical engineer during grading and foundation work GEO-1

Insufficient Transit and Infrastructure Planning
The project will be 100% dependent on car-based access with limited street parking (only 24 spaces beyond garages and driveways for 51 homes) and the severely limited public transit service. The community has been advised SolTrans is considering cutting or reducing service in the area. Housing not supported by public transit access conflicts with Vallejo's sustainability and greenhouse gas reduction goals as noted in the city's general plan. TRA-6

Outdated and Overgeneralized Trip Generation Data
The analysis uses trip rates from the ITE Trip Generation Manual (11th Edition, 2021) based on pre-2010 data. While labeled 'conservative,' no local validation was done using Vallejo or Solano County data. Without this calibration, the 481-trip estimate may misrepresent real traffic conditions on Glen Cove Parkway. TRA-2

Lack of Comprehensive Intersection Study
Only one intersection (Glen Cove Parkway & Robles Way) was analyzed. No measurements were taken at the intersections the project will also rely on for access to the property including Robles Way & Shady Lane, Wildflower Ave and Silktree Lane. What are quiet residential streets will be exposed to years of heavy equipment during the construction phase, then the additional volume of traffic to support 51 additional households. There are days where Wildflower Ave, where I reside, sees only a dozen or so cars as a closed loop street. With the only access to Vista Cove coming from Shay Lane, construction traffic will be forced to use Wildflower and Skiltree, in addition to Shady Lave, as the width of Shady is only about 25' at the what will become the entrance to Vista Cove and this can't support two way traffic. The peace of our community would forever be altered and create risks for residents and pets. TRA-2

Road Surface Conditions
According to the City of Vallejo's "pavement condition dashboard" all streets within GC II are "Category V - Very Poor" with cracks, rutting and potholes. While Shady Lane had a slurry seal applied within the last 12 months, there is no other planned maintenance identified in Vallejo's general plan for the next decade. With the additional traffic demands during both the construction phase and the long term residential usage, the impact on the condition of our streets could be disastrous and render roads dangerous to all traffic. TRA-3

Incomplete Vehicle Miles Traveled (VMT) Analysis
The study disregards the State Technical Advisory's 110-trip threshold and instead applies Vallejo's outdated 500-trip standard. The site is on the city's fringe with limited transit, making the 'infill efficiency' claim questionable. TRA-1

Minimal Consideration of Pedestrian, Bicycle, and Transit Access
The report notes the lack of high-quality transit and omits quantitative pedestrian or bicycle safety evaluation. No transportation demand management (TDM) strategies are proposed to mitigate car dependency. TRA-6

Cumulative and Construction Impacts Ignored
No cumulative analysis with other Glen Cove or I-780 area developments is provided, including the recently approved 130 home development by KB Homes on Rollingwood Drive which will feed directly into the Glen Cove Parkway / 780 access points. Construction-phase traffic impacts were not modeled, potentially underestimating short-term safety and congestion issues. TRA-2

Construction Phase Risks and Disruption
The project involves diesel-powered equipment, fuel storage, and hazardous material handling (fuels, paints, solvents). Mitigation measures require emergency response plans and containment, but accidental spills remain a risk, particularly given the site's drainage connection to the Carquinez Strait. Local communities will also face the potential risk of localized air quality degradation during construction, especially for sensitive groups (children, elderly). Given the demographics of the existing Glen Cove Hills II, we have a strong representation of both populations. HYD-2

Expansive and Unstable Soils
The existing Sequoia clay loam soils exhibit moderate expansion potential, creating risk of differential settlement or heaving. Mitigation includes over-excavation, controlled compaction, and engineered fill. Therefore, there may be slope stability and landslide risk as portions of the site contain moderate to steep slopes. Planned grading includes cuts and fills up to 24 feet. Engineering controls such as retaining walls and slope stabilization are required where there could exist residual hazards with localized slope failure during intense rainfall or if construction controls fail. GEO-1

Hydrology and Drainage Alteration
New impervious surfaces alter runoff patterns. Proposed drainage basins and storm drains reduce off-site flooding risk. Residual hazard: if drainage systems fail or are not maintained, localized flooding and erosion could occur. HYD-4

Cultural and Tribal Resource Sensitivity
The MND acknowledges consultation with the Yocha Dehe Winton Nation and the likelihood of buried cultural materials. The project's hillside grading—up to 24 feet deep over 10 acres—presents a significant risk of disturbing cultural or ancestral sites. TCR-1

Precedent for Further Development
Rezoning to Planned Development (PD) allows 'coordinated development' across multiple parcels, potentially opening adjacent lands to future projects. The MND does not limit future development scope, setting a precedent for incremental loss of open space east toward Benicia State Park. CUM-1

Many measures rely on proper implementation, long-term monitoring, and enforcement by the City and agencies which we know are lacking in resources, budget and the levels of personnel necessary to perform any of this work. Therefore, the mitigation factors and resulting effectiveness is not guaranteed in the MND. BIO-1

The study properly identifies several sensitive resources and proposes mitigation; however, given the permanent nature of wetland loss and mature tree removal and the presence of nesting/roosting special-status species, the project presents residual, potentially significant ecological harms that warrant higher scrutiny and stronger, enforceable mitigation. The Planning Commission should consider requiring a focused EIR and stronger on-site avoidance before approving the project. BIO-2 BIO-3

The Vista Cove project would convert vital open hillside and wetland terrain into housing that provides no demonstrable public benefit other than market rate housing for those who can afford it while eliminating natural habitat, scenic views, and open space connectivity. The magnitude of ecological and visual impacts, and the project's reliance on outdated CEQA review create cause for concern. I would request the City reject the Mitigated Negative Declaration and require preparation of a full Environmental Impact Report (EIR) or make the choice to preserve the site as open space and integrate it into a regional habitat and recreation corridor adjacent to Benicia State Park while pursuing infill housing alternatives in the multitude of existing urbanized areas consistent with Vallejo's General Plan sustainability goals.

Thank you for allowing me to provide my concerns on this project.

Regards
Christine Gipson
116 Wildflower Ave, Vallejo

Comment Letter I-4

From: Rick Zavatsky
To: Cesar Orozco
Subject: Fwd: Vista Cove
Date: Wednesday, November 19, 2025 10:03:20 AM

This Message Is From an External Sender
This message came from outside your organization.

Sent from my iPhone

Begin forwarded message:

From: emerick zavatsky <emerickpz@yahoo.com>
Date: November 19, 2025 at 8:59:44 AM PST
To: cesar.orozco@cityofvallejo.net
Subject: Vista Cove

Mr. Orozco,
I'm writing to you to voice my many concerns to the Vista Cove housing development. I am a resident of Glen Cove and have owned my house since 1986.
1. Robles Ave has no stop signs or speed bumps making it a speedway for drivers and a hazard to try & safely enter from Shady Lane. TRA-4
2. Visibility is limited from Shady Lane entering Robles; especially when vehicles are parked at the intersection. TRA-4
3. Shady Lane was not designed for an additional 100 car a day from the 51 new houses planned. TRA-5
4. There have been numerous studies done since the 1980's finding that building a structures would not be advised. GEO-1 GEO-2
5. With the building of 130 new houses on Rollingwood Ave. the traffic would increase in the areas and Safeway, the only supermarket in the area would already be overcrowded. TRA-5
6. With the Vallejo police department short staffed already, the safety of the Glen Cove area would suffer. I rarely see a police presence in Glen Cove & when they area called
It takes hours or days for them to show up. PS-1

Thank you for you time & consideration
Rick Zavatsky

Sent from my iPad

From: Don Spilman
To: Cesar Orozco
Subject: Vista Cove -public comment and SMNG
Date: Thursday, November 20, 2025 7:25:22 PM

This Message Is From an External Sender
This message came from outside your organization.

SERIOUSLY??? Has there been a Traffic impact analysis (TIA) and mitigation planning with this mess? I can't imagine how these 100 or so more automobile trips roaring up little old peaceful Shady lane and then merging with Robles Way then another intersection with Honeydew then Peppercorn another at the shopping center and then congesting the Glen Cove Parkway traffic system will be good for anyone. Put the 50 homes somewhere else!!!! TRA-5

Sent from my iPad

Comment Letter I-6

From: Sandra Zarate
To: Cesar Orozco
Subject: Vista Cove - Public Comment on SMND
Date: Friday, November 21, 2025 5:44:38 PM

This Message Is From an External Sender
This message came from outside your organization.

Hello,

This letter is to ensure that I am NOT supporting the Vista Cove addition.

I have been here for 44 years and have enjoyed a peaceful environment with nature and natural habitats. There has been low noise pollution and less traffic in this area. We need to keep this area as is. It will definitely affect all the animals and native plants in this area and take away from the Benicia state park. NOI-1 TRA-5 BIO-1

Congestion in our schools is not the answer. The issues will cascade and we as a community will suffer. PS-2

Again, I do NOT AGREE WITH THIS.

Thank you,
Sandra

Comment Letter I-7

From: Gina Blair
To: Cesar Orozco
Subject: Vista Cove – Public Comment on SMND
Date: Friday, November 21, 2025 9:36:31 AM

This Message Is From an External Sender
This message came from outside your organization.

Dear Mr. Orozco,

I'm a Glen Cove resident and I'm writing to express my concerns about the Vista Cove project. Our neighborhood is already very limited in terms of road access, and adding more homes will create more traffic and safety issues for families who walk, drive, and bike here every day. TRA-4

The area below Shady Lane and Silk Street is quiet, narrow, and not built to handle more cars or congestion. We already deal with speeding and cut-through traffic, and this would make it worse. TRA-5 The noise and extra activity would also change the character of a neighborhood that many of us chose because it borders open space and the State Park. NOI-1

I respectfully ask that the City reconsider moving this project forward and take into account the real day-to-day impacts it will have on the people who live here.

Thank you for your time and for including my comments in the record.

Sincerely,
Gina Blair
Glen Cove Resident
Sent from my iPhone

From: ANNETTE HILTS
To: Cesar Orozco
Subject: Vista Cove - Public Comment on SMND
Date: Friday, November 21, 2025 4:58:55 PM

This Message Is From an External Sender
This message came from outside your organization.

Dear Mr. Orozco,

I'm writing as a longtime Glen Cove resident to share my concerns about the Vista Cove proposal. Our neighborhood simply isn't built to handle additional traffic or activity. With only one main road in and out, even a small increase in cars would make it harder and less safe for families to get around. TRA-4 TRA-5

The area near the State Park is quiet, natural open space that many of us walk, bike, and enjoy daily. Developing that land would bring noise, congestion, and permanent changes that don't match the character of this community. NOI-1 TRA-5 AES-1

I respectfully ask that the City take these issues seriously and reconsider moving this project forward.

Thank you for your time.

Sincerely,
Annette Hilts
Glen Cove Resident

RECEIVED
DEC 05 2025

111 Bluebell Place
Vallejo, CA 94591

December 5, 2025

Cesar Orozco, Planning Manager
City of Vallejo, Planning Division
555 Santa Clara Street
Vallejo, CA 94590

Vista Cove: Development/Subsequent Mitigated Negative Declaration

(Inconvenient Truths)

A casual reader of the Vista Cove Subsequent Mitigated Negative Declaration (SMND) would walk away thinking that the proposed project (PP) was in the middle of an urban enclave, with nearby commercial and service buildings and easy access to public transportation.

In reality, the proposed project (PP) is to be located on a large open area bordering to the East on the Benicia State Recreation Area (BSRA) and to the west on the outer limits of a residential area where, apart from Shady Lane, streets are one block long (despite the grandiose name of Wildflower AVENUE). To the north the PP is bordered by State Highway 780, which separates the PP from all public services. From north to south, a wildlife corridor wanders until it reaches the Carquinez Strait. Public transportation is 0.6--1.0 miles away, up a rather steep incline. Having lived in Glen Cove for four decades, I can see clearly the many flaws in the PP.

One further general comment, the check-a-box system employed by SMNDs is flatly misleading and cannot be given much weight.

The following discusses four major areas of concern: Destruction of Wildlife, Detriment to Recreation /Benicia State Recreation Area, Uncontrollable Erosion/Degradation of Wetlands, Traffic Dangers. And Emergencies. Areas where MITIGATION IS NOT POIBLE.

Notes:

Words in red are quotations from SMND

Section numbers refer to the SMND report.

DISTRUCTION OF WILDLIFE

1.The PP will impact on the BIODIVERSITY of one of the remaining wildlife corridors in this area. It is visited by hare/rabbits, possums, lizards, snakes, wild turkeys, foxes, deer, coyotes, raccoons, skunks, owls, bats, ground squirrels, moles, migrating and nesting birds and more. Predators, like redtail hawks and turkey vultures, and small resident birds fly freely overhead. All depend on the biodiversity of this large open area to survive. Nowhere in the SMND is there a list of all affected wildlife. When this is complete and studied, it will be clear there is no possible mitigation. BIO-1

2. SMND/Section 4.44 acknowledges that "...these impacts could interfere with the local policies...protecting biological resources and is a potentially significant impact." These impacts do interfere with stated policies.

3.Those of us living in Glen Cove can attest to wildlife pathways which have been traced through open spaces where multiple species move to and from feeding areas, rest areas, nurseries, etc. These pathways will be interrupted. Parcel B, which is currently part of the wildlife corridor, will be cut off from the main corridor, isolating wildlife and/or forcing it on to unsafe corridors. BIO-4

4. The SMND itself recognizes that mitigation would be required "due in fact to a substantial reduction in habitat in the project area." That **substantial reduction** in habitat cannot be mitigated. BIO-1

5.The PP allocates only one acre, non-accessible to the public, for BIORETENTION, an insufficient space to mitigate harm that will be caused by the PP. HYD-2

6. Once again, the SMND suggests that the PP is WITHIN a much larger tract of housing development and acknowledges that ...wildlife moves freely on the periphery.' THIS IS MISLEADING. Remember that the PP is slated to be built on that very periphery of existing developments. If construction occurs on the periphery/wildlife corridor, causing irreversible damage, wildlife will no longer be able to move freely. BIO-4

7.The PP "could have a substantial adverse effect on special-status species, sensitive natural communities, protected wetlands, and native resident or migratory wildlife corridors and native wildlife nursery site." No mitigation can compensate for this adverse effect. BIO-1 BIO-2 BIO-4

8. Policy NBE-1-6 /SMND 4.4.1 states that the city of Vallejo, must "conserve and enhance natural open space areas in and adjacent to Vallejo". The PP does nothing to conserve or enhance natural open space. Policy NBE-1-2 requires assurance "that adverse impacts on sensitive biological resources...are avoided." This will not happen if the PP goes forward.
Policy NBE-5-6G6D/section 4.10.1 states as a goal to" Protect and enhance hillsides, waterways and aquatic and wildlife habitat." The PP completely opposes this policy. BIO-5

9. Section 4.21 advises that there will be degradation, causing wildlife to drop below self-sustaining levels. In other words, extinction. BIO-1

DETRIMENT TO RECREATION/BENICIA STATE RECREATION AREA (BSRA)

1. The PP is adjacent to the frequently visited BSRA, which is a peaceful natural preserve enjoyed by many people each day. Fifty-one additional dwellings, the anticipated traffic driving along the one access road overlooking the BSRA, increased nighttime lighting including bright security lights, will be an additional disruption to the nearby wildlife.

2. The SMND states that the BSRA is only 0.3 miles from the PP (*as the bird flies).* Access to the park, however, is only by driving from the PP up Shady Lane, Down Robles, to Glen Cove Parkway and onto Highway 780 to the park entrance where a fee paid. Hence the BSRA is not an easily accessible recreation area for the PP.

BIO-1

3. SECTION 4.16-3 enumerates "9.74 Acres of undisturbed open space and 355 acres of common open space including 2 bioretention areas, walkways, a loop walk and a vista overlook are part of the PP. THESE PRIVATE AMENITIES ARE ONL FOR RESIDENTS OF THE PROJECT AND NOT FOR PUBLIC ACCESS." **THIS IS NOT A GATED COMMUNITY.** This area is currently enjoyed by many hikers. The added amenities will attract more hikers, strollers, walkers and parkers.

PD-1

UNCONTROLLABLE EROSION/DEGRADATION OF WETLANDS

1." The current site consists entirely of pervious surface area. This pervious space will be reduced by nearly 20%." With reduced pervious surface area, damage from PP runoff can occur.

2. The PP will introduce a significant measure of impermeable surfaces, causing more than today's normal runoff from the existing open space. As mitigation, the SNMD suggests that homeowners will be requested to limit their choices of hardscaping. A "suggestion" is hardly mitigation. Many lawns in nearby neighborhoods are being paved over with concrete despite HOA restrictions, and this trend continues unchecked.

HYD-2

3. Potential slope erosion, exacerbated by rising sea levels and heavy rains, could have disastrous effects on the BSRA

HYD-3

4. 'Expected pollutants...include pathogens, nutrients, pesticides/herbicides, sediment...trash and debris, oil and grease." All of these will eventually find their way into the wetlands east of the PP, harming plants, wildlife and the functioning of the wetlands themselves. The runoff cannot be mitigated.

HYD-2

5." Because of the proximity of the riparian and freshwater marsh land...the PP could result in increased sedimentation to the freshwater marsh or damage to trees ...due to construction." No true mitigation is possible.

HYD-3

TRAFFIC DANGERS

1. Glen Cove Hills (immediately to the west of the PP) is a quiet neighborhood, with most streets having limited traffic, and many having no more than 5-6 houses per street. The residents of these new houses, using the planned one full access street will cause traffic congestion, particularly at commute/school hours. THERE IS NO WAY TO ADD AN ADDITIONAL OPENING TO THE PROJECT, AN ACTUAL AND WORKABLE MITIGATION — TRA-5

2. NO public transportation is readily available despite the oft-repeated assurance to the contrary in the SBMD where it is said that "public transportation would reduce the use of private vehicles." The only feasible mitigation would be to extend the bus route into the PP, but, even then, most residents would choose to drive their own vehicles. — TRA-6

3. The traffic pattern for the PP is a disaster waiting to happen. First, all vehicles (cars, emergency vehicles, fire engines, service vehicles, delivery vans, etc.) must enter the PP at the intersection of Shady Lane and Wildflower Avenue, a quiet residential corner. Next, all exiting vehicles must come to a complete stop at that intersection. Then these same vehicles must accelerate promptly to ascend the steep incline on Shady Lane. The projected high volume of traffic, particularly at commute hours, may cause congestion and hinder smooth exits. Any interruption in traffic would bring the whole system to a standstill. Furthermore, in any emergency, local traffic may have to come to a standstill, waiting for emergency vehicles to clear the intersection. In a worst-case scenario, the intersection may be totally blocked, trapping residents as there is **no** alternative exit. — TRA-5, TRA-4

4. PP housing is located on "alley ways" exiting to a single through street (the proposed extension of Shady Lane). In the event of an emergency, emergency vehicles may be unable to access the PP. Furthermore, alley ways and "private streets" provide limited direct access and/or space to maneuver emergency vehicles. — HAZ-1, TRA-4

5. A single blockage of Shady Lane could thus prohibit residents from escaping and emergency vehicles from entering. Nowhere in the SBMD is there an adequate response to this problem of evacuation/emergency. Safe evacuation may not be feasible.

6. A community mailbox with a single designated parking space for 51residences further exacerbates the parking problem. This could be mitigated by community mailboxes at the corner of each alley way. — NON-1

EMERGENCIES/DISASTERS

1.Major emergencies such as wildfires and earthquakes could cut off the PP from all assistance, virtually trapping the residents. Hiking out may be the only escape. — HAZ-1

2.With no alternative entrance, emergency vehicles could be delayed in their response particularly during times of heavy traffic — HAZ-1, TRA-4

3.Alley ways and "private streets" may not be able to accommodate multiple fire engines andallow maneuverability.

4.When faced with thee question "would the project result in inadequate emergency access?", SMND's response was "less than significant impact." This cannot be accepted. It is hard to imagine a more thoughtless /inaccurate answer. Policy MTC-2.3 in Section4.20.1 states: ensure adequate emergency vehicle access. Section 4.20.3 restated that the impact was less than significant. Has the fire department signed off on the PP? TRA-4

5.It *is* true that there is a fire department in Glen Cove. Unfortunately, it will be useless if access at the one entrance to the PP is compromised.

FOR THE ABOVE REASONS (AND PERHAPS MANY MORE)

We urge that this project not proceed.

Carol McKenzie, Glen Cove Resident

Kay McKenzie, Glen Cove Resident

*Words in red are quoted from the

Re: Vista Cove Project

Comment Letter I-10

To: Cesar Orozco, Planning Manager

CC: Andrea.Source@cityofvallejo.net, Tonia.Lediju@cityofvallejo,net

December 8, 2025

I am writing this letter in express my concerns about the Vallejo, “Vista Cove” Project.

I am a retired senior and the owner of the home at 488 Robles Way. I have been a resident of the Glen Cove neighborhood in Vallejo for over 30 years.

I am frustrated that we are again addressing a proposed project for the property at the bottom of Shady Lane which as you may not know is a fairly steep street.

This is the third or fourth time that an idea has been proposed to build on this land. Each time, we the people who live in this neighborhood, have come together to sign petitions, raise objections and make it known that this area should remain open and unspoiled by housing.

Since we are currently talking about a “Vista Cove Project”, I take it that the other proposals must have failed, so why are we again, talking about building in this location?

My number one concern that I have with this project is that the “basic description of the property” in the Project **omits** that it is adjacent to and next to the Benicia State Park and Recreation Area therefore misleading anyone making a decision on this project and the Appendix findings.

Even in your Public Hearing Notice lists the “Project Location & APS(s)” incorrectly by omitting that it is next to the Benicia State Park and Recreation Area.

This project would have a significant impact not only on the State Park but on my area of Glen Cove.

BIO-1

If built Vista Cove would spoil the appearance of a natural, wild, setting that we all treasure and enjoy with having the Benicia State Park located in such close contact to busy cities. This is one of selling points for being in Glen Cove.

What ever happened to the plan to only have houses on the ridgeline around the Park? This I understand was the **ORIGINAL** plan for this area as it impacts the State Park.

Another basic argument I have against the Project is that there is **no** shortage of housing in the area. There is currently a large development underway and being populated with new homes just off Columbus Parkway and there is another project of houses planned for the Rollingwood Street location.

The homes planned for Vista Cove are not small and affordable housing. With planned footage of 2,494 to 2,674 square feet and two story structures these homes for large, wealthy families with numerous cars as well as other types of vehicles that will have a large impact on the amount of additional traffic in our small area.

TRA-5

And as for traffic, the only way out of the area is by going up Shady Lane, turning right onto Robles Way, driving past the only driveway entrance to the Safeway shopping center, continuing down the

street to Glen Cove Parkway and then turning right to access the freeway or left to access other streets. HAZ-1

This one way in and one way out is also a big safety hazard. Consider if a fire should break out and people get trapped down on their "private street". Perhaps fire trucks or ambulances will be unable to respond. Only one way in and one way out is very risky. TRA-4

And do they plan to make this a "gated" community and or have private streets?

The 25 mile an hour speed limit doesn't work well in our area. The neighborhood has already asked for speed bumps to try to slow traffic down on Robles Way. The intersection at Robles Way and Glen Cove Parkway is hazardous as too many impatient drivers on the Parkway, run the red light. TRA-8

This traffic configuration will also have a large impact during construction. This again will be the ONLY access to Vista Cove, which means heavy equipment will have to travel this route as well. Currently at various times of the day and week, traffic is backed up all the way to the bridge trying to turn left onto Robles Way. The Appendix doesn't seem to support this but I see this all the time. TRA-5

Also of concern, I don't see any information in the Appendixes that the Benicia State Park and Recreation people or that the City of Benicia has had any contact either. BIO-1

I also don't see any mention of the power towers that run through the Park area and are close to this property.

Other comments specific to the data presented;

Appendix A - CALLEEMOD Outputs – Page 66, "58,700 cubic yards of soil would be cut and 59,300 cubic yards would be used for fill, resulting in a total soil import of 600 cubic yards." This will generate a lot of dirt and dust frying into the air. I am very concerned about the impact on my asthma and the quality of life we can expect during construction.

Appendix B HRA – Data used is from **2013 – 2017**. **Out of date data**. Again I am concerned about the about of dust and dirt this project will generate. I am retired and I am home a large percentage of the time. This noise, traffic and dust will have a substantial impact on my quality of life. AIR-2

Appendix C - Biological Resources has flaws in it. There were only two days of study listed and they were **February 28 and July 14 of 2022**. **The data is not current.** 2022 was a VERY dry year. I have a weather station and I recorded only .11 inches of rainfall in all of February and 0 in July. BIO-1

Appendix C also omits that the property adjoins our State Park. But in many ways the findings within appendix C support my argument that this is a wildlife area and should not be disturbed.

There are many animals living, feeding, breeding and seasonally visiting this area and the park. This project will cause a loss of habitat.

I didn't see any reference in the study to our deer, raccoon, possum, skunk, coyote, geese, eagles or wild turkey population.

Appendix D – Cultural - Omits any mention that property is next to a State Park and there is no contact with any Indigenous Indian tribes listed. TCR-2

Appendix E – Geotechnical Investigation - Page 14, Item 11.0 states that "the professional opinions" are valid for a period of no more than **2 years** from the date of the report". The Date of the Report is **September 12, 2022**. **The report is out of date.** Page 15, Paragraph 2 has a disclaimer of what has not been cover which includes flood potential as well as other issues. GEO-2

Appendix F Environmental – Is dated **April 26, 2022** and is only a **DRAFT**. Table 2.4-1 Records reviewed. 1 out of 5 contacted provided useable feedback. HAZ-2

From what I read and see some of this grading, land rearranging leveling and vegetation removal will have to be done on property owned by residents of Wildflower. Has this been approved? GEO-2

Appendix G – Drainage - This appendix also omits the fact that Benicia State Park and Recreation Area adjoins the location. Report is from **May3**, **2023 and November 17, 2023** which makes it old information and it is **NOT** signed. It reports that the property is elevated between 75 and 155 feet. HYD-1

Shouldn't there be some concern for Global warming and the increase we are seeing in tides in the area? Are requirements still met for the Regional Water Quality Board? HYD-4

There also is no mention of the Vallejo Flood and Wastewater Unit located at 198 Wildflower. What do they plan to do with it?

There is also a creek that runs along Columbus Parkway and down into the Park. It floods Benicia Road almost yearly. HYD-4

Appendix H – Noise Impact - Sound walls will be built in various locations in the development mainly areas closest to the highway. So they know there are issues already with noise from the highway which traffic patterns have changed dramatically over the past year with added housing. NOI-1

Appendix I – Transportation Analysis – The report is dated **9/16/2024** and omits the existence of a State Park. It projects 481 new daily vehicle trips. All of these trips will be accessing the one way in and one way out route using the above described above route up the steep Shady Lane and down Robles Way. TRA-2

It also states that it was based on a Trip Generation Manual for 2021.

My comments on the Appendixes are solely based on my understanding in reading what was available at the designated website

This Project appears to be supported by a lot of misinformation and incomplete studies.

I invite you to come visit the site if you haven't already, so you can more thoroughly understand what my neighbors and myself are so concerned about and why this location and adjoining properties should remain undeveloped.

I feel for the nine people who hope to make a profit with this project but this project will impact a lot more than just 9 people.

Please reconsider this project. It is a bad idea and will always be a bad idea to think about building on this location. It should remain open and better yet, it should be part of the Park. And if this isn't an option right now, at least "REZONE" it and keep it open space.

Thank you for reading my concerns,

Linda Zupan-McKenna
488 Robles Way, Vallejo, CA 94591
707-553-8918 or cell phone 707-567-7672

From: Sabrina Cardoso
To: Cesar Orozco
Subject: Vista Cove - SMND Comments
Date: Tuesday, December 9, 2025 10:47:15 PM

This Message Is From an External Sender
This message came from outside your organization.

Dear Mr. Orozco,

After reviewing the proposal for Vista Cove I decided to voice my families opposition to the development. We moved to Glen Cove becuase of its proximity to Benicia State Park and that it was removed from Vallejo proper. I have seen that hillside many times on my walks and cannot imagine putting a housing development there. That hill will not be easy to grade and the potential for earth movement is possible. I also feel like the amount of housing in such a small space feels forced not to mention the traffic it will add to our neighborhood. GEO-1 TRA-5

We don't want this built.

Regards, Sabrina Cardoso and David Ingalls

From: Lisjan Nation
To: Cesar Orozco
Subject: Re: AB 52 and SB 18 Proposed Vista Cove Planned Development Project
Date: Friday, November 14, 2025 2:14:26 PM
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png
image006.png

This Message Is From an External Sender
This message came from outside your organization.

Hi Cesar,

Thank you very much for this information. The Tribe has some comments on the draft mitigation measures.

Measure TCR-1 is described as "Protocol for the Discovery of Native American Cultural Items" but then specifically describes human remains. The Tribe respectfully recommends that there be two separate mitigation measures, one for cultural items and one for human remains.

The Tribe's recommended language is as follows:

TCR-1 Inadvertent discovery of Tribal Cultural Resources: If cultural resources of Native American origin are identified during grading or excavation of the proposed project, all ground disturbing activities within 100 feet shall cease until a representative from the Confederated Villages of Lisjan Nation is consulted by the government agency. If the entity in consultation with the consulting Tribe(s), determines that the resource is a Tribal Cultural Resource and thus significant under CEQA, the entity shall retain a Tribal representative and, if applicable, a qualified archaeologist, at the applicant's expense, to prepare a mitigation plan, which shall be implemented in consultation with the consulting Tribe. The mitigation plan shall include avoidance of the resource or, if avoidance of the resource is not feasible, the plan shall outline appropriate treatment of the resource in coordination with the consulting Tribe. Examples of appropriate mitigation for Tribal Cultural Resources include, but are not limited to, protecting the cultural character and integrity of the resources, protecting traditional use of the resources, protecting the confidentiality of the resources, or heritage recovery.

TCR-2 Inadvertent discovery of human remains: If human remains are encountered during construction and ground disturbing activities, all work within 100 feet of the remains should be redirected and the County Coroner notified immediately. At the same time, an archeologist shall be contacted to assess the situation. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission (NAHC) within 24 hours of this identification. The NAHC will identify a Native American Most Likely Descendent (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and any associated funerary objects. There shall be no pictures taken or testing done on the Native American human remains. All bone, until identified as not human, shall be treated as potential human remains and the appropriate protocols followed. The archaeologist shall record information, as appropriate and in accordance with the recommendations of the MLD and/or Tribal representative. Upon completion of the archeologist's assessment, a report should be prepared documenting methods and results, as well as the MLD's recommendations regarding the treatment of the human remains and any associated funerary objects. The report should be submitted to the lead government agency, the NWIC and the consulting Tribe. Tribal representatives will rebury the Native American human remains and associated funerary objects with the appropriate dignity either; in accordance with the recommendations of the MLD if available or in the project vicinity at a location agreed upon between the Tribe and the entity, where the reburial would be accessible to Tribal members in perpetuity and would not be subject to further disturbance. The discovery and reburial is to be kept confidential and secure to prevent any further disturbance.

TCR-1

The Tribe is not comfortable with including specific information concerning excavation of human remains at this time. As described above, the Tribe does not permit photography of human remains, even if the photographs are not published. The Tribe is also not comfortable with the mention of curation currently in the mitigation measures.

Please let us know if the City has any questions about the Tribe's proposed mitigation measures.

'Uni (Respectfully),

Lucy Beyhan, Cultural Resource Manager II
Confederated Villages of Lisjan Nation

From: Cultural Preservation Department Inbox
To: Cesar Orozco
Subject: Vista Cove Project
Date: Friday, November 14, 2025 2:34:17 PM

This Message Is From an External Sender
This message came from outside your organization.

Dear Cesar Orozco,

Thank you for your letter dated November 12, 2025, regarding the proposed project. Wilton Rancheria ("Tribe") is a federally recognized Tribe as listed in the Federal Register, Vol. 74, No. 132, p. 33468-33469, as "Wilton Rancheria of Wilton, California". The Tribe's Service Delivery Area ("SDA") as listed in the Federal Register, Vol. 78, No. 176, p. 55731, is Sacramento County. The Tribe's Trust Lands are in Sacramento County however, the Tribe's ancestral territory spans from Sacramento County to portions of the surrounding Counties.

TCR-2

Although your project is within the ancestral territory of the Wilton Rancheria, we do not have any comments and do not wish to open consultation at this time. We appreciate your continued outreach and/ or consultation for future projects and respectfully request that you contact us if there are any project updates or changes.

Thank you,

Wilton Rancheria
Department of Cultural Preservation
Front Desk: 916-313-4493
cpd@wiltonrancheria-nsn.gov

Docusign Envelope ID: C84663D2-8260-49FF-B517-21B74C0F2D82

Comment Letter O-3

YOCHA DEHE
CULTURAL RESOURCES

December 4, 2025

City of Vallejo – Planning Division
Attn: Cesar Orozco, Planner
555 Santa Clara Street
Vallejo, CA 94590

RE: Vista Cove Planned Development Project YD-09042024-03

Dear Mr. Orozco:

Thank you for the project notification regarding cultural information on or near the proposed Vista Cove Planned Development Project. We appreciate your effort to contact us and wish to respond.

The Cultural Resources Department has reviewed the project and concluded that it is within the aboriginal territories of the Yocha Dehe Wintun Nation. Therefore, we have a cultural interest and authority in the proposed project area and would like to initiate a formal consultation with the lead agency. At the time of consultation, please provide our Cultural Resources Department with a project timeline, detailed project information and the latest cultural study for the proposed project. TCR-1

To coordinate a date and time for the consultation meeting, please contact:

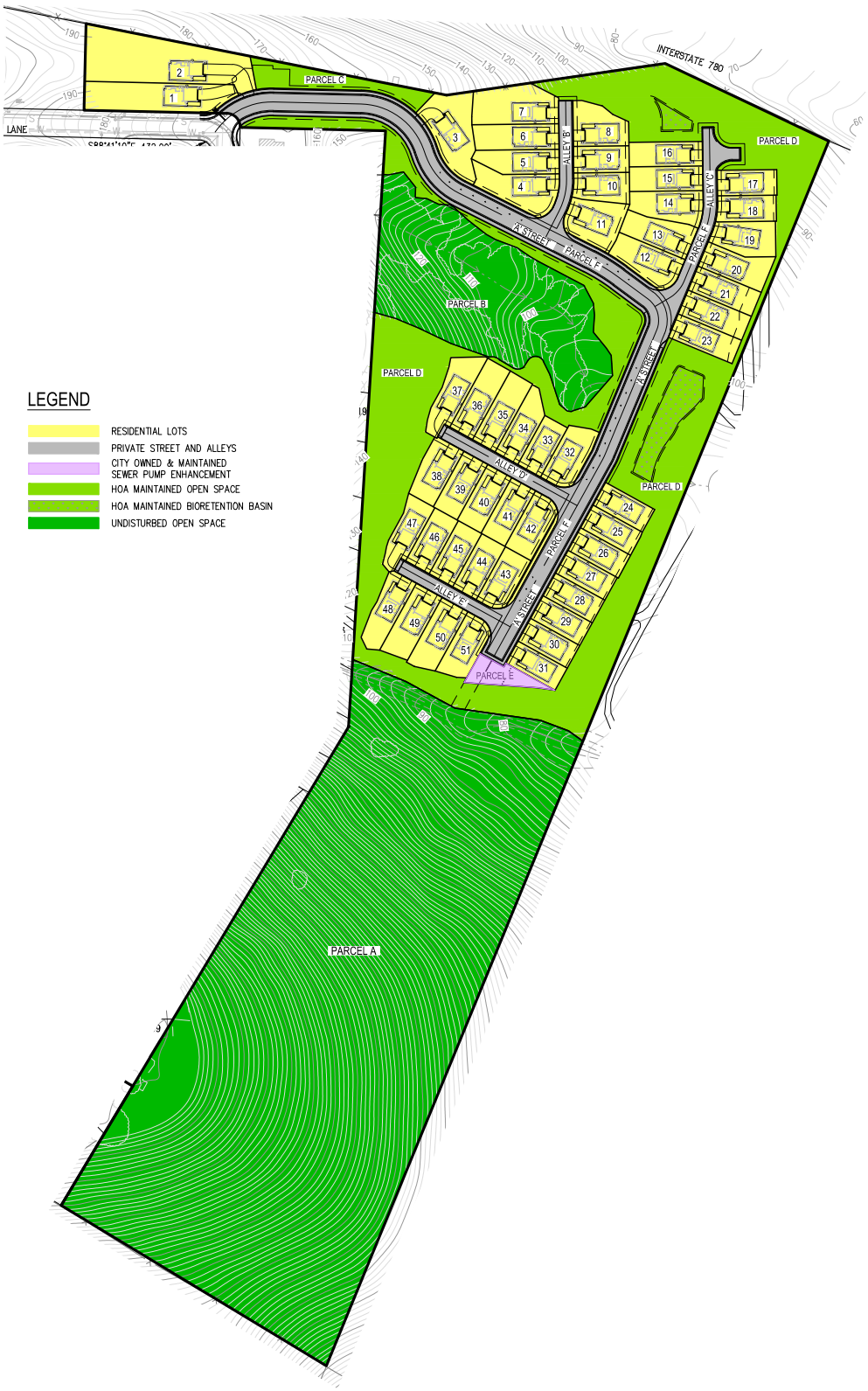
CRD Administrative Staff
Yocha Dehe Wintun Nation
Office: (530) 796-3400
Email: THPO@yochadehe.gov

Please refer to identification number YD–09042024-03 in any correspondence concerning this project.

Thank you for providing us the opportunity to comment.

Sincerely,

Signed by:
Yvonne Perkins
8DD0BD089ED6438...
Tribal Historic Preservation Officer



LSA

FIGURE 2-4
Sheet 1 of 2

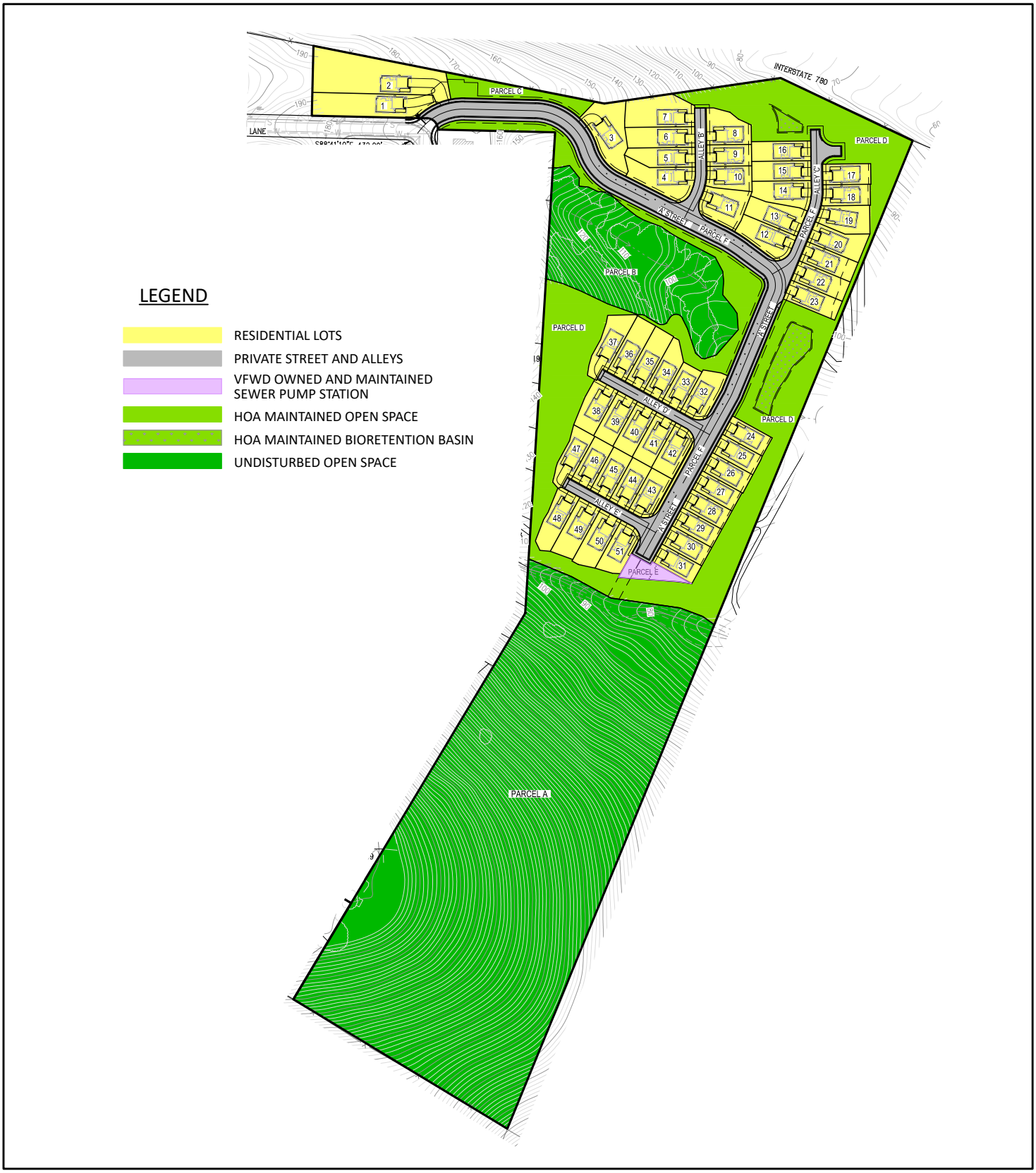
N

0 125 250
FEET

SOURCE: DK Engineering

I:\2024\20241845\G\Site_Plan.ai (12/22/2025)

Vista Cove Planned Development Project
Original Conceptual Site Plan



LSA

FIGURE 2-4
Sheet 2 of 2

N

0 125 250
FEET

SOURCE: DK Engineering

I:\2024\20241845\G\Site_Plan.ai (12/22/2025)

Vista Cove Planned Development Project
Revised Conceptual Site Plan

Project No.
20164.000.001

January 7, 2026

Mr. Adam Smith
Sancerra
2618 San Miguel Drive, Suite 1223
Newport Beach, CA 92660

Subject: Vallejo Properties – Vista Cove
Vallejo, California

GEOTECHNICAL REPORT CLARIFICATION

Reference: ENGEO. 2022. Preliminary Geotechnical Exploration, Vallejo Properties – Vista Cove, Vallejo, California. September 12, 2022; Revised September 23, 2022. Project No. 20164.000.001

Dear Mr. Smith:

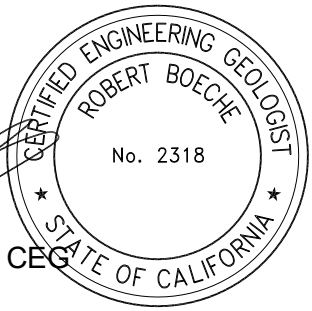
As requested, this letter confirms that the preliminary conclusions and recommendations contained in the referenced report remain valid.

If you have any questions about the contents of this letter or require additional information, please do not hesitate to contact us.

Sincerely,

ENGEO Incorporated

Andrew Firmin, GE



Robert H. Boeche, CEG

af/jw/rhb/cb

Vista Cove

Evacuation Assessment

Project Name:
Vista Cove

Location:
Glen Cove area of Vallejo, California

Date:
10/27/25

Prepared for:
Sancerra

Prepared by:
CAS Safety Consulting, LLC

3558 ROUND BARN BLVD., SUITE 200
SANTA ROSA, CA 95401
(707) 806-7628

CLINT SHUBEL
CLINT@CASSAFETYCONSULTING.COM

ROB GIORDANO
ROB@CASSAFETYCONSULTING.COM

1) Introduction & Qualifications

CAS Safety Consulting[1] is an independent public safety firm with extensive experience in wildfire evacuation planning, emergency response coordination, and Alert and Warning Notification practices. Serving as Sheriff and Assistant Sheriff of Sonoma County we had leadership roles during the 2017 Sonoma Complex Fires, one of the most destructive wildfire events in state history. These fires let us see first-hand the importance of evacuation preparedness and planning.

CAS Safety Consulting has developed evacuation assessments and wildfire mitigation plans for numerous projects across California, including residential, hospitality, and commercial/large-scale projects in fire prone areas. We also served as subject matter experts for post-incident After Action Reviews (AARs) on the 2025 Palisades and Eaton Fires assessing alert and warning performance, agency coordination, and public response during mass evacuations.

We were hired by the developer (Sancerra) of the Vista Cove project to provide a law-enforcement operations perspective on evacuation readiness for the proposed project. This is an operations-based opinion. It was not a requirement for the developer, not for CEQA purposes, and does not include traffic modeling or clearance-time estimates.

Our mission is not to advocate for or against any specific development, but to ensure that if a project does proceed, it does so with the highest regard to evacuation safety.

2) Project and Community Description

The project site[2] is at Shady Lane and Wildflower Avenue in the Glen Cove neighborhood of Vallejo, California. The property boundary comprises 20.13 acres zoned for residential land uses. This defined residential medium density zoning location allows for development of 500+ homes, but the proposed project is for the minimum allowed of 51 single-family homes. The site is bordered to the west by a 141-unit single-family residential subdivision within a mix of rolling hills and flat areas. The community's main thoroughfare, Glen Cove Parkway, is a four-lane divided corridor that traverses north/south bound, and the site is approximately 0.7 miles to I-780 access.

[1] www.cassafetyconsulting.com
[2] Information received from the developer's Project Description for City of Vallejo Planning Department

3558 ROUND BARN BLVD., SUITE 200
SANTA ROSA, CA 95401
(707) 806-7628

CLINT SHUBEL
CLINT@CASSAFETYCONSULTING.COM

ROB GIORDANO
ROB@CASSAFETYCONSULTING.COM

The proposed plan calls for a total maximum parking of 228 vehicles. There is no gate at the entrance to the development. The project will be designed and built to comply with all applicable fire and life safety codes and prevailing standards.

This is the proposed site plan with the Primary and Alternate evacuations routes identified in red:

The site lies within evacuation zone VLJ-1236 and is proximate to Vallejo Fire Station 26 and the California Highway Patrol (CHP) - local area office.

3558 ROUND BARN BLVD., SUITE 200
SANTA ROSA, CA 95401
(707) 806-7628

CLINT SHUBEL
CLINT@CASSAFETYCONSULTING.COM

ROB GIORDANO
ROB@CASSAFETYCONSULTING.COM

3) Evacuation Hazard Assessment

Analyzing the hazard context for the area, CAL FIRE's FRAP[3] shows no on-site wildfire history. Current Solano/City mapping[4] places the location outside mapped wildfire hazard severity zones (non-WUI) and outside the tsunami hazard area. Based on publicly available mapping and regional climate conditions (hurricanes, etc.), the likelihood of a mass evacuation triggered by natural hazards is low at this location. That said, earthquakes, HAZMAT, large structure fires, or other all-hazards events can still require evacuations. However, such actions would likely be smaller in scale and incident specific.

4) Alert & Warning Readiness

Solano County OES operates Alert Solano[5] for countywide mass notification, coordinates WEA/IPAWS for time-critical, zone-based warnings and orders, and maintains official evacuation zones (e.g., VLJ-1236) on Know Your Zone / Genasys Protect so messages, maps, and checkpoints use the same identifiers. This framework supports phased, geographically targeted notifications and integrates cleanly with ICS field operations (TCPs, staging, responder ingress). Based on these capabilities, Solano County's Alert & Warning system appears well positioned to support alerting and evacuations for the Glen Cove area. Law enforcement employs hi-lo sirens as an audible evacuation notification redundancy.

5) Evacuation Assessment and Operations Viewpoint

CAS Safety's observations are informed by our drive-through inspection of the primary and alternate evacuation routes, and street-view imagery. The Glen Cove Center (northwest corner at the parkway) is a practical location for short-term staging of evacuation routes and a Traffic Control Point (TCP). Any use of lane reallocation or ramp controls remains incident-dependent and at the discretion of Vallejo PD/FD with CHP/Caltrans coordination; this report does not assume contraflow as a baseline tactic.

[3] https://www.fire.ca.gov/what-we-do/fire-resource-assessment-program
[4] https://solanocountygis.com/portal/home/webmap/viewer.html?layers=a75e7ea0d3eb438796390317517ff8e5
[5] https://www.solanocounty.gov/government/office-emergency-services/alert-solano

3558 ROUND BARN BLVD., SUITE 200
SANTA ROSA, CA 95401
(707) 806-7628

CLINT SHUBEL
CLINT@CASSAFETYCONSULTING.COM

ROB GIORDANO
ROB@CASSAFETYCONSULTING.COM

Primary Evacuation Route:

From an operations viewpoint, the primary evacuation route runs from project entrance to Shady Lane; to Robles Way; to Glen Cove Parkway; to I-780 (approx. 0.7 miles total). This route is viable because:

1) the initial approximately 0.15-mile segment has no driveways and posted No Parking on the north side, so vehicles can enter the route with little traffic conflict.
2) mid-segments provide adequate width for two-way egress/ingress and fire apparatus.
3) Robles Way widens with a center turn lane approaching Glen Cove Parkway, allowing control of outbound flow, and temporary lane reallocation if needed.
4) movements are all right turns, which reduce crossing conflicts and avoid left-turn delays.

Alternate Evacuation Route

The alternate path (approximately 1.3 miles from the project entrance to the I-780 ramps) provides secondary egress/ingress if the primary route is compromised. It is less favorable due to additional turns across traffic and more residential side friction but remains a viable contingency.

As with any mass evacuation, some traffic congestion is inevitable during large evacuations and is anticipated and managed in planning. Police and fire typically conduct zone-based, phased evacuations, timing phases to the location and behavior of the threat. In rapidly evolving incidents, decisions are coordinated and executed under Unified Command (ICS) to align alerts, TCPs, and responder ingress. A significant event would also trigger mutual-aid through the County's EOC, bringing additional personnel to staff TCPs, conduct door-to-door notifications, and improve outbound flow.

6) Best Practices for Residents

Effective evacuations depend on residents who know their zone, understand how orders are issued, and are ready to act. CAS Safety proposes the developer, through the HOA, provide a Resident Orientation handout at move-in and refresh it annually. It should be concise (one page), all-hazards focused, and include:

- **Emergency contacts:** local police/fire, Alert Solano info line, property management/HOA.
- **Evacuation Zone:** VLJ-1236 reference and link/QR to Know Your Zone / Genasys Protect.

3558 ROUND BARN BLVD., SUITE 200
SANTA ROSA, CA 95401
(707) 806-7628

CLINT SHUBEL
CLINT@CASSAFETYCONSULTING.COM

ROB GIORDANO
ROB@CASSAFETYCONSULTING.COM

- **Alerts:** Alert Solano sign-up instructions and a brief WEA/IPAWS explainer (how wireless alerts appear and what "Warning" vs. "Order" means).
- **Routes:** Two outbound options to I-780 with a simple map (Route 1 as primary).
- **Redundant awareness:** Recommend a NOAA Weather Radio (tone-alert) and the Watch Duty app for situational awareness.
- **Preparedness resources:** Links to Ready.gov and CAL FIRE guidance (go-kit, defensible space, pets/meds checklist).
- **Early action guidance:** Encouraging early, voluntary departure if residents feel unsafe or need extra time (AFN[6], small children, pets).
- **Construction phase.** Provide the same orientation sheet to the General Contractor and require on-site subscription to Alert Solano. Keep public lanes open with 24/7 emergency access, and post a single emergency coordination POC at the job trailer.

7) Opinions & Conclusions

This is an operations-focused opinion based on public hazard mapping, site plans, personally driving primary and alternate routes, and law-enforcement/ICS experience. It does not quantify traffic capacity or evacuation clearance times. Any evacuation tactics during an evacuation, including TCP placement, lane use, ramp controls, etc. are incident-dependent and determined by responding agencies under Unified Command.

In this setting, the project does not present a substantial evacuation concern and is compatible for evacuation operations for the surrounding community, based on:

[6] In emergency planning, it refers to people who may need extra assistance to receive, understand, or act on warnings or to evacuate. This includes people with disabilities (mobility, sensory, cognitive), older adults, children, transportation-disadvantaged individuals, people who rely on electricity-dependent medical devices (oxygen, ventilators), those who are pregnant, and anyone with temporary injuries.

3558 ROUND BARN BLVD., SUITE 200
SANTA ROSA, CA 95401
(707) 806-7628

CLINT SHUBEL
CLINT@CASSAFETYCONSULTING.COM

ROB GIORDANO
ROB@CASSAFETYCONSULTING.COM

- **Low likelihood of mass evacuation from natural hazards.** The site is outside mapped WUI fire-hazard areas, outside the tsunami hazard area, there is no wildfire history, and this area is not subject to other natural events that commonly trigger mass evacuations (e.g., hurricanes, etc.).

- **Two viable evacuation routes (primary and alternate).** The project sits near the front of the neighborhood outflow with a short, direct connection, to I-780. The primary route has a very low traffic conflict (no driveways and posted No Parking on the first segment), adequate width for two-way egress/ingress and fire apparatus, and a widened approach to Glen Cove Pkwy that supports outbound traffic flow. The alternate route is less favorable but remains a viable contingency if the primary route is compromised.

- **Alert & Warning Systems are in place.** Public notification of a disaster is paramount in evacuations. Solano County is well equipped with systems such as Alert Solano (with WEA/IPAWS) which supports phased, geo-targeted alerts. The County coordinates notifications for the City of Vallejo. Law enforcement employs hi-lo sirens as an audible redundancy.

- **Pre-determined evacuation zones.** The County's Emergency Operations Plan (including Evacuation Annex procedures) provides an established framework for zone-based operations.

- **Vehicle demand is operationally manageable.** The corridor is well suited for TCPs and short-term staging to manage outbound flow while preserving responder ingress when conditions allow.

- **Proximity of public-safety resources.** Vallejo Fire Department Station 26 (1335 Fulton Avenue) and CHP local area office (1551 Benecia Road) are nearby for coordination and support.

- **Scaled project = lower operational demand.** The current 51-unit proposal is substantially reduced and operationally favorable from an evacuation-management standpoint.

- **Mutual-aid depth.** Significant incidents can draw county/state mutual aid (and CHP/Caltrans for I-780) to staff TCPs, staging, and perimeters independent of day-to-day staffing levels.

3558 ROUND BARN BLVD., SUITE 200
SANTA ROSA, CA 95401
(707) 806-7628

CLINT SHUBEL
CLINT@CASSAFETYCONSULTING.COM

ROB GIORDANO
ROB@CASSAFETYCONSULTING.COM

For the reasons above, and assuming resident preparedness and standard agency practice, it is our professional opinion that the project does not materially degrade evacuation operations and poses no substantial impediment to emergency egress/ingress.

If subsequent studies, approvals, or operational directives emerge, CAS Safety should be notified so we can review and supplement these findings as appropriate.

Attachments:

1) Example Resident Orientation handout
2) CAL-FIRE Historical Fire Map
3) Solano County Tsunami Hazard Areas
4) Local Responsibility Area Map as of February 24, 2025

3558 ROUND BARN BLVD., SUITE 200
SANTA ROSA, CA 95401
(707) 806-7628

CLINT SHUBEL
CLINT@CASSAFETYCONSULTING.COM

ROB GIORDANO
ROB@CASSAFETYCONSULTING.COM

Primary Evacuation Route:

From an operations viewpoint, the primary evacuation route runs from project entrance to Shady Lane; to Robles Way; to Glen Cove Parkway; to I-780 (approx. 0.7 miles total). This route is viable because:

1) the initial approximately 0.15-mile segment has no driveways and posted No Parking on the north side, so vehicles can enter the route with little traffic conflict.
2) mid-segments provide adequate width for two-way egress/ingress and fire apparatus.
3) Robles Way widens with a center turn lane approaching Glen Cove Parkway, allowing control of outbound flow, and temporary lane reallocation if needed.
4) movements are all right turns, which reduce crossing conflicts and avoid left-turn delays.

Alternate Evacuation Route

The alternate path (approximately 1.3 miles from the project entrance to the I-780 ramps) provides secondary egress/ingress if the primary route is compromised. It is less favorable due to additional turns across traffic and more residential side friction but remains a viable contingency.

As with any mass evacuation, some traffic congestion is inevitable during large evacuations and is anticipated and managed in planning. Police and fire typically conduct zone-based, phased evacuations, timing phases to the location and behavior of the threat. In rapidly evolving incidents, decisions are coordinated and executed under Unified Command (ICS) to align alerts, TCPs, and responder ingress. A significant event would also trigger mutual-aid through the County's EOC, bringing additional personnel to staff TCPs, conduct door-to-door notifications, and improve outbound flow.

6) Best Practices for Residents

Effective evacuations depend on residents who know their zone, understand how orders are issued, and are ready to act. CAS Safety proposes the developer, through the HOA, provide a Resident Orientation handout at move-in and refresh it annually. It should be concise (one page), all-hazards focused, and include:

- **Emergency contacts:** local police/fire, Alert Solano info line, property management/HOA.
- **Evacuation Zone:** VLJ-1236 reference and link/QR to Know Your Zone / Genasys Protect.

3558 ROUND BARN BLVD., SUITE 200
SANTA ROSA, CA 95401
(707) 806-7628

CLINT SHUBEL
CLINT@CASSAFETYCONSULTING.COM

ROB GIORDANO
ROB@CASSAFETYCONSULTING.COM

- **Alerts:** Alert Solano sign-up instructions and a brief WEA/IPAWS explainer (how wireless alerts appear and what "Warning" vs. "Order" means).
- **Routes:** Two outbound options to I-780 with a simple map (Route 1 as primary).
- **Redundant awareness:** Recommend a NOAA Weather Radio (tone-alert) and the Watch Duty app for situational awareness.
- **Preparedness resources:** Links to Ready.gov and CAL FIRE guidance (go-kit, defensible space, pets/meds checklist).
- **Early action guidance:** Encouraging early, voluntary departure if residents feel unsafe or need extra time (AFN[6], small children, pets).
- **Construction phase.** Provide the same orientation sheet to the General Contractor and require on-site subscription to Alert Solano. Keep public lanes open with 24/7 emergency access, and post a single emergency coordination POC at the job trailer.

7) Opinions & Conclusions

This is an operations-focused opinion based on public hazard mapping, site plans, personally driving primary and alternate routes, and law-enforcement/ICS experience. It does not quantify traffic capacity or evacuation clearance times. Any evacuation tactics during an evacuation, including TCP placement, lane use, ramp controls, etc. are incident-dependent and determined by responding agencies under Unified Command.

In this setting, the project does not present a substantial evacuation concern and is compatible for evacuation operations for the surrounding community, based on:

[6] In emergency planning, it refers to people who may need extra assistance to receive, understand, or act on warnings or to evacuate. This includes people with disabilities (mobility, sensory, cognitive), older adults, children, transportation-disadvantaged individuals, people who rely on electricity-dependent medical devices (oxygen, ventilators), those who are pregnant, and anyone with temporary injuries.

3558 ROUND BARN BLVD., SUITE 200
SANTA ROSA, CA 95401
(707) 806-7628

CLINT SHUBEL
CLINT@CASSAFETYCONSULTING.COM

ROB GIORDANO
ROB@CASSAFETYCONSULTING.COM

- **Low likelihood of mass evacuation from natural hazards.** The site is outside mapped WUI fire-hazard areas, outside the tsunami hazard area, there is no wildfire history, and this area is not subject to other natural events that commonly trigger mass evacuations (e.g., hurricanes, etc.)

- **Two viable evacuation routes (primary and alternate).** The project sits near the front of the neighborhood outflow with a short, direct connection, to I-780. The primary route has a very low traffic conflict (no driveways and posted No Parking on the first segment), adequate width for two-way egress/ingress and fire apparatus, and a widened approach to Glen Cove Pkwy that supports outbound traffic flow. The alternate route is less favorable but remains a viable contingency if the primary route is compromised.

- **Alert & Warning Systems are in place.** Public notification of a disaster is paramount in evacuations. Solano County is well equipped with systems such as Alert Solano (with WEA/IPAWS) which supports phased, geo-targeted alerts. The County coordinates notifications for the City of Vallejo. Law enforcement employs hi-lo sirens as an audible redundancy.

- **Pre-determined evacuation zones.** The County's Emergency Operations Plan (including Evacuation Annex procedures) provides an established framework for zone-based operations.

- **Vehicle demand is operationally manageable.** The corridor is well suited for TCPs and short-term staging to manage outbound flow while preserving responder ingress when conditions allow.

- **Proximity of public-safety resources.** Vallejo Fire Department Station 26 (1335 Fulton Avenue) and CHP local area office (1551 Benecia Road) are nearby for coordination and support.

- **Scaled project = lower operational demand.** The current 51-unit proposal is substantially reduced and operationally favorable from an evacuation-management standpoint.

- **Mutual-aid depth.** Significant incidents can draw county/state mutual aid (and CHP/Caltrans for I-780) to staff TCPs, staging, and perimeters independent of day-to-day staffing levels.

3558 ROUND BARN BLVD., SUITE 200
SANTA ROSA, CA 95401
(707) 806-7628

CLINT SHUBEL
CLINT@CASSAFETYCONSULTING.COM

ROB GIORDANO
ROB@CASSAFETYCONSULTING.COM

For the reasons above, and assuming resident preparedness and standard agency practice, it is our professional opinion that the project does not materially degrade evacuation operations and poses no substantial impediment to emergency egress/ingress.

If subsequent studies, approvals, or operational directives emerge, CAS Safety should be notified so we can review and supplement these findings as appropriate.

Attachments:

1) Example Resident Orientation handout
2) CAL-FIRE Historical Fire Map
3) Solano County Tsunami Hazard Areas
4) Local Responsibility Area Map as of February 24, 2025

Resident Evacuation Orientation - Vista Cove (Zone VLJ-1236)

Your Address: _____

1) Sign up for Alerts - do these now: (Scan QR code with smartphone camera or use the links below.)

- **Enroll in Alert Solano** (county/Vallejo notifications). Keep your phone and address current. https://www.solanocounty.gov/government/office-emergency-services/alert-solano

- **Know your zone.** You are in Evacuation Zone VLJ-1236. Check live status on Genasys Protect / Know Your Zone before and during incidents. https://www.solanocounty.gov/government/office-emergency-services/prepare-emergency/evacuation-zones

2) Know your evacuation routes: (Maps Attached)

- **Primary (Route 1):** Exit → Shady Lane → Right on Robles Way → Right on Glen Cove Pkwy → I-780.
- **Alternate (Route 2):** Optional route if necessary: Exit → Left on Wildflower Avenue → Skilltree Lane → Left on Bluebell Place → Right on Redbud Lane → Left on Robles Drive → Right on Fairhaven Way → Left on Honeydew Drive → Right on Wellfleet Drive → Right on Glen Cove Pkwy → I-780.

3) Understand what to do:

- **Follow the alert message:** ***Warning*** = prepare to leave and ***Order*** = leave now.
- **Go early** if you need extra time (kids, pets, medical, etc.).
- **Travel light:** people, pets, meds, documents. Don't stop near intersections or block driveways.
- **Expect traffic:** obey officers and signage. Don't block lanes.

4) Be ready:

- Keep one vehicle fueled/charged during fire weather.
- Maintain a "go bag" (include pet supplies and copies of key documents).
- Keep the open-space edge lean/green; secure outdoor combustibles on red-flag days.
- **Redundant awareness:** install the Watch Duty app on smartphone and consider a NOAA Weather Radio for tone alerts and instructions if cell service is degraded.

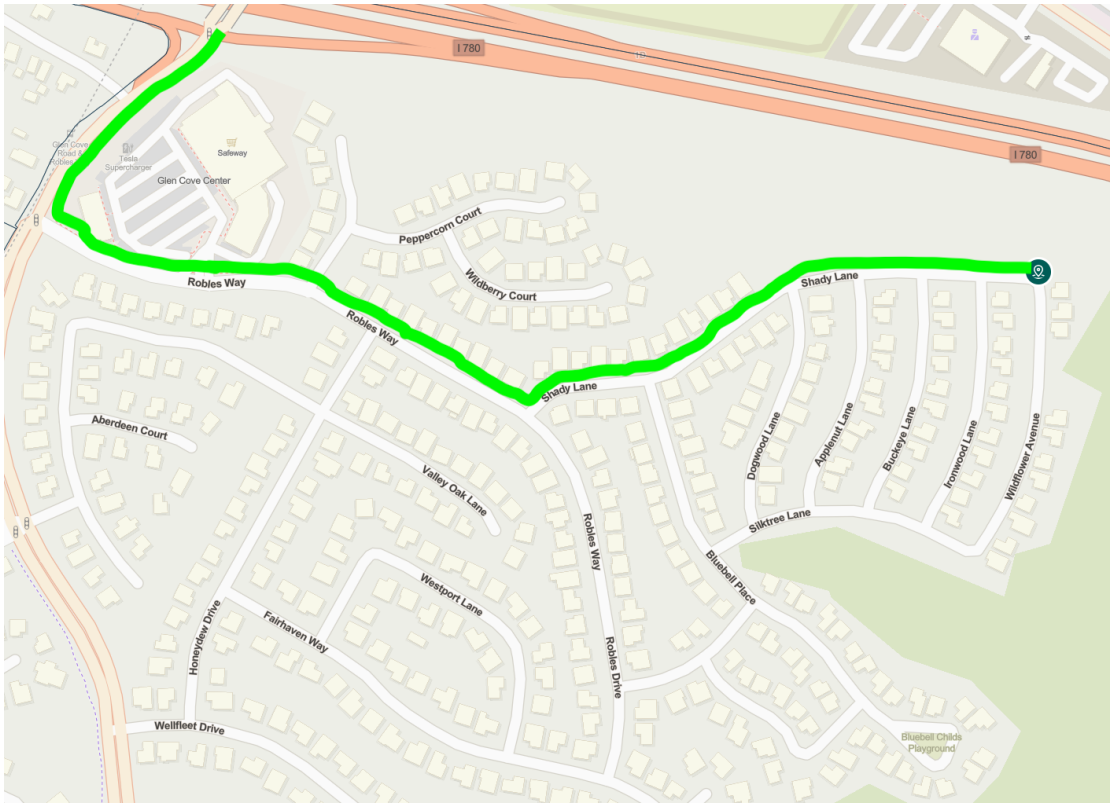
5) Special Notes/Resources:

- **Hi-Lo siren** = evacuation notification. Look for zone messages and officer direction.
- **Check on your neighbors:** People might need help evacuating (elderly, medical etc.) or are not aware of alerts.
- **Vallejo Emergency Services (Police/Fire):** www.Vallejo.gov
- **www.Ready.gov:** Make a plan! Go the website for more information.

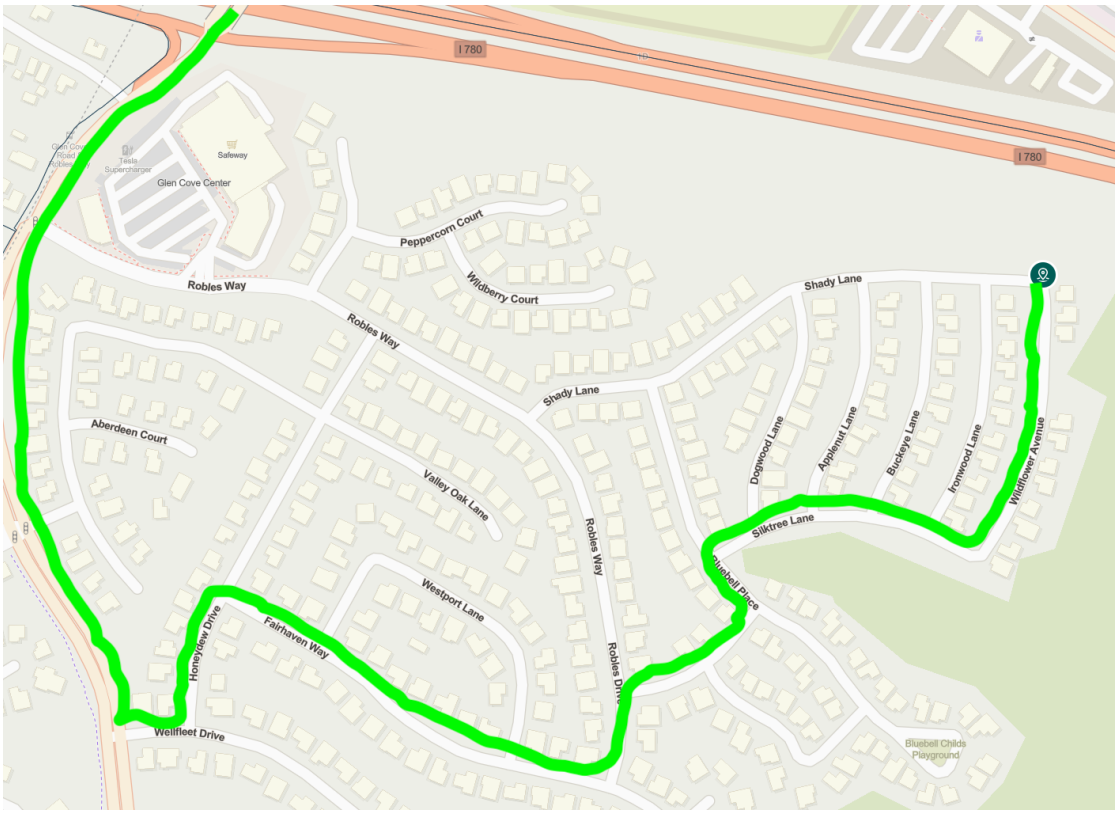
This handout is informational and does not replace official instructions. Always follow directives from police, fire, and Solano County OES.

Evacuation Routes

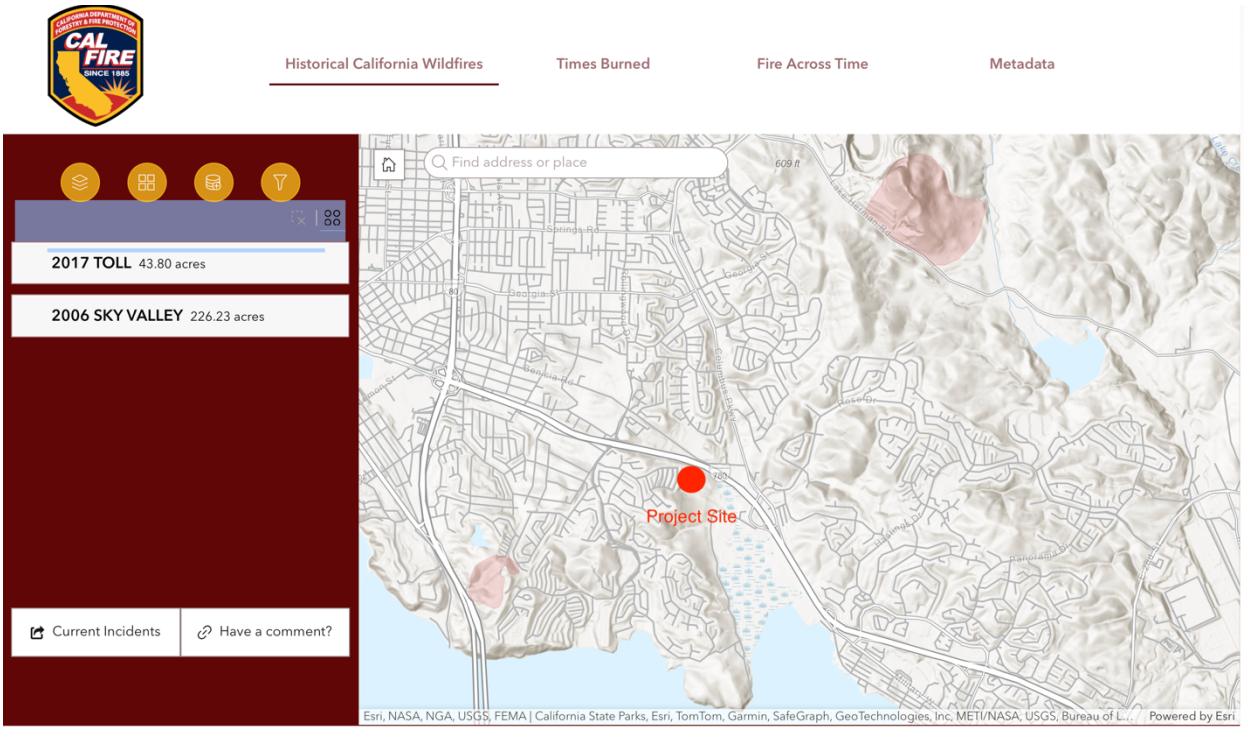
Primary Route 1:



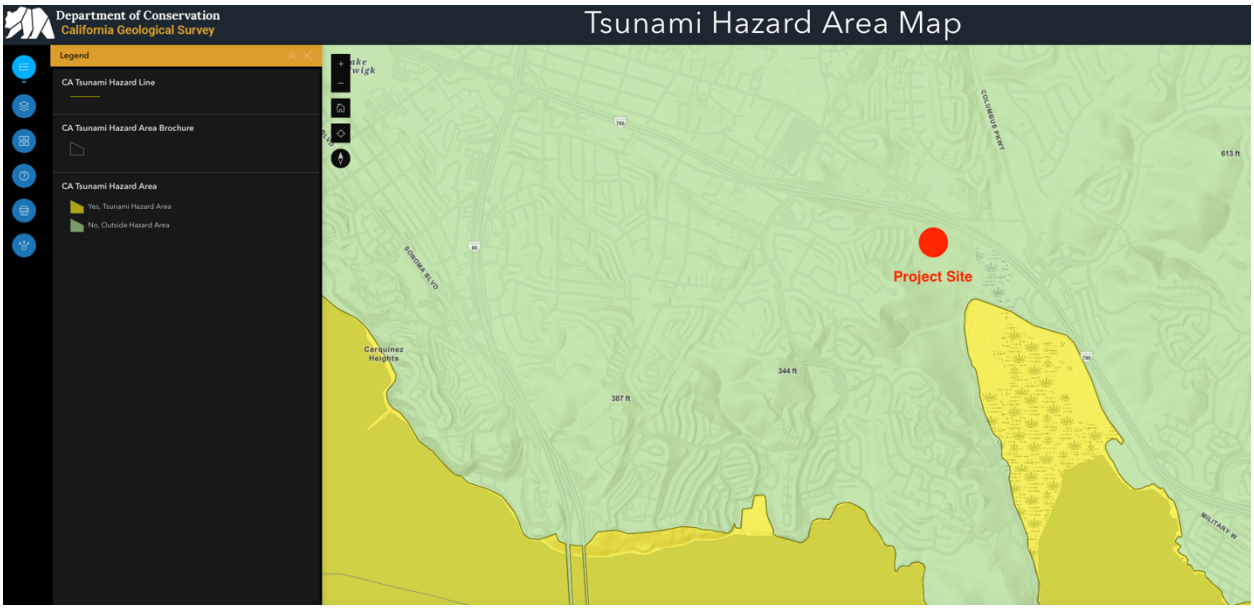
Alternate Route 2:



Attachment #2



Attachment #3

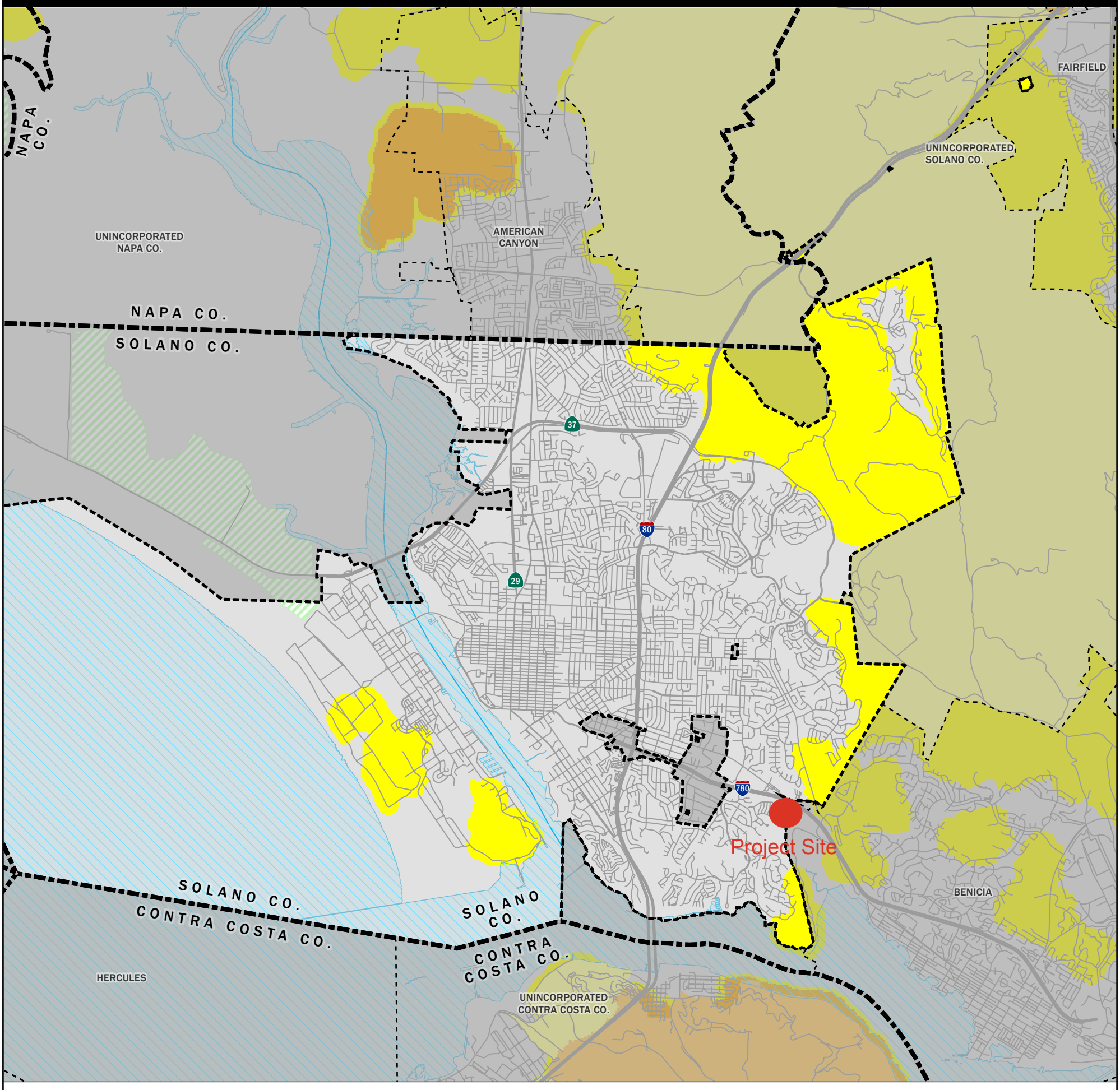


CITY OF VALLEJO – SOLANO COUNTY

Local Responsibility Area Fire Hazard Severity Zones

As Identified by the State Fire Marshal

February 24, 2025



Fire Hazard Severity Zones (FHSZ) in Local Responsibility Area (LRA), as Identified by the State Fire Marshal

High Moderate

Fire Hazard Severity Zones in State Responsibility Area (SRA), Effective April 1, 2024

High Moderate

Mi 0 0.5 1 1.5 2 2.5 3 3.5

Km 0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5 5.5

Projection: NAD 83 California Teale Albers
Scale: 1:74,000 at 11" x 17"

Incorporated City Waterbody

Unzoned LRA Federal Responsibility Area (FRA)

Government Code section 51178 requires the State Fire Marshal to identify areas in the state as moderate, high, and very high fire hazard severity zones based on consistent statewide criteria and based on the severity of fire hazard that is expected to prevail in those areas. Moderate, high, and very high fire hazard severity zones shall be based on fuel loading, slope, fire weather, and other relevant factors including areas where winds have been identified by the Office of the State Fire Marshal as a major cause of wildfire spread.

The State of California and the Department of Forestry and Fire Protection make no representations or warranties regarding the accuracy of data or maps. Neither the State nor the Department shall be liable under any circumstances for any direct, special, incidental, or consequential damages with respect to any claim by any user or third party on account of, or arising from, the use of data or maps.

Gavin Newsom, Governor, State of California

Wade Crowfoot, Secretary for Natural Resources, CA Natural Resources Agency

Joe Tyler, Director/Fire Chief, CA Department of Forestry and Fire Protection

Daniel Berlant, State Fire Marshal, CA Department of Forestry and Fire Protection

Data Sources:

CAL FIRE Fire Hazard Severity Zones (FHSZSRA23_3, FHSZLRA_25_1)

CAL FIRE State Responsibility Areas (SRA25_1)

City and County boundaries as of 10/22/24 (CA Board of Equalization)

VALLEJO PROPERTIES - GLEN COVE
VALLEJO, CALIFORNIA

PHASE I ENVIRONMENTAL SITE ASSESSMENT

SUBMITTED TO
Mr. Adam Smith
Sancerra
2618 San Miguel Drive, Suite 1223
Newport Beach, CA 92660

PREPARED BY
ENGEO Incorporated

April 26, 2022

PROJECT NO.
20164.000.001

Copyright © 2022 by ENGEO Incorporated. This document may not be reproduced in whole or in part by any means whatsoever, nor may it be quoted or excerpted without the express written consent of ENGEO Incorporated.

ENGEO
Expect Excellence

Project No.
20164.000.001

April 26, 2022

Mr. Adam Smith
Sancerra
2618 San Miguel Drive, Suite 1223
Newport Beach, CA 92660

Subject: Vallejo Properties - Glen Cove
Wildflower Avenue
Vallejo, California

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Dear Mr. Smith:

ENGEO is pleased to present our phase I environmental site assessment of the subject property (Property), located in Vallejo, California. The attached report includes a description of the site assessment activities, along with ENGEO's findings, opinions, and conclusions regarding the Property.

ENGEO has the specific qualifications based on education, training, and experience to assess the nature, history, and setting of the Property, and has developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312 and the American Society for Testing and Materials (ASTM) Practice E1527-13. We declare that, to the best of our professional knowledge and belief, the responsible charge for this study meets the definition of Environmental Professional as defined in Section 312.10 of 40 CFR Part 312 and ASTM E1527-13.

We are pleased to be of service to you on this project. If you have any questions concerning the contents of our report, please contact us.

Sincerely,

ENGEO Incorporated

Jenna Keith, EIT

Jeffrey A. Adams, PhD, PE

jk/jaa/dt

TABLE OF CONTENTS

LETTER OF TRANSMITTAL

EXECUTIVE SUMMARY 1

1.0 INTRODUCTION 2

1.1 PURPOSE OF PHASE I ENVIRONMENTAL SITE ASSESSMENT 2
1.2 DETAILED SCOPE OF SERVICES 2
1.3 SITE LOCATION AND DESCRIPTION 2
1.4 CURRENT USE OF PROPERTY AND ADJOINING PROPERTIES 2
1.5 SITE AND VICINITY CHARACTERISTICS 2

2.0 RECORDS REVIEW 3

2.1 PROPERTY RECORDS 3
2.1.1 Title Report/Ownership 3
2.2 HISTORICAL RECORD SOURCES 4
2.2.1 Historical Topographic Maps/Aerial Photographs/Sanborn Maps 4
2.2.2 City Directory 4
2.3 ENVIRONMENTAL RECORD SOURCES 4
2.3.1 Environmental Records 5
2.3.1.1 Subject Property 5
2.3.1.2 Other Properties 5
2.4 REGULATORY AGENCY FILES AND RECORDS 6
2.5 INDOOR AIR QUALITY 7

3.0 SITE RECONNAISSANCE 7

3.1 METHODOLOGY 7
3.2 EXTERIOR OBSERVATIONS 7
3.3 ASBESTOS, LEAD, AND PCB-CONTAINING MATERIALS 8

4.0 INTERVIEWS 8

5.0 FINDINGS AND CONCLUSIONS 9

6.0 LIMITATIONS 9

6.1 SIGNIFICANT ASSUMPTIONS OR DEVIATIONS FROM ASTM STANDARD PRACTICE 9
6.2 OPINIONS AND DATA GAPS 10
6.3 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT 10
6.4 SPECIAL TERMS AND CONDITIONS 11

SELECTED REFERENCES

FIGURES

APPENDIX A – Environmental Data Resources, Inc., Radius Map Report

APPENDIX B – First American Title Company, Preliminary Title Report

APPENDIX C – Environmental Data Resources, Inc., Historical Topographic Map Report

APPENDIX D – Environmental Data Resources, Inc., Aerial Photo Decade Package

TABLE OF CONTENTS (Continued)

APPENDIX E – Environmental Data Resources, Inc., Sanborn Map Report

APPENDIX F – Environmental Data Resources, Inc., City Directory

APPENDIX G – Environmental Site Assessment Questionnaire

APPENDIX H – Qualifications of Environmental Professional

EXECUTIVE SUMMARY

ENGEO conducted a phase I environmental site assessment for the property located at Wildflower Avenue in Vallejo, California (Property). The Property is approximately 29 acres in area and is identified by Assessor's Parcel Numbers (APNs) 0079-171-170, 0079-120-100, and a portion of 0079-220-070.

The Property is presently vegetated open space. Review of historical records indicates that the Property has remained undeveloped land since at least 1937 (the first year of aerial photographic coverage). The eastern portion of the Property was historically used for dry farming (hay cultivation).

This assessment included a review of local, state, tribal, and federal environmental record sources, standard historical sources, aerial photographs, fire insurance maps, and physical setting sources. A reconnaissance of the Property was completed to review site use and current conditions to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials and to conduct written/oral interviews with persons knowledgeable about current and past site use.

The site reconnaissance and records review did not find documentation or physical evidence of soil or groundwater impairments associated with the use or past use of the Property. A review of regulatory databases maintained by county, state, tribal, and federal agencies found no documentation of hazardous materials violations or discharge on the Property and did not identify contaminated facilities within the appropriate American Society for Testing and Materials (ASTM) search distances that would reasonably be expected to impact the Property.

Based on the findings of this assessment, no Recognized Environmental Conditions (RECs), no historical RECs, and no controlled RECs were identified for the Property.

ENGEO has performed a phase I environmental site assessment in general conformance with the scope and limitations of ASTM E1527-13 and the standards and practices of the All Appropriate Inquiry – Final Rule (40 Code of Federal Regulations Part 312).

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC. The following data gaps were identified during this assessment.

- We did not receive a response to our file review request from Solano County Environmental Health prior to the publication of this report.

- We did not receive a completed Key Site Manager-based environmental questionnaire prior to the publication of this report.

These data gaps do not affect the conclusions as to the presence or lack of presence of RECs at the Property.

This assessment has revealed no evidence of RECs in connection with the Property, and the property is suitable for residential development. ENGEO recommends no further environmental studies at this time.

1.0 INTRODUCTION

1.1 PURPOSE OF PHASE I ENVIRONMENTAL SITE ASSESSMENT

This assessment was performed at the request of Sancerra for the purpose of environmental due diligence during property acquisition. The objective of this phase I environmental site assessment is to identify Recognized Environmental Conditions (RECs) associated with the Property. As defined in the ASTM Standard Practice E1527-13, an REC is "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

1.2 DETAILED SCOPE OF SERVICES

The scope of services performed included the following.

- A review of publicly available and practicably reviewable standard local, state, tribal, and federal environmental record sources.
- A review of publicly available and practicably reviewable standard historical sources, aerial photographs, fire insurance maps and physical setting sources.
- A reconnaissance of the Property to review site use and current conditions. The reconnaissance was conducted to check for the storage, use, production or disposal of hazardous or potentially hazardous materials.
- Interviews with owners/occupants and public sector officials.
- Preparation of this report with our findings, opinions, and conclusions.

1.3 SITE LOCATION AND DESCRIPTION

The Property is located at Wildflower Avenue in Vallejo, California (Figures 1 and 2). The approximately 29-acre Property is identified as APNs 0079-171-170, 0079-120-100, and a portion of 0079-220-070 (Figure 3) and is currently vacant, vegetated open space.

1.4 CURRENT USE OF PROPERTY AND ADJOINING PROPERTIES

The Property is vacant, but the vegetation has been plowed to create several dirt paths through the Property. The Property is bordered by the Benicia State Recreation Area to the east, Interstate 780 to the north, and the Glen Cove neighborhood homes to the west and south.

1.5 SITE AND VICINITY CHARACTERISTICS

The Property consists of a northern and southern hill separated by a creek, which both slope downhill toward the east. According to published topographic maps, the elevation of the northern area of the Property ranges from approximately 160 feet above mean sea level (msl) in the west to 100 feet in the east. The elevation of the southern area ranges from approximately 290 feet in the west to approximately 90 feet above msl to the east. Review of the Geologic Map and Map Database of Northeastern San Francisco Bay Region, California – Most of Solano County and

Parts of Napa, Main, Contra Costa, San Joaquin, Sacramento, Yolo, and Sonoma Counties (Graymer et al., 2002) found that the Property is underlain by the Great Valley Complex, consisting of sandstone and shale from the Late Cretaceous period.

Geocheck – Physical Setting Source Summary of the Environmental Data Resources, Inc. (EDR) report (Appendix A) indicated no Federal United States Geological Survey (USGS) and three State wells are located approximately ½ mile west-northwest of the Property. No groundwater level measurements are reported for these wells. We also reviewed the Department of Water Resources On-line Water Data Library for depth to water in the vicinity of the Property. However, the website did not identify any wells within 1 mile of the Property.

We reviewed EnviroStor, a website maintained by the State of California Department of Toxic Substances Control (DTSC), and GeoTracker, a website maintained by the State of California Water Resources Control Board, for nearby facilities with records that include depth-to-groundwater measurements. The following information was obtained regarding local groundwater conditions. The case closure summary report for the Big 4 Rents facility, located approximately 750 feet east-northeast of the Property, indicates that groundwater may be found at a depth of 15 to 25 feet below the ground surface (bgs) with a flow direction toward the southwest, toward the marshland in Benicia State Recreation Area. Based on the local topographic gradient, we expect an easterly groundwater flow direction at the Property, similarly directed toward the marshland.

The site-specific depth to groundwater and direction of groundwater flow was not determined as part of this assessment. Fluctuations in groundwater levels may occur seasonally and over a period of years due to variations in precipitation, temperature, irrigation, and other factors.

We reviewed the Department of Conservation, Geologic Energy Management (CalGEM), formerly the Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR), website and map database to determine if any historic oil and/or gas wells were located within the Property. No wells were mapped within 1 mile of the Property.

2.0 RECORDS REVIEW

2.1 PROPERTY RECORDS

2.1.1 Title Report/Ownership

The Title Report lists recorded land title detail, ownership fees, leases, land contracts, easements, liens, deficiencies, and other encumbrances attached to or recorded against a subject property. Laws and regulations pertaining to land trusts vary from state to state and the detail of information presented in a Title Report can vary greatly by jurisdiction. As a result, ENGEO utilizes a Title Report, when provided to us, as a supplement to other historical record sources.

A Preliminary Title Report for the Property, prepared by First American Title Company and dated February 4, 2022, was provided for our review. The Property title is vested in The Timothy F. Wei Trust; The Terrence F. Wei Trust; The Tammy F. Dong Trust; The Tina T. Dong Trust; The Litton L. Chen Trust; The Tiffany L. Chen Trust; The Thomas L. Chen Trust; The Tyler C. Chuang Trust; and The Troy Chuang Trust. No references to environmental liens, deed restrictions, or other potential environmental issues were noted. This report is included in Appendix B.

2.2 HISTORICAL RECORD SOURCES

The purpose of the historical record review is to develop a history of the previous uses or occupancies of the Property and surrounding area in order to identify those uses or occupancies that are likely to have led to RECs on the Property.

2.2.1 Historical Topographic Maps/Aerial Photographs/Sanborn Maps

Historical USGS topographic maps and aerial photographs were reviewed to determine if discernible changes pertaining to the Property had been recorded. EDR provided the following maps and photographs, presented in Appendices C and D. No Sanborn Fire Insurance Maps were identified for the Property; a copy of the Sanborn Map search report is presented in Appendix E.

TABLE 2.2.1-1: Historical Review Summary

HISTORIC MAP/PHOTOGRAPH	YEARS
Topographic Maps	1896, 1898, 1901, 1902, 1940, 1942, 1947, 1950, 1952, 1959, 1968, 1973, 1980, 2012, 2015, 2018
Aerial Photographs	1937, 1939, 1947, 1952, 1958, 1968, 1974, 1982, 1987, 1993, 2006, 2009, 2012, 2016
Sanborn Maps	N/A

In the 1896 topographic map, the Property is vacant, undeveloped land. Benicia Road is depicted north of the Property. Southampton Bay and Glen Cove are depicted south of the Property, and marshes and a creek extending into Southampton Bay are depicted just east of the Property. In the 1937 and 1939 aerial photographs, the southeastern portion of the Property appears to be used for dry farming (hay cultivation). In the 1940 topographic map, two creeks are depicted traveling eastward through the center of the Property. By 1950, only one creek was depicted. Between 1959 and 1968, the alignment of Benicia Road was adjusted and Interstate 680 (now Interstate 780) was constructed just north of the Property. The adjacent Glen Cove neighborhood development was constructed between about 1974 and 1993. No significant changes have appeared at the Property throughout its history.

2.2.2 City Directory

City Directories, published since the 18th century for major towns and cities, list the name of the resident or business associated with each address. A city directory search conducted by EDR is located in Appendix F. The Property is unlisted. Nearby listings show a variety of residential homes and commercial businesses along Benicia Road. No listings were identified which could be expected to pose an environmental concern to the Property.

2.3 ENVIRONMENTAL RECORD SOURCES

EDR performed a search of federal, tribal, state, and local databases regarding the Property and nearby properties. Details regarding the databases searched by EDR are provided in Appendix A. A list of the facilities documented by EDR within the approximate minimum search distance of the Property is provided below.

2.3.1 Environmental Records

2.3.1.1 Subject Property

The Property is not listed on Environmental Record source databases.

2.3.1.2 Other Properties

The following databases include facilities listed within the appropriate ASTM search distances of the Property on Environmental Records sources.

TABLE 2.3.1.2-1: Environmental Database Listings for Nearby Properties

FACILITY	STREET	DATABASES
Shady Lane Sanitary Pump Station	198 Wildflower Ave	CERS, CERS HAZ WASTE
California Highway Patrol #301 Golden Gate Division	1551 Benicia Road	CERS, CERS HAZ WASTE, CERS TANKS, RCRA NONGEN / NLR, UST
Ecolab, Inc.	1500 Benicia Road	RCRA NONGEN / NLR
St. Patrick St. Vincent High School	1500 Benicia Road	RCRA NOGEN / NLR
Big 4 Rents, Inc.	1600 Benicia Road	CA FID UST, CERS, CORTESE, ECHO, FINDS, HAZNET, HIST CORTESE, HIST UST, HWTS, LUST, RCRA-SQG, SWEEPS UST
Crusader Fence Company, Inc.	1600 Benicia Road	CERS, CERS HAZ WASTE, HWTS, RCRA NONGEN / NLR, UST
Siri Construction Company	1855 Benicia Road	HIST UST, UST
Greenmont Sanitary Pump Station	230 Greenmont Drive	CERS, CERS HAZ WASTE
St. Vincent's Cemetery/ All Souls Cemetery	550 Glen Cove Road	CERS, CIWQS, CORTESE, HIST CORTESE, LUST, NPDES, UST
Rollingwood Middle School	Rollingwood Drive/ Benicia Road	ENVIROSTOR, SCH
Shadow Ridge	Glen Cove Road	CERS, ENVIROSTOR, HIST CAL-SITES, RESPONSE
Southampton/Company/Blake Court	Rose Drive/Blake Court	ENVIROSTOR, HIST CAL-SITES, RESPONSE
Weber Property	1100 Block of Warren Avenue	CERS, ENVIROSTOR, RESPONSE

Shady Lane Sanitary Pump Station – 198 Wildflower Avenue

The Shady Lane Pump Station is located at the corner of Shady Lane and Wildflower Avenue, next to the northwestern area of the Property. The station is operated by Vallejo Sanitation & Flood Control District and overseen by Solano County Environmental Health, and stores chemicals. This station is not expected to pose an environmental concern to the Property.

California Highway Patrol Golden Gate Division – 1551 Benicia Road

California Highway Patrol Golden Gate Division, located approximately 200 feet north of the Property, is listed in the CERS, CERS HAZ WASTE, CERS TANKS, RCRA NONGEN / NLR, and UST databases. The facility has received numerous violations from Solano County Environmental

Health pertaining to hazardous waste storage and UST operation. However, these violations are not indicative of large-scale releases of hazardous chemicals to the environment.

Big 4 Rents, Inc./ Crusader Fence Company, Inc. – 1600 Benicia Road

Big 4 Rents is listed in the CA FID UST, CERS, CORTESE, ECHO, FINDS, HAZNET, HIST CORTESE, HIST UST, HWTS, LUST, RCRA-SQG, and SWEEPS UST databases. This facility is listed as a closed cleanup case under GeoTracker case listing T0609500271, as of November 1995. According to the case closure summary, a 4,000-gallon gasoline UST, 2,000-gallon diesel UST, and 1,000-gallon diesel UST were removed from the site in May 1995 following spills. Reportedly, 468 cubic yards of impacted soil were removed and off-hauled for landfill disposal, and groundwater was not impacted. Residual concentrations of total petroleum hydrocarbons in soil ranged from non-detect to 1 part per million (ppm). Benzene, toluene, ethylbenzene, and xylenes (BTEX) concentrations in soil were non-detect. Crusader Fence Company is the current, or more recent, tenant at this property. This facility has received several administrative violations pertaining to hazardous materials storage. Based on this information, this facility is not expected to pose an environmental concern to the Property.

Based on the distances to the identified database sites, regional topographic gradient, and the EDR findings, it is unlikely that the above-stated database sites pose an environmental risk to the Property.

One property, Benicia State Recreation Area, was listed on the “Orphan Summary” list. This site is listed in the SWF/LF database. This listing does not represent a concern to the Property.

2.4 REGULATORY AGENCY FILES AND RECORDS

The following agencies were contacted pertaining to possible past development and/or activity at the Property.

TABLE 2.4-1: Regulatory Agency Records

NAME OF AGENCY	RECORDS REVIEWED
City of Vallejo Fire Department	We contacted the City of Vallejo Fire Department regarding hazardous materials and underground storage tanks. The City does not maintain these records.
City of Vallejo Building Department	We requested historical building permit records from the City of Vallejo Building Department. We did not receive a response to our request by the time of publication of this report.
Solano County Department of Environmental Health	We contacted Solano County Environmental Health regarding hazardous materials and underground storage tanks. We did not receive a response to our file review request by the time of publication of this report.
Solano County Assessor’s Office	We reviewed online parcel maps provided by Solano County Assessor’s Office. The parcel boundaries in the EDR radius map report are consistent with those provided by Solano County Assessor’s office.
California State Water Resources Control Board	We reviewed GeoTracker, the website maintained by the California State Water Resources Control Board, for records pertaining to the Property. The Property is not listed on GeoTracker.

NAME OF AGENCY	RECORDS REVIEWED
Department of Toxic Substances Control	We reviewed EnviroStor, the website maintained by the California Department of Toxic Substances Control, for records pertaining to the Property. The Property is not listed on EnviroStor.

2.5 INDOOR AIR QUALITY

An evaluation of indoor air quality, mold, or radon was not included as part of the contracted scope of services. The California Department of Public Health has conducted studies of radon risks throughout the state, sorted by zip code. Results of the studies indicate that 13 tests were conducted within the Property zip code, with two tests exceeding the current EPA action level of 4 picocuries per liter (pCi/L)[1].

In accordance with ASTM E2600-15 (Tier 1) (*Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*); there is one potential petroleum hydrocarbon source for vapor intrusion within 1/10 mile of the Property (California Highway Patrol Golden Gate Division) and no volatile organic compound (VOCs) sources within 1/3 mile of the Property. As discussed, the California Highway Patrol facility is not expected to pose a concern to the Property.

3.0 SITE RECONNAISSANCE

3.1 METHODOLOGY

ENGEO conducted a reconnaissance of the Property on April 13, 2022. The reconnaissance was performed by Jenna Keith, a Staff Engineer of ENGEO. The Property was viewed for hazardous materials storage, superficial staining or discoloration, debris, stressed vegetation, or other conditions that may be indicative of potential sources of soil or groundwater contamination. The Property was also checked for evidence of fill/ventilation pipes, ground subsidence, or other evidence of existing or preexisting underground storage tanks. Photographs taken during the site reconnaissance are presented in Figure 4.

The Property is vacant, vegetated land. Several unpaved paths have been constructed through the natural vegetation in the northern portion of the Property. The southern/southwestern portion of the Property was inaccessible due to natural marshy areas and barbed wire fencing.

3.2 EXTERIOR OBSERVATIONS

The following table summarizes our observations during the reconnaissance.

TABLE 3.2-1: Exterior Site Observations

FEATURE TYPE	OBSERVATIONS
Structures	No structures were observed during the site reconnaissance.

[1] California Department of Public Health – Radon Program– (https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/EMB/Radon/Radon%20Test%20Results.pdf).

FEATURE TYPE	OBSERVATIONS
Hazardous Substances and Petroleum Products in Connection with Identified Uses	No hazardous substances or petroleum products were observed within the Property during the site reconnaissance.
Storage Tanks (underground and above-ground)	No above-ground storage tanks or evidence of existing underground storage tanks was observed during the site reconnaissance.
Odors	No odors indicative of hazardous materials or petroleum material impacts were noted at the time of the reconnaissance.
Pools of Potentially Hazardous Liquid	No pools of potentially hazardous liquid were observed within the Property at the time of our reconnaissance.
Drums	No drums were observed on the Property at the time of the reconnaissance.
Polychlorinated Biphenyls (PCBs) Containing Equipment	No potential PCB-containing equipment, including transformers, were observed within the Property during our site reconnaissance.
Hazardous Substances and Petroleum Product Containers	No hazardous substance or petroleum product containers were observed on the Property at the time of our reconnaissance.
Pits, Ponds, and Lagoons	No pits, ponds, or lagoons were observed within the Property at the time of our reconnaissance. There are several natural marshy areas which collect water from concrete drainage channels.
Stained Soil/Pavement	No stained soil or pavement was observed within the Property at the time of our reconnaissance.
Stressed Vegetation	No signs of stressed vegetation were observed on the Property at the time of our reconnaissance.
Solid Waste/Debris	No disposal of solid waste was observed at the Property.
Stockpiles/Fill Material	No stockpiles or fill material was observed on the Property during the reconnaissance.
Wastewater	No wastewater conveyance systems were observed at the Property during the reconnaissance. The Shady Lane Pump Station is located at the corner of Shady Lane and Wildflower Avenue, next to the northwestern area of the Property. The station is operated by Vallejo Sanitation & Flood Control District and overseen by Solano County Environmental Health.
Wells	No wells were found within the Property during our site reconnaissance.
Septic Systems	No septic systems were found within the Property during our site reconnaissance.

3.3 ASBESTOS, LEAD, AND PCB-CONTAINING MATERIALS

An asbestos, lead, and PCB-containing building material survey was not conducted as part of this assessment. No structures are currently located on the Property.

4.0 INTERVIEWS

Mr. Adam Smith completed a Client-based environmental site questionnaire pertaining to applicable environmental information regarding the Property. In the questionnaire, Mr. Smith noted that the Property is unimproved, undeveloped land, and did not identify potentially environmentally related issues with the Property. A summary is provided below.

Mr. Smith is unaware of commonly known, reasonably ascertainable, or specialized knowledge indicative of releases or threatened releases that is material to the potential presence of RECs. Mr. Smith has indicated that the purchase price of the Property is reflective of fair market value of the Property. The questionnaire is presented in its entirety in Appendix G.

We did not receive a completed Key Site Manager-based environmental questionnaire prior to the publication of this report.

5.0 FINDINGS AND CONCLUSIONS

This assessment included a review of local, state, tribal, and federal environmental record sources, standard historical sources, aerial photographs, fire insurance maps and physical setting sources. A reconnaissance of the Property was completed to review site use and current conditions to check for the storage, use, production, or disposal of hazardous or potentially hazardous materials and to conduct written/oral interviews with persons knowledgeable about current and past site use.

The site reconnaissance and records review did not find documentation or physical evidence of soil or groundwater impairments associated with the use or past use of the Property. A review of regulatory databases maintained by county, state, tribal, and federal agencies found no documentation of hazardous materials violations or discharge on the Property and did not identify contaminated facilities within the appropriate American Society for Testing and Materials (ASTM) search distances that would reasonably be expected to impact the Property.

Based on the findings of this assessment, no RECs, no historical RECs, and no controlled RECs were identified for the Property.

ENGEO has performed a phase I environmental site assessment in general conformance with the scope and limitations of ASTM E1527-13 and the standards and practices of the All Appropriate Inquiry – Final Rule (40 Code of Federal Regulations Part 312).

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC.

This assessment has revealed no evidence of RECs in connection with the Property, and the Property is suitable for residential development. ENGEO recommends no further environmental studies at this time.

6.0 LIMITATIONS

6.1 SIGNIFICANT ASSUMPTIONS OR DEVIATIONS FROM ASTM STANDARD PRACTICE

There were no significant assumptions or deviations from the ASTM Standard Practice during preparation of this report.

6.2 OPINIONS AND DATA GAPS

It is our opinion that the findings of this study are based on a sufficient level of information obtained during our contracted scope of services to render a conclusion as to whether additional appropriate investigation is required to identify the presence or likely presence of a REC. The following data gaps were identified during this assessment.

- We did not receive a response to our file review request from Solano County Environmental Health or the City of Vallejo Building Department prior to the publication of this report.

- We did not receive a completed Key Site Manager-based environmental questionnaire prior to the publication of this report.

These data gaps do not affect the conclusions as to the presence or lack of presence of RECs at the Property.

6.3 LIMITATIONS AND EXCEPTIONS OF ASSESSMENT

The professional staff at ENGEO strives to perform its services in a proper and professional manner with reasonable care and competence but is not infallible. The recommendations and conclusions presented in this report were based on the findings of our study, which were developed solely from the contracted services. The findings of the report are based in part on contracted database research, out-of-house reports, and personal communications. The opinions formed by ENGEO are based on the assumed accuracy of the relied upon data in conjunction with our relevant professional experience related to such data interpretation. ENGEO assumes no liability for the validity of the materials relied upon in the preparation of this report.

This document must not be subject to unauthorized reuse; that is, reuse without written authorization of ENGEO. Such authorization is essential because it requires ENGEO to evaluate the document's applicability given new circumstances, not the least of which is passage of time. The findings from a phase I environmental site assessment are valid for one year after completion of the report. Updates of portions of the assessment may be necessary after a period of 180 days after completion.

This phase I environmental site assessment is not intended to represent a complete soil, soil gas, or groundwater characterization, nor define the depth or extent of soil, soil gas, or groundwater contamination. It is intended to provide an evaluation of potential environmental concerns associated with the use of the Property. A more extensive assessment that would include a subsurface exploration with laboratory testing of soil, soil gas, and groundwater samples could provide more definitive information concerning site-specific conditions. If additional assessment activities are considered for the Property and if other entities are retained to provide such services, ENGEO cannot be held responsible for any and all claims arising from or resulting from the performance of such services by other persons or entities. ENGEO can also not be held responsible from any and all claims arising or resulting from clarifications, adjustments, modifications, discrepancies or other changes necessary to reflect changed field or other conditions.

6.4 SPECIAL TERMS AND CONDITIONS

ENGEO has prepared this report for the exclusive use of our client, Sancerra. It is recognized and agreed that ENGEO has assumed responsibility only for undertaking the study for the Client. The responsibility for disclosures or reports to a third party and for remedial or mitigative action shall be solely that of the Client.

Laboratory testing of soil, soil gas, or groundwater samples was not within the scope of the contracted services. The assessment did not include an asbestos survey, an evaluation of lead-based paint, an inspection of light ballasts for polychlorinated biphenyls (PCBs), or a mold survey. A radon evaluation was not performed.

This report is based upon field and other conditions discovered at the time of preparation of ENGEO's assessment. Visual observations referenced in this report are intended only to represent conditions at the time of the reconnaissance. ENGEO would not be aware of site contamination, such as dumping and/or accidental spillage, that occurred subsequent to the reconnaissance conducted by ENGEO personnel.

SELECTED REFERENCES

California Department of Water Resources (http://www.water.ca.gov/waterdatalibrary/)

California Department of Public Health – Radon Program–
(https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/EMB/Radon/Radon%20Test%20Results.pdf).

California Geologic Energy Management Division (CalGEM)
(https://www.conservation.ca.gov/calgem)

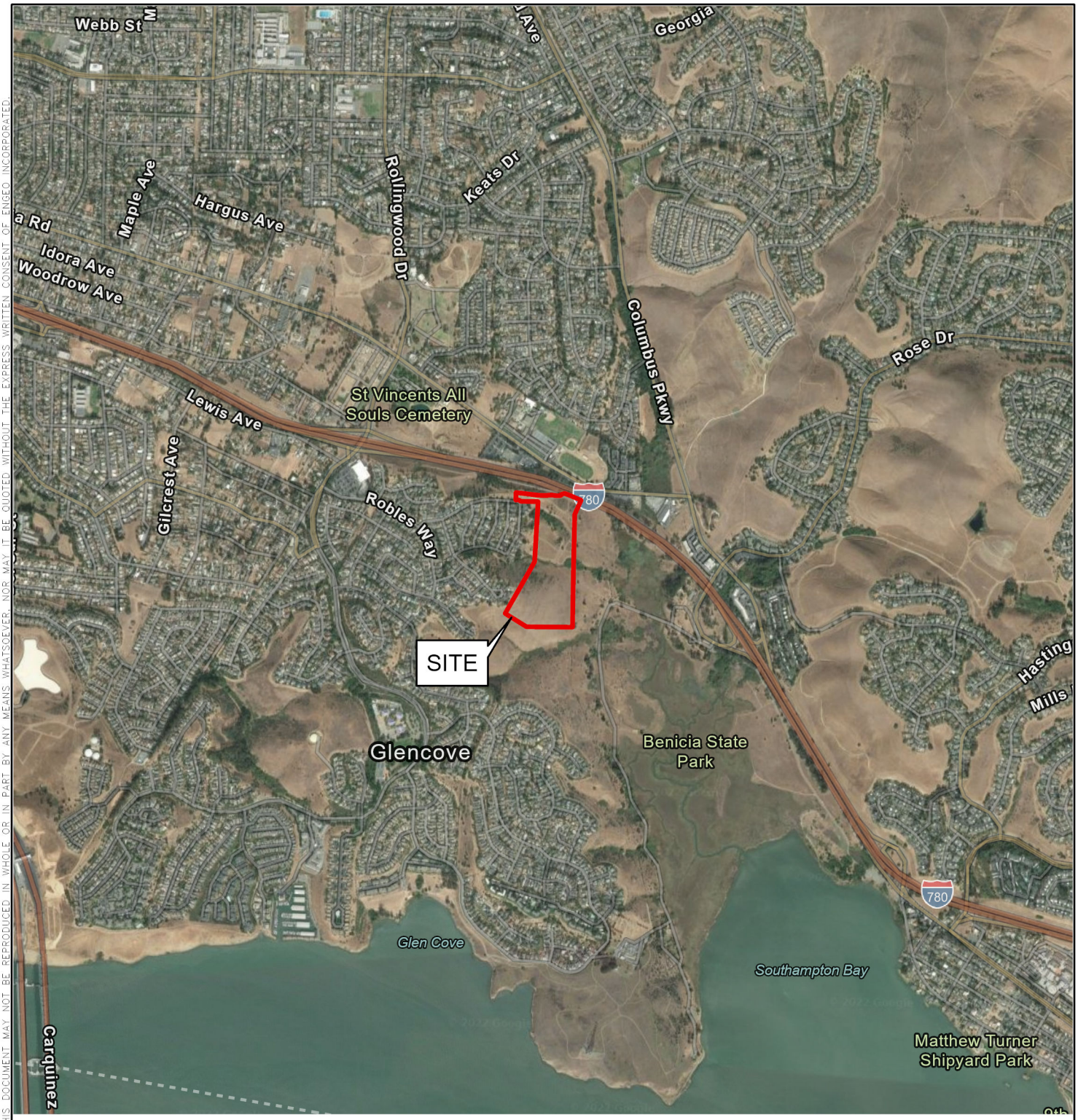
CalGEM Well Finder
(https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.94276/37.12009/6)

Google Maps (http://maps.google.com)

Graymer, R.W., Jones, D.L., and Brabb, E.E., Geologic map and map database of northeastern San Francisco Bay region, California; Most of Solano County and parts of Napa, Marin, Contra Costa, San Joaquin, Sacramento, Yolo, and Sonoma Counties. 2002.

FIGURES

FIGURE 1: Vicinity Map
FIGURE 2: Site Plan
FIGURE 3: Assessor's Parcel Map
FIGURE 4: Site Photographs



N

0 1,000 2,000

FEET

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 10/12/2020

COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

ENGEO Expect Excellence

VICINITY MAP

VALLEJO PROPERTIES - GLEN COVE

VALLEJO, CALIFORNIA

PROJECT NO. :	20164.000.001
SCALE:	AS SHOWN
DRAWN BY: NLK	CHECKED BY: JAA

FIGURE NO. 1

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20164\20164000001\20164-ESA.APRX
LAYOUT: VICINITY USER: NLAMOTTEKERR

ORIGINAL FIGURE PRINTED IN COLOR

N

0 200 400

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

PROJECT SITE

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 10/12/2020

COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

ENGEO Expect Excellence

SITE PLAN

VALLEJO PROPERTIES - GLEN COVE

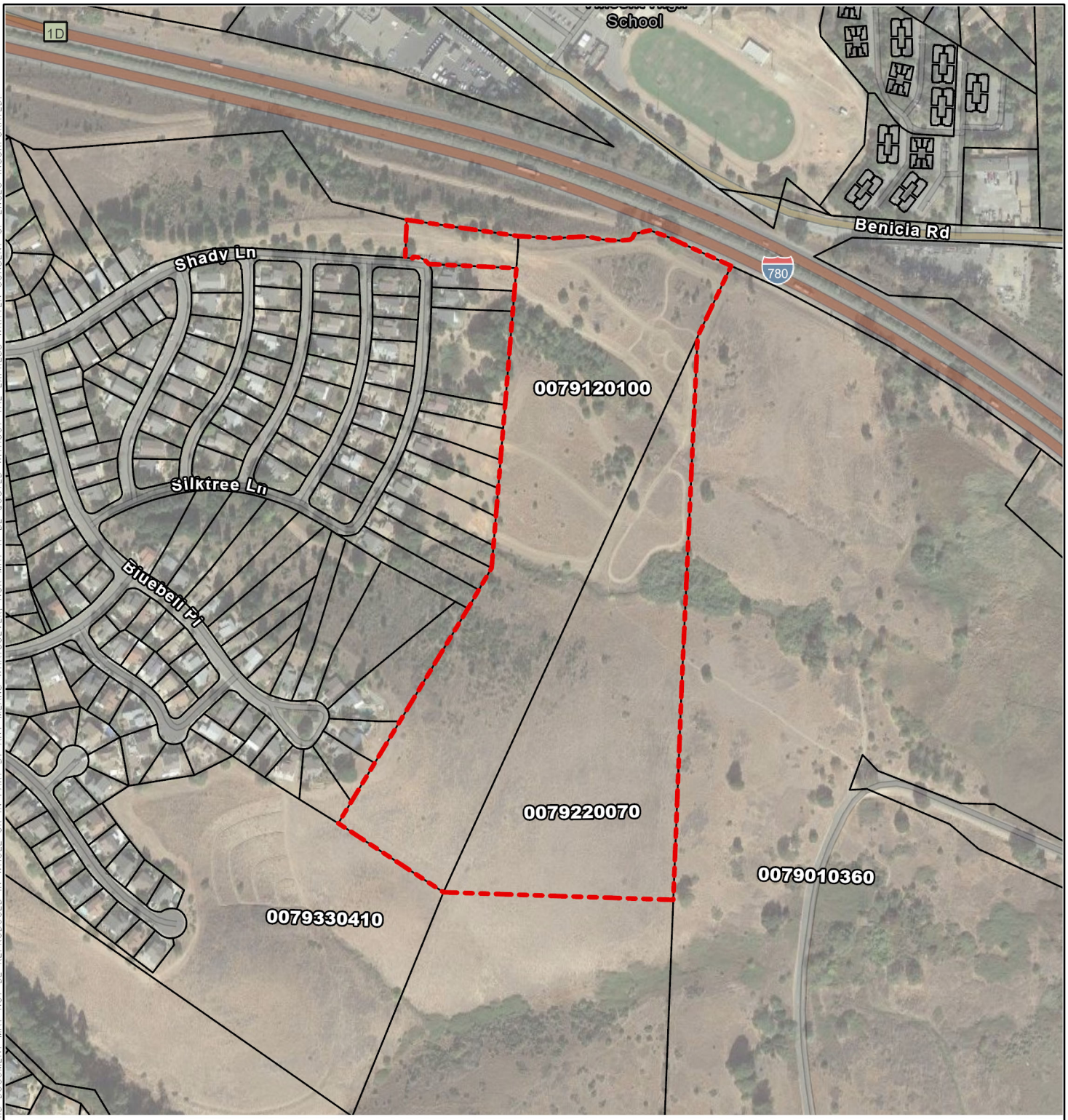
VALLEJO, CALIFORNIA

PROJECT NO. :	20164.000.001
SCALE:	AS SHOWN
DRAWN BY: NLK	CHECKED BY: JAA

FIGURE NO. 2

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20164\20164000001\20164-ESA.APRX
LAYOUT: SITE PLAN USER: NLAMOTTEKERR

ORIGINAL FIGURE PRINTED IN COLOR



N

0 200 400

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

PROJECT SITE

PARCEL BOUNDARY

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 10/12/2020

ENGEO Expect Excellence

ASSESSOR'S PARCEL MAP

VALLEJO PROPERTIES - GLEN COVE

VALLEJO, CALIFORNIA

PROJECT NO. :	20164.000.001
SCALE:	AS SHOWN
DRAWN BY: NLK	CHECKED BY: JAA

FIGURE NO. 3

COPYRIGHT © 2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

PATH: G:\DRAFTING\PROJECTS_20000 TO 21999\20164\20164000001\20164-ESA.APRX
LAYOUT: SITE PLAN USER: NLAMOTTEKERR

ORIGINAL FIGURE PRINTED IN COLOR

VIEW OF NEARBY HILLS FROM SITE FACING EAST

VIEW OF SITE FACING SOUTH TOWARD SAN FRANCISCO BAY

VIEW OF PLANNED OPEN SPACE AREA IN SOUTHERN PORTION OF SITE

HILLSIDE IN WESTERN PART OF SITE, FACING SOUTHWEST

PLOWED DIRT ROAD LEADING TO BACKYARDS OF HOUSES ON WILDFLOWER AVENUE

PLANNED OPEN SPACE PORTION OF SITE FACING WEST; INACCESSIBLE DUE TO MARSHY AREA

COPYRIGHT @2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

ENGEO
Expect Excellence

SITE PHOTOGRAPHS
VALLEJO PROPERTIES - GLEN COVE
VALLEJO, CALIFORNIA

PROJECT NUMBER:	**20164.000.001**		FIGURE NO. 4A
SCALE:	**NO SCALE**		
DRAWN BY: **NLK**		CHECKED BY: **JAA**	

ORIGINAL FIGURE PRINTED IN COLOR

CONCRETE DRAINAGE CANALS THAT CHANNEL WATER TOWARD MARSHY AREA

VIEW OF SITE FACING SOUTH

VIEW OF SITE FACING NORTHEAST; A MARSHY VEGETATED AREA SEPARATES TWO HILLS

NORTHWESTERN CORRIDOR OF SITE

WASTEWATER MAINTENANCE AREA NEAR ENTRANCE TO SITE AT WILDFLOWER AVENUE AND SHADY LANE

COPYRIGHT @2022 BY ENGEO INCORPORATED. THIS DOCUMENT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER, NOR MAY IT BE QUOTED WITHOUT THE EXPRESS WRITTEN CONSENT OF ENGEO INCORPORATED.

ENGEO Expect Excellence

SITE PHOTOGRAPHS

VALLEJO PROPERTIES - GLEN COVE

VALLEJO, CALIFORNIA

PROJECT NUMBER: **20164.000.001**		FIGURE NO. 4B
SCALE: **NO SCALE**		
DRAWN BY: **NLK**	CHECKED BY: **JAA**	

ORIGINAL FIGURE PRINTED IN COLOR

APPENDIX A

ENVIRONMENTAL DATA RESOURCES, INC.

Radius Map Report

Vallejo Properties - Glen Cove
Not Reported
Vallejo, CA 94591

Inquiry Number: 06938050.2r
April 13, 2022

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM-LBC-TPS

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	9
Orphan Summary	90
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-10
Physical Setting Source Map Findings	A-12
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2020 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E1527-21), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

NOT REPORTED
VALLEJO, CA 94591

COORDINATES

Latitude (North):	38.0815680 - 38ˆ 4' 53.64''
Longitude (West):	122.2010370 - 122ˆ 12' 3.73''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	570071.4
UTM Y (Meters):	4214960.5
Elevation:	117 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	12008089 BENICIA, CA
Version Date:	2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140608
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
NOT REPORTED
VALLEJO, CA 94591

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
1	SHADY LANE SANITARY	198 WILDFLOWER AVE	CERS HAZ WASTE, CERS	Higher	30, 0.006, NNW
A2	CALIFORNIA HIGHWAY P	1551 BENICIA RD	RCRA NonGen / NLR	Lower	175, 0.033, NE
A3	CALIFORNIA HIGHWAY P	1551 BENICIA RD	UST	Lower	175, 0.033, NE
A4	CA HIGHWAY PATROL GO	1551 BENICIA ROAD	UST	Lower	175, 0.033, NE
A5	CALIF. DEPT. OF HIGH	1551 BENICIA RD	UST	Lower	175, 0.033, NE
A6	CA HIGHWAY PATROL GO	1551 BENICIA ROAD	CERS HAZ WASTE, CERS TANKS, CERS	Lower	175, 0.033, NE
B7	ECOLAB INC.	1500 BENICIA ROAD	RCRA NonGen / NLR	Lower	367, 0.070, North
B8	ST PATRICK ST VINCEN	1500 BENICIA RD	RCRA NonGen / NLR	Lower	367, 0.070, North
C9	BIG 4 RENTS INC	1600 BENICIA	LUST, HIST UST, HIST CORTESE, CERS	Lower	756, 0.143, NE
C10	CRUSADER FENCE CO IN	1600 BENICIA RD	RCRA NonGen / NLR	Lower	756, 0.143, NE
C11	BIG 4 RENTS, INC.	1600 BENICIA RD	SWEEPS UST, HIST UST, CA FID UST	Lower	756, 0.143, NE
C12	CRUSADER FENCE CO. I	1600 BENICIA RD	UST	Lower	756, 0.143, NE
C13	CRUSADER FENCE CO IN	1600 BENICIA RD	CERS HAZ WASTE, CERS, HWTS	Lower	756, 0.143, NE
C14	BIG 4 RENTS INC	1600 BENICIA RD	LUST, Cortese	Lower	756, 0.143, NE
C15	BIG 4 RENTS VALLEJO	1600 BENICIA RD	RCRA-SQG, FINDS, ECHO, HAZNET, HWTS	Lower	756, 0.143, NE
C16	SIRI CONSTRUCTION CO	1855 BENICIA ROAD	HIST UST	Lower	992, 0.188, ENE
17	SIRI CONSTRUCTION	1855 BENICIA RD	UST	Lower	1233, 0.234, ENE
18	GREENMONT SANITARY P	230 GREENMONT DR	CERS HAZ WASTE, CERS	Lower	1268, 0.240, NNE
D19	ST VINCENT'S CEMETER	550 GLEN COVE RD	LUST, UST	Higher	2405, 0.455, NW
D20	ALL SOULS CEMETERY	550 GLEN COVE RD	LUST, Cortese, HIST CORTESE, NPDES, CIWQS, CERS	Higher	2405, 0.455, NW
21	ROLLINGWOOD MIDDLE S	ROLLINGWOOD DRIVE/BE	ENVIROSTOR, SCH	Higher	2539, 0.481, NW
22	SHADOW RIDGE	GLEN COVE ROAD	RESPONSE, ENVIROSTOR, HIST Cal-Sites, CERS	Higher	2937, 0.556, West
23	SOUTHAMPTON/COMPANY/	ROSE DRIVE/BLAKE COU	RESPONSE, ENVIROSTOR, HIST Cal-Sites	Higher	4194, 0.794, ENE
24	WEBER PROPERTY	1100 BLOCK OF WARREN	RESPONSE, ENVIROSTOR, CERS	Higher	4267, 0.808, WNW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL ---------- National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS ---------- Corrective Action Report

Lists of Federal RCRA TSD facilities

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Lists of Federal RCRA generators

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-VSQG ---------- RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List

US INST CONTROLS Institutional Controls Sites List

Federal ERNS list

ERNS Emergency Response Notification System

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF Solid Waste Information System

Lists of state and tribal leaking storage tanks

INDIAN LUST Leaking Underground Storage Tanks on Indian Land
CPS-SLIC Statewide SLIC Cases

Lists of state and tribal registered storage tanks

FEMA UST Underground Storage Tank Listing
AST Aboveground Petroleum Storage Tank Facilities
INDIAN UST Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

INDIAN VCP Voluntary Cleanup Priority Listing
VCP Voluntary Cleanup Program Properties

Lists of state and tribal brownfield sites

BROWNFIELDS Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT Waste Management Unit Database
SWRCY Recycler Database
HAULERS Registered Waste Tire Haulers Listing
INDIAN ODI Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 Torres Martinez Reservation Illegal Dump Site Locations
ODI Open Dump Inventory
IHS OPEN DUMPS Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL Delisted National Clandestine Laboratory Register
SCH School Property Evaluation Program
CDL Clandestine Drug Labs
Toxic Pits Toxic Pits Cleanup Act Sites
US CDL National Clandestine Laboratory Register
AQUEOUS FOAM Former Fire Training Facility Assessments Listing

PFAS ---- PFAS Contamination Site Location Listing

Local Land Records

LIENS ---- Environmental Liens Listing
LIENS 2 ---- CERCLA Lien Information
DEED ---- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---- Hazardous Materials Information Reporting System
CHMIRS ---- California Hazardous Material Incident Report System
LDS ---- Land Disposal Sites Listing
MCS ---- Military Cleanup Sites Listing
SPILLS 90 ---- SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ---- Formerly Used Defense Sites
DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
ROD ---- Records Of Decision
RMP ---- Risk Management Plans
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data
CONSENT ---- Superfund (CERCLA) Consent Decrees
INDIAN RESERV ---- Indian Reservations
FUSRAP ---- Formerly Utilized Sites Remedial Action Program
UMTRA ---- Uranium Mill Tailings Sites
LEAD SMELTERS ---- Lead Smelter Sites
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem
US MINES ---- Mines Master Index File
ABANDONED MINES ---- Abandoned Mines
FINDS ---- Facility Index System/Facility Registry System
DOCKET HWC ---- Hazardous Waste Compliance Docket Listing
UXO ---- Unexploded Ordnance Sites
ECHO ---- Enforcement & Compliance History Information
FUELS PROGRAM ---- EPA Fuels Program Registered Listing

CA BOND EXP. PLAN - Bond Expenditure Plan
CUPA Listings - CUPA Resources List
DRYCLEANERS - Cleaner Facilities
EMI - Emissions Inventory Data
ENF - Enforcement Action Listing
Financial Assurance - Financial Assurance Information Listing
HAZNET - Facility and Manifest Data
ICE - ICE
HWP - EnviroStor Permitted Facilities Listing
HWT - Registered Hazardous Waste Transporter Database
MINES - Mines Site Location Listing
MWMP - Medical Waste Management Program Listing
NPDES - NPDES Permits Listing
PEST LIC - Pesticide Regulation Licenses Listing
PROC - Certified Processors Database
Notify 65 - Proposition 65 Records
UIC - UIC Listing
UIC GEO - UIC GEO (GEOTRACKER)
WASTEWATER PITS - Oil Wastewater Pits Listing
WDS - Waste Discharge System
WIP - Well Investigation Program Case List
MILITARY PRIV SITES - MILITARY PRIV SITES (GEOTRACKER)
PROJECT - PROJECT (GEOTRACKER)
WDR - Waste Discharge Requirements Listing
CIWQS - California Integrated Water Quality System
CERS - CERS
NON-CASE INFO - NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS - OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS - PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT - SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ - Well Stimulation Project (GEOTRACKER)
HWTS - Hazardous Waste Tracking System
MINES MRDS - Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP - EDR Proprietary Manufactured Gas Plants
EDR Hist Auto - EDR Exclusive Historical Auto Stations
EDR Hist Cleaner - EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF - Recovered Government Archive Solid Waste Facilities List
RGA LUST - Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal RCRA generators

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 02/28/2022 has revealed that there is 1 RCRA-SQG site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS VALLEJO	***1600 BENICIA RD***	***NE 1/8 - 1/4 (0.143 mi.)***	***C15***	***47***
EPA ID:: CAD983647595				

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

A review of the RESPONSE list, as provided by EDR, has revealed that there are 3 RESPONSE sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHADOW RIDGE	***GLEN COVE ROAD***	***W 1/2 - 1 (0.556 mi.)***	***22***	***66***
Database: RESPONSE, Date of Government Version: 10/25/2021 Facility Id: 48990005 Status: Certified				
SOUTHAMPTON/COMPANY/	***ROSE DRIVE/BLAKE COU***	***ENE 1/2 - 1 (0.794 mi.)***	***23***	***70***
Database: RESPONSE, Date of Government Version: 10/25/2021 Facility Id: 48490011 AWP Facility Id: 48490011 Status: Certified				
WEBER PROPERTY	***1100 BLOCK OF WARREN***	***WNW 1/2 - 1 (0.808 mi.)***	***24***	***86***
Database: RESPONSE, Date of Government Version: 10/25/2021 Facility Id: 48880001 Status: Certified				

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/25/2021 has revealed that there are 4 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ROLLINGWOOD MIDDLE S	***ROLLINGWOOD DRIVE/BE***	***NW 1/4 - 1/2 (0.481 mi.)***	***21***	***63***
Facility Id: 48780001				
Status: Inactive - Withdrawn				
SHADOW RIDGE	***GLEN COVE ROAD***	***W 1/2 - 1 (0.556 mi.)***	***22***	***66***
Facility Id: 48990005				
Status: Certified				
SOUTHAMPTON/COMPANY/	***ROSE DRIVE/BLAKE COU***	***ENE 1/2 - 1 (0.794 mi.)***	***23***	***70***
Facility Id: 48490011				
Status: Certified				
WEBER PROPERTY	***1100 BLOCK OF WARREN***	***WNW 1/2 - 1 (0.808 mi.)***	***24***	***86***
Facility Id: 48880001				
Status: Certified				

Lists of state and tribal leaking storage tanks

LUST: Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the LUST list, as provided by EDR, has revealed that there are 4 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ST VINCENT'S CEMETER	***550 GLEN COVE RD***	***NW 1/4 - 1/2 (0.455 mi.)***	***D19***	***57***
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019				
Facility Id: 10840				
Facility Status: I				
ALL SOULS CEMETERY	***550 GLEN COVE RD***	***NW 1/4 - 1/2 (0.455 mi.)***	***D20***	***58***
Database: LUST REG 2, Date of Government Version: 09/30/2004				
Database: LUST, Date of Government Version: 12/06/2021				
Facility Id: 48-0255				
Facility Status: Case Closed				
Global Id: T0609500235				

Status: Completed - Case Closed
date9: 8/10/1994

Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS INC	***1600 BENICIA***	***NE 1/8 - 1/4 (0.143 mi.)***	***C9***	***33***
Database: SOLANO CO. LUST, Date of Government Version: 06/04/2019 Database: LUST, Date of Government Version: 12/06/2021 Facility Id: 10176 Global Id: T0609500271 Status: Completed - Case Closed Facility Status: I				
BIG 4 RENTS INC	***1600 BENICIA RD***	***NE 1/8 - 1/4 (0.143 mi.)***	***C14***	***46***
Database: LUST REG 2, Date of Government Version: 09/30/2004 Facility Id: 48-0295 Facility Status: Case Closed date9: 11/7/1995				

Lists of state and tribal registered storage tanks

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the State Water Resources Control Board's Hazardous Substance Storage Container Database.

A review of the UST list, as provided by EDR, has revealed that there are 5 UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CALIFORNIA HIGHWAY P	1551 BENICIA RD	NE 0 - 1/8 (0.033 mi.)	A3	13
Database: SOLANO CO. UST, Date of Government Version: 09/15/2021 Facility Status: A Facility Id: 10815				
CA HIGHWAY PATROL GO	1551 BENICIA ROAD	NE 0 - 1/8 (0.033 mi.)	A4	14
Database: UST, Date of Government Version: 12/06/2021 Facility Id: 48-000-010815				
CALIF. DEPT. OF HIGH	1551 BENICIA RD	NE 0 - 1/8 (0.033 mi.)	A5	14
Database: UST, Date of Government Version: 12/06/2021 Facility Id: 10815				
CRUSADER FENCE CO. I	1600 BENICIA RD	NE 1/8 - 1/4 (0.143 mi.)	C12	40
Database: SOLANO CO. UST, Date of Government Version: 09/15/2021 Facility Status: I Facility Id: 10176				
SIRI CONSTRUCTION	1855 BENICIA RD	ENE 1/8 - 1/4 (0.234 mi.)	17	55
Database: SOLANO CO. UST, Date of Government Version: 09/15/2021 Facility Status: I Facility Id: 80057				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

HIST Cal-Sites: Formerly known as ASPIS, this database contains both known and potential hazardous substance sites. The source is the California Department of Toxic Substance Control. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

A review of the HIST Cal-Sites list, as provided by EDR, and dated 08/08/2005 has revealed that there are 2 HIST Cal-Sites sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHADOW RIDGE	*GLEN COVE ROAD*	*W 1/2 - 1 (0.556 mi.)*	*22*	*66*
SOUTHAMPTON/COMPANY/	*ROSE DRIVE/BLAKE COU*	*ENE 1/2 - 1 (0.794 mi.)*	*23*	*70*

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 01/18/2022 has revealed that there are 4 CERS HAZ WASTE sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHADY LANE SANITARY	*198 WILDFLOWER AVE*	*NNW 0 - 1/8 (0.006 mi.)*	*1*	*9*

Lower Elevation	Address	Direction / Distance	Map ID	Page
CA HIGHWAY PATROL GO	*1551 BENICIA ROAD*	*NE 0 - 1/8 (0.033 mi.)*	*A6*	*15*
CRUSADER FENCE CO IN	*1600 BENICIA RD*	*NE 1/8 - 1/4 (0.143 mi.)*	*C13*	*41*
GREENMONT SANITARY P	*230 GREENMONT DR*	*NNE 1/8 - 1/4 (0.240 mi.)*	*18*	*55*

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS, INC.	*1600 BENICIA RD*	*NE 1/8 - 1/4 (0.143 mi.)*	*C11*	*38*
Status: A				
Tank Status: A				
Comp Number: 18312				

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 3 HIST UST sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS INC	***1600 BENICIA***	***NE 1/8 - 1/4 (0.143 mi.)***	***C9***	***33***
Facility Id: 00000018312				
BIG 4 RENTS, INC.	***1600 BENICIA RD***	***NE 1/8 - 1/4 (0.143 mi.)***	***C11***	***38***
SIRI CONSTRUCTION CO	1855 BENICIA ROAD	ENE 1/8 - 1/4 (0.188 mi.)	C16	54
Facility Id: 00000010581				

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS, INC.	***1600 BENICIA RD***	***NE 1/8 - 1/4 (0.143 mi.)***	***C11***	***38***
Facility Id: 48001263				
Status: A				

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 01/18/2022 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CA HIGHWAY PATROL GO	***1551 BENICIA ROAD***	***NE 0 - 1/8 (0.033 mi.)***	***A6***	***15***

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 02/28/2022 has revealed that there are 4 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
CALIFORNIA HIGHWAY P	1551 BENICIA RD	NE 0 - 1/8 (0.033 mi.)	A2	11
EPA ID:: CAL000046134				
ECOLAB INC.	1500 BENICIA ROAD	N 0 - 1/8 (0.070 mi.)	B7	28
ST PATRICK ST VINCEN	1500 BENICIA RD	N 0 - 1/8 (0.070 mi.)	B8	31

EPA ID:: CAC003023091

CRUSADER FENCE CO IN EPA ID:: CAL000409506	1600 BENICIA RD	NE 1/8 - 1/4 (0.143 mi.)	C10	36

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 12/16/2021 has revealed that there are 2 Cortese sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALL SOULS CEMETERY	***550 GLEN COVE RD***	***NW 1/4 - 1/2 (0.455 mi.)***	***D20***	***58***
Cleanup Status: COMPLETED - CASE CLOSED				

Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS INC	***1600 BENICIA RD***	***NE 1/8 - 1/4 (0.143 mi.)***	***C14***	***46***
Cleanup Status: COMPLETED - CASE CLOSED				

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 2 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ALL SOULS CEMETERY	***550 GLEN COVE RD***	***NW 1/4 - 1/2 (0.455 mi.)***	***D20***	***58***
Reg Id: 48-0255				

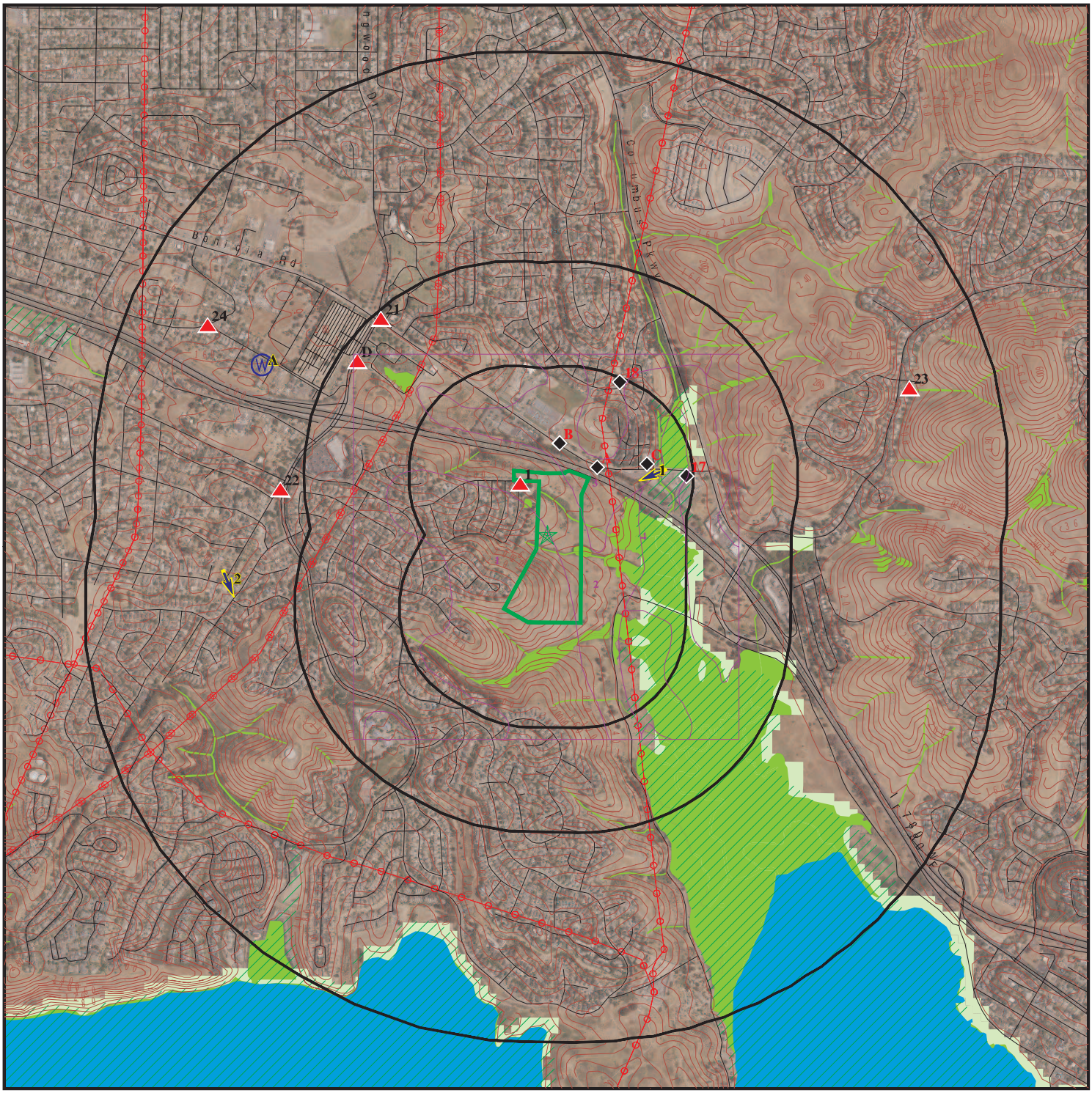
Lower Elevation	Address	Direction / Distance	Map ID	Page
BIG 4 RENTS INC	***1600 BENICIA***	***NE 1/8 - 1/4 (0.143 mi.)***	***C9***	***33***
Reg Id: 48-0295				

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 1 records.

Site Name	Database(s)
BENICIA STATE REC AREA/SOUTH HAMPT	SWF/LF

OVERVIEW MAP - 06938050.2R



0 1/4 1/2 1 Miles

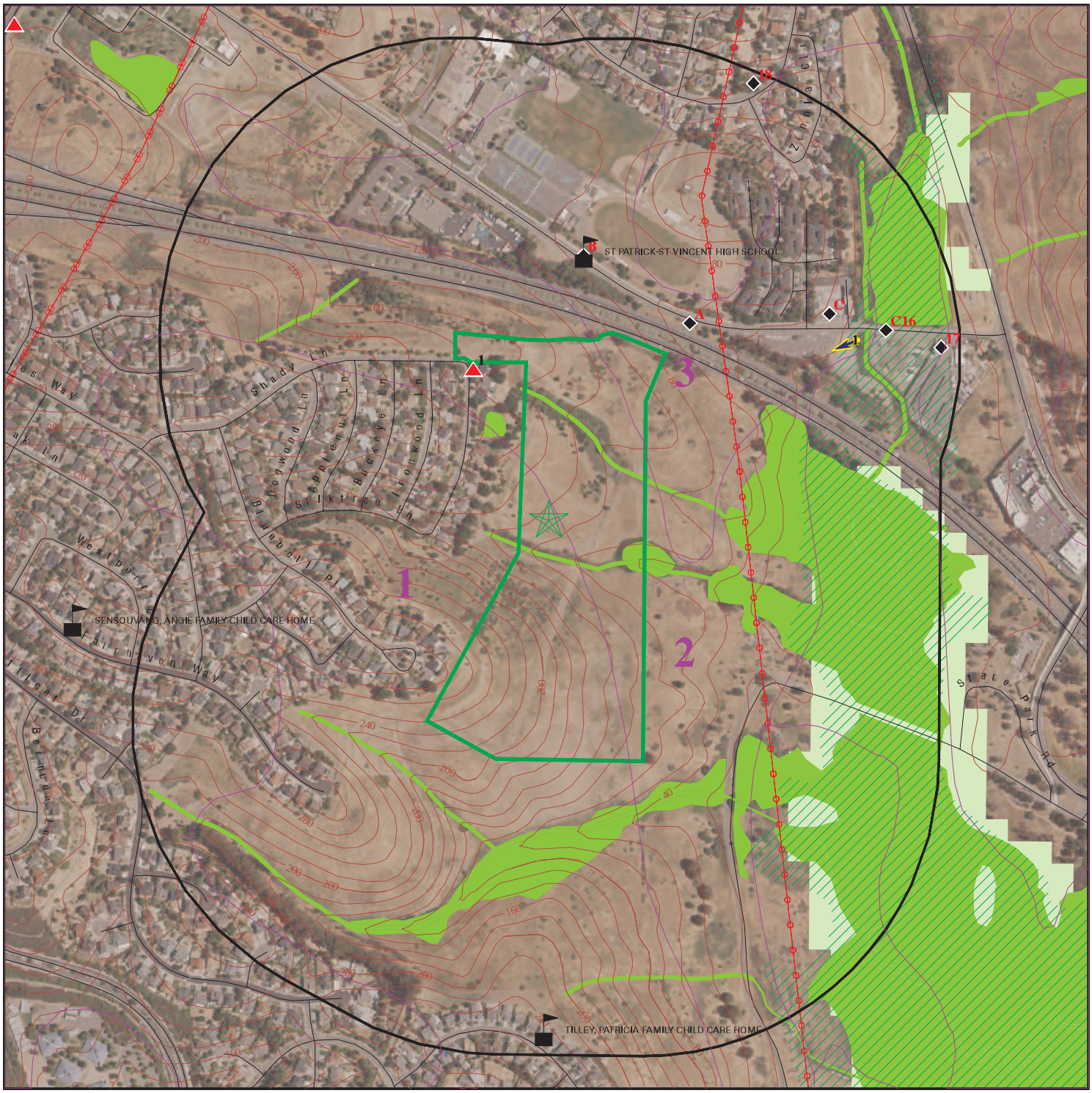
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Special Flood Hazard Area (1%)
- 0.2% Annual Chance Flood Hazard
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vallejo Properties - Glen Cove	CLIENT: Engeo Inc.
ADDRESS: Not Reported Vallejo CA 94591	CONTACT: Jenna Keith INQUIRY #: 06938050.2r
LAT/LONG: 38.081568 / 122.201037	DATE: April 13, 2022 11:50 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

DETAIL MAP - 06938050.2R



Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
Sensitive Receptors
National Priority List Sites
Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA
Power transmission lines
Special Flood Hazard Area (1%)
0.2% Annual Chance Flood Hazard
National Wetland Inventory
State Wetlands

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Vallejo Properties - Glen Cove	CLIENT: Engeo Inc.
ADDRESS: Not Reported Vallejo CA 94591	CONTACT: Jenna Keith INQUIRY #: 06938050.2r
LAT/LONG: 38.081568 / 122.201037	DATE: April 13, 2022 11:50 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Lists of Federal NPL (Superfund) sites								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
Lists of Federal Delisted NPL sites								
Delisted NPL	1.000		0	0	0	0	NR	0
Lists of Federal sites subject to CERCLA removals and CERCLA orders								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Lists of Federal CERCLA sites with NFRAP								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA facilities undergoing Corrective Action								
CORRACTS	1.000		0	0	0	0	NR	0
Lists of Federal RCRA TSD facilities								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Lists of Federal RCRA generators								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	1	NR	NR	NR	1
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
Lists of state- and tribal (Superfund) equivalent sites								
RESPONSE	1.000		0	0	0	3	NR	3
Lists of state- and tribal hazardous waste facilities								
ENVIROSTOR	1.000		0	0	1	3	NR	4
Lists of state and tribal landfills and solid waste disposal facilities								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
Lists of state and tribal leaking storage tanks								
LUST	0.500		0	2	2	NR	NR	4
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
Lists of state and tribal registered storage tanks								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		3	2	NR	NR	NR	5
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
Lists of state and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
Lists of state and tribal brownfield sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	2	NR	2
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
CERS HAZ WASTE	0.250		2	2	NR	NR	NR	4
US CDL	TP		NR	NR	NR	NR	NR	0
AQUEOUS FOAM	TP		NR	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	1	NR	NR	NR	1
HIST UST	0.250		0	3	NR	NR	NR	3
CA FID UST	0.250		0	1	NR	NR	NR	1

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CERS TANKS	0.250		1	0	NR	NR	NR	1
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		3	1	NR	NR	NR	4
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	1	1	NR	NR	2
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	1	1	NR	NR	2
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	9	15	5	8	0	37

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

1
NNW
< 1/8
0.006 mi.
30 ft.

SHADY LANE SANITARY PUMP STATION
198 WILDFLOWER AVE
VALLEJO, CA 94591

CERS HAZ WASTE
CERS

S121746783
N/A

Relative:
Higher

Actual:
166 ft.

CERS HAZ WASTE:

Name:	SHADY LANE SANITARY PUMP STATION
Address:	198 WILDFLOWER AVE
City,State,Zip:	VALLEJO, CA 94591
Site ID:	152813
CERS ID:	10402213
CERS Description:	Hazardous Waste Generator

CERS:

Name:	SHADY LANE SANITARY PUMP STATION
Address:	198 WILDFLOWER AVE
City,State,Zip:	VALLEJO, CA 94591
Site ID:	152813
CERS ID:	10402213
CERS Description:	Chemical Storage Facilities

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	05-03-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Solano County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS,

Coordinates:

Site ID:	152813
Facility Name:	Shady Lane sanitary pump station
Env Int Type Code:	HWG
Program ID:	10402213
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.,
Latitude:	38.083340
Longitude:	-122.202200

Affiliation:

Affiliation Type Desc:	Environmental Contact
Entity Name:	Jennifer Harrington
Entity Title:	Not reported
Affiliation Address:	450 Ryder St.
Affiliation City:	Vallejo
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94590
Affiliation Phone:	,
Affiliation Type Desc:	Document Preparer
Entity Name:	Jennifer Harrington
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported

SHADY LANE SANITARY PUMP STATION (Continued) **S121746783**

Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	450 Ryder St.
Affiliation City:	Vallejo
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94590
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Vallejo Sanitation & Flood Control District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 644-8948,
Affiliation Type Desc:	Identification Signer
Entity Name:	Jennifer Harrington
Entity Title:	Environmental Services Director
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	CUPA District
Entity Name:	Solano County Env Health
Entity Title:	Not reported
Affiliation Address:	675 Texas Street, Suite 5500
Affiliation City:	Fairfield
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94533
Affiliation Phone:	(707) 784-6765,
Affiliation Type Desc:	Legal Owner
Entity Name:	Public Entity, Special District
Entity Title:	Not reported
Affiliation Address:	450 Ryder St.
Affiliation City:	Vallejo
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	94590
Affiliation Phone:	(707) 644-8949,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Vallejo Sanitation & Flood Control District

SHADY LANE SANITARY PUMP STATION (Continued) **S121746783**

Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

A2 **CALIFORNIA HIGHWAY PATROL #301 GOLDEN GATE DIVISIO** **RCRA NonGen / NLR** **1024788493**
NE **1551 BENICIA RD** **CAL000046134**
< 1/8 **VALLEJO, CA 94591**
0.033 mi.
175 ft. **Site 1 of 5 in cluster A**

Relative: **Lower**
Actual: **50 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	19910215
Handler Name:	CALIFORNIA HIGHWAY PATROL #301 GOLDEN GATE DIVISION VALLEJO
Handler Address:	1551 BENICIA RD
Handler City,State,Zip:	VALLEJO, CA 94591-7568
EPA ID:	CAL000046134
Contact Name:	BETH DEPAOLA
Contact Address:	PO BOX 942898
Contact City,State,Zip:	SACRAMENTO, CA 94298-0001
Contact Telephone:	916-843-3817
Contact Fax:	916-322-3172
Contact Email:	EDEPAOLA@CHP.CA.GOV
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 942898
Mailing City,State,Zip:	SACRAMENTO, CA 94298-0001
Owner Name:	CALIFORNIA HIGHWAY PATROL
Owner Type:	Other
Operator Name:	BETH DEPAOLA
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported

CALIFORNIA HIGHWAY PATROL #301 GOLDEN GATE DIVISION VALLEJO (Continued) **1024788493**

Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20180905
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	BETH DEPAOLA
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 942898
Owner/Operator City,State,Zip:	SACRAMENTO, CA 94298-0001
Owner/Operator Telephone:	916-843-3817
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CALIFORNIA HIGHWAY PATROL

CALIFORNIA HIGHWAY PATROL #301 GOLDEN GATE DIVISION VALLEJO (Continued) **1024788493**

Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	PO BOX 942898
Owner/Operator City,State,Zip:	SACRAMENTO, CA 94298-0001
Owner/Operator Telephone:	916-843-3800
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19910215
Handler Name:	CALIFORNIA HIGHWAY PATROL #301 GOLDEN GATE DIVISION VALLEJO
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	92212
NAICS Description:	POLICE PROTECTION

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

A3 **CALIFORNIA HIGHWAY PATROL** **UST** **U003641233**
NE **1551 BENICIA RD** **N/A**
< 1/8 **VALLEJO, CA 94591**
0.033 mi.
175 ft. **Site 2 of 5 in cluster A**

Relative: SOLANO CO. UST:
Lower

Name:	CALIFORNIA HIGHWAY PATROL
Address:	1551 BENICIA RD
City,State,Zip:	VALLEJO, CA 94591
Facility Id:	10815
Facility Status:	Active
Decode for Facility Status:	Operating
Facility Phone:	707-648-4180

Actual:
50 ft.

Inventory Number:	1
Inventory Type:	State Government (170)
Inventory Description:	Not reported
Permit Expire/Last Service:	ROUTINE - INITIAL (INVENTORIED)\\ 10/31/21,\\ 10/31/21
Last Service Date:	1/12/2021
District:	SUP-DIST NO 3032

CALIFORNIA HIGHWAY PATROL (Continued) **U003641233**

Inspector:	Nicolet, Brad
Name:	CALIFORNIA HIGHWAY PATROL
Address:	1551 BENICIA RD
City,State,Zip:	VALLEJO, CA 94591
Inventory Number:	2
Inventory Type:	State Government (170)
Inventory Description:	Not reported
Permit Expire/Last Service:	ROUTINE - INITIAL (INVENTORIED)\\ 10/31/21,\\ 10/31/21
Last Service Date:	1/12/2021
District:	SUP-DIST NO 3032
Inspector:	Nicolet, Brad

A4 **CA HIGHWAY PATROL GOLDEN GATE DIVISION** **UST** **U004348659**
NE **1551 BENICIA ROAD** **N/A**
< 1/8 **VALLEJO, CA 94591**
0.033 mi.
175 ft. **Site 3 of 5 in cluster A**

Relative: UST:
Lower

Actual: Name:	CA HIGHWAY PATROL GOLDEN GATE DIVISION
50 ft. Address:	1551 BENICIA ROAD
City,State,Zip:	VALLEJO, CA 94591
Facility ID:	48-000-010815
Permitting Agency:	Solano County Environmental Health
CERSID:	10423576
Latitude:	38.08623
Longitude:	-122.20338

A5 **CALIF. DEPT. OF HIGHWAY PATROL** **UST** **U004343932**
NE **1551 BENICIA RD** **N/A**
< 1/8 **VALLEJO, CA 94591**
0.033 mi.
175 ft. **Site 4 of 5 in cluster A**

Relative: UST:
Lower

Actual: Name:	CALIF. DEPT. OF HIGHWAY PATROL
50 ft. Address:	1551 BENICIA RD
City,State,Zip:	VALLEJO, CA 94591
Facility ID:	10815
Permitting Agency:	SOLANO COUNTY
CERSID:	Not reported
Latitude:	38.0867154
Longitude:	-122.2014749

A6 **CA HIGHWAY PATROL GOLDEN GATE DIVISION** **CERS HAZ WASTE** **S121793371**
NE **1551 BENICIA ROAD** **CERS TANKS** **N/A**
< 1/8 **VALLEJO, CA 94591** **CERS**
0.033 mi.
175 ft. **Site 5 of 5 in cluster A**

Relative:
Lower

Actual:
50 ft.

CERS HAZ WASTE:

Name:	CA HIGHWAY PATROL GOLDEN GATE DIVISION
Address:	1551 BENICIA ROAD
City,State,Zip:	VALLEJO, CA 94591
Site ID:	87264
CERS ID:	10423576
CERS Description:	Hazardous Waste Generator

CERS TANKS:

Name:	CA HIGHWAY PATROL GOLDEN GATE DIVISION
Address:	1551 BENICIA ROAD
City,State,Zip:	VALLEJO, CA 94591
Site ID:	87264
CERS ID:	10423576
CERS Description:	Underground Storage Tank

CERS:

Name:	CA HIGHWAY PATROL GOLDEN GATE DIVISION
Address:	1551 BENICIA ROAD
City,State,Zip:	VALLEJO, CA 94591
Site ID:	87264
CERS ID:	10423576
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	10-27-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 05/07/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.7 25284.2 - California Health and Safety Code, Chapter 6.7, Section(s) 25284.2
Violation Description:	Failure to test the spill bucket annually.
Violation Notes:	Returned to compliance on 05/04/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	12-12-2019
Citation:	23 CCR 16 2712(b)(1)(F) - California Code of Regulations, Title 23,

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

	Chapter 16, Section(s) 2712(b)(1)(F)
Violation Description:	"Failure to conduct secondary containment testing, or one or more of the following requirements: Perform the test of the secondary containment system upon installation, within six months of installation and every 36 months thereafter. Perform the test of a secondary containment component within 30 days of a repair or discontinuing vacuum, pressure or hydrostatic monitoring. Use a procedure that demonstrates the system works as well as at installation. Use applicable manufacturer guidelines, industry codes, engineering standard, or professional engineer approval. Performed by a certified service technician. Maintain records of secondary containment testing for 36 months."
Violation Notes:	Not reported
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	11-15-2016
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 12/19/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)
Violation Description:	Failure to operate the UST system to prevent spills and/or overfills.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	12-12-2019
Citation:	HSC 6.7 25284, 25286 - California Health and Safety Code, Chapter 6.7, Section(s) 25284, 25286
Violation Description:	Failure to submit a complete and accurate application for a permit to operate a UST, or for renewal of the permit.
Violation Notes:	Returned to compliance on 01/10/2020.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Violation Date:	12-19-2018
Citation:	HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)
Violation Description:	Failure to operate the UST system to prevent unauthorized releases including leaks, spills, and/or overfills.
Violation Notes:	Not reported
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Description:	Failure to maintain on site an approved monitoring plan.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	10-27-2014
Citation:	HSC 6.11 25404(e)(4) - California Health and Safety Code, Chapter 6.11, Section(s) 25404(e)(4)
Violation Description:	Failure to report program data electronically.
Violation Notes:	Returned to compliance on 05/07/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Description:	Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Description:	Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	10-27-2014
Citation:	19 CCR 6.95 25508(a)(1) - California Code of Regulations, Title 19, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit the Business Activities Page and/or Business Owner Operator Identification Page.
Violation Notes:	Returned to compliance on 05/07/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.7 25299 - California Health and Safety Code, Chapter 6.7, Section(s) 25299
Violation Description:	Failure to comply with one or more of the operating permit conditions.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	12-12-2019
Citation:	HSC 6.7 25284 - California Health and Safety Code, Chapter 6.7, Section(s) 25284
Violation Description:	Failure to obtain a valid permit to operate from the UPA including but not limited to unpaid permit fees.
Violation Notes:	Not reported
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	10-27-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 05/07/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	10-27-2014
Citation:	22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130
Violation Description:	Failure to properly handle, manage, label, and recycle used oil and fuel filters.
Violation Notes:	Returned to compliance on 04/25/2017.
Violation Division:	Solano County Environmental Health

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Violation Program:	HW
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Description:	Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.
Violation Notes:	Returned to compliance on 04/25/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	10-27-2014
Citation:	22 CCR 12 66262.12 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.12
Violation Description:	Failure to obtain and/or maintain an Active EPA ID.
Violation Notes:	Returned to compliance on 04/25/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.11 25404(e)(4) - California Health and Safety Code, Chapter 6.11, Section(s) 25404(e)(4)
Violation Description:	Failure to report program data electronically.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	02-10-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 02/13/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	22 CCR 16 66266.130 - California Code of Regulations, Title 22, Chapter 16, Section(s) 66266.130

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Violation Description:	Failure to properly handle, manage, label, and recycle used oil and fuel filters.
Violation Notes:	Returned to compliance on 04/25/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.7 25284 - California Health and Safety Code, Chapter 6.7, Section(s) 25284
Violation Description:	Failure to obtain and maintain a valid operation permit from the CUPA.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	UST
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	02-10-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Returned to compliance on 02/13/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	02-10-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate training program in safety procedures in the event of a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 02/13/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	01-14-2015
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Returned to compliance on 05/19/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Violation Date:	10-27-2014
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Returned to compliance on 05/07/2015.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	11-15-2016
Citation:	HSC 6.5 25250.22 - California Health and Safety Code, Chapter 6.5, Section(s) 25250.22
Violation Description:	Failure to properly manage used oil and/or fuel filters in accordance with the requirements.
Violation Notes:	Returned to compliance on 12/19/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HW
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	11-15-2016
Citation:	HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description:	Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 02/13/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	02-10-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 02/13/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	87264
Site Name:	CA Highway Patrol Golden Gate Division
Violation Date:	02-10-2016
Citation:	HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description:	Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 02/13/2017.

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Violation Division: Solano County Environmental Health
Violation Program: HMRRP
Violation Source: CERS,

Evaluation:
Eval General Type: Other/Unknown
Eval Date: 05-04-2015
Violations Found: No
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-22-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-15-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-15-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-15-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-19-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-06-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-27-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-27-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-19-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-19-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 01-14-2015
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Eval Date: 02-10-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-22-2013
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-12-2019
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-19-2018
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-06-2016
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-14-2015
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 01-14-2015
Violations Found: Yes
Eval Type: Routine done by local agency

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Other/Unknown
Eval Date: 01-14-2015
Violations Found: Yes
Eval Type: Other, not routine, done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 10-27-2014
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-19-2017
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: UST
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 12-19-2018
Violations Found: No
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HW
Eval Source: CERS,

Enforcement Action:
Site ID: 87264
Site Name: CA Highway Patrol Golden Gate Division
Site Address: 1551 BENICIA ROAD
Site City: VALLEJO
Site Zip: 94591
Enf Action Date: 01-14-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Solano County Environmental Health
Enf Action Program: HMRRP
Enf Action Source: CERS,

Site ID: 87264
Site Name: CA Highway Patrol Golden Gate Division

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Site Address: 1551 BENICIA ROAD
Site City: VALLEJO
Site Zip: 94591
Enf Action Date: 01-14-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Solano County Environmental Health
Enf Action Program: HW
Enf Action Source: CERS,

Site ID: 87264
Site Name: CA Highway Patrol Golden Gate Division
Site Address: 1551 BENICIA ROAD
Site City: VALLEJO
Site Zip: 94591
Enf Action Date: 01-14-2015
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes: Not reported
Enf Action Division: Solano County Environmental Health
Enf Action Program: UST
Enf Action Source: CERS,

Affiliation:
Affiliation Type Desc: Environmental Contact
Entity Name: Karen Mejia
Entity Title: Not reported
Affiliation Address: PO Box 942898
Affiliation City: Sacramento
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94298-0001
Affiliation Phone: ,

Affiliation Type Desc: Identification Signer
Entity Name: Simi Rapacon
Entity Title: Staff Services Analyst, GGD
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: Department of California Highway Patrol
Entity Title: Not reported
Affiliation Address: PO Box 942898
Affiliation City: Sacramento
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 94298-0001
Affiliation Phone: (916) 843-3800,

Affiliation Type Desc: CUPA District
Entity Name: Solano County Env Health

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Entity Title: Not reported
Affiliation Address: 675 Texas Street, Suite 5500
Affiliation City: Fairfield
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94533
Affiliation Phone: (707) 784-6765,

Affiliation Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title: Not reported
Affiliation Address: 1551 Benicia Road
Affiliation City: Vallejo
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 94591
Affiliation Phone: ,

Affiliation Type Desc: Operator
Entity Name: Chief Chris Costigan #301 Golden Gate Division
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (707) 917-4300,

Affiliation Type Desc: UST Tank Operator
Entity Name: California Highway Patrol - Golden Gate Division
Entity Title: Not reported
Affiliation Address: 1551 Beneica Road
Affiliation City: Vallejo
Affiliation State: Ca
Affiliation Country: United States
Affiliation Zip: 94591
Affiliation Phone: (707) 648-4180,

Affiliation Type Desc: Parent Corporation
Entity Name: Department of California Highway Patrol
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: UST Permit Applicant
Entity Name: Donna Robinson
Entity Title: Business Services Officer
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: (707) 373-3062,

CA HIGHWAY PATROL GOLDEN GATE DIVISION (Continued) **S121793371**

Affiliation Type Desc:	UST Property Owner Name
Entity Name:	California Highway Patrol
Entity Title:	Not reported
Affiliation Address:	PO Box 942898
Affiliation City:	Sacramento
Affiliation State:	Ca
Affiliation Country:	United States
Affiliation Zip:	942898-
Affiliation Phone:	(916) 843-3800,

Affiliation Type Desc:	UST Tank Owner
Entity Name:	California Highway Patrol
Entity Title:	Not reported
Affiliation Address:	PO Box 942898
Affiliation City:	Sacramento
Affiliation State:	Ca
Affiliation Country:	United States
Affiliation Zip:	942898
Affiliation Phone:	(916) 843-3800,

Affiliation Type Desc:	Document Preparer
Entity Name:	Simi Rapacon
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

B7 **ECOLAB INC.** **RCRA NonGen / NLR** **1026473464**
North **1500 BENICIA ROAD** **CAC003079131**
< 1/8 **VALLEJO, CA 94591**
0.070 mi.
367 ft. **Site 1 of 2 in cluster B**

Relative: **Lower**

Actual: **76 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20200813
Handler Name:	ECOLAB INC.	
Handler Address:		1500 BENICIA ROAD
Handler City,State,Zip:		VALLEJO, CA 94591
EPA ID:		CAC003079131
Contact Name:		GARRETT LOWE
Contact Address:		ONE ECOLAB PLACE
Contact City,State,Zip:		ST PAUL, MN 55102
Contact Telephone:		651-250-2600
Contact Fax:		Not reported
Contact Email:		GARRETT.LOWE@ECOLAB.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Not reported
State District Owner:		Not reported

ECOLAB INC. (Continued) **1026473464**

State District:	Not reported
Mailing Address:	ONE ECOLAB PLACE
Mailing City,State,Zip:	ST PAUL, MN 55102
Owner Name:	GARRETT LOWE
Owner Type:	Other
Operator Name:	GARRETT LOWE
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	No
Universal Waste Destination Facility:	No
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20200814
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No

ECOLAB INC. (Continued) **1026473464**

Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	GARRETT LOWE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	ONE ECOLAB PLACE
Owner/Operator City,State,Zip:	ST PAUL, MN 55102
Owner/Operator Telephone:	651-250-2600
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	GARRETT LOWE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	ONE ECOLAB PLACE
Owner/Operator City,State,Zip:	ST PAUL, MN 55102
Owner/Operator Telephone:	651-250-2600
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	20200813
Handler Name: ECOLAB INC.	
Federal Waste Generator Description:	Not a generator, verified
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes
Non Storage Recycler Activity:	Not reported
Electronic Manifest Broker:	Not reported

List of NAICS Codes and Descriptions:

NAICS Code:	56299
NAICS Description:	ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:

Violations:	No Violations Found

Evaluation Action Summary:

Evaluations:	No Evaluations Found

B8 **ST PATRICK ST VINCENT HIGH SCHOOL** **RCRA NonGen / NLR** **1025843476**
North **1500 BENICIA RD** **CAC003023091**
< 1/8 **VALLEJO, CA 95476**
0.070 mi.
367 ft. **Site 2 of 2 in cluster B**

Relative: **Lower**
Actual: **76 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:	20190709
Handler Name:	ST PATRICK ST VINCENT HIGH SCHOOL
Handler Address:	1500 BENICIA RD
Handler City,State,Zip:	VALLEJO, CA 95476
EPA ID:	CAC003023091
Contact Name:	JASON MCCABE
Contact Address:	1500 BENICIA RD
Contact City,State,Zip:	VALLEJO, CA 95476
Contact Telephone:	707-644-4425
Contact Fax:	Not reported
Contact Email:	J.MCCABE@SPSV.ORG
Contact Title:	Not reported
EPA Region:	09
Land Type:	Not reported
Federal Waste Generator Description:	Not a generator, verified
Non-Notifier:	Not reported
Biennial Report Cycle:	Not reported
Accessibility:	Not reported
Active Site Indicator:	Handler Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	1500 BENICIA RD
Mailing City,State,Zip:	VALLEJO, CA 95476
Owner Name:	JASON MCCABE
Owner Type:	Other
Operator Name:	JASON MCCABE
Operator Type:	Other
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported

ST PATRICK ST VINCENT HIGH SCHOOL (Continued) **1025843476**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20190729
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	JASON MCCABE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1500 BENICIA RD
Owner/Operator City,State,Zip:	VALLEJO, CA 95476
Owner/Operator Telephone:	707-644-4425
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Owner/Operator Indicator:	Operator
Owner/Operator Name:	JASON MCCABE
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1500 BENICIA RD
Owner/Operator City,State,Zip:	VALLEJO, CA 95476
Owner/Operator Telephone:	707-644-4425
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

ST PATRICK ST VINCENT HIGH SCHOOL (Continued) **1025843476**

Historic Generators:
Receive Date: 20190709
Handler Name: ST PATRICK ST VINCENT HIGH SCHOOL
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56299
NAICS Description: ALL OTHER WASTE MANAGEMENT SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C9 **BIG 4 RENTS INC** **LUST** **U001598783**
NE **1600 BENICIA** **HIST UST** **N/A**
1/8-1/4 **VALLEJO, CA 94591** **HIST CORTESE**
0.143 mi. **CERS**
756 ft. **Site 1 of 8 in cluster C**

Relative: Lower
Actual: 34 ft.

SOLANO CO. LUST:
Name: CRUSADER FENCE CO. INC
Address: 1600 BENICIA RD
City,State,Zip: VALLEJO, CA 94591
Region: SOLANO
Facility ID: 10176
Facility Status: I
Facility Status Desc: Inactive
Facility Phone: 707-656-6101
Program: 29S
Inventory Number: 1
Inventory Type: LOP - Closed Site (128)
Inventory Description: Not reported
Last service/permit exp: Not reported
Last service date: Not reported
District: SUP-DIST NO 3037
Inspector: Kaltreider, Misty
Call Back: Not reported

LUST:
Name: BIG 4 RENTS INC
Address: 1600 BENICIA RD
City,State,Zip: VALLEJO, CA 94591
Lead Agency: SOLANO COUNTY LOP

BIG 4 RENTS INC (Continued) **U001598783**

Case Type:	LUST Cleanup Site
Geo Track:	http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500271
Global Id:	T0609500271
Latitude:	38.084258
Longitude:	-122.19658
Status:	Completed - Case Closed
Status Date:	11/07/1995
Case Worker:	Not reported
RB Case Number:	48-0295
Local Agency:	SOLANO COUNTY
File Location:	Not reported
Local Case Number:	10176
Potential Media Affect:	Under Investigation
Potential Contaminants of Concern:	Diesel
Site History:	Not reported

LUST:

Global Id:	T0609500271
Contact Type:	Local Agency Caseworker
Contact Name:	SOLANO COUNTY
Organization Name:	SOLANO COUNTY
Address:	675 TEXAS STREET, SUITE 2500
City:	FAIRFIELD
Email:	Not reported
Phone Number:	Not reported

LUST:

Global Id:	T0609500271
Action Type:	Other
Date:	05/04/1995
Action:	Leak Discovery
Global Id:	T0609500271
Action Type:	Other
Date:	08/24/1995
Action:	Leak Reported
Global Id:	T0609500271
Action Type:	Other
Date:	05/04/1995
Action:	Leak Stopped
Global Id:	T0609500271
Action Type:	ENFORCEMENT
Date:	11/03/1995
Action:	Closure/No Further Action Letter

LUST:

Global Id:	T0609500271
Status:	Open - Case Begin Date
Status Date:	05/04/1995
Global Id:	T0609500271
Status:	Completed - Case Closed
Status Date:	11/07/1995

BIG 4 RENTS INC (Continued) **U001598783**

HIST UST:

Name:	BIG 4 RENTS, INC.
Address:	1600 BENICIA RD
City,State,Zip:	VALLEJO, CA 94590
File Number:	Not reported
URL:	Not reported
Region:	STATE
Facility ID:	00000018312
Facility Type:	Other
Other Type:	RENTAL YARD
Contact Name:	MIKE SUTLIFF
Telephone:	7075548030
Owner Name:	BIG 4 RENTS, INC.
Owner Address:	7613 SO. SANTA ROSA AVENUE
Owner City,St,Zip:	COTATI, CA 94928
Total Tanks:	0003
Tank Num:	001
Container Num:	#1
Year Installed:	Not reported
Tank Capacity:	00004000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	Visual
Tank Num:	002
Container Num:	#2
Year Installed:	Not reported
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	Not reported
Leak Detection:	Visual
Tank Num:	003
Container Num:	#3
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	PRODUCT
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Visual

HIST CORTESE:

edr_fname:	BIG 4 RENTS INC
edr_fadd1:	1600 BENICIA
City,State,Zip:	VALLEJO, CA 94591
Region:	CORTESE
Facility County Code:	48
Reg By:	LTNKA
Reg Id:	48-0295

CERS:

Name:	BIG 4 RENTS INC
Address:	1600 BENICIA RD

BIG 4 RENTS INC (Continued) **U001598783**

City,State,Zip:	VALLEJO, CA 94591
Site ID:	254308
CERS ID:	T0609500271
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	SOLANO COUNTY - SOLANO COUNTY
Entity Title:	Not reported
Affiliation Address:	675 TEXAS STREET, SUITE 2500
Affiliation City:	FAIRFIELD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

C10 **CRUSADER FENCE CO INC** **RCRA NonGen / NLR** **1024851206**
NE **1600 BENICIA RD** **CAL000409506**
1/8-1/4 **VALLEJO, CA 94591**
0.143 mi.
756 ft. **Site 2 of 8 in cluster C**

Relative: **Lower**

Actual: **34 ft.**

RCRA NonGen / NLR:

Date Form Received by Agency:		20150821
Handler Name:	CRUSADER FENCE CO INC	
Handler Address:		1600 BENICIA RD
Handler City,State,Zip:		VALLEJO, CA 94591-7500
EPA ID:		CAL000409506
Contact Name:		JEFF PETERSON
Contact Address:		1600 BENICIA RD
Contact City,State,Zip:		VALLEJO, CA 94591-7500
Contact Telephone:		707-645-9191
Contact Fax:		707-645-8989
Contact Email:		JEFF@CRUSADERFENCE.COM
Contact Title:		Not reported
EPA Region:		09
Land Type:		Not reported
Federal Waste Generator Description:		Not a generator, verified
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		3115 GOLD VALLEY DRIVE
Mailing City,State,Zip:		RANCHO CORDOVA, CA 95742
Owner Name:		CRUSADER FENCE CO INC
Owner Type:		Other
Operator Name:		JEFF PETERSON
Operator Type:		Other
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No

CRUSADER FENCE CO INC (Continued) **1024851206**

Smelting Melting and Refining Furnace Exemption:	No
Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	No
Active Site Fed-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site Converter Treatment storage and Disposal Facility:	Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:	Not reported
Active Site State-Reg Handler:	---
Federal Facility Indicator:	Not reported
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
Commercial TSD Indicator:	No
Treatment Storage and Disposal Type:	Not reported
2018 GPRA Permit Baseline:	Not on the Baseline
2018 GPRA Renewals Baseline:	Not on the Baseline
Permit Renewals Workload Universe:	Not reported
Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20181120
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Operator
Owner/Operator Name:	JEFF PETERSON
Legal Status:	Other
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	1600 BENICIA RD

CRUSADER FENCE CO INC (Continued) **1024851206**

Owner/Operator City,State,Zip: VALLEJO, CA 94591-7500
Owner/Operator Telephone: 707-645-9191
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: CRUSADER FENCE CO INC
Legal Status: Other
Date Became Current: Not reported
Date Ended Current: Not reported
Owner/Operator Address: 3115 GOLD VALLEY DR
Owner/Operator City,State,Zip: RANCHO CORDOVA, CA 95742-6588
Owner/Operator Telephone: 916-631-9191
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Historic Generators:
Receive Date: 20150821
Handler Name: CRUSADER FENCE CO INC
Federal Waste Generator Description: Not a generator, verified
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: Not reported
Recognized Trader Exporter: Not reported
Spent Lead Acid Battery Importer: Not reported
Spent Lead Acid Battery Exporter: Not reported
Current Record: Yes
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Code: 56291
NAICS Description: REMEDIATION SERVICES

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

C11 **BIG 4 RENTS, INC.** **SWEEPS UST** **S101624194**
NE **1600 BENICIA RD** **HIST UST** **N/A**
1/8-1/4 **VALLEJO, CA 94590** **CA FID UST**
0.143 mi.
756 ft. **Site 3 of 8 in cluster C**

Relative: **Lower**
Actual: **34 ft.**

SWEEPS UST:
Name: BIG 4 RENTS, INC.
Address: 1600 BENICIA RD
City: VALLEJO
Status: Active
Comp Number: 18312
Number: 1

BIG 4 RENTS, INC. (Continued) **S101624194**

Board Of Equalization: 44-013746
Referral Date: 10-03-89
Action Date: 10-03-89
Created Date: 02-29-88
Owner Tank Id: #1
SWRCB Tank Id: 48-087-018312-000001
Tank Status: A
Capacity: 4000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 3

Name: BIG 4 RENTS, INC.
Address: 1600 BENICIA RD
City: VALLEJO
Status: Active
Comp Number: 18312
Number: 1
Board Of Equalization: 44-013746
Referral Date: 10-03-89
Action Date: 10-03-89
Created Date: 02-29-88
Owner Tank Id: #2
SWRCB Tank Id: 48-087-018312-000002
Tank Status: A
Capacity: 2000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Name: BIG 4 RENTS, INC.
Address: 1600 BENICIA RD
City: VALLEJO
Status: Active
Comp Number: 18312
Number: 1
Board Of Equalization: 44-013746
Referral Date: 10-03-89
Action Date: 10-03-89
Created Date: 02-29-88
Owner Tank Id: #3
SWRCB Tank Id: 48-087-018312-000003
Tank Status: A
Capacity: Not reported
Active Date: 07-01-85
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: Not reported

HIST UST:
Name: BIG 4 RENTS INC
Address: 1600 BENICIA ROAD

BIG 4 RENTS, INC. (Continued) **S101624194**

City,State,Zip:	VALLEJO, CA 94590
File Number:	000211C1
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/000211C1.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported
Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	48001263
Regulated By:	UTNKA
Regulated ID:	00018312
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	Not reported
Mail To:	Not reported
Mailing Address:	P O BOX
Mailing Address 2:	Not reported
Mailing City,St,Zip:	VALLEJO 94590
Contact:	Not reported
Contact Phone:	Not reported
DUNs Number:	Not reported
NPDES Number:	Not reported
EPA ID:	Not reported
Comments:	Not reported
Status:	Active

C12 **CRUSADER FENCE CO. INC** **UST** **U003895710**
NE **1600 BENICIA RD** **N/A**
1/8-1/4 **VALLEJO, CA 94591**
0.143 mi.
756 ft. **Site 4 of 8 in cluster C**

Relative: **Lower**

Actual: **34 ft.**

SOLANO CO. UST:

Name:	CRUSADER FENCE CO. INC
Address:	1600 BENICIA RD
City,State,Zip:	VALLEJO, CA 94591
Facility Id:	10176
Facility Status:	Inactive
Decode for Facility Status:	Closed

CRUSADER FENCE CO. INC (Continued) **U003895710**

Facility Phone: 707-656-6101

Inventory Number: 1
Inventory Type: Underground Storage Tank (1)
Inventory Description: Not reported
Permit Expire/Last Service: Not reported
Last Service Date: Not reported
District: SUP-DIST NO 3032
Inspector: Nicolet, Brad

Name: CRUSADER FENCE CO. INC
Address: 1600 BENICIA RD
City,State,Zip: VALLEJO, CA 94591

Inventory Number: 2
Inventory Type: Underground Storage Tank (1)
Inventory Description: Not reported
Permit Expire/Last Service: Not reported
Last Service Date: Not reported
District: SUP-DIST NO 3032
Inspector: Nicolet, Brad

Name: CRUSADER FENCE CO. INC
Address: 1600 BENICIA RD
City,State,Zip: VALLEJO, CA 94591

Inventory Number: 3
Inventory Type: Underground Storage Tank (1)
Inventory Description: Not reported
Permit Expire/Last Service: Not reported
Last Service Date: Not reported
District: SUP-DIST NO 3032
Inspector: Nicolet, Brad

C13 **CRUSADER FENCE CO INC** **CERS HAZ WASTE** **S123103598**
NE **1600 BENICIA RD** **CERS** **N/A**
1/8-1/4 **VALLEJO, CA 94591** **HWTS**
0.143 mi.
756 ft. **Site 5 of 8 in cluster C**

Relative:
Lower

Actual:
34 ft.

CERS HAZ WASTE:
Name: CRUSADER FENCE CO INC
Address: 1600 BENICIA RD
City,State,Zip: VALLEJO, CA 94591
Site ID: 443759
CERS ID: 10727503
CERS Description: Hazardous Waste Generator

CERS:
Name: CRUSADER FENCE CO INC
Address: 1600 BENICIA RD
City,State,Zip: VALLEJO, CA 94591
Site ID: 443759
CERS ID: 10727503
CERS Description: Chemical Storage Facilities

Violations:
Site ID: 443759

CRUSADER FENCE CO INC (Continued) **S123103598**

Site Name:	Crusader Fence Co Inc
Violation Date:	11-30-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to establish and electronically submit an adequate emergency response plan and procedures for a release or threatened release of a hazardous material.
Violation Notes:	Returned to compliance on 06/04/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	443759
Site Name:	Crusader Fence Co Inc
Violation Date:	11-30-2016
Citation:	HSC 6.95 25507 - California Health and Safety Code, Chapter 6.95, Section(s) 25507
Violation Description:	Failure to adequately establish and implement a business plan when storing/handling a hazardous material at or above reportable quantities.
Violation Notes:	Returned to compliance on 06/04/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	443759
Site Name:	Crusader Fence Co Inc
Violation Date:	11-30-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit a site map with all required content.
Violation Notes:	Returned to compliance on 06/04/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,
Site ID:	443759
Site Name:	Crusader Fence Co Inc
Violation Date:	11-30-2016
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Description:	Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.
Violation Notes:	Returned to compliance on 06/04/2018.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	11-30-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Solano County Environmental Health

CRUSADER FENCE CO INC (Continued) **S123103598**

Eval Program: HW
Eval Source: CERS,

Eval General Type: Compliance Evaluation Inspection
Eval Date: 11-30-2016
Violations Found: Yes
Eval Type: Routine done by local agency
Eval Notes: Not reported
Eval Division: Solano County Environmental Health
Eval Program: HMRRP
Eval Source: CERS,

Coordinates:
Site ID: 443759
Facility Name: Crusader Fence Co Inc
Env Int Type Code: HWG
Program ID: 10727503
Coord Name: Not reported
Ref Point Type Desc: Center of a facility or station.,
Latitude: 38.084290
Longitude: -122.196690

Affiliation:
Affiliation Type Desc: Identification Signer
Entity Name: Sharie Martin
Entity Title: Office Manager
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Legal Owner
Entity Name: Crusader Fence Co., Inc
Entity Title: Not reported
Affiliation Address: 3115 Gold Valley Drive
Affiliation City: Rancho Cordova
Affiliation State: CA
Affiliation Country: United States
Affiliation Zip: 95742
Affiliation Phone: (916) 631-9191,

Affiliation Type Desc: Document Preparer
Entity Name: Sharie Martin
Entity Title: Not reported
Affiliation Address: Not reported
Affiliation City: Not reported
Affiliation State: Not reported
Affiliation Country: Not reported
Affiliation Zip: Not reported
Affiliation Phone: ,

Affiliation Type Desc: Environmental Contact
Entity Name: Brent Henderson
Entity Title: Not reported

CRUSADER FENCE CO INC (Continued) **S123103598**

Affiliation Address:	3115 Gold Valley Drive
Affiliation City:	Rancho Cordova
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	5742
Affiliation Phone:	,
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	1600 Benicia Rd
Affiliation City:	Vallejo
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94591
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Brent Henderson
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(916) 631-9191,
Affiliation Type Desc:	Parent Corporation
Entity Name:	CRUSADER FENCE CO INC
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	CUPA District
Entity Name:	Solano County Env Health
Entity Title:	Not reported
Affiliation Address:	675 Texas Street, Suite 5500
Affiliation City:	Fairfield
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94533
Affiliation Phone:	(707) 784-6765,
Affiliation Type Desc:	Property Owner
Entity Name:	Robin Masters Group, LLC
Entity Title:	Not reported
Affiliation Address:	9616 Wexford Circle
Affiliation City:	Granite Bay
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95746
Affiliation Phone:	(916) 631-9191,

CRUSADER FENCE CO INC (Continued) **S123103598**

HWTS:

Name:	CRUSADER FENCE CO INC
Address:	1600 BENICIA RD
Address 2:	Not reported
City,State,Zip:	VALLEJO, CA 945917500
EPA ID:	CAL000409506
Inactive Date:	06/30/2020
Create Date:	08/21/2015
Last Act Date:	01/04/2021
Mailing Name:	Not reported
Mailing Address:	3115 Gold Valley Drive
Mailing Address 2:	Not reported
Mailing City,State,Zip:	Rancho Cordova, CA 95742
Owner Name:	CRUSADER FENCE CO INC
Owner Address:	3115 GOLD VALLEY DR
Owner Address 2:	Not reported
Owner City,State,Zip:	RANCHO CORDOVA, CA 957426588
Contact Name:	Jeff Peterson
Contact Address:	1600 BENICIA RD
Contact Address 2:	Not reported
City,State,Zip:	VALLEJO, CA 945917500

NAICS:

EPA ID:	CAL000409506
Create Date:	2015-08-21 08:22:53.263
NAICS Code:	56291
NAICS Description:	Remediation Services
Issued EPA ID Date:	2015-08-21 08:22:53.25700
Inactive Date:	2020-06-30 00:00:00
Facility Name:	CRUSADER FENCE CO INC
Facility Address:	1600 BENICIA RD
Facility Address 2:	Not reported
Facility City:	VALLEJO
Facility County:	Not reported
Facility State:	CA
Facility Zip:	945917500

Name:	CRUSADER FENCE CO INC
Address:	1600 BENICIA RD
Address 2:	Not reported
City,State,Zip:	VALLEJO, CA 945917500
EPA ID:	CAC002651552
Inactive Date:	09/12/2010
Create Date:	03/15/2010
Last Act Date:	03/15/2010
Mailing Name:	Not reported
Mailing Address:	3115 GOLD VALLEY DR
Mailing Address 2:	Not reported
Mailing City,State,Zip:	RANCHO CORDOVA, CA 957426588
Owner Name:	CRUSADER FENCE CO INC
Owner Address:	3115 GOLD VALLEY DR
Owner Address 2:	Not reported
Owner City,State,Zip:	RANCHO CORDOVA, CA 957426588
Contact Name:	COLEBE MASSIE
Contact Address:	3115 GOLD VALLEY DR
Contact Address 2:	Not reported

CRUSADER FENCE CO INC (Continued) **S123103598**

City,State,Zip: RANCHO CORDOVA, CA 957426588

C14 **BIG 4 RENTS INC** **LUST** **S105033817**
NE **1600 BENICIA RD** **Cortese** **N/A**
1/8-1/4 **VALLEJO, CA 94591**
0.143 mi.
756 ft. **Site 6 of 8 in cluster C**

Relative:
Lower

Actual:
34 ft.

LUST REG 2:

Region:	2
Facility Id:	48-0295
Facility Status:	Case Closed
Case Number:	10176
How Discovered:	Tank Closure
Leak Cause:	Overfill
Leak Source:	Tank
Date Leak Confirmed:	Not reported
Oversight Program:	LUST
Prelim. Site Assesment Wokplan Submitted:	Not reported
Preliminary Site Assesment Began:	Not reported
Pollution Characterization Began:	Not reported
Pollution Remediation Plan Submitted:	Not reported
Date Remediation Action Underway:	Not reported
Date Post Remedial Action Monitoring Began:	Not reported

CORTESE:

Name:	BIG 4 RENTS INC
Address:	1600 BENICIA RD
City,State,Zip:	VALLEJO, CA 94591
Region:	CORTESE
Envirostor Id:	Not reported
Global ID:	T0609500271
Site/Facility Type:	LUST CLEANUP SITE
Cleanup Status:	COMPLETED - CASE CLOSED
Status Date:	Not reported
Site Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported
Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	active
Order No:	Not reported
Waste Discharge System No:	Not reported
Effective Date:	Not reported
Region 2:	Not reported
WID Id:	Not reported
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported
File Name:	Active Open

C15 **BIG 4 RENTS VALLEJO** **RCRA-SQG** **1000818845**
NE **1600 BENICIA RD** **FINDS** **CAD983647595**
1/8-1/4 **VALLEJO, CA 94591** **ECHO**
0.143 mi. **HAZNET**
756 ft. **Site 7 of 8 in cluster C** **HWTS**

Relative: **Lower**
Actual: **34 ft.**

RCRA-SQG:

Date Form Received by Agency:		19920909
Handler Name:	BIG 4 RENTS VALLEJO	
Handler Address:		1600 BENICIA RD
Handler City,State,Zip:		VALLEJO, CA 94591
EPA ID:		CAD983647595
Contact Name:		MARDELL SARKELA
Contact Address:		P O BOX 2939
Contact City,State,Zip:		ROHNERT PARK, CA 94927
Contact Telephone:		707-586-4413
Contact Fax:		Not reported
Contact Email:		Not reported
Contact Title:		Not reported
EPA Region:		09
Land Type:		Private
Federal Waste Generator Description:		Small Quantity Generator
Non-Notifier:		Not reported
Biennial Report Cycle:		Not reported
Accessibility:		Not reported
Active Site Indicator:		Handler Activities
State District Owner:		Not reported
State District:		Not reported
Mailing Address:		1600 BENICIA RD
Mailing City,State,Zip:		VALLEJO, CA 94591
Owner Name:		CHARLES BRADLEY
Owner Type:		Private
Operator Name:		Not reported
Operator Type:		Not reported
Short-Term Generator Activity:		No
Importer Activity:		No
Mixed Waste Generator:		No
Transporter Activity:		No
Transfer Facility Activity:		No
Recycler Activity with Storage:		No
Small Quantity On-Site Burner Exemption:		No
Smelting Melting and Refining Furnace Exemption:		No
Underground Injection Control:		No
Off-Site Waste Receipt:		No
Universal Waste Indicator:		No
Universal Waste Destination Facility:		No
Federal Universal Waste:		No
Active Site Fed-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site Converter Treatment storage and Disposal Facility:		Not reported
Active Site State-Reg Treatment Storage and Disposal Facility:		Not reported
Active Site State-Reg Handler:		---
Federal Facility Indicator:		Not reported
Hazardous Secondary Material Indicator:		NN
Sub-Part K Indicator:		Not reported
Commercial TSD Indicator:		No
Treatment Storage and Disposal Type:		Not reported
2018 GPRA Permit Baseline:		Not on the Baseline
2018 GPRA Renewals Baseline:		Not on the Baseline
Permit Renewals Workload Universe:		Not reported

BIG 4 RENTS VALLEJO (Continued) **1000818845**

Permit Workload Universe:	Not reported
Permit Progress Universe:	Not reported
Post-Closure Workload Universe:	Not reported
Closure Workload Universe:	Not reported
202 GPRA Corrective Action Baseline:	No
Corrective Action Workload Universe:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	No
TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe:	No
TSDFs Only Subject to CA under Discretionary Auth Universe:	No
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	N/A
Groundwater Controls Indicator:	N/A
Operating TSDF Universe:	Not reported
Full Enforcement Universe:	Not reported
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20020627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	Not reported
Manifest Broker:	Not reported
Sub-Part P Indicator:	No

Handler - Owner Operator:

Owner/Operator Indicator:	Owner
Owner/Operator Name:	CHARLES BRADLEY
Legal Status:	Private
Date Became Current:	Not reported
Date Ended Current:	Not reported
Owner/Operator Address:	P O BOX 2939
Owner/Operator City,State,Zip:	ROHNERT PARK, CA 94927
Owner/Operator Telephone:	707-586-4413
Owner/Operator Telephone Ext:	Not reported
Owner/Operator Fax:	Not reported
Owner/Operator Email:	Not reported

Historic Generators:

Receive Date:	19920909
Handler Name: BIG 4 RENTS VALLEJO	
Federal Waste Generator Description:	Small Quantity Generator
State District Owner:	Not reported
Large Quantity Handler of Universal Waste:	No
Recognized Trader Importer:	No
Recognized Trader Exporter:	No
Spent Lead Acid Battery Importer:	No
Spent Lead Acid Battery Exporter:	No
Current Record:	Yes

BIG 4 RENTS VALLEJO (Continued) **1000818845**

Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:
NAICS Codes: No NAICS Codes Found

Facility Has Received Notices of Violations:
Violations: No Violations Found

Evaluation Action Summary:
Evaluations: No Evaluations Found

FINDS:
Registry ID: 110002884120

Click Here:

Environmental Interest/Information System:
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.
STATE MASTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000818845
Registry ID: 110002884120
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110002884120
Name: BIG 4 RENTS VALLEJO
Address: 1600 BENICIA RD
City,State,Zip: VALLEJO, CA 94591

HAZNET:
Name: BIG 4 RENTS VALLEJO
Address: 1600 BENICIA RD
Address 2: Not reported
City,State,Zip: VALLEJO, CA 945910000
Contact: INACTIVE PER '96 FEES
Telephone: 7075864444
Mailing Name: Not reported
Mailing Address: PO BOX 2939

Year: 1995
Gepaid: CAD983647595
TSD EPA ID: CAD083166728
CA Waste Code: 223 - Unspecified oil-containing waste
Disposal Method: R01 - Recycler
Tons: 15.846

Year: 1995

BIG 4 RENTS VALLEJO (Continued) **1000818845**

Gepaid: CAD983647595
TSD EPA ID: CAD980883177
CA Waste Code: 223 - Unspecified oil-containing waste
Disposal Method: R01 - Recycler
Tons: 8.34

Year: 1995
Gepaid: CAD983647595
TSD EPA ID: CAD004771168
CA Waste Code: -
Disposal Method: R01 - Recycler
Tons: 0.075

Year: 1995
Gepaid: CAD983647595
TSD EPA ID: CAD004771168
CA Waste Code: 512 - Other empty containers 30 gallons or more
Disposal Method: R01 - Recycler
Tons: 3.5

Year: 1994
Gepaid: CAD983647595
TSD EPA ID: CAD980887418
CA Waste Code: 221 - Waste oil and mixed oil
Disposal Method: R01 - Recycler
Tons: 15.2

Additional Info:
Year: 1994
Gen EPA ID: CAD983647595

Shipment Date: 19941123
Creation Date: 3/28/1996 0:00:00
Receipt Date: 19941123
Manifest ID: 92856118
Trans EPA ID: CAD980695761
Trans Name: Not reported
Trans 2 EPA ID: Not reported
Trans 2 Name: Not reported
TSDF EPA ID: CAD980887418
Trans Name: Not reported
TSDF Alt EPA ID: CAD980887418
TSDF Alt Name: Not reported
Waste Code Description: 221 - Waste oil and mixed oil
RCRA Code: Not reported
Meth Code: R01 - Recycler
Quantity Tons: 15.2
Waste Quantity: 4000
Quantity Unit: G
Additional Code 1: Not reported
Additional Code 2: Not reported
Additional Code 3: Not reported
Additional Code 4: Not reported
Additional Code 5: Not reported

BIG 4 RENTS VALLEJO (Continued) **1000818845**

Additional Info:

Year:	1995
Gen EPA ID:	CAD983647595
Shipment Date:	19950526
Creation Date:	4/2/1996 0:00:00
Receipt Date:	19950531
Manifest ID:	95208193
Trans EPA ID:	CAD004771168
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD083166728
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD083166728
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	15.846
Waste Quantity:	3800
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950504
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950504
Manifest ID:	95208064
Trans EPA ID:	CAD004771168
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD004771168
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD004771168
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	2
Waste Quantity:	4000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950504
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950504
Manifest ID:	95208064
Trans EPA ID:	CAD004771168

BIG 4 RENTS VALLEJO (Continued) **1000818845**

Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD004771168
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD004771168
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	1
Waste Quantity:	2000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19950504
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950504
Manifest ID:	95208064
Trans EPA ID:	CAD004771168
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD004771168
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD004771168
TSDF Alt Name:	Not reported
Waste Code Description:	- Not reported
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	0.075
Waste Quantity:	150
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

Shipment Date:	19950504
Creation Date:	3/29/1996 0:00:00
Receipt Date:	19950504
Manifest ID:	95208064
Trans EPA ID:	CAD004771168
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD004771168
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD004771168
TSDF Alt Name:	Not reported
Waste Code Description:	512 - Other empty containers 30 gallons or more
RCRA Code:	Not reported

BIG 4 RENTS VALLEJO (Continued) **1000818845**

Meth Code:	R01 - Recycler
Quantity Tons:	0.5
Waste Quantity:	1000
Quantity Unit:	P
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported
Shipment Date:	19950503
Creation Date:	10/23/1995 0:00:00
Receipt Date:	19950508
Manifest ID:	95208051
Trans EPA ID:	CAD004771168
Trans Name:	Not reported
Trans 2 EPA ID:	Not reported
Trans 2 Name:	Not reported
TSDF EPA ID:	CAD980883177
Trans Name:	Not reported
TSDF Alt EPA ID:	CAD980883177
TSDF Alt Name:	Not reported
Waste Code Description:	223 - Unspecified oil-containing waste
RCRA Code:	Not reported
Meth Code:	R01 - Recycler
Quantity Tons:	8.34
Waste Quantity:	2000
Quantity Unit:	G
Additional Code 1:	Not reported
Additional Code 2:	Not reported
Additional Code 3:	Not reported
Additional Code 4:	Not reported
Additional Code 5:	Not reported

HWTS:

Name:	BIG 4 RENTS VALLEJO
Address:	1600 BENICIA RD
Address 2:	Not reported
City,State,Zip:	VALLEJO, CA 945910000
EPA ID:	CAD983647595
Inactive Date:	06/30/1996
Create Date:	09/09/1992
Last Act Date:	08/10/2004
Mailing Name:	Not reported
Mailing Address:	PO BOX 2939
Mailing Address 2:	Not reported
Mailing City,State,Zip:	ROHNERT PARK, CA 949280000
Owner Name:	CORP
Owner Address:	P O BOX 2939
Owner Address 2:	Not reported
Owner City,State,Zip:	ROHNERT PARK, CA 949280000
Contact Name:	INACTIVE PER '96 FEES
Contact Address:	5500 COMMERCE BLVD/PO BOX 2939
Contact Address 2:	Not reported
City,State,Zip:	ROHNERT PARK, CA 949280000

NAICS:

BIG 4 RENTS VALLEJO (Continued) **1000818845**

EPA ID:	CAD983647595
Create Date:	2002-03-14 16:36:27.000
NAICS Code:	2349
NAICS Description:	Other Heavy Construction
Issued EPA ID Date:	1992-09-09 00:00:00
Inactive Date:	1996-06-30 00:00:00
Facility Name:	BIG 4 RENTS VALLEJO
Facility Address:	1600 BENICIA RD
Facility Address 2:	Not reported
Facility City:	VALLEJO
Facility County:	Not reported
Facility State:	CA
Facility Zip:	945910000

C16 **SIRI CONSTRUCTION CO** **HIST UST** **U001596300**
ENE **1855 BENICIA ROAD** **N/A**
1/8-1/4 **BENICIA, CA 94510**
0.188 mi.
992 ft. **Site 8 of 8 in cluster C**

Relative: HIST UST:
Lower

Actual: Name:	SIRI CONSTRUCTION CO
8 ft. Address:	1855 BENICIA ROAD
City,State,Zip:	BENICIA, CA 94510
File Number:	0002119A
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002119A.pdf
Region:	STATE
Facility ID:	00000010581
Facility Type:	Other
Other Type:	CONSTRUCTION CO.
Contact Name:	Not reported
Telephone:	7075523464
Owner Name:	ANDREW F. SIRI
Owner Address:	716 WEST H STREET
Owner City,St,Zip:	BENICIA, CA 94510
Total Tanks:	0001
Tank Num:	001
Container Num:	A
Year Installed:	1979
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	Stock Inventor

Click here for Geo Tracker PDF:

17
ENE
1/8-1/4
0.234 mi.
1233 ft.

SIRI CONSTRUCTION
1855 BENICIA RD
VALLEJO, CA 94591

UST **U003530558**
N/A

Relative:
Lower

Actual:
9 ft.

SOLANO CO. UST:

Name:	SIRI CONSTRUCTION
Address:	1855 BENICIA RD
City,State,Zip:	VALLEJO, CA 94591
Facility Id:	80057
Facility Status:	Inactive
Decode for Facility Status:	Closed
Facility Phone:	707-552-3496
Inventory Number:	1
Inventory Type:	Underground Storage Tank (1)
Inventory Description:	Not reported
Permit Expire/Last Service:	Not reported
Last Service Date:	Not reported
District:	SUP-DIST NO 3032
Inspector:	Nicolet, Brad

18
NNE
1/8-1/4
0.240 mi.
1268 ft.

GREENMONT SANITARY PUMP STATION
230 GREENMONT DR
VALLEJO, CA 94591

CERS HAZ WASTE **S121763737**
CERS **N/A**

Relative:
Lower

Actual:
61 ft.

CERS HAZ WASTE:

Name:	GREENMONT SANITARY PUMP STATION
Address:	230 GREENMONT DR
City,State,Zip:	VALLEJO, CA 94591
Site ID:	34386
CERS ID:	10402201
CERS Description:	Hazardous Waste Generator

CERS:

Name:	GREENMONT SANITARY PUMP STATION
Address:	230 GREENMONT DR
City,State,Zip:	VALLEJO, CA 94591
Site ID:	34386
CERS ID:	10402201
CERS Description:	Chemical Storage Facilities

Violations:

Site ID:	34386
Site Name:	Greenmont Sanitary Pump Station
Violation Date:	04-28-2016
Citation:	HSC 6.95 Multiple - California Health and Safety Code, Chapter 6.95, Section(s) Multiple
Violation Description:	Business Plan Program - Operations/Maintenance - General
Violation Notes:	Returned to compliance on 06/05/2017.
Violation Division:	Solano County Environmental Health
Violation Program:	HMRRP
Violation Source:	CERS,

Evaluation:

Eval General Type:	Compliance Evaluation Inspection

GREENMONT SANITARY PUMP STATION (Continued) **S121763737**

Eval Date:	04-28-2016
Violations Found:	Yes
Eval Type:	Routine done by local agency
Eval Notes:	Not reported
Eval Division:	Solano County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS,

Coordinates:

Site ID:	34386
Facility Name:	Greenmont Sanitary Pump Station
Env Int Type Code:	HWG
Program ID:	10402201
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.,
Latitude:	38.087170
Longitude:	-122.197400

Affiliation:

Affiliation Type Desc:	CUPA District
Entity Name:	Solano County Env Health
Entity Title:	Not reported
Affiliation Address:	675 Texas Street, Suite 5500
Affiliation City:	Fairfield
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94533
Affiliation Phone:	(707) 784-6765,

Affiliation Type Desc:	Document Preparer
Entity Name:	Jennifer Harrington
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	450 Ryder St.
Affiliation City:	Vallejo
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94590
Affiliation Phone:	,

Affiliation Type Desc:	Legal Owner
Entity Name:	Public Entity, Special District
Entity Title:	Not reported
Affiliation Address:	450 Ryder St.
Affiliation City:	Vallejo
Affiliation State:	CA
Affiliation Country:	United States

GREENMONT SANITARY PUMP STATION (Continued) **S121763737**

Affiliation Zip:	94590
Affiliation Phone:	(707) 644-8949,
Affiliation Type Desc:	Environmental Contact
Entity Name:	Jennifer Harrington
Entity Title:	Not reported
Affiliation Address:	450 Ryder St.
Affiliation City:	Vallejo
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	94590
Affiliation Phone:	,
Affiliation Type Desc:	Operator
Entity Name:	Vallejo Sanitation & Flood Control District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(707) 644-8948,
Affiliation Type Desc:	Parent Corporation
Entity Name:	Vallejo Sanitation & Flood Control District
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,
Affiliation Type Desc:	Identification Signer
Entity Name:	Jennifer Harrington
Entity Title:	Environmental Services Director
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

D19 **ST VINCENT'S CEMETERY** **LUST U003895720**
NW **550 GLEN COVE RD** **UST N/A**
1/4-1/2 **VALLEJO, CA 94591**
0.455 mi.
2405 ft. **Site 1 of 2 in cluster D**

Relative:
Higher

Actual:
199 ft.

SOLANO CO. LUST:

Name:	ST VINCENT'S CEMETERY
Address:	550 GLEN COVE RD
City,State,Zip:	VALLEJO, CA 94591
Region:	SOLANO
Facility ID:	10840
Facility Status:	I
Facility Status Desc:	Inactive

ST VINCENT'S CEMETERY (Continued) **U003895720**

Facility Phone: 707-644-5209
Program: 29S
Inventory Number: 1
Inventory Type: LOP - Closed Site (128)
Inventory Description: Not reported
Last service/permit exp: Not reported
Last service date: Not reported
District: SUP-DIST NO 3037
Inspector: Kaltreider, Misty
Call Back: Not reported

SOLANO CO. UST:
Name: ST VINCENT'S CEMETERY
Address: 550 GLEN COVE RD
City,State,Zip: VALLEJO, CA 94591
Facility Id: 10840
Facility Status: Inactive
Decode for Facility Status: Closed
Facility Phone: 707-644-5209

Inventory Number: 1
Inventory Type: Underground Storage Tank (1)
Inventory Description: Not reported
Permit Expire/Last Service: Not reported
Last Service Date: Not reported
District: SUP-DIST NO 3032
Inspector: Nicolet, Brad

D20 **ALL SOULS CEMETERY** **LUST** **S104493352**
NW **550 GLEN COVE RD** **Cortese** **N/A**
1/4-1/2 **VALLEJO, CA 94590** **HIST CORTESE**
0.455 mi. **NPDES**
2405 ft. **Site 2 of 2 in cluster D** **CIWQS**
CERS

Relative: Higher

Actual: 199 ft.

LUST:
Name: ALL SOULS CEMETERY
Address: 550 GLEN COVE RD
City,State,Zip: VALLEJO, CA 94590
Lead Agency: SOLANO COUNTY LOP
Case Type: LUST Cleanup Site
Geo Track: http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=T0609500235
Global Id: T0609500235
Latitude: 38.0834146
Longitude: -122.2125454
Status: Completed - Case Closed
Status Date: 08/10/1994
Case Worker: Not reported
RB Case Number: 48-0255
Local Agency: SOLANO COUNTY
File Location: Not reported
Local Case Number: 10840
Potential Media Affect: Under Investigation
Potential Contaminants of Concern: Gasoline
Site History: Not reported

LUST:
Global Id: T0609500235

ALL SOULS CEMETERY (Continued) **S104493352**

Contact Type: Local Agency Caseworker
Contact Name: SOLANO COUNTY
Organization Name: SOLANO COUNTY
Address: 675 TEXAS STREET, SUITE 2500
City: FAIRFIELD
Email: Not reported
Phone Number: Not reported

LUST:
Global Id: T0609500235
Action Type: Other
Date: 03/09/1994
Action: Leak Discovery

Global Id: T0609500235
Action Type: Other
Date: 03/28/1994
Action: Leak Reported

Global Id: T0609500235
Action Type: ENFORCEMENT
Date: 06/06/1994
Action: Closure/No Further Action Letter

Global Id: T0609500235
Action Type: Other
Date: 03/02/1994
Action: Leak Stopped

LUST:
Global Id: T0609500235
Status: Open - Case Begin Date
Status Date: 03/02/1994

Global Id: T0609500235
Status: Open - Site Assessment
Status Date: 03/28/1994

Global Id: T0609500235
Status: Completed - Case Closed
Status Date: 08/10/1994

LUST REG 2:
Region: 2
Facility Id: 48-0255
Facility Status: Case Closed
Case Number: 10840
How Discovered: Tank Closure
Leak Cause: Corrosion
Leak Source: UNK
Date Leak Confirmed: 3/28/1994
Oversight Program: LUST
Prelim. Site Assesment Wokplan Submitted: Not reported
Preliminary Site Assesment Began: Not reported
Pollution Characterization Began: Not reported

ALL SOULS CEMETERY (Continued) **S104493352**

Pollution Remediation Plan Submitted: Not reported
Date Remediation Action Underway: Not reported
Date Post Remedial Action Monitoring Began: Not reported

CORTESE:
Name: ALL SOULS CEMETERY
Address: 550 GLEN COVE RD
City,State,Zip: VALLEJO, CA 94590
Region: CORTESE
Envirostor Id: Not reported
Global ID: T0609500235
Site/Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported
Owner: Not reported
Enf Type: Not reported
Swat R: Not reported
Flag: active
Order No: Not reported
Waste Discharge System No: Not reported
Effective Date: Not reported
Region 2: Not reported
WID Id: Not reported
Solid Waste Id No: Not reported
Waste Management Uit Name: Not reported
File Name: Active Open

HIST CORTESE:
edr_fname: ALL SOULS CEMETERY
edr_fadd1: 550 GLEN COVE
City,State,Zip: VALLEJO, CA 94591
Region: CORTESE
Facility County Code: 48
Reg By: LTNKA
Reg Id: 48-0255

NPDES:
Name: ALL SOULS CEMETERY
Address: 550 GLEN COVE ROAD
City,State,Zip: VALLEJO, CA 94591
Facility Status: Active
NPDES Number: CAS000002
Region: 2
Agency Number: 0
Regulatory Measure ID: 535945
Place ID: Not reported
Order Number: 2009-0009-DWQ
WDID: 2 48C394498
Regulatory Measure Type: Enrollee
Program Type: Construction
Adoption Date Of Regulatory Measure: Not reported
Effective Date Of Regulatory Measure: 07/19/2021
Termination Date Of Regulatory Measure: Not reported

ALL SOULS CEMETERY (Continued) **S104493352**

Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	2110 Broadway
Discharge Name:	Roman Catholic Bishop of Sacramento a Corp Sole
Discharge City:	Sacramento
Discharge State:	California
Discharge Zip:	95818
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Name:	ALL SOULS CEMETERY
Address:	550 GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94591
Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	2 48C394498
Regulatory Measure Type:	Construction
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	07/19/2021
Operator Name:	Roman Catholic Bishop of Sacramento a Corp Sole
Operator Address:	2110 Broadway
Operator City:	Sacramento
Operator State:	California
Operator Zip:	95818

CIWQS:

Name:	ALL SOULS CEMETERY
Address:	550 GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94591
Agency:	Roman Catholic Bishop of Sacramento a Corp Sole
Agency Address:	2110 Broadway 277, Sacramento, CA 95818
Place/Project Type:	Construction - Commercial
SIC/NAICS:	Not reported
Region:	2
Program:	CONSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ

ALL SOULS CEMETERY (Continued) **S104493352**

WDID:	2 48C394498
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	07/19/2021
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.08784
Longitude:	-122.2079

CERS:

Name:	ALL SOULS CEMETERY
Address:	550 GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94591
Site ID:	578519
CERS ID:	893816
CERS Description:	Construction Storm Water

Affiliation:

Affiliation Type Desc:	Owner/Operator
Entity Name:	Roman Catholic Bishop of Sacramento a Corp Sole
Entity Title:	Operator
Affiliation Address:	2110 Broadway277
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95818
Affiliation Phone:	,

Name:	ALL SOULS CEMETERY
Address:	550 GLEN COVE RD
City,State,Zip:	VALLEJO, CA 94590
Site ID:	254108
CERS ID:	T0609500235
CERS Description:	Leaking Underground Storage Tank Cleanup Site

Affiliation:

Affiliation Type Desc:	Local Agency Caseworker
Entity Name:	SOLANO COUNTY - SOLANO COUNTY
Entity Title:	Not reported
Affiliation Address:	675 TEXAS STREET, SUITE 2500
Affiliation City:	FAIRFIELD
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

21
NW
1/4-1/2
0.481 mi.
2539 ft.

ROLLINGWOOD MIDDLE SCHOOL
ROLLINGWOOD DRIVE/BENICIA ROAD
VALLEJO, CA 94591

ENVIROSTOR SCH

S105628981
N/A

Relative: Higher

Actual: 183 ft.

ENVIROSTOR:

Name:	ROLLINGWOOD MIDDLE SCHOOL
Address:	ROLLINGWOOD DRIVE/BENICIA ROAD
City,State,Zip:	VALLEJO, CA 94591
Facility ID:	48780001
Status:	Inactive - Withdrawn
Status Date:	11/18/2004
Site Code:	204098
Site Type:	School Cleanup
Site Type Detailed:	School
Acres:	32.13
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	SMBRP
Program Manager:	Kamili Siglowide
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Assembly:	14
Senate:	03
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	School District
Latitude:	38.0891
Longitude:	-122.2083
APN:	NONE SPECIFIED
Past Use:	* MOTION PICTURES
Potential COC:	Arsenic
Confirmed COC:	Arsenic
Potential Description:	SOIL
Alias Name:	ROLLINGWOOD MIDDLE SCHOOL
Alias Type:	Alternate Name
Alias Name:	VALLEJO CITY UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	VALLEJO CITY USD-ROLLINGWOOD MID SCHOOL
Alias Type:	Alternate Name
Alias Name:	110033607014
Alias Type:	EPA (FRS #)
Alias Name:	204098
Alias Type:	Project Code (Site Code)
Alias Name:	48780001
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	09/25/2003
Comments:	DTSC approved the Preliminary Endangerment Assessment and determined that further investigation and or remediation is required at the proposed Rollingwood Middle School.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

ROLLINGWOOD MIDDLE SCHOOL (Continued) **S105628981**

Completed Document Type: Phase 1
Completed Date: 06/13/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Workplan
Completed Date: 09/18/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Cost Recovery Closeout Memo
Completed Date: 11/18/2004
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Environmental Oversight Agreement
Completed Date: 09/12/2002
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 10/26/2007
Comments: The Phase 1, PEA Workplan and PEA report were loaded into EnvirStor.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Inspections/Visit (Non LUR)
Completed Date: 09/18/2002
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SCH:

Name: ROLLINGWOOD MIDDLE SCHOOL
Address: ROLLINGWOOD DRIVE/BENICIA ROAD
City,State,Zip: VALLEJO, CA 94591
Facility ID: 48780001
Site Type: School Cleanup
Site Type Detail: School
Site Mgmt. Req.: NONE SPECIFIED
Acres: 32.13
National Priorities List: NO
Cleanup Oversight Agencies: SMBRP
Lead Agency: SMBRP

ROLLINGWOOD MIDDLE SCHOOL (Continued) **S105628981**

Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Kamili Siglowide
Supervisor:	Mark Malinowski
Division Branch:	Northern California Schools & Santa Susana
Site Code:	204098
Assembly:	14
Senate:	03
Special Program Status:	Not reported
Status:	Inactive - Withdrawn
Status Date:	11/18/2004
Restricted Use:	NO
Funding:	School District
Latitude:	38.0891
Longitude:	-122.2083
APN:	NONE SPECIFIED
Past Use:	* MOTION PICTURES
Potential COC:	Arsenic
Confirmed COC:	Arsenic
Potential Description:	SOIL
Alias Name:	ROLLINGWOOD MIDDLE SCHOOL
Alias Type:	Alternate Name
Alias Name:	VALLEJO CITY UNIFIED SCHOOL DISTRICT
Alias Type:	Alternate Name
Alias Name:	VALLEJO CITY USD-ROLLINGWOOD MID SCHOOL
Alias Type:	Alternate Name
Alias Name:	110033607014
Alias Type:	EPA (FRS #)
Alias Name:	204098
Alias Type:	Project Code (Site Code)
Alias Name:	48780001
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	09/25/2003
Comments:	DTSC approved the Preliminary Endangerment Assessment and determined that further investigation and or remediation is required at the proposed Rollingwood Middle School.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Phase 1
Completed Date:	06/13/2002
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Workplan
Completed Date:	09/18/2002
Comments:	Not reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Cost Recovery Closeout Memo
Completed Date:	11/18/2004
Comments:	Not reported

ROLLINGWOOD MIDDLE SCHOOL (Continued) **S105628981**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Environmental Oversight Agreement
Completed Date:	09/12/2002
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Correspondence
Completed Date:	10/26/2007
Comments:	The Phase 1, PEA Workplan and PEA report were loaded into EnvirStor.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Site Inspections/Visit (Non LUR)
Completed Date:	09/18/2002
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

22
West
1/2-1
0.556 mi.
2937 ft.

SHADOW RIDGE
GLEN COVE ROAD
VALLEJO, CA 94951

RESPONSE **S101007153**
ENVIROSTOR **N/A**
HIST Cal-Sites
CERS

Relative:
Higher

Actual:
198 ft.

RESPONSE:

Name:	SHADOW RIDGE
Address:	GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94951
Facility ID:	48990005
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0
National Priorities List:	NO
Cleanup Oversight Agencies:	HWMP
Lead Agency Description:	DTSC - Hazardous Waste Management Program
Project Manager:	Not reported
Supervisor:	Daniel Murphy
Division Branch:	Cleanup Berkeley
Site Code:	Not reported
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	14
Senate:	03
Special Program Status:	Not reported
Status:	Certified
Status Date:	04/01/1985
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	38.0832

SHADOW RIDGE (Continued) **S101007153**

Longitude:	-122.2127
APN:	NONE SPECIFIED
Past Use:	UNKNOWN
Potential COC :	Lead, Organic (tetraethyl lead
Confirmed COC:	Lead, Organic (tetraethyl lead
Potential Description:	SOIL
Alias Name:	110033605640
Alias Type:	EPA (FRS #)
Alias Name:	48990005
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Certification
Completed Date:	04/01/1985
Comments:	Our records do not indicate the actual date this site was certified. Our records show 04/1985. We have used the date 04/01/1985 because this gives us the earliest statute of limitations.
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

ENVIROSTOR:

Name:	SHADOW RIDGE
Address:	GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94951
Facility ID:	48990005
Status:	Certified
Status Date:	04/01/1985
Site Code:	Not reported
Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	0
NPL:	NO
Regulatory Agencies:	HWMP
Lead Agency:	HWMP
Program Manager:	Not reported
Supervisor:	Daniel Murphy
Division Branch:	Cleanup Berkeley
Assembly:	14
Senate:	03
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	38.0832
Longitude:	-122.2127
APN:	NONE SPECIFIED
Past Use:	UNKNOWN

SHADOW RIDGE (Continued) **S101007153**

Potential COC: Lead, Organic (tetraethyl lead
Confirmed COC: Lead, Organic (tetraethyl lead
Potential Description: SOIL
Alias Name: 110033605640
Alias Type: EPA (FRS #)
Alias Name: 48990005
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 04/01/1985
Comments: Our records do not indicate the actual date this site was certified.
Our records show 04/1985. We have used the date 04/01/1985 because this gives us the earliest statute of limitations.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Calsite:
Name: SHADOW RIDGE
Address: GLEN COVE ROAD
City: VALLEJO
Region: SACRAMENTO
Facility ID: 48990005
Facility Type: RP
Type: RESPONSIBLE PARTY
Branch: CC
Branch Name: CENTRAL CALIFORNIA
File Name: Not reported
State Senate District: 04011985
Status: CERTIFIED AS HAVING BEEN REMEDIED SATISFACTORILY UNDER DTSC OVERSIGHT
Status Name: CERTIFIED
Lead Agency: N/A
NPL: Not reported
SIC Code: 99
SIC Name: NONCLASSIFIABLE ESTABLISHMENTS
Access: Not reported
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Not reported
Staff Member Responsible for Site: Not reported
Supervisor Responsible for Site: Not reported
Region Water Control Board: Not reported
Region Water Control Board Name: Not reported
Lat/Long Direction: Not reported
Lat/Long (dms): 0 0 0 / 0 0 0
Lat/long Method: Not reported

SHADOW RIDGE (Continued) **S101007153**

Lat/Long Description:	Not reported
State Assembly District Code:	07
State Senate District Code:	02
Facility ID:	48990005
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	04011985
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	CERT
Definition of Status:	CERTIFIED
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Alternate Address:	GLEN COVE ROAD
Alternate City,St,Zip:	VALLEJO, CA 94951
Background Info:	Not reported
Comments Date:	01261996
Comments:	Our records do not indicate the actual date this site was
Comments Date:	01261996
Comments:	certified. Our records show 04/1985. We have used the date
Comments Date:	01261996
Comments:	04/01/1985 because this gives us the earliest statute of
Comments Date:	01261996
Comments:	limitations.
Comments Date:	04011985
Comments:	100 cubic yards of contaminated soil were removed.
Comments Date:	04011985
Comments:	This certification was confirmed by a report prepared by the
Comments Date:	04011985
Comments:	Auditor General. The Auditor General conducted an audit of
Comments Date:	04011985
Comments:	the Department's records to confirm a list of sites where
Comments Date:	04011985
Comments:	the Department was involved in the cleanup and the cleanup
Comments Date:	04011985
Comments:	had been completed. This Auditor General list became the
Comments Date:	04011985
Comments:	basis for our historical certification information. Many of
Comments Date:	04011985
Comments:	the sites on this list were handled by our Surveillance and
Comments Date:	04011985
Comments:	Enforcement Staff. Much of this work was in response to
Comments Date:	04011985

SHADOW RIDGE (Continued) **S101007153**

Comments:	complaints from the public or reports from industry and the
Comments Date:	04011985
Comments:	response action may have only addressed the immediate
Comments Date:	04011985
Comments:	problem and not the entire facility.
ID Name:	Not reported
ID Value:	Not reported
Alternate Name:	SHADOW RIDGE
Alternate Name:	Not reported
Special Programs Code:	Not reported
Special Programs Name:	Not reported

CERS:

Name:	SHADOW RIDGE
Address:	GLEN COVE ROAD
City,State,Zip:	VALLEJO, CA 94951
Site ID:	342879
CERS ID:	48990005
CERS Description:	State Response

Affiliation:

Affiliation Type Desc:	Supervisor
Entity Name:	DANIEL MURPHY
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

---

23 **SOUTHAMPTON/COMPANY/BLAKE COURT** **RESPONSE** **S100714944**
ENE **ROSE DRIVE/BLAKE COURT** **ENVIROSTOR** **N/A**
1/2-1 **BENICIA, CA 94510** **HIST Cal-Sites**
0.794 mi.
4194 ft.

Relative:
Higher

Actual:
168 ft.

RESPONSE:

Name:	SOUTHAMPTON/COMPANY/BLAKE COURT
Address:	ROSE DRIVE/BLAKE COURT
City,State,Zip:	BENICIA, CA 94510
Facility ID:	48490011
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0
National Priorities List:	NO
Cleanup Oversight Agencies:	SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Darrell Nations
Supervisor:	Susan Fears
Division Branch:	Cleanup Legacy Landfills
Site Code:	200290
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	14
Senate:	03
Special Program Status:	Not reported
Status:	Certified

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Status Date:	07/01/2002
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	38.08670
Longitude:	-122.1852
APN:	NONE SPECIFIED
Past Use:	LANDFILL - HAZARDOUS WASTE
Potential COC :	* HALOGENATED SOLVENTS * OXYGENATED SOLVENTS * EMPTY PESTICIDE CONTAINERS, 30 GALLONS OR MORE * Sludge - Sewage * TANK BOTTOM WASTES * UNSPECIFIED OIL CONTAINING WASTE * FLY ASH, BOTTOM ASH & RETORT ASH * WASTE POTENTIALLY CONTAINING DIOXINS Lead Polychlorinated biphenyls (PCBs Chromium VI Cyanide (free Nickel
Confirmed COC:	* WASTE POTENTIALLY CONTAINING DIOXINS * Sludge - Sewage * TANK BOTTOM WASTES * UNSPECIFIED OIL CONTAINING WASTE
Potential Description:	SOIL, SV
Alias Name:	BLAKE COURT/ROSE DRIVE
Alias Type:	Alternate Name
Alias Name:	BRAITO DUMP
Alias Type:	Alternate Name
Alias Name:	BRAITO LANDFILL (NORTH CANYON)
Alias Type:	Alternate Name
Alias Name:	SOLANO COUNTY SANITARY LANDFILL
Alias Type:	Alternate Name
Alias Name:	110033616825
Alias Type:	EPA (FRS #)
Alias Name:	200290
Alias Type:	Project Code (Site Code)
Alias Name:	48490011
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Remedial Investigation / Feasibility Study
Completed Date:	05/08/1997
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	03/07/1996
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Completion Report
Completed Date:	02/15/1996
Comments:	Removal Action: Tires - Approximately 150 cubic yards of investigation accumulated waste (including leather scraps and associated soil) were transported to BFI Keller Canyon Landfill in Pittsburg, California. Approximately 1,100 cubic yards of leather and associated soil were transported to Altamont Landfill in Livermore, California. Additionally, 154 tires were removed from the excavation and transported to Big Sky Enterprises, in Benicia California for recycling. The completed excavation was approximately 134 feet long by 30 feet wide by 10 feet at its deepest point. Removal Activities continued until background levels were achieved. Confirmation samples were collected 2 feet beyond observed waste (in each direction). 22

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

confirmation samples were collected (10 side wall samples and 12 bottom samples) and analyzed for total and hexavalent chromium.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Engineering Evaluation / Cost Analysis
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 09/27/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA
Completed Date: 12/11/1995
Comments: CEQA - Obtained negative declaration for removal of wastes from the "Tires and Hides" area within the Braito Landfill site. Removal action completed 2/15/96.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Order
Completed Date: 05/15/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Triage Meeting
Completed Date: 07/20/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 09/25/1994
Comments: Consent Order

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

ENVIROSTOR:
Name: SOUTHAMPTON/COMPANY/BLAKE COURT
Address: ROSE DRIVE/BLAKE COURT
City,State,Zip: BENICIA, CA 94510
Facility ID: 48490011
Status: Certified
Status Date: 07/01/2002
Site Code: 200290
Site Type: State Response
Site Type Detailed: State Response or NPL
Acres: 0
NPL: NO
Regulatory Agencies: SMBRP
Lead Agency: SMBRP
Program Manager: Darrell Nations
Supervisor: Susan Fears
Division Branch: Cleanup Legacy Landfills
Assembly: 14
Senate: 03
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Responsible Party
Latitude: 38.08670
Longitude: -122.1852
APN: NONE SPECIFIED
Past Use: LANDFILL - HAZARDOUS WASTE
Potential COC: * HALOGENATED SOLVENTS * OXYGENATED SOLVENTS * EMPTY PESTICIDE CONTAINERS, 30 GALLONS OR MORE * Sludge - Sewage * TANK BOTTOM WASTES * UNSPECIFIED OIL CONTAINING WASTE * FLY ASH, BOTTOM ASH & RETORT ASH * WASTE POTENTIALLY CONTAINING DIOXINS Lead Polychlorinated biphenyls (PCBs Chromium VI Cyanide (free Nickel
Confirmed COC: * WASTE POTENTIALLY CONTAINING DIOXINS * Sludge - Sewage * TANK BOTTOM WASTES * UNSPECIFIED OIL CONTAINING WASTE
Potential Description: SOIL, SV
Alias Name: BLAKE COURT/ROSE DRIVE
Alias Type: Alternate Name
Alias Name: BRAITO DUMP
Alias Type: Alternate Name
Alias Name: BRAITO LANDFILL (NORTH CANYON)
Alias Type: Alternate Name
Alias Name: SOLANO COUNTY SANITARY LANDFILL
Alias Type: Alternate Name
Alias Name: 110033616825
Alias Type: EPA (FRS #)
Alias Name: 200290
Alias Type: Project Code (Site Code)
Alias Name: 48490011
Alias Type: Envirostor ID Number

Completed Info:

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Remedial Investigation / Feasibility Study
Completed Date: 05/08/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 03/07/1996
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 02/15/1996
Comments: Removal Action: Tires - Approximately 150 cubic yards of investigation accumulated waste (including leather scraps and associated soil) were transported to BFI Keller Canyon Landfill in Pittsburg, California. Approximately 1,100 cubic yards of leather and associated soil were transported to Altamont Landfill in Livermore, California. Additionally, 154 tires were removed from the excavation and transported to Big Sky Enterprises, in Benicia California for recycling. The completed excavation was approximately 134 feet long by 30 feet wide by 10 feet at its deepest point. Removal Activities continued until background levels were achieved. Confirmation samples were collected 2 feet beyond observed waste (in each direction). 22 confirmation samples were collected (10 side wall samples and 12 bottom samples) and analyzed for total and hexavalent chromium.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Completion Report
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Engineering Evaluation / Cost Analysis
Completed Date: 06/30/1992
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Site Screening
Completed Date: 09/27/1991
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * CEQA

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Completed Date: 12/11/1995
Comments: CEQA - Obtained negative declaration for removal of wastes from the "Tires and Hides" area within the Braito Landfill site. Removal action completed 2/15/96.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Order
Completed Date: 05/15/1995
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Triage Meeting
Completed Date: 07/20/2015
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 09/25/1994
Comments: Consent Order

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

Calsite:
Name: SOUTHAMPTON/COMPANY/BLAKE COURT
Address: ROSE DRIVE/BLAKE COURT
City: BENICIA
Region: BERKELEY
Facility ID: 48490011
Facility Type: RP
Type: RESPONSIBLE PARTY
Branch: ST
Branch Name: STRINGFELLOW
File Name: Not reported
State Senate District: 01261996
Status: ANNUAL WORKPLAN (AWP) - ACTIVE SITE
Status Name: ANNUAL WORKPLAN - ACTIVE SITE
Lead Agency: DEPT OF TOXIC SUBSTANCES CONTROL
NPL: Not Listed
SIC Code: 49
SIC Name: ELECTRIC, GAS & SANITARY SERVICES
Access: Controlled
Cortese: Not reported
Hazardous Ranking Score: Not reported
Date Site Hazard Ranked: Not reported
Groundwater Contamination: Not reported
Staff Member Responsible for Site: PRUFFIN

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Supervisor Responsible for Site:	Not reported
Region Water Control Board:	SF
Region Water Control Board Name:	SAN FRANCISCO BAY
Lat/Long Direction:	Not reported
Lat/Long (dms):	0 0 0 / 0 0 0
Lat/long Method:	Not reported
Lat/Long Description:	Not reported
State Assembly District Code:	08
State Senate District Code:	02
Facility ID:	48490011
Activity:	SS
Activity Name:	SITE SCREENING
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	09271991
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	FRIFS
Activity Name:	FOCUSED REMEDIAL INVESTIGATION/FEASIBILITY STUDY
AWP Code:	METH1
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Facility ID:	48490011
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	DRUMS
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	REMOVAL OF 76 DRUMS OF SOIL CUTTING & RINSE WATER CONTAINING ELEVATEDCONCENTRATION LEVELS OF PB AND CU; AND 3 ROLL-OFF BINS CONTAINING SOIL& DEBRIS & ORGANIC MATTER.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	WELLS
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	06301992
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	X
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	CLOSURE OF AN "ABANDONED WELL" DISCOVERED IN CLOSE PROXIMITY TOSOUTHAMPTON SITE AND THE EAST CANYON LANDFILL.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	ORDER
Activity Name:	I/SE, IORSE, FFA, FFSRA, VCA, EA
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Revised Due Date:	Not reported
Comments Date:	05151995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	TIRES
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	02151996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	1250
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	150 CUBIC YARDS OF INVESTIGATION ACCUMULATED WASTE TRANSPORTED-BFIKELLER CANYON LANDFILL. 1,100 CUBIC YARDS OF LEATHER & ASSOC SOILTRANSPORTED-ALTAMONT LANDFILL. 154 TIRES TRANSPORTED-BIG SKY ENTER.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	03041999
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	RAP
Activity Name:	REMEDIAL ACTION PLAN / RECORD OF DECISION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	02181999
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	DES
Activity Name:	DESIGN
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	06241999
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	06292000
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	CERT
Activity Name:	CERTIFICATION
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	09302000
Revised Due Date:	Not reported
Comments Date:	Not reported
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	CEQA
Activity Name:	CEQA INCLUDING NEGATIVE DECS
AWP Code:	TIRES
Proposed Budget:	0
AWP Completion Date:	Not reported

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Revised Due Date:	Not reported
Comments Date:	12111995
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	Not reported
Activity Comments:	Not reported
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	RA
Activity Name:	REMOVAL ACTION
AWP Code:	TANK
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	03071996
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	1550
Liquids Treated (Gals):	0
Action Included Capping:	Not reported
Well Decommissioned:	Not reported
Action Included Fencing:	Not reported
Removal Action Certification:	N
Activity Comments:	NO SIGNIFICANT GROUND WATER CONTAMINATION DETECTED.
For Commercial Reuse:	0
For Industrial Reuse:	0
For Residential Reuse:	0
Unknown Type:	0
Facility ID:	48490011
Activity:	RIFS
Activity Name:	REMEDIAL INVESTIGATION / FEASIBILITY STUDY
AWP Code:	Not reported
Proposed Budget:	0
AWP Completion Date:	Not reported
Revised Due Date:	Not reported
Comments Date:	05081997
Est Person-Yrs to complete:	0
Estimated Size:	Not reported
Request to Delete Activity:	Not reported
Activity Status:	AWP
Definition of Status:	ANNUAL WORKPLAN - ACTIVE SITE
Liquids Removed (Gals):	0
Liquids Treated (Gals):	0

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Action Included Capping: Not reported
Well Decommissioned: Not reported
Action Included Fencing: Not reported
Removal Action Certification: Not reported
Activity Comments: Not reported
For Commercial Reuse: 0
For Industrial Reuse: 0
For Residential Reuse: 0
Unknown Type: 0
Alternate Address: ROSE DRIVE/BLAKE COURT
Alternate City,St,Zip: BENECIA, CA 94510
Alternate Address: BLAKE COURT
Alternate City,St,Zip: BENECIA, CA 94510
Alternate Address: ROSE DRIVE/BLAKE COURT
Alternate City,St,Zip: BENICIA, CA 94510
Background Info: A portion of the Southampton community was formerly occupied by the Braito landfill, also referred to as the Solano County Sanitary Landfill. From about 1955 to 1978, the site was privately owned and operated, pursuant to permits issued by the Solano County Department of Environmental Management (SCDEM) and Bay Area Regional Water Quality Control Board (RWQCB), as a sanitary landfill. The landifll operated primarily in two areas: the 12.3 acre east canyon site and the 6.4 acre north canyon site. The area subject to this environmental investigation is the north canyon site.
Historically the landfill was not classified as a hazardous or toxic materials disposal site, but rather a Class III landfill. However, historical records show that hazardous wastes (e.g. tannery wastes) were also disposed at the site, and that several related enforcement actions were taken.
In the early 1980's, following transfer of site ownership to Southampton Comapny, excavation of most of the landfilled wastes, and RWQCB approved closure, houses were constructed at the site. Homes were never constructed on the Blake Court lots, however, apparently due to the high cost of stabilizing these prospective home sites, i.e., the costs of engineering measures to mitigate foundation conditions. During site excavation and grading activities, the decision had been made to leave wastes at Blake Court because the wastes appeared to be "substantially decomposed"
In June of 1991, the discovery of subsidence in the backyard of one of the homes (Lot 50), led to the discovery of a soft "black material" (believed to be tannery wastes) buired beneath that home and adjacent lots. In the widening investigation that ensued, it has become apparent that approximately 24,000cy of hazardous waste (i.e. 22,000 cy of refuse and 2,200 cy of black material) remained buried at the site.
Investigative work today has included soil and groundwater sampling and testing (for site characterization and waste classification purposes), soil gas testing, a geophysical survey, and slope stability study. The responsible parties completed the remedial investigation/feasibility study in March 1997.
Not reported

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

	Not reported
	Not reported
	Not reported
Comments Date:	02151996
Comments:	yards of leather and associated soil were transported to
Comments Date:	02151996
Comments:	Altamont Landfill in Livermore, California. Additionally,
Comments Date:	02151996
Comments:	154 tires were removed from the excavation and transported
Comments Date:	02151996
Comments:	to Big Sky Enterprises, in Benicia California for recycling.
Comments Date:	02151996
Comments:	The completed excavation was approximately 134 feet long by
Comments Date:	02151996
Comments:	30 feet wide by 10 feet at its deepest point. Removal
Comments Date:	02151996
Comments:	Activities continued until background levels were achieved.
Comments Date:	02151996
Comments:	Confirmation samples were collected 2 feet beyond observed
Comments Date:	02151996
Comments:	waste (in each direction). 22 confirmation samples were
Comments Date:	02151996
Comments:	collected (10 side wall samples and 12 bottom samples) and
Comments Date:	02151996
Comments:	analyzed for total and hexavalent chromium.
Comments Date:	06051997
Comments:	Until 6/5/97, this site had been identified as being listed on
Comments Date:	06051997
Comments:	the Annual Workplan List as of 9/27/91 which was an error. When
Comments Date:	06051997
Comments:	the site was changed from Removal Required which is how it was
Comments Date:	06051997
Comments:	first listed in CalSites, the date was not changed. We have
Comments Date:	06051997
Comments:	reviewed our past hard copy printouts of the AWP lists and this
Comments Date:	06051997
Comments:	site does not appear on them until the FY 95/96 list. The date
Comments Date:	06051997
Comments:	of that list is 1/26/96 which is why we've use this status date.
Comments Date:	10071993
Comments:	The initial site investigation work was directed by the
Comments Date:	10071993
Comments:	SCDEM. The local agency relinquished project management
Comments Date:	10071993
Comments:	responsibility to DTSC-Region 2 when the magnitude of the
Comments Date:	10071993
Comments:	problem became apparent. Oversight responsibility was
Comments Date:	10071993
Comments:	subsequently transferred to HQ-PDTS Branch in January , 1993
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	Activities since that transfer have included soil and
Comments Date:	10071993
Comments:	groundwater sampling and testing, methane gas monitoring
Comments Date:	10071993
Comments:	within selected homes, a geophysical (GPR) survey, a slope

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Comments Date:	10071993
Comments:	stability investigation, and a subsurface methane migration
Comments Date:	10071993
Comments:	study. As a result of discoveries of characteristically
Comments Date:	10071993
Comments:	distinct wastes at different geographical locations, the
Comments Date:	10071993
Comments:	site has been divided into four operable units. These are:
Comments Date:	10071993
Comments:	OU1 - Lots 47, 59, 51 and portions of Parcel C1 (Black
Comments Date:	10071993
Comments:	Material Unit): OU2 - Lots 41 through 47 and portions of
Comments Date:	10071993
Comments:	Parcel C1 (Blake Court and Parcel C1 Refuse): OU3 - Lots 84
Comments Date:	10071993
Comments:	through 92 and 33 through 40 (Hydrocarbon Area); and OU4 -
Comments Date:	10071993
Comments:	principally lots 77 through 82 (Creek Bed Refuse). OU1
Comments Date:	10071993
Comments:	was fenced and posted following the appearance of a sinkhole
Comments Date:	10071993
Comments:	in the back yard of lot 50.
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	A consent order was signed on May 15, 1995 to complete the
Comments Date:	10071993
Comments:	remedial investigation and feasibility study.
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	The following is a breakdown of the above mentioned operable
Comments Date:	10071993
Comments:	units in terms of contamination.
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	Black Material Unit (OU1)
Comments Date:	10071993
Comments:	OU1 TTLC (mg/kg) MAX CONC DETECTED (mg/kg)
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	Cr 2,500 mg/k 15,000
Comments Date:	10071993
Comments:	Pb 1,000 2,800
Comments Date:	10071993
Comments:	Zn 5,000 4,600
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	Blake Court Refuse (OU2)
Comments Date:	10071993
Comments:	OU2 TTLC (mg/kg) MAX CONC DETECTED (mg/kg)
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993

SOUTHAMPTON/COMPANY/BLAKE COURT (Continued) **S100714944**

Comments:	Cr 3,600
Comments Date:	10071993
Comments:	Pb 3,700
Comments Date:	10071993
Comments:	Zn 18,200
Comments Date:	10071993
Comments:	Cu 2,500 7,590
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	Hydrocarbon Area (OU3)
Comments Date:	10071993
Comments:	OU2 TTLC (mg/kg) MAX CONC DETECTED (mg/kg
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	PNAs max= phenanthrene,
Comments Date:	10071993
Comments:	13.0 mg/kg
Comments Date:	10071993
Comments:	TRPH 23,000 mg/kg
Comments Date:	10071993
Comments:	Not reported
Comments Date:	10071993
Comments:	Not reported
Comments Date:	12111995
Comments:	CEQA - Obtained negative declaration for removal of wastes
Comments Date:	12111995
Comments:	from the "Tires and Hides" area within the Braito Landfill
Comments Date:	12111995
Comments:	site. Removal action completed 2/15/96.
Comments Date:	02151996
Comments:	Removal Action: Tires - Approximately 150 cubic yards of
Comments Date:	02151996
Comments:	investigation accumulated waste (including leather scraps
Comments Date:	02151996
Comments:	and associated soil) were transported to BFI Keller Canyon
Comments Date:	02151996
Comments:	Landfill in Pittsburg, California. Approximately 1,100 cubic
ID Name:	Not reported
ID Value:	Not reported
Alternate Name:	SOUTHAMPTON/COMPANY/BLAKE COURT
Alternate Name:	BRAITO LANDFILL (NORTH CANYON)
Alternate Name:	SOLANO COUNTY SANITARY LANDFILL
Alternate Name:	BRAITO DUMP
Alternate Name:	BLAKE COURT/ROSE DRIVE
Alternate Name:	Not reported
Special Programs Code:	Not reported
Special Programs Name:	Not reported

24 WNW 1/2-1 0.808 mi. 4267 ft. — **WEBER PROPERTY**, **1100 BLOCK OF WARREN AVENUE**, **VALLEJO, CA 94590** — **RESPONSE ENVIROSTOR CERS** — **S106896801 N/A**

Relative: Higher

Actual: 139 ft.

RESPONSE:

Name:	WEBER PROPERTY
Address:	1100 BLOCK OF WARREN AVENUE
City,State,Zip:	VALLEJO, CA 94590
Facility ID:	48880001
Site Type:	State Response
Site Type Detail:	State Response or NPL
Acres:	0.8
National Priorities List:	NO
Cleanup Oversight Agencies:	HWMP, SMBRP
Lead Agency Description:	DTSC - Site Cleanup Program
Project Manager:	Not reported
Supervisor:	Mark Piros
Division Branch:	Cleanup Berkeley
Site Code:	201485
Site Mgmt. Req.:	NONE SPECIFIED
Assembly:	14
Senate:	03
Special Program Status:	Not reported
Status:	Certified
Status Date:	02/15/2005
Restricted Use:	NO
Funding:	Responsible Party
Latitude:	38.08888
Longitude:	-122.2158
APN:	74-140-540
Past Use:	RECYCLING - SCRAP METAL
Potential COC :	Arsenic Lead
Confirmed COC:	NONE SPECIFIED
Potential Description:	SOIL
Alias Name:	74-140-540
Alias Type:	APN
Alias Name:	110033614444
Alias Type:	EPA (FRS #)
Alias Name:	201485
Alias Type:	Project Code (Site Code)
Alias Name:	48880001
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Preliminary Endangerment Assessment Report
Completed Date:	02/15/2005
Comments:	Approved Removal Action. Sample results detected arsenic, copper, lead, and zinc above regulatory levels. Other metals were observed. 33 cubic yards of ash material was removed and disposed off-site.
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Removal Action Workplan
Completed Date:	02/23/2004
Comments:	Approved Workplan to remove contaminated ash

WEBER PROPERTY (Continued) **S106896801**

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Public Notice
Completed Date:	03/05/2006
Comments:	Work Notice informing the surrounding residents of the ash removal work

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Certification
Completed Date:	02/15/2005
Comments:	Issued No Further Action letter.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date:	09/15/2003
Comments:	Issued I or SE Order.

Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

ENVIROSTOR:

Name:	WEBER PROPERTY
Address:	1100 BLOCK OF WARREN AVENUE
City,State,Zip:	VALLEJO, CA 94590
Facility ID:	48880001
Status:	Certified
Status Date:	02/15/2005
Site Code:	201485
Site Type:	State Response
Site Type Detailed:	State Response or NPL
Acres:	0.8
NPL:	NO
Regulatory Agencies:	HWMP, SMBRP
Lead Agency:	SMBRP
Program Manager:	Not reported
Supervisor:	Mark Piros
Division Branch:	Cleanup Berkeley
Assembly:	14
Senate:	03
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Responsible Party
Latitude:	38.08888
Longitude:	-122.2158
APN:	74-140-540
Past Use:	RECYCLING - SCRAP METAL
Potential COC:	Arsenic Lead

WEBER PROPERTY (Continued) **S106896801**

Confirmed COC: NONE SPECIFIED
Potential Description: SOIL
Alias Name: 74-140-540
Alias Type: APN
Alias Name: 110033614444
Alias Type: EPA (FRS #)
Alias Name: 201485
Alias Type: Project Code (Site Code)
Alias Name: 48880001
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Preliminary Endangerment Assessment Report
Completed Date: 02/15/2005
Comments: Approved Removal Action. Sample results detected arsenic, copper, lead, and zinc above regulatory levels. Other metals were observed. 33 cubic yards of ash material was removed and disposed off-site.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Removal Action Workplan
Completed Date: 02/23/2004
Comments: Approved Workplan to remove contaminated ash

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Public Notice
Completed Date: 03/05/2006
Comments: Work Notice informing the surrounding residents of the ash removal work

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Certification
Completed Date: 02/15/2005
Comments: Issued No Further Action letter.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 09/15/2003
Comments: Issued I or SE Order.

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

CERS:
Name: WEBER PROPERTY

WEBER PROPERTY (Continued) **S106896801**

Address:	1100 BLOCK OF WARREN AVENUE
City,State,Zip:	VALLEJO, CA 94590
Site ID:	344686
CERS ID:	48880001
CERS Description:	State Response

Affiliation:

Affiliation Type Desc:	Supervisor
Entity Name:	MARK PIROS
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	,

Count: 1 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BENICIA	S126984483	BENICIA STATE REC AREA/SOUTH HAMPT	BENICIA STATE REC AREA	94510	SWF/LF

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 10
Telephone 206-553-8665

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: N/A
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 05/25/2021
Date Data Arrived at EDR: 06/24/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/16/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 84

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/01/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 9

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/22/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/25/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/14/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/25/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/14/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/08/2021
Date Data Arrived at EDR: 11/09/2021
Date Made Active in Reports: 01/28/2022
Number of Days to Update: 80

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/28/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35
Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36
Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11
Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17
Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88
Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 03/02/2022
Number of Days to Update: 85
Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/28/2021
Date Data Arrived at EDR: 06/22/2021
Date Made Active in Reports: 09/20/2021
Number of Days to Update: 90
Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85
Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/06/2021
Date Data Arrived at EDR: 06/11/2021
Date Made Active in Reports: 09/07/2021
Number of Days to Update: 88
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 02/09/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/12/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 85

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27
Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 07/08/2021
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/25/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/14/2022
Number of Days to Update: 80
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/15/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 77
Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/10/2022
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 0
Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/15/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 09/14/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 11/23/2021
Number of Days to Update: 12

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 11/16/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/25/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/14/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/25/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/20/2021
Date Made Active in Reports: 04/08/2021
Number of Days to Update: 78

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 11/16/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Quarterly

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 12/10/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 77

Source: State Water Resources Control Board
Telephone: 916-341-5455
Last EDR Contact: 03/11/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 80

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/24/2022
Date Data Arrived at EDR: 02/25/2022
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 12

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78
Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/15/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 84
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 79
Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 02/28/2022
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 15

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 04/06/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 10/26/2021
Date Data Arrived at EDR: 11/16/2021
Date Made Active in Reports: 02/08/2022
Number of Days to Update: 84

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/13/2021
Date Data Arrived at EDR: 12/17/2021
Date Made Active in Reports: 03/17/2022
Number of Days to Update: 90

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/01/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/03/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/17/2020
Date Made Active in Reports: 09/10/2020
Number of Days to Update: 85

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/18/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 08/14/2020
Date Made Active in Reports: 11/04/2020
Number of Days to Update: 82

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/18/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 01/19/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 82

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 10/20/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 11/12/2021
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 22

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/01/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2022
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 64

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 07/29/2021
Date Data Arrived at EDR: 08/24/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 87

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 84
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 11/11/2019
Number of Days to Update: 251
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019
Date Data Arrived at EDR: 11/06/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 96
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 02/04/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019
Date Data Arrived at EDR: 07/01/2019
Date Made Active in Reports: 09/23/2019
Number of Days to Update: 84
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 03/28/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/08/2022
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 70

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 03/02/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 23

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/25/2022
Date Data Arrived at EDR: 02/03/2022
Date Made Active in Reports: 02/22/2022
Number of Days to Update: 19

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/03/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/21/2022
Date Data Arrived at EDR: 03/22/2022
Date Made Active in Reports: 03/25/2022
Number of Days to Update: 3

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/02/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 84

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/23/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/14/2021
Date Data Arrived at EDR: 12/15/2021
Date Made Active in Reports: 03/10/2022
Number of Days to Update: 85

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/04/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 95

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021
Date Data Arrived at EDR: 05/21/2021
Date Made Active in Reports: 08/11/2021
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 02/22/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information
ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 01/10/2022
Number of Days to Update: 6
Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites
A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 34
Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 78
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/16/2021
Date Data Arrived at EDR: 12/16/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 77
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 05/14/2019
Date Made Active in Reports: 07/17/2019
Number of Days to Update: 64
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/14/2022
Number of Days to Update: 77

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 11/17/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 02/07/2022
Number of Days to Update: 81

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities
A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021
Date Data Arrived at EDR: 09/01/2021
Date Made Active in Reports: 11/19/2021
Number of Days to Update: 79

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 06/10/2021
Date Made Active in Reports: 08/27/2021
Number of Days to Update: 78

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/18/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 84

Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 03/03/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/18/2021
Date Data Arrived at EDR: 11/19/2021
Date Made Active in Reports: 02/07/2022
Number of Days to Update: 80

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 04/15/2020
Date Made Active in Reports: 07/02/2020
Number of Days to Update: 78

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 80

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/15/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 80

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/15/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 73

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 11/18/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 79
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 11/09/2021
Date Made Active in Reports: 01/27/2022
Number of Days to Update: 79
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/08/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 79
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/13/2021
Date Data Arrived at EDR: 12/14/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 79
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/09/2022
Next Scheduled EDR Contact: 06/26/2022
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 12/03/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/24/2022
Number of Days to Update: 79
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/18/2022
Date Data Arrived at EDR: 01/19/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 79

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/19/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)
Produced water ponds sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 12/06/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/23/2022
Number of Days to Update: 78
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Varies

PCS: Permit Compliance System
PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55
Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

PCS INACTIVE: Listing of Inactive PCS Permits
An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

MINES MRDS: Mineral Resources Data System
Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3
Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System
DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 07/13/2021
Date Data Arrived at EDR: 07/14/2021
Date Made Active in Reports: 10/06/2021
Number of Days to Update: 84

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 04/05/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

PCS ENF: Enforcement data
No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners
EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 12/28/2021
Date Data Arrived at EDR: 12/28/2021
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 80

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 11/01/2021
Date Data Arrived at EDR: 11/02/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 83

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 12/28/2021
Date Data Arrived at EDR: 12/28/2021
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 80

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/17/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 10/22/2021
Date Data Arrived at EDR: 10/26/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 85

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 10/01/2021
Date Data Arrived at EDR: 11/02/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 83

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 12/01/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 77

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/06/2022
Number of Days to Update: 82

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List
A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/12/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 82

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/12/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 82

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 03/24/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 80

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/11/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/11/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 83

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/12/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2022
Date Data Arrived at EDR: 01/21/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 80

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory
A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills
This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/12/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 82
Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 01/07/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory
A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 06/28/2021
Number of Days to Update: 11
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory
A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 04/19/2021
Date Data Arrived at EDR: 06/17/2021
Date Made Active in Reports: 09/14/2021
Number of Days to Update: 89
Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/21/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/26/2021
Date Data Arrived at EDR: 07/09/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 82
Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 04/25/2022
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/27/2019
Number of Days to Update: 65

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 02/02/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020
Date Data Arrived at EDR: 08/12/2020
Date Made Active in Reports: 10/23/2020
Number of Days to Update: 72

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/24/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 03/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 04/04/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 10/26/2021
Date Data Arrived at EDR: 10/27/2021
Date Made Active in Reports: 01/20/2022
Number of Days to Update: 85

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 10/08/2021
Date Data Arrived at EDR: 11/04/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 81

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 10/08/2021
Date Data Arrived at EDR: 11/02/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 10/29/2021
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/20/2022
Number of Days to Update: 83

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 10/29/2021
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 12/02/2021
Date Made Active in Reports: 02/25/2022
Number of Days to Update: 85

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 03/31/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 8

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 03/31/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 8

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/14/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 06/18/2021
Date Data Arrived at EDR: 09/28/2021
Date Made Active in Reports: 12/14/2021
Number of Days to Update: 77

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 08/02/2021
Date Data Arrived at EDR: 08/04/2021
Date Made Active in Reports: 11/02/2021
Number of Days to Update: 90

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 11/04/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 01/24/2022
Number of Days to Update: 80

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 12/01/2021
Date Data Arrived at EDR: 12/02/2021
Date Made Active in Reports: 02/17/2022
Number of Days to Update: 77

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 01/31/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/30/2021
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/16/2022
Number of Days to Update: 78

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 02/28/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/01/2020
Date Data Arrived at EDR: 11/23/2020
Date Made Active in Reports: 02/08/2021
Number of Days to Update: 77

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 02/25/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021
Date Data Arrived at EDR: 10/19/2021
Date Made Active in Reports: 01/13/2022
Number of Days to Update: 86

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 02/03/2022
Date Data Arrived at EDR: 02/04/2022
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 7

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversite Facilities
A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information
Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/10/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 83

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/10/2022
Next Scheduled EDR Contact: 06/27/2022
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 11/15/2021
Date Data Arrived at EDR: 11/16/2021
Date Made Active in Reports: 02/03/2022
Number of Days to Update: 79

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/11/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 11/19/2021
Date Data Arrived at EDR: 11/22/2021
Date Made Active in Reports: 02/07/2022
Number of Days to Update: 77

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/17/2022
Next Scheduled EDR Contact: 06/06/2022
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/16/2022
Next Scheduled EDR Contact: 07/04/2022
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 11/09/2021
Date Data Arrived at EDR: 11/11/2021
Date Made Active in Reports: 02/02/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/11/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 11/23/2021
Date Data Arrived at EDR: 11/29/2021
Date Made Active in Reports: 02/11/2022
Number of Days to Update: 74

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/24/2022
Next Scheduled EDR Contact: 06/13/2022
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 01/13/2021
Date Data Arrived at EDR: 01/14/2021
Date Made Active in Reports: 04/06/2021
Number of Days to Update: 82

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/13/2022
Date Data Arrived at EDR: 01/14/2022
Date Made Active in Reports: 04/06/2022
Number of Days to Update: 82

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 04/26/2021
Date Data Arrived at EDR: 04/28/2021
Date Made Active in Reports: 07/13/2021
Number of Days to Update: 76

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/16/2022
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/13/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/08/2022
Number of Days to Update: 78

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/23/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/07/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/20/2022
Date Made Active in Reports: 04/11/2022
Number of Days to Update: 81

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/18/2022
Next Scheduled EDR Contact: 05/02/2022
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/29/2021
Date Data Arrived at EDR: 12/07/2021
Date Made Active in Reports: 02/24/2022
Number of Days to Update: 79

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/08/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/27/2021
Date Data Arrived at EDR: 01/04/2022
Date Made Active in Reports: 03/18/2022
Number of Days to Update: 73

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/24/2022
Next Scheduled EDR Contact: 07/11/2022
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 10/26/2021
Date Data Arrived at EDR: 10/27/2021
Date Made Active in Reports: 01/20/2022
Number of Days to Update: 85

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 01/24/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/11/2021
Date Data Arrived at EDR: 11/12/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 81

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/11/2022
Next Scheduled EDR Contact: 05/23/2022
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/07/2022
Next Scheduled EDR Contact: 07/18/2022
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/28/2022
Next Scheduled EDR Contact: 05/09/2022
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/08/2022
Next Scheduled EDR Contact: 07/25/2022
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2020
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/14/2022
Next Scheduled EDR Contact: 05/30/2022
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/02/2022
Next Scheduled EDR Contact: 06/20/2022
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: Endeavor Business Media
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data
Source: Endeavor Business Media
This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

Â© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

VALLEJO PROPERTIES - GLEN COVE
NOT REPORTED
VALLEJO, CA 94591

TARGET PROPERTY COORDINATES

Latitude (North):	38.081568 - 38ˆ 4’ 53.64’’
Longitude (West):	122.201037 - 122ˆ 12’ 3.73’’
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	570071.4
UTM Y (Meters):	4214960.5
Elevation:	117 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	12008089 BENICIA, CA
Version Date:	2018

EDR’s GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

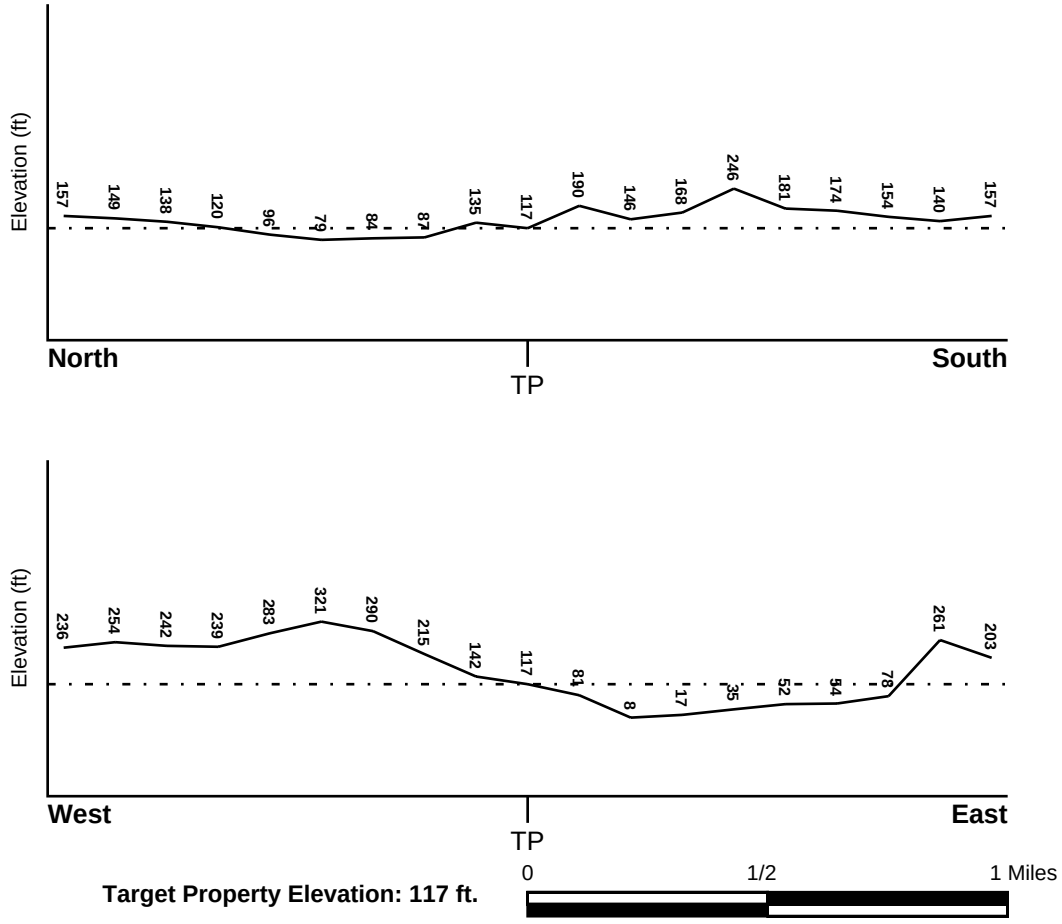
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General East

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Target Property Elevation: 117 ft.

Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06095C0630F	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06095C0633E	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
BENICIA	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
1	1/4 - 1/2 Mile ENE	WSW
2	1/2 - 1 Mile West	SSE
1G	1/4 - 1/2 Mile ENE	WSW
2G	1/2 - 1 Mile West	SSE

For additional site information, refer to Physical Setting Source Map Findings.

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

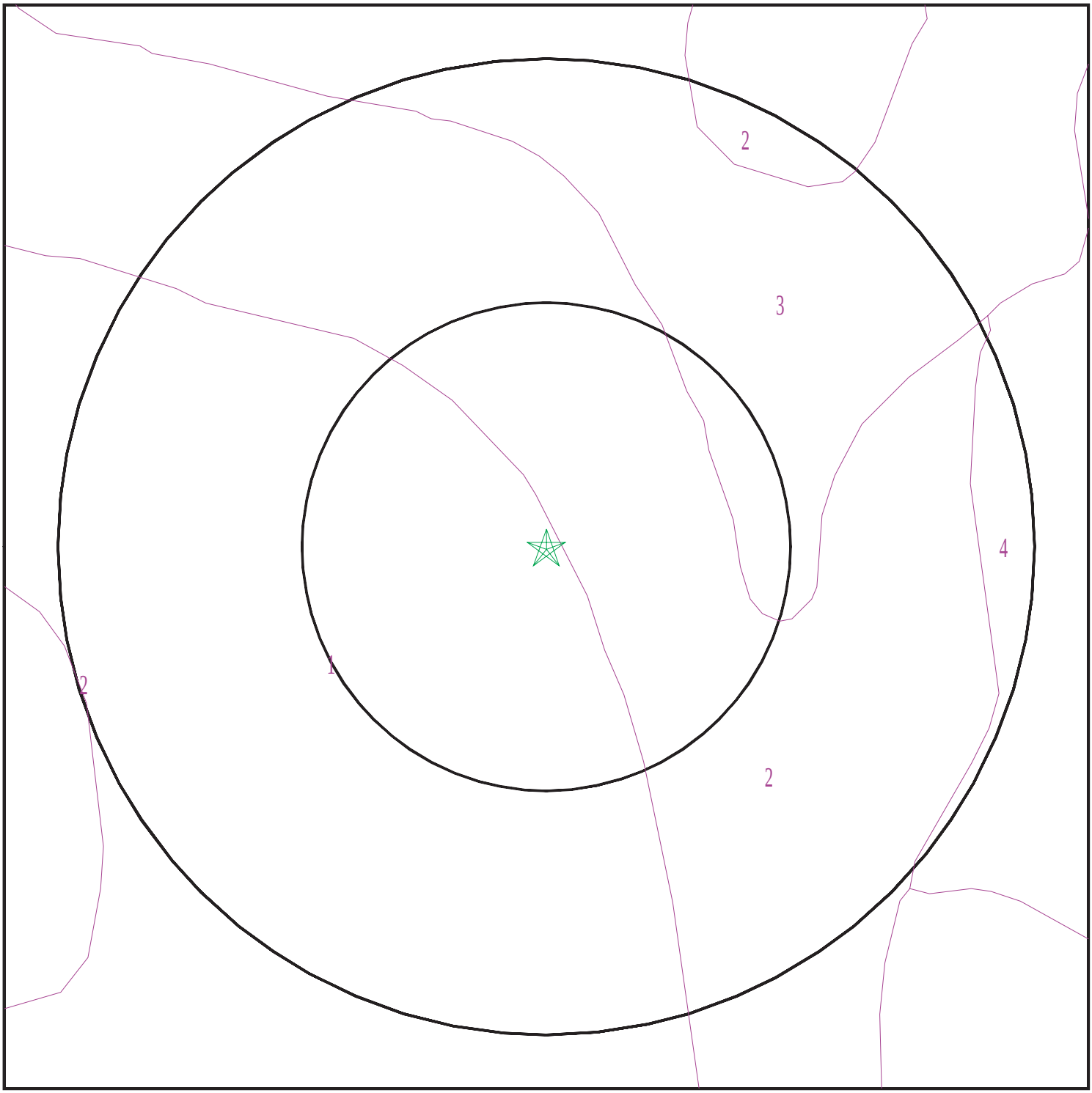
Era:	Mesozoic
System:	Cretaceous
Series:	Upper Cretaceous
Code:	uK *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 06938050.2r



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Vallejo Properties - Glen Cove	CLIENT:	Engeo Inc.
ADDRESS:	Not Reported Vallejo CA 94591	CONTACT:	Jenna Keith
		INQUIRY #:	06938050.2r
LAT/LONG:	38.081568 / 122.201037	DATE:	April 13, 2022 11:51 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Dibble

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	3 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:
2	3 inches	20 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:
3	20 inches	24 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:

Soil Map ID: 2

Soil Component Name: Dibble

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:
2	12 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:
3	29 inches	33 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: 4 Min: 1.4	Max: Min:

Soil Map ID: 3

Soil Component Name: Dibble

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:
2	12 inches	29 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:
3	29 inches	33 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	Not reported	Max: Min:	Max: Min:

Soil Map ID: 4

Soil Component Name: Joice

Soil Surface Texture: muck

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Very poorly drained

Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 52 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	20 inches	muck	A-8	Highly organic soils, Peat.	Max: 141 Min: 42	Max: Min:
2	20 inches	59 inches	muck	A-8	Highly organic soils, Peat.	Max: 141 Min: 42	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

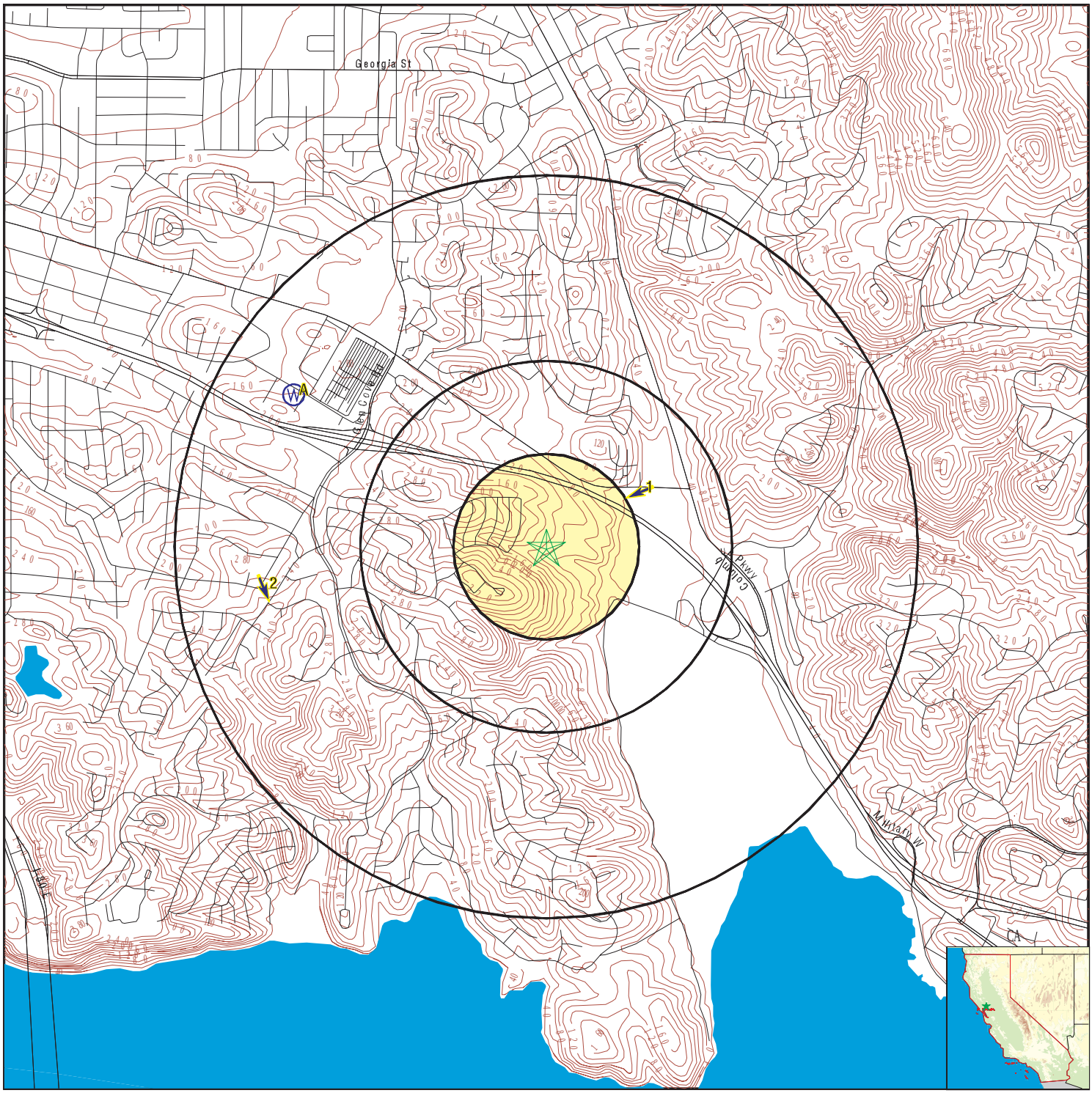
MAP ID	WELL ID	LOCATION FROM TP
A3	CAUSGS000002113	1/2 - 1 Mile WNW
A4	CAUSGS000001244	1/2 - 1 Mile WNW
A5	CAUSGSN00008707	1/2 - 1 Mile WNW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

PHYSICAL SETTING SOURCE MAP - 06938050.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME: Vallejo Properties - Glen Cove	CLIENT: Engeo Inc.
ADDRESS: Not Reported Vallejo CA 94591	CONTACT: Jenna Keith INQUIRY #: 06938050.2r
LAT/LONG: 38.081568 / 122.201037	DATE: April 13, 2022 11:51 am

Copyright © 2022 EDR, Inc. © 2015 TomTom Rel. 2015.

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

			Database	EDR ID Number
1 **ENE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported WSW 15 25 Not Reported 10/16/1995	**AQUIFLOW**	**53629**
2 **West** **1/2 - 1 Mile** **Higher**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported SSE 6.5 9.0 Not Reported 07/20/1998	**AQUIFLOW**	**52294**
A3 **WNW** **1/2 - 1 Mile** **Higher**			**CA WELLS**	**CAUSGS000002113**
A4 **WNW** **1/2 - 1 Mile** **Higher**			**CA WELLS**	**CAUSGS000001244**
A5 **WNW** **1/2 - 1 Mile** **Higher**			**CA WELLS**	**CAUSGSN00008707**

Well ID: USGS-380515122124801 Well Type: UNK
Source: United States Geological Survey
Other Name: USGS-380515122124801 GAMA PFAS Testing: Not Reported
Groundwater Quality Data: https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=USGSNEW&samp_date=&global_id=&assigned_name=USGS-380515122124801&store_num=
GeoTracker Data: Not Reported

			Database	EDR ID Number
1G **ENE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported WSW 15 25 Not Reported 10/16/1995	**AQUIFLOW**	**53629**
2G **West** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Shallow Water Depth: Deep Water Depth: Average Water Depth: Date:	Not Reported SSE 6.5 9.0 Not Reported 07/20/1998	**AQUIFLOW**	**52294**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
94591	13	2

Federal EPA Radon Zone for SOLANO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 94591

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.500 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program
State Water Resources Control Board
Telephone: 916-341-5577
The GAMA Program is Californias comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Heath Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations
Source: Dept of Conservation, Geologic Energy Management Division
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

Â© 2015 TomTom North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

APPENDIX B

FIRST AMERICAN TITLE COMPANY

Preliminary Title Report

First American Title

First American Title Company

1250 Corona Pointe Court, Suite 200
Corona, CA 92879

Customer Reference:

Order Number: OSA-6781631 (RA)

Title Officer: Ryan Achterberg
Phone: (949)299-4950
Fax No.: (714)824-5946
E-Mail: rachterberg@firstam.com

Escrow Officer: Jeanne Gould
Phone: (949)885-2405
Fax No.: (714)913-6372
E-Mail: jagould@firstam.com

Buyer:
Owner: The Timothy F. Wei Trust dated April 1, 2007 and The Terrence F. Wei Trust dated March 18, 2007 and The Tammy F. Dong Trust dated March 17, 2007 and The Tina T. Dong Trust dated February 26, 2007 and The Litton L. Chen Trust dated March 18, 2007 and The Tiffany L. Chen Trust dated April 3, 2007 and The Thomas L. Chen Trust dated March 14, 2007 and The Tyler C. Chuang Trust dated December 31, 2008 and The Troy Chuang Trust dated December 28, 2012

PRELIMINARY REPORT

In response to the above referenced application for a policy of title insurance, this company hereby reports that it is prepared to issue, or cause to be issued, as of the date hereof, a Policy or Policies of Title Insurance describing the land and the estate or interest therein hereinafter set forth, insuring against loss which may be sustained by reason of any defect, lien or encumbrance not shown or referred to as an Exception below or not excluded from coverage pursuant to the printed Schedules, Conditions and Stipulations of said Policy forms.

The printed Exceptions and Exclusions from the coverage and Limitations on Covered Risks of said policy or policies are set forth in Exhibit A attached. *The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than that set forth in the arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties*. Limitations on Covered Risks applicable to the CLTA and ALTA Homeowner's Policies of Title Insurance which establish a Deductible Amount and a Maximum Dollar Limit of Liability for certain coverages are also set forth in Exhibit A. Copies of the policy forms should be read. They are available from the office which issued this report.

Please read the exceptions shown or referred to below and the exceptions and exclusions set forth in Exhibit A of this report carefully. The exceptions and exclusions are meant to provide you with notice of matters which are not covered under the terms of the title insurance policy and should be carefully considered.

It is important to note that this preliminary report is not a written representation as to the condition of title and may not list all liens, defects, and encumbrances affecting title to the land.

Please be advised that any provision contained in this document, or in a document that is attached, linked or referenced in this document, that under applicable law illegally discriminates against a class of individuals based upon personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or any other legally protected class, is illegal and unenforceable by law.

This report (and any supplements or amendments hereto) is issued solely for the purpose of facilitating the issuance of a policy of title insurance and no liability is assumed hereby. If it is desired that liability be assumed prior to the issuance of a policy of title insurance, a Binder or Commitment should be requested.

Dated as of February 04, 2022 at 7:30 A.M.

The form of Policy of title insurance contemplated by this report is:

To Be Determined

A specific request should be made if another form or additional coverage is desired.

Title to said estate or interest at the date hereof is vested in:

TIMOTHY WEI, AS TRUSTEE OF THE TIMOTHY F. WEI TRUST DATED APRIL 1, 2007, AS TO AN UNDIVIDED 1/9 INTEREST; TERRENCE F. WEI, AS TRUSTEE OF THE TERRENCE F. WEI TRUST DATED MARCH 18, 2007; AS TO AN UNDIVIDED 1/9 INTEREST; TAMMY F. DONG, AS TRUSTEE OF THE TAMMY F. DONG TRUST DATED MARCH 17, 2007, AS TO AN UNDIVIDED 1/9 INTEREST; TINA T. DONG, AS TRUSTEE OF THE TINA T. DONG TRUST DATED FEBRUARY 26, 2007, AS TO AN UNDIVIDED 1/9 INTEREST; LITTON L. CHEN, AS TRUSTEE OF THE LITTON L. CHEN TRUST DATED MARCH 18, 2007, AS AMENDED, AS TO AN UNDIVIDED 1/9 INTEREST; TIFFANY CHEN HERRERO, AS TRUSTEE OF THE TIFFANY L. CHEN TRUST DATED APRIL 3, 2007, AS AMENDED, AS TO AN UNDIVIDED 1/9 INTEREST; THOMAS L. CHEN, AS TRUSTEE OF THE THOMAS L. CHEN TRUST DATED MARCH 14, 2007, AS TO AN UNDIVIDED 1/9 INTEREST; TYLER C. CHUANG, MIKE M. CHUANG AND MARIE W. CHUANG, AS CO-TRUSTEES OF THE TYLER C. CHUANG TRUST DATED DECEMBER 31, 2008, AS TO AN UNDIVIDED 1/9 INTEREST; TROY CHUANG, MIKE M. CHUANG AND MARIE W. CHUANG, AS CO-TRUSTEES OF THE TROY CHUANG TRUST DATED DECEMBER 28, 2012, AS TO AN UNDIVIDED 1/9 INTEREST; ALL AS TENANTS IN COMMON

The estate or interest in the land hereinafter described or referred to covered by this Report is:

A fee as to Parcel(s) One and Two, an easement as to Parcel(s) Three.

The Land referred to herein is described as follows:

(See attached Legal Description)

At the date hereof exceptions to coverage in addition to the printed Exceptions and Exclusions in said policy form would be as follows:

1. General and special taxes and assessments for the fiscal year 2022-2023, a lien not yet due or payable.

2. General and special taxes and assessments for the fiscal year 2021-2022.
   First Installment: $1,845.49, PAID
   Penalty: $0.00
   Second Installment: $1,845.49, OPEN
   Penalty: $0.00
   Tax Rate Area: 7016
   A. P. No.: 0079-120-100

   Affects: Parcel One

3. General and special taxes and assessments for the fiscal year 2021-2022.
   First Installment: $227.70, PAID
   Penalty: $0.00
   Second Installment: $227.70, OPEN
   Penalty: $0.00
   Tax Rate Area: 7047
   A. P. No.: 0079-171-170

   Affects: Parcel Two

4. The Land lies within the boundaries of proposed community facilities District No. 2014-1 (Clean Energy), as disclosed by a map filed August 27, 2015 in Book 0025, Page 55 of maps of assessment and community facilities districts and recorded August 27, 2015 as Instrument No. 201500078287 of Official Records.

5. The lien of supplemental taxes, if any, assessed pursuant to Chapter 3.5 commencing with Section 75 of the California Revenue and Taxation Code.

6. The fact that the land lies within the boundaries of the Southeast Vallejo Redevelopment Project Area, as disclosed by various documents of record.

7. Abutter's rights of ingress and egress to or from the freeway have been relinquished in the document recorded October 20, 1958 as Book 944, Page 392 of Official Records.

   Affects Parcel One

8. A waiver of any claims for damages by reason of the location, construction, landscaping or maintenance of a contiguous freeway, highway or roadway, as contained in the document recorded October 20, 1958 as Instrument No. 17024, Book 944, Page 392 of Official Records.

   Affects Parcel One

9. An easement for ingress and egress and incidental purposes, recorded August 6, 1973 as Book 1844, Page 331 of Official Records.
   In Favor of: City of Vallejo
   Affects: A Portion of Said Land

   The location of the easement cannot be determined from record information.

10. Covenants, conditions, restrictions and easements in the document recorded May 16, 1979 as Book 1979, Page 38579 of Official Records, which provide that a violation thereof shall not defeat or render invalid the lien of any first mortgage or deed of trust made in good faith and for value, but deleting any covenant, condition, or restriction, if any, indicating a preference, limitation, or discrimination based on race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, familial status, marital status, disability, handicap, veteran or military status, genetic information, national origin, source of income as defined in subdivision (p) of Section 12955, or ancestry, to the extent that such covenants, conditions or restrictions violate applicable state or federal laws. Lawful restrictions under state and federal law on the age of occupants in senior housing or housing for older persons shall not be construed as restrictions based on familial status.

    Document(s) declaring modifications thereof recorded October 25, 1979 as Book 1979, Page 91941 of Official Records.

    Affects Parcel Two

11. An easement shown or dedicated on the Map as referred to in the legal description

    For: Access, Landscape maintenance and incidental purposes.

    Affects: Parcel Two

12. Abutter's rights of ingress and egress to or from Shady Lane, have been dedicated or relinquished on the filed Map.

    Affects: Parcel Two

13. The terms and provisions contained in the document entitled Agreement To Maintain Area Within Landscape Maintenance District recorded May 29, 1987 as Page 71802 of Official Records.

    Affects Parcel Two

14. Any easements and/or servitudes affecting easement parcel(s) Three herein described.

15. Any right, title or interest of the spouse (if any) of Litton Chen, Tiffany Chen aka Tiffany Herrero and Timothy Wei.

16. Water rights, claims or title to water, whether or not shown by the Public Records.

17. Rights of parties in possession.

Prior to the issuance of any policy of title insurance, the Company will require:

18. A deed from the spouse (if any) of Litton Chen, Tiffany Chen aka Tiffany Herrero and Timothy Wei be recorded in the public records, or the joinder of the spouse named herein on any conveyance, encumbrance or lease to be executed by said married person.
    The deed should contain the following statement:
    "It is the express intent of the grantor, being the spouse of the grantee, to convey all right, title and interest of the grantor, community or otherwise, in and to the herein described property to the grantee as his/her sole and separate property."

19. With respect to the trust referred to in the vesting:
a. A certification pursuant to Section 18100.5 of the California Probate Code in a form satisfactory to the Company.
b. Copies of those excerpts from the original trust documents and amendments thereto which designate the trustee and confer upon the trustee the power to act in the pending transaction.
c. Other requirements which the Company may impose following its review of the material required herein and other information which the Company may require.

INFORMATIONAL NOTES

Note: The policy to be issued may contain an arbitration clause. When the Amount of Insurance is less than the certain dollar amount set forth in any applicable arbitration clause, all arbitrable matters shall be arbitrated at the option of either the Company or the Insured as the exclusive remedy of the parties. If you desire to review the terms of the policy, including any arbitration clause that may be included, contact the office that issued this Commitment or Report to obtain a sample of the policy jacket for the policy that is to be issued in connection with your transaction.

1. The property covered by this report is vacant land.

2. According to the public records, there has been no conveyance of the land within a period of twenty-four months prior to the date of this report, except as follows:

   None

3. We find no outstanding voluntary liens of record affecting subject property. Disclosure should be made concerning the existence of any unrecorded lien or other indebtedness which could give rise to any possible security interest in the subject property.

The map attached, if any, may or may not be a survey of the land depicted hereon. First American expressly disclaims any liability for loss or damage which may result from reliance on this map except to the extent coverage for such loss or damage is expressly provided by the terms and provisions of the title insurance policy, if any, to which this map is attached.

LEGAL DESCRIPTION

Real property in the City of Vallejo, County of Solano, State of California, described as follows:

PARCEL ONE: (APN: 0079-120-100)

BEGINNING AT A POINT AT THE INTERSECTION OF THE NORTHWESTERLY LINE OF THAT CERTAIN PARCEL OF LAND, DESCRIBED IN DEED TO FRANK SPENGER, ET UX, RECORDED JULY 26, 1954, OFFICIAL RECORDS, IN BOOK 724, PAGE 474, SOLANO COUNTY RECORDS, WITH THE GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND, DESCRIBED IN DEED TO THE STATE OF CALIFORNIA FOR INTERSTATE FREEWAY 680 RECORDED IN BOOK 944, OFFICIAL RECORDS, PAGE 392, SOLANO COUNTY RECORDS; THENCE ALONG SAID NORTHWESTERLY LINE OF SPENGER, SOUTH 21° 58' 48" WEST 266.80 FEET AND SOUTH 22° 16' 28" WEST, 1675.30 FEET TO THE EASTERLY TERMINUS OF THE COMMON BOUNDARY LINE DESCRIBED IN THAT CERTAIN BOUNDARY AGREEMENT EXECUTED BY MARY A. SILVA, ET AL, DATED MAY 11, 1972 AND RECORDED MAY 30, 1972 IN BOOK 1754 OF OFFICIAL RECORDS, PAGE 21, AS INSTRUMENT NO. 12027; THENCE ALONG SAID COMMON BOUNDARY NORTH 59° 00' 20" WEST, 453.83 FEET; THENCE LEAVING SAID COMMON BOUNDARY AND RUNNING ALONG THE FOLLOWING COURSES AND DISTANCES: NORTH 30° 52' 36" EAST, 819.08 FEET; NORTH 59° 07' 24" WEST, 488.00 FEET; NORTH 16° 36' 03" WEST, 541.10 FEET; NORTH 26° 48' 16" WEST, 500.00 FEET; TO THE INTERSECTION THEREOF WITH THE SAID GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND DESCRIBED IN DEED TO THE STATE OF CALIFORNIA; THENCE ALONG THE SAID GENERAL SOUTHERLY LINE THE FOLLOWING COURSES AND DISTANCES: NORTH 83° 15' 11" EAST 107.36 FEET; SOUTH 45° 09' 17"; EAST, 241.31 FEET; SOUTH 78° 53' 57" EAST, 676.07 FEET; NORTH 81° 38' 30" EAST, 324.45 FEET, AND SOUTH 64° 40' 59" EAST, 265.86 FEET TO THE POINT OF BEGINNING.

EXCEPTING THEREFROM:

THAT PORTION DESCRIBED IN THE DEED OF PARTIAL RECONVEYANCE RECORDED JULY 26, 1973 IN BOOK 1842, PAGE 355 AS INSTRUMENT NO. 18396, SOLANO COUNTY RECORDS AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT AT THE INTERSECTION OF THE SOUTHEASTERLY LINE OF COUNTY ROAD NO. 267, AS IT PRESENTLY EXISTS, 50 FEET IN WIDTH, SAID COUNTY ROAD NO. 267 ALSO KNOWN AS GLEN COVE ROAD, WITH THE GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF CALIFORNIA FOR INTERSTATE 680 FREEWAY BY DEED RECORDED IN BOOK 944 OF OFFICIAL RECORDS, PAGE 392, INSTRUMENT NO. 17024, SOLANO COUNTY RECORDS; THENCE ALONG THE SAID GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF CALIFORNIA, NORTH 71° 44' 04" EAST, 132.30 FEET TO THE BEGINNING OF A NON-TANGENT CURVE WHOSE RADIAL BEARS SOUTH 0° 48' 57" EAST FROM ITS CENTER; THENCE ALONG THE SAID NON-TANGENT CURVE TO THE LEFT, CONCAVED TO THE NORTHWEST, HAVING A RADIUS OF 310 FEET, THROUGH A CENTRAL ANGLE OF 47° 53' 56", FOR AN ARC LENGTH OF 259.16 FEET TO THE END OF THE NON-TANGENT CURVE WHOSE RADIAL BEARS SOUTH 48° 42' 53" EAST FROM ITS CENTER; THENCE CONTINUING ALONG THE SAID GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF CALIFORNIA, SOUTH 70° 17' 14" EAST, 628.79 FEET; NORTH 88° 35' 56" EAST, 306.96 FEET; SOUTH 66° 02' 26" EAST, 308.06 FEET; NORTH 83° 15' 11" EAST, 522.00 FEET TO THE TRUE POINT OF BEGINNING; THENCE LEAVING THE SAID GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF CALIFORNIA, SOUTH 26° 48' 16" EAST, 500.00 FEET; SOUTH 16° 36' 03" EAST, 541.1 FEET; SOUTH 59° 07' 24" EAST, 488.00 FEET; NORTH 3° 27' 42" EAST, 945.96 FEET TO THE INTERSECTION THEREOF WITH THE SAID GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF

CALIFORNIA; THENCE ALONG THE SAID GENERAL SOUTHERLY LINE OF THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF CALIFORNIA, NORTH 78° 53' 57" WEST, 589.34 FEET; NORTH 45° 09' 17" WEST, 241.31 FEET; SOUTH 83° 15' 11" WEST, 107.36 FEET TO THE TRUE POINT OF BEGINNING.

PARCEL TWO: (APN: 0079-171-170)

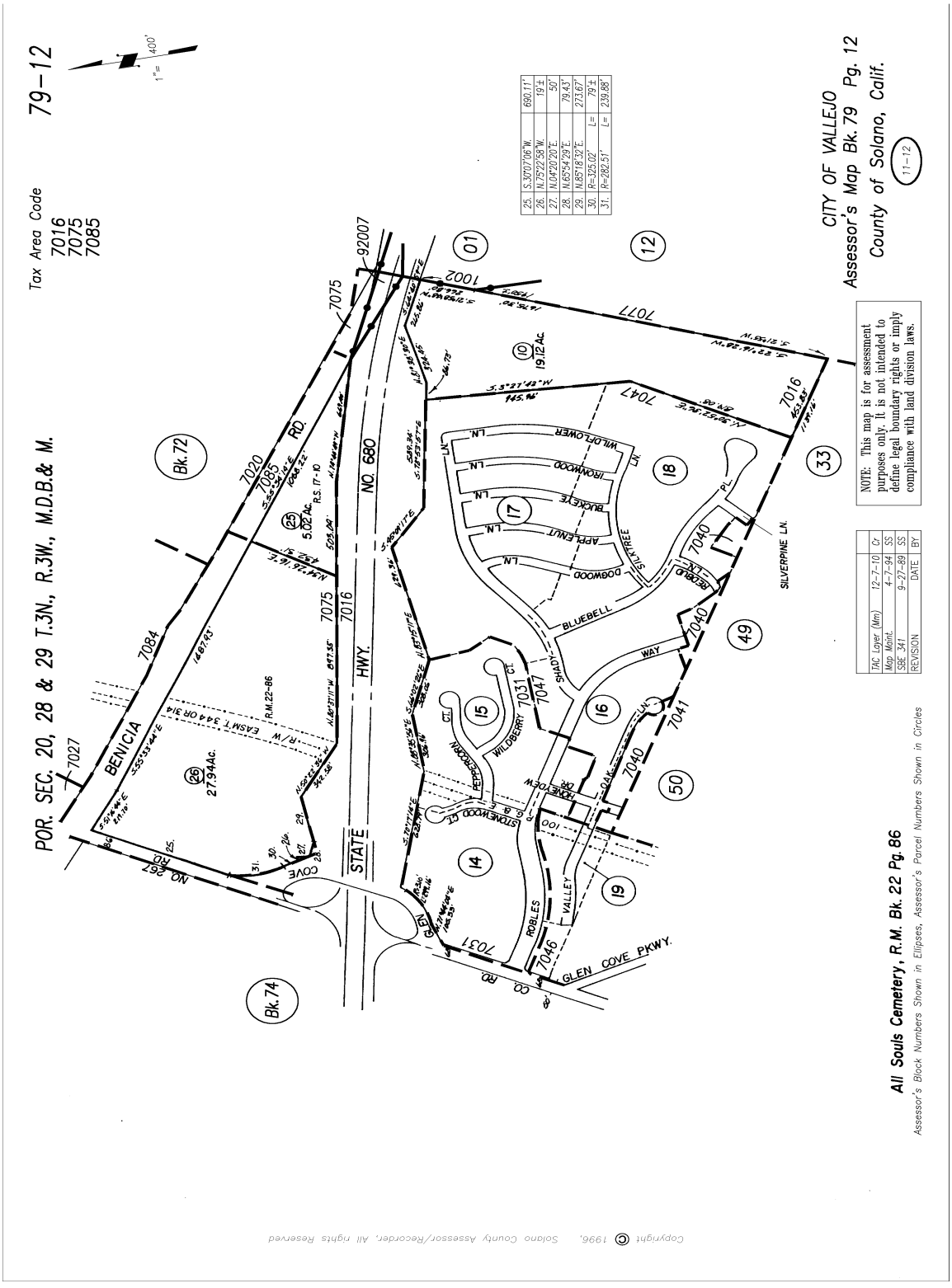
BEING A PORTION OF LOT 15, AS SAID LOT IS SHOWN UPON THE MAP OF GLEN COVE, UNIT II, RECORDED MAY 16, 1979, IN BOOK 36 OF MAPS AT PAGES 93 THROUGH 104, SOLANO COUNTY RECORDS, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING ON THE NORTHERLY LINE OF SHADY LANE AT THE INTERSECTION THERETO WITH THE NORTHERLY PROLONGATION OF THE CENTERLINE OF IRONWOOD LANE, AS SAID LANES AND CENTERLINE ARE SHOWN UPON SAID MAP OF GLEN COVE, UNIT II; THENCE FROM SAID POINT OF BEGINNING ALONG SAID NORTHERLY LINE NORTH 88° 41' 10" WEST 37.00 FEET; THENCE LEAVING SAID NORTHERLY LINE AT RIGHT ANGLES NORTH 1° 18' 50" EAST 128 FEET, MORE OR LESS, TO THE NORTHERLY LINE OF SAID LOT 15; THENCE ALONG SAID NORTHERLY LINE OF LOT 15 SOUTH 78° 47' 27" EAST 450 FEET, MORE OR LESS TO THE NORTHEASTERLY CORNER THEREOF; THENCE ALONG THE EASTERLY LINE OF SAID LOT 15 SOUTH 3° 34' 12" WEST 69.26 FEET TO THE SOUTHEASTERLY CORNER THEREOF, ALSO BEING THE NORTHEASTERLY CORNER OF LOT 16, AS SAID LOT 16 IS SHOWN UPON SAID MAP; THENCE ALONG THE COMMON LINE BETWEEN SAID LOTS 15 AND 16 NORTH 88° 41' 10" WEST 213.67 FEET TO THE NORTHWEST CORNER OF SAID LOT 16 IN THE EASTERLY LINE OF WILDFLOWER AVENUE AS SHOWN UPON SAID MAP; THENCE ALONG THE NORTHEASTERLY LINE OF SAID WILDFLOWER AVENUE IN A NORTHWESTERLY DIRECTION ON A TANGENT CURVE TO THE LEFT, HAVING A RADIUS OF 20.00 FEET, THROUGH A CENTRAL ANGLE OF 90° 00' 00", AN ARC DISTANCE OF 31.42 FEET TO SAID NORTHERLY LINE OF SHADY LANE; THENCE ALONG SAID LAST DESCRIBED NORTHERLY LINE NORTH 88° 41' 10" WEST 172.71 FEET TO THE POINT OF BEGINNING.

PARCEL THREE:

AN ACCESS EASEMENT OVER THAT REAL PROPERTY BEING A PORTION OF LOT 16, UNIT II OF THE GLEN COVE TRACT, IN THE CITY OF VALLEJO, COUNTY OF SOLANO, STATE OF CALIFORNIA, MAP RECORDED IN BOOK 36 OF MAPS, PAGES 93 THROUGH 104, IN THE OFFICE OF THE COUNTY RECORDER OF THE COUNTY OF SOLANO, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 16; THENCE ALONG THE NORTHERLY LOT LINE SOUTH 88° 41' 10" EAST, 25.00 FEET; THENCE SOUTH 54° 04' 45" WEST, 31.40 FEET TO A POINT ON THE WESTERLY LOT LINE; THENCE ALONG SAID WESTERLY LINE NORTH 1° 18' 50" EAST, 19.00 FEET TO THE POINT OF BEGINNING, AS GRANTED IN THE DEED FROM DONALD L. BREN COMPANY, RECORDED NOVEMBER 19, 1982 AT PAGE 76541, SOLANO COUNTY RECORDS, INSTRUMENT NO. 43623.



Copyright © 1996, Solano County Assessor/Recorder. All rights Reserved

NOTICE

Section 12413.1 of the California Insurance Code, effective January 1, 1990, requires that any title insurance company, underwritten title company, or controlled escrow company handling funds in an escrow or sub-escrow capacity, wait a specified number of days after depositing funds, before recording any documents in connection with the transaction or disbursing funds. This statute allows for funds deposited by wire transfer to be disbursed the same day as deposit. In the case of cashier's checks or certified checks, funds may be disbursed the next day after deposit. In order to avoid unnecessary delays of three to seven days, or more, please use wire transfer, cashier's checks, or certified checks whenever possible.

EXHIBIT A
LIST OF PRINTED EXCEPTIONS AND EXCLUSIONS (BY POLICY TYPE)

CLTA STANDARD COVERAGE POLICY – 1990

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building or zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien, or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
   (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
   (a) whether or not recorded in the public records at Date of Policy, but created, suffered, assumed or agreed to by the insured claimant;
   (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
   (c) resulting in no loss or damage to the insured claimant;
   (d) attaching or created subsequent to Date of Policy; or
   (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the insured mortgage or for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with the applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any claim, which arises out of the transaction vesting in the insured the estate of interest insured by this policy or the transaction creating the interest of the insured lender, by reason of the operation of federal bankruptcy, state insolvency or similar creditors' rights laws.

EXCEPTIONS FROM COVERAGE - SCHEDULE B, PART I

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
   Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public, records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the public records at Date of Policy.

CLTA/ALTA HOMEOWNER'S POLICY OF TITLE INSURANCE (12-02-13)
EXCLUSIONS

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of those portions of any law or government regulation concerning:
   a. building;
   b. zoning;
   c. land use;
   d. improvements on the Land;
   e. land division; and
   f. environmental protection.
   This Exclusion does not limit the coverage described in Covered Risk 8.a., 14, 15, 16, 18, 19, 20, 23 or 27.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not limit the coverage described in Covered Risk 14 or 15.
3. The right to take the Land by condemning it. This Exclusion does not limit the coverage described in Covered Risk 17.
4. Risks:
   a. that are created, allowed, or agreed to by You, whether or not they are recorded in the Public Records;
   b. that are Known to You at the Policy Date, but not to Us, unless they are recorded in the Public Records at the Policy Date;
   c. that result in no loss to You; or
   d. that first occur after the Policy Date - this does not limit the coverage described in Covered Risk 7, 8.e., 25, 26, 27 or 28.
5. Failure to pay value for Your Title.
6. Lack of a right:
   a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
   b. in streets, alleys, or waterways that touch the Land.
   This Exclusion does not limit the coverage described in Covered Risk 11 or 21.
7. The transfer of the Title to You is invalid as a preferential transfer or as a fraudulent transfer or conveyance under federal bankruptcy, state insolvency, or similar creditors' rights laws.
8. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
9. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

LIMITATIONS ON COVERED RISKS

Your insurance for the following Covered Risks is limited on the Owner's Coverage Statement as follows:
For Covered Risk 16, 18, 19, and 21 Your Deductible Amount and Our Maximum Dollar Limit of Liability shown in Schedule A.
The deductible amounts and maximum dollar limits shown on Schedule A are as follows:

	Your Deductible Amount	Our Maximum Dollar Limit of Liability
Covered Risk 16:	1% of Policy Amount Shown in Schedule A or $2,500 (whichever is less)	$10,000
Covered Risk 18:	1% of Policy Amount Shown in Schedule A or $5,000 (whichever is less)	$25,000
Covered Risk 19:	1% of Policy Amount Shown in Schedule A or $5,000 (whichever is less)	$25,000
Covered Risk 21:	1% of Policy Amount Shown in Schedule A or $2,500 (whichever is less)	$5,000

2006 ALTA LOAN POLICY (06-17-06)
EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to

   (i) the occupancy, use, or enjoyment of the Land;
   (ii) the character, dimensions, or location of any improvement erected on the Land;

(iii) the subdivision of land; or
(iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
(b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
(a) created, suffered, assumed, or agreed to by the Insured Claimant;
(b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
(c) resulting in no loss or damage to the Insured Claimant;
(d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 13, or 14); or
(e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law.
6. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
(a) a fraudulent conveyance or fraudulent transfer, or
(b) a preferential transfer for any reason not stated in Covered Risk 13(b) of this policy.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the Insured Mortgage in the Public Records. This Exclusion does not modify or limit the coverage provided under Covered Risk 11(b).

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

[Except as provided in Schedule B - Part II,[t[or T]his policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:

[PART I

[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the Public Records at Date of Policy.

PART II

In addition to the matters set forth in Part I of this Schedule, the Title is subject to the following matters, and the Company insures against loss or damage sustained in the event that they are not subordinate to the lien of the Insured Mortgage:]

2006 ALTA OWNER'S POLICY (06-17-06)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to

(i) the occupancy, use, or enjoyment of the Land;
(ii) the character, dimensions, or location of any improvement erected on the Land;
(iii) the subdivision of land; or
(iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5.
(b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 6.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
(a) created, suffered, assumed, or agreed to by the Insured Claimant;
(b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
(c) resulting in no loss or damage to the Insured Claimant;
(d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 9 or 10); or
(e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Title.
4. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction vesting the Title as shown in Schedule A, is
(a) a fraudulent conveyance or fraudulent transfer, or
(b) a preferential transfer for any reason not stated in Covered Risk 9 of this policy.
5. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching between Date of Policy and the date of recording of the deed or other instrument of transfer in the Public Records that vests Title as shown in Schedule A.

The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, and the Company will not pay costs, attorneys' fees or expenses, that arise by reason of:
[The above policy form may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following Exceptions from Coverage:

1. (a) Taxes or assessments that are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the Public Records; (b) proceedings by a public agency that may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the Public Records.
2. Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land.
3. Easements, liens or encumbrances, or claims thereof, not shown by the Public Records.
4. Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b), or (c) are shown by the Public Records.
6. Any lien or right to a lien for services, labor or material unless such lien is shown by the Public Records at Date of Policy.
7. [Variable exceptions such as taxes, easements, CC&R's, etc. shown here.]

ALTA EXPANDED COVERAGE RESIDENTIAL LOAN POLICY (07-26-10)

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy, and the Company will not pay loss or damage, costs, attorneys' fees, or expenses that arise by reason of:

1. (a) Any law, ordinance, permit, or governmental regulation (including those relating to building and zoning) restricting, regulating, prohibiting, or relating to

(i) the occupancy, use, or enjoyment of the Land;
(ii) the character, dimensions, or location of any improvement erected on the Land;
(iii) the subdivision of land; or
(iv) environmental protection;

or the effect of any violation of these laws, ordinances, or governmental regulations. This Exclusion 1(a) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d), 14 or 16.
(b) Any governmental police power. This Exclusion 1(b) does not modify or limit the coverage provided under Covered Risk 5, 6, 13(c), 13(d),

14 or 16.

2. Rights of eminent domain. This Exclusion does not modify or limit the coverage provided under Covered Risk 7 or 8.
3. Defects, liens, encumbrances, adverse claims, or other matters
   (a) created, suffered, assumed, or agreed to by the Insured Claimant;
   (b) not Known to the Company, not recorded in the Public Records at Date of Policy, but Known to the Insured Claimant and not disclosed in writing to the Company by the Insured Claimant prior to the date the Insured Claimant became an Insured under this policy;
   (c) resulting in no loss or damage to the Insured Claimant;
   (d) attaching or created subsequent to Date of Policy (however, this does not modify or limit the coverage provided under Covered Risk 11, 16, 17, 18, 19, 20, 21, 22, 23, 24, 27 or 28); or
   (e) resulting in loss or damage that would not have been sustained if the Insured Claimant had paid value for the Insured Mortgage.
4. Unenforceability of the lien of the Insured Mortgage because of the inability or failure of an Insured to comply with applicable doing-business laws of the state where the Land is situated.
5. Invalidity or unenforceability in whole or in part of the lien of the Insured Mortgage that arises out of the transaction evidenced by the Insured Mortgage and is based upon usury or any consumer credit protection or truth-in-lending law. This Exclusion does not modify or limit the coverage provided in Covered Risk 26.
6. Any claim of invalidity, unenforceability or lack of priority of the lien of the Insured Mortgage as to Advances or modifications made after the Insured has Knowledge that the vestee shown in Schedule A is no longer the owner of the estate or interest covered by this policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11.
7. Any lien on the Title for real estate taxes or assessments imposed by governmental authority and created or attaching subsequent to Date of Policy. This Exclusion does not modify or limit the coverage provided in Covered Risk 11(b) or 25.
8. The failure of the residential structure, or any portion of it, to have been constructed before, on or after Date of Policy in accordance with applicable building codes. This Exclusion does not modify or limit the coverage provided in Covered Risk 5 or 6.
9. Any claim, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that the transaction creating the lien of the Insured Mortgage, is
   (a) a fraudulent conveyance or fraudulent transfer, or
   (b) a preferential transfer for any reason not stated in Covered Risk 27(b) of this policy.
10. Contamination, explosion, fire, flooding, vibration, fracturing, earthquake, or subsidence.
11. Negligence by a person or an Entity exercising a right to extract or develop minerals, water, or any other substances.

First American Title™

Privacy Notice

Effective: October 1, 2019

Notice Last Updated: January 1, 2022

This Privacy Notice describes how First American Financial Corporation and its subsidiaries and affiliates (together referred to as "First American," "we," "us," or "our") collect, use, store, and share your information with the exception that a subsidiary or affiliate has their own privacy policy, that policy governs. This Privacy Notice applies to information we receive from you offline only, as well as from third parties, when you interact with us and/or use and access our services and products ("Products"). For more information about our privacy practices, including our online practices, please visit https://www.firstam.com/privacy-policy/. The practices described in this Privacy Notice are subject to applicable laws in the places in which we operate.

What Type Of Information Do We Collect About You? We collect a variety of categories of information about you. To learn more about the categories of information we collect, please visit https://www.firstam.com/privacy-policy/.

How Do We Collect Your Information? We collect your information: (1) directly from you; (2) automatically when you interact with us; and (3) from third parties, including business parties and affiliates.

How Do We Use Your Information? We may use your information in a variety of ways, including but not limited to providing the services you have requested, fulfilling your transactions, comply with relevant laws and our policies, and handling a claim. To learn more about how we may use your information, please visit https://www.firstam.com/privacy-policy/.

How Do We Share Your Information? We do not sell your personal information. We only share your information, including to subsidiaries, affiliates, and to unaffiliated third parties: (1) with your consent; (2) in a business transfer; (3) to service providers; and (4) for legal process and protection. To learn more about how we share your information, please visit https://www.firstam.com/privacy-policy/.

How Do We Store and Protect Your Information? The security of your information is important to us. That is why we take commercially reasonable steps to make sure your information is protected. We use our best efforts to maintain commercially reasonable technical, organizational, and physical safeguards, consistent with applicable law, to protect your information.

How Long Do We Keep Your Information? We keep your information for as long as necessary in accordance with the purpose for which it was collected, our business needs, and our legal and regulatory obligations.

Your Choices We provide you the ability to exercise certain controls and choices regarding our collection, use, storage, and sharing of your information. You can learn more about your choices by visiting https://www.firstam.com/privacy-policy/.

International Jurisdictions: Our Products are offered in the United States of America (US), and are subject to US federal, state, and local law. If you are accessing the Products from another country, please be advised that you may be transferring your information to us in the US, and you consent to that transfer and use of your information in accordance with this Privacy Notice. You also agree to abide by the applicable laws of applicable US federal, state, and local laws concerning your use of the Products, and your agreements with us.

We may change this Privacy Notice from time to time. Any and all changes to this Privacy Notice will be reflected on this page, and where appropriate provided in person or by another electronic method. **YOUR CONTINUED USE, ACCESS, OR INTERACTION WITH OUR PRODUCTS OR YOUR CONTINUED COMMUNICATIONS WITH US AFTER THIS NOTICE HAS BEEN PROVIDED TO YOU WILL REPRESENT THAT YOU HAVE READ AND UNDERSTOOD THIS PRIVACY NOTICE.**

Contact Us dataprivacy@firstam.com or toll free at 1-866-718-0097.

© 2022 First American Financial Corporation and/or its affiliates. All rights reserved. NYSE:FAF

First American Title™

For California Residents

If you are a California resident, you may have certain rights under California law, including but not limited to the California Consumer Privacy Act of 2018 ("CCPA"). All phrases used in this section shall have the same meaning as those phrases are used under California law, including the CCPA.

Right to Know. You have a right to request that we disclose the following information to you: (1) the categories of personal information we have collected about or from you; (2) the categories of sources from which the personal information was collected; (3) the business or commercial purpose for such collection and/or disclosure; (4) the categories of third parties with whom we have shared your personal information; and (5) the specific pieces of your personal information we have collected. To submit a verified request for this information, go to our online privacy policy at www.firstam.com/privacy-policy to submit your request or call toll-free at 1-866-718-0097. You may also designate an authorized agent to submit a request on your behalf by going to our online privacy policy at www.firstam.com/privacy-policy to submit your request or by calling toll-free at 1-866-718-0097

Right of Deletion. You also have a right to request that we delete the personal information we have collected from and about you. This right is subject to certain exceptions available under the CCPA and other applicable law. To submit a verified request for deletion, go to our online privacy policy at www.firstam.com/privacy-policy to submit your request or call toll-free at 1-866-718-0097. You may also designate an authorized agent to submit a request on your behalf by going to our online privacy policy at www.firstam.com/privacy-policy to submit your request or by calling toll-free at 1-866-718-0097.

Verification Process. For either a request to know or delete, we will verify your identity before responding to your request. To verify your identity, we will generally match the identifying information provided in your request with the information we have on file about you. Depending on the sensitivity of the information requested, we may also utilize more stringent verification methods to verify your identity, including but not limited to requesting additional information from you and/or requiring you to sign a declaration under penalty of perjury.

Notice of Sale. We do not sell California resident information, nor have we sold California resident information in the past 12 months. To the extent any First American affiliated entity has a different practice, it will be stated in the applicable privacy policy. We have no actual knowledge of selling the information of minors under the age of 16.

Right of Non-Discrimination. You have a right to exercise your rights under California law, including under the CCPA, without suffering discrimination. Accordingly, First American will not discriminate against you in any way if you choose to exercise your rights under the CCPA.

Notice of Collection. To learn more about the categories of personal information we have collected about California residents over the last 12 months, please see "What Information Do We Collect About You" in https://www.firstam.com/privacy-policy. To learn about the sources from which we have collected that information, the business and commercial purpose for its collection, and the categories of third parties with whom we have shared that information, please see "How Do We Collect Your Information", "How Do We Use Your Information", and "How Do We Share Your Information" in https://www.firstam.com/privacy-policy.

Notice of Sale. We have not sold the personal information of California residents in the past 12 months.

Notice of Disclosure. To learn more about the categories of personal information we may have disclosed about California residents in the past 12 months, please see "How Do We Use Your Information" and "How Do We Share Your Information" in https://www.firstam.com/privacy-policy.

© 2022 First American Financial Corporation and/or its affiliates. All rights reserved. NYSE:FAF

APPENDIX C

ENVIRONMENTAL DATA RESOURCES, INC.

Historical Topographic Map Report

Vallejo Properties - Glen Cove

Not Reported

Vallejo, CA 94591

Inquiry Number: 6938050.4

April 13, 2022

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

04/13/22

Site Name:	Client Name:
Vallejo Properties - Glen Cove	Engeo Inc.
Not Reported	2010 Crow Canyon Place
Vallejo, CA 94591	San Ramon, CA 94583
EDR Inquiry # 6938050.4	Contact: Jenna Keith

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Engeo Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		*Coordinates:*	
P.O.#	NA	**Latitude:**	38.081568 38° 4' 54" North
Project:	20164.000.001	**Longitude:**	-122.201037 -122° 12' 4" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	570069.60
		UTM Y Meters:	4215166.56
		Elevation:	110.86' above sea level

Maps Provided:

2018	1950
2015	1947
2012	1942
1980	1940
1973	1902
1968	1901
1959	1898
1952	1896

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

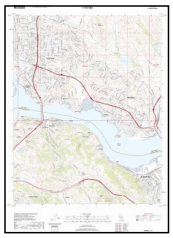
Copyright 2022 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Topo Sheet Key

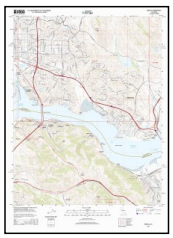
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets



Benicia
2018
7.5-minute, 24000

2015 Source Sheets



Benicia
2015
7.5-minute, 24000

2012 Source Sheets

Benicia
2012
7.5-minute, 24000

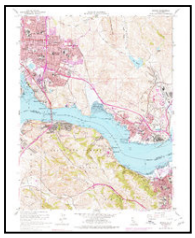
1980 Source Sheets

Benicia
1980
7.5-minute, 24000
Aerial Photo Revised 1979

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1973 Source Sheets

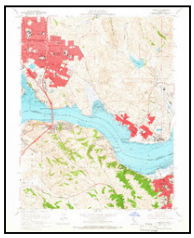


Benicia
1973
7.5-minute, 24000
Aerial Photo Revised 1968

1968 Source Sheets

Benicia
1968
7.5-minute, 24000
Aerial Photo Revised 1968

1959 Source Sheets



Benicia
1959
7.5-minute, 24000
Aerial Photo Revised 1958

1952 Source Sheets

Benicia
1952
7.5-minute, 24000
Aerial Photo Revised 1948

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1950 Source Sheets

Benicia
1950
7.5-minute, 24000
Aerial Photo Revised 1948

1947 Source Sheets

PORT CHICAGO
1947
15-minute, 50000

1942 Source Sheets

Carquinez
1942
15-minute, 62500
Aerial Photo Revised 1937

1940 Source Sheets

Carquinez Strait
1940
15-minute, 62500
Aerial Photo Revised 1940

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1902 Source Sheets

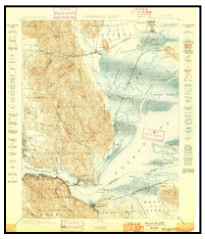
Napa
1902
30-minute, 125000

1901 Source Sheets

Carquinez
1901
15-minute, 62500

Karquines
1901
15-minute, 62500

1898 Source Sheets



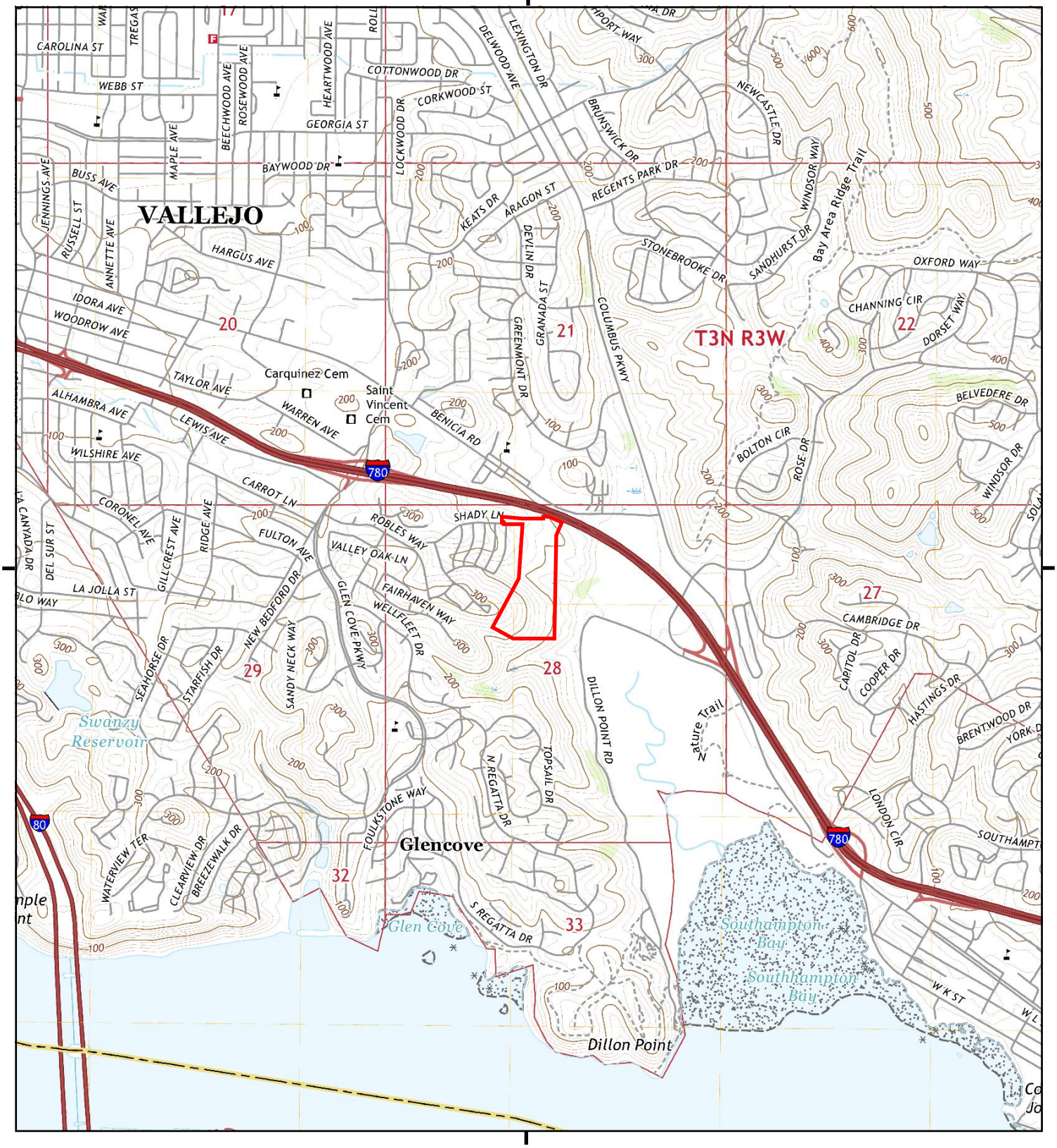
Karquines
1898
15-minute, 62500

1896 Source Sheets

Carquinez Strait
1896
15-minute, 62500

Historical Topo Map

2018



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Benicia, 2018, 7.5-minute

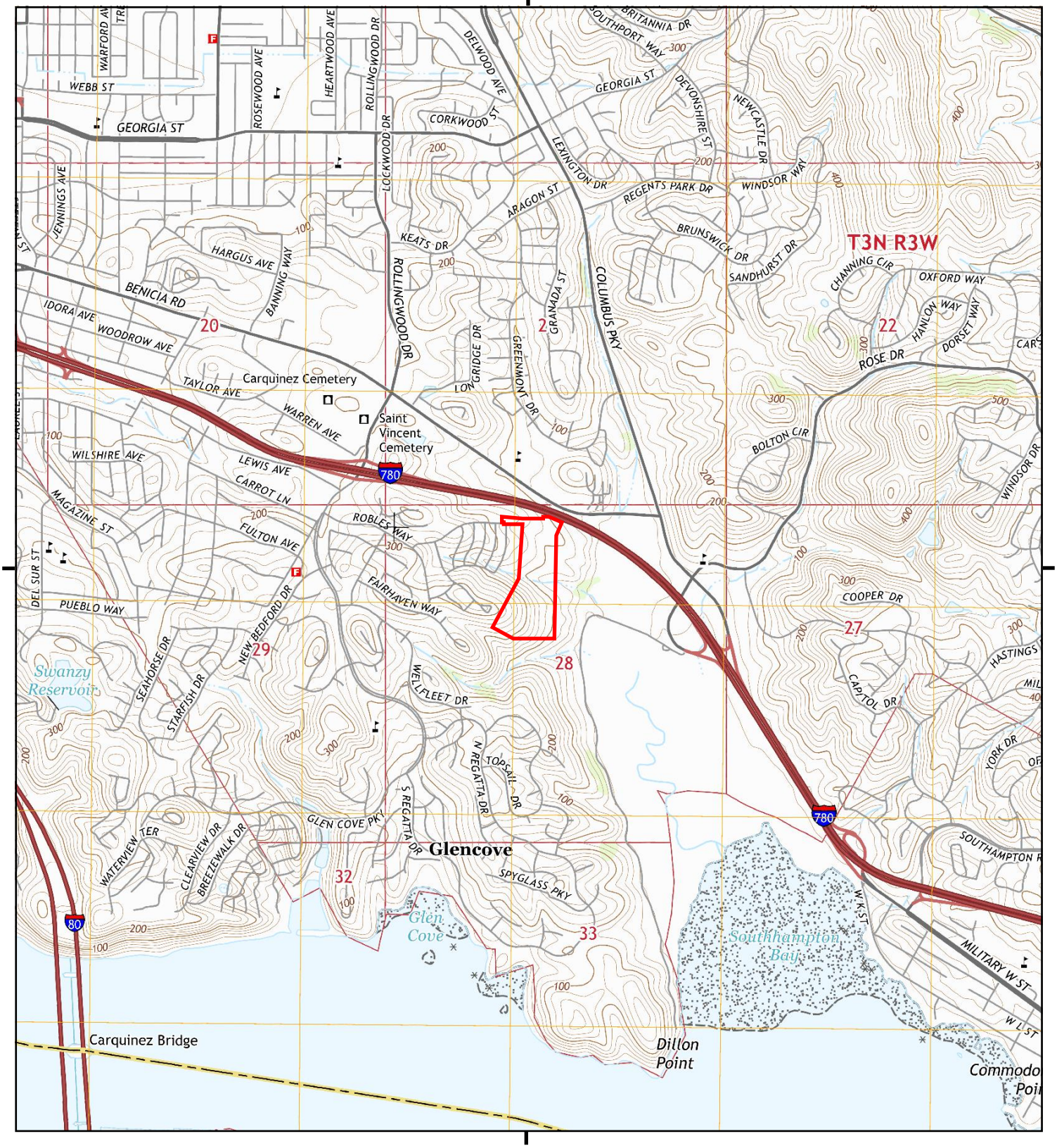
SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 7

Historical Topo Map

2015



This report includes information from the following map sheet(s).

NW N NE
W E
SW S SE

TP, Benicia, 2015, 7.5-minute

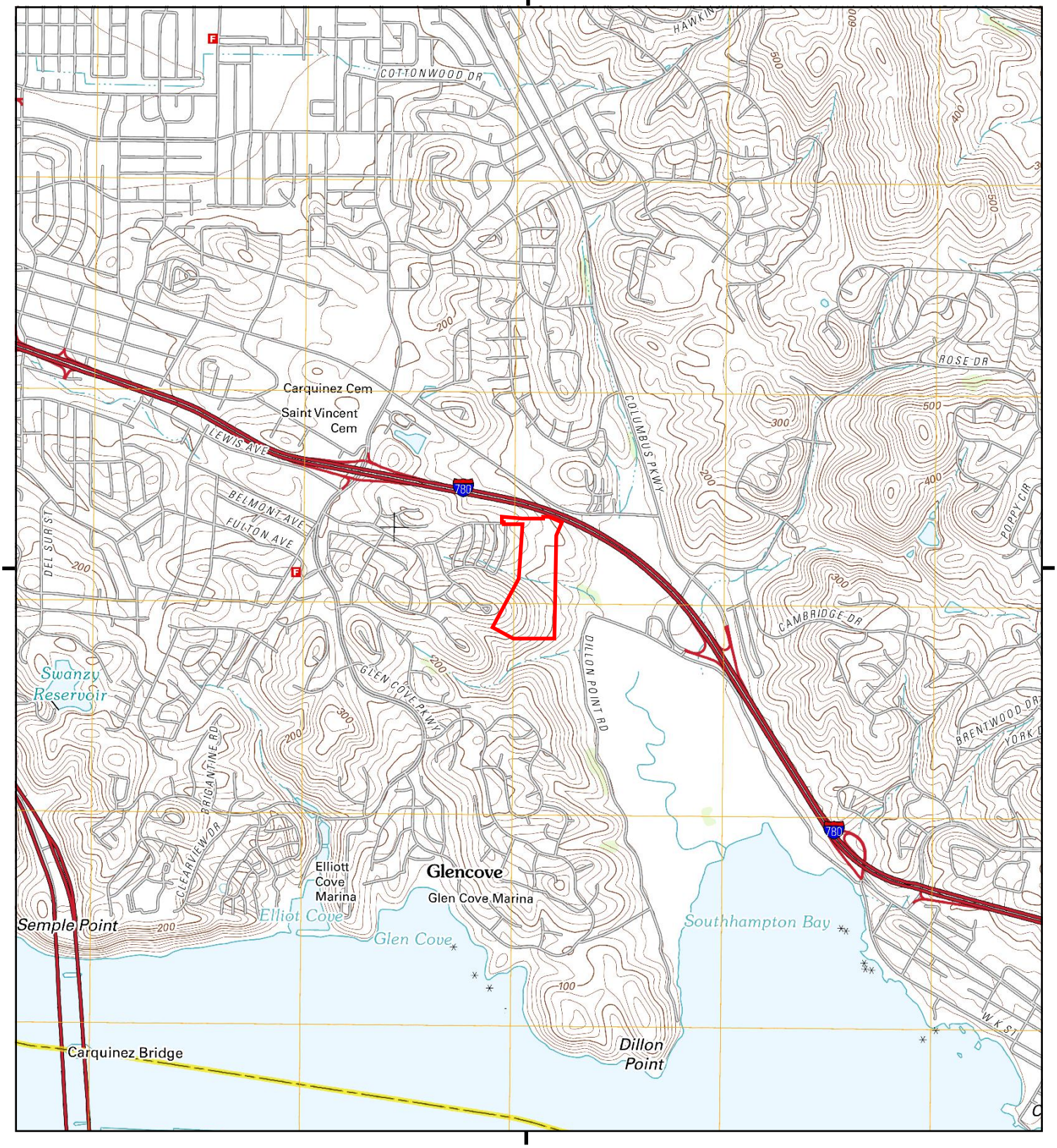
SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 8

Historical Topo Map

2012



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

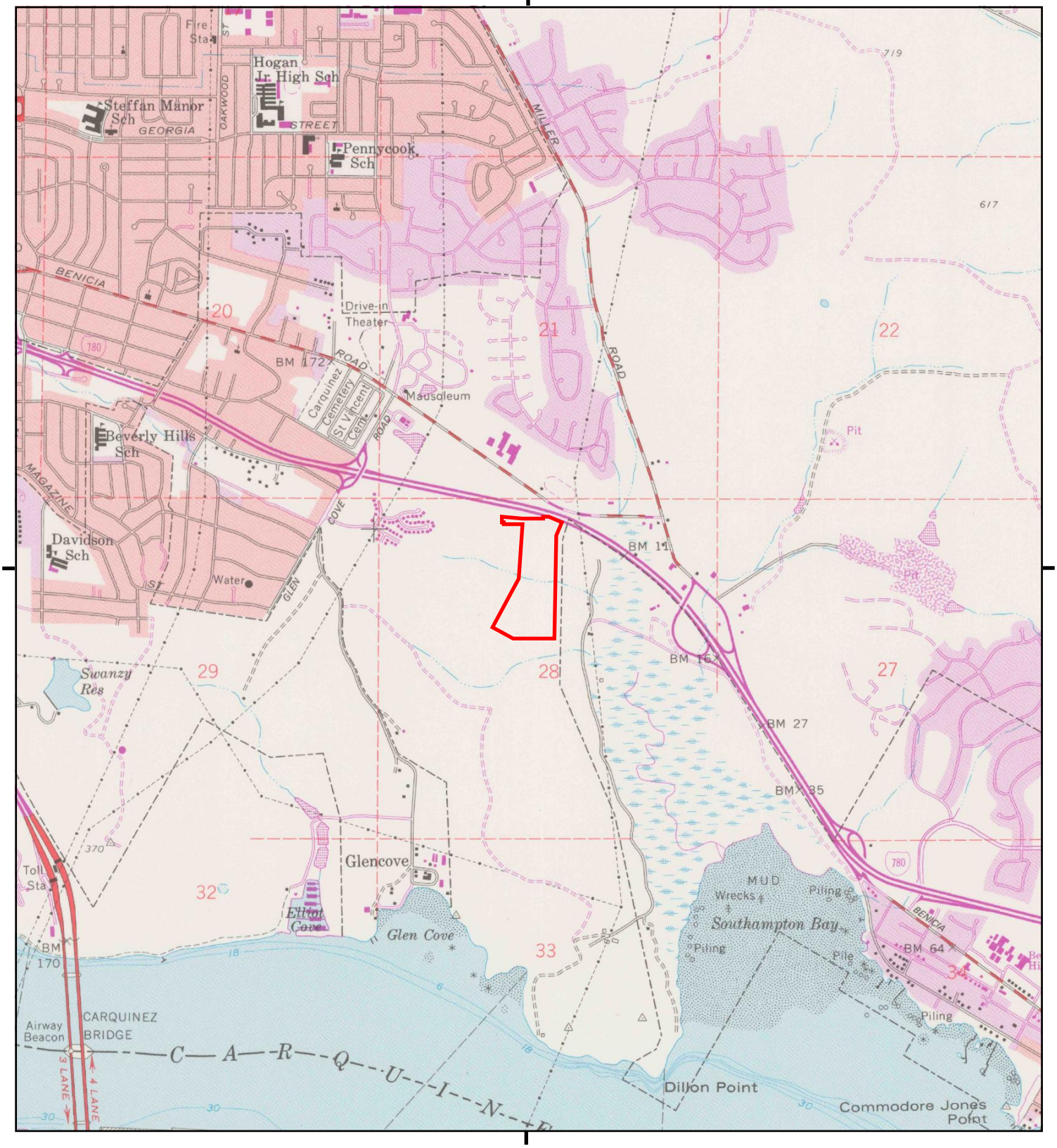
TP, Benicia, 2012, 7.5-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

Historical Topo Map

1980



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

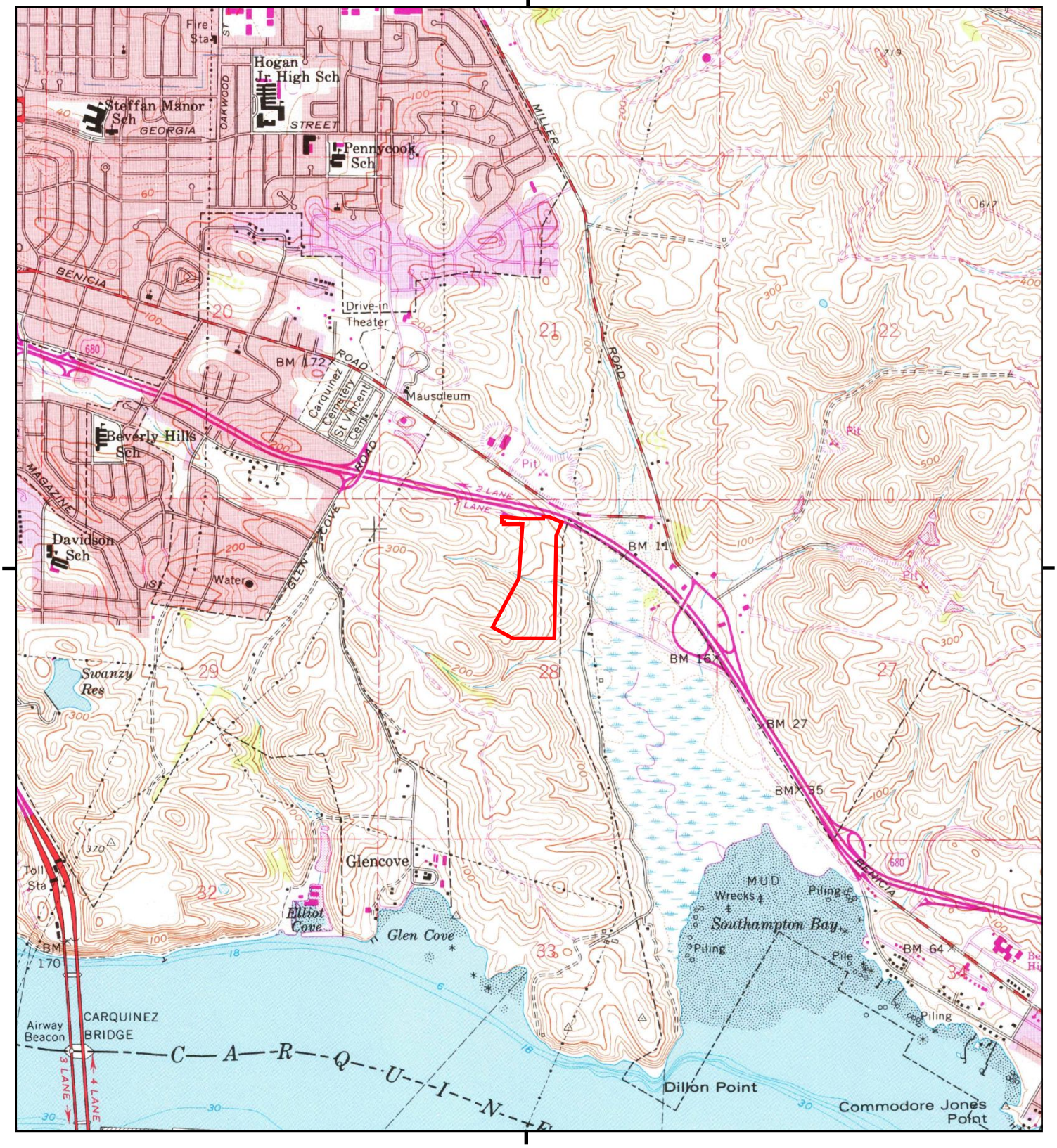
TP, Benicia, 1980, 7.5-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

Historical Topo Map

1973



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

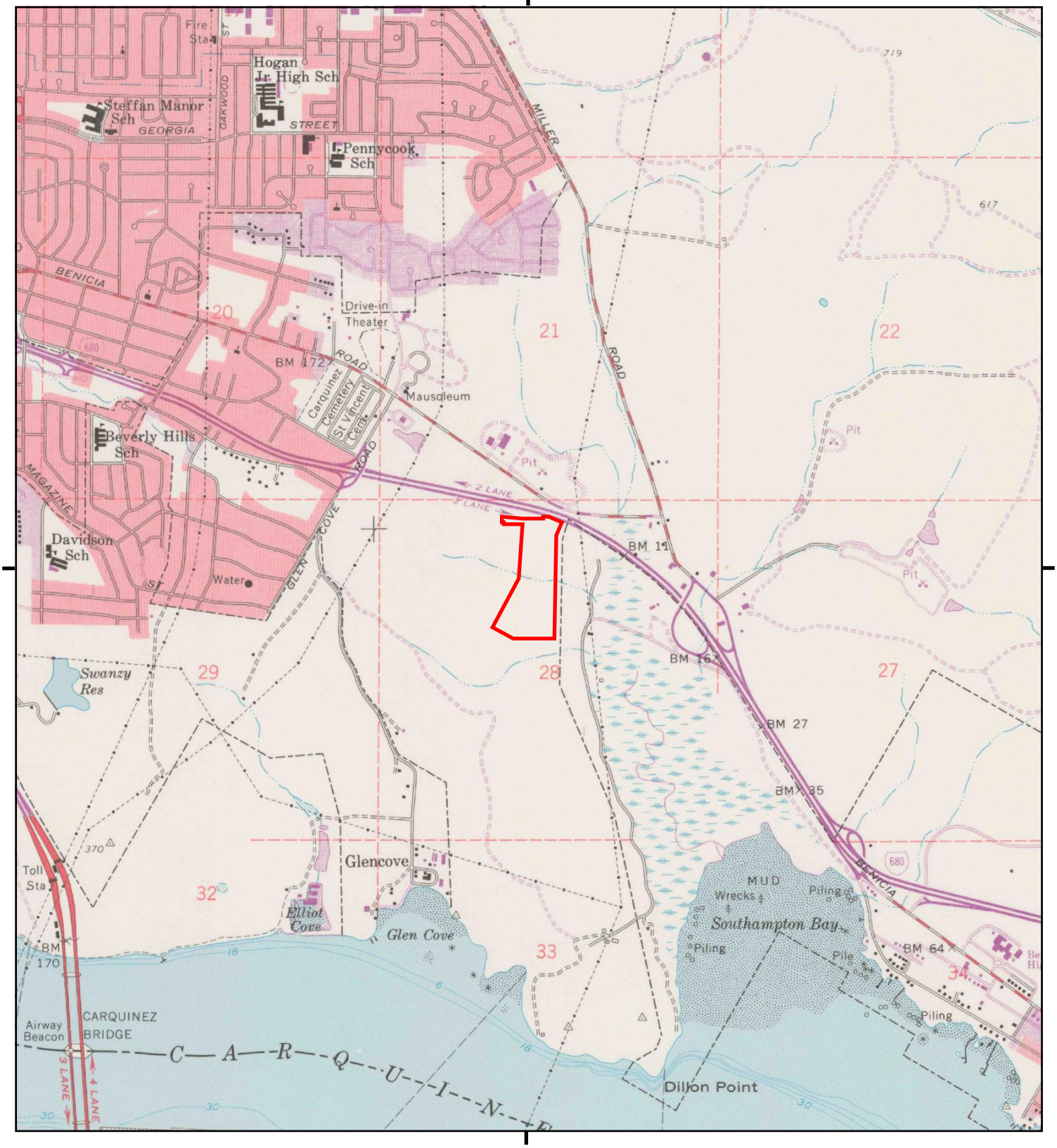
TP, Benicia, 1973, 7.5-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

Historical Topo Map

1968



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

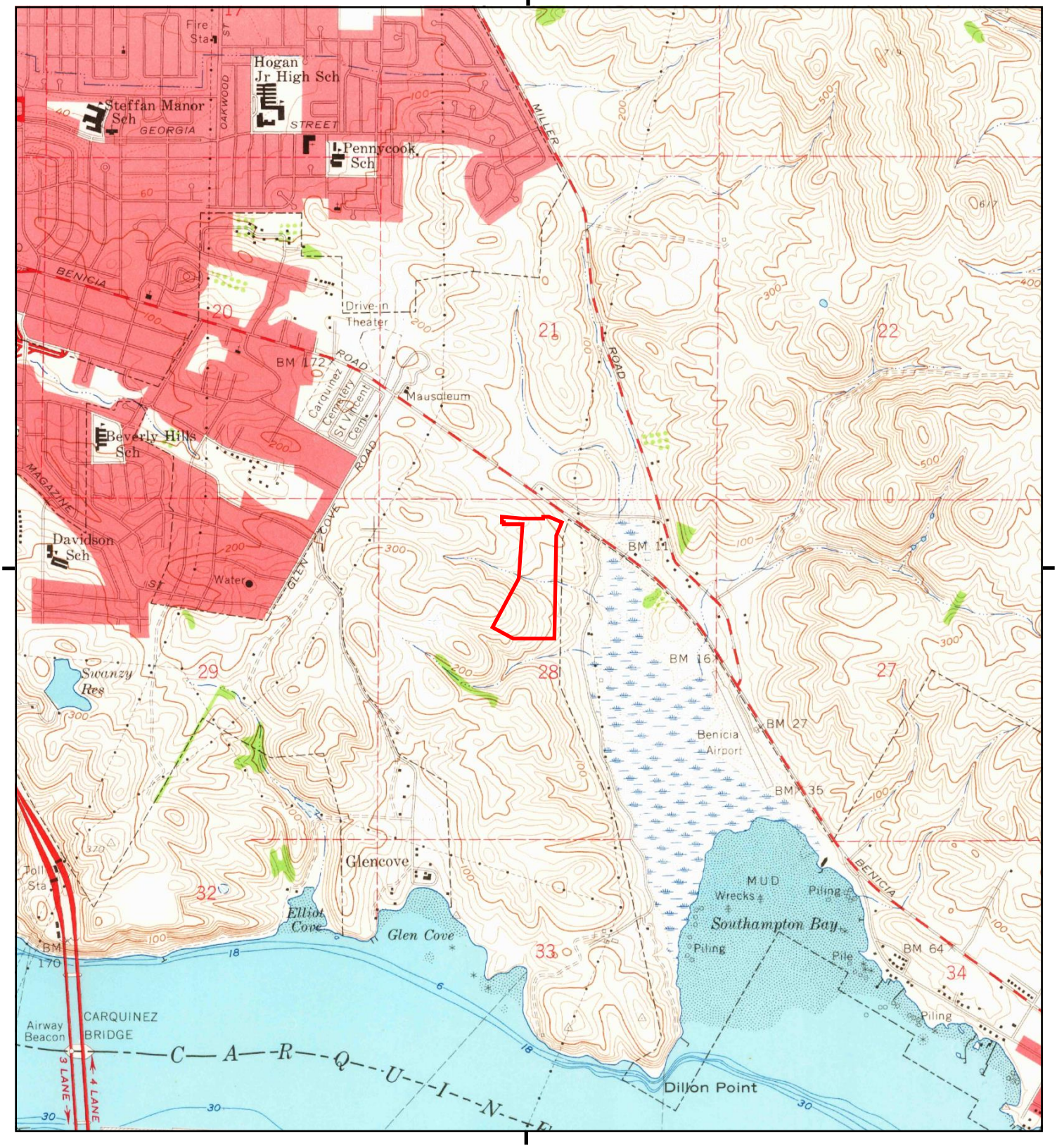
TP, Benicia, 1968, 7.5-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

Historical Topo Map

1959



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

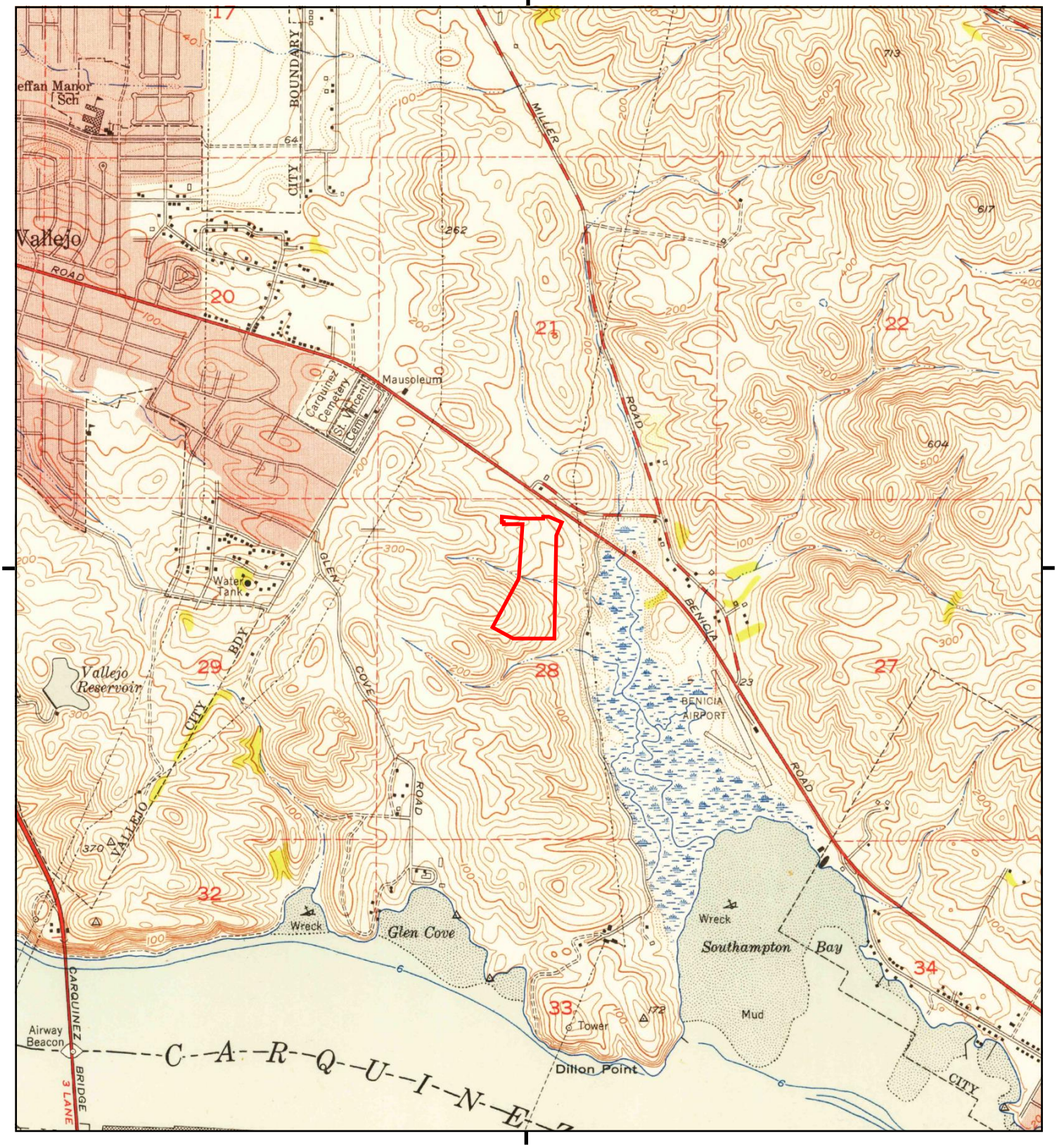
TP, Benicia, 1959, 7.5-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

Historical Topo Map

1952



This report includes information from the following map sheet(s).

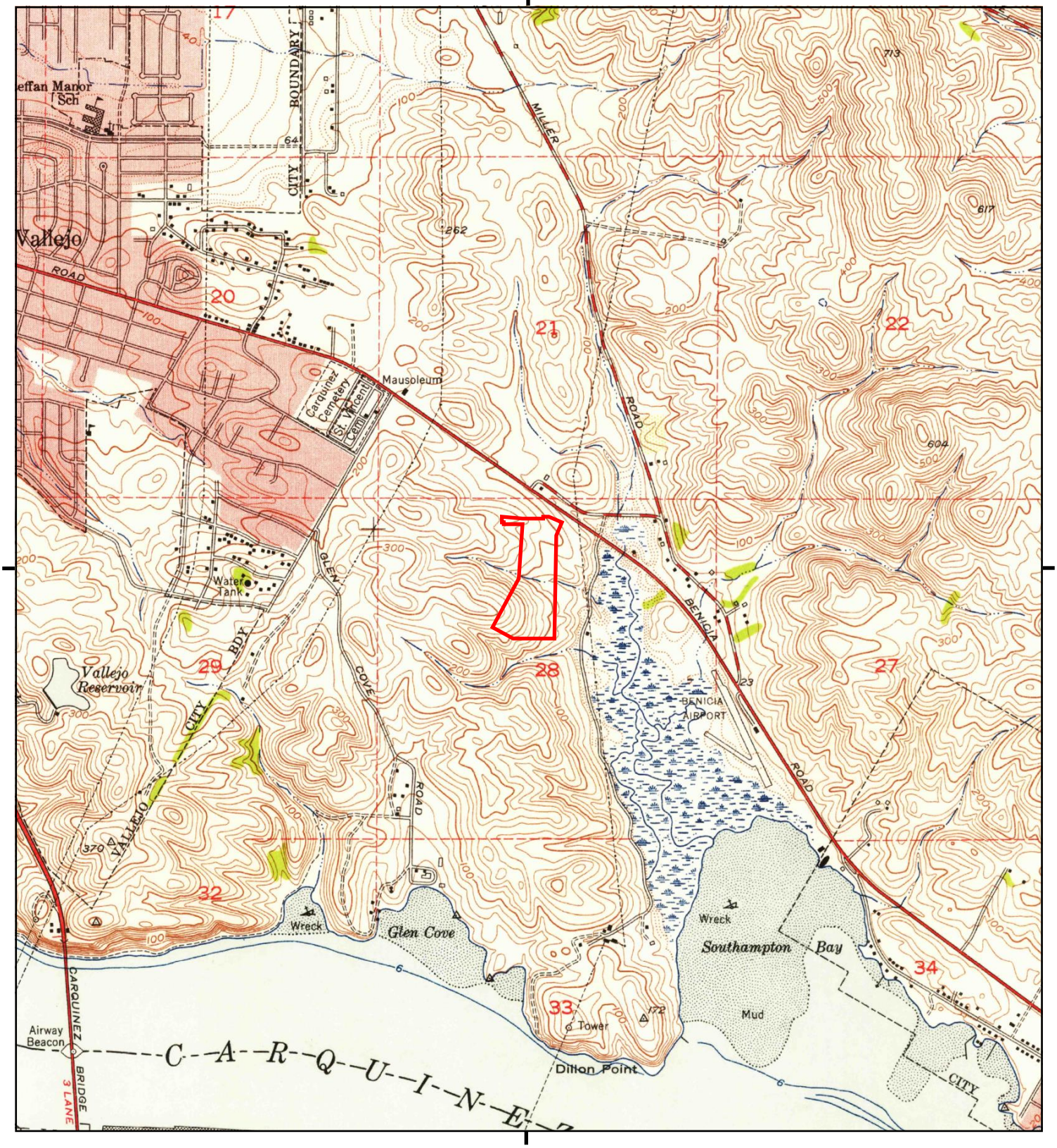
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Benicia, 1952, 7.5-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Benicia, 1950, 7.5-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

Historical Topo Map

1947

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

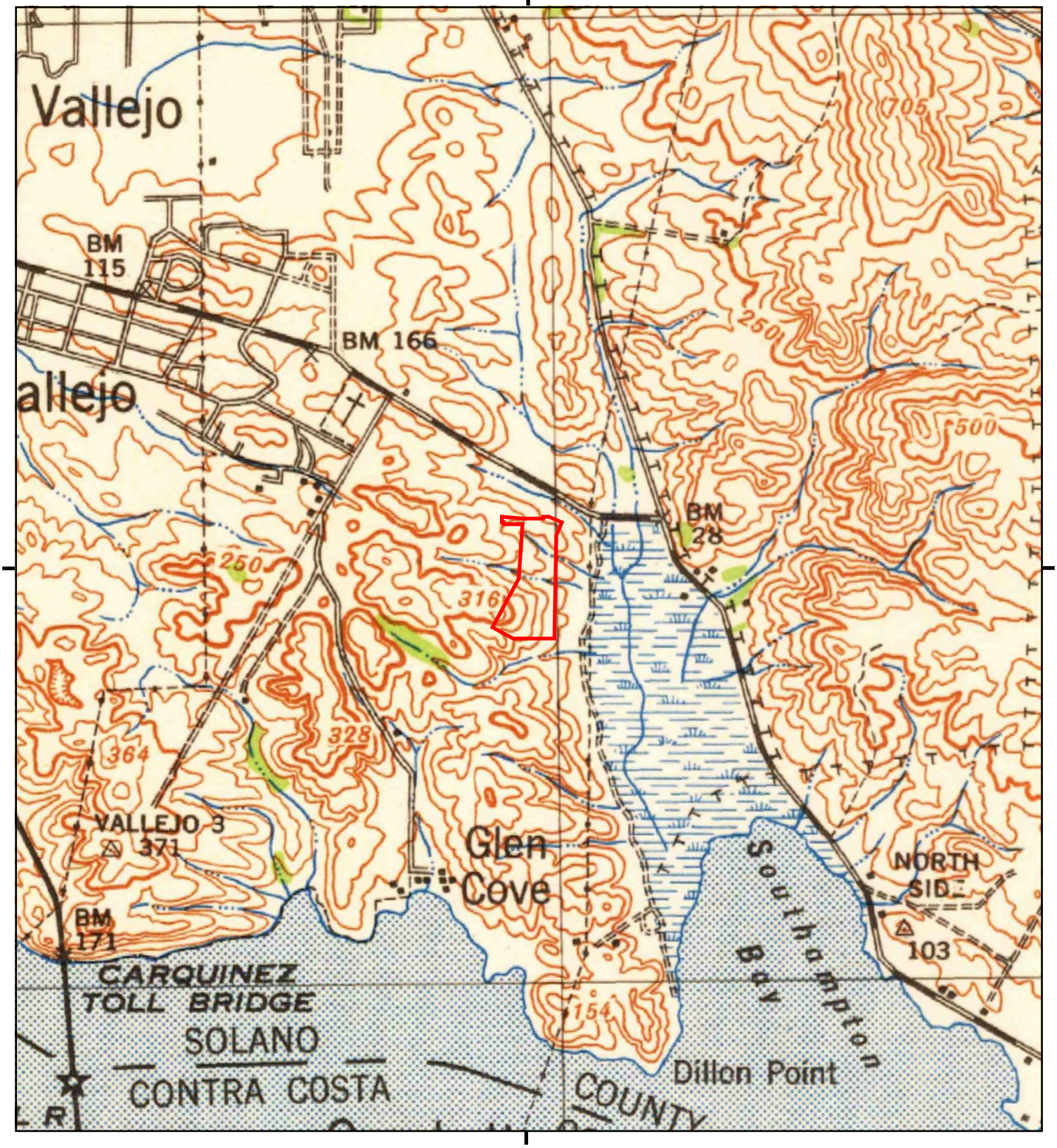
NW N NE
W E
SW S SE

TP, PORT CHICAGO, 1947, 15-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

6938050 - 4 page 16



This report includes information from the following map sheet(s).

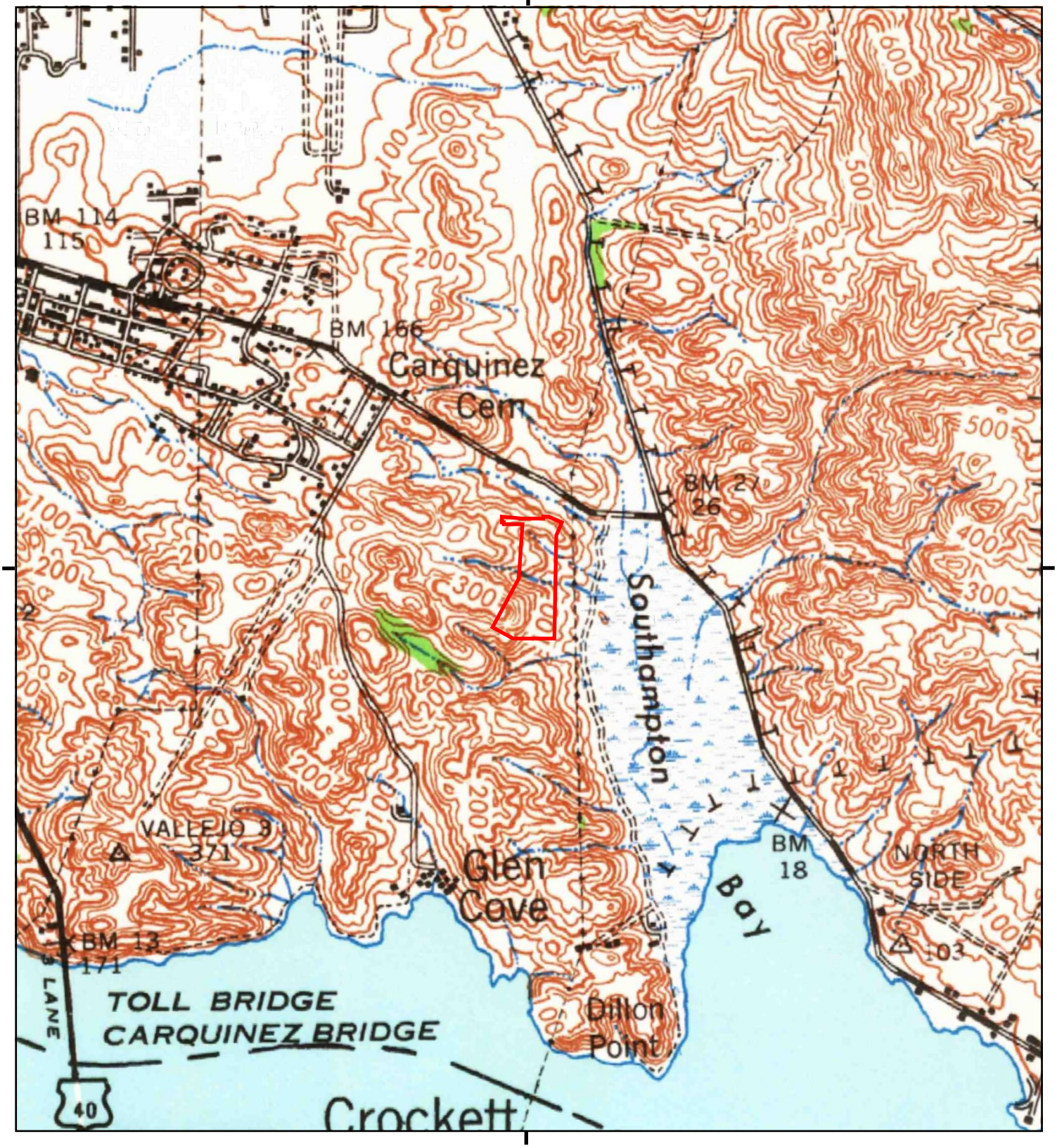
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Carquinez, 1942, 15-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N



This report includes information from the following map sheet(s).

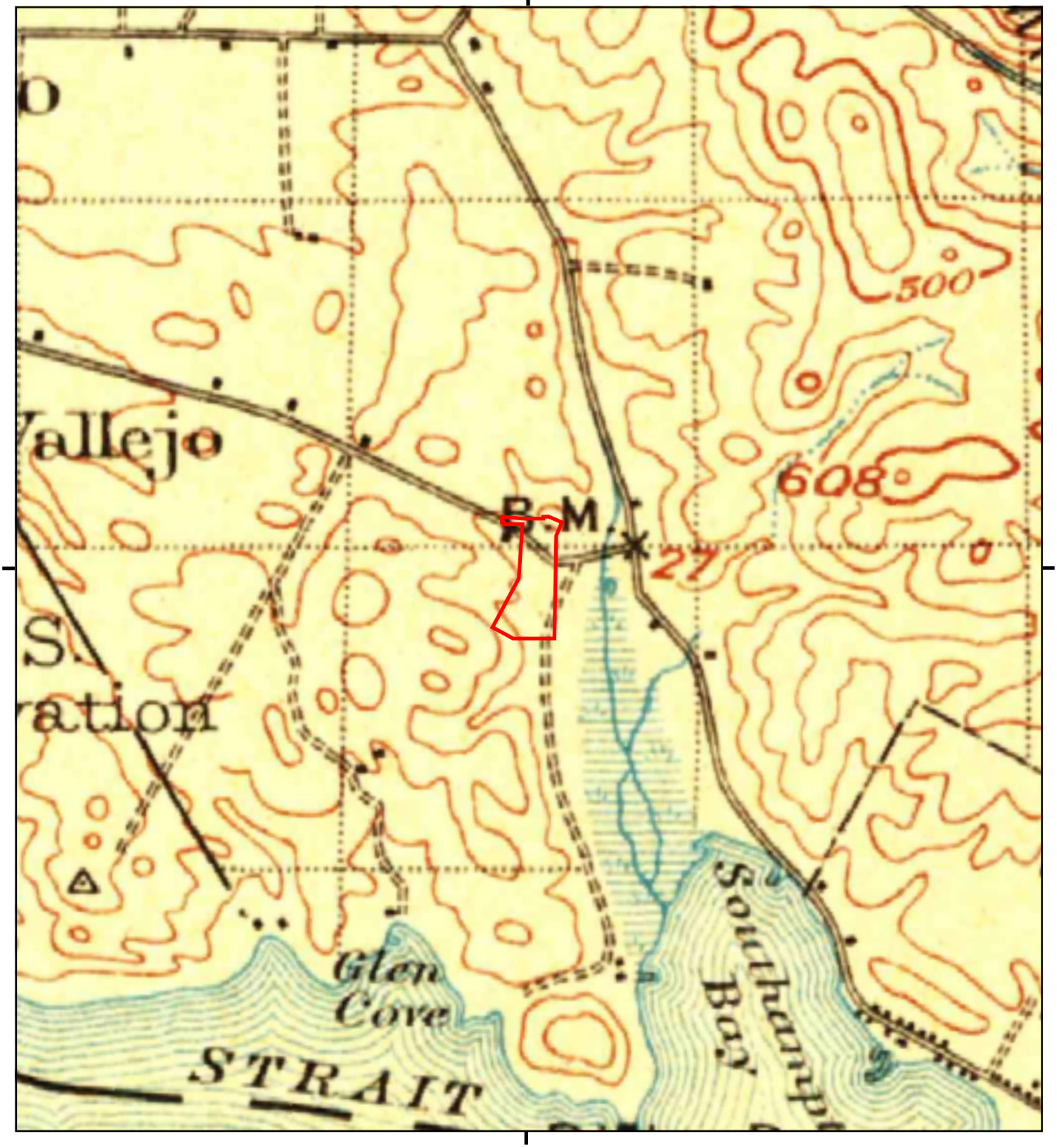
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Carquinez Strait, 1940, 15-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N



This report includes information from the following map sheet(s).

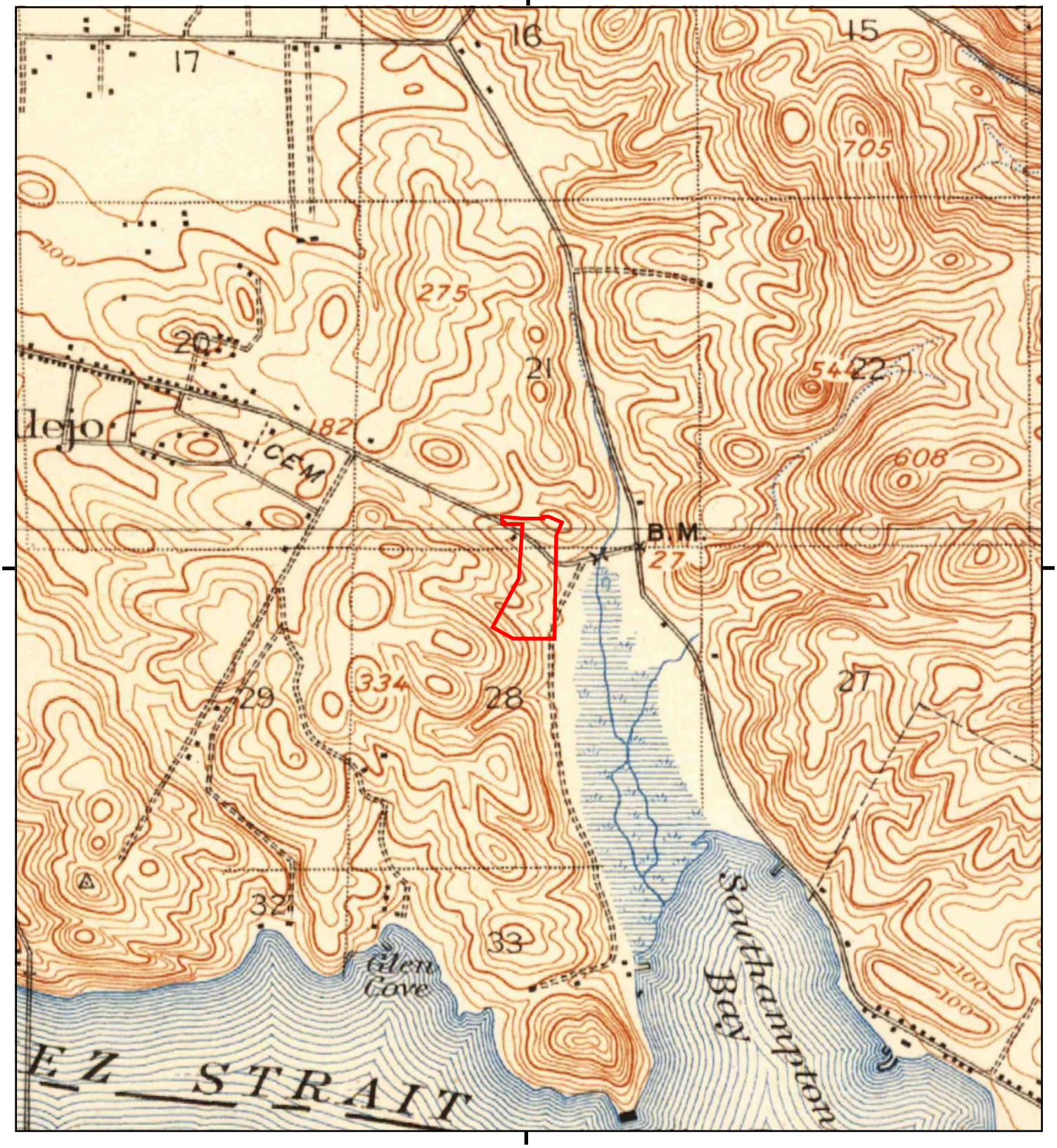
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Napa, 1902, 30-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N



This report includes information from the following map sheet(s).

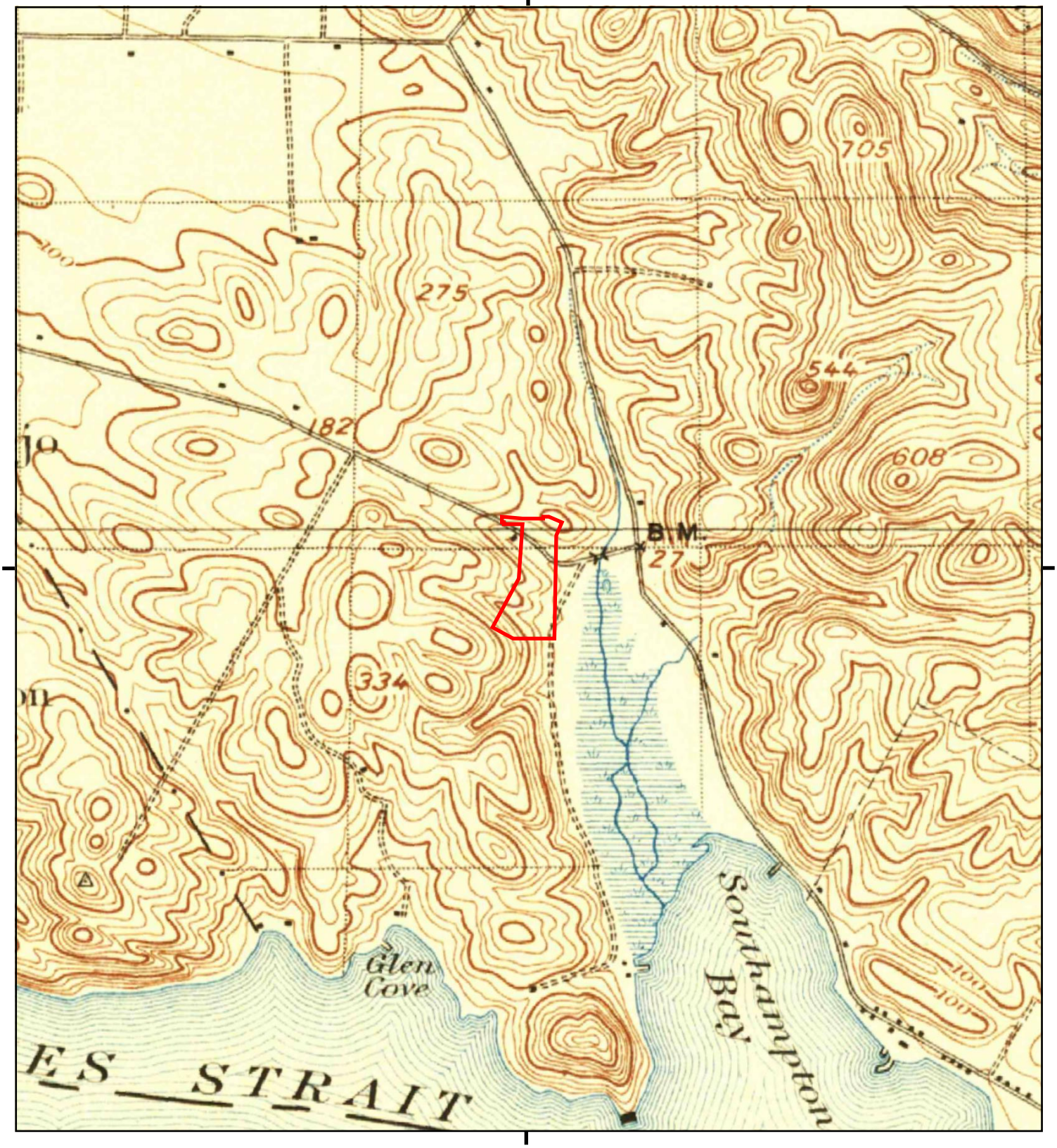
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Carquinez, 1901, 15-minute
TP, Karquines, 1901, 15-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

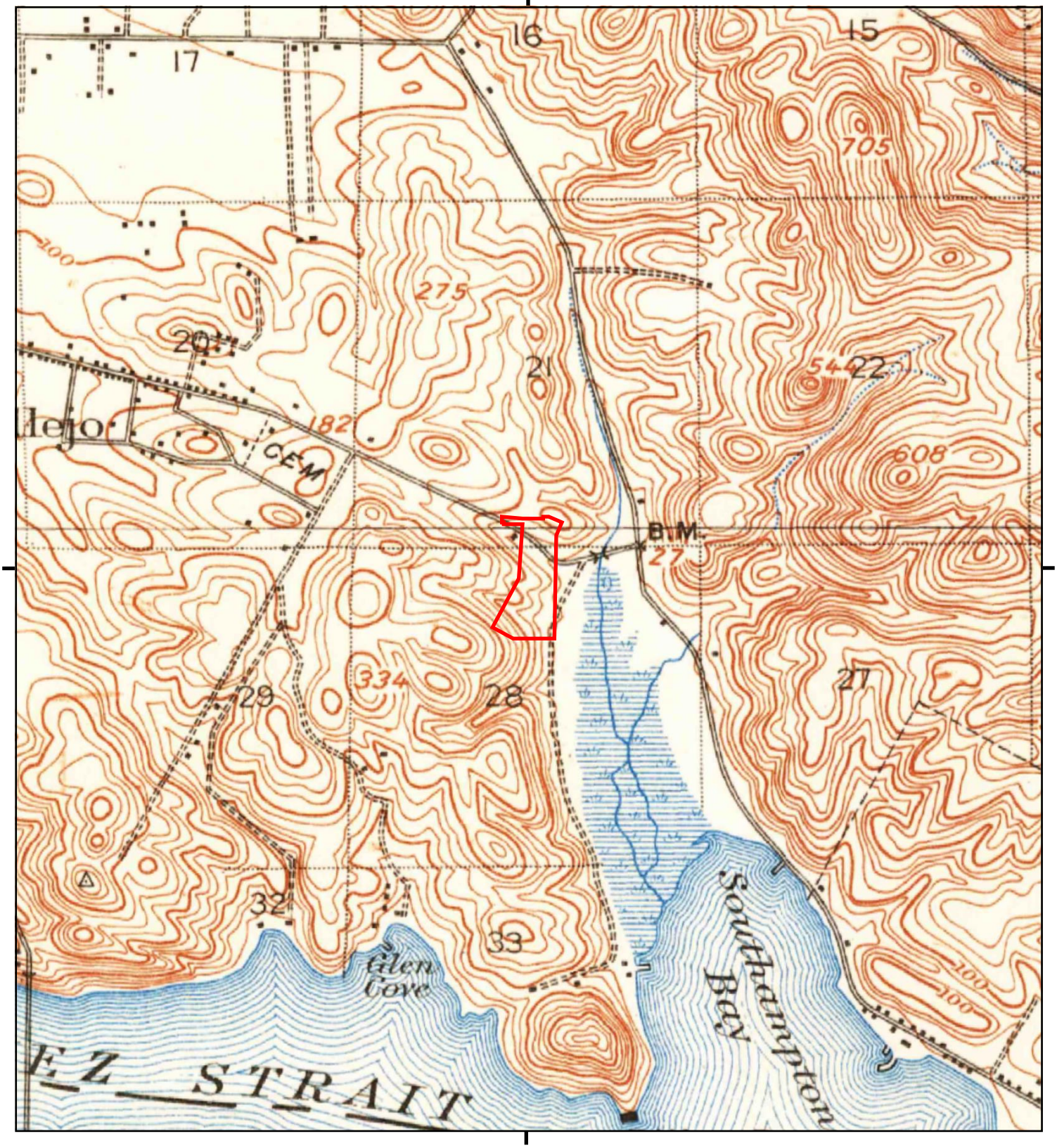
TP, Karquines, 1898, 15-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

Historical Topo Map

1896



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Carquinez Strait, 1896, 15-minute

SITE NAME: Vallejo Properties - Glen Cove
ADDRESS: Not Reported
Vallejo, CA 94591
CLIENT: Engeo Inc.

N

APPENDIX D

ENVIRONMENTAL DATA RESOURCES, INC.

Aerial Photo Decade Package

Vallejo Properties - Glen Cove

Not Reported

Vallejo, CA 94591

Inquiry Number: 6938050.8

April 13, 2022

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

04/13/22

Site Name:

Vallejo Properties - Glen Cove
Not Reported
Vallejo, CA 94591
EDR Inquiry # 6938050.8

Client Name:

Engeo Inc.
2010 Crow Canyon Place
San Ramon, CA 94583
Contact: Jenna Keith

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1993	1"=500'	Acquisition Date: January 01, 1993	USGS/DOQQ
1987	1"=500'	Acquisition Date: July 02, 1987	USGS/DOQQ
1982	1"=500'	Flight Date: July 05, 1982	USDA
1974	1"=500'	Flight Date: April 30, 1974	USGS
1968	1"=500'	Flight Date: April 22, 1968	USGS
1958	1"=500'	Flight Date: July 21, 1958	USGS
1952	1"=500'	Flight Date: August 03, 1952	USDA
1947	1"=500'	Flight Date: March 01, 1947	USGS
1939	1"=500'	Flight Date: August 02, 1939	USDA
1937	1"=500'	Flight Date: August 20, 1937	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2022 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

INQUIRY #: 6938050.8
YEAR: 2016
= 500'
N
EDR

INQUIRY #: 6938050.8
YEAR: 2012
= 500'
N
EDR

INQUIRY #: 6938050.8
YEAR: 2009
= 500'
N
EDR

INQUIRY #: 6938050.8

YEAR: 2006

= 500'

N

EDR

INQUIRY #: 6938050.8

YEAR: 1993

= 500'

N

EDR

INQUIRY #: 6938050.8
YEAR: 1987
= 500'
N
EDR

INQUIRY #: 6938050.8

YEAR: 1982

= 500'

N

EDR

INQUIRY #: 6938050.8

YEAR: 1974

= 500'

N

EDR

INQUIRY #: 6938050.8

YEAR: 1968

= 500'

N

EDR

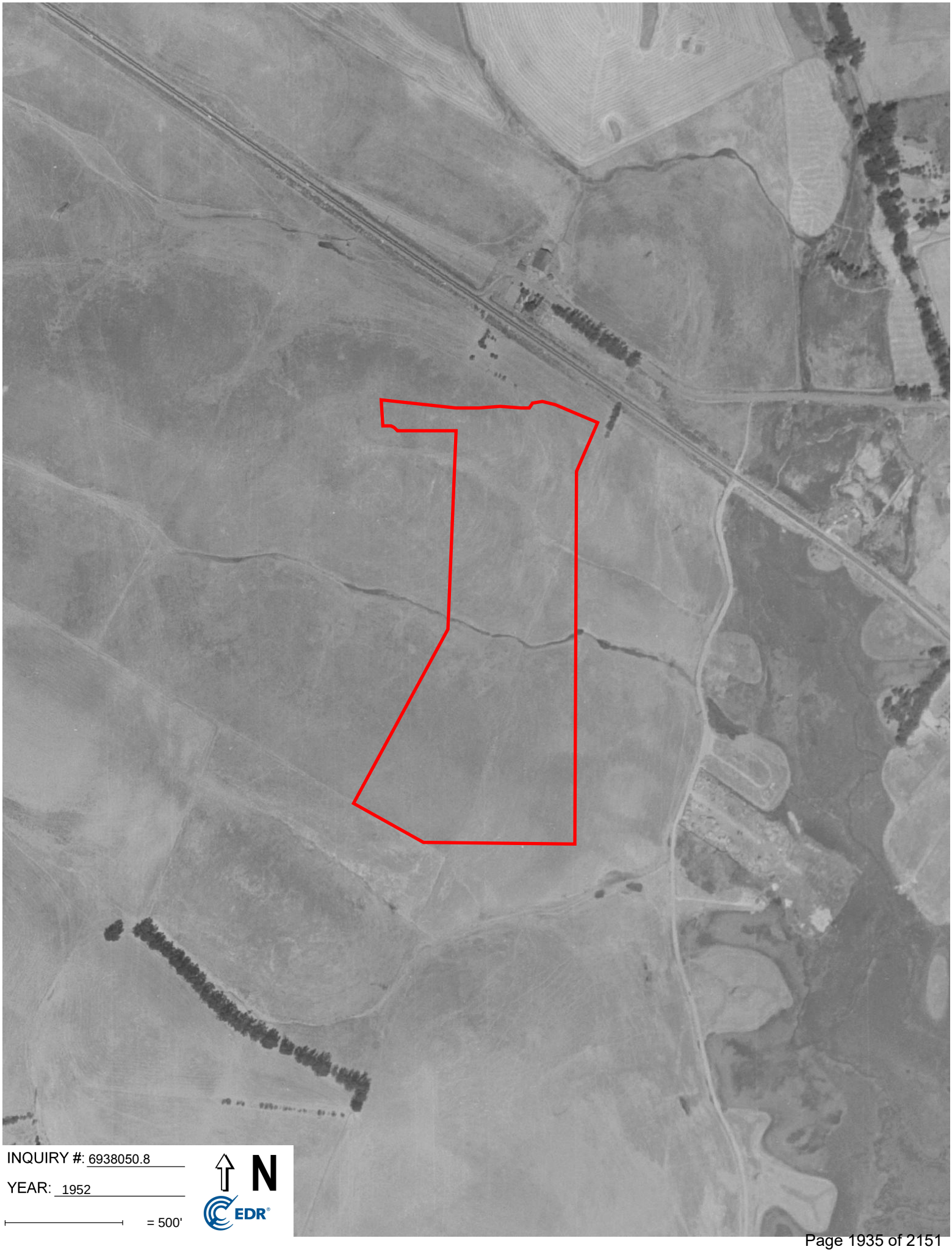
INQUIRY #: 6938050.8

YEAR: 1958

= 500'

N

EDR



INQUIRY #: 6938050.8

YEAR: 1952

= 500'

N

EDR

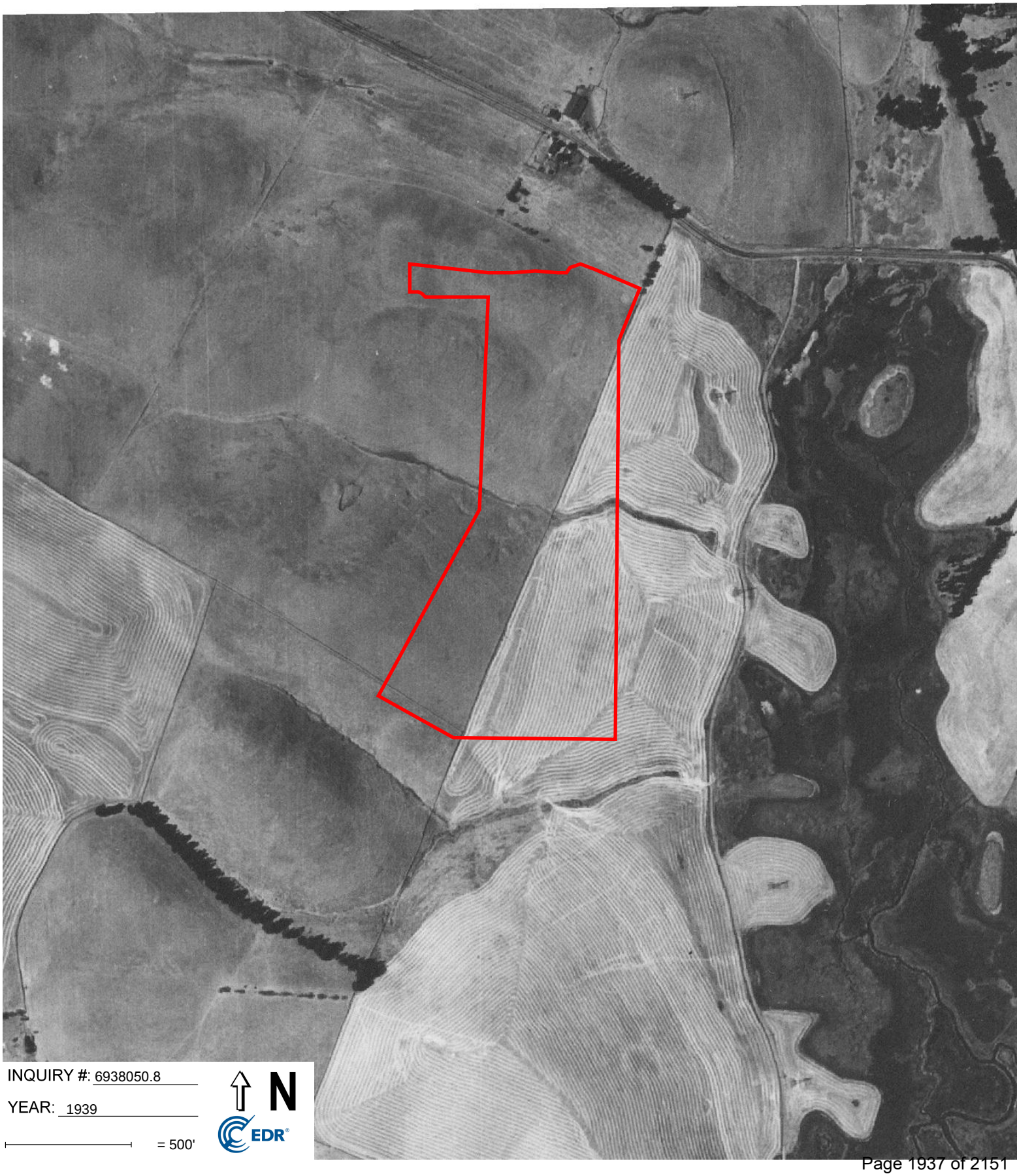
INQUIRY #: 6938050.8

YEAR: 1947

= 500'

N

EDR



INQUIRY #: 6938050.8

YEAR: 1939

= 500'

N

EDR

INQUIRY #: 6938050.8

YEAR: 1937

= 500'

N

EDR

APPENDIX E

ENVIRONMENTAL DATA RESOURCES, INC.

Sanborn Map Report

Vallejo Properties - Glen Cove

Not Reported

Vallejo, CA 94591

Inquiry Number: 6938050.3

April 13, 2022

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

04/13/22

Site Name:

Vallejo Properties - Glen Cove
Not Reported
Vallejo, CA 94591
EDR Inquiry # 6938050.3

Client Name:

Engeo Inc.
2010 Crow Canyon Place
San Ramon, CA 94583
Contact: Jenna Keith

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Engeo Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # B899-4BA0-870E

PO # NA

Project 20164.000.001

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: B899-4BA0-870E

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

Engeo Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2022 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

APPENDIX F

ENVIRONMENTAL DATA RESOURCES, INC.

City Directory

Vallejo Properties - Glen Cove
Not Reported
Vallejo, CA 94591

Inquiry Number: 6938050.5
April 14, 2022

The EDR-City Directory Image Report

EDR® Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction orforecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2020 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer. Reproduction of City Directories without permission of the publisher or licensed vendor may be a violation of copyright.

Data by infoUSA®

Copyright©2008
All Rights Reserved

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☐	☑	EDR Digital Archive
2014	☐	☑	EDR Digital Archive
2010	☐	☑	EDR Digital Archive
2005	☐	☑	EDR Digital Archive
2000	☐	☑	EDR Digital Archive
1995	☐	☑	EDR Digital Archive
1992	☐	☑	EDR Digital Archive
1988	☑	☐	POLK DIRECTORY CO
1984	☑	☐	POLK DIRECTORY CO
1979	☑	☐	POLK DIRECTORY CO
1974	☑	☐	POLK DIRECTORY CO
1970	☑	☐	POLK DIRECTORY CO
1965	☑	☐	POLK DIRECTORY CO
1959	☑	☐	POLK DIRECTORY CO
1937	☑	☐	POLK DIRECTORY CO
1926	☑	☐	POLK DIRECTORY CO

EXECUTIVE SUMMARY

Year	***Target Street***	***Cross Street***	***Source***

FINDINGS

TARGET PROPERTY STREET

Not Reported
Vallejo, CA 94591

No Addresses Found

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
BENICIA RD			
2017	pg. A2	EDR Digital Archive	
2014	pg. A6	EDR Digital Archive	
2010	pg. A10	EDR Digital Archive	
2005	pg. A14	EDR Digital Archive	
2000	pg. A19	EDR Digital Archive	
1995	pg. A22	EDR Digital Archive	
1992	pg. A25	EDR Digital Archive	
1988	pg. A27	POLK DIRECTORY CO	
1988	pg. A28	POLK DIRECTORY CO	
1984	pg. A29	POLK DIRECTORY CO	
1984	pg. A30	POLK DIRECTORY CO	
1979	pg. A31	POLK DIRECTORY CO	
1979	pg. A32	POLK DIRECTORY CO	
1974	pg. A33	POLK DIRECTORY CO	
1974	pg. A34	POLK DIRECTORY CO	
1970	pg. A35	POLK DIRECTORY CO	
1970	pg. A36	POLK DIRECTORY CO	
1965	pg. A37	POLK DIRECTORY CO	
1965	pg. A38	POLK DIRECTORY CO	
1959	pg. A39	POLK DIRECTORY CO	
1959	pg. A40	POLK DIRECTORY CO	
1959	pg. A41	POLK DIRECTORY CO	
1937	pg. A42	POLK DIRECTORY CO	
1937	pg. A43	POLK DIRECTORY CO	
1926	pg. 0	POLK DIRECTORY CO	Target and Adjoining not listed in Source

City Directory Images

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2017

650	GATEWAY MEMORIAL
	GREEN LEAF SOLUTIONS
	LIFE ENHANCEMENT SERVICES
656	CHRIS CLUB
700	MAGGIES HAMBURGERS
708	BALUGO, JEFF B
709	VARGAS, MAURICIO E
711	SANCHEZ, GERARDO F
713	VALENTINE, BRUCE
714	ARIAS, JOSE D
717	NDT ELECTRONICS
	TAYLOR, ROBERT
720	WALLSH, STEPHEN M
723	LOPEZ, AGUILAR N
726	WOMBLE, DENNIS R
729	BUCHALTER, MARC Z
731	SMITH, TODD
732	RESTUCCIA, JOSEPH M
737	MOORE, RYAN B
738	FRAIRE, ADRY
739	JERNEY, STEVEN J
743	MERRITZ, PATSY R
744	HARVEY, KEVIN
745	LOPEZ, NICOLAS
750	VESS, CHERYL A
751	HENDERSON, CARL M
756	BROOKS, ROBERT B
762	PERIDO, MARIO A
786	WRIGHT, LARRY G
801	STEWART, KENA
802	KOSIERADZKI, ERYK
805	SURLES, EARLINE S
806	GONZALEZ, JUAN
809	VARGAS, JAQUELINE
810	ESPINOZA, DEBORAH A
813	EVERSOLE, MATTHEW
814	HAYDOCK, JONATHAN R
817	KISTLE, MARION Y
	MCSHERRY, BARBARA J
	RAMOS, SUSAN
818	DUNCAN, ELLIS
821	ROGERS, TRACY
822	JACKSON, NACHELE R
830	DENSON, GREGORY R
834	OJALA, SANNA B
	PEREZ, JOSE L
	ROTTER, MICHAEL
	TODD, HEIDI M
835	SANTOS, RAOULEEN U
837	ARREOLA, ALMA I

BENICIA RD 2017 (Cont'd)

837	CLARK, DAVID
839	SANTO, TOM H
841	HEYMANS, KAYLEIGH A
843	DIGIORDANO, MATTHEW J
844	HENSON, MICHAEL
845	MESA, VIDAL C
849	JOHNSON, CHRISTI A
	NUNES, DARRYL
853	ELLIS, JEFF
854	HOLMES, LAURA
855	HARRIS, LISA L
857	ZUIDEMA, RICHARD D
860	WESTER, SEAN
900	BIBLE BAPTIST CHURCH
901	ZAMORA, CECILIO T
903	HERKENRATH, TERESA
909	MILLS, JOHN
911	SCUDDER, GRACE N
915	RUS, DALI
920	BIBLE BAPTIST CHURCH
921	SARAVIA, JAIRO
925	PALELEI, TOILEA
930	DONALDO, ALDWIN J
933	MCGILL, QUAIYAMA
	MITCHELL, BRENDA N
934	CELSA, GARCIA
937	THEOBALD, JAMES D
941	GANN, SEAN
945	VARGAS, MARIO M
946	EARLY, PATRICK T
948	BACOME, GARY A
949	JOHNS, GARY E
950	BERNARDINO, ELMER D
953	GUTIERREZ, IRENE
956	ALLISON, EARIN
	MIRABELLI, SARAH
	RICHMOND, DWANE A
	SIMMONS, CYRIL J
957	BURLA, DONNA K
960	TAYLOR, RASHONDA
	THOMAS, BRITNY
961	AHUMADA, VICENTE O
966	ART DURDEN E Z TREE SERVICE
	BARNETT, RAMONA B
	SALDIVAR, JEFFREY
969	MACK, NILES P
970	HAMILTON, JUMOKE P
971	HELEN, SOTELO
973	LISSICK, KENNETH I
1001	KRUSZKA, S M

BENICIA RD 2017 (Cont'd)

1013 LIFELINE INTERNATIONAL CHURCH
1016 JONES, KANTINA L
1017 TURNER, JEAN E
1020 CAPWELL, JERRY M
ODONNELL, FRANCISCA K
SIDHU, HARJINBER
1021 MENCHACA, NICHOLAS J
1025 JOHNS WELDING & MARINE PROPELLER RE
1026 GARRET, JAMIE
1030 RAMOS, JOVY V
1031 SCARROTT, JOHN E
1045 WEBER, EDWARD L
1049 DAVIS, HAROLD N
1050 PANGELINAN, MICHAEL G
SHOP N SAVE
1100 MERRILL, NORMAN L
1101 CORINTHIANS CHURCH OF GOD IN CHRIST
1117 TYLER, TY
1123 ELLIS, JEFFREY A
1125 AARDVARKS DOG TRAINING CENTER
1134 HILLARD, JONATHAN C
1138 DULAY, ENRIQUE R
1141 BALDRIDGE, ALFRED R
1144 ANDREWS, LARRY B
1145 SILVA, RICHARD A
1146 OVERBY, DONALD M
1150 TEVES, THOMAS D
1153 MCLAIN, TONI
NICHOLLS, JAMES
1154 BAUTISTA, ARTURO G
1161 BEIGHLEY, ARTHUR
DEVINE, KATHLENE L
KEENEY, JOANN A
LAM, ALYCIA
LOSTICA, ANTONINA
MCBRIDE, ELLEN
RILEY, DONALD A
WALLACE, JEREMY
1162 DEJESUS, CECILA
1164 BASCRACEA, MARIAN
1167 ALEXANDER, JAMES L
DAVIES, FLORENCE R
NEWELL, GUILLAUME
OHARA, DANIEL D
1170 SECOND BAPTIST CHURCH
1175 TRICITY FENCE COMPANY
1182 PANETTA, JOSEPH A
1191 GERMINO JIM LANDSCAPE
WEGLEITNER, JASON B
1195 PRICE, RICK S

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2017 (Cont'd)

1500 PATRICKS SAINT VINCENT HIGH SCHOOL
SUPERIOR SISTER
1551 CALIFORNIA HWY PATROL
STATE OF CALIFORNIA
1600 CRUSADER FENCE CO INC
1855 780 MINI STORAGE
1865 LEWS BRAKE SHOP

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2014

650	GATEWAY MEMORIAL
	GREEN LEAF SOLUTIONS
656	CHRIS CLUB
658	EARLS TEXAS BBQ
	UNCLE ZACS PIZZARIA
700	MAGGIES HAMBURGERS
707	OCCUPANT UNKNOWN,
708	BALUGO, JEFF B
709	VARGAS, BERTA D
711	SANCHEZ, GERARDO F
713	VALENTINE, BRUCE
714	TINKHAM, MIKE K
717	GANCH, WILLIAM
	NDT ELECTRONICS
720	WALLSH, STEPHEN M
723	DAVIS, JASON L
726	WOMBLE, DENNIS R
729	BRETHAUER, MORGAN
731	JOHNSON, CAIL
732	RESTUCCIA, JOSEPH M
737	MOORE, RYAN B
738	OCCUPANT UNKNOWN,
739	JERNEY, STEVEN J
744	HARVEY, KEVIN
745	JIMENEZ, NICOLAS L
750	OCCUPANT UNKNOWN,
751	HENDERSON, CARL M
756	BROOKS, ROBERT B
757	RINCON, KAREN
762	OCCUPANT UNKNOWN,
764	ROBERTS, JOHN N
778	OCCUPANT UNKNOWN,
782	REID, RU
786	WRIGHT, LARRY G
801	ZIMMERMAN, STANLEY R
802	KOSIERADZKI, ARKADIUSZ P
805	SURLES, EARUNE
809	BECK, CLIFFORD A
810	OCCUPANT UNKNOWN,
813	OCCUPANT UNKNOWN,
814	RUSSELL, WYCONDA D
817	DAVIDSON, JIM M
	MCSHERRY, BARBARA J
818	RIVERA, MELODIE
821	ROGERS, TRACY
822	DURAN, J J
826	CEPEDA, CANDICE
830	DENSON, GREGORY R
834	ERIC, CLAY
	OCCUPANT UNKNOWN,

BENICIA RD 2014 (Cont'd)

834 ROTTER, MICHAEL
835 OCCUPANT UNKNOWN,
837 WILSON, WANDA A
839 SANTO, TOM H
841 HAMNER, STEVEN
842 OCCUPANT UNKNOWN,
843 DIGIORDANO, MATTHEW J
844 HENSON, MICHAEL
845 CORTEZ, VIDAL
849 JOHNSON, CHRISTINA A
853 JONES, ASHLEY
854 SWEETING, SARAH
855 HARRIS, LISA L
OCCUPANT UNKNOWN,
856 OCCUPANT UNKNOWN,
857 ZUIDEMA, RICHARD D
860 WESTER, EVELYN
900 BIBLE BAPTIST CHURCH
MUSCATO, MICAH
901 AGUILAR, MARIA
MANZON, JAIME
OCCUPANT UNKNOWN,
ZAMORA, CECILIO T
903 HERKENRATH, TERESA
909 GLASER, JOHN W
911 SCUDDER, MATTHEW
915 OCCUPANT UNKNOWN,
921 SARAVIA, JAIRO
925 TAUTUIAKI, ANITA
930 DONALDO, ALDWIN J
933 MCGILL, QUAIYAMA
MITCHELL, BRENDA N
934 DESANTIAGO, ABEL D
936 OCCUPANT UNKNOWN,
937 OCCUPANT UNKNOWN,
941 SCARROTT, SHERRI A
945 DAVIDSON, D
NEWMAN, TEDI
946 OCCUPANT UNKNOWN,
948 BACOME, GARY A
949 JOHNS, GARY E
950 CM PLUMBING
OCCUPANT UNKNOWN,
953 GUTIERREZ, IRENE
956 BAZILE, BRENDA J
MCDONALD, JOHNATHAN L
WILLIAMS, LISA
957 BURLA, DONNA K
961 AHUMADA, VICENTE O
965 DUENIAS, JESSE

BENICIA RD 2014 (Cont'd)

966 HUDGINS, JESSICA
OCCUPANT UNKNOWN,
967 OCCUPANT UNKNOWN,
968 ZUIDEMA, RICHARD
969 LLOYD, CANDIS C
970 HAMILTON, JUMOKE
971 HELEN, SOTELO
973 LISSICK, KENNETH I
1001 KRUSZKA, FRANCIS B
1012 TOOR, GURMIT K
1013 LIFELINE INTERNATIONAL CHURCH
OCCUPANT UNKNOWN,
1016 JONES, KANTINA
1017 TURNER, BOOKER T
1020 OCCUPANT UNKNOWN,
SIDHU, HARJINBER
1021 DORNBURG, SAMANTHA
1025 JOHNS WELDING & MARINE PROPELLER RE
1026 WILLIAMS, JEFF M
1031 SCARROTT, JOHN E
1045 WEBBER, EDWARD L
1049 OCCUPANT UNKNOWN,
1050 PANGELINAN, MICHAEL G
SANDHU, BALBIR K
SHOP N SAVE
WINNING, BRIAN T
1100 MERRILL, NORMAN L
1101 CORINTHIANS CHURCH OF GOD IN CHRIST
1117 OCCUPANT UNKNOWN,
1123 ELLIS, JEFFREY A
OCCUPANT UNKNOWN,
1125 AARDVARKS & OTHERS PET SITTING
AARDVARKS DOG TRAINING CENTER
1134 LEWIS, ALLEN
1138 DULAY, ENRIQUE R
1141 BALDRIDGE, ALFRED R
1144 MARTINEZ, MELVYN A
1145 MOORE, MONIQUE Y
1146 BROOKS, CHRISTOPHER P
JOHNSTON, SHARON
MACIAS, ALEJANDRA
1150 OCCUPANT UNKNOWN,
TEVES, THOMAS D
1153 KARBO, CAROL
NICHOLLS, JAMES
1154 BAUTISTA, ARTURO G
DEFIESTA, MITCHELL L
MCKAY, DELIMAR T
PARTYNSKI, PHILLIP
1156 SCHWARTZ, DOLLY

BENICIA RD 2014 (Cont'd)

1161	DEVINE, KATHLENE L
	DUNCAN, DAVID L
	FROLANDER, CHARITY
	KEENEY, JOANN A
	MCBRIDE, CHARLOTTE
	MCWILLIAMS, ERIC W
	RILEY, DONALD A
	WALLACE, JEREMY
1162	DEJESUS, CECILA
1164	CHAN, RAMON
1165	BLACKWELL, FRAYDRA D
1167	CABRERA, CARLOS
	FEAGINS, ROBERT
1170	SECOND BAPTIST CHURCH OF VALLEJO
1175	RENT AFENCE FROM TRICITY FENCE CO
	TRICITY FENCE COMPANY
1182	PANETTA, JOSEPH A
1191	WEGLEITNER, JASON B
1193	OCCUPANT UNKNOWN,
1194	JOIE DE VI BOARDING KENNELS & PET SI
1195	PRICE, RICK S
1196	OCCUPANT UNKNOWN,
1300	OCCUPANT UNKNOWN,
1500	PATRICKS SAINT VINCENT HIGH SCHOOL
	SUPERIOR SISTER
1551	CALIFORNIA HWY PATROL
	STATE OF CALIFORNIA
1600	CRUSADERS FENCE CORPORATION INC
1855	780 MINI STORAGE
1865	LEWS BRAKE SHOP

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2010

650 VALLEJO MONUMENT CO
656 CHRIS CLUB
666 VALLEJO DISTRIBUTORS & SUPER
688 DECKER, THOMAS W
700 MAGGIES HAMBURGERS
707 NDT ELECTRONICS
OCCUPANT UNKNOWN,
708 ABREGO, ANGELA D
711 SANCHEZ, GERARDO F
713 VALENTINE, DEBORAH F
714 ROACH, MICHAEL D
717 GANCH, WILLIAM
720 SORRELS, CAROL D
726 WOMBLE, DENNIS R
729 BUCHALTER, MARC A
731 RUSS, YVONNE
732 RESTUCCIA, JOSEPH M
733 LAWSON, GRAY
737 MOORE, RYAN B
738 GARCIA, ANTONIO A
739 JERNEY, STEVEN J
743 GLENN, PATSY R
744 HARVEY, CHARLES A
745 MONROE, JAMES F
750 VESS, CHERYL A
751 HENDERSON, CARL M
756 OCCUPANT UNKNOWN,
757 SANTIAGO, M
762 OCCUPANT UNKNOWN,
764 ROBERTS, JOHN N
782 REID, RU
786 WRIGHT, NOY M
801 REZA, DANIEL M
802 KOSIERADZKI, ARKADIUSZ P
805 SURLES, EARLINE S
809 BECK, CLIFFORD A
810 ESPINOZA, DEBORAH A
813 MORRIS, TIMOTHY S
814 RUSSELL, WYCONDA
817 JONES, ROLAND E
MCSHERRY, BARBARA J
RAMOS, LINDA J
WOOD, JOHN D
818 OCCUPANT UNKNOWN,
821 MORENO, LUIS E
822 ANY DOG RESCUE OF VALLEJO
WOLFE, MARTA L
826 IBARRA, DARIO
830 DENSON, GREGORY R
834 ERIC, CLAY

BENICIA RD 2010 (Cont'd)

834 OCCUPANT UNKNOWN,
ROTTER, MICHAEL
835 SANTOS, ROBERT D
839 SANTO, TOM
841 HAMNER, PAMELA A
842 OCCUPANT UNKNOWN,
843 MICHNA, KEN
844 HENSON, MICHAEL
845 SANCHEZ, JONATHAN
854 ROSALES, ADELA R
855 BRIGHT, LISA L
HARRISONS MOBILE AUTO DETAIL
OCCUPANT UNKNOWN,
856 OCCUPANT UNKNOWN,
857 ZUIDEMA, RICHARD D
860 WESTER, SEAN
900 BIBLE BAPTIST CHURCH
OCCUPANT UNKNOWN,
901 AGUILAR, MARIA
JAVIER ZARATE CONCRETE CONTR
OCCUPANT UNKNOWN,
RUBIO, VIDAL
909 MILLS, WILLIAMS H
911 SCUDDER, GRACE
921 ACHESON, HARRY H
925 TAUTUIAKI, TOILA F
927 OCCUPANT UNKNOWN,
930 DONALDO, ALDWIN J
933 HOBBS, SCOTT A
PLYTAS, O
934 DESANTIAGO, ABEL D
936 LOVE, DAMIEN
937 NESCI, LAURIE
OCCUPANT UNKNOWN,
941 OCCUPANT UNKNOWN,
945 CERVANTES, MARIANA
DAVIDSON, D
TAFOYA, R
946 OCCUPANT UNKNOWN,
948 BACOME, GARY A
949 JOHNS, GARY E
953 TUFTS, SHARON
956 DELGADO, ELLIA
MCDONALD, RUNAKO
MOORE, RANDY
PEREZ, JULIAN
SMITH, IDA D
957 BURLA, DAVID K
960 LANDRY, TAVIS
STRONG, KIMMIA

BENICIA RD 2010 (Cont'd)

961 DUENAS DUENAS CONCRETE
DUENAS, JESUS
965 OCCUPANT UNKNOWN,
966 BARRELL, RICHARD
DURDEN, ARTHUR L
EZ T
967 OCCUPANT UNKNOWN,
969 OCCUPANT UNKNOWN,
970 MAJETTE, MARIE A
971 NUNES, CLARK
973 LISSICK, KENNETH I
1001 KRUSZKA, FRANCIS B
1012 OCCUPANT UNKNOWN,
1013 LIFELINE INTERNATIONAL CHURCH
OCCUPANT UNKNOWN,
1017 TURNER, KENNETH W
1020 CULPEPPER, TY T
OCCUPANT UNKNOWN,
1021 DORNBURG, SAMANTHA
1025 JOHNS WELDING & MARINE PRPLR
1026 OCCUPANT UNKNOWN,
1030 OCCUPANT UNKNOWN,
1031 SCARROTT, JOHN E
1045 WEBBER, EDWARD L
1049 DAVIS, HAROLD N
1050 SANDHU, SURJIT K
SHOP N SAVE MARKET
1100 MERRIL, N
1101 CORINTHIANS CHURCH OF GOD
1117 OCCUPANT UNKNOWN,
1123 COWAN, MERRYLYNN
ELLIS, JEFFREY A
1125 AARDVARKS & OTHERS PET SITTING
AARDVARKS DOG TRAINING CTR
SIRIUS PUPPY TRAINING
1132 DUNCAN MOTORS
1134 STEVENS, BRENDA M
1138 DULAY, ENRIQUE R
1141 MARTIN, ALFRED R
1144 BANUELOS, SUSANA
1146 JOHNSTON, SHARON
1150 DELPH, PATRICIA U
TEVES, THOMAS D
USHER, WILLARD M
1153 OCCUPANT UNKNOWN,
1154 DEFIESTA, JONATHAN M
DOMINGO, FREDDIE R
1156 SCHWARTZ, DOLLY
1161 BURKE, DIANE
DAVENPORT, STEVE S

BENICIA RD 2010 (Cont'd)

1161	DEVINE, KATHLENE
	GINI, KENNETH L
	KEENEY, JOANN A
	KUHN, GEORGE
	LYONS, DOREANN
	MCBRIDE, CHARLOTTE
	WALLACE, JEFF L
1162	OCCUPANT UNKNOWN,
1164	VELAZQUEZ, RUBEN
1165	CRUZ, JOSEPH J
1167	WOODARD, ADELENE
1170	SECOND BAPTIST CHURCHVALLEJO
1175	CONSTRUCTION SITE RENTAL FNCNG
	TRICITY FENCE CO INC
1182	PANETTA, JOSEPH A
1191	FILL IN SOLUTIONS
	GERMINO, JAMES M
1193	OCCUPANT UNKNOWN,
1194	JOIE DE VI BOARDING KENNELS
1195	PRICE, RICK S
	RICK PRICE ROOFING CO
1196	OCCUPANT UNKNOWN,
1300	OCCUPANT UNKNOWN,
1490	DOMINICAN SISTERS
1500	ST PATRICKST VINCENT ATHLETIC
1529	MONROY, RAUL
1551	CALIFORNIA HIGHWAY PATROL
	GOLDEN GATE COMMUNICATION CTR
	HIGHWAY DEPT
	HIGHWAY PATROL
1600	SAM JIN
1855	780 MINI STORAGE
1865	LEWS BRAKE SHOP

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2005

648	ARTS & IMAGES
688	DECKER, THOMAS W
700	MAGGIES RESTAURANT
707	LA FORCE ENTERPRISES
	NDT ELECTRONICS
	OCCUPANT UNKNOWN,
709	VARGAS, BERTHA D
711	REEVES, STEVEN R
713	VALENTINE, DEBORAH F
714	ROACH, MICHAEL D
717	GANCH, WILLIAM
720	SORRELS, CAROL
726	WOMBLE, DENNIS R
729	BUCHALTER, MARC A
731	GIPSON, HORACE
732	RESTUCCIA, JOSEPH M
733	MYERS, ALPHONSO L
737	MOORE, RYAN B
738	HORST, KRISTA L
739	JERNEY, STEVEN J
743	OCCUPANT UNKNOWN,
744	HERNANDEZ, JENNIFER
745	MONROE, JAMES F
750	VESS, CHERYL A
751	HENDERSON, CARL
756	OCCUPANT UNKNOWN,
757	CAJUCOM, JOMERSAN
762	PERIDO, MARIO A
764	ROBERTS, JOHN N
778	HENRIQUEZ, JAIME
782	DIGIGEO
	EDMONDS, GEORGE
786	WRIGHT, NOY
801	REZA, DANIEL M
802	JOHNSON, ELIZABETH
805	SURLES, EARLINE S
806	FLORES, JOSE F
809	ROMERO, MARIA
810	ADELSTEIN, BRIAN W
813	OCCUPANT UNKNOWN,
814	MARTINEZ, ROSEMARY
817	GROSSER, NICHOLE M
	JAMES, C
	JONES, ROLAND E
	JUAREZ, TONY F
818	SUTTON, JEFFREY
821	URZUA, ROGELIO
822	WOLFE, MARTA L
826	IBARRA, DARIO
830	DENSON, GREGORY R

BENICIA RD 2005 (Cont'd)

834	OCCUPANT UNKNOWN,
	ROTTER, MICHAEL
837	FOWLER, LAURA J
	MURRIETA, EVA M
	RUEGG, CHRISTOPHER
839	SANTO, ROBERT P
841	HAMNER, PAMELA A
842	RUIZ, PATRICIA R
843	MONTERROSA, JOSE A
844	MARR, FORREST
845	VAZQUEZ, OFELIA
849	IVES, STEVEN
853	REYES, ELEONORE S
854	BUI, TRINH
855	HARRISON, LISA L
	JOHNSON, HARVEY
857	ZUIDEMA, RICHARD D
900	BIBLE BAPTIST CHURCH OF VALLEJO
901	OCCUPANT UNKNOWN,
	QUITEVIS, FAUSTINO
903	LARSON, D
909	VICKERY, CALVIN D
911	OCCUPANT UNKNOWN,
921	ACHESON, HARRY H
925	PALELEI, TOILEA
933	ALLEN, NAOMI
934	DESANTIAGO, ABEL D
936	RIDGWAY, KEMP D
937	NESCI, LAURIE
	OCCUPANT UNKNOWN,
941	OCCUPANT UNKNOWN,
942	COLON, CHARLETTA
945	JEREZANO, ANA
	VARGAS, MARIO M
946	RUVALCABA, MARCO A
948	BACOME, GARY A
949	JOHNS, GARY E
950	AURE, ALLAN
953	GOLIAT, HENRY
956	DELGADO, ELLIA
	GARROTT, SHANAY
	JOHNSON, MICHAEL A
957	BURLA, DAVID K
960	DEVINE, JOHNNY
	HENRY, PAMELA J
	LANDRY, TAVIS
	MARTIN, MARSHEL
	MINIX, CHARLES
	ROSS, JANICE
	STANGLER, LINDA

BENICIA RD 2005 (Cont'd)

961 DUENAS, JESUS
966 DURDEN, ARTHUR L
SAUNDERS, MOSI F
967 HERNANDEZ, JAVIER
969 STAMPLEY, HENRY J
970 HAMILTON, MARIE A
971 NUNES, CLARK
973 LISSICK, KENNETH I
974 KAJUKENBO SELF DEFENSE INST
1001 KRUSZKA, FRANCIS B
1013 OCCUPANT UNKNOWN,
OUR LORD REIGNS COMMUNITY CHURCH
1016 HOUSE, WARDELL
JONES BLESSED ONES FAMILY CHILD CARE
1017 TURNER, JOYCE E
1020 CAPWELL, JERRY M
OCCUPANT UNKNOWN,
1021 ROXBERG, VALERIE J
1026 DIAZ, ERNESTO B
1030 JONES, DENNIS A
1031 SCARROTT, JOHN E
1045 WEBBER, EDWARD L
1049 DAVIS, HAROLD
1050 DAVIS, C
LIQUOR & CO
SHOP N SAVE MARKET
1100 MERRILL, NORMAN
1101 CORINTHIAN CHURCH OF GOD IN CHRIST
1117 HARRIS, DORLENE
1121 CALDWELL, ALBERTA
1123 OCCUPANT UNKNOWN,
1125 CERAMICS IN VALLEJO
VALLEJO CERAMIC SUPPLY CENTER
1132 DUNCAN MOTORS
DUNCAN, JONISH
STEVE N LARRYS AUTO BODY & CUSTOM
1134 LEWIS, ALLEN
1138 DULAY, WELBORN K
1141 MARTIN, ALFRED R
1145 PUTER FIXER
1146 HEART FELT HOME
LARA, MARIA
1148 MARKS, CATHERINE L
1150 GRIGG, STEPHEN W
TEVES, THOMAS D
USHER, WILLARD M
1152 TURNER, ROSE A
1153 COKER, ALBERT J
OCCUPANT UNKNOWN,
1154 BAUTISTA, ARTURO G

BENICIA RD 2005 (Cont'd)

1154 DEFIESTA, LUZ L
DOMINGO, LOUISA C
HIDALGO, JOSE
LIVING ROCK FELLOWSHIP FOURSQU
MARIANO, LUDIVICA D
1156 HERNANDEZ, JULIO
1160 OCCUPANT UNKNOWN,
1161 ARCHER, DOUG G
BAILEY, ARTHUR
BEIGHLEY, JOSEPH C
CHRISTOSILIS, CAROLYN A
DEVINE, KATHLENE
EDWARDS, LANSA
HAMBURG, JANET
JACKSON, KELLY
JONES, RANDY
KEENEY, JOANN A
KENNETH, LARRY
KUHN, GEORGE
LYONS, DOREANN
MATTHEWS, ROGER
OLSON, ELIZABETH C
OVERLY, LUPE
PADILLA, HUGO
PERRY, RONALD
SILVEY, GREG W
TREHAN, J D
WALLACE, JEFF L
ZURFLEY, MELVIN N
1162 OCCUPANT UNKNOWN,
1165 STANBERRY, LERAI L
1167 BLOUNT, MELANIE
HILLIARD, JAKE
NEWELL, LOWANNA R
REYES, REBECCA
SANTOS, MARIE
WILLIAMS, CHRIS
WOODARD, ADELENE
1170 SECOND BAPTIST CHURCH OF VALLEJO
1182 PANETTA, JOSEPH A
1191 FORSYTHE, IAN J
1193 OCCUPANT UNKNOWN,
1194 JOIE DEVISHOW & BOARDING KENL
1195 PRICE, RICK S
RICK PRICE ROOFING CO
1196 OCCUPANT UNKNOWN,
1197 BJ LEWIS
VALLEY EQUIPMENT REPAIR
1300 STOCKWELL, EPHRIAM J
1500 ROMAN CATHOLIC BSHPSCRMENTO

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2005 (Cont'd)

1500	SAINT PATRICK ST VINCENT HIGH SCHOOL SUPERIOR SISTER
1529	MONROY, RAUL
1551	CHP
1600	STEWART FENCE & LUMBER INC
1855	780 MINI STORAGE
1865	LEWS BRAKE SHOP

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 2000

646	SILVAS MEMORIALS
	VALLEJO MONUMENT COMPANY
656	CHRIS' CLUB
658	RENEGADE PIZZA
666	VALLEJO DISTRIBUTORS & SUPER SAVE MARKET
700	MAGGIE'S HAMBURGERS
707	N D T ELECTRONICS
708	OCCUPANT UNKNOWN,
709	MORRISON, DOUGLAS M
713	KURTZ, DAN
714	ROACH, MICHAEL D
717	GANCH, WILLIAM
723	CORYELL, BRIAN
726	WOMBLE, DENNIS R
729	BRETHAUER, JOAN C
732	RESTUCCIA, JOSEPH M
733	MYERS, A
737	MOORE, RYAN
738	CLAXTON, MICHAEL J
739	RECKLEY, JEAN D
743	GLENN, PATSY R
744	MCCLURE, VANESSA A
745	KOENEN, R W
750	VESS, CHERYL A
751	NATALE, O J
756	OCCUPANT UNKNOWN,
762	TAYLOR, L
764	CHEDISTER, SABRINA
778	NEWCOMB, ELVA A
782	OCCUPANT UNKNOWN,
786	WRIGHT, LARRY
801	REZA, DANIEL M
805	SURLES, EARLINE
806	RAMOS, JOSE
809	BECK, C A
810	OCCUPANT UNKNOWN,
813	RUSHTON, DONALD W
814	CAMPBELL, ERIC
817	OCCUPANT UNKNOWN,
818	OCCUPANT UNKNOWN,
822	TRUJILLO, PETER P
826	PETERSON, EMILLY C
830	DENSON, GREGORY R
834	PAXTON, ANN P
835	OCCUPANT UNKNOWN,
839	NEBERGALL, ROBERT V
841	HAMNER, PAMELA A
842	VASQUEZ, P R
843	OCCUPANT UNKNOWN,
844	OCCUPANT UNKNOWN,

BENICIA RD 2000 (Cont'd)

845	OCCUPANT UNKNOWN,
849	BESSE, RICHARD
853	OCCUPANT UNKNOWN,
854	OCCUPANT UNKNOWN,
855	OCCUPANT UNKNOWN,
857	OCCUPANT UNKNOWN,
885	BORNSCHEIN, JUANITA
901	QUITEVIS, FAUSTIN
903	OCCUPANT UNKNOWN,
909	VICKERY, G
911	SCUDDER, BARBARA C
915	OCCUPANT UNKNOWN,
920	BIBLE BAPTIST CHURCH
925	TAUTUIAKI, TOILEA
	TUPOU LANDSCAPING & GARDENING
927	OCCUPANT UNKNOWN,
933	SMITH, TIFFANY N
934	DESANTIAGO, ABEL
936	OCCUPANT UNKNOWN,
937	STEVENS, MAUREEN
941	CYR, CAROLYN
942	SARABIA, ROBERTO C
945	OCCUPANT UNKNOWN,
946	RUVALCABA, MARCO
948	OCCUPANT UNKNOWN,
949	OCCUPANT UNKNOWN,
950	JAY, NATHAN L
953	SHINER, GARY D
956	BOGANS, BARBARA A
	BUTLER, SANDRA D
	JOHNSON, G
	WILSON, WILLIE
957	BURLA, DONNA K
960	HENRY, PAMELA J
970	MAJETTE, MARIE A
971	OCCUPANT UNKNOWN,
973	OCCUPANT UNKNOWN,
1001	KRUSZKA, FRANCIS B
1012	ROBINSON, M
1013	APOSTOLIC PENTECOSTAL CHURCH
1017	TURNER, BOOKER T
1020	OCCUPANT UNKNOWN,
1021	OCCUPANT UNKNOWN,
1024	VALLEY DIAZ CONSTRUCTION & DEVELOPMENT
1025	JOHNS WELDING & MARINE PROPELLER REPAIR
1050	LIQUOR & COMPANY
	OCCUPANT UNKNOWN,
1100	WADE, ROLAND
1101	CORINTHIANS CHURCH OF GOD ILN CHRIST MULTI PURPOSE
	CORINTHIANS CHURCH OF GOD ILN CHRIST OFFICE

BENICIA RD 2000 (Cont'd)

1117 HARRIS, CATRINA
1125 EVERGREEN COMMUNICATION SERVICES
1130 GRAPEVINE FORGE
1132 STEVE N LARRYS AUTO BODY & CUSTOM PAINTING
1134 HILLARD, J
1141 BALDRIDGE, ALFRED
MARTIN, MARY I
1146 UDOM, STEVE J
1148 MARKS, C
1150 OCCUPANT UNKNOWN,
1152 TURNER, GUY A
1153 KLINGENSMITH, CAROL A
1154 BAUTISTA, ARTURO
DEFIESTA, LUZ L
MARIANO, VICTOR A
1156 SALVADOR, ALBERTO
1161 BAYBADO, ROXANNE R
BIDWELL, AUDREY
COURTNEY, MARTIN
MILLER, LEE
SOUTHERLAND, BILLY T
VISTA VALLEJO TRAILER PARK & APARTMENTS
WALLACE, JEFF L
WOOLEY, EDWARD
YEUNG, GLENN
YOUNG, GLENN J
1162 REYNOLDS, RICKY
1164 SANDERS, TAMMY
1165 OCCUPANT UNKNOWN,
1167 BARBOSA, JOSE I
STPIERRE, SIMON P
VILAYSITH, PHO P
1170 SECOND BAPTIST CHURCH OF VALLEJO
1175 RENT A FENCE FROM TRI CITY FENCE COMPANY
TRI CITY FENCE COMPANY INCORPORATED
1194 JOIE DEVI SHOW & BOARDING KENNELS
1500 ST PATRICK ST VINCENT ATHLETIC DEPARTMENT
ST PATRICK ST VINCENT HIGH SCHOOL
SUPERIOR SISTER
1551 CALIFORNIA STATE OF
CALIFORNIA STATE OF HIGHWAY PATROL
1600 STEWART FENCE COMPANY
1855 780 MINI STORAGE
SIRI CONSTRUCTION COMPANY
1865 LEWS BRAKE SHOP

BENICIA RD 1995

646	VACAVILLE MONUMENT CO
	VALLEJO MONUMENT CO
656	CHRIS CLUB
	TANNER, EDWARD
666	AWAD, NAIM A
	VALLEJO DISTRIBUTORS SUPER SV
700	MAGGIES HAMBURGERS
709	MORRISON, DOUG M
711	LOVEDAY, ANDREA G
713	THOMPSON, CARLA
714	ROACH, MICHAEL D
717	GANCH, WILLIAM JR
723	OGBAH, PAUL
726	WOMBLE, DENNIS R
729	BRETHAUER, JOAN C
732	JOHNSTON, J
733	MCALLISTER, VINCENT J
737	CONOW, N L
738	CLAXTON, ANNETTE
739	RECKLEY, WILBUR A
743	OCCUPANT UNKNOWNN
744	OCCUPANT UNKNOWNN
745	KOENEN, GLENNA B
750	VESS, CHERYL A
751	NATALE, O J
756	LEMASTERS, GENE R
757	OCCUPANT UNKNOWNN
762	OCCUPANT UNKNOWNN
764	MCKELDIN, GORMAN F
778	SCITERN, COY C
782	OCCUPANT UNKNOWNN
786	WRIGHT, LARRY
801	REZA, SANDRA E
805	SURLES, EARLINE
806	MACE, ALFRED H
809	GAILLARD, DOROTHY M
810	ERICKSON, JOHN A
813	MONGIELLO, GAYLE
814	WALKER, NEWELL
817	TORRES, GEORGE
818	OCCUPANT UNKNOWNN
822	OCCUPANT UNKNOWNN
826	BROTHERS, RODNEY B
830	OCCUPANT UNKNOWNN
834	HUDIBURG, JOHN L
835	OCCUPANT UNKNOWNN
	VALLEY CLEANING SYSTEMS
837	PHAM, HIEN V
839	NEBERGALL, ROBERT V
841	OCCUPANT UNKNOWNN

BENICIA RD 1995 (Cont'd)

842 OCCUPANT UNKNOWNN
843 OCCUPANT UNKNOWNN
RUSTYS RECORDS
844 OCCUPANT UNKNOWNN
845 DANCO INTERIOR WALLBOARD SYSTS
OCCUPANT UNKNOWNN
849 JORDAN, RICHARD
STEPHENS, ELEANOR
853 OCCUPANT UNKNOWNN
854 OCCUPANT UNKNOWNN
855 ROHRS, SARAH J
857 ZUIDEMA, RICHARD D
901 QUITEVIS, FAYE
WILKES, WILKES
903 CAMPBELL, DEBORAH
909 VICKERY, G
911 OCCUPANT UNKNOWNN
915 LAPRADE, DAVID
920 BIBLE BAPTIST CHURCH
921 BURCH, JOSEPH N
925 TAUTUIAKI, TOILEA
927 OCCUPANT UNKNOWNN
933 OCCUPANT UNKNOWNN
934 OCCUPANT UNKNOWNN
936 OCCUPANT UNKNOWNN
941 OCCUPANT UNKNOWNN
942 OCCUPANT UNKNOWNN
948 CORBETT, BEULAH
OREILLY, DEANNA A
949 OCCUPANT UNKNOWNN
950 SHUSTA, CYNTHIA
953 SHINER, GARY
956 ZIMMERMAN, DIANA
957 BURLA, DONNA
960 HERNANDEZ, SIMON
965 OCCUPANT UNKNOWNN
966 HALL, BURL W
970 MAJETTE, MARIE A
971 OCCUPANT UNKNOWNN
973 SCHULTZ, ERIC P
1013 APOSTOLIC PENTECOSTAL CHURCH
1020 CAPWELL, JERRY
ODONNELL, IKE
TOOR, KARMEL
1025 JOHNS WELDING & MARINE PRPLR
1026 VALLEY DIAZ CONSTRUCTION
1030 OCCUPANT UNKNOWNN
1101 CORINTHIANS CHURCH OF GOD
1117 TURNER, BOOKER T
1123 ROMERO, BEN

BENICIA RD 1995 (Cont'd)

1125 B & D AUTO ELECTRIC
1132 R & R BODY WORKS
1134 JEFFERSON, C
1138 OCCUPANT UNKNOWNN
1141 BALDRIDGE, ALFRED
MARTIN, MARY I
1144 OCCUPANT UNKNOWNN
1145 GREENE, MICHAEL
1146 ILOFF, MELISSA
1150 DELPH, P U
USHER, MARVIN
1152 OCCUPANT UNKNOWNN
1153 SNYDER, JOANN
1154 DEFIESTA, ELIBETH
MARIANO, VICTOR A
1156 OCCUPANT UNKNOWNN
1161 BROLLIAR, LESTER P
BUTLER, GARY
DOCKERY, THOMAS
INGELS, CARL
KING, TED
LUKER, LISA A
MILLER, LEE
OLSON, E C
PALMAYMESA, FRANK M
1162 SIMMONS, NORMA D
1163 OCCUPANT UNKNOWNN
1167 DAY, NATASHA
HATHCOAT, MICHAEL
SINGLETON, L J SR
1170 SECOND BAPTIST CHURCH
1175 TRI CITY CABINET & DOOR INC
TRI CITY FENCE CO
TRI CITY LANDSCAPE BORDERS
1182 SANGER, ALICE M
1191 OCCUPANT UNKNOWNN
1193 OCCUPANT UNKNOWNN
1194 JOIE DE VI BOARDING KENNELS
PANETTA, FANNIE
1300 FEDERLE, STEVEN
1500 ST PATRICKS HIGH SCHOOL
1551 COMMUNICATIONS CENTER
HIGHWAY PATROL
SANCHEZ, ERNEST
1600 BIG 4 RENTS
1855 780 MINI STORAGE
SIRI CONSTRUCTION CO
1865 LEWS BRAKE SHOP

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

BENICIA RD 1992

646	VALLEJO MONUMENT CO
648	A&R GLASS COMPANY
656	CHRIS CLUB
658	YANGS MARTIAL ARTS
666	VALLEJO DSTRBTRS
700	MAGGIES HAMBURGERS
707	N D T ELECTRONICS
713	LAWSON, CHRIS
717	GANCH, WILLIAM JR
723	SOUSA, GEORGE R
726	WOMBLE, DENNIS R
729	BRETHAUER, JOAN C
733	MCALLISTER, VINCENT J
744	TAYLOR, KEVIN
745	KOENEN, RALPH W
751	NATALE, O J
778	PEPER, DARVIN
786	WRIGHT, LARRY
801	REZA, S E
806	MACE, ALFRED H
809	GAILLARD, BERNARD K
810	ERICKSON, JOHN A
813	MITREA, GEORGE C
834	HUDIBURG, JOHN L
837	HERPY, B
	PHAM, HIEN V
839	NEBERGALL, ROBERT V
843	RUSTYS RECORDS
845	DANCO INTERIOR SYS
849	STEPHENS, ELEANOR
901	KING, DAVID R
	QUITEVIS, FAYE
909	VICKERY, G
915	LAPRADE, DAVID
920	BIBLE BAPTIST CH
948	CORBETT, BEULAH
950	RYSLINGE, LARS
953	HURST, JAMES
956	HALE, JOY
	MARKIET, EWALD
	OCAMPO, AUDON
960	BORGES, LUZ M
973	SCHULTZ, ERIC P
1001	KRUSZKA, FRANCIS B
1013	APOSTOLIC CHAPEL
1025	JOHNS WELDING&MRN
1050	LIQUID&CO
1101	CORINTHIANS CH GOD
1117	TURNER, BOOKER T
1125	B&D AUTO ELECTRIC

BENICIA RD 1992 (Cont'd)

1130	VALLEJO PLUMBING
1132	JERRYS AUTO BODY
1141	BALDRIDGE, ALFRED
	MARTIN, MARY I
1145	RIKKERS, LEE R
1150	USHER, MARVIN
1154	CASTILLO, LOUISA
	DEFIESTA, LUZ
	DEFIESTASAGUID, LYNETTE
	MARIANO, VICTOR A
1161	BROLLIAR, LESTER P
	DOCKERY, THOMAS
	INGELS, CARL
	JACKSON, ROBERT L JR
	KING, TED
	OLSON, E C
	VISTA VALLEJO HM PK
1170	SECOND BAPTIST CHRH
1175	RENT A FENCE
	TRI CITY CBNT&DOOR
1194	JOIE DE VI KENNELS
	PANETTA, FANNIE
1500	ST PATRICKS HI SCHL
1551	CA ST HIGHWAY PATRL
1600	BIG 4 CONTR RENTS
1855	780 MINI STORAGE
	SIRI CONSTRUCTION

BENICIA RD 1988

1100 Vacant
1101 Corinthians Church Of God In Christ
554-1002
1117 Vacant
1121 Hatcher Mary L ◎
1123 Vacant
1124 Brewer Lonell 642-4655
1125 Vacant
1130 Vallejo Plumbing 553-9912
1132 R & R Body Works auto repr 552-5750
1138★Harding Steve D 553-8248
1141 Baldridge Alf
1141b★Jones Trudy
1144 Vacant
1145 Rikkers Lee R ◎ 643-4822
1146 Bickford James E ◎ 643-3815
1146a Nealson Debbie
1146b Snell Mike 553-8197
1148★Iloff Richd ◎
1150 Nicia B ◎
1150a Usher Ruth 644-1524
1152 Tanner Betty J Mrs ◎ 643-8063
1152b Turner Guy A ◎ 643-6388
1153 Vacant
1153½ Gilcrest Wm S
1154 Mariano Victor A ◎ 557-4468
1154b De Fiesta Luz L 557-4642
1156 Boyles Danny C
1161 Bailey Auto & Trailer Court 552-5075
Apartments
1★Woodruff Jothanthan
2 Davis Roy B
3 King Mark
4★Sheldon Violet M
5★Garrison Blanca
6★Day Geo
7 Vacant
Spaces
1 King Ted 644-5020

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1988

BENICIA RD–Contd

2★Hrzeck Jose
3 Ingels Carl
4★Hohman Frank
5 Green John
6★Gardner Charles
7★Caster Roy
8★William Jack
9★Williams Stan
10 Olson Eliz Mrs 554-4617
11 Jackson Robt L Jr
12 Williams Don
13★Bulkley Don
14 Lemon Lillian M Mrs ◎ 643-3917
15★Emerson Donald
16★Timmons Michl P
17★Redway David
18 Brophy Cecelia H Mrs 644-5392
19 Miller Lee A 557-5456
20 Vacant

1162 No Return
1164★Clark Candice M 644-6228
1165 Jones James
1167 Apartments
1 Vacant
2★Smith Ophelia
3★Zumwalt Paul A
4 Vacant
5★Young Kim R
6 Vacant
7★Barkley David

1170 Second Baptist Church 643-6496
1175 Tri-City Rent-A-Fence Co Inc 644-5764
Tri-City Fence Co Inc fence contrs 644-5764
Strange Chas E ◎ 642-7242
1182 Sanger Alice M Mrs ◎ 644-2744
1186 Vacant
1191 Reed Harold L ◎ 644-0376
1193 Houston Paul J 642-4142
1194 Pet Hotel pets grooming & boarding servs 644-8323
★Walker Daisy ◎ 554-6346
1195 Price Richd S ◎ 644-0936
1196 Vacant
1202 Vacant
1300 Vallejo Auto Movies 642-0615
Morales Robt 557-4024
ROLLINGWOOD DR INTERSECTS
GLEN COVE RD INTERSECTS
1500 St Vincent High School 644-4425
★Casey Danl
1600 Big 4 Rents equip rental 554-8030
WINDJAMMER DR BEGINS
COLUMBUS PKWY INTERSECTS

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1984

TAYLOR AV INTERSECTS
BANNING WAY INTERSECTS
1100 Vacant
1117 Vacant
1123 Teter Dale ◎ 557-4674
1124 Mason Albert D 552-5535
1125 Plumbing School (Ofc) 552-9404
1130 Vallejo Plumbing 553-9912
1132 Jerry's Auto Body Repair 552-5750
1138★Martinez Thomas 554-1136
1141 Matlock Trudie 644-6835
1141b Vacant
1144★Murry Reed E 553-1205
1145 Rikkers Lee R 643-4822
1146 Bickford James E ◎ 643-3815
1146a No Return
1146b★Marley Gary V 643-0442
1148 Morris Richard ◎ 554-0757
1150 Tuttle Patty ◎
1150a Usher Ruth 644-1524
1152 Tanner Jehu W ◎ 648-0201
1152b Turner Guy A 643-6388
1153 Vacant
1153½ No Return
1154 Mariano Victor A ◎ 557-4468
1154b★De Fiesta Luz L 557-4642
1154c De Fiesta Manases L
1156 Boyles Danny C
1161 Bailey Auto & Trailer Court 552-5075
★West Wm E
Apartments
1 Wood Jas M
2 Davis Roy B ◎
3 King Mark
4★Sprankle J
5★Dickey D
6 Weatherly Richd
7 Vacant
Trailer Spaces
1 King Ted 644-5020
2 Vacant
3 Hargrove Maureen Mrs 552-5102
4★Judd Henry H
5 Vacant
6 Cannon J C Mrs ◎ 554-1663
7 Vacant
8 Vacant
9 Tilgemeir Rosa Mrs 644-7015
10 Huffman Vernon 554-4617
11★Wisher James
12★Williams Don
13★Crates C

1400 LEMON STREET

BENICIA RD 1984

14 Lemon Lillian M Mrs ◎ 643-3917
15 Sackett Homer
16 Roberts Patsy Mrs ◎ 643-6746
17★Wolfe John
18 Brophy Cecelia H Mrs ◎ 644-5392
19★Aitken Ken J 554-2850
20★Torres F
21 Lashley John H 643-2921
1162 Vacant
1164 Whittington Wayne L ◎ 642-1247
1165★Ojascastro Alex
1167 Apartments
1 Barton Vida
2 Barrett Vanessa
3 Cruz Herbert H
4 Kaloczi Steve
5 Muller Colleen
6 No Return
7★Ortin Rosa S
1170 Second Baptist Church 643-6496
1175 Tri-City Rent-A-Fence Co 644-5764
Tri-City Fence Co fence contrs 644-5764
Strange Charles E ◎ 642-3457
1182 Sanger Alice M Mrs ◎ 644-2744
1186 Vacant
1191 Reed Harold L ◎
1193 Houston Paul J 642-4142
1194 Pet Hotel kennel 644-8323
★Walker Daisy I ◎ 554-6346
1195 Price Richd S ◎ 644-0936
1196★Jackson Michael A ◎ 643-8003
1202★Hertel Marilyn E ◎ 554-2291
1300 Vallejo Auto Movies 642-0615
ROLLINGWOOD DR INTERSECTS

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1979

Near Wolfe Al

TAYLOR AV INTERSECTS

BANNING WAY INTERSECTS

1100 Bible Art F 642-5220
1117 Vacant
1121 Breedlove R 642-9653
1123★Hatcher
1124 No Return
1125 Vacant
1138 Bell Sylvester 644-4785
1141 Trujillo Martha L Mrs 644-6835
1141b Vacant
1144★Moseley Gladys
1145 Rikkers Lee R 643-4822
1146 Bickford James E ◎ 643-3815
1146a★Biggs Casey
1146b★Goodman Thomas
1148★Morris Richard ◎
1150 Tuttle Pauline ◎
1150a Usher Erma Mrs 644-1524
1152 Tanner Jehu W ◎ 648-0201
1152b Turner Guy A 643-6388
1153 Davis Rosalena Mrs ◎ 644-1760
1154 Vacant
1154a Vacant
1154b Vacant
1154c Vacant
1156 Vacant
1161 Bailey Auto & Trailer Court 642-9822
Apartments
★Miller Lee 642-9822
1 La Fontaine Lou
2 Vacant
3★Ladd Marsha
4 Frazekas Emory
5 Goff
6 Beadle Dosia 648-2492

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1979

BENICIA RD—Contd

7 Fullington Linnie 643-6778
Trailer Spaces
1 King Ted 644-5020
2 Murray Vernon 644-1534
3 Bowes Etta Mrs 644-3860
4 Nathan Hazel A Mrs 648-9815
5 Camel Art
6★Cannon J C ◎
7★Nichols Melanie
8 Vacant
9 Tilgemeir Henry
10 Markus Donald
11★Becham James
12★Bowels James
13★Hartland Leo
14 Lemon Lillian M Mrs 643-3917
15★Moore Buddy
16 Roberts Patsy
17★Little Laura
18 Brophy Cecelia H Mrs 644-5392
19 Vacant
20★Lum Herb
21 Lashley John H 643-2921
1162★Cuberos Sandra 644-9491
1164★Tubb James P 552-2430
1165 Drake Earl V
1167 Apartments
1★Tordesen William 642-2560
2 Vacant (Apts 2-4)
3★Moreis Bill L
4★Thurlough Rebecca
6 Vacant
7★Bilo Louie Q
1170 Second Baptist Church 644-2017
1175 Strange Charles E ◎ 644-5764
1182 Sanger Alice M Mrs ◎ 644-2744
1186 Vacant
1191 Amerine Clarence V ◎
1193★Houston Paul J 552-1456
1194 Pet Hotel Kennel 644-8323
★Rose Richd L ◎ 644-8323
1195 Vacant
1196★Rose Hazel 644-9581
1202 Ellis Ralph 552-1070
ROLLINGWOOD DR INTERSECTS
1300 Vallejo Auto Movies 642-0615

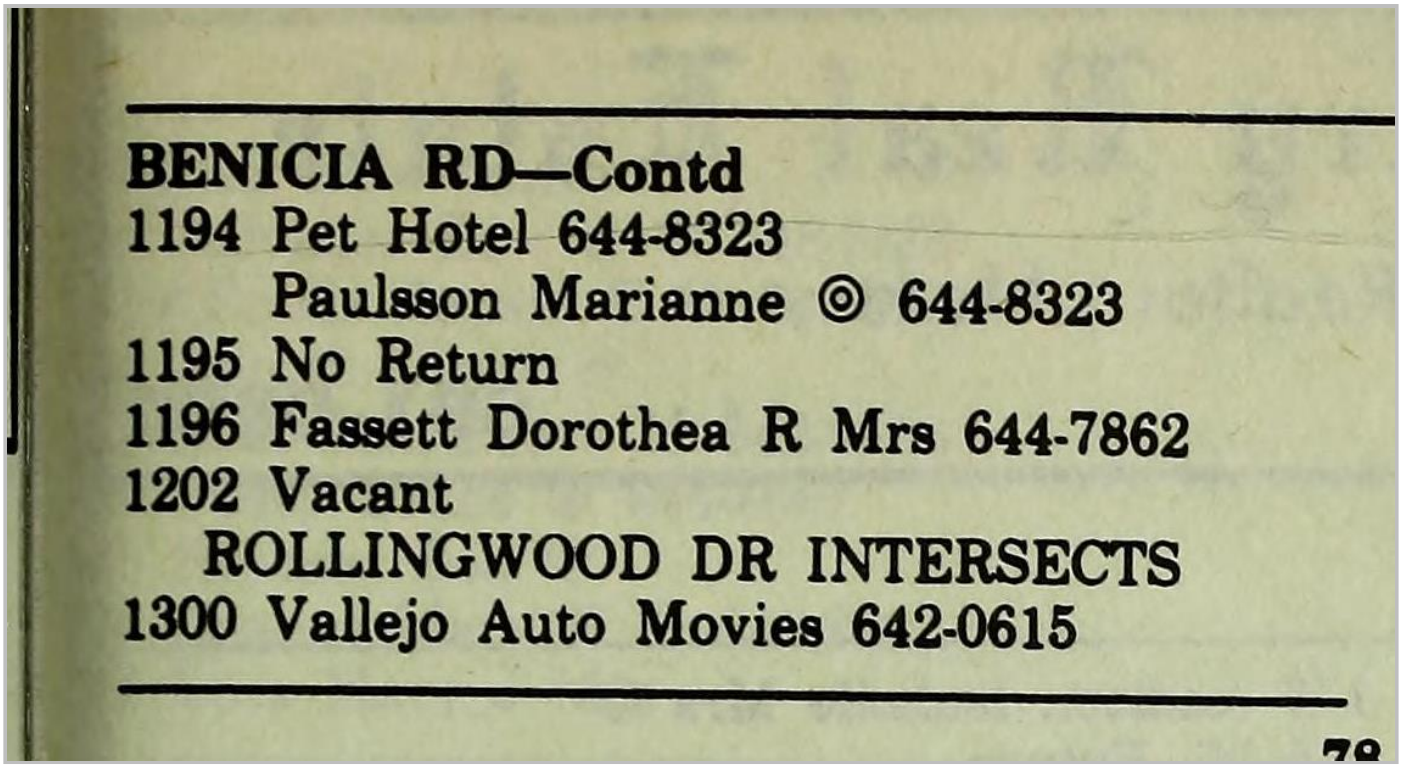
BENICIA RD 1974

BANNING WAY INTERSECTS

1100 Bible Art F 642-5220
1117 Burns Ruben
1121 Candate Robt
1123 No Return
1124 No Return
1138 Bell Sylvester ◎ 642-7239
1141★Triyillo Martha L Mrs 644-6835
1141b Vacant
1144★Tenney Joanne Mrs
1145 Farrell James ◎
1146 Bickford James E ◎ 643-3815
1146a Teitgen Bob
1146b Rikkers Lee R 643-4822
1150 Flora Alberto ◎
1150a Usher Marvin ◎ 644-1524
1152 Tanner Jehu W ◎ 648-0201
1153 Davis Rosalena Mrs ◎ 644-1760
1154 Gragg Robt L ◎ 642-1513
1154a Vacant
1154b★Lyons Henry
1154c★Healy Robt
1156 Wolfe Lester ◎ 691-1535
1161 Bailey Auto & Trailer Court 642-9822
Bailey Elva Mrs ◎ 642-9822
Apartments
1 Kopper Richd 644-4250
2★Fontain Lon
3 Mc Daniel Al
4 Frazekas Emory
5 Vacant
6 Beadle Dosia 648-2492
7 Smith Ora P 643-7467
1116 Trailer Spaces
1 King Ted ◎ 644-5020
2 Brown Ella Mrs ◎ 644-1559
3 Bowes Etta Mrs ◎ 644-3860
4 Nathan Hazel A Mrs ◎ 648-9815
5 Camel Art ◎
6 Cannon J C ◎ 644-3322
7★Gordon Ralph
8★Chandler Richard
9 Bradley Wm A ◎ 642-9137
10 Vacant
11 Pelgemeir Henry ◎
12 Klause Joe ◎
13 Enea Paula ◎
14 Lemon Lillian M Mrs ◎ 643-3917
76 15★Giles G H
17 Farnsworth Emma Mrs ◎
18 Brophy Cecelia H Mrs ◎ 644-5392
19 Vacant
20 Dennison Lydia
21 Lashley John H ◎ 643-2921
1162★Meeks Fredk J ◎
1164 Whittington Wayne ◎ 642-1247
1165★Drake Earl B
1167 Apartments
1 Pillow Fernie E Mrs 644-8459
2 Vacant
3 Cooper James
4 Trelease Jim
5 Vacant
6 Mayberry Marlin 691-0465
7 Vacant
1170 Second Baptist Church 644-2017
1175 Strange Charles E ◎ 644-5764
0 1182 Sanger Wm L ◎ 644-2744
1186 Wade Libby
1191 Amerine Clarence V ◎ 644-1035
1193 Yaeger Geo A ◎ 642-3767
1193a★Luske Bruce

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1974



BENICIA RD—Contd
1194 Pet Hotel 644-8323
Paulsson Marianne ◎ 644-8323
1195 No Return
1196 Fassett Dorothea R Mrs 644-7862
1202 Vacant
ROLLINGWOOD DR INTERSECTS
1300 Vallejo Auto Movies 642-0615

78

BENICIA RD 1970

Rear Wong Ah 642-1084
TAYLOR AV INTERSECTS
BANNING WAY INTERSECTS
1100 Dugas S G
1101 Bill's Time Service Station 648-1034
1117 Stephens Emma Mrs ◎ 643-2989
1123 Wiegenstien Jules R
1124 Fears Geo
1130 Vacant
1138 Bell Sylvester
1141 Vacant
1141b Brown Edw 644-7578
1144 Law Curtis L
1145 Farrell James
1146 Bickford James E ◎ 643-3815
1146a Gunsalus David
1146b Rikkers Lee R 643-4822
1150a Usher Marvin 644-1524
1152 Tanner Jehu W ◎ 648-0386
1153 Davis Rosalena Mrs ◎ 644-1760
Rear Rice Clyde L Jr
1154 Gragg Robt L ◎ 642-1513
1154a Reading Rolano 642-8185
1154b Beadle Robt R
1154c Vacant
1156 Doeur John
1161 Bailey Auto & Trailer Court 642-9822
Apartments
1 Kopper Richd
2 Lovan Cleo
3 Bailey Elva Mrs ◎ 642-9822
4 Frazekas Emory
5 Avilla Roger
6 Cruz Donald
7 Smith Ora 643-7467
Trailer Spaces
1 King Ted
2 Brown Ella Mrs
3 Bowes Etta Mrs
4 Nathan Wilfred J
5 Camel Art
6 Cannon J E
7 Glass Douglas
8 Farnsworth Emma Mrs ◎ 644-6849
9 Bradley W A ◎ 642-9137
10 Neal Ann
11 Blazer Jefferson
12 Webb Kevin
13 Brock Rick
14 Lemon Lillian M Mrs
15 Vacant
17 Phillips C C ◎ 642-6021
18 Brophy Cecilia Mrs
19 Denison Lydia Mrs
20 Moss Wayne
21 Lashley J H

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1970

BENICIA RD—Contd

1162 No Return
1164 Scheile Ronald L 644-3054
1165 Rhead Margt L Mrs 643-0189
1167 Apartments
1 Pillow Fernie E Mrs 644-8459
2 Gaviglio Glen
3 Adams Lawrence
4 Vacant
5 Vacant
6 Shallen James
7 Vaughn Richd 643-2000
1170 Second Baptist Church 644-2017
1175 Sprankle Richd A 642-3480
1182 Sanger Wm L ◎ 644-2744
1186 Vacant
1187 Sangar Willard
1191 Amerine Clarence V ◎ 644-1035
1193 Yaeger Geo A ◎ 644-8277
1193a Dobbs Wm J
1194 Pet Hotel 644-8323
Paulsson Marianne
1195 Ellis Le Roy E 642-4602
1196 Vacant
1202 Howington Le Roy H ◎ 644-2146
ROLLINGWOOD DR INTERSECTS
1300 Vallejo Auto Movies 642-0615
Creslewicz Eva Mrs 643-9951

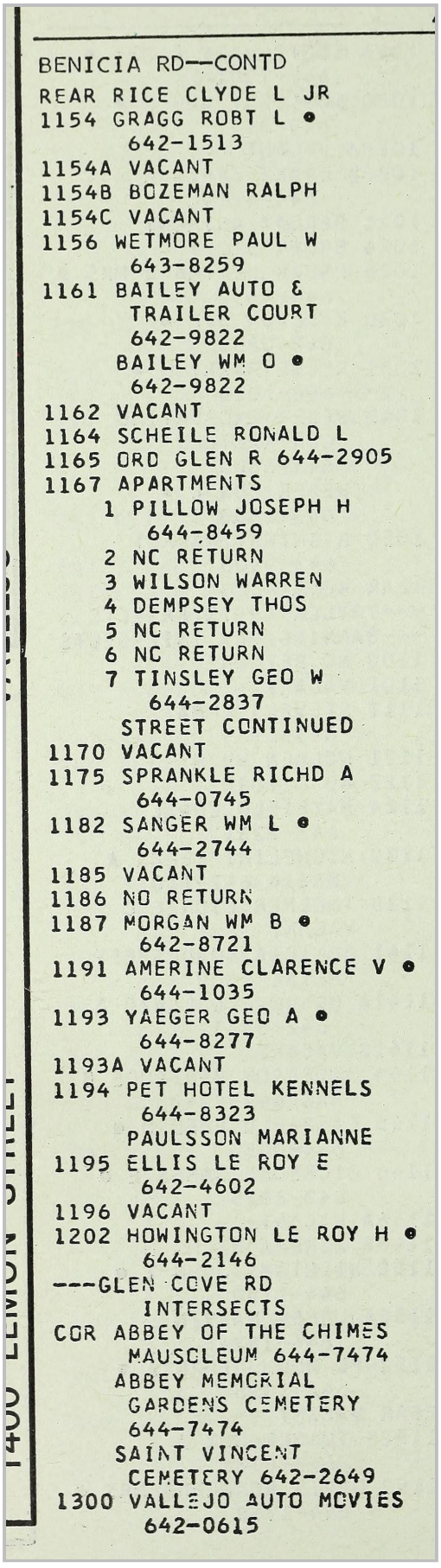
Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1965

---TAYLCR AV INTERSECTS
---BANNING WAY INTERSECTS
1100 NO RETURN
1101 VACANT
1117 STEVENS EMMA
643-2989
1121 HOLMEN WM H
1123 NO RETURN
1124 MAYFIELD EDW L
642-7231
1130 NICHELINI LEONA A
MRS • 642-1101
1138 THOLMER LIONEL C
VACANT
1141 BENICIA ROAD SHEET
METAL SHOP
1141A MC DOWELL LONZO A
642-6833
1141B VACANT
1144 ANDERSON GERTRUDE B
MRS 644-0242
1145 CAMPBELL FRED D •
644-0058
1146 BICKFORD JAMES E •
643-3815
1146A VACANT
1146B ALKEMA RICHC M
1150 WILLIAMS JOHN T •
644-1759
1150A USHER MARVIN
644-1524
1152 MC HUGH GEORGIA •
642-1995
REAR VACANT
1152B TURNER GUY A
643-6388
1153 DAVIS ROSALENA MRS •
644-1760

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1965



BENICIA RD--CONTD
REAR RICE CLYDE L JR
1154 GRAGG ROBT L •
642-1513
1154A VACANT
1154B BOZEMAN RALPH
1154C VACANT
1156 WETMORE PAUL W
643-8259
1161 BAILEY AUTO &
TRAILER COURT
642-9822
BAILEY WM O •
642-9822
1162 VACANT
1164 SCHEILE RONALD L
1165 ORD GLEN R 644-2905
1167 APARTMENTS
1 PILLOW JOSEPH H
644-8459
2 NC RETURN
3 WILSON WARREN
4 DEMPSEY THOS
5 NC RETURN
6 NC RETURN
7 TINSLEY GEO W
644-2837
STREET CONTINUED
1170 VACANT
1175 SPRANKLE RICHD A
644-0745
1182 SANGER WM L •
644-2744
1185 VACANT
1186 NO RETURN
1187 MORGAN WM B •
642-8721
1191 AMERINE CLARENCE V •
644-1035
1193 YAEGER GEO A •
644-8277
1193A VACANT
1194 PET HOTEL KENNELS
644-8323
PAULSSON MARIANNE
1195 ELLIS LE ROY E
642-4602
1196 VACANT
1202 HOWINGTON LE ROY H •
644-2146
---GLEN COVE RD
INTERSECTS
COR ABBEY OF THE CHIMES
MAUSOLEUM 644-7474
ABBEY MEMORIAL
GARDENS CEMETERY
644-7474
SAINT VINCENT
CEMETERY 642-2649
1300 VALLEJO AUTO MOVIES
642-0615

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1959

Taylor av intersects
Banning way inter-
sects

1100 Coleman Edw B
1101 Vacant
1109 Chuck Wagon restr
△MI3-9980
1117 Smith Ervin A ◎
△MI2-0697
1121 Green H D △MI2-5224
1123 Gillesby Chas C
1124 Nichols Ralph
1130 Nichelini Jos F ◎
△MI2-1101
1138 Johnson Fred R ◎
△MI4-3980
rear Vacant
1141 Benicia Road Sheet
Metal Shop
△MI2-6833
McDowell Lonza A
◎ MI2-6833
1141b McDowell Lonzo A
sht mtl wkr
MI2-6833
1144 Taylor Arth F
△MI2-8647
1145 Large C D Tobacco Co
whol △MI3-3394
Large Chas D ◎
△MI3-3394
1146 Bickford Jas E ◎
△MI3-3815

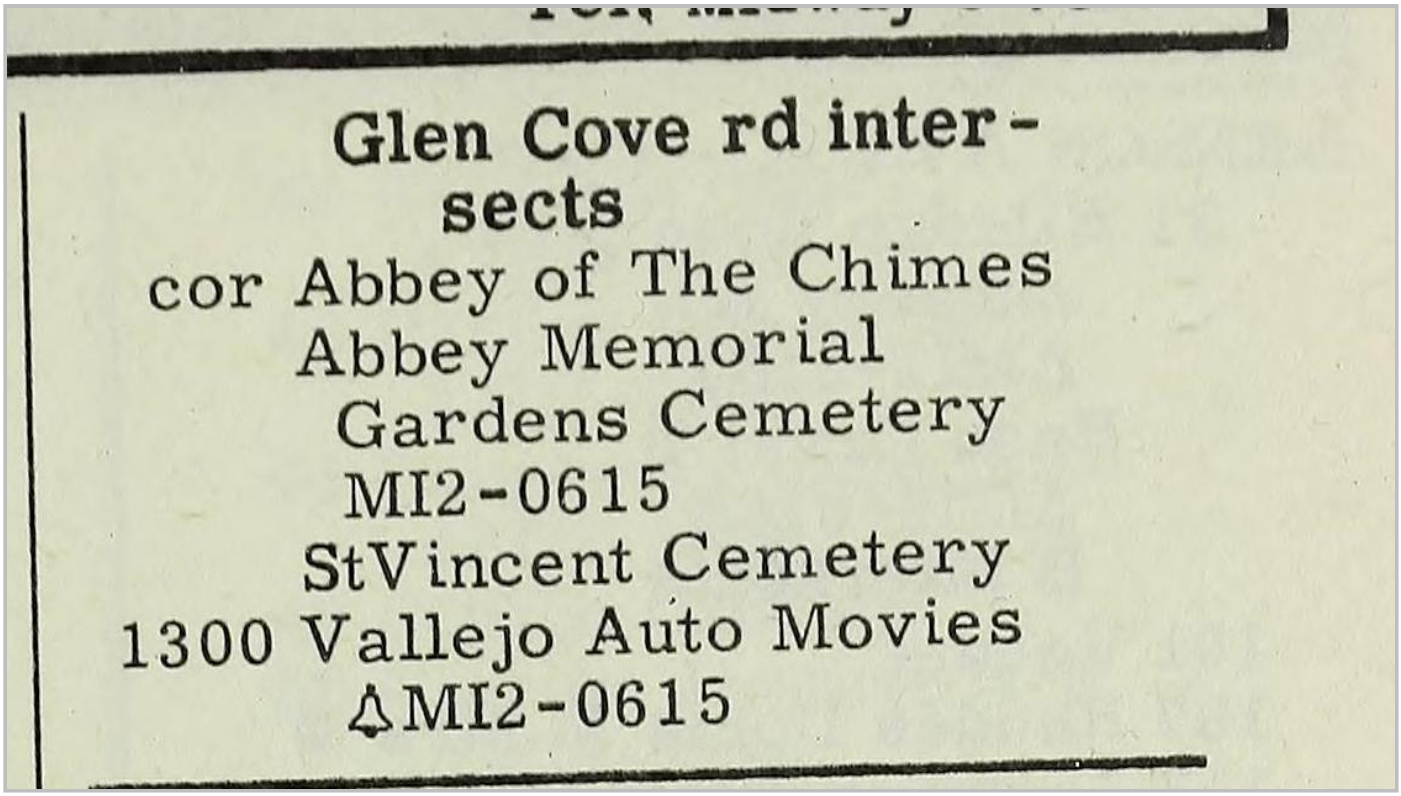
Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1959

BENICIA RD—Contd
1146a McIver John
1146b Vacant
1150 Dudley Anna E Mrs ◎
△MI2-8559
1150a Usher Marvin
MI4-1524
1152 McHugh Georgia Mrs ◎
△MI2-1995
rear Dunn Earl
1152b Turner Guy A ◎
△MI3-6388
1153 Davis Rosalena Mrs ◎
△MI4-1760
rear Erben Herman T
MI2-3757
1154 Gragg Robt L ◎
△MI2-1513
1154a Upholstery The
△MI4-0952
Buhl Bruce
1154b Sparks Sammy J
1154c Carter Gary J
MI3-4426
1156 Woodward O B ◎
△MI4-1627
1161 Bovey Auto & Trailer
Ct MI3-6636
Bovey Raymond P ◎
MI3-6073
1162 Lyon Howard A ◎
△MI4-8745
1164 McPherson Lester H
△MI2-5621
1165 Mantei Fred C
Lenet Norman H
McLean Justin C
Wright Wm L
1170 Lyon's Nursery
△MI2-5621
1175 Vacant
1182 Sanger Wm L ◎
△MI4-2744
1185 McGinnis Milton ◎
△MI2-7414
1186 Vacant
1187 Morgan Wm B ◎
1191 Amerine Clarence V ◎
MI4-1035
1193 Yaeger Geo A ◎
△MI4-8277
1193a Morgan Terral
1194 Pet Hotel kennels
△MI4-8323
Winsor Orville R ◎
△MI4-8323
1195 McClafferty James J
MI2-4890
1196 Ridenour Mack
△MI4-4723
1202 Vacant

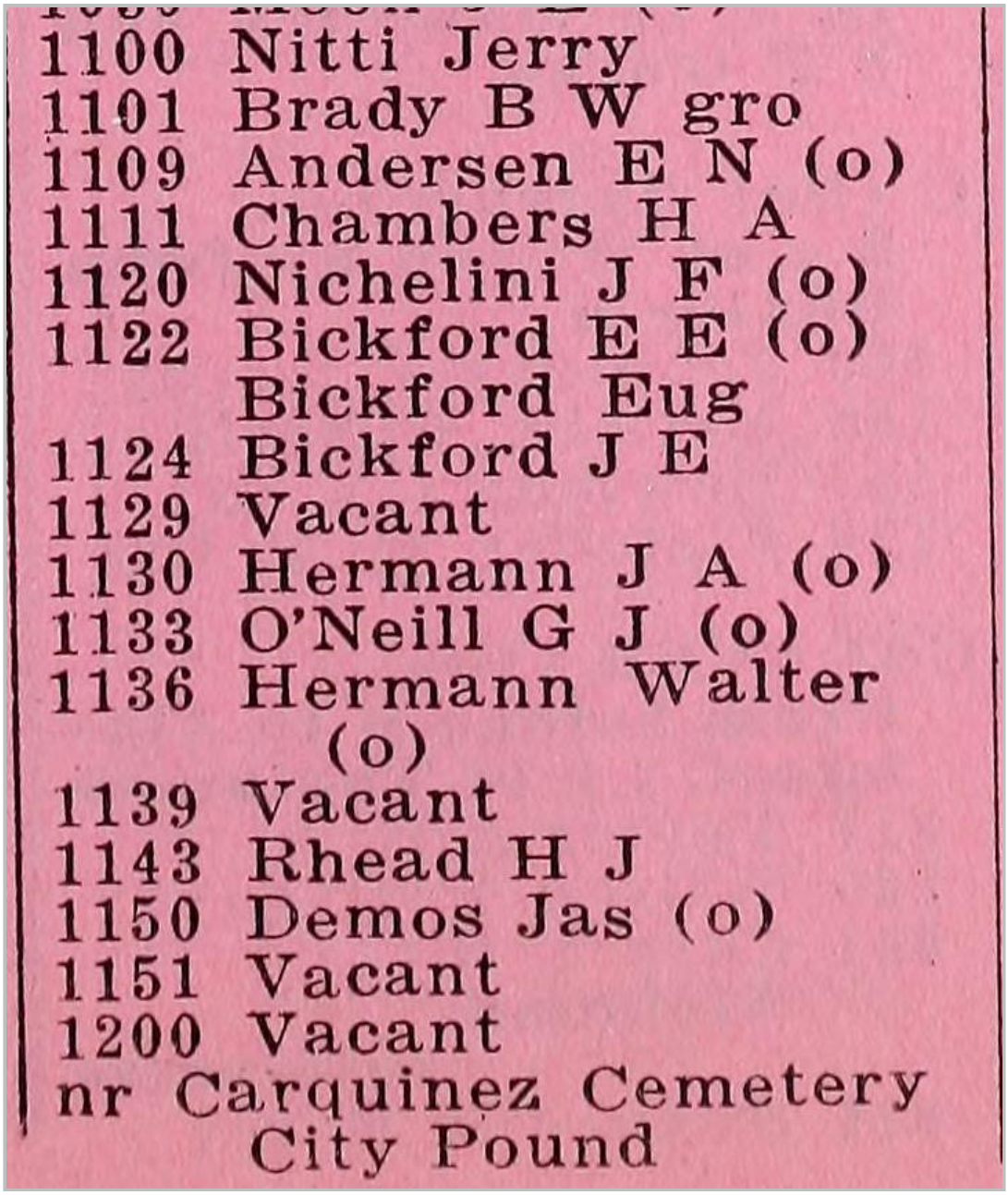
Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1959



Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1937



1100 Nitti Jerry
1101 Brady B W gro
1109 Andersen E N (o)
1111 Chambers H A
1120 Nichelini J F (o)
1122 Bickford E E (o)
Bickford Eug
1124 Bickford J E
1129 Vacant
1130 Hermann J A (o)
1133 O'Neill G J (o)
1136 Hermann Walter (o)
1139 Vacant
1143 Rhead H J
1150 Demos Jas (o)
1151 Vacant
1200 Vacant
nr Carquinez Cemetery
City Pound

Target Street	Cross Street	Source
-	✓	POLK DIRECTORY CO

BENICIA RD 1937

APPENDIX G

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE
FOR CLIENT

To evaluate the potential for possible environmentally related impacts and site contamination the following information is requested. This questionnaire is to be completed by the user of the phase one environmental site assessment, or their authorized representative.

PART I

1. Property address and Assessor's Parcel Number (APN):

   Property is located at the NEC of Shady lane and Wildflower Street.
   Assessor Parcels 0079-120-100 and 0079-171-170

2. Current property owner (name, address, voice/fax number):

   Susan Chen and Litton Chen for the Timothy Wei Trust
   3620 Ralston Avenue | Hillsborough, CA 94010

3. Date current property owner assumed title of property:

   Records indicate the Timothy Wei Trust assumed owership on 11/29/2013

4. Current property development/improvements:

   Property is undeveloped land.

5. Past property use, development/improvements:

   The property has remained unimproved, undelveoped land.

6. Neighboring property uses:

   Immediately adjacent to the subject site, to the west, is a residential subdivsion. Immediately adjacent, the the east, is Benicia State Park.

PART II

1.	Are you aware of any environmental cleanup liens against the *property* that are filed under federal, tribal, local or state law?	☐ Yes	☑ No
2.	Are you aware of any activity and land use limitations, such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded in a registry under federal, tribal, state or local law?	☐ Yes	☑ No
3.	Do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the *property* or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?	☐ Yes	☑ No
4.	If a property transaction is occurring in conjunction with this environmental assessment, does the purchase price of this *property* reasonably reflect the fair market value of the *property*?	☑ Yes	☐ No
5.	If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property?*	☐ Yes	☑ No ☐ N/A
6.	Are you aware of any commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, (a) do you know of specific chemicals that are present or once were present at the *property*? (b) do you know of spills or other chemical releases that have taken place at the *property*? (c) do you know of any environmental cleanups that have taken place at the *property*?	☐ Yes	☑ No
7.	Based on your knowledge and experience related to the *property* are there any obvious indicators that point to the presence or likely presence of contamination at the *property*?	☐ Yes	☑ No

If a "Yes" response was provided to any of the above questions, please provide details below:

I certify that the information herein is true and correct to the best of my knowledge as of the date signed below.

Name (Printed/Typed): Adam Smith

Signature: Adam Smith Date: 4/6/22

APPENDIX H

QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL

EDUCATION

BS Civil Engineering University of Illinois at Chicago 1994

MS Civil Engineering University of Illinois at Chicago 1996

PhD Civil Engineering University of Illinois at Chicago 1999

MBA University of Washington 2004

EXPERIENCE

Years with ENGEO: 22
Years with Other Firms: 0

REGISTRATIONS & CERTIFICATIONS

Environmental Manager, NV 2150

Professional Engineer, CA 69633

Envision ENV SP Credentialed

SPECIALIZATIONS

- Environmental Assessments, Characterization, and Remediation
- Green and Sustainable Remediation (GSR)
- Resilient and Sustainable Infrastructure
- Geologic Hazard Abatement Districts (GHADs)

AFFILIATIONS

ASCE American Society of Civil Engineers

ASCE Geo-Institute

GRA - Groundwater Resource Association

JEFFREY ADAMS, PHD, PE

Principal

Jeff joined ENGEO in 1999. He leads environmental assessment, characterization, remediation projects, and Geologic Hazard Abatement District (GHAD) formation. He has contributed to a wide range of remediation and development projects in high-density and low-density urban and suburban settings redeveloped for a variety of uses.

Jeff's research interests include green and sustainable remediation (GSR), resilient and sustainable infrastructure solutions, environmental applications, and emerging public/private financial mechanisms to mitigate flood-related losses. He has authored and co-authored numerous environmental remediation-related textbooks, instructional materials, and research papers that have been presented worldwide and published in a diverse group of academic and professional journals.

SELECT PROJECT EXPERIENCE

Howard Terminal—Oakland, CA
Lead Environmental Principal. Jeff has provided ongoing technical leadership during several environmental studies for the redevelopment of the Howard Terminal site. The approximately 62.1-acre Property is a former container terminal along the Port of Oakland's Inner Harbor. The Property was originally a bulk-break terminal dating back to the early 1900s, with a manufactured gas plant located in the eastern portion of the Property. The terminal was expanded and converted to a container terminal in the 1980s. Improvements will include a Major League Baseball stadium as well as mid-rise and high-rise buildings to provide a mix of residential, retail, and other commercial uses. ENGEO performed a Phase I Environmental Site Assessment (ESA), Phase II ESAs consisting of soil, soil gas, and groundwater sampling across the property, EIR preparation support, the preparation of a human health and ecological risk assessment (HHERA), and is developing a removal action work plan (RAW).

Google San Jose Downtown West—San Jose, CA
Project Manager. Jeff provided technical leadership and review for a comprehensive ESA for various industrial and commercial properties over approximately 50 acres in downtown San Jose considered for acquisition by Google. The purpose of the assessment was to identify known and unknown environmental concerns and recommended appropriate actions to quantify potential risks to inform due diligence efforts. The risk assessment utilized an innovative

Geographic Information System (GIS) digital interactive platform that provides additional data beyond typical environmental information and is scalable for future project plans.

The South Lathrop Commerce Center—Tracy, CA
Lead Environmental Principal. Jeff provided technical leadership and review for a Phase I ESA for the approximately 245-acre master-planned industrial development. The 4.2-million-square-foot development includes nine tilt-up concrete buildings, ranging in size from 282,000 square feet to over 1,000,000 square feet. Additional improvements for the logistics center include detention and retention basins, paved streets, parking, and drive lanes, a stormwater pump station and outfall, and a sewer lift station. Site development activities include grading operations, primarily consisting of minor cuts and fills, for individual pads and roadways, underground utility installation, pump station and outfall structure construction, flexible and rigid pavement construction, and vertical construction.

Crown Chevrolet Property—Dublin, CA
Project Manager. Jeff provided comprehensive environmental consultation services for the project. Working on behalf of the purchaser, Jeff collaborated with a multi-firm consulting team to characterize and mitigate environmental impacts resulting from previous on-site automotive maintenance activities and off-site businesses. Jeff designed and managed a site characterization program that definitively demonstrated that groundwater and soil gas impacts at the site were the result of off-site releases. He peer reviewed the design and implementation of a permeable reactive barrier (PRB), which serves to remediate an encroaching groundwater plume, as well as vapor intrusion mitigation systems for the site. He also completed a Phase I ESA for a remnant parcel subsequently developed for housing for veterans. The site consists of a multi-story commercial and residential apartment/condominium "transit village" complex.

3512 Clayton Road—Concord, CA
Lead Environmental Principal. Jeff provided technical leadership and review for a Brownfields redevelopment project in Concord. Following the Phase I and Phase II ESAs that identified soil and soil gas impacts, he assisted in the development of a remediation program that included a comprehensive pre-characterization program, accurately delineating soil impacts from past light-industrial uses and soil gas impacts from off-site businesses, allowing for accelerated field implementation. Following active soil remediation and post-remediation soil gas sampling, Jeff and the ENGEO team performed a vapor intrusion risk assessment that confirmed the site did not require long-term vapor mitigation systems. The site was granted case closure from the oversight regulatory agency within an accelerated review and approval timeframe. The project consists of a high-density residential development.

Blacow Road Project—Fremont, CA
Environmental Principal. Jeff has provided technical assistance for project remediation activities and prepared a Phase I ESA for site. The site is an active, open remediation site under the regulatory oversight of the San Francisco Bay Regional Water Quality Control Board (RWQCB). Impacts resulted from a variety of on-site and off-site commercial and industrial land uses dating back over 50 years. ENGEO has performed numerous characterization, remediation design, and monitoring services for the Site. Remediation activities are underway at the site to address groundwater and soil gas impacts from volatile organic compounds (VOCs) and petroleum hydrocarbons. The remediation approach consists of several remedial and mitigative technologies, including soil vapor extraction (SVE), in-situ enhanced bioremediation, and post-remediation vapor intrusion mitigation systems to be installed in future residential structures. The project consists of a residential development.

Eastvale 79—Eastvale, CA
*Environmental Principal***.** Jeff served in an Environmental Principal role for environmental studies at the site. ENGEO performed a Phase I ESA and a subsequent ESA update that included regulatory file reviews, interviews with property owners and regulatory agencies, a site reconnaissance, and preparation of a report documenting our findings. The approximately 16-acre site was historically associated with a portion of a dairy dating to at least 1967. During grading activities, a localized area of stained and odoriferous soil was observed in the southeast corner of the site. ENGEO coordinated and managed remediation efforts, confirmation sampling, and coordination with Riverside County DEH. Approximately 4,115 tons petroleum-impacted soil were removed and disposed. The DEH issued "No Further Action" status for the site.

Alameda Landing—Alameda, CA
Project Manager. Project Manager, Lead Environmental Principal. Jeff has provided comprehensive environmental consultation services for the Alameda Landing project. He has prepared and managed the completion of Phase I ESA and ESA Update studies for subunits of the greater project area. He directed environmental characterization operations for the site, which was suspected of having been affected by naturally occurring methane deposits within the subsurface. Working closely with innovative protocols, Jeff was able to demonstrate to regulatory oversight officials that expensive vapor intrusion mitigation systems were not necessary for proposed residential structures, potentially saving millions of dollars to the site developer. Additionally, he has prepared several Remedial Action Completion Reports (RACRs) of development phases to achieve regulatory case closure. The project consists of a multi-phased residential housing community built as part of a master-planned redevelopment of a former United States Navy facility.

VTA BART Silicon Valley Berryessa Extension Design-Build Project—San Jose, CA
Project Manager. As the lead project team member with respect to hazardous materials, Jeff provided a range of value engineering consulting services relating to existing soils, groundwater, and building materials. ENGEO provided a range of value engineering consulting services to address existing soils, hydrology resources, SWPPP, and building materials.

Following a complex right-of-way that extended through numerous developed areas and paralleled an existing rail line, the project generated hundreds of thousands of cubic yards of excavated soil with potential toxic and hazard concerns. The right-of-way intersected several groundwater plumes emanating from former industrial and commercial sources. Further, a number of structures in the project footprint harbored lead-based paint and asbestos-containing building materials. ENGEO led the effort to accurately quantify these materials and devise strategies to effectively manage and mitigate these materials to drive overall project cost savings.

Foster City Civic Center Lots—Foster City, CA
Assistant Project Manager. Jeff provided technical oversight for a Phase I ESA for the Foster City Civic Center site and environmental characterization operations for the site, which was suspected of having been affected by unauthorized petroleum hydrocarbon releases within the subsurface. Following the completion of a soil gas survey, Jeff and team demonstrated that vapor intrusion mitigation systems were not necessary for proposed development, providing a significant cost savings to the project. The project consists of a multi-use urban infill development.

Macedo Property Environmental Consultation—Livermore, CA
Project Manager. Jeff provided comprehensive environmental consultation services for a Brownfields redevelopment project in Livermore. The project included several challenges, including ongoing business activities at the site and complex contaminant conditions resulting

from a long history of site operation of an automotive service station. Following a comprehensive site characterization plan that he developed, Jeff developed a cost-effective remedial plan to address hydrocarbon-contaminated soil. Jeff worked closely with the design team to rapidly remediate the site contamination using a soil excavation program that minimized disturbance to the active businesses at the site. Through Jeff's project oversight, the characterization and remediation activities were completed on time and under budget. Because of his effective work with various project stakeholders, the site was granted case closure from the oversight regulatory agency within an accelerated timeframe, allowing redevelopment to occur on schedule. The project consists of a residential subdivision. The project consists of a residential subdivision.

1511 Jefferson—Oakland, CA
Project Manager. Jeff provided environmental and geotechnical consultation services for a Brownfields redevelopment project in downtown Oakland. The project included several challenges, including limited site access due to on-site business activities, environmental impact related to previous site use, and the presence of several adjacent mid-rise structures. Jeff developed efficient remedial value engineering solutions to mitigate the presence of geotechnical and environmental development constraints. Jeff worked with the design team to establish cost-effective retaining wall and foundation systems, designed and observed a subsurface environmental mitigation program, and assisted in the design of a structure-wide vapor barrier. The project, serving as a cornerstone of the revitalization of downtown Oakland, consists of a multi-story residential condominium structure.

Alamo Creek—Danville, CA
Project Manager. Jeff prepared guidance documents and helped to form a transit-focused County Service Area (CSA). The transit-focused CSA, believed to be the first in Contra Costa County, helped to establish commuter transit service for a recently constructed residential development. Utilizing market analysis research provided by other consultants, he prepared an Engineer's Report that outlined a three-part phased implementation of transit, beginning with vanpools and ultimately resulting in an airporter-style fleet of bus service to and from an existing Bay Area Rapid Transit station. Jeff also prepared a long-range budget and confirmed a yearly assessment to ensure financial solvency of the CSA over the lifetime of the development. The CSA serves the Alamo Creek development and vicinity in Contra Costa County, California.

Alcosta Boulevard/Interstate 680 Interchange Project—San Ramon, CA
Project Engineer. Jeff performed an Aerially Deposited Lead (ADL) assessment program for the Alcosta Boulevard/Interstate 680 Interchange Improvement. The purpose of the investigation was to determine existing lead levels in surface soils. The scope of services included the recovery of soil samples from the surface to a depth of 3 feet below the ground surface, analytical testing of the samples to determine hydrogen ion content (pH testing), total lead, STLC WET soluble lead, and STLC TCLP soluble lead analyses, and a statistical analysis to determine Confidence Intervals (CI) of soil lead concentrations. An innovative, risk-based statistical analysis was performed to assure site soils were suitable for on-site reuse in accordance with Caltrans/State of California regulations. The project consists of a rehabilitation and realignment of the interstate highway interchange.

Arroyo Crossing—Livermore, CA
Project Engineer. Jeff contributed to the award-winning project, which included an extensive scope of work, including supplemental geotechnical exploration, Phase I and II ESAs, underground storage tank removal and groundwater monitoring. Jeff provided environmental analysis of existing subsurface conditions, helping the design team to implement a comprehensive yet innovative geotechnical and environmental mitigation program. Following

completion of environmental remediation activities, Jeff was able to secure a substantial federal corporate income tax rebate on behalf of the client through the EPA's Brownfields Tax Incentive program. The project consists of a residential subdivision re-use of a former quarry.

Brookside - Guadalupe Mines Road—San Jose, CA
Senior Engineer. Jeff performed a review of existing environmental documents by others, consultation with the client, and peer review document preparation. This 16-acre commercial property is planned for redevelopment into a roughly 95-lot single-family residential development. Site challenges include pre-existing environmental impacts, existing fills, creek bank stability/meander, and faulting.

East Garrison Development - Operations and Maintenance Plan—Carmel, CA
Project Engineer. Jeff prepared an Operations and Maintenance Plan (OMP) that included an assemblage of projected capital and maintenance costs from a range of consultants into working 50-year budgets for both a County Service District (CSD) and a homeowner's association (HOA). He worked to reach agreement with a number of project stakeholders, including the developer, other consultants, and local government agencies. In addition to assisting in the preparation of capital expenditure projections, Jeff developed the two operating and maintenance budgets, maintenance activity schedules and checklists, and the governing document for the two maintenance entities. The project consists of a redevelopment from a former military facility to a residential subdivision.

Highlands Ranch, Unit 3 - Environmental T&O—Pittsburg, CA
Project Engineer. Jeff managed the remediation of a former petroleum tank farm located in a rural/exurban setting. The extensive remediation program was in support of a conversion of industrial site usage into residential site usage. At this prototypical Brownfield site, Jeff personally oversaw all field operations involving a series of subcontractors, including an innovative ex-situ enhanced bioremediation program of impacted soils. Following excavation, Jeff worked closely with California Department of Toxic Substances Control (DTSC) personnel to determine the suitability of the intended site reuse. Jeff implemented an innovative statistical procedure in accordance with State and Federal Environmental Agency Best Practices to assure the site was safe for residential use. The project consists of a large-scale residential subdivision.

Highway 4 Bypass - Lime Treatment Consultation—Brentwood, CA
Project Manager. Jeff served as Project Manager. He provided consultation services that consisted of a variety of forensic analyses pertaining to the lime treatment of sub-base soils. Jeff worked closely with the project contractor as well as a diverse range of stakeholders to determine if lime treatment materials used in construction had met project specification. Following several protocols, including ASTM methods, Jeff demonstrated the absence of a statistical correlation that would confirm the use of substandard materials. Jeff's work was used to produce an opinion on behalf of the project team that the treated materials would be expected to adequately perform over the design life of the project, saving significant cost overruns. The project consists of a multi-lane highway constructed within a rapidly growing region of Eastern Contra Costa County. The project consists of a multi-lane highway constructed within a rapidly growing region of Eastern Contra Costa County.

Lockheed Martin Storm Water Pond No 4—Sunnyvale, CA
Project Manager. Jeff provided permitting consultation services, including the federal and state permitting required for the maintenance of a stormwater detention system. Jeff has also provided geotechnical and environmental support to evaluate the geotechnical conditions of the site. He also determined the absence of environmentally impacted materials within the site area. The site

consists of a stormwater detention basin measuring approximately 4.5 acres in area and located adjacent to sensitive habitat.

New Farm Agricultural and Meteorological Assessment—Contra Costa County, CA
Project Manager. Jeff managed an agricultural suitability evaluation. As part of the project, a portion of hillside open space is to be devoted to cultivation as olive groves. Jeff led the effort to review USDA soil maps and to test onsite soils for the ability to support olive cultivation. The soils were compared to active olive orchards in other locations of Contra Costa County. The project consists of a residential development with agricultural-intensive open space. Jeff managed an agricultural suitability evaluation. As part of the project, a portion of hillside open space is to be devoted to cultivation as olive groves. Jeff led the effort to review USDA soil maps and to test on-site soils for the ability to support olive cultivation. The soils were compared to active olive orchards in other locations of Contra Costa County. The project consists of a residential development with agricultural-intensive open space.

San Ramon Village Plaza - Environmental Consultation—Dublin, CA
Project Manager. Jeff contributed to an environmental peer review of previous land uses, which included a former dry cleaner. Further investigation identified impact due to former site operations. Jeff assisted in a remediation program, closely collaborating with other consultants representing different parties of the property transaction. The site was efficiently remediated, allowing for redevelopment. The project consists of a high-density residential development within the 4.68-acre mixed-use San Ramon Village Plaza site.

Schaefer Ranch - GHAD Consultation—Dublin, CA
Project Engineer. Jeff assisted with the scoping, Plan of Control preparation, budget, and formation processes of a Geologic Hazard Abatement District (GHAD). The scope of the GHAD includes maintenance of slopes, water conveyance features, habitat, and other features. Proactive maintenance, assessment, repair and replacement are also the responsibility of the GHAD subject to the limitations of the Plan of Control. The project consists of a large-scale residential subdivision in the East Bay hills west of Dublin.

Sparklizing Cleaners and Laundry—Fremont, CA
Project Engineer. Jeff provided review and data analysis for this former dry cleaning facility that had released tetrachloroethylene (PCE) to site soil and groundwater. Work included site characterizations using direct push borings, soil gas surveys, well installations, and a remedial alternatives evaluation. He has also assisted in the development of a remedial program for the site. The project site consists of a dry-cleaning facility located within a commercial/retail center. Dry-cleaning operations occurred at the facility since 1974 and resulted in chlorinated solvent impacts to soil and groundwater beneath the site. As a result, the RWQCB opened a Spills, Leaks, Investigations, and Cleanups (SLIC) case and the site was referred to the Alameda County Water District (ACWD) for lead agency oversight. A series of soil and groundwater investigations identified a source area beneath the drycleaner suite and an adjoining retail suite. ENGEO prepared a Corrective Action Plan (CAP) and coordinated the in-situ chemical oxidation program that consisted of injecting 35,000 gallons of potassium permanganate to the subsurface to oxidize chlorinated solvents. The project is currently in the post-remediation monitoring phase.

Stone Lock District Development - Consulting Services—West Sacramento, CA
Project Engineer. Jeff prepared a pro forma analysis of infrastructure-related costs for a preliminary development concept of the property. The analysis included a cost estimate for all site improvements, grading, utilities, and non-structural facilities. Included in the analysis was an evaluation of the existing adjacent levee system. Jeff worked with other team members to provide

a preliminary assessment of the existing levee condition and prepared a cost estimate for levee rehabilitation and reconstruction. The project consists of a proposed mixed-use redevelopment as part of a city revitalization plan.

Torian Parcels - Additional Phase II Environmental Site Assessment—Newark, CA
Project Manager. Jeff served as Project Manager and Project Engineer. He provided comprehensive geotechnical and environmental evaluation. Several significant geotechnical and environmental conditions existed at the property, including compressible soils, liquefiable soils, and significant deposits of non-engineered fill and debris. Several areas of soil and groundwater environmental impact were present due to historic industrial use at and in the vicinity of the site. Jeff performed a financial analysis of several mitigation alternatives to identify the most cost effective remedial solution, one in which a single remedial program in several locations addressed both environmental and geotechnical impact. Additionally, Jeff worked closely with the environmental oversight agency to develop a work plan to assess potential environmental impact. In developing and implementing the work plan, Jeff was able to demonstrate that environmental impact at the property was not as extensive as previously believed. This allowed for an alteration of the proposed site plan to avoid areas of potential impact, saving significant projected redevelopment costs. The project consists of a residential redevelopment of a 40-acre property formerly used for industrial purposes. The project consists of a residential redevelopment of a 40-acre property formerly used for industrial purposes.

Los Banos Airport - Phase I ESA—Los Banos, CA
Project Engineer. Jeff provided a Phase I ESA, prepared a soil and groundwater characterization program, and developed a conceptual soil remediation work plan as part of a multi-phase development. The Los Banos Airport project measures approximately 112 acres in area.

Navlet's Garden Center Concord - Phase I ESA—Concord, CA
Project Manager. Jeff prepared a Phase I ESA for the site. Jeff was able to effectively navigate through the complex historic records and ownership legacy associated with the property. He prepared a report that satisfied the demands and deadline of both the ownership entity and the financial institutions associated with the property. The project consists of a Navlet's Garden Center.

Mare Island, 3rd and Connelly Utility Corridor Environmental Services—Vallejo, CA
Project Engineer. Jeff provided environmental consultation support. During excavation of the utility corridor, zones of impacted soil were identified and removed from an approximate 9,300-square-foot footprint area and depths from 5 to 10½ feet below existing grade. The project consisted of utility demolition and soil excavation activities required to prepare for construction of a 300-foot water and sewer utility corridor along Connelly Street between 3rd Street and Azuar Drive.

Maggiore Property - Soil Remediation—Brentwood, CA
Project Engineer. Jeff directed field remediation operations for the site, which had been affected by an unauthorized subsurface petroleum product release. He managed a site plume delineation and groundwater-monitoring program. Additionally, Jeff performed RBCA Tier I and Tier II assessments to determine feasibility of residential development of property. The project consists of a small residential subdivision.

Cree Court Slide Repair—San Ramon, CA
Project Engineer. Jeff assisted in the development and implementation of a custom-tailored "top-down" construction procedure, allowing the project to be constructed on time and under

budget. Additionally, Jeff helped develop an innovative non-structural grouting procedure to verify proper structural tieback performance. The project consisted of an integrated structural and grading-related repair for the mitigation of a large active landslide in proximity to existing homes. A 70-foot-high retaining wall is now in place to stabilize a major, active landslide.

Sequoia/Conifer Terrace - Structural Repair Design—Danville, CA
Project Engineer. Jeff assisted in the design of a structural repair system for a landslide remediation project within a residential setting. He provided recommendations to help optimize construction of system and lessen financial burden of project. The project consisted of a unique structural repair for the mitigation of a large active landslide in close proximity to existing homes.

PUBLICATIONS

Books and Book Chapters

Reddy, K.R., Cameselle, C., and Adams, J.A., Sustainable Engineering: Drivers, Metrics, Tools, and Applications, John Wiley and Sons, Inc., Hoboken, New Jersey, 2019 (ISBN: 9781119493938).

Reddy, K.R., and Adams, J.A., Sustainable Remediation of Contaminated Sites, Momentum Press, New York, New York, 2015 (ISBN: 9781606505205).

Adams, J.A., Property Evaluations and Environmental Compliance Audits, Chapter 3 in Environmental Health and Safety Issues, D. Aldrich (ed.), BOMI International, 2013, pp.3.1-3.42 (ISBN: 978-1-933138-38-1).

Reddy, K.R., and Adams, J.A., Cleanup of Chemical Spills Using Air Sparging, Chapter 14 in the Handbook of Hazardous Materials Spill Technology, M. Fingas (ed.), McGraw-Hill Company, 2001, pp.14.1-14.29 (ISBN: 0-07-135171-X).

Conference Papers

Adams, J.A., and Reddy, K.R., “State-of-the-practice of characterization and remediation of contaminated sites.” Proc.Geotechnical Engineering State of the Art and Practice-Geotechnical Special Publication No.226, ASCE, 2012, pp.423-442.

Reddy, K.R., and Adams, J.A., "Remediation of Hydrocarbon Contamination in Groundwater Using In-Situ Biosparging," Recent Advances in Groundwater Engineering, Nishigaki and Kmatsu (eds.), Japan, May 2003, pp.329-333.

Reddy, K.R., and Adams, J.A., "Effect of Pulsed Air Injection During In-Situ Air Sparging for Groundwater Remediation," Proceedings of the ASCE Conference on In-Situ Remediation of the Geoenvironment, Minneapolis, Minnesota, October 1997, pp.68-82.

Reddy, K.R., and Adams, J.A., Towards Green and Sustainable Remediation of Contaminated Sites, 6th International Congress on Environmental Geotechnics, New Delhi, India, November 7, 2010.

Journal Papers

Adams, J.A., Reddy, K.R., and Tekola, L., “Remediation of Chlorinated Solvent Plumes Using In-Situ Air Sparging,” International Journal of Environmental Research and Public Health, Vol.8, No.6, 2011, pp.2226-2239.

Adams, J.A., and Reddy, K.R., "Extent of Benzene Biodegradation in Saturated Soil Columns During Air Sparging," Ground Water Monitoring and Remediation, Vol.23, No.3, 2003, pp.85-94.

Reddy, K.R., and Adams, J.A., "Effects of Soil Heterogeneity on Air Flow Patterns and Hydrocarbon Removal During In-Situ Air Sparging," Journal of Geotechnical and Geoenvironmental Engineering, ASCE, Vol.127, No.3, 2001, pp.234-247.

Adams, J.A., and Reddy, K.R., "Removal of Dissolved and NAPL-Phase Benzene Pools from Groundwater Using In-Situ Air Sparging," Journal of Environmental Engineering, ASCE, Vol.126, No.8, 2000, pp.697-707.

Adams, J.A., and Reddy, K.R., "Laboratory Study of Air Sparging of TCE-Contaminated Saturated Soils and Groundwater," Ground Water Monitoring and Remediation, Vol.19, No.3, 1999, pp.182-190.

Reddy, K.R., and Adams, J.A., "Effect of Groundwater Flow on Remediation of Dissolved-Phase VOC Contamination Using Air Sparging," Journal of Hazardous Materials, Vol.72, No.2-3, 2000, pp.147-165.

Reddy, K.R., Adams, J.A., and Richardson, C., "Potential Technologies for Remediation of Brownfields," Practice Periodical of Hazardous, Toxic, and Radioactive Waste Management, ASCE, Vol.3, No.2, 1999.

Reddy, K.R., Semer, R., and Adams, J.A., "Air Flow Optimization and Surfactant Enhancement to Remediate Toluene-Contaminated Saturated Soils Using Air Sparging," Environmental Management & Health, Special Issue on Groundwater, Vol.10, No.1, 1999.

Reddy, K.R., and Adams, J.A., "System Effects on Benzene Removal from Saturated Soils and Groundwater Using Air Sparging," Journal of Environmental Engineering, ASCE, Vol.124, No.3, 1998.

Semer, R., Adams, J.A., and Reddy, K.R., "An Experimental Investigation of Air Flow Patterns in Saturated Soils During Air Sparging," Geotechnical and Geological Engineering Journal, Vol.16, No.1, 1998, pp.59-75.

ENGEO
Expect Excellence

CITY OF VALLEJO PLANNING COMMISSION

RESOLUTION NO. PC 26-XX

A RESOLUTION OF THE PLANNING COMMISSION RECOMMENDING CITY COUNCIL APPROVAL OF TENTATIVE MAP (TM23-0001), PLANNED DEVELOPMENT (PD24-0001), DEVELOPMENT REVIEW (DVR23-0017), DESIGN REVIEW (DR23-0006) AND LANDSCAPE REVIEW (LR23-0002) FOR THE DEVELOPMENT OF 51 SINGLE-FAMILY RESIDENCES ("VISTA COVE SUBDIVISION") ON A 20.13-ACRE SITE AT THE NORTHEAST CORNER OF SHADY LANE AND WILDFLOWER AVENUE (APNs: 0079-171-170 & 0079-120-100)

* *

WHEREAS, on August 29, 2017, the City Council adopted General Plan 2040 and certified the Environmental Impact Report (EIR); and

WHEREAS, on June 22, 2021, the City Council adopted a new Zoning Code and Zoning Map; and

WHEREAS, on November 29, 2022, Sancerra Vista Cove, LLC., the applicant, submitted for a Preliminary Review Application pursuant to California Senate Bill (SB) 330, "the Housing Crisis Act of 2019," for development of a vacant 20.13-acre site located near the intersection of Shady Lane and Wildflower Avenue (APNs:0079-171-170 and 0079-120-100) ("Subject Property"); and

WHEREAS, on December 28, 2022, the SB 330 Preliminary Review Application was found to satisfy the checklist as listed in California Government Code Section 65941.1; and

WHEREAS, the Subject Property has a current General Plan 2040 land use designation of Primary Single-Family (R-SF) and Mix of Housing Types/Medium Density (R-MH), and a zoning designation of Residential Low Density (RLD) and Residential Medium Density (RMD); and

WHEREAS, on February 13, 2023, the applicant formally submitted an application for Tentative Map (TM23-0001), Development Review (DVR23-0017), Design Review (DR23-0006), Landscape Review (LR23-0002) and Minor Use Permit (MUP23-0010), to develop 51 detached single-family homes on the Subject Property (the "Project"); and

WHEREAS, on December 18, 2023, after multiple rounds of review, the Project was deemed complete; and

WHEREAS, on May 16, 2024, the applicant revised the Project description to withdraw the Minor Use Permit application, and add a request for a Planned Development zoning map amendment (PD24-0001) to change the Project site's zoning districts from RLD and RMD Zoning to Planned Development (PD) with a proposed "Vista Cove Planned Development Plan"; and

WHEREAS, on July 24, 2024, the application for the revised Project was deemed complete; and

WHEREAS, on July 10, 2025, after giving all public notices required by State law and the City of Vallejo Municipal Code, the Design Review Board conducted a duly noticed public hearing and voted 3-0, with one absence, to adopt Resolution No. DRB25-02 recommending approval of Design Review (DR23-0006) and Landscape Review (LR23-0002) to the Planning Commission; and

WHEREAS, on November 10, 2025, a Subsequent Mitigated Negative Declaration for the proposed Project was published for a 30-day public review period; and

WHEREAS, on November 24, 2025, pursuant to Vallejo Municipal Code (VMC) Section16.602.08(A), notice of this hearing was published in the Times Herald and mailed to all active neighborhood groups and property owners within 500 feet of the Property, the property owners, the Vallejo City Unified School District and any other local agency expected to provide water, wastewater treatment, streets, roads, schools, or other essential facilities or services to the Project and electronically mailed to the members of the Planning Commission, to the applicant and interested parties; and

WHEREAS, the Planning Commission conducted a duly noticed public hearing on December 15, 2025, to consider the proposed Project, including the recommended environmental review determination prepared pursuant to CEQA; and

WHEREAS, the staff requested to continue the Project to the Planning Commission regular meeting date of January 21, 2026 and the Planning Commission voted 5-1 to continue the meeting; and

WHEREAS, the Planning Commission conducted a public hearing on January 21, 2026 to consider the proposed Project, including the recommended environmental review determination pursuant to CEQA; and

WHEREAS, by separate resolution adopted prior hereto, the Planning Commission recommended the City Council adopt a Subsequent Mitigated Negative Declaration for the Project, and did consider the IS/SMND prior to making a recommendation on the Project; and

NOW, THEREFORE, LET IT BE RESOLVED that the Planning Commission hereby finds, determines and resolves as follows:

Section 1. Recitals

The foregoing recitals are true and correct, and the same are incorporated herein by reference.

Section 2. Record

The Record of Proceedings ("Record") upon which the Planning Commission bases its recommendation on the Project includes but is not limited to: (1) the Initial Study/Subsequent Mitigated Negative Declaration and the appendices and technical reports cited in and/or relied upon in preparing same; (2) the staff reports, City files and records and other documents, prepared for and/or submitted to the City relating to the Initial Study/Subsequent Mitigated Negative Declaration and the Project; (3) the evidence, facts, findings and other determinations set forth in this resolution; (4) Vallejo General Plan 2040 and its certified final Environmental Impact Report [SCH]#20141120356)(“GP EIR”); the 2021 Zoning Code and its Initial Study and Mitigated Negative Declaration; the Vallejo 2023-2031 Housing Element, and the Addendum to the GP EIR dated September 2025 and prepared by Environmental Science Associates prepared therefor; the Vallejo Municipal Code; (5) all designs, plans, studies, data and correspondence submitted to the City in connection with the Project; (6) all documentary and oral evidence received at public meetings, hearings, or submitted to the City during the comment period relating to the Project; and (7) all other matters of common knowledge to the Planning Commission including, but not limited to, City state, and federal laws, policies, rules, regulations, reports, records, and projections related to development within the City of Vallejo and its surrounding areas.

The location and custodian of the records is the Planning and Development Services of the City of Vallejo, 555 Santa Clara Street, Vallejo, California 94590.

Section 3. Tentative Map Findings

1. **The project is consistent with the goals and policies of the Vallejo General Plan and any applicable specific plans.**

   Facts in support: The Project site is comprised of two parcels with different general plan land use designations. The smaller parcel has a general plan land use designation of P-SF, which applies to residential neighborhoods primarily characterized by detached single- family homes. The larger parcel has a land use designation of R-MH, which applies to residential neighborhoods largely characterized by single-family homes typically located in the central and more historic parts of Vallejo. The maximum permitted residential density in the P-SF is 9 units per acre. The maximum permitted residential density in the R-MH land use designation is 25 units per acre. As proposed, the Project would construct 51 additional single-family dwellings units on a vacant and underutilized infill site adjacent to existing residential development. The proposed residential density of the Project is 2.5 units per acre (or 4.9 units an acre on the 10.39-acres being developed), consistent with the maximum permitted density for the P-SF and R-MH designation. The Project is consistent with the goals and policies of the Vallejo General Plan, as shown in Exhibit B of this Resolution.

   There is no specific plan applicable to the Project.

2. **The project conforms with Title 15 of the Vallejo Municipal Code and the Zoning Ordinance.**

   Facts in support: The proposed Vesting Tentative Map proposes to subdivide two vacant parcels, totaling 20.8-acres, into 51 residential parcels and six open space, detention, and water quality treatment and street parcels. The Tentative Map is consistent with the proposed Planned Development and to the applicable standards of Chapter 15.08 (Tentative Maps) of Title 15 (Subdivisions) of the VMC.

   As proposed, the Tentative Map conforms to the applicable standards set forth in Title 15, as it is consistent with goals and policies of the Vallejo General Plan as described in Exhibit B of this Resolution and includes all of the elements required for a tentative map set forth in VMC Section 15.08.030.

3. **The project conforms with the Subdivision Map Act.**

   Facts in support: The California Subdivision Map Act (SMA) governs the division of land into smaller parcels, ensures orderly development and the provision of adequate infrastructure for new subdivisions. The SMA requires developers to submit maps showing how the land will be divided and ensures adequate access to utilities, drainage, and compliance with zoning and environmental regulations, thereby promoting public health, safety, and welfare.

   The Project and its accompanying Tentative Map have been reviewed for consistency with applicable General Plan and Housing Element policies, the Vallejo Municipal Code (Title 15 – Subdivisions and Title 16 – Zoning), and the SMA. As discussed above, the Tentative Map is consistent with the Vallejo General Plan policies, and the proposed Planned Development, as shown in Exhibit C of this Resolution, including those related to lot size, lot coverage, landscaping, and other relevant development standards. The Project will also have adequate access to utilities, drainage, and infrastructure by providing new streets, sidewalks, water, sanitary sewer, storm drain lines, and bioretention and water quality basins, and a detention basin.

Section 4. Planned Development

1. **The proposed development is consistent with the general plan, including the density and intensity limitations that apply;**

   Facts in support: The Project site currently has the General Plan Land Use Designations of Primarily Single-Family (P-SF) and Mix of Housing Types/Medium Density (R-MH). The P-SF applies to residential neighborhoods primarily characterized by detached single- family homes with a maximum permitted residential density of 9 units per acre. The R-MH allows single-family homes but with a mix of other housing types, including duplexes, triplexes, fourplexes, some smaller scale apartment buildings and small commercial spaces; or 2) primarily single-use, multi-family developments with common outdoor spaces and maximum permitted residential density of 25 dwelling units per acre. The Project includes 51 detached single-family residential units with a density of 2.5-units per acre. The proposed residential density of the Project is 2.5 units per acre (or 4.9 units an acre on the 10.39-acres being developed), consistent with the maximum permitted density for the P-SF and R-MH designation. The Project is consistent with the goals and policies of the Vallejo General Plan, as shown in Exhibit B of this Resolution.

2. **The subject site is physically suitable for the type and intensity of the land use being proposed;**

   Facts in support: The Project site is currently a vacant 20.18-acre site adjacent to an existing developed subdivision. The site has a steep topography towards the south end of the site and biologically sensitive areas to the west of the site that are being avoided to develop the Project. The areas make up approximately 9.74 acres that will be deed restricted to prevent any future development. The remaining 10.39-acres is physically suitable to accommodate the 51-unit subdivision, while providing new private streets, landscaping, adequate on-site circulation, emergency access and will be served by all required utilities needed for the Project.

3. **Adequate transportation facilities and public services exist or will be provided in accord with the conditions of development plan approval, to serve the proposed development; and the approval of the proposed development will not result in a reduction of traffic levels of service or public services so as to be a detriment to public health, safety, or welfare;**

   Facts in support: The Project will provide a new private road at the intersection of Shady Lane and Wildflower Avenue. The subdivision will have one main private street with five private alleys to access the 51-units. The new private street will have a 40-foot right-of-way, with sidewalk, curb and gutter and with approximately 24 on-street parking spaces and one mailbox bay parking space. The private streets will have two lanes, one for incoming traffic and one for outgoing traffic. The private alleys will have a 21-foot right-of-way with curb and gutters at each end.

   The Project site is located in an urban area that is currently served by existing utilities, including water, sanitary sewer, storm drainage, electricity, gas, and telecommunications infrastructure. The infrastructure to be provided would be a combination of public and private systems. A private new 8-inch water main line would connect to an existing 8-inch water main in Shady Lane at two locations, for a looped system. The Vallejo Flood and Wastewater District (VFWD) maintains existing sanitary sewer lines within the vicinity of the Project site. A new 8-inch sewer lateral would connect to the existing 8-inch public sanitary sewer main line located in Shady Lane at the northwestern corner of the Project site. The sanitary sewer would be designed and installed to VFWD standards. The Project would also include the replacement of the existing sewer lift station that currently serves the 141 single-family home development to the west of the proposed Project site with an upgraded system to serve both communities. The lift station would be owned and maintained by the VFWD. New utilities will be installed throughout the subdivision to support the Project that will not result in detriment to public health, safety and welfare of existing and future residents.

4. **The proposed development will not have a substantial adverse effect on surrounding land uses and will be compatible with the existing and planned land use character of the surrounding area;**

   Facts in support: The 51 new single family dwelling units have been designed to be in scale with existing development to the west of the Project site. The new homes have been designed to be compatible with the existing residential development to the west, such as overall scale of the units, similar roof pitches, and massing. The development will preserve approximately 13.25-acres of open space across four parcels, including approximately 2.5-acres of open space adjacent to the existing development to create a buffer between the two subdivisions. Therefore, the development as proposed, will not have a substantial adverse effect on the existing, nor planned surrounding land uses.

5. **The development generally complies with applicable adopted design guidelines; and**

   Facts in support: The Planned Development Plan includes separate design standards that relate to specific materials, colors, and development standards (e.g. setbacks, lot coverage, etc.) within the subdivision. The homes have been designed in the "Modern Farmhouse" architectural style. The homes will incorporate different finished materials such as stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and batten siding, and naturally decay resistant wood. The architectural detailing (shutters, eave brackets, corbels, exposed rafters/rafter tails, and/or beams) have been proposed to provide visual interest and richness to the elevations, thereby resulting in a development that will be consistent with the design standards included in the Planned Development Plan.

6. **The proposed development is demonstratively superior to the development that could occur under the standards applicable to the underlying base district, and will achieve superior community design, environmental preservation and/or substantial public benefit. In making this determination, the following factors shall be considered:**
   a. **Appropriateness of the use(s) at the proposed location.**
   b. **The mix of uses, housing types, and housing price levels.**
   c. **Provision of units affordable to persons and families of low and moderate income or to lower income households, if applicable.**
   d. **Provision of infrastructure improvements.**
   e. **Provision of open space.**
   f. **Compatibility of uses within the development area.**
   g. **Quality of design, and adequacy of light and air to the interior spaces of the buildings.**
   h. **Overall contribution to the enhancement of neighborhood character and the environment of Vallejo in the long term.**
   i. **Creativity in design and use of land; and**

   Facts in support: The Planned Development (PD) zoning and PD plan provide for a proposed development that is superior to a development that could occur under the standards applicable to the underlying RLD and RMD zoning districts. Unlike the underlying zoning districts, the PD plan allows less restrictive development standards, such as reduction in the minimum lot size, minimum lot widths and depths, maximum lot coverage, setbacks, etc. The homes will incorporate different finished materials such as stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and batten siding, and naturally decay resistant wood. The architectural detailing (shutters, eave brackets, corbels, exposed rafters/rafter tails, and/or beams) have been proposed to provide visual interest and richness to the elevations and including adequacy of light and air to the interior spaces of the buildings. The PD will preserve a total of 13.25-acres of open space of the total 20.18-acres. Overall, the development will contribute to

the enhancement of the existing neighborhood character and the environment of Vallejo for the long term by developing an underutilized site.

7. **The proposed PD rezoning and planned development plan has been reviewed in compliance with the California Environmental Quality Act, if applicable, and the requirements of this chapter.**

   Facts in support: An Initial Study/Subsequent Mitigated Negative Declaration and a Mitigation and Monitoring Report have been prepared for the Project in compliance with CEQA.

Section 5. Development Review Findings

1. **The project complies with all applicable specific standards and criteria of the Zoning Code.**

   Facts in support: The Project will rezone the Subject Property from RLD and RMD to Planned Development, as shown in Exhibit D of the Resolution. The Project is consistent with the Vista Cove Planned Development, as shown in Exhibit C of this Resolution,, such as setbacks, lot coverage, building height and design standards.

2. **The project is consistent with the General Plan and any applicable approved Specific Plan or Planned Development.**

   Facts in support: The Project site has a general plan land use designation of P-SF which applies to residential neighborhoods primarily characterized by detached single- family homes. Also has a land use designation of R-MH, which applies to residential neighborhoods largely characterized by single-family homes typically located in the central and more historic parts of Vallejo. The maximum permitted residential density in the P-SF is 9 units and acre and 25 units per acre in the R-MH land use designation. As proposed, the Project would construct 51 additional single-family dwellings units on a vacant and underutilized infill site adjacent to existing residential development. The proposed residential density of the Project is 2.5 units per acre (or 4.9 units an acre on the 10.39-acres being developed), consistent with the maximum permitted density for the P-SF and R-MH designation. The Project is consistent with the goals and policies of the Vallejo General Plan, as shown in Exhibit B of this Resolution.

   The proposed Project will add 51 additional single-unit dwellings to the available housing stock in the City on a vacant and underutilized infill site adjacent to existing residential development. The subdivision layout is compatible with the existing roadway network and existing residential development density in the surrounding area. The subdivision will have adequate vehicular and pedestrian access throughout the site and will feature of a mix of floor plan layouts to create an inviting neighborhood that will be complimentary to the existing neighborhoods in the vicinity of the Project.

   The Project also includes a rezone to Planned Development (PD).

   There is no specific plan applicable to the Project.

3. **The project complies with any design conditions, standards, or requirements imposed by a discretionary approval including but not limited to a Major or Minor Use Permit, Variance, Specific Plan, Planned Development, or tentative map applicable to the project or the location where it is proposed.**

   Facts in support: The Planned Development Plan include separate design standards that relate to specific materials, colors, and development standards (e.g. setbacks, lot coverage, etc.). The

homes have been designed in the "Modern Farmhouse" architectural style. The homes will incorporate different finished materials such as stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and batten siding, and naturally decay resistant wood. The architectural detailing (shutters, eave brackets, corbels, exposed rafters/rafter tails, and/or beams) have been proposed to provide visual interest and richness to the elevations, thereby resulting in a development that will be consistent with the design standards included in the Planned Development Plan.

There are no other discretionary approvals applicable to the Project or to the Project location.

4. **The project is in substantial compliance with any applicable adopted design guidelines.**

   Facts in support: The Project includes a rezoning to Planned Development with adoption of a PD Plan that includes site specific design and development standards. The Planned development Plan include separate design standards that relate to specific materials, colors, and development standards (e.g. setbacks, lot coverage, etc.). The homes have been designed in the "Modern Farmhouse" architectural style. The homes will incorporate different finished materials such as stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and batten siding, and naturally decay resistant wood. The architectural detailing (shutters, eave brackets, corbels, exposed rafters/rafter tails, and/or beams) have been proposed to provide visual interest and richness to the elevations, thereby resulting in development that will be consistent with the design standards included in the Planned Development Plan, as shown in Exhibit D of the Resolution .

5. **The project will serve to achieve groupings of structures that are well related one to another and which, taken together, will result in a well-composed urban design, with consideration given to site, height, arrangement, texture, material, color and appurtenances, the relation of these factors to other structures in the immediate area, and the relation of the development to the total setting as seen from key points in the surrounding area; only elements of design which have some significant relationship to outside appearance shall be considered;**

   Facts in support: The Project proposes to construct 51 new detached single-family dwellings with public streets, streetlights, and landscaping improvements. The Project proposes five different residential floor plans and three architectural styles to create visual interest throughout the subdivision.

6. **The project will be of a quality and demonstrates thoughtful site planning that will serve to protect the value of private and public investments in the area.**

   Facts in support: As described in the Planned Development, the architectural vision for Vista Cove subdivision is grounded in the principles of Wine Country Agrarian designs. Through thoughtful massing, material quality and variation, and detailed craftsmanship, the homes at Vista Cove subdivision would contribute to and enhance the aesthetic of the existing surrounding development.

   The proposed dwellings will be setback from the street to create landscape buffers adjacent to private sidewalks throughout the proposed subdivision. The proposed subdivision layout will provide an open space buffer between existing homes to the north and will incorporate new single-family dwellings that are oriented toward the street. Required detention and bioretention basins are grouped together and sited at the rear of the subdivision to provide a buffer from existing residential development to the west and to reduce visibility from public view. The proposed street pattern layout does not incorporate sharp curves and will promote safety for vehicles and pedestrians.

The project includes a total of 9.74 acres of undisturbed open space across two parcels: Parcel A (8.36-acres) and Parcel B (1.38-acres). These undisturbed open space areas would be fenced with access via private gates to facilitate maintenance activities only, and they would have signage installed to prevent trespassing. Future development would not be allowed on either of the two parcels. The project will also include 3.55 acres of common open space, across two parcels (Parcel C and D), that would include one bioretention area, walkways, a loop walk around a flexible use turf area, and a vista overlook for residents. The landscape design includes drought-tolerant and native landscaping to transition between the proposed residential area and adjacent open space.

7. **The project has been reviewed in compliance with the California Environmental Quality Act, if applicable, and the requirements of this Chapter.**

   Facts in support: See #7 in Section 4 above.

Section 6. Design Review Findings

Note: In accordance with VMC Section 16.604.02 the Design Review Board has reviewed and independently considered the applicable development standards (including the zoning adjustments proposed in conjunction with the Draft Planned Development Plan, as described in the staff report), the overall design, architecture, landscaping and Project aesthetics proposed, and the Design Review Board finds that all of the design elements are satisfactory as presented with no Project modifications recommended to the Planning Commission at this time.

A. **Is consistent with the purposes of this chapter, the design policies of the general plan and any applicable specific plan, any adopted applicable design guidelines.**

   Purposes of the Chapter

   1. **Establish regulations for an objective process that applies urban design principles to ensure that new construction supports the best of the city's architectural traditions.**

      Facts in support: As proposed, the Project meets objective process that applies urban design principles to ensure that new construction supports the best of the city's architectural traditions, as discussed in detail below.

   2. **Encourage new structures that show creativity and imagination, add distinction, interest, and variety to the community, and are environmentally sustainable.**

      Facts in support: The proposed home designs include 'Modern Farmhouse' architecture that will be constructed with a variety of high-quality building materials and painted with simple, neutral colors. Vertical and horizontal façade breaks, and appropriate building massing have been incorporated into the design of the subdivision and will create distinction in the context of the larger established neighborhood.

   3. **Promote architectural and design excellence in new construction and discourage poor quality development.**

      Facts in support: The Project details, colors, materials, and landscaping are integrated with one another in a way that ensures a visually consistent proposal. Each building elevation will consist of building features, materials, and colors typically associated with the Modern Farmhouse architectural style. The homes will incorporate different finished materials such as stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and

batten siding, and naturally decay resistant wood. The architectural detailing (shutters, eave brackets, corbels, exposed rafters/rafter tails, and/or beams) have been proposed to provide visual interest and richness to the elevations. Overall, the Project architecture and landscaping propose high-quality, long-lasting material that will result in a quality development.

4. **Ensure that future development should:**
    a. **Reflect the values of the community.**
    b. **Enhance the surrounding environment.**
    c. **Visually harmonize with its surroundings and not unnecessarily obstruct scenic views; and**
    d. **Avoid nostalgic misrepresentations that may confuse the relationships among structures over time.**

    Facts in support: The Project reflects the promotion of development that targets underutilized sites, which is a policy identified in the General Plan. Due to its location, the Project will sit lower on the site as to not obstruct scenic views from existing residences to the east, and due to its nature and design, nor will it confuse the relationships among structures in the vicinity over time. The overall Project has been designed to wrap around the back side of the existing residential development in order to fit in with the existing development pattern.

5. **Ensure that decisions on housing development projects are based on objective design standards as required by the State Housing Accountability Act (Government Code Section 65589.5).**

    Facts in support: The Project complies with applicable, objective general plan and zoning standards. Therefore, in accordance with the provisions of the Housing Accountability Act (HAA), California Government Code Section 65589.5(j), the city may not deny the Project or approve the Project at a reduced density without basing its decision on the written findings under Section 65589.5(j), which read as follows:

    1. The development would have a specific adverse impact on public health or safety unless disapproved, or approved at a lower density; and
    2. There is no feasible method to satisfactorily mitigate or avoid the specific adverse impact, other than the disapproval, or approval at a lower density

6. **Provide for new landscaping to create a visually pleasing setting for structures on the site.**

    Facts in support: Landscaping will be provided in the front yards, open spaces and around the bioretention basins. A total of 141 new trees, as well as shrubs and ground cover, will be planted within the Project to enhance the Project site. The new landscaping will create a visually pleasing setting for the homes to be constructed on the site.

7. **Promote the protection and retention of landmark, native, and specimen trees and if feasible mature canopy trees and other significant landscaping of aesthetic and environmental value.**

    Facts in support: The Project will remove a total of 69 on-site trees. An arborist report was prepared and a total of 83 trees were assessed, identifying seven different tree species, e.g. Coast Live Oak, Plum Cherry, Apple, Monterey Pine, Valley Oak, Toyon, and Strawberry Tree, with Coast Live Oak as the most common species. The trees ranged from poor to good

condition. A total of 47 significant trees will be removed and replaced with a total of 141 new trees, as part of the Project.

8. **Ensure that the design, quality, and location of signs are consistent with the character and scale of the structures to which they are attached and are visually harmonious with surrounding development.**

   Facts in support: As part of the Project, an entry monument sign, with an overall height of six feet and four inches, will be placed at the entrance of the new subdivision. The monument sign will be constructed of CMU blocks and will be precasted with board and batten veneer. The new sign will create a sense of place and is appropriately scaled with surrounding structures and is visually harmonious with the overall development. Additionally, new street and directional signage will be included.

9. **Promote the conservation, enhancement, preservation, and protection of historic resources.**

   Facts in support: Not applicable; there are no historic resources near this Project's location.

   Design policies of the General Plan

   Facts in support: The Project is consistent with the goals and policies of the Vallejo General Plan, as shown in Exhibit B of this Resolution.

   Adopted applicable design guidelines.

   Facts in support: The rezoning of the subject site from Residential Low Density and Residential Medium Density to Planned Development, will include adoption of the Vista Cove Planned Development Plan which includes design guidelines for residential development and design standards, landscaping, and fencing standards. As proposed, the Project is consistent with the proposed Vista Cove Planned Development Plan.

B. **Is consistent with any planning or zoning approvals by the director or the planning commission.**

   Facts in support: Not applicable; Neither the Director, nor the Planning Commission, have approved any previous entitlements at the site.

C. **Complies with any other relevant city policies or regulations.**

   Facts in support: The Project as proposed complies with VMC Chapter 16.202 – Residential Districts, as the Project has been designed to meet the requirements, as detailed in Table 3 and 4 of Attachment 2 of the staff report. The Planning Commission will act on the Development Review for the Project.

D. **Meets the following criteria:**
   a. **The aesthetic design, including its exterior design and landscaping, is appropriate to the function of the project and will provide an attractive and comfortable environment for occupants, visitors, and the general community.**

      Facts in support: The proposed Modern Farmhouse architectural style includes a variety of different building materials such as stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and batten siding, and naturally decay resistant wood. With the application of neutral paint colors and installation of drought tolerant

front yard landscaping as proposed, all design elements will complement each other and provide an attractive and comfortable environment for occupants and visitors to the subdivision.

b. **Project details, colors, materials, and landscaping are fully integrated with one another and used in a manner that is visually consistent with the proposed architectural design.**

Facts in support: As described above, the proposed materials, colors and landscaping will be fully integrated with one another and will be used in a manner that is visually consistent with the proposed architectural design of a Modern Farmhouse style.

c. **The project has been designed with consideration of neighboring development.**

Facts in support: The Project has been designed with consideration of the existing neighborhood development to the east. The existing development is classified as detached, single- and two-story homes with hip and gable roofs, with a mixture of stucco, wood and batten siding. The proposed Project will incorporate two-story homes that include a variety of different building materials such as stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and batten siding, and naturally decay resistant wood. With the application of neutral paint colors, and installation of drought tolerant front yard landscaping as proposed, all design elements will not only complement each other but will also complement the existing surrounding development to the west.

d. **The project contributes to the creation of an attractive and visually interesting built environment that includes well-articulated structures that present varied building facades, rooflines, and building heights and encourages increased pedestrian activity and transit use.**

Facts in support: The proposed detached single-family residences have been designed to be visually interesting, and they will be constructed with a variety of high-quality building materials and painted with simple, complementary colors. Vertical and horizontal façade breaks, and building massing have all been incorporated into the design of the homes. The building features wall articulation, and materials that are aesthetically pleasing and compatible with other newer developments in the community.

e. **Street frontages are attractive and interesting for pedestrians, address the street and provide for greater safety by allowing for surveillance of the street by people inside buildings and elsewhere.**

Facts in support: The proposed Project will activate an underutilized, vacant site by creating new roads and alleys for the subdivision. The street frontages have been designed to include a variety of different building materials, colors and landscaping to create an attractive streetscape and create an attractive street presence for pedestrians and passing motorists.

f. **The proposed design is compatible with the historical or visual character of any area recognized by the city as having such character.**

Facts in support: Not applicable; the subject site is not within any historic district of the city.

g. **The aesthetic design preserves significant public views and vistas from public streets and open spaces and enhances them by providing areas for pedestrian activity.**

Facts in support: The Project has been designed to take advantage of the views of vistas of the Carquinez Strait that will be visible from public streets and open spaces. To the extent feasible, the Project will preserve the views and vistas of the existing neighborhood to the west of the site. The Project will incorporate common open space to create a sense of place and provide an area for pedestrian activity.

h. **The proposed landscaping plan is suitable for the type of project and will improve the appearance of the community by enhancing the building, minimizing hardscape and softening walls; and the landscape plan incorporates plant materials that are drought-tolerant, will minimize water usage, and are compatible with Vallejo's climate.**

Facts in support: The proposed landscaping, including trees, shrubs and ground covering has been designed to improve the appearance of an underutilized site and minimize hardscape. The landscaping incorporates plant materials that are drought-tolerant, would minimize water usage, and are compatible with City of Vallejo's climate.

i. **The project has been designed to be energy efficient including, but not limited to, landscape design and green or eco-friendly design and materials.**

Facts in support: As required by the California Building Code, the Project has been designed to be energy efficient and will include features such as LED lighting and solar panels. The proposed landscaping has been designed to incorporate plant materials that are drought tolerant consistent with the California Water Efficient Landscaping Standards.

j. **The project design protects and integrates natural features including creeks, open space, significant vegetation, and geologic features.**

Facts in support: The Project will only develop approximately 10-acres of the vacant 20.13-acre site. The development has been designed to protect natural features and significant vegetation. The remaining 10.13-acre site will be left undeveloped and preserved as undisturbed open space.

Section 7. Decision.

BE IT FURTHER RESOLVED that the Planning Commission hereby recommends that the City Council approve Tentative Map (TM23-0001), Planned Development (PD24-0001), Development Review (DVR23-0018), Design Review (DR23-0006) and Landscape Review (LR23-0002) for the development of 51 single-family residences ("Vista Cove Subdivision"), subject to the conditions of approval in Exhibit A to the Resolution.

PASSED AND ADOPTED at a regular meeting of the Planning Commission of the City of Vallejo, State of California, on the 21st day of January 2026 by the following vote, to-wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
ANTHONY TAYLOR, CHAIRPERSON
City of Vallejo Planning Commission

Attest:

_____
KRISTIN POLLOT, AICP - SECRETARY
City of Vallejo Planning Commission

Exhibits:

A. Conditions of Approval
B. General Plan 2040 Policies
C. Planned Development Consistency
D. Vista Cove Planned Development Plan
E. Tentative Map – Dated June 2024

EXHIBT A

CONDITIONS OF APPROVAL

Tentative Map (TM23-0001)
Planned Development (PD24-0001)
Development Review (DVR23-0017)
Design Review (DR23-0006)
Landscape Review (LR23-0002)

Vacant Site at the northeast corner of Shady Lane and Wildflower Avenue
(APNs: 0079-171-170 and 0079-120-100)

PROJECT DESCRIPTION: The project includes a Tentative Map, Planned Development rezoning, Development Review, Design Review, and Landscape Review to allow the subdivision of two vacant parcels totaling approximately 20.13 acres into 57 parcels for the development of 51 detached single-family residences, and including four parcels dedicated to open space and bioretention areas, one parcel for a new private roadway network, and one for a new sewer pump station. The new single-family homes would include four distinct modern farmhouse-style floor plans ranging in size from 2,494 to 2,674 square feet, each featuring an attached two-car garage and driveway parking. The development also includes construction of a new private street, sidewalks, curbs and gutters, private alleys, street lighting, landscaping, and other related site improvements to support the proposed residential neighborhood.

A. PLANNING DIVISION

Pre-Building Permit

1. Prior to building permit issuance, Developer shall submit a numbered list to the Planning Division with a written response as to how each condition of approval contained in this report will be satisfied. The list should be submitted to the project planner who will coordinate continued development of the project. The conditions shall also be included in the permit set after the cover sheet with each condition listed.

2. Prior to issuance of any grading permit, building permit, or other discretionary or ministerial approval, and throughout project construction and operation, the applicant shall fully comply with and implement all applicable mitigation measures required by the Mitigated Monitoring and Reporting Program (MMRP) adopted by the City Council and incorporated herein by reference.

3. Pursuant to VMC 16.602.10.b, the site plan, floor plans, building elevations and/or any additional information or representations, whether oral or written, indicating the proposed structure or manner of operation submitted with an application or submitted during the approval process shall be deemed conditions of approval. Any approval may be subject to requirements that the applicant guarantees, warranties, or ensures compliance with the plans and conditions in all respects.

4. Prior to building permit issuance, Developer shall obtain a Temporary Use Permit from the Planning Division for any temporary office or construction trailer, as necessary.

5. Prior to building permit issuance, Developer shall obtain a Temporary Use Permit from the Planning Division for any subdivision signs during the time period of subdivision sales.

6. Prior to building permit issuance, Developer shall submit construction-level landscaping plans prepared by a registered landscape architect as part of the building plan set for review and approval. Landscape plans shall comply with Chapter 16.504 (VMC) and substantially comply with the landscape plans in the approved entitlements.

7. Prior to building permit issuance, Developer shall have recorded a deed restriction for Parcel A that restricts the development of future residential units in perpetuity. Said form of deed restriction shall be approved by the City Attorney prior to recordation.

8. Prior to final approval of the Final Map, Developer shall submit a copy of the draft CC&R's for the City's review and approval. City, as third-party beneficiary, shall have the power but not the obligation to enforce maintenance requirements and standards. The CC&Rs shall include a clause that there shall be no amendments without City approval.

<u>During Construction</u>

9. Construction activities shall be managed in compliance with the following requirements, as applicable:

    a. Site Watering. During the construction of a project, all portions of the site shall be watered as necessary to reduce emissions of dust and other particulate matter, and all stockpiles shall be covered.
    b. Maintenance. Streets and sidewalks shall be made dirt free at the completion of construction.
    c. Noise. All construction and transport equipment shall be muffled in accordance with state and federal laws.
    d. Emissions. Construction and transport equipment shall be operated so as to minimize exhaust emissions. During construction, trucks and equipment should be running only when necessary.
    e. Hours of Operation. Grading and pile driving operations within ¼ mile of residential units shall be limited to between 8:00 am and 5:00 p.m. on weekdays pursuant to Subsection 16.502.03.E.
    f. Water Run-off. All water run-off from construction sites shall be controlled. During construction, trucks and equipment should be running only when necessary, and shall comply with Chapter 12.41 of the Vallejo Municipal Code.

10. No person shall make, or cause to suffer, or permit to be made upon any public property, public right-of-way or private property, any excessive noise, annoying noise, amplified sound or vibrations that are physically annoying to reasonable persons of normal sensitivity or that are so harsh or so prolonged or unnatural or unusual in their use, time or place as to cause or contribute to the unnecessary and unreasonable discomfort of any persons of normal sensitivity located at the lot line of the property from which these noises emanate or that interfere with the peace and comfort of residents or their guests, or the operators or customers in places of business in the vicinity, or that may detrimentally or adversely affect such residences or places of business. (VMC Section 16.502.09 (C))

11. Construction, demolition, and related loading/unloading activities that may generate noise shall be limited to the following: 7 a.m. and 6 p.m. in Monday- Friday, Saturday 9 am- 6 pm and Sundays and holidays not allowed. (VMC Section 16.502.09 (D))

12. Fencing for construction sites shall not be installed until a building permit or grading permit has been issued and shall be removed prior to final inspection. In the event that the building permits expire before the construction is completed, the Director may issue a temporary use permit pursuant to Chapter 16.339, Temporary Uses, to allow the fencing to remain for a longer period of time. (VMC Section 16.505.08 (B))

Landscaping

13. Prior to operation/final building inspection, the landscape architect shall provide a complete Certificate of Completion and Certificate of Installation According to the Landscape Documentation in accordance with VMC Section 16.504.09 - Water Efficient Landscape Requirements. The documentation shall include the following:
    a. Certificate of Completion (VMC Section 16.504.09 (G.9))
    b. Irrigation Scheduling (VMC Section 16.504.09 (G.9.c))
    c. Schedule of Landscape and Irrigation Maintenance (VMC Section 16.504.09 (G.9.d))
    d. Landscape Irrigation Audit Report (VMC 16.504.09 (G.9.e))
    e. Soil Analysis Report (VMC Section 16.504.09 (G.9.f))

14. Prior to occupancy/final building inspection, Developer shall install landscaping and irrigation per approved plans. The landscape architect shall verify in writing that the landscaping and irrigation have been installed in accordance with the approved landscape plans with respect to size, health, number and species of plants, and the overall design concept.

15. Litter shall be removed from all landscaped areas in a timely fashion. (VMC Section 16.504.08 (B))

16. Turf areas shall be mowed on a regular basis and be kept green. Accumulation of leaves, twigs, bark, and other similar materials shall be removed on a regular basis. Planting areas shall be kept free of weeds at all times. (VMC Section 16.504.08 (C))

17. The Home Owners Association (HOA) shall ensure all landscaping shall be permanently maintained in a healthy and thriving condition at all times, in compliance with the approved landscape plan. Irrigation systems and their components shall be maintained in a fully functional manner consistent with the original approved design or upgraded to reflect current best practices for water efficiency. Regular maintenance shall include but is not limited to:
    a. Adjusting, checking, and repairing irrigation equipment; resetting automatic controllers; aerating and de-thatching turf areas; adding/replenishing fertilizer, mulch, soil amendments; insect control; the replacement of dead or diseased plants; pruning; watering; and weeding all landscaped areas.
    b. The trimming of vegetation is necessary to maintain the effective functioning of solar energy facilities and passive solar design features installed both on site and on adjacent properties.
    c. The trimming of vegetation is necessary to keep pedestrian and bicycle paths clear. (VMC Section 16.504.08 (A))
    d. Pruning, cultivating, weeding, fertilizing, replacement of plants, and watering on a regular basis.
    e. Pruning or removal of overgrown vegetation, cultivated or uncultivated, that may harbor rats, vermin, or other nuisances, or otherwise be detrimental to neighboring properties.
    f. The removal of dead, decayed, diseased, or hazardous trees, weeds and debris that create an unsightly appearance and may be dangerous to public safety and welfare or detrimental to neighboring properties or property values. Compliance shall be by removal, replacement, or maintenance.
    g. Landscaping (trees, shrubs, ground cover, turf, etc.) which, due to accident, damage, disease, lack of maintenance, or other cause, fails to show a healthy appearance and growth, shall be replaced. Replacement plants shall conform to all standards that govern the original planting installation, approved landscaping plan, or as approved by the director. (VMC Section 16.504.08 (D))

Fences and Screening

18. Prior to occupancy/final building inspection, Developer shall have installed all fencing per approved plans.

19. Maintenance. Fencing on site shall be continuously maintained with no sign of rust or disrepair. Graffiti shall be removed within forty-eight hours. (VMC Section 16.505.02 (B)).

20. General Requirements. All exterior mechanical equipment, whether on a roof, on the side of a structure, or located on the ground, shall be screened from public view. Exterior mechanical equipment to be screened includes, without limitation, heating, ventilation, air conditioning, refrigeration equipment, plumbing lines, ductwork, transformers, smoke exhaust fans, water meters, backflow preventers, service entry section, back-up and emergency generators, and similar utility devices.
    a. Screening shall be architecturally integrated into the main structure with regard to materials, color, shape, and size to appear as an integral part of the building or structure.
    b. Equipment shall be screened on all sides, and screening materials shall be opaque.
    c. When screening with plants, evergreen types of vegetation shall be planted and maintained. Plant material sizes and types shall be selected and installed so that, at the time of building occupancy, such plants effectively screen their respective equipment.
    d. The use of wood expanded metal lath, and chain link for the purpose of screening is prohibited. (VMC Section 16.505.10)

Lighting

21. Lighting shall be designed, located, and installed to be directed downward or toward structures, be shielded or fully shielded, and shall be well-maintained in order to prevent glare, light trespass (unwanted light on adjacent lots and public rights-of-way), and light pollution to the maximum extent feasible. No permanently installed lighting shall blink, flash, or be of unusually high intensity or brightness, as determined by the Director. (VMC Section 16.506.04 (B)) Time clocks or photo-sensor systems may be required as a condition of approval of a discretionary permit. (VMC Section 16.506.04 (D))

General Requirements

22. The development of the subdivision shall be subject to the development standards of the Vista Cove Planned Development.

23. All model homes that are landscaped shall use signs and written information to demonstrate the principles of water efficient landscapes described in VMC Chapter 16.504. Signs shall be used to identify the model as an example of a water efficient landscape featuring elements such as hydrozones, irrigation equipment, and others that contribute to the overall water efficient theme. Signage shall include information about the site water use as designed per this chapter; specify who designed and installed the water efficient landscape; and demonstrate low water use approaches to landscaping such as using native plants, graywater systems, and rainwater catchment systems.

24. Developer shall contact local postal authorities to obtain the requirements for mail facilities for the project. The design and location of mail receptacles shall be reviewed and approved by the Planning Division and shown on the Utility, Landscape, and Building Plans, prior to issuance of Building Permits. Mail facilities shall be installed prior to occupancy approval.

25. Developer shall submit a written request for new street names with a site plan showing their location to the Planning Division for review and approval, at the time of submittal of Improvement Plans and Final Map. Include a list of alternatives for each name, as some names may not be acceptable.

26. Pursuant to VMC Section 15.08.110, the approval of the Tentative Map shall automatically expire three years (36 months) (MONTH, XX, 202X) after its approval.

27. The entitlement of Planned Development, Development Review, Design Review, and Landscape Review shall automatically expire within three years (36 months) of the effective date of this approval, on Month XX, 202X, unless the use is exercised or extended (VMC Section 16.602.12 (A)). Issuance of a building permit shall constitute exercise of rights; provided, however, that, unless otherwise specified as a condition of project approval, the permit shall expire if:

    a. The building permit expires.
    b. Final inspection is not completed, or certificate of occupancy issued within the time specified as a condition of project approval.
    c. The rights granted under the permit are not exercised within one year following the earliest to occur of the following: issuance of a certificate of occupancy; or if no certificate of occupancy is required, the last required final inspection for the new construction. (VMC Section 16.602.11 (B))

28. The Director may approve a one-year extension of any permit or approval granted for a residential or non-residential project under the Zoning Code upon receipt of a written application and fees received fifteen calendar days before the expiration date with the required fee prior to expiration of the permit. (VMC Section 16.602.11 (C.1))

29. For new developments, utilities including, but not limited to, all electrical, telephone, cable television, fiber-optic cable, gas, water, sewer, irrigation/recycled water, and similar distribution lines providing direct service to a project shall be installed underground within the site. This requirement may be waived by the Director upon determining that underground installation is infeasible, or the electrical line is otherwise exempt from an under-grounding requirement. (VMC Section 16.501.10)

30. Within five business days after project approval, the Applicant shall pay the Notice of Determination filing fee (the latest fees in effect at the time of payment) for County Clerk processing, made payable to Solano County and submitted to the City of Vallejo Planning Division. If an in-person filing is required, such filing shall be completed by the Applicant, unless directed otherwise by the Planning Division. NOTE: If the fees are not paid and the Notice of Determination is not filed within five working days after approval of the project, it will extend time frames for California Environmental Quality Act (CEQA) legal challenges.

31. Developer shall obtain an inspection from the Planning Division prior to occupancy/final building inspection. All inspections require a minimum of 24-hour notice. Occupancy permits shall not be granted until all construction and landscaping is completed and finaled in accordance with the approved plans and required conditions of approval or a bond has been posted to cover all costs of the unfinished work as agreed to by the Planning and Development Services Director.

32. Developer shall indemnify, hold harmless, and defend City, its officers, officials, directors, employees, agents, volunteers and affiliates and each of them from any and all claims, demands, causes of action, damages, costs, expenses, actual attorney's fees, Developer's fees, expert fees, losses or liability, in law or in equity, of every kind and nature whatsoever arising out of or in connection with Developer's operations, or any subcontractor's operations, to be performed under this agreement for Developer's or subcontractor's tort negligence including active or passive, or strict negligence, including but not limited to personal injury including, but not limited to bodily injury,

emotional injury, sickness or disease, or death to persons and/or damage to property of anyone, including loss of use thereof, caused or alleged to be caused by any act or omission of Developer, or any subcontractor, or anyone directly or indirectly employed by any of them or anyone for the full period of time allowed by the law, regardless to any limitation by insurance, with the exception of the sole negligence or willful misconduct of the City. No modification of the project, any application, permit, certification, condition, environmental determination, other approval, change in applicable laws and regulations, or change in processing methods shall alter the Developer's indemnity obligation.

B. **BUILDING DIVISION**

1. Plans and permits required for Building, mechanical, plumbing, and electrical work per California Code of Regulations, Title 24, and applicable City Ordinance in effect at the time of completed Building Permit application date and required fees paid at time of application.

2. Soils Report shall be required for foundation plan design.

3. A separate permit shall be required for each structure.

C. **PUBLIC WORKS**

1. All public improvements shall be designed and constructed to current City of Vallejo Design Standards, unless otherwise noted within these conditions of approval.

2. All frontage improvements along Shady Lane and Wildflower Road shall be designed and constructed to City of Vallejo Design Standards, including but not limited to: curb, gutter, sidewalk, curb ramps, streetlighting, and pavement surface improvements including signing and striping.

3. All interior streets shall be designed and constructed per the Tentative Map. Street pavement sections shall be designed to City of Vallejo Design Standards.

4. Grading and drainage shall be designed so that surplus drainage is directed overland so as not to jeopardize existing or proposed buildings with flooding. All drainage shall be directed to existing or proposed streets or the proposed Bio-retention Basins.

5. The project shall comply with the requirements of the most current National Pollutant Discharge Elimination System (NPDES) permit issued to the City of Vallejo, which incorporates Low Impact Development (LID) Best Management Practices in the overall design to address the issue of ongoing post-construction stormwater quality for the project site. Stormwater Quality shall be designed for the entirety of the site.

6. Prior to beginning construction of public improvements, Developer shall enter into a Subdivision Improvement Agreement with the City. The Developer shall furnish the necessary insurance, bonds and pay all fees associated with the Agreement.

7. Existing public facilities damaged during the course of construction shall be repaired by the Developer, at his sole expense, to the satisfaction of the City Engineer.

8. The project Engineer shall coordinate grading design closely with the project Geotechnical Engineer. Specifically, the Geotechnical Engineer shall be consulted to evaluate and address issues related to:
    a. Geologic Hazards
    b. Retaining Wall Design Parameters

9. The developer shall retain a registered Geotechnical Engineer to conduct a Geotechnical Investigation of the project area. Two copies of the project Geotechnical Report shall be submitted to the Public Works Department prior to submittal of Construction Plans. The Geotechnical Report shall include details and recommendations regarding the following:
    a. Geologic Hazards
    b. Grading Limitations and Requirements
    c. Foundation Design
    d. Settlement
    e. Retaining Wall Design as Required
    f. Slope grading shall comply with the Geotechnical Report. Slopes steeper than 3H:1V shall not be allowed in the public right-of-way. Slopes steeper than 2H:1V shall not be allowed on-site.
    g. A grading plan shall be prepared by the Developer's Civil Engineer and approved by the City Engineer. The following information shall be shown on the Grading Plan:
    h. Geologic contours, landscaping, fences, buildings, or other improvements
    i. Existing trees to be saved in place or removed
    j. Furnish all necessary details to clearly convey recommendations outlined in the project geotechnical investigation
    k. Cut/Fill interfaces and limits of grading
    l. Limits of existing geologic hazards as identified by the Geotech. Engineer
    m. Lot boundaries and road rights-of-way
    n. Proposed pad elevations, finished contours and lot grading details
    o. Top of curb elevations
    p. Perimeter cross-sections along all sides of the project to show the proposed project's interface with abutting properties and streets
    q. Plan view of proposed drainage facilities including storm drains, catch basins, manholes and underdrains
    r. Parking lot surface drainage, pavement grades, ridge lines, etc.

10. Retaining walls over 18 inches tall shall be concrete or masonry. Retaining walls over four feet tall shall be designed by a Civil or Structural Engineer.

11. The developer shall prepare a Storm Water Control Plan and Report for the project, consistent with the City of Vallejo requirements. Please refer to the Stormwater C.3 Guidebook prepared by the Contra Costa Clean Water Program.

12. All stormwater treatment measures shall be adequately operated and maintained. Prior to the issuance of the first building permit, the property owner shall enter into a Stormwater Treatment Measures Maintenance Agreement with the City for all privately maintained treatment devices. This agreement is included in the document entitled "Storm Water Requirements for Development Projects- Packet for Project Applicants."

13. The Developer or any successor in interest shall obtain all necessary permits for storm water discharges, including but not limited to the State Water Resources Control Board Construction General Permit. Developers whose projects disturb one or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, shall obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (State Water Resources Control Board Construction General Permit, 99-08-DWQ). Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

14. An erosion and sedimentation control plan shall be included and prepared by the Developer's Civil Engineer. The erosion control plan shall include protection measures such as:
    a. sedimentation basins,
    b. check dams
    c. straw wattles
    d. hydroseeding details.

15. Prior to the approval of the construction drawings, the Developer shall be responsible for developing and implementing a Storm Water Pollution Prevention Plan which shall be reviewed and approved by the City of Vallejo.

16. The project architect and engineer shall coordinate design closely with the project landscape designer. Specifically, they shall consult the landscape designer to evaluate and address issues related to:
    a. Fencing/wall layout and details
    b. Locations and sizes for irrigation services
    c. Sight distance constraints for fencing and landscaping
    d. Depth of cover and tree setbacks over water, sewer and storm drain lines in landscape areas.

17. Landscaping plans shall be prepared by a registered Landscape Architect and City-maintained landscaping shall be designed per City standards. Landscaping and irrigation plans shall be designed to comply with the City's Water Efficient Landscaping Ordinance. Use of turf and other water intensive landscaping shall be minimized.

18. A Homeowner’s Association (HOA) shall be formed and shall be responsible for the ownership, maintenance, repair, restoration, replacement, and management of proposed shared improvements such as the interior streets, onsite storm drain system, Open Space Lots (Parcels A, B, C, D, and F) and the Bio-Retention Basin. The HOA will be responsible for enforcing the CC&Rs and providing written notice of any violations to the property owners.

19. Prior to submitting improvement plans for City review, a Tentative Subdivision Map, including legal descriptions and plats, shall be submitted to the City for review and approval. The Subdivision Map shall be prepared in accordance with the State Map Act and all local ordinances. Construction shall not commence until a Final Subdivision Map has been approved by the City and recorded. Developer shall furnish to the City of Vallejo appropriate fees to garner a mylar copy of the County-recorded map.

20. A title report, current within the past 90 days, shall be submitted with the subdivision map. The title report shall include the entire legal boundary of the property being subdivided.

21. Closure calculations shall be submitted with the initial map. All calculated points within the map shall be based upon one common set of coordinates. All information shown on the map shall be directly verifiable by information shown on the closure calculation printout. The point of beginning shall be clearly identified and all lot acreage shall be shown and verifiable from information shown on the closure calculation printout. Additionally, the square footage of each lot shall be shown on the subdivision map. Appropriate easements shall be provided for public facilities located on private property.

22. A Public Utility Easement, Planting Easement, and Emergency Vehicle Access Easement shall be dedicated along the private streets, as shown on the Tentative Map.

D. **Fire Prevention**

Fire Code Requirements

1. Access roads shall be designed and maintained to support the imposed loads of fire apparatus weighing 70,000 lbs. with an all-weather driving surface. The turning radius shall be determined by the fire official. Please submit scaled drawings for review prior to building permit issuance.

2. A fire apparatus turn-a-round is required when buildings are more than 150 feet from a public roadway.

3. Access roads shall have an unobstructed width of not less than 20' (16' for single residential and (EVA) with a maximum grade of 15%. Access roads shall have a minimum of 13'-6" of vertical clearance, including trees, wires and overhead signs. Speed bumps or other vertical traffic calming devices are prohibited on routes of fire access.

4. All access roads shall be installed and maintained serviceable prior to and during combustible construction.

5. Access roads that are fire lanes shall either be posted with permanent all-weather signs constructed and installed in accordance with the Fire Department Fire Lane Marking Standards and shall all have curbs painted red and a sign posted at each entrance. Contact the Fire Prevention Bureau for further information and design templates. Location of such area's shall be determined prior to final inspection.

6. Fire flow shall be 1500 GPM for 2 hours. 2022 CFC Appendix BB. Please submit a flow test from the Vallejo Water Division.

7. Fire Hydrants shall be located in accordance with the 2022 California Fire Code Appendix C. Fire-Flow requirements for buildings shall be in accordance with the 2022 California Fire Code Appendix B Table B105.1. (1) (Fire mains shall be engineered as a grid system, connected at both ends, with isolation valves)

8. Fire hydrants must be installed and approved by the Fire Department prior to combustible construction. Fire hydrants shall be spaced a maximum of 500 feet apart and a maximum distance of 250 feet to any point fronting a street. Please indicate on the plans the location of all existing and proposed fire hydrants. If needed, approved impact protection shall be installed as necessary to

protect hydrants from vehicular damage. Please submit plans to the Fire Prevention Division to verify location of all fire hydrants for this project.

9. Access roads that are fire lanes shall either be posted with permanent all-weather signs constructed and installed in accordance with the Fire Department Fire Lane Marking Standards or shall all have curbs painted red and a sign posted at each entrance. Contact the Fire Prevention Bureau for further information and design templates. Location of such area's shall be determined prior to final inspection.

10. Prior to final inspection, in accordance with the 2022 California Fire Code, approved address numbers shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Said numbers shall clearly contrast with their background. The characters shall be a minimum of 4" high (6" for Commercial) with a 1/2" stroke. The size of the building and distance or location of the address numbers from the roadway may necessitate larger numbers.

11. An NFPA13D automatic fire sprinkler system is required for all residential buildings. Please submit 2 sets of plans and calculations for each house to the Fire Marshal's Office and obtain permit prior to installation. Fees are $580 each system, plus $6.71 per head.

12. Provide smoke detectors in all sleeping rooms and common hallways. Detectors shall be hardwired with battery backup. Electrical circuits supplying detectors shall be separate dedicated lines with no other devices on the circuits.

13. Carbon monoxide detectors shall be installed in accordance with the manufacturers recommendations.

14. This area does not fall under a fire hazard severity zone under the CSFM FHSZ maps. Although not required, it is recommended that all vegetation on the property shall be maintained to reduce the risk of damage from a vegetation fire in accordance with the VMC Chapter 7.56. This includes creating a "Defensible Space" area around the structure for a minimum of 100 feet, trimming overhanging tree branches to 6 -8 feet above ground, keeping dry fuels cut low to the ground, planting fire resistive plants, and keeping branches trimmed within 10 feet of all chimney(s). Please see the attached Weed Abatement Guidelines for more information.

15. All roof material shall be rated class "C" or better.

16. A final inspection from the Fire Prevention Division is required.

E. **Water Department**

1. CODE REQUIREMENTS. All code requirements as stated in Title 11 of the Vallejo Municipal Code (VMC) and Vallejo Standard Specifications and Standard Drawings adopted in 2011 (VSSSD) that apply to this project shall be conformed to. The project is being made aware of codes that require extra attention by the following items.
    a. WATER SYSTEM PLANS (VSSSD Section 4.1). All water system improvements shall be consistent with the latest Vallejo Water System Master Plan, prepared by Kennedy/Jenks Engineers. Prior to Improvement plan approval and building permit issuance, water system improvement plans shall be submitted to the Water Department for review and approval, and shall contain at least:
        i. Location and size of fire sprinkler service connection(s).

ii. Location and size of existing and proposed domestic service connection(s).
iii. Location and size of irrigation service connection(s), if any.
iv. Location of fire hydrants.
v. Location of structures with respect to existing public water system improvements, such as mains, meters, etc.
vi. Location and size of any new water mains.
vii. Location and size of backflow prevention devices (required on water service connections to irrigation systems, certain commercial water users, and to commercial fire sprinkler systems, per City Ordinance 922 N.C. (2d).

b. FIRE FLOW REQUIREMENTS (VSSSD Section 4.1). Fire flow requirements of the Fire department shall be complied with. Fire flow at no less than 25 psig residual pressure shall be available within 1,000 feet of any structure. One half of the fire flow shall be available within 300 feet of any structure.
   i. For single family residential units, the fire flow is 1,500 gpm.
   ii. For other developments, see the Vallejo Water System Master Plan, 2015, prepared by Kennedy Jenks.

c. HYDRAULIC CALCULATIONS (VSSSD Section 4.1). Prior to Improvement Plan and building permit issuance, hydraulic calculations shall be submitted to the Water Director demonstrating that the fire flow requirements are complied with.

d. FIRE PROTECTION SYSTEMS (VSSSD Section 4.1). Fire hydrant placement and fire sprinkler system installation, if any, shall meet the requirements of the Fire Department. For combined water and fire services, the requirements of both the Fire Department and the Vallejo Water System Master Plan, with latest revisions, shall be satisfied.

e. WATER EASEMENTS (VSSSD Section 4.1). Easements shall be granted for all water system improvements installed outside the public right-of-way in the City's Standard Form for Grant of Water Line Easement with the following widths:
   i. 15 ft. wide (minimum) for water mains.
   ii. 10 ft. wide (minimum) for fire hydrants, water meters, backflow preventers, double detector check valves, etc.
   iii. Other facilities will be reviewed by the Water Department.

f. WATER SERVICE BONDS AND FEES (VMC Sections 11.16, 11.18, 11.20 and 11.24). Water service shall be provided by the City of Vallejo following completion of the required water system improvements and payment of applicable fees. Performance and payment bonds shall be provided to the City of Vallejo prior to construction of water system improvements. Fees include those fees specified in the Vallejo Municipal Code including connection and elevated storage fees, etc., and fees for tapping, tie-ins, inspections, disinfection, construction water, and other services provided by the City with respect to the water system improvements. The Water Department may be contacted for a description of applicable fees. These fees have to be paid prior to issuance of the building permit.

2. Apply and pay for Fire Flow Test with the Water Department in order to determine operation of sprinkler system and final service size.

3. Provide water meter and service sizing calculations per most recent California Plumbing Code, include a water fixture count table.

4. As of January 1, 2018, all units in multi-family, commercial, or combination thereof, buildings shall be individually metered (if existing plumbing allows or is re-configured) by the City, additional meters at the owner/applicant's expense; or, master metered by the City, and sub-metered by the property owner, with approved/certified meters. Per California Senate Bill 7 (SB7).

5. Prior to occupancy or final building inspection, install water system improvements as required. Backflow device/s where required shall be installed in areas hidden from public view and/or shall be mitigated by landscaping.

6. Since this is a condominium development that has private streets the Water Facilities (mains, fire hydrants, pressure reducing facility, service laterals, etc.) shall be private and not owned or maintained by the City. The development shall have a master meter set in the existing right-of-way for Shady Lane to serve this development.

7. The on-site water facilities shall be owned and maintained by the HOA.

8. Based on the site-specific water master plan one 6-inch water service shall be installed to serve this development. (PHD + FF = 100 GPM + 1500 GPM = 1600GPM)

9. The site-specific water master plan prepared by Kennedy Jenks dated May 6, 2023 shall be updated to show the June 10, 2025 Development Plan for Vista Cove Development and these Conditions of Approval.

F. Vallejo Flood and Wastewater
PROJECT-SPECIFIC CONDITIONS OF APPROVAL

Storm Drainage

1. The HOA shall be responsible for owning and maintaining all the proposed storm drain infrastructure, including pipelines, collection structures, basins and ponds, and outfall structures. VFWD will require a maintenance manual and agreement that documents ownership and maintenance obligations by the HOA.

2. Based on the existing contours, EX DA 3 and EX DA 2 appear to have more contributing areas to the west. Revise the existing and developed conditions drainage areas accordingly. Update the drainage study calculations and confirm compliance with all VFWD Standards.

3. Submit design plans for the detention basin outfall (end wall and riprap apron structure) and ensure all weather access is available. Provide hydraulic design calculations showing that erosion control at the outfall structure is designed for the highest potential flow velocity. VFWD and the City of Vallejo will review for approval of the proposed outfall location, which shall be privately maintained.

4. Comply with the Regional Water Quality Control Board requirements for trash capture, for

developments larger than 10,000 square feet, pursuant to VFWD Engineering Standards, Section 4.12.

Sanitary Sewer

5. At low points in the proposed sanitary force main, install an appropriately sized blow-off valve, to clear accumulated solids.

6. Sanitary sewer laterals shall be installed away from driveways and in compliance with VFWD standards.

7. Connections from new gravity sewer lines to the existing SS shall be made at a SSMH per VFWD Standards.

8. VFWD shall own and maintain the public sewer system within the private streets and alleys, up to VFWD's District clean out, within dedicated easements.

9. Sewer Force Main material shall be Fusible HDPE. Confirm C-factor of 110 and provide total dynamic head calculations to confirm that the chosen pumps and design flow rate of 220 gallons per minute are still appropriate.

Sanitary Sewer Pump Station

10. The new Sanitary Sewer Pump Station shall conform to the requirements in the Basis of Design (BOD) - Shaaf & Wheeler dated 11/24/25, and details shall be provided on the Improvement Plans.

11. Demolition of the existing Sewer Pump Station shall be subject to approval of VFWD. Details shall be provided on the Improvement Plans.

12. The BOD has been reviewed by VFWD. It provides parameters for the pump station improvements, features, and anticipated operations. The current layout of all improvements and features is subject to review and approval by VFWD, during final design.

13. The Developer shall provide a hydraulic transient analysis during final design, to assess surge conditions. If surge protection is determined necessary to protect the lift station, Developer shall design and construct a surge protection system.

14. The site layout and pump station equipment shall be reviewed and approved by VFWD prior to approval of the plans.

15. VFWD requires a building over the MCC and other VFWD electrical components, and any variance from that is subject to VFWD approval.

16. An 8' tall wood good-neighbor fence shall be constructed between the pump station and Lots 31 and 51.

17. A truck turning template exhibit dated 11/24/25 in the BOD was reviewed by VFWD. Any changes to access based on the relocation of facilities must be approved by VFWD.

18. VFWD may request a letter signed by the Geotechnical Engineer stating that any adjacent slope will be stabilized in relation to the final location of the proposed wet well, and won't create future issues that decrease the integrity of the wet well.

Onsite Utilities/Easements

19. The Developer shall dedicate Parcel E to VFWD (fee title) for the new Sanitary Sewer Pump Station.

20. The 20-foot wide Private Access Easement proposed over Parcel E shall be eliminated if determined unnecessary. If an easement is required, it shall be relocated and/or reduced as necessary to accommodate the final design layout of the VFWD sewer lift station.

21. All easements over storm drainage infrastructure shall be dedicated to the HOA for maintenance of such infrastructure. The easements shall be identified in the maintenance manual and agreement.

22. No trees or other permanent structures will be allowed within a VFWD easement area without prior written approval.

23. The Developer shall dedicate access and maintenance easements to VFWD on the private roadways and alleys for the public sewer pipes. The easement shall be minimum 20 feet in width.

GENERAL CONDITIONS OF APPROVAL

24. The Developer shall size the storm drain lines to convey the peak 15-year, 24-hour design storm flows with the hydraulic grade line (HGL) at least 1.0 feet below the gutter flow lines and maintenance hole rims.

25. Prior to building permit issuance, a VFWD Sewer Connection Permit is required. The Developer shall pay all applicable fees prior to issuance of any permit.

26. The Developer shall design building pads at least 1.0 feet above the 100-year, 24-hour design storm water surface elevations (WSEs)

27. The Developer shall minimize the storm drainage system operations and maintenance (O&M) efforts and costs to the HOA.

28. All public improvements shall be designed and constructed to current VFWD Standards. If Conditions of Approval from VFWD, City of Vallejo or County of Solano call for differing standards of development, the higher standard shall apply.

29. Submit complete improvement plans and supporting documentation, for all proposed sanitary sewer and storm drainage construction, including the sewer pump station, to VFWD for review and approval. Plans shall be revised, as needed, at the discretion of VFWD and the City.

30. Provide construction details for all proposed connections to existing facilities for storm water and sewer pipes, and maintenance holes.

31. All sanitary sewer and storm drainage facilities shall be clearly labeled to distinguish ownership as either private or public on improvement plans.

32. All sewer laterals and cleanouts shall be in accordance with VFWD Standards.

33. The 100-year storm overland release location shall be shown on the grading plans. Provide a secondary (surface flow) drainage system to handle flows more than the capacity of the primary system (piped or channelized). Proposed building locations shall not be constructed within the

secondary drainage path. Determine the tributary area for the 100-year storm. This may differ from the 15-year tributary area.

34. The Developer shall submit grading and erosion control plans to VFWD for review. Do not block drainage from adjacent lands.
35. Bioretention/water quality basins shall be owned, operated, and maintained by the HOA.
36. "No Dumping Drains to Bay" markings shall be installed at each new storm water drain inlet per VFWD's Standards.
37. VFWD approval of public and private storm drainage and sanitary sewer system designs are a condition precedent to the approval of the improvement plans.
38. All storm drainage and sanitary sewer outside of building footprints shall be inspected by VFWD.
39. The Developer's engineer shall provide the Engineer's estimate of probable construction cost itemizing all sewer and storm drain improvements. The inspection fee shall be calculated and paid prior to VFWD approval of the improvement plans.
40. In the event any claim, action or proceeding is commenced naming VFWD or its agents, officers, and employees as defendant, respondent or cross defendant arising or alleged to arise from VFWD's approval of the project, the project Developer shall defend, indemnify, and hold harmless VFWD or its agents, officers and employees, from liability, damages, penalties, costs or expense in any such claim, action, or proceeding to attach, set aside, void, or annul an approval of the City of Vallejo, or any advisory agency to the City. The Developer shall defend such action at Developer's sole cost and expense which includes court costs and attorney fees. VFWD shall promptly notify the Developer of any such claim, action, or proceeding and shall cooperate fully in the defense. Nothing in this condition shall be construed to prohibit the VFWD from participating in the defense of any claim, action, or proceeding, if VFWD bears its own attorney fees and cost, and defends the action in good faith. Developers shall not be required to pay or perform any settlement unless the Developer in good faith approves the settlement, and the settlement imposes no direct or indirect cost on VFWD, or its agents, officers, and employees.
41. No public Sanitary sewer or storm drain infrastructure shall be located or installed in the rear of any private lot, unless otherwise approved by VFWD.
42. VFWD will use a consultant to provide plan review for new development. The Developer shall be responsible for all costs associated with the consultant's review, through the Reimbursement Agreement provisions.
43. The Developer shall provide electronic (AutoCAD) files of final sewer and stormwater infrastructure as a condition precedent to VFWD approval of the Improvement Plans.
44. The Developer shall be responsible for all costs and work necessary to relocate any existing VFWD facilities.
45. Developer shall contact VFWD at least 72 hours prior to beginning construction, for a pre-construction meeting.
46. Existing public and private VFWD facilities damaged during construction shall be repaired by the Developer, at his/her sole expense, to the satisfaction of VFWD.
47. The conditions set forth in this document are not all inclusive. The Developer shall thoroughly review all VFWD, City, State, and Federal planning documents associated with this map and comply with all regulations, mitigations, and conditions set forth.

EXHIBIT – B

GENERAL PLAN 2040 POLICIES

Policies and Actions	*Facts in Support*
POLICY NBE-1.6 **Open Space.** Conserve and enhance natural open space areas in and adjacent to Vallejo and its waterfront.	*The proposed project would preserve approximately 13.25-acres of the project site as natural open space and approximately, 9.86-acres of the 13.25-acres of the open space will be deed restricted in perpetuity to ensure it is maintained as natural open space.*
POLICY NBE-1.8 **Urban Forest.** Encourage planting of street trees and landscaping to beautify the city, encourage walking and biking, and create a stronger sense of identity.	*The project involves the planting of 141 trees, and many shrubs and ground covers contributing to the beautification of Vallejo and the cultivation of an urban forest. The construction of sidewalk improvements within the project will encourage walking within the subject site.*
POLICY NBE-2.3 **Inviting, Compatible Design.** Promote attractive development that is compatible with surrounding uses.	*The 51 detached single-family residences will incorporate a Modern Farmhouse style look, and the building height and massing of the structures will not be out of scale with those located in close proximity.*
Action NBE-2.3A: Continue to utilize development approval conditions to achieve compatibility between nearby uses and scale and style of buildings, and to establish limitations on activities that could create potential adverse effects.	*The scale and style of the residences is compatible with the scale and style of the nearby subdivision.*
Policy NBE-1.15 **Energy Efficiency.** Support measures to reduce energy consumption and increase energy efficiency in residential, commercial, industrial, and public buildings.	*The project would be required to comply with standards set forth in the California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California's Green Building Standards Code (CBC Title 24, Part 11) requires implementation of energy efficient light fixtures and building materials into the design of new construction projects.*
Policy NBE-1.5 **Scenic Vistas.** Protect and improve scenic vistas, including views from Interstate 80 and State Route 37 in Vallejo.	*Although the project site is located approximately 0.85-mile northwest of the Carquinez Strait and 0.3-mile southeast of the Benicia State Recreation Area, these features are not identified as a scenic vista or significant visual resource in the City's General Plan. San Pablo Bay, Mare Island Strait, the Vallejo Waterfront, Sulphur Springs Mountain, Vaca Mountains, White Slough, Napa River Wetlands, and Sky Valley, the resources designated as scenic vistas, are not visible from the project site or nearby vicinity. These features are located over two miles from the project site and views of these resources are obstructed by intervening*

	development, topography, and mature trees. The project site and surrounding areas are not located within the residential view district and would not impact scenic vistas of designated views
Policy NBE-3.13 **Neighborhood Character.** Preserve the character of existing single-family residential neighborhoods.	*The project at the northeast corner of Shady Lane and Wildflower Avenue lies within a well-established, lower-density residential neighborhood of southeastern Vallejo. The proposed homes will be similar in scale and massing as those of the existing residential neighborhood to the west.*
Policy NBE-3.14 **Neighborhood Corridors.** Connect the community with mixed use corridors that function as neighborhood main streets for adjacent residential areas.	*The proposed development will connect the new subdivision with an existing residential subdivision that connects it to a mixed-use corridor along Glen Cove Way.*
Policy CP1.12 **Clean Air.** Protect the community from harmful levels of air pollution.	*The project will be required to comply with MMRPAQ-2b.1 which ensures the proposed project implements the Air District's Basic BMPs throughout all phases of construction. Measures include watering exposed surfaces, covering haul trucks, limiting vehicle speeds on unpaved roads, using wet power sweepers, and suspending work during high winds. Additional requirements involve paving surfaces promptly, washing vehicles before site exit, stabilizing unpaved access roads, and posting contact information for dust complaints. Implementation of MMRP AQ-2b.1 would further ensure that the proposed project would not disrupt or hinder implementation of a control measure from the Clean Air Plan.*
Action CP-1.12C: Provide information regarding advances in air-quality protection measures to schools, homeowners, and operators of "sensitive receptors" such as senior and child care facilities.	*See response to Policy CP-1.12: Clean Air above.*

Policy NBE-1.1 **Natural Resources.** Protect and enhance hillsides, waterways, wetlands, occurrences of special-status species and sensitive natural communities, and aquatic and important wildlife habitat through land use decisions that avoid and mitigate potential environmental impacts on these resources to the extent feasible.	*The project will preserve hillside areas as open space to prevent impact of the existing topography of the site. Prior to construction per the mitigation measures imposed by the MMRP and as described in the SMND,, preconstruction surveys will be required (such as roost surveys, nesting bird survey, etc.) to ensure protection of special-status species.* *Additionally, as required by the MMRP BIO-3a , compensatory mitigation for permanent loss of 0.49 acre of the seasonal wetland shall be required.*
Policy NBE-1.2 **Sensitive Resources.** Ensure that adverse impacts on sensitive biological resources, including special-status species, sensitive natural communities, and wetlands are avoided and mitigated to the greatest extent feasible as development takes place.	*See Policy NBE-1.1: Natural Resources above.*
Action NBE-1.2D: Protect the remaining woodlands and native tree resources, and require replacement plantings where native trees must be removed.	*See Policy NBE-1.1: Natural Resources above.* Also, 47 of the 69 native trees proposed for removal are considered to be significant (as defined in VMC 16.701) and as such, are being required to be replaced at a three to one ratio.
Action NBE-1.3B: Work with landowners to facilitate assembly and retention of parcels of sufficient size to preserve valuable tidal marshes, seasonal marshes, managed wetlands and contiguous grassland areas for the protection of aquatic and wildlife habitat.	*See Policy NBE-1.1: Natural Resources above. A 9.86-acre parcel of the original 20.13-acre site will be deed restricted to prevent future development on the parcel in perpetuity.*
Policy NBE-1.7 **Green Infrastructure.** Encourage the installation of green infrastructure, including tools such as permeable pavement, rain gardens, constructed wetlands, grassy swales, rain barrels and cisterns, and green roofs, to treat stormwater, attenuate floods, increase groundwater recharge, and reduce urban heat islands.	*The project will include bioretention swells to treat stormwater from the new subdivisions. Additionally, a total of 141 new trees will be planted throughout the site, which will help reduce urban heat islands.*

Policy NBE-1.9 **Cultural Resources.** Protect and preserve archaeological, historic, and other cultural resources.	*The project will implement sensitivity training for all contractors prior to ground disturbance. If remains are found, the developer will implement Mitigation Measure CUL-1 (Unknow Discovery of Archaeological Resources, CUL-2 (Protocol for Human Ramins Discovery), TCR-1 (Protocol for Discovery of Native American Remains), and TCR-2 (Inadvertent Discovery of Tribal Cultural Resources).*
Action NBE-1.9A: Continue to require that land use activities comply with State requirements and follow best practices to ensure that cultural resources are not impacted and that appropriate agencies and technical experts are involved in the evaluation and protection of resources and sites.	See Policy NBE-1.9: Cultural Resources above.
Action NBE-1.9B: Maintain a dialogue with local Native American groups regarding sensitive cultural resources in Vallejo.	*See Policy NBE-1.9: Cultural Resources above.*
Policy NBE-5.3 **Health and Safety Codes**. Enforce development regulations and building code requirements to protect residents, businesses, and employees from flooding, liquefaction, earthquakes, fires, and other hazards.	The construction plans of the single-family residences will be reviewed to ensure the project meets applicable building code.
Action NBE-5.4A: Continue to require geotechnical studies for land use proposals to determine engineering measures that may be necessary to adequately mitigate any seismic, flooding, sea level rise, landslide, erosion, or related risk.	*See Policy NBE-5.4: Project Location and Design above.*
Action NBE-5.4B: Continue to require drainage and erosion control measures for landslide-prone or geologically hazardous hillside areas to minimize risks to downhill areas.	*See Policy NBE-5.4: Project Location and Design above.*
Action NBE-5.4C: Continue to use the development review process to ensure that development is planned and constructed to resist the encroachment of uncontrolled fire.	*See Policy NBE-5.3: Health and Safety Codes above.*
Action NBE-1.14C: Update the Green Building Standards Code to require the use of low flow plumbing fixtures, low volume irrigation systems, and drought-tolerant plant palettes.	*See Policy NBE-1.7: Green Infrastructure above.*
Action NBE-5.6D:	*See Policy NBE-5.4: Project Location and Design above.*

Continue to enforce City regulations that prohibit development, grading, and land modification activities that would adversely affect the local drainage system or create unacceptable erosion impacts.	
Policy CP-2.3 **Fire Prevention and Response Services**. Ensure the provision of fire prevention and emergency response services that minimize fire risks and protect life and property.	*The proposed project was reviewed by the City's Fire Prevention team and complies with [(ask Fire)_]. The site is located within an urbanized area and is not designated as a Very High Fire Hazard Severity Zone. Compliance with local building codes, defensible space requirements, and fire codes, will minimize risks to protect life and property.*
Policy MTC-2.1 **Safety First.** Prioritize pedestrian, bicycle, and automobile safety over traffic flow.	*The proposed project would include new internal residential streets that would be a 40-foot right-of-way, with a 28-foot-wide travel lane from curb-to-curb with parking on one side and a 4.5-foot-attached sidewalk. The project would also include private alleys which would be smaller in scale than the private residential streets and would include shared vehicular access to houses with garages fronting them. Private alleys would include a 33-foot public utility easement/planting easement, and a 10.5-foot travel way in each direction with no parking allowed.*
Policy MTC-2.7 **Complete Streets.** Increase accessibility for and use of streets by pedestrians, bicyclists, and transit riders.	*The new private streets will incorporate a 40-foot right-of-way with sidewalk, curb and gutters to increase accessibility for the use by pedestrians.*
Action MTC-2.8C: As part of the site plan approval process, require development to provide services from a menu of transportation demand management (TDM) strategies that will reduce VMT.	*See policy MTC-2.7: Complete Streets above.*
Policy MTC-2.11 **Sustainable Transportation.** Ensure that circulation improvements can be operated and maintained within existing and future resource limitations.	*See policy MTC-2.7: Complete Streets above.*
Policy MTC-3.1 **Coordinated Transportation Planning.** Ensure that improvements to the transportation network support a land use pattern that connects the community and facilities travel among Vallejo's neighborhoods.	*The project will include a new private roadway that will connect the new subdivision to the existing developed subdivision to the west of the subject site. This will connect the two neighborhoods to support a local network.*
Housing Element Policy A.2: The project will convert vacant infill land into single-unit residences that are compatible with the surrounding area	*The project will develop an underutilized site into a subdivision with detached single-family residences that are compatible with the*

which includes existing single-unit residences to the north, east, and west.	*surrounding single-family residences that are to the west.*
Housing Element Policy H.3 Protect the character of the existing neighborhoods by developing objective standards to facilitate infill projects to be compatible with the existing neighborhoods.	*The project will protect the existing character of the existing neighborhood to the west by ensuring the new homes are similar in scale and massing.*
Housing Element Policy I.1 The City of Vallejo will promote energy efficiency in residential development within the city, including reduction of energy use through better design and construction in individual homes and through energy-efficient urban design.	*See Policy NBE-1.15 - Energy Efficiency above.*

EXHIBIT - C

Table 1			
VISTA COVE PLANNED DEVELOPMENT DEVELOPMENT STANDARDS			
Development Standard		*Proposal*	*Compliant*
Density	*P-SF: 9 units/acre R-MH: 25 units/acre Allowed: 487 units on lot size of 20.13-Acres*	*New: 51 Existing: 0 Total: 51*	*Yes*
Minimum Lot Size	*2,800 sq.ft.*	*Ranging from 3,323 sq.ft. to 15,875 sq.ft. (residential lots)*	*Yes*
Minimum Lot Width	*35 feet*	*Ranging from 37.48 feet to 49.8 feet*	*Yes*
Minimum Lot Depth	*80 feet*	*Ranging 86.9 feet to 127.59 feet*	*Yes*
Maximum Lot Coverage	*85%*	*45.9% to 52%*	*Yes*
Maximum Building Height	*35 feet*	*30 feet and 4 inches*	*Yes*
Minimum Setbacks	*Front: 7 feet*	*Ranging from 8.9 feet to 34.05 feet*	*Yes*
	Interior: 5 feet	*5 feet*	*Yes*
	Street Side: 5 feet	*5 feet*	
	Rear: 10 feet	*5 feet*	*Yes*
Access Location	*Alley or street preferred*	*Direct access from private street or private alley.*	*Yes*
Orientation	*Facades shall be designed to be oriented towards the public street or to a common courtyard, if provided.*	*Facades facing the street or open space are enhanced.*	*Yes*
Entrance Location	*The main entrance to each ground floor dwelling shall be visible to and located directly off a common courtyard or directly from the street.*	*Plans 1 through 3 have main entrances facing the street; Plans 4 and 5 have entrances facing each other.*	*Yes*
Street Trees	*1 per 50 ft. of frontage and at least 5 ft. in height when planted.*	*384 Trees*	*Yes*
Off Street Parking	*2 spaces per unit*	*4 spaces per unit*	*Yes*

VISTA COVE

PLANNED DEVELOPMENT

VALLEJO, CALIFORNIA

November 2025

ADOPTED BY THE VALLEJO CITY COUNCIL ON: _____

sancerra

Artemis ADVISERS

Table of Contents

SECTION 1: INTRODUCTION 5

1.1 PLANNED DEVELOPMENT (PD) 5

1.2 PROJECT CONCEPT 6

1.3 PROJECT LOCATION 6

1.3.1 Regional Context 6

1.3.2 Site Location 7

1.4 EXISTING CONDITIONS AND TOPOGRAPHY 8

1.5 SURROUNDING LAND USES 8

1.6 PARCELS IN SITE PLAN 9

1.7 PROJECT DESCRIPTION 10

1.7.1 Residential 10

1.7.2 Open Space 11

1.8 LAND OWNERSHIP DESCRIPTION 12

SECTION 2: ROADWAY DEVELOPMENT STANDARDS 13

2.1 ROAD STANDARDS 13

2.2 RESIDENTIAL STREET STANDARDS 13

2.2.1 Residential Streets 13

2.2.2 Private Alleys 14

SECTION 3: PROJECT UTILITIES 14

3.1 RESIDENTIAL 14

DRAFT

3.1.1 Residential Sanitary Sewer 16

3.1.2 Residential Storm Drain System 17

3.1.3 Residential Water System 17

SECTION 4: RESIDENTIAL DEVELOPMENT STANDARDS 17

4.1 RESIDENTIAL STANDARDS 17

4.1.1 Primary Uses Permitted 17

4.1.2 Purpose and Intent 17

4.1.3 Site Development Standards 17

4.1.4 Grading Standards 19

4.1.5 Homeowners Association 20

4.1.6 Conditions, Covenants, and Restrictions (CC&Rs) 20

SECTION 5: LANDSCAPE DEVELOPMENT STANDARDS 20

5.1 GENERAL GUIDELINES 20

5.2 PLANT SELECTION 21

5.2.1 Residential Plant Palette 21

5.2.2 Open Space Plant Palette 22

5.3 EXTERIOR WALLS AND FENCES 24

5.3.1 Residential Fence Plan 24

5.4 WALKWAYS AND PATHS 26

5.5 PASSIVE PARK 26

5.6 FRONT YARD TYPICAL LANDSCAPE 27

SECTION 6: ARCHITECTURE DEVELOPMENT STANDARDS 28

DRAFT

6.1 GENERAL GUIDELINES 28

6.1.1 Architectural Styles 28

6.2 SINGLE FAMILY HOMES 28

6.2.1 Development Guidelines and Standards 28

6.2.2 SINGLE FAMILY HOME TYPICAL ELEVATION EXAMPLE 30

SECTION 7: HILLSIDE DEVELOPMENT STANDARDS 31

SECTION 8: OPEN SPACE 32

8.1 EROSION CONTROL 32

8.2 FIRE MANAGEMENT 32

8.3 WILDLIFE MANAGEMENT 32

8.4 PRESERVATION 32

SECTION 9: CONCLUSION 32

DRAFT

SECTION 1: INTRODUCTION

1.1 PLANNED DEVELOPMENT (PD)

Vista Cove is a single-family residential project. The project is currently zoned as Residential Low Density (RLD) and Residential Medium Density (RMD) on the City of Vallejo's zoning map and will be rezoned to Planned Development (PD). The General Plan 2040 land use designation map identifies the subject properties as "primarily single-family and Mix of Housing Types/Medium Density". The proposed project is compatible with the General Plan and the surrounding land uses as described in Section 1.5.

Development standards have been established to provide a high quality of design and continuity throughout the Vista Cove project. Design requirements such as street widths, building setbacks, architectural guidelines and landscape materials are included in the standards.

The development standards are broken down into multiple sections addressing roadway standards, proposed utilities, residential standards, community-wide landscape standards, community-wide architecture standards, and Open Space requirements with the final section concluding the Planned Development. All development within the Vista Cove Planned Development Plan is intended to conform to the development standards which are presented in this document.

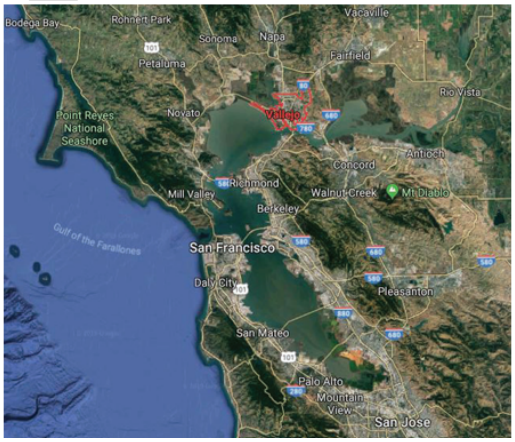
1.2 PROJECT CONCEPT

Vista Cove is a single-family residential community that includes areas of preserved Open Space. This community is walkable and connected by private streets. The project is thematically accented to create a Modern Farmhouse character that draws on the proximity to California's wine country and the area's natural topography. The landscape design for Vista Cove emphasizes drought tolerance and native landscaping and provides abundant trees for beauty, definition of spaces, and habitat enhancement. A Common Open Space shall be located central to the neighborhood providing an overlook into the preserved open space as well as passive reaction opportunities.

1.3 PROJECT LOCATION

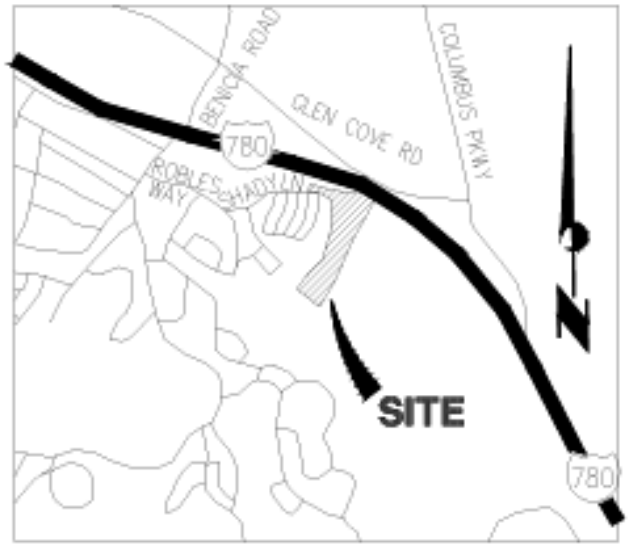
1.3.1 Regional Context

Vista Cove is in the City of Vallejo. Vallejo provides access to multiple freeways and transit systems and has a popular and widely used ferry system that connects directly to the City of San Francisco and other parts of the Greater Bay Area. The region continues to experience continued growth, creating strong demand for more housing in Vallejo. See Figure below.



1.3.2 Site Location

Vista Cove is a 20.13-acre vacant project site located in the northeast intersection of Shady Lane and Wildflower Avenue. It occupies two assessor parcel numbers (APN: 0079-171-170 and 0079-120-100). The site lies west of Benicia State Park and directly east of an existing subdivision. The site is partially visible from Interstate 780 to the north. See Figure below.



VICINITY MAP

DRAFT

1.4 EXISTING CONDITIONS AND TOPOGRAPHY

The subject property comprises 20.13 acres of undeveloped land designated by the City of Vallejo for Residential land uses. A low-lying area with a jurisdictional wetland can be found in the middle part of the site. The wetland width varies and is created from regional flows from the neighboring developed residential properties. There are 83 existing trees surveyed on the site. Of these trees a total of 69 require removal. Of the 69 trees, 47 are significant trees protected under local ordinance. Significant trees shall be replaced at a ratio of 3 new trees for every tree removed, minimum size of replacement tree shall be 15 gallons.

The project is currently zoned as Residential Low Density and Residential Medium Density and will be rezoned to Planned Development (PD). The General Plan 2040 designates the Property as “Primarily Single-Family” and “Mix of Housing Types/Medium Density”. The proposed project is compatible with the surrounding land uses as described in Section 1.5.

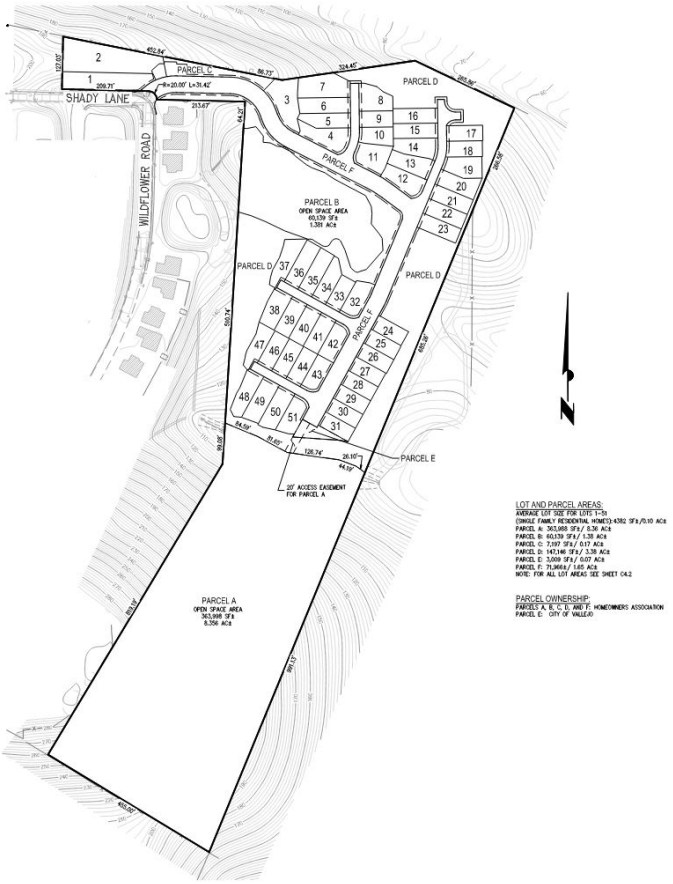
1.5 SURROUNDING LAND USES

The project site is in a suburban environment and is bordered by existing development.

The project site is primarily surrounded by residential areas, open spaces, and transportation corridors, including Interstate 780 and nearby roadways. Interstate 780 runs directly to the north of the site. To the east lies Benicia State Park, where an undeveloped parcel is situated to the south. West of the site is the established Glen Cove #2 subdivision, consisting of 141 single-family homes. Specifically, the site is located east of the existing Shady Lane and Wildflower Avenue residential community.

1.6 PARCELS IN SITE PLAN

Vista Cove would be subdivided into 57 parcels: 51 residential single-family; lots and four common area parcels: Parcels A (8.36 acres), B (1.38 acres), Parcels C (0.17 acres) and D (3.38 acres) that are HOA-maintained common open space parcels. The enhanced sewer pump station would be located on Parcel E (0.07 acres) and Parcel F (1.65 acres) is a parcel for the private roadways.



1.7 PROJECT DESCRIPTION

Under existing conditions, the Property boundary comprises 20.13-acres of undeveloped land designated by the City of Vallejo for Residential land uses. The developed project site (Lots 1-51, Parcels C, D, E, and F) included as part of this application is approximately 10.39-acres with the remainder open space of Parcel A and B being 9.73-acres. The discretionary approval associated with the Project includes a Tentative Map, Planned Development, Development Review, Design Review and Landscape Review. Approval of the Tentative Map, Planned Development, Development Review, Design Review and Landscape Review would allow for development of 51 single-family residential dwelling units.

The Project site encompasses Assessor's Parcel Numbers (APNs) 0079-171-170 and 0079-120-100 located in the City of Vallejo, CA. The General Plan designates the approximately 1-acre western parcel, (APN 0079-171-170) Primarily Single Family. The parcel is zone Residential Low Density. The General Plan designates the second parcel (0079-120-100) Mix of Housing Types/Medium Density. The parcel is zoned Residential Medium Density. The Project site is currently undeveloped with elevations ranging between approximately 70-190 feet above mean sea level (amsl).

The Project application consists of a Planned Development Review for the purposes of implementing the project in accordance with the Tentative Tract Map for a 10.39-acre property. The Project would provide for development of 51 single-family residential homes at a density of 4.9 dwelling (51 units /10.39ac) units per acre (du/ac). The proposed 51 dwelling units are comprised of four floor plans with three elevations each. For parking, 102 covered garage spaces (2/unit), 102 driveway stalls (2/unit), 24 on-street stalls and 1 mailbox stall are provided. Grading proposed by the project would disturb 10.39-acres. Access to the Project would be provided by one (1) full access driveway through an established residential community to the west.

1.7.1 Residential

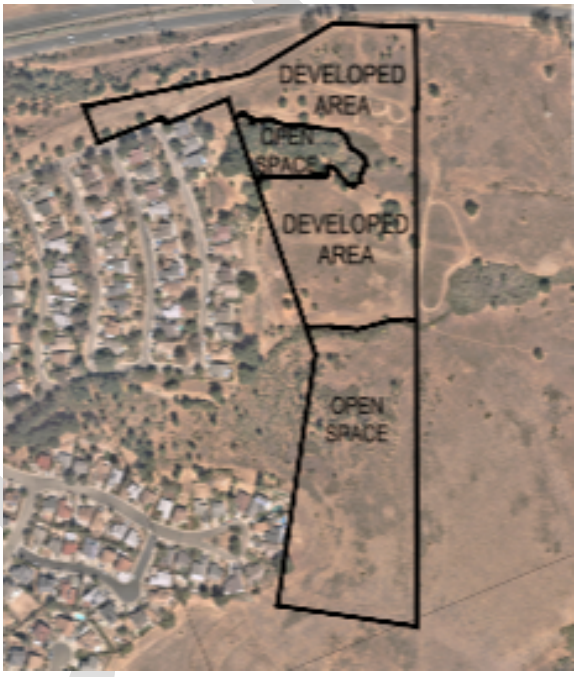
The residential component will be located within the entirety of the project site on the future developed 10.395 acres. The project proposes 51 single-family detached units with four floor plans. These homes will also come in three different elevation styles with subtle variations among the designs. A conceptual design of a Single-Family home is shown in Section 6.2.2: Single Family Home Typical Example. The average density for the residential uses will be 4.9 units per gross acre.

The alleys would be accessed from north-south-trending 40-foot-wide right-of-way interior private streets. Between the interior residences, landscaped paseos would provide access to the front of the homes. The 51 residential units will be traditional single-family detached units on lots with a 35-foot minimum width and an 80-foot minimum depth. The traditional residential units would feature a front driveway and front entry way facing the streets and be generally oriented to the interior of the residential area. The residential component of the project will be accessed from a drive aisle off the

intersection of Shady Lane and Wildflower Ave as shown on the Tentative Map Cover Sheet, Page C4.0.

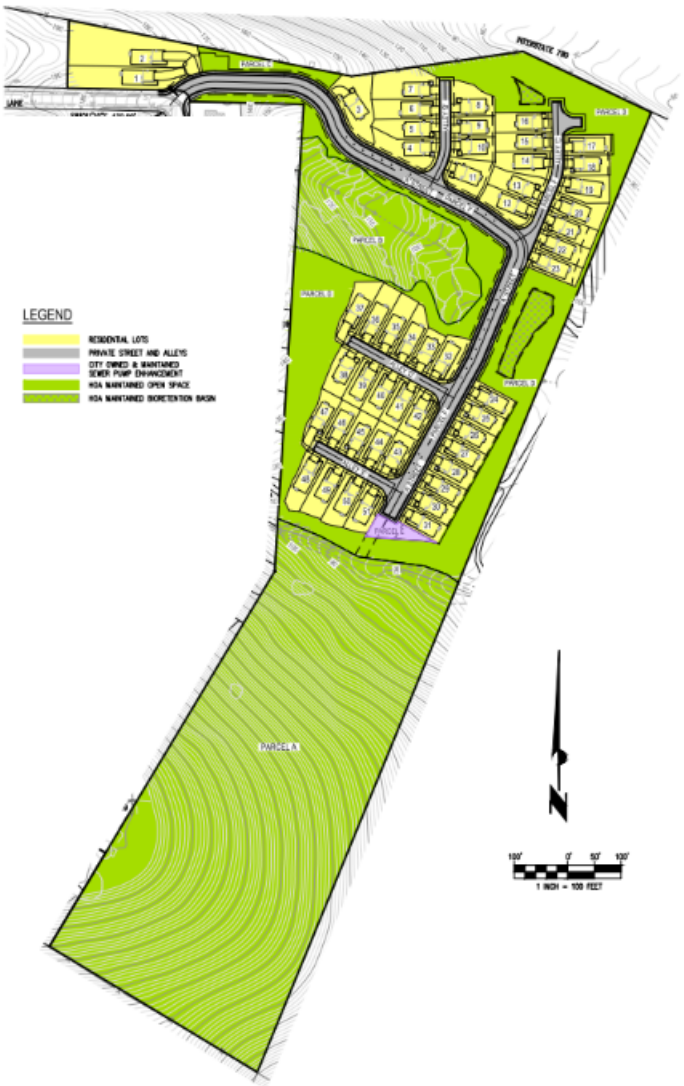
1.7.2 Open Space

The central portion of the proposed residential project site will be preserved as open space and would consist of 1.38 acres. Future development would be precluded from this area. This area drains the existing off-site residential development (east of the proposed project site) into low lying areas that will continue to be directed east and off the property. This area will be subject to protective restrictions that would not allow public or private use. The open space would only be accessible via private gates to facilitate maintenance activities. The proposed project anticipates that the open space would be owned, managed, and maintained by a homeowner's association (HOA) created in connection with the residential component.



1.8 LAND OWNERSHIP DESCRIPTION

Vista Cove is a 20.13 (10.39-acres developed) acre proposed residential project. The 10.39 developed acres representing residential portions will be privately owned by one or more parties, except for the public sewer main line and lift station**.** The remainder acreage will remain as undeveloped and undisturbed open space. The Residential portion is 10.39 acres and includes 51 residential lots, private streets and alleys, passive park, and water quality basins. Within the residential areas, the individual lots, passive park, and water quality basin will be privately owned. The streets and aleys that serve the residential lots shall be dedicated to the HOA for private ownership and maintenance. The Open Space will be privately owned and will ultimately be transferred to a future private homeowner's association**.**



SECTION 2: ROADWAY DEVELOPMENT STANDARDS

2.1 ROAD STANDARDS

Roadway cross sections have been created for the Vista Cove development project. The following standards describe each roadway and their typical mid-block cross section.

2.2 RESIDENTIAL STREET STANDARDS

2.2.1 Private Residential Streets

Residential streets will provide access to houses fronting onto it. City of Vallejo Standards have been applied to the streets planned for the Vista Cove residential development. These streets are internal to the project and connect to the local streets of Shady Lane and Wildflower Ave.

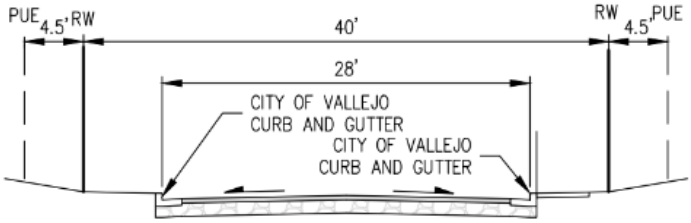
Street Standards:

a. 40-foot Right-of-Way
b. 28-foot curb-to curb
c. Parking on one side
d. Lighting to meet City of Vallejo Public Improvements Standards

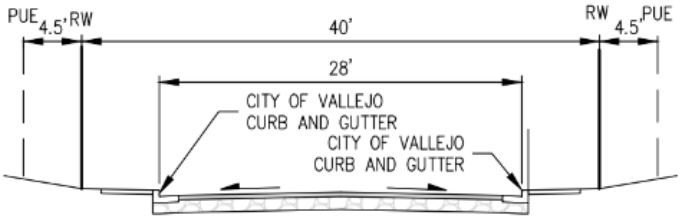
Landscaping:

a. 4.5-foot attached walk
b. Street trees to be planted in private yards

Residential Streets – SECTIONS



TYPICAL PRIVATE STREET W-E
SECTION A1
(STANDARD - STANDARD CURB)
NOT TO SCALE



TYPICAL PRIVATE STREET N-S
SECTION A2
(STANDARD - STANDARD CURB)
NOT TO SCALE

2.2.2 Private Alleys

Alleys provided include shared vehicular access to houses with garages fronting them. These are private and the lot lines will go to the back of the curb. These alleys are small in scale and connect to the private residential streets. Private alleys will be owned and maintained by the HOA.

Private Alley Standards

a. 33-foot PUE/PE (Public Utility Easement, Planting easement)

b. 10-foot travel way in each direction

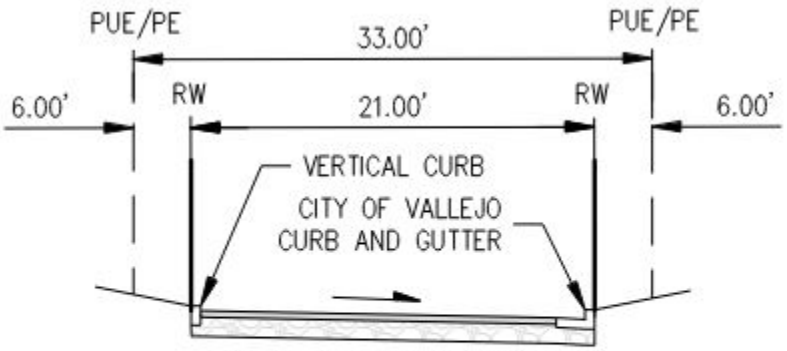
c. No parking on the Alleys

d. Garage lighting to meet safety standards

Landscaping:

a. Street trees to be planted in private yards

Private Alley - SECTION



TYPICAL PRIVATE ALLEY
SECTION B
(VERTICAL - STANDARD CURB)
NOT TO SCALE

SECTION 3: PROJECT UTILITIES

3.1 RESIDENTIAL

This Section provides information on the proposed utilities needed for the residential development of the Vista Cove Planned Development. The project will be designed, developed, and constructed with all utility infrastructure (water, electric, gas, sanitary sewer, storm water, cable/internet) required for the operation of the proposed residential project improvements. The proposed project will connect to existing utility infrastructure located in the right-of-way (i.e. Shady Lane and Wildflower Ave). An overview of the

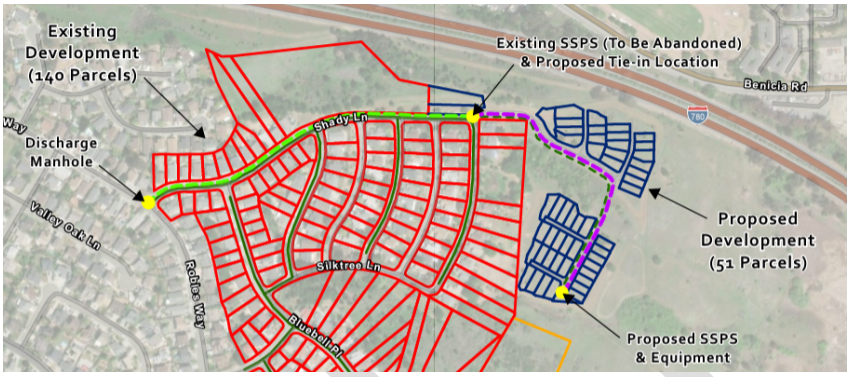
project utilities is below, detailed graphics will follow in the section. The infrastructure to be provided will be a combination of public and private systems. Infrastructure located within the private streets will be owned and maintained by the HOA, except for the sewer sanitary and sewer sanitary force main that will be dedicated and maintained by Vallejo Flood and Wastewater District (VFWD). Infrastructure located within the private alleys/paseos will be owned and maintained by the future Homeowners Association to be established. The water will connect to the existing water line in Shady Lane at two locations for a private looped system. The sanitary sewer will tie into the existing sewer line in Shady Lane. The proposed storm drain system will convey runoff to two basins. These basins will be installed in the northwest corner of the site and the middle east border of the site. These basins will provide both water quality and hydro-modification meeting current City standards before discharging to Parcel D.

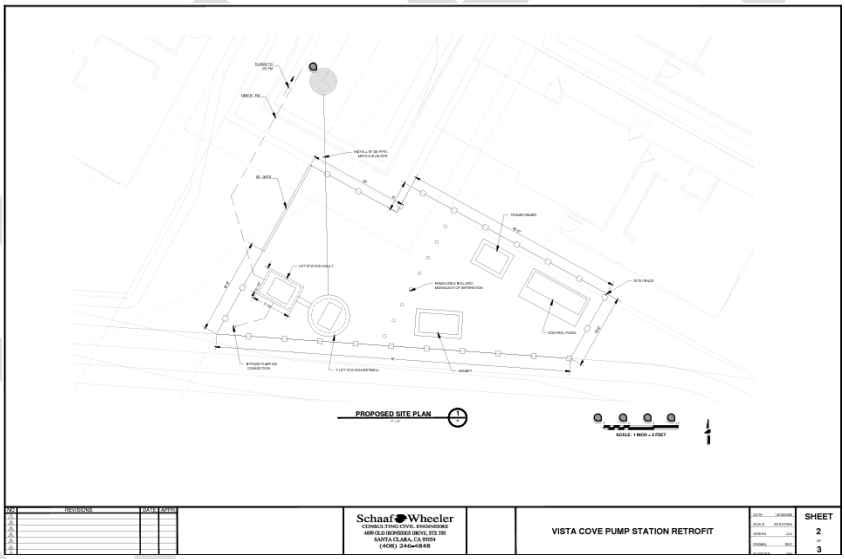
3.1.1 Residential Sanitary Sewer

The Sanitary Sewer shall be designed and installed to VFWD standards. The system will be of publicly owned by VFWD, connecting to the existing sanitary sewer system located in Shady Lane.

a. Lift Station

The Vista Cove project will replace the existing sewer lift station that currently serves the 141 single family home development to the west of the proposed project site with an upgraded system to serve both communities. The lift station will be owned and maintained by the VFWD. See Figures below.





3.1.2 Residential Storm Drain System

The Storm Drain System shall be designed and installed to VFWD standards and be privately owned and maintained by the HOA. The proposed storm drain system will convey runoff to two basins that will be installed in the northwest corner of the site and the middle east border of the site. These basins will provide both water quality and hydro-modification meeting current City standards before discharging to Open Space Parcel D.

3.1.3 Residential Water System

The Water System shall be designed and installed to City of Vallejo Water Department standards. The public system will tie into the existing water line in Shady Lane at two locations creating a private looped system that will be privately owned and maintained by the HOA.

SECTION 4: RESIDENTIAL DEVELOPMENT STANDARDS

This section provides development standards for the residential development of the Vista Cove Planned Development. These standards apply to the residential portion of the Planned Development which makes up approximately 10.39-acres of the Plan.

4.1 RESIDENTIAL STANDARDS

4.1.1 Primary Uses Permitted

Two-story single family detached residences.

4.1.2 Purpose and Intent

This zone allows for the development of homes within a single zone. 10.39-acres are going to be used for residential development.

4.1.3 Site Development Standards

a. Individual Lots

Each dwelling shall be located on an individual lot

b. Lot Area

Single Family lots shall be a minimum of 2,800 square feet

c. Maximum Lot Coverage

For single family lots no more than 85% of any lot shall be occupied by a residence or an accessory structure.

d. Lot Width

Single family lots shall be a minimum of 35 feet in width at the living setback

e. Lot Depth

Single family lots shall be a minimum of 80 feet in depth

f. Building Setbacks:

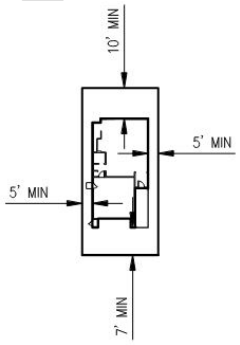
Each Single-Family dwelling shall have the following minimum setbacks to the property line:

- Front: 7’ (non-alley loaded)
- Front: 0’ from garage door (alley loaded)

Covered porches, balconies and stairways of non-alley loaded product may extend into required front yard setback not more than three feet.

- Rear: 10’ minimum
- Sideyards: 5’
- Corner Lots – street side: 5’

Allowable encroachments include but are not limited to architectural features such as cornices, canopies, greenhouse or windows, and chimneys may extend into required yards not more than two feet.



TYPICAL LOT SETBACKS
NOT TO SCALE

DRAFT

g. Maximum Height

The maximum height shall be 35 feet. No house shall be over two stories.

h. Garages

All garages will hold 2 cars.

i. Required Parking

Two parking spaces in a garage are required for every dwelling unit. Additional parking spaces shall be located on the private streets. On-street parking space minimum of 8 feet by 20 feet.

j. Fencing

Rear and Side property Lines shall have 6’ tall solid wood fence. Lots with views into the open space shall have a 6’ tall view fence in the rear and a 6’ tall solid wood fence on the side. See Section 5.3 for more detail.

k. Lighting

Lighting shall be of similar design throughout the development meeting City of Vallejo standards.

l. Accessory Structures

Accessory structures shall be allowed in the Single-Family portion and shall follow the Vallejo Municipal Code as defined in Chapter 16.202.

- Shall not encroach any setback
- Shall be under 14’ in height

4.1.4 Grading Standards

The objective of the preliminary grading concept is to use the existing terrain to define the development footprint while conforming to the existing surrounding land uses. The existing topography for the site is a gentle rolling downhill slope traveling west to east including a west-east running drainage swale. Using the City of Vallejo’s Hillside Grading Standards as a guide, the grading will be done in such a way as to create buildable lots and pads while providing for efficient and safe roadway network. The developed area will be graded to create pads and streets that will sit below the surrounding residential uses similar to the existing site conditions**.** Improvement of the grading concepts as proposed in the Master Plan would require approximately 60,000 cubic yards of material to be moved.

Where topography must be changed; various contour grading techniques will be employed to allow the affected area to blend in with the natural slope. Cut and fill will be constructed with rounded corners to eliminate sharp angles of slopes at the contour intersections. Contour grading will also be utilized to create rounded, undulating slopes

between street levels and building pads, and in transition areas from natural slopes to graded slopes. Slope gradients will vary, where feasible, to produce a more natural appearance.

4.1.5 Homeowners Association

There will be a Homeowner's Association for residential development. This entity will make and enforce rules for the properties within this residential development. Lot owners will automatically become members of the HOA Association.

4.1.6 Conditions, Covenants, and Restrictions (CC&Rs)

Within the residential neighborhood controls will be placed on each lot to guide the builder and homeowners during the construction of the neighborhood and throughout any subsequent changes in the future. No development will be allowed on the common areas HOA-maintained hillside open space. The CC&Rs are part of the purchase of a lot and are legally enforced.

SECTION 5: LANDSCAPE DEVELOPMENT STANDARDS

This section provides development standards for landscape as part of the Vista Cove Planned Development.

5.1 GENERAL GUIDELINES

The landscape concept for Vista Cove focuses on a drought tolerant native or adaptive plant palette designed to create a cohesive development with an attractive transition between the production housing and adjacent open space. Material shall be arranged to screen views of Interstate 780 while also highlighting views into undisturbed preserved open space.

DRAFT

5.2 PLANT SELECTION

5.2.1 Residential Plant Palette

TREES:

Acer rubrum 'Armstrong'	Armstrong Red Maple
Ginkgo biloba 'Autumn Gold'	Maidenhair Tree
Quercus agrifolia	Coast Live Oak
Quercus lobata	Valley Oak
Quercus robur 'Fastigiata'	Skyrocket English Oak
Tilia cordata 'Greenspire'	Greenspire Littleleaf Linden

Ginkgo biloba 'Autumn Gold'

SHRUBS AND GRASSES:

Acacia cognata `Cousin Itt'	River Wattle
Achillea spp.	Yarrow
Agave X `Blue Glow`	Blue Glow Agave
Anigozanthos spp.	Kangaroo Paw
Arctostaphylos spp.	Manzanita
Bouteloua g. 'Blonde Ambition'	Blue Grama Grass
Bulbine frutescens	Stalked Bulbine
Acacia cognata `Cousin Itt'	River Wattle
Achillea spp.	Yarrow
Agave X `Blue Glow`	Blue Glow Agave
Anigozanthos spp.	Kangaroo Paw
Arctostaphylos spp.	Manzanita
Bouteloua g. 'Blonde Ambition'	Blue Grama Grass
Bulbine frutescens	Stalked Bulbine
Calamagrostis X a. `Karl Foerster`	Feather Reed Grass
Calandrinia spectabilis	Pink Calandrinia
Callistemon viminalis 'Little John'	Weeping Bottlebrush
Carex divulsa	European Grey Sedge
Ceanothus spp.	Ceanothus
Chondropetalum spp.	Cape Rush
Cistus spp.	Rockrose
Dietes iridioides	Fortnight Lily
Dodonaea viscosa `Purpurea`	Purple Leafed Hopseed Bush
Epilobium canum	California Fuchsia
Erigeron glaucus	Beach Daisy
Erigeron karvinskianus	Fleabane
Escallonia X `Compacta`	Compact Escallonia
Festuca spp.	Fescue
Gaura lindheimeri	Siskiyou Pink Gaura
Grevillea spp.	Grevillea
Helictotrichon sempervirens	Blue Oat Grass
Hemerocallis X `Evergreen Yellow`	Daylily
Hesperaloe parviflora	Yucca
Kniphofia uvaria	Torchlily
Lantana spp.	Lantana
Ligustrum japonicum `Texanum`	Waxleaf Privet
Limonium perezii	Statice
Loropetalum chinense	Fringe Flower

Anigozanthos spp.

Ceanothus spp.

Epilobium canum

DRAFT

SHRUBS AND GRASSES (continued):

Muhlenbergia capillaris	Pink Muhly
Nandina domestica	Lemon Lime Nandina
Nepeta X faassenii `Six Hills Giant`	Giant Catmint
Penstemon spp.	Beard Tongue
Pittosporum spp.	Pittosporum
Polygala spp.	Sweet Pea Shrub
Prunus caroliniana `Compacta`	Carolina Laurel Cherry
Rhamnus californica	Coffeeberry
Rhaphiolepis spp.	Indian Hawthorn
Rosa spp.	Rose
Rosmarinus officinalis	Tuscan Blue Rosemary
Salvia spp.	Sage
Tulbaghia violacea	Society Garlic
Westringia fruticosa	Coast Rosemary
Xylosma congestum 'Compacta'	Compact Xylosma

Muhlenbergia capillaris

Salvia spp.

GROUNDCOVER:

Arctostaphylos spp.	Groundcover Manzanita
Ceanothus griseus horizontalis	California Lilac
Grevillea lanigera `Coastal Gem`	Coastal Gem Grevillea
Helianthemum n.`Henfield Brilliant`	Henfield Brilliant Rock Rose
Myoporum parvifolium	Myoporum
Scaevola `Mauve Clusters`	Fan Flower
Senecio mandraliscae	Blue Finger
Verbena spp.	Verbena

Grevillea lanigera 'Coastal Gem'

5.2.2 Open Space Plant Palette

TREES:

Quercus agrifolia	Coast Live Oak
Quercus lobata	Valley Oak

SHRUBS AND GRASSES:

Achillea spp.	Yarrow
Arctostaphylos spp.	Manzanita
Bouteloua g. 'Blonde Ambition'	Blue Grama Grass
Carex divulsa	European Grey Sedge
Ceanothus spp.	Ceanothus
Chondropetalum spp.	Cape Rush
Epilobium canum	California Fuchsia
Erigeron glaucus	Beach Daisy
Erigeron karvinskianus	Fleabane

DRAFT

SHRUBS AND GRASSES (continued):

Eriogonum spp.	Buckwheat
Eriophyllum spp.	Woolly Sunflower
Festuca spp.	Fescue
Fremontodendron californicum	California Flannel Bush
Helictotrichon sempervirens	Blue Oat Grass
Heteromeles arbutifolia	Toyon
Juncus patens	California Gray Rush
Mimulus aurantiacus	Sticky Monkeyflower
Muhlenbergia capillaris	Pink Muhly
Muhlenbergia rigens	Deer Grass
Penstemon spp.	Beard Tongue
Rhamnus californica	Coffeeberry
Salvia spp.	Sage
Verbena spp.	Verbena

Eriogonum spp.

GROUNDCOVER:

Arctostaphylos spp.	Groundcover Manzanita
Ceanothus griseus horizontalis	California Lilac
Verbena spp.	Verbena

Verbena spp.

DRAFT

5.3 EXTERIOR WALLS AND FENCES

Walls and fences provide separation and delineate property lines. A list is provided within this document. The attached images are conceptual and will be refined in final design.

5.3.1 Residential Fence Plan

Good Neighbor Fence

Six-foot-tall solid wood fence located between residential lots.

GOOD NEIGHBOR FENCE

View Fence

Six-foot-tall tube steel fence located between residential and open space views.

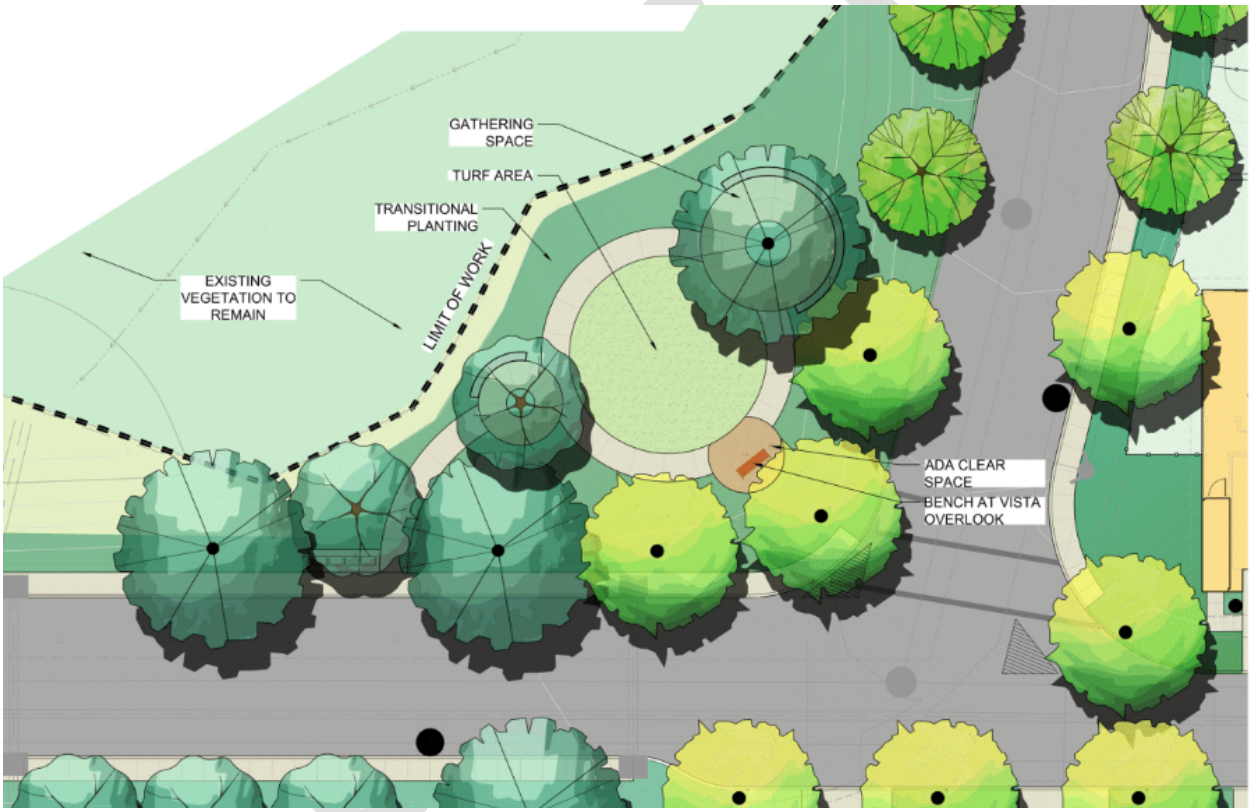
VIEW FENCE

5.4 WALKWAYS AND PATHS

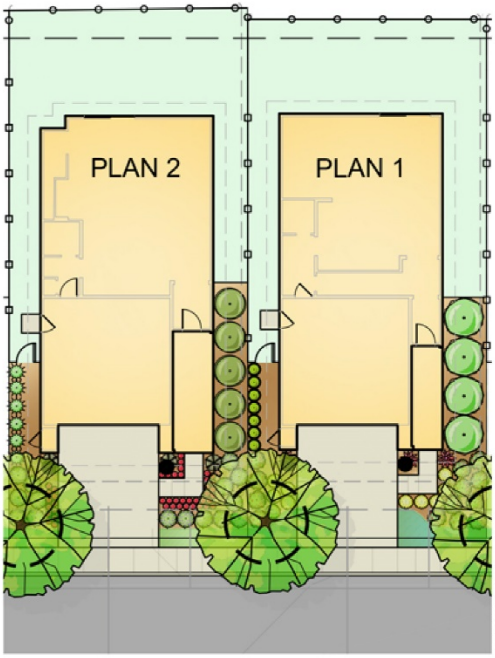
Walkways shall connect the residential lanes to the Common Open Space and adjacent neighborhood. Walkways shall be a minimum of 4 and a half feet wide.

5.5 PASSIVE OPEN SPACE

The Common Open Space, located centrally in the development, shall be designed to take advantage of views into the adjacent riparian area. A loop walk around a flexible use turf area and a vista overlook will provide passive recreation opportunities for residents. The plant palette shall be a combination of native and adaptive species selected to attract pollinators and create a smooth transition into the undisturbed open space.



5.6 FRONT YARD TYPICAL LANDSCAPE



NOTE:
PLANS SHOW ESTIMATED REPRESENTATION OF SHRUB MATERIAL WITHIN THREE YEARS

TYPICAL FRONT YARD PLANTING

Accent Tree:
Acer rubrum 'Armstrong' - Armstrong Red Maple
Ginkgo biloba 'Autumn Gold' - Maidenhair Tree

Screen Shrub:
Ceanothus spp. - Ceanothus
Dodonaea viscosa `Purpurea` - Hopseed Bush
Ligustrum japonicum `Texanum` - Waxleaf Privet
Loropetalum chinense - Fringe Flower
Prunus caroliniana `Compacta` - Carolina Laurel Cherry
Xylosma congestum 'Compacta' - Compact Xylosma

Foundation Shrub:
Arctostaphylos spp. - Manzanita
Callistemon viminalis 'Little John' - Bottlebrush
Escallonia X `Compacta` - Compact Escallonia
Grevillea spp. - Grevillea
Nandina domestica - Lemon Lime Nandina
Pittosporum spp. - Pittosporum
Rhamnus californica - Coffeeberry
Rhaphiolepis spp. - Indian Hawthorn
Westringia fruticose - Coast Rosemary

Secondary Shrub:
Acacia cognata `Cousin Itt' - River Wattle
Bulbine frutescens - Stalked Bulbine
Calandrinia spectabilis - Pink Calandrinia
Chondropetalum spp. - Cape Rush
Cistus spp. - Rockrose
Dietes iridioides - Fortnight Lily
Gaura lindheimeri - Siskiyou Pink Gaura
Polygala spp. - Sweet Pea Shrub
Rosmarinus officinalis - Tuscan Blue Rosemary
Salvia spp. - Sage

Accent Shrub:
Achillea spp. - Yarrow
Agave X `Blue Glow` - Blue Glow Agave
Anigozanthos spp. - Kangaroo Paw
Epilobium canum - California Fuchsia
Erigeron glaucus - Beach Daisy
Erigeron karvinskianus - Fleabane
Hemerocallis X `Evergreen Yellow` - Daylily
Hesperaloe parviflora - Yucca
Kniphofia uvaria - Torchlily
Lantana spp. - Lantana
Limonium perezii - Statice
Nepeta X faassenii `Six Hills Giant' - Catmint
Penstemon spp. - Beard Tongue
Rosa spp. - Rose
Tulbaghia violacea - Society Garlic

Grasses:
Bouteloua g. 'Blonde Ambition' - Blue Grama Grass
Calamagrostis X a. `Karl Foerster` - Feather Reed Grass
Carex divulsa - European Grey Sedge
Festuca spp. - Fescue
Helictotrichon sempervirens - Blue Oat Grass
Muhlenbergia capillaris - Pink Muhly

Groundcover:
Arctostaphylos spp. - Groundcover Manzanita
Ceanothus griseus horizontalis - California Lilac
Grevillea lanigera `Coastal Gem` - Coastal Gem Grevillea
Helianthemum n.`Henfield Brilliant` - Rock Rose
Myoporum parvifolium - Myoporum
Scaevola `Mauve Clusters` - Fan Flower
Senecio mandraliscae - Blue Finger
Verbena spp. - Verbena

SECTION 6: ARCHITECTURE DEVELOPMENT STANDARDS

This section provides the development standards for architecture as part of the Vista Cove Planned Development.

6.1 GENERAL GUIDELINES

6.1.1 Architectural Styles

Architectural Character: Modern Farmhouse

The architectural character of Vista Cove Planned Development draws on the project site's proximity to California's wine country and the community's natural topography. The guidelines and standards in the following sections are provided to help guide the development and maintenance of the future residential structures at Vista Cove.

6.2 SINGLE FAMILY HOMES

6.2.1 Development Guidelines and Standards

The following recommendations are encouraged when designing the residential homes at Vista Cove:

a. Building Massing

- Appropriately articulated wall planes (on all 4 sides) with recessed windows.
- Entry Porticos that are forward of the Garage plane.
- Varying projections that add interest by providing shadow and depth.
- Clean, simple forms that support the architectural characteristics of Modern Farmhouse.
- Complimentary exterior finish materials that are typical of the architectural character.

b. Main Entrances/Porches

Residential Entries, whether front or side facing, shall feature covered Porches or Porticos that are inviting and engage both the street and the sideyard. Elements may include:

- Covered Porch and/or Entry ways that open to the sideyard
- Trellis feature
- Recessed Entry

c. Roofs

The roof design and treatment should be varied but not overly complicated or "busy" - enough to provide visual interest to the neighborhood roofscape. Roof forms that may be considered include:

- Pitched roofs such as Gables, Hips, and Shed roofs (Gambrel, Mansard, and flat roofs are prohibited).
- Varying plate heights and roof pitches (min. of 4.5:12 for main roof and 3:12 for secondary roofs).
- Roof materials such as concrete tile and architectural shingles of differing colors.

d. Window Openings

Windows are important elements to the building design as they provide both elevation articulation and light and fresh air for the occupants. The following guidelines balance these priorities.

- Windows at stucco conditions should be recessed from the wall plane a minimum of 2".
- Window types may include Casements, Sliders, Single Hung, and fixed glass.
- Any window grids or divided lights should complement the architectural character of the home.
- The frame color should be appropriately colored to match or complement the home's selected color scheme.
- The shape and size of any shutters that may be proposed should match the window opening.
- Reflective glass is prohibited in all locations.

e. Garage Doors

The overall design of the home's street facing elevation should de-emphasize the garage door to better promote a pedestrian friendly, more engaging streetscape. Examples to consider are:

- Garages doors that are deeply recessed from the surrounding wall plane (min. of 0'-6").
- Additional articulation around the recessed opening at the garage entrance.
- A garage recessed/house forward design solution that brings an entry Porch, Portico, or habitable space forward of the garage plane.
- 2nd floor projections over the garage door below that provide additional shading and architectural interest.

f. Exterior Materials and Colors

Varying exterior materials and colors can provide an appealing street scene and further enhance the building's architectural design. To better ensure the homes in Vista Cove support the Modern Farmhouse style, the following guidelines and standards apply:

- Surface materials and treatments should be designed to appear as an integral part of the design and not merely applied. Materials shall wrap columns, porches, or balconies in their entirety.
- Color and/or material changes shall occur at inside corners. Materials applied to any elevation shall turn the outside corner of the building and end at a logical termination point that relates to rooflines, building masses, and/or fence/wall returns.
- Field color used at the base of a wall should continue down to finish grade. At masonry veneer conditions, the visible wall below the weep screed level should be painted a color that closely matches the veneer above.
- Exterior materials may include (but are not limited to) stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and batten siding, and naturally decay resistant wood.

g. Architectural Detailing

Detail elements such as shutters, eave brackets, corbels, exposed rafters/rafter tails, or beams should be used to provide visual interest and richness to the elevations where appropriate. Any trim used around windows, doors, and/or as belly bands at stucco conditions, shall be at least 1" thick.

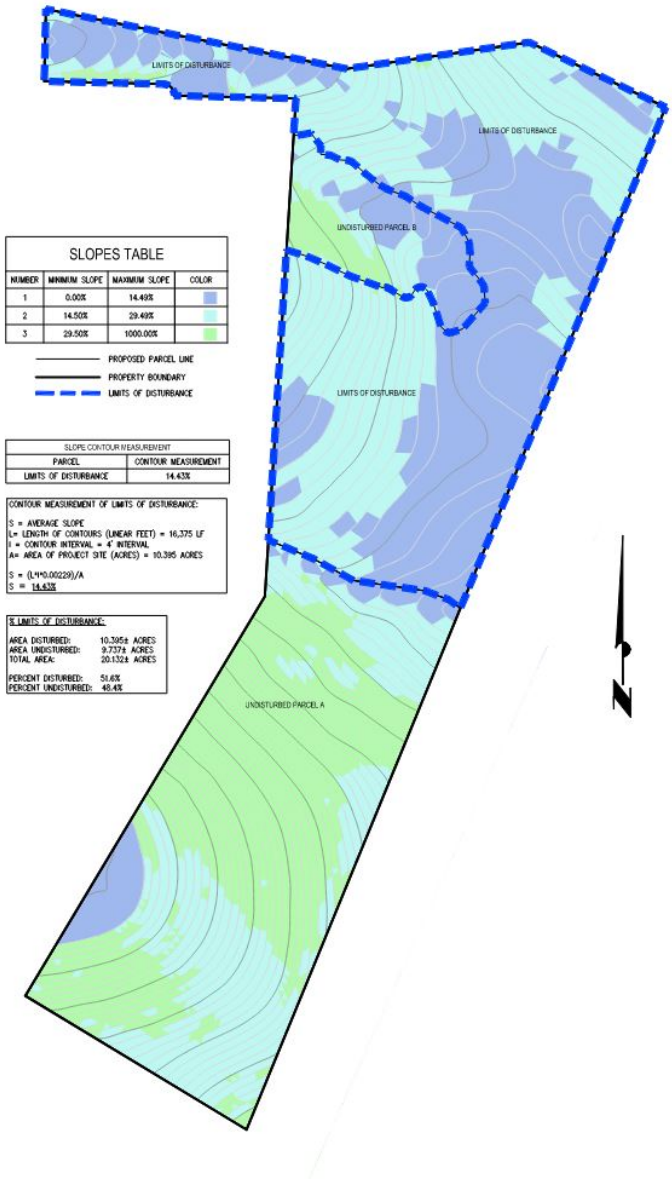
h. Exterior Light Fixtures

Exterior lighting both enhances the architectural character of the design while providing a much-needed sense of security and visual awareness at night. Exterior wall-mounted light fixtures should complement the architectural character of the home and be of the high efficiency, low voltage LED type. All exterior light fixtures must be dark-sky compliant and be aimed away from neighbors to avoid light trespass.

6.2.2 SINGLE FAMILY HOME TYPICAL ELEVATION EXAMPLE

SECTION 7: HILLSIDE DEVELOPMENT STANDARDS

The Vista Cove Planned Development will leave 48.4% of the site undisturbed. Development of the remaining 10.395 acres will follow the approved grading plan accordingly. See Figure below.



The project will use the most accurately available topographic information. The average slope of the proposed developed areas will be calculated using the contour measurement method as shown in Vallejo's Municipal Code due to the existence of varied slope conditions and topography. All measurements to be taken at four-foot increments for the vertical distance of contour lines.

SECTION 8: OPEN SPACE

The natural open space in Vista Cove is in two distinct areas of the proposed Visa Cove project. Parcel A is approximately 8.36 Acres and Parcel B is approximately 1.38 acres and both parcels will be fenced and have signage installed to prevent trespassing and will remain undisturbed and maintained by the HOA.

8.1 EROSION CONTROL

Erosion control standards shall be used on all disturbed lands during project development. Disturbance to the central open space shall be kept at a minimum. See Erosion Control Sheet C8.1 for hydroseeding limits.

8.2 FIRE MANAGEMENT

The open space can be accessed by fire from the residential street through the 20’ access easement for Parcel A through Parcels D and E, accessed by the roadways in Parcel F.

8.3 WILDLIFE MANAGEMENT

The open space site shall promote and protect wildlife.

8.4 PRESERVATION

The open space shall reasonably preserve existing vegetation in its current condition.

SECTION 9: CONCLUSION

Vista Cove will be a comprehensive development as laid out in this Planned Development narrative. It will be developed under the overall theme that has been established within this document.

DRAFT

SANCERRA

VISTA COVE
PLANNED DEVELOPMENT, TENTATIVE MAP
COVER SHEET

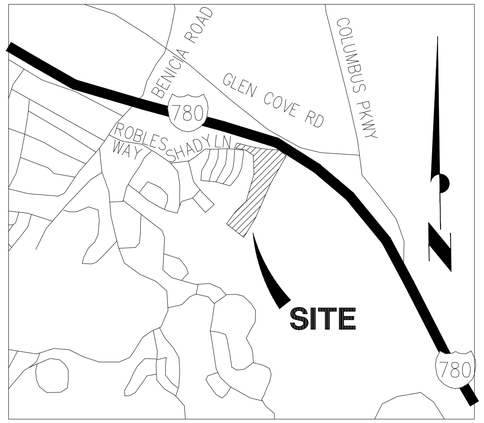
APNS: 0079-171-170, 0079-220-070, A PORTION OF 0079-120-100

VALLEJO, CALIFORNIA

SHEET INDEX	
NUMBER	TITLE
0.00	PROJECT COVER SHEET
C1.0	TITLE SHEET
C2.0	EXISTING BOUNDARY AND TOPOGRAPHY
C2.1	SITE PHOTOGRAPHS
C3.0	LAND USE PLAN
C4.0	TENTATIVE MAP COVER SHEET
C4.1	PRELIMINARY SITE PLAN
C4.2	PRELIMINARY SITE PLAN
C4.3	PRELIMINARY SITE PLAN
C4.4	PRELIMINARY SITE PLAN
C4.5	PRELIMINARY SITE PLAN
C5.0	PRELIMINARY SITE, DRAINAGE AND GRADING PLAN
C5.1	ENGINEERED SECTIONS AND SITE DETAILS
C5.2	TRUE SECTIONS
C6.0	COMPOSITE UTILITY PLAN
C6.1	PRELIMINARY UTILITY PLAN
C6.2	PRELIMINARY UTILITY PLAN
C6.3	PRELIMINARY UTILITY PLAN
C6.4	PRELIMINARY UTILITY PLAN
C7.0	STORMWATER CONTROL PLAN
C8.0	EROSION CONTROL NOTES
C8.1	EROSION CONTROL PLAN
C9.0	SIGNING AND STRIPING PLAN
C10.0	HILLSIDE DEVELOPMENT
C11.0	FIRE TRUCK TURNAROUND
C12.0	PLOTTED SITE PLAN
L-1	OVERALL LANDSCAPE PLAN
L-2	LANDSCAPE PLAN
L-3	LANDSCAPE PLAN
L-4	LANDSCAPE PLAN
L-5	LANDSCAPE PLAN
L-6	COMMON OPEN SPACE ENLARGEMENT
L-7	PLANT AND SITE IMAGERY
L-8	OVERALL FENCE PLAN
L-9	EXISTING TREE PLAN

ARCHITECTURAL SHEET INDEX	
NUMBER	TITLE
A-1	COVER SHEET
A-2	PLAN 1A FLOOR PLAN
A-3	PLAN 1A SECTIONS
A-4	PLAN 1A ELEVATIONS
A-5	PLAN 1A ROOF PLAN
A-6	PLAN 1B FLOOR PLAN
A-7	PLAN 1B SECTIONS
A-8	PLAN 1B ELEVATIONS
A-9	PLAN 1B ROOF PLAN
A-10	PLAN 1C FLOOR PLAN
A-11	PLAN 1C SECTIONS
A-12	PLAN 1C ELEVATIONS
A-13	PLAN 1C ROOF PLAN
A-14	PLAN 1 STREETSCENE
A-15	PLAN 2A FLOOR PLAN
A-16	PLAN 2A SECTIONS
A-17	PLAN 2A ELEVATIONS
A-18	PLAN 2A ROOF PLAN
A-19	PLAN 2B FLOOR PLAN
A-20	PLAN 2B SECTIONS
A-21	PLAN 2B ELEVATIONS
A-22	PLAN 2B ROOF PLAN
A-23	PLAN 2C FLOOR PLAN
A-24	PLAN 2C SECTIONS
A-25	PLAN 2C ELEVATIONS
A-26	PLAN 2C ROOF PLAN
A-27	PLAN 2 STREETSCENE
A-28	PLAN 3A FLOOR PLAN
A-29	PLAN 3A SECTIONS
A-30	PLAN 3A ELEVATIONS
A-31	PLAN 3A ROOF PLAN
A-32	PLAN 3B FLOOR PLAN
A-33	PLAN 3B SECTIONS
A-34	PLAN 3B ELEVATIONS
A-35	PLAN 3B ROOF PLAN
A-36	PLAN 3 STREETSCENE
A-37	PLAN 4A FLOOR PLAN
A-38	PLAN 4A SECTIONS
A-39	PLAN 4A ELEVATIONS
A-40	PLAN 4A ROOF PLAN
A-41	PLAN 4B FLOOR PLAN
A-42	PLAN 4B SECTIONS
A-43	PLAN 4B ELEVATIONS
A-44	PLAN 4B ROOF PLAN
A-45	PLAN 4 STREETSCENE

E:\PROJECTS\2021\21-1008 VISTA COVE - VALLEJO\CIVIL\ENTITLEMENTS\01 PROJECT COVER SHEET - ZONE.DWG 6/5/2025

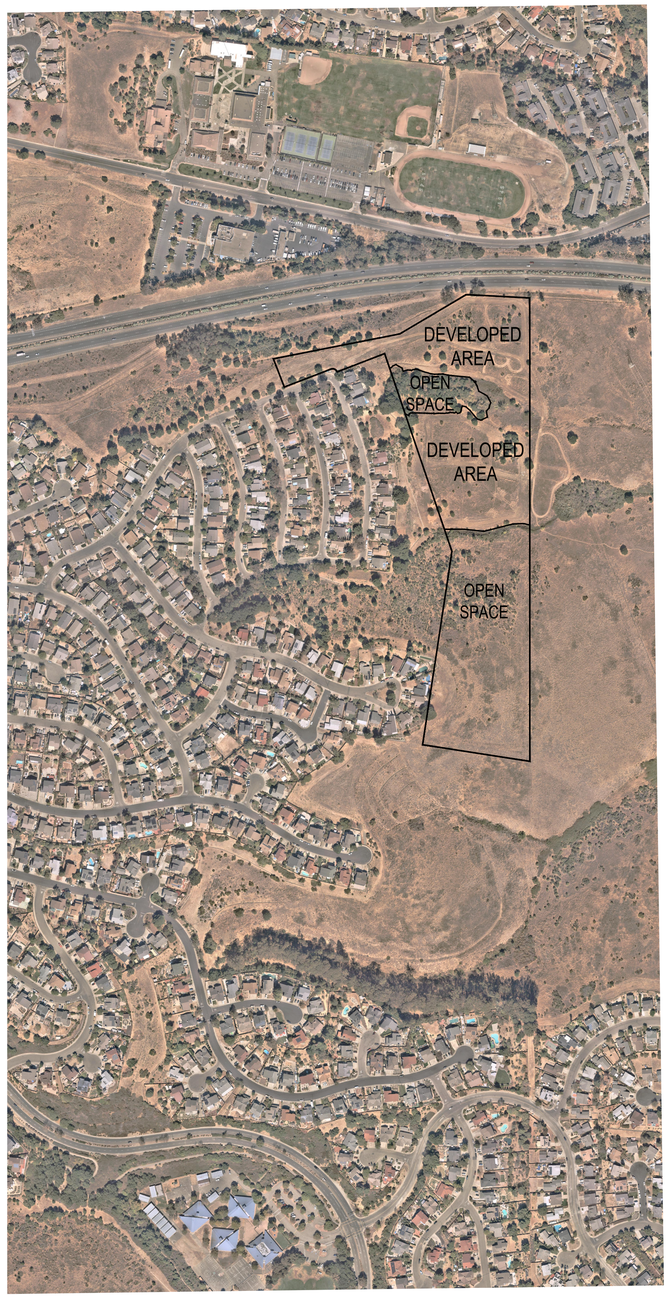


VICINITY MAP

NOT TO SCALE

SANCERRA
VISTA COVE

APNS: 0079-171-170, 0079-220-070, A PORTION OF 0079-120-100
VALLEJO, CALIFORNIA



LEGEND

EXISTING	DESCRIPTION	PROPOSED
	BOUNDARY LINE	
	EASEMENT LINE	
	PARCEL LINE	
	MAJOR CONTOUR	100
	MINOR CONTOUR	
	BACK OF CURB, FACE OF CURB, LIP OF GUTTER	
	ROLLED CURB	
	STREET CENTERLINE	
	SPOT ELEVATION	×72.32
	SLOPE DIRECTION	
	STREET LIGHT	
X	FENCE	
	FLOW LINE	
W EX 12" W	WATER MAIN	W WS
S EX 8" SS	SANITARY SEWER MAIN, MANHOLE	SS
(S)	SANITARY SEWER FORCE MAIN	SS FM
EX SD	STORM DRAIN LINE, CATCH BASIN, FIELD INLET	SD
	FIRE HYDRANT	
(G)	GAS	
(JT)	JOINT TRENCH	
	BIORETENTION BASIN	
	UNIT NUMBER	33

ABBREVIATIONS

AC	ACRES
APN	ACCESSOR'S PARCEL NUMBER
APPURT.	APPURTENANT
BIO	BIORETENTION AREA
BNDY	BOUNDARY
EAS.	EASEMENT
EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
FI	FIELD INLET
FL	FLOW LINE
INST.	INSTRUMENT
L	LENGTH
LME	LANDSCAPE MAINTENANCE EASEMENT
MAX	MAXIMUM
MIN	MINIMUM
NO.	NUMBER
PAR	PARCEL
PE	PLANTING EASEMENT
PL	PROPERTY LINE
POR.	PORTION
PSDE	PRIVATE STORM DRAIN EASEMENT
PUE	PUBLIC UTILITY EASEMENT
R	RADIUS
RET WALL	RETAINING WALL
SF	SQUARE FEET
SO	SIDE OPENING
TB	TOP OF BASIN
TR	TITLE REPORT
TYP	TYPICAL

PROJECT INFORMATION

PLANNED ZONING	PLANNED DEVELOPMENT
PROPOSED PROJECT NAME	VISTA COVE
SIZE OF PROPERTY	TOTAL SITE AREA (DEVELOPED): 10.395± ACRES PARCEL A: 8.356± ACRES PARCEL B: 1.381± ACRES
ADJACENT LAND USES	RESIDENTIAL TO THE WEST, OPEN SPACE TO THE EAST, HIGHWAY TO THE NORTH, OPEN SPACE TO THE SOUTH
DEVELOPMENT STANDARDS	CITY OF VALLEJO, VALLEJO FLOOD AND WASTEWATER DISTRICT
SQUARE FOOTAGE OF EXISTING BUILDINGS	N/A
SQUARE FOOTAGE OF ALL PROPOSED BUILDINGS	135,688 TOTAL SF FOR 51 RESIDENTIAL HOMES
PARKING PROVIDED	2 GARAGE STALLS PER UNIT (102 STALLS); 2 DRIVEWAY STALLS PER UNIT (102 STALLS); ON-STREET STALLS = 24 STALLS ; MAILBOX PARKING = 1 STALL
INUNDATION	FEMA FLOOD ZONE X
UTILITY SOURCES	SEWER DISPOSAL: VALLEJO FLOOD AND WASTEWATER DISTRICT WATER SUPPLY: CITY OF VALLEJO
INTENDED USE OF PARCELS	RESIDENTIAL HOMES, OPEN SPACE

SITE INFORMATION

SITE ADDRESS:
SHADY LANE AND WILDFLOWER ROAD
VALLEJO, CA

BENCHMARK:
VERTICAL DATUM NAVD88 GEOID 12B DERIVED FROM OPUS SOLUTION

ASSESSORS PARCEL NUMBERS:
0079-171-170, 007-220-070, A PORTION OF 0079-120-100

PROJECT SITE AREA:
TOTAL DEVELOPED AREA: 10.395± ACRES
PARCEL A: 8.356± ACRES
PARCEL B: 1.381± ACRES

PROJECT FLOOD ZONE:
ZONE X

PROJECT DESCRIPTION:
51 SINGLE FAMILY RESIDENTIAL HOMES

REQUIRED FIRE FLOW:
1500 GALLONS PER MINUTE

300' 0' 150' 300'

1 INCH = 300 FEET

PROJECT TEAM

OWNER/APPLICANT:
SANCERRA VISTA COVE, LLC
2618 SAN MIGUEL DRIVE, SUITE 1223
NEWPORT BEACH, CA 92660
(949) 469-4497
CONTACT: ADAM SMITH

CIVIL ENGINEER:
dk ENGINEERING
1931 SAN MIGUEL DR, SUITE 100
WALNUT CREEK, CA 94596
(925) 932-6868
CONTACT: ANDREW D. PALFFY, RCE 43704

ARCHITECT:
ROBERT HIDEY ARCHITECTS
3337 MICHELSON DRIVE, SUITE 170
IRVINE, CA 92612
(949) 655-1550
CONTACT: DAN WEIBEL

LANDSCAPE ARCHITECT:
VANDERTOOLEN AND ASSOCIATES
700 YGNACIO VALLEY ROAD, SUITE 100
WALNUT CREEK, CA 94596
(707) 224-2299
CONTACT: JACQUELINE SMYTH

GEOTECHINCAL ENGINEER:
ENGEO
2010 CROW CANYON PLACE, SUITE 250
SAN RAMON, CA 94583
(925) 866-9000
CONTACT: JACOB WHITE

ENVIRONMENTAL:
WRA ENVIRONMENTAL CONSULTANTS
2169-G EAST FRANCISCO BLVD
SAN RAFAEL, CA 94901
(949) 524-7542
CONTACT: PATRICIA VALCARCEL

SHEET INDEX

NUMBER	TITLE
0.00	PROJECT COVER SHEET
C1.0	TITLE SHEET
C2.0	EXISTING BOUNDARY AND TOPOGRAPHY
C2.1	SITE PHOTOGRAPHS
C3.0	LAND USE PLAN
C4.0	TENTATIVE MAP COVER SHEET
C4.1	PRELIMINARY SITE PLAN
C4.2	PRELIMINARY SITE PLAN
C4.3	PRELIMINARY SITE PLAN
C4.4	PRELIMINARY SITE PLAN
C4.5	PRELIMINARY SITE PLAN
C5.0	PRELIMINARY SITE, DRAINAGE AND GRADING PLAN
C5.1	ENGINEERED SECTIONS AND SITE DETAILS
C5.2	TRUE SECTIONS
C6.0	COMPOSITE UTILITY PLAN
C6.1	PRELIMINARY UTILITY PLAN
C6.2	PRELIMINARY UTILITY PLAN
C6.3	PRELIMINARY UTILITY PLAN
C6.4	PRELIMINARY UTILITY PLAN
C7.0	STORMWATER CONTROL PLAN
C8.0	EROSION CONTROL NOTES
C8.1	EROSION CONTROL PLAN
C9.0	SIGNING AND STRIPING PLAN
C10.0	HILLSIDE DEVELOPMENT
C11.0	FIRE TRUCK TURNAROUND
C12.0	PLOTTED SITE PLAN

SANCERRA
VISTA COVE
PLANNED DEVELOPMENT, TENTATIVE MAP
TITLE SHEET
REVISED JUNE 10, 2025

dk ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C1.0

I:\PROJECTS\2022\22-1008 VISTA COVE - VALLEJO\DWG\VISTA MAPS\C3 SITE SHEET - ZONE.DWG 6/5/2025

dk JOB# 22-1008-10

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP

LAND USE PLAN

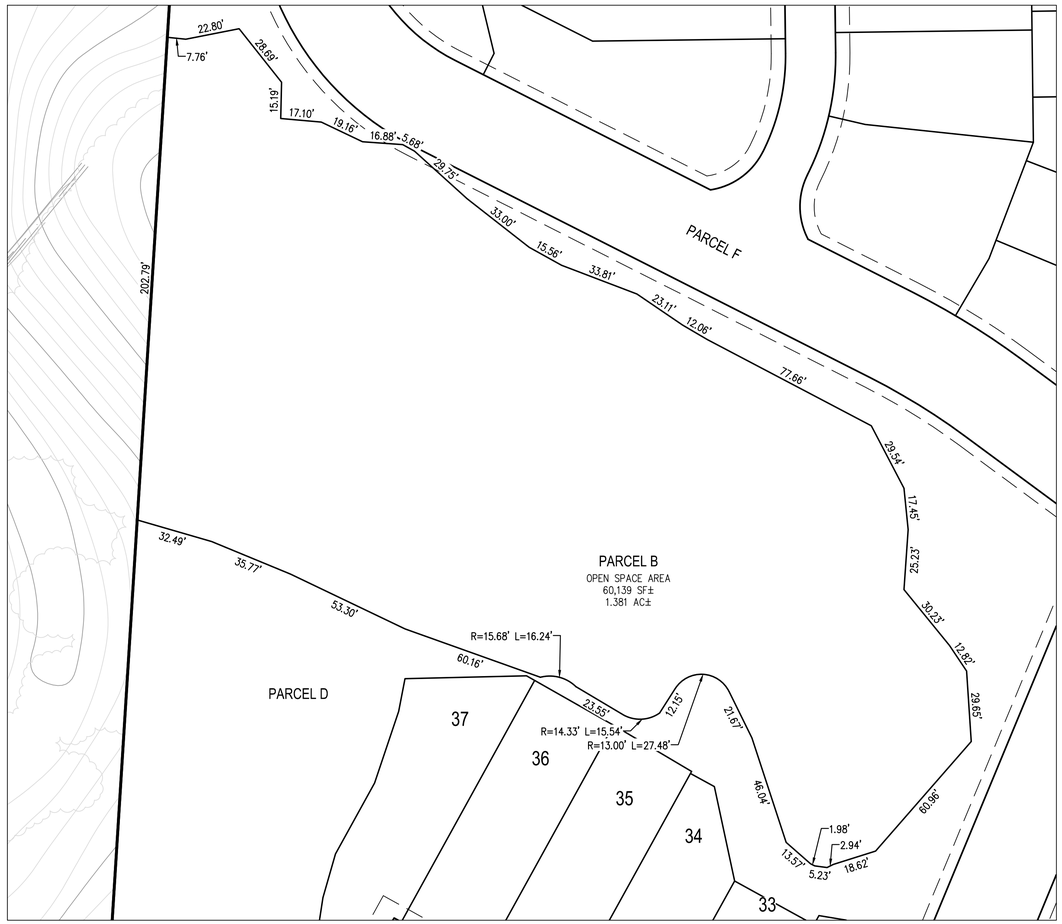
REVISED AUGUST 20, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C3.0

F:\PROJECTS\2022\22-1008 VISTA COVE - VALLEJO\DWG\TENTATIVE MAP\C3.0 LAND USE PLAN.DWG 8/25/2025

dk JOB# 22-1008-10

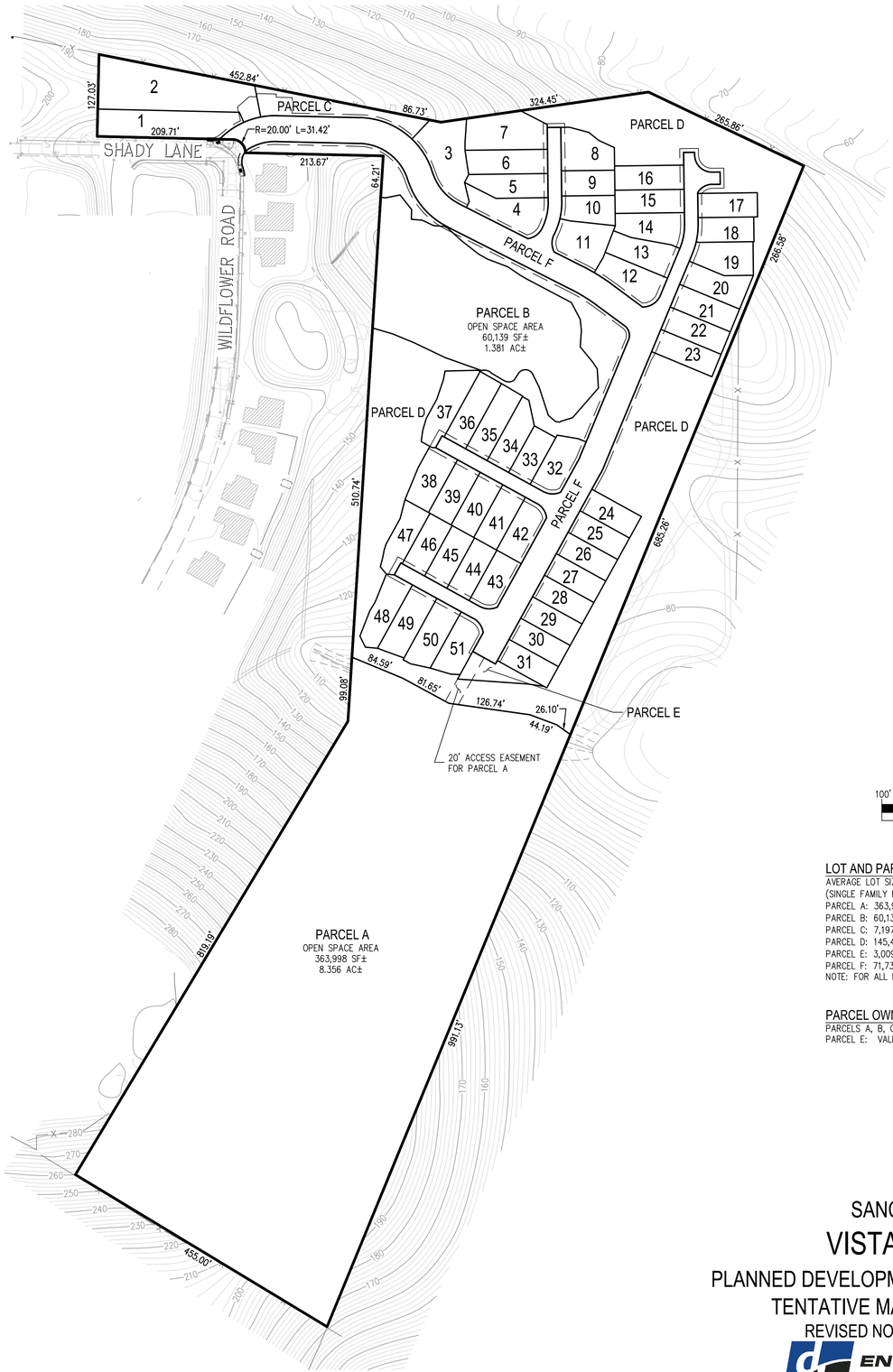


DETAIL

SCALE: 1'=30'

30' 0' 15' 30'

1 INCH = 30 FEET



100' 0' 50' 100'

1 INCH = 100 FEET

LOT AND PARCEL AREAS:

AVERAGE LOT SIZE FOR LOTS 1–51
(SINGLE FAMILY RESIDENTIAL HOMES): 4,420 SF±/0.10 AC±
PARCEL A: 363,988 SF±/ 8.36 AC±
PARCEL B: 60,139 SF±/ 1.38 AC±
PARCEL C: 7,197 SF±/ 0.17 AC±
PARCEL D: 145,421 SF±/ 3.34 AC±
PARCEL E: 3,009 SF±/ 0.07 AC±
PARCEL F: 71,735±/ 1.65 AC±
NOTE: FOR ALL LOT AREAS SEE SHEET C4.2

PARCEL OWNERSHIP:

PARCELS A, B, C, D, AND F: HOMEOWNERS ASSOCIATION
PARCEL E: VALLEJO FLOOD AND WASTEWATER DISTRICT

SANCERRA

VISTA COVE

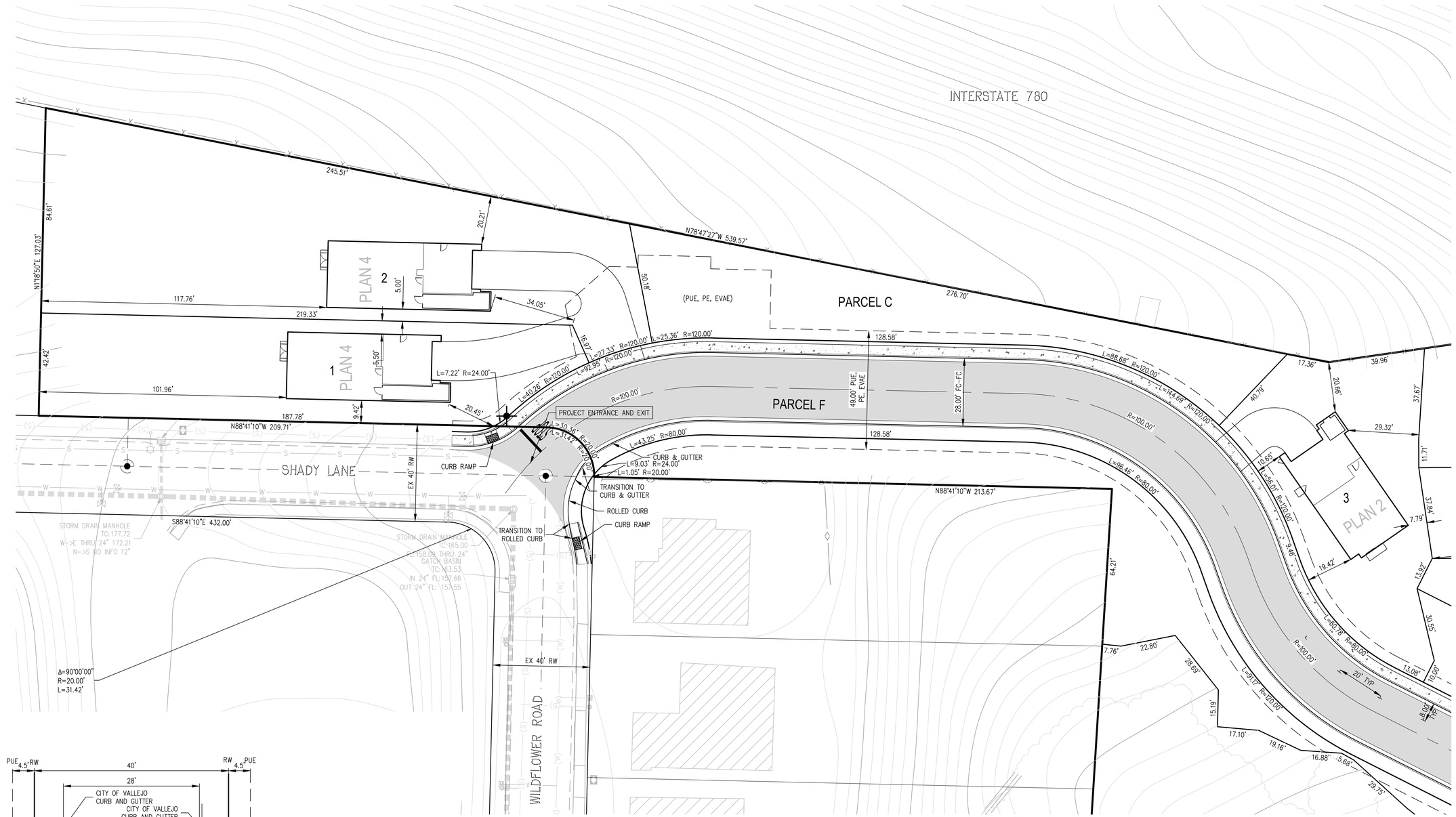
PLANNED DEVELOPMENT, TENTATIVE MAP
TENTATIVE MAP COVER SHEET
REVISED NOVEMBER 17, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

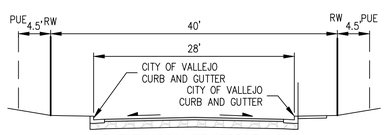
C4.0

F:\PROJECTS\2022\22-1008 VISTA COVE - VALLEJO\DWG\TENTATIVE MAP\C4.0 TENTATIVE MAP FOR CONDOMINIUM PURPOSES.DWG 11/17/2025

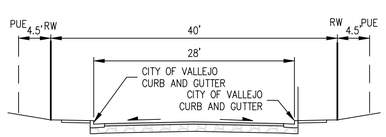
dk JOB# 22-1008-10



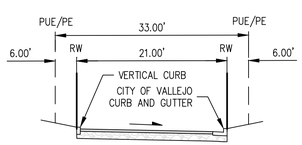
SEE SHEET C4.2



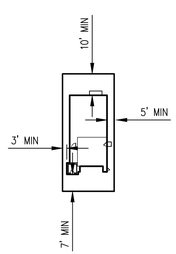
TYPICAL PRIVATE STREET W-E
SECTION A1
(STANDARD - STANDARD CURB)
NOT TO SCALE



TYPICAL PRIVATE STREET N-S
SECTION A2
(STANDARD - STANDARD CURB)
NOT TO SCALE



TYPICAL PRIVATE ALLEY
SECTION B
(VERTICAL - STANDARD CURB)
NOT TO SCALE



TYPICAL LOT SETBACKS
NOT TO SCALE

FLOOR AREA RATIO

PLAN TYPE	FLOOR AREA	NUMBER OF BEDROOMS	NUMBER PROPOSED	TOTAL FLOOR AREA
PLAN 1	2,329 SF	3	9	20,961 SF
PLAN 2	2,499 SF	4	13	32,487 SF
PLAN 3	2,792 SF	4	17	47,464 SF
PLAN 4	2,898 SF	4	12	34,776 SF
			TOTAL	135,688 SF

LOWEST BUILDING FINISHED FLOOR: LOT 24, ELEVATION 99.7

LOT AND PARCEL AREAS:

AVERAGE LOT SIZE FOR LOTS 1-51
(SINGLE FAMILY RESIDENTIAL HOMES): 4,420 SF±/0.10 AC±
PARCEL A: 363,988 SF±/ 8.36 AC±
PARCEL B: 60,139 SF±/ 1.38 AC±
PARCEL C: 7,197 SF±/ 0.17 AC±
PARCEL D: 145,421 SF±/ 3.34 AC±
PARCEL E: 3,009 SF±/ 0.07 AC±
PARCEL F: 71,735±/ 1.65 AC±
NOTE: FOR ALL LOT AREAS SEE SHEET C4.2

PARCEL OWNERSHIP:

PARCELS A, B, C, D, AND F: HOMEOWNERS ASSOCIATION
PARCEL E: CITY OF VALLEJO

ABBREVIATIONS

EVAE	EMERGENCY VEHICLE ACCESS EASEMENT
PE	PLANTING EASEMENT
PUE	PUBLIC UTILITY EASEMENT
RW	RIGHT OF WAY
TYP	TYPICAL

SANCERRA

VISTA COVE

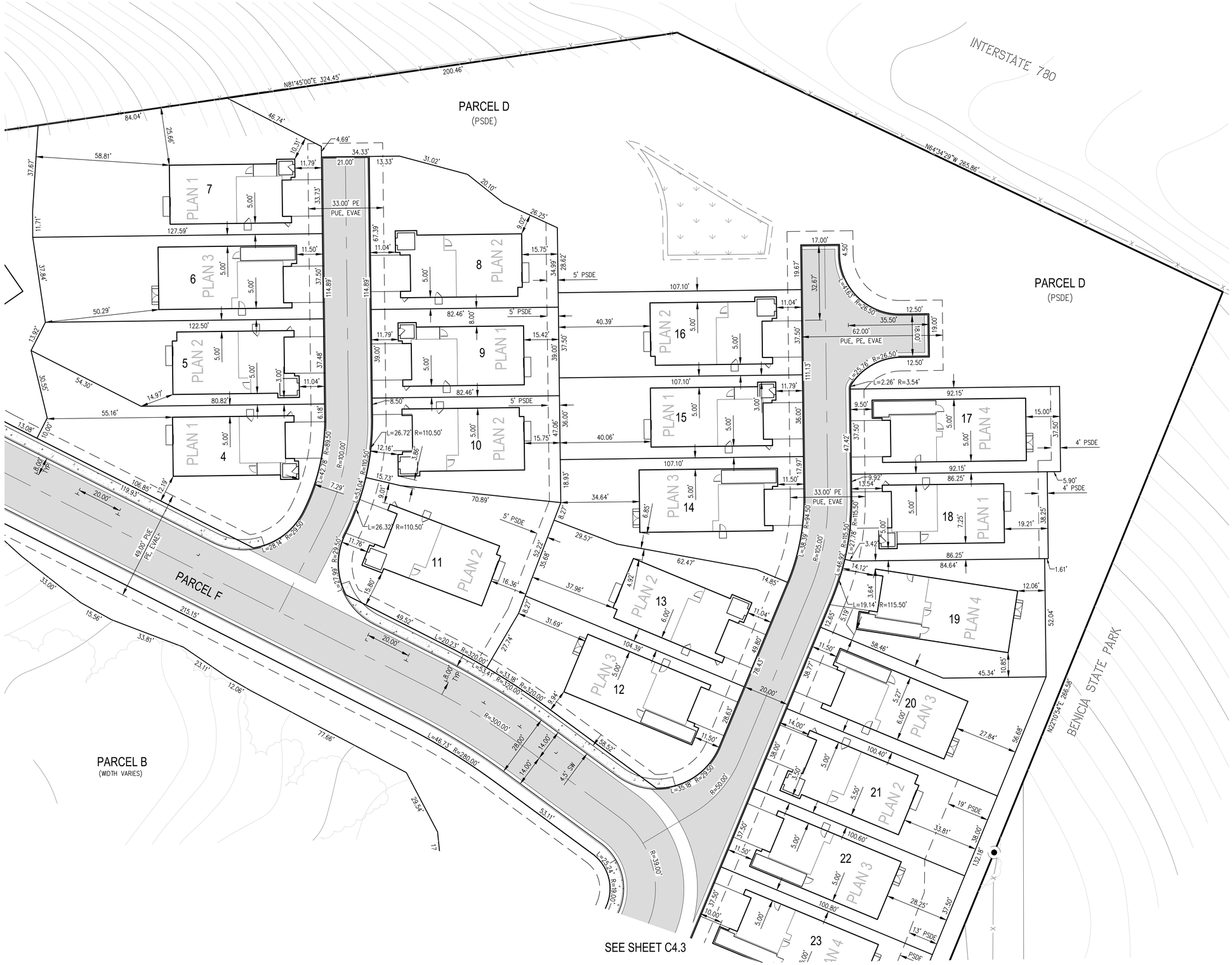
PLANNED DEVELOPMENT, TENTATIVE MAP
PRELIMINARY SITE PLAN

REVISED SEPTEMBER 18, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C4.1

I:\PROJECTS\2021\21-1008 VISTA COVE - VALLEJO\CIVIL\TENTATIVE MAP\C4.1 SITE PLAN.DWG 9/18/2025



Parcel Table		
LOT #	NET/GROSS AREA (SF)	NET/GROSS AREA (AC)
PARCEL A	363,998	8.36
PARCEL B	60,139	1.38
PARCEL C	7,197	0.17
PARCEL D	145,421	3.34
PARCEL E	3,009	0.07
PARCEL F	71,735	1.65
1	8,983	0.21
2	15,875	0.36
3	7,282	0.17
4	5,737	0.13
5	4,188	0.10
6	4,689	0.11
7	6,690	0.15
8	4,567	0.10
9	3,216	0.07
10	3,498	0.08
11	5,241	0.12
12	4,861	0.11
13	4,423	0.10
14	4,523	0.10
15	3,856	0.09
16	4,016	0.09
17	3,455	0.08
18	3,331	0.08
19	4,364	0.10
20	4,262	0.10
21	3,819	0.09
22	3,776	0.09
23	3,783	0.09

Parcel Table		
LOT #	NET/GROSS AREA (SF)	NET/GROSS AREA (AC)
24	3,323	0.08
25	3,323	0.08
26	3,323	0.08
27	3,323	0.08
28	3,323	0.08
29	3,323	0.08
30	3,280	0.08
31	3,280	0.08
32	4,348	0.10
33	3,137	0.07
34	3,892	0.09
35	4,356	0.10
36	4,387	0.10
37	4,924	0.11
38	4,253	0.10
39	3,725	0.09
40	3,725	0.09
41	3,725	0.09
42	4,009	0.09
43	3,751	0.09
44	3,513	0.08
45	3,513	0.08
46	3,513	0.08
47	3,983	0.09
48	4,367	0.10
49	4,690	0.11
50	4,544	0.10
51	4,171	0.10

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP
PRELIMINARY SITE PLAN
REVISED JUNE 10, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C4.2

C:\PROJECTS\2022\22-1008 BCH, CVE - VALLEJO\PLOT\SITE\PDE MAP\C4.1 PDE PLAN.DWG 6/10/2025

SANCERRA

VISTA COVE

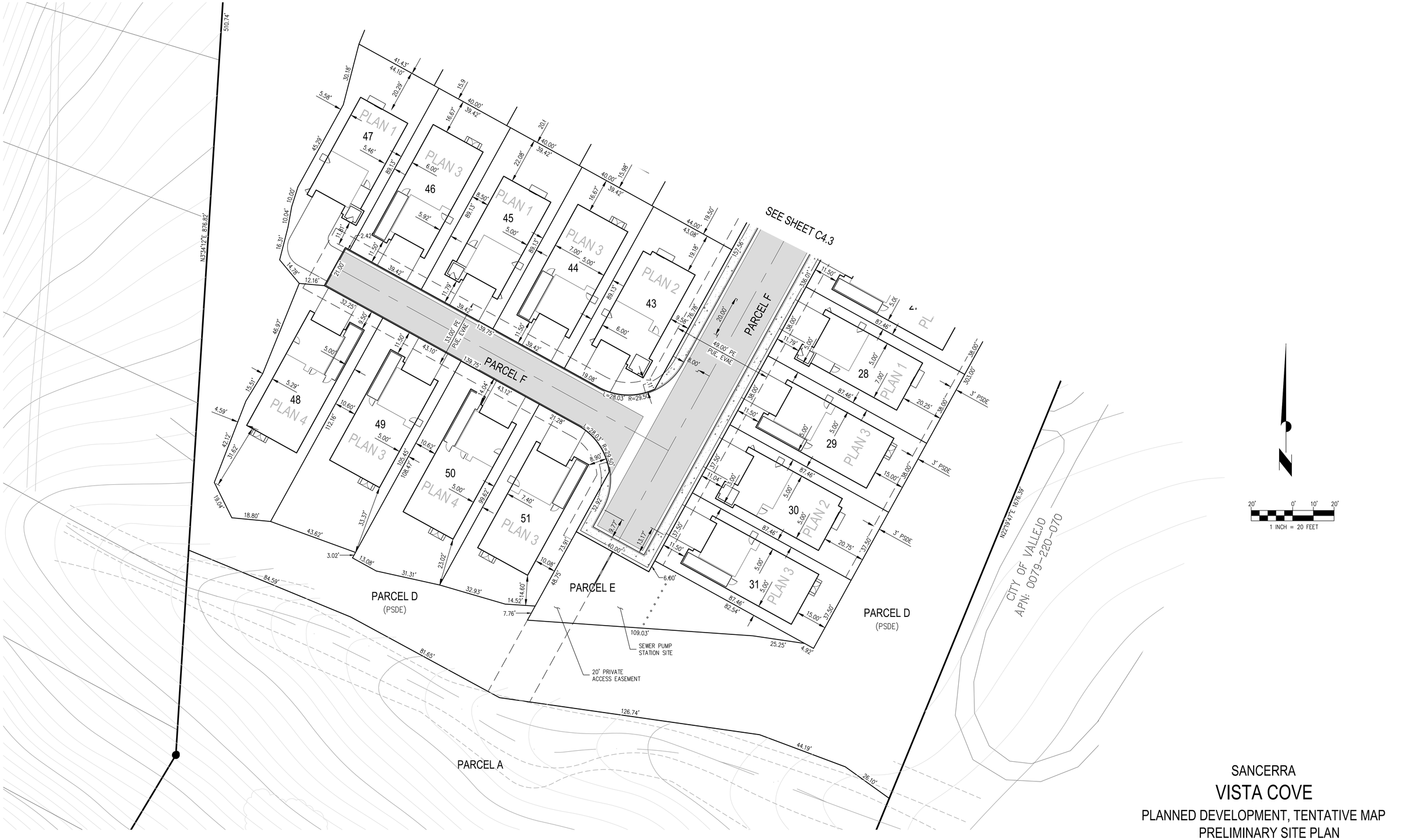
PLANNED DEVELOPMENT, TENTATIVE MAP

PRELIMINARY SITE PLAN

REVISED JUNE 10, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C4.3



SEE SHEET C4.5

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP

PRELIMINARY SITE PLAN

REVISED JUNE 10, 2025

ENGINEERING SURVEYING • PLANNING

1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C4.4

dk JOB# 22-1008-10

50' 0' 25' 50'

1 INCH = 50 FEET

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP

PRELIMINARY SITE PLAN

REVISED JUNE 10, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C4.5

I:\PROJECTS\2022\22-1008 VISTA COVE - VALLEY\DWG\TENTATIVE MAP\C4.5 SITE PLAN.DWG 6/10/2025

LEGEND

EXISTING	DESCRIPTION	PROPOSED
	PROJECT BOUNDARY	
	RIGHT OF WAY	
	PROPERTY LINE	
	EASEMENT LINE	
90	MAJOR CONTOUR	90
	MINOR CONTOUR	
	BACK OF CURB, FACE OF CURB, LIP OF GUTTER	
	CONCRETE SIDEWALK	
	PAVEMENT	
	DRAINAGE LOCATION	
	FOUND MONUMENT	
	FOUND IRON PIPE	
	TREE DRIPLINE	
X	FENCE	
	FLOW LINE	
	LIMITS OF GRADING	
	STORM DRAIN LINE, CATCH BASIN, FIELD INLET, MAINTENANCE HOLE	
	BENCH	
	PAD LIMIT	
	RETAINING WALL	
	STORMWATER BASIN	
	INTERMITTENT STREAM*	
	SEASONAL WETLAND*	
	FRESHWATER MARSH*	
	RIPARIAN AREA*	
	TOYON CHAPARRAL	
	BUILDING PLAN TYPE	PLAN 1
	UNIT NUMBER	33
	OVERLAND RELEASE DIRECTION	

* NOTE: MAY BE SUBJECT TO SECTION 1600 OF THE FISH & WILDLIFE CODE.

ABBREVIATIONS

APN	ACCESSOR'S PARCEL NUMBER
CL	CENTERLINE ELEVATION
FI	FIELD INLET
KB	KICKERBOARD
MIN	MINIMUM
P	PAD ELEVATION
RET	RETAINING WALL
SF	SQUARE FEET
SO	SIDE OPENING
TB	TOP OF BASIN
TC	TOP OF CURB ELEVATION
TSM	TOP OF SOIL MIX

DISTURBED AREA

TOTAL SITE AREA	876,963 SF	100%
DISTURBED AREA	448,893 SF	51.19%
UNDISTURBED AREA	428,070 SF	48.81%

PLAN TYPE SUMMARY

PLAN TYPE	QUANTITY
1	9
2	13
3	17
4	12

PRELIMINARY EARTHWORK SUMMARY TABLE

CUT (CY)	58,700
FILL (CY)	59,300
NET (CY)	600 (IMPORT)

50' 0' 25' 50'

1 INCH = 50 FEET

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP

PRELIMINARY SITE, DRAINAGE AND GRADING PLAN

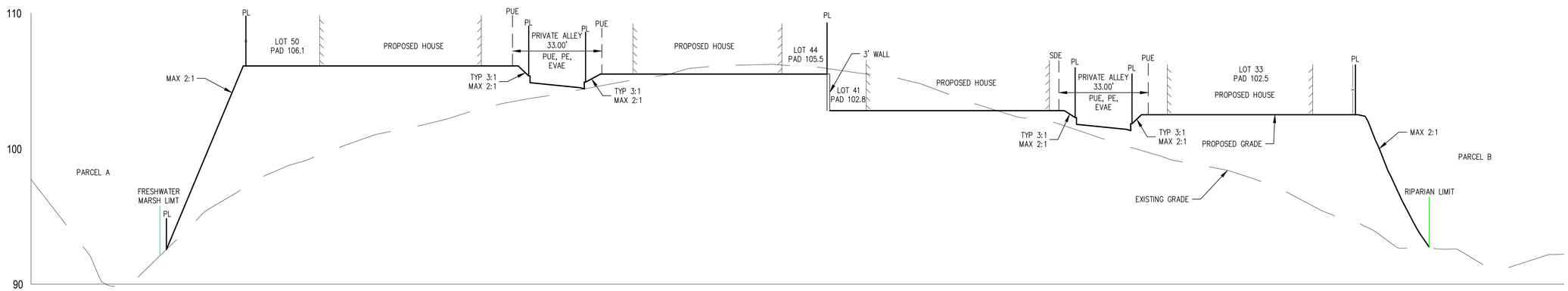
REVISED JUNE 10, 2025

ENGINEERING SURVEYING • PLANNING

1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

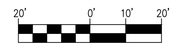
C5.0

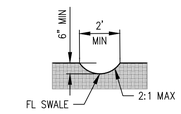
dk JOB# 22-1008-10



SECTION A-A

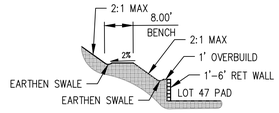
SCALE: VERTICAL: 1"=4'
HORIZONTAL: 1"=20'





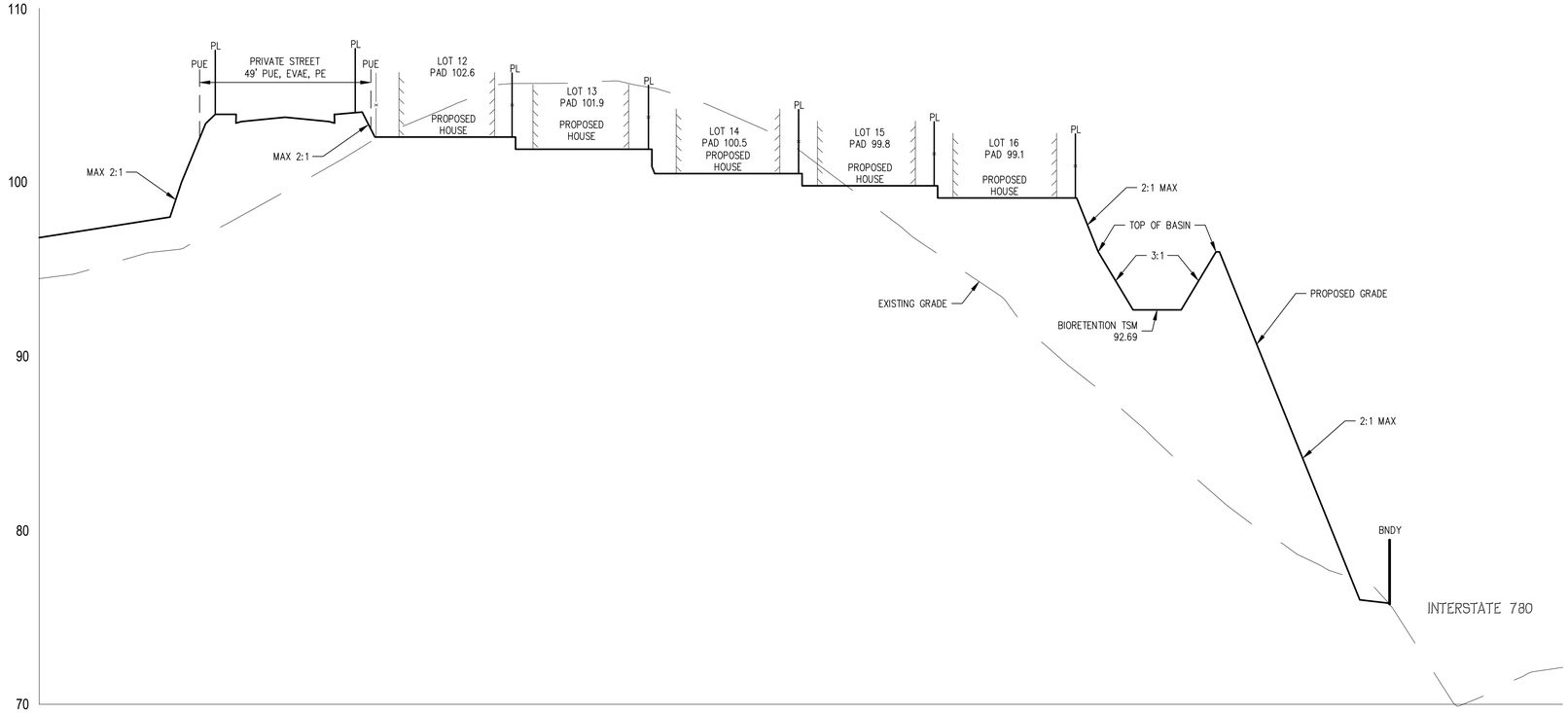
EARTHEN SWALE DETAIL

NOT TO SCALE



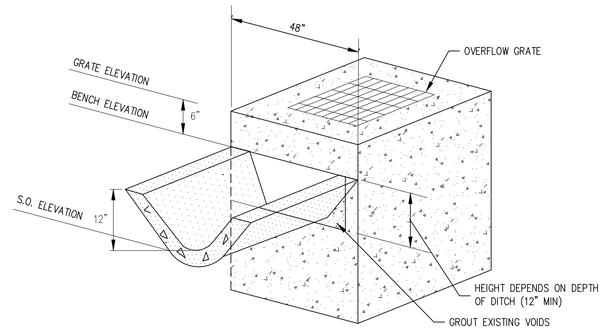
LOT 47 GRADING DETAIL

NOT TO SCALE



SECTION B-B

SCALE: VERTICAL: 1"=4'
HORIZONTAL: 1"=20'



MODIFIED FIELD INLET DETAIL SD-3 WITH SIDE OPENING

NOT TO SCALE

SANCERRA

VISTA COVE

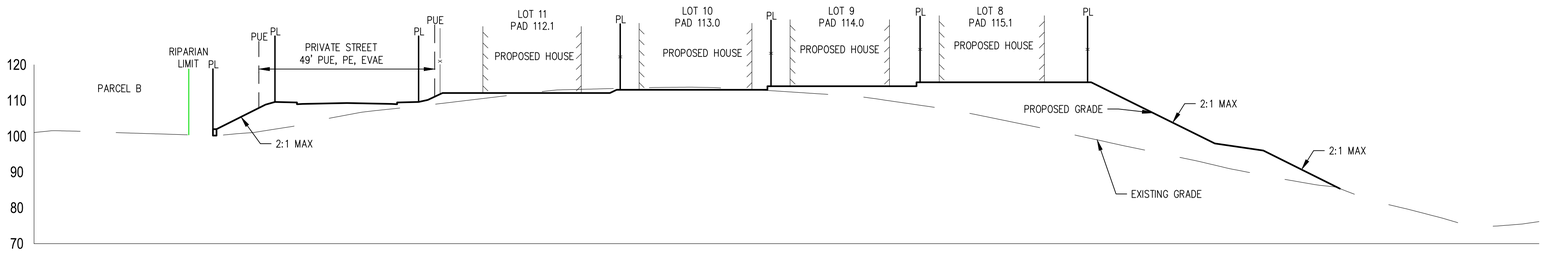
PLANNED DEVELOPMENT, TENTATIVE MAP
ENGINEERED SECTIONS AND SITE DETAILS
REVISED JUNE 10, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C5.1

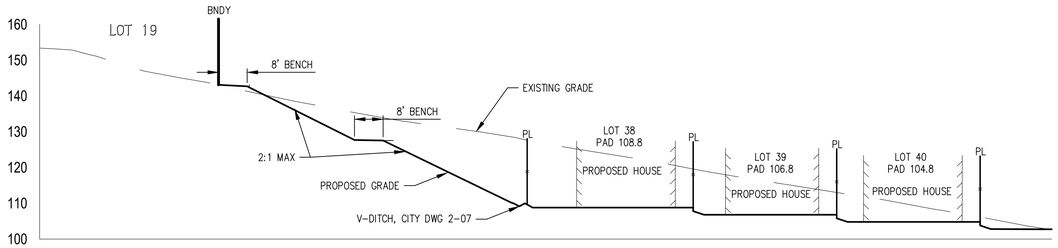
F:\PROJECTS\2022\22-1008 VISTA COVE - HILLSIDE\CIVIL\ENTITLEMENT\PLOT DRAWING SECTIONS.DWG 6/10/2025

dk JOB# 22-1008-10



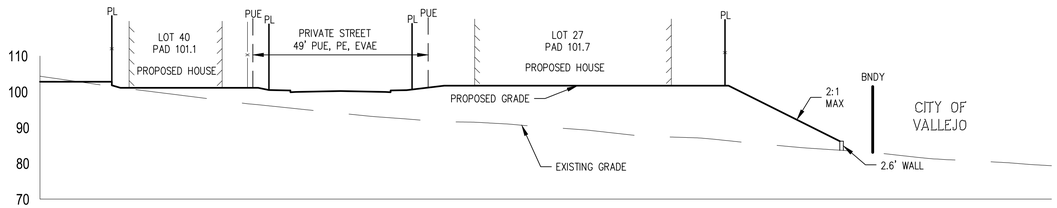
SECTION C-C

SCALE: VERTICAL: 1"=20'
HORIZONTAL: 1"=20'



SECTION D-D

SCALE: VERTICAL: 1"=20'
HORIZONTAL: 1"=20'



SECTION E-E

SCALE: VERTICAL: 1"=20'
HORIZONTAL: 1"=20'

20' 0' 10' 20'
1 INCH = 20 FEET

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP
TRUE SECTIONS
REVISED JUNE 10, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C5.2

F:\PROJECTS\2022\22-1008 VISTA COVE - VALLEJO\PWK\TENTATIVE MAP\C5.1 DRAWING SECTIONS.DWG 6/10/2025

dk JOB# 22-1008-10

LEGEND

- POTABLE WATER SYSTEM
- STORM DRAIN SYSTEM
- SANITARY SEWER SYSTEM
- SEWER FORCE MAIN
- SEWER PUMP ENHANCEMENT
- BIORETENTION AREA

50' 0' 25' 50'

1 INCH = 50 FEET

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP

COMPOSITE UTILITY PLAN

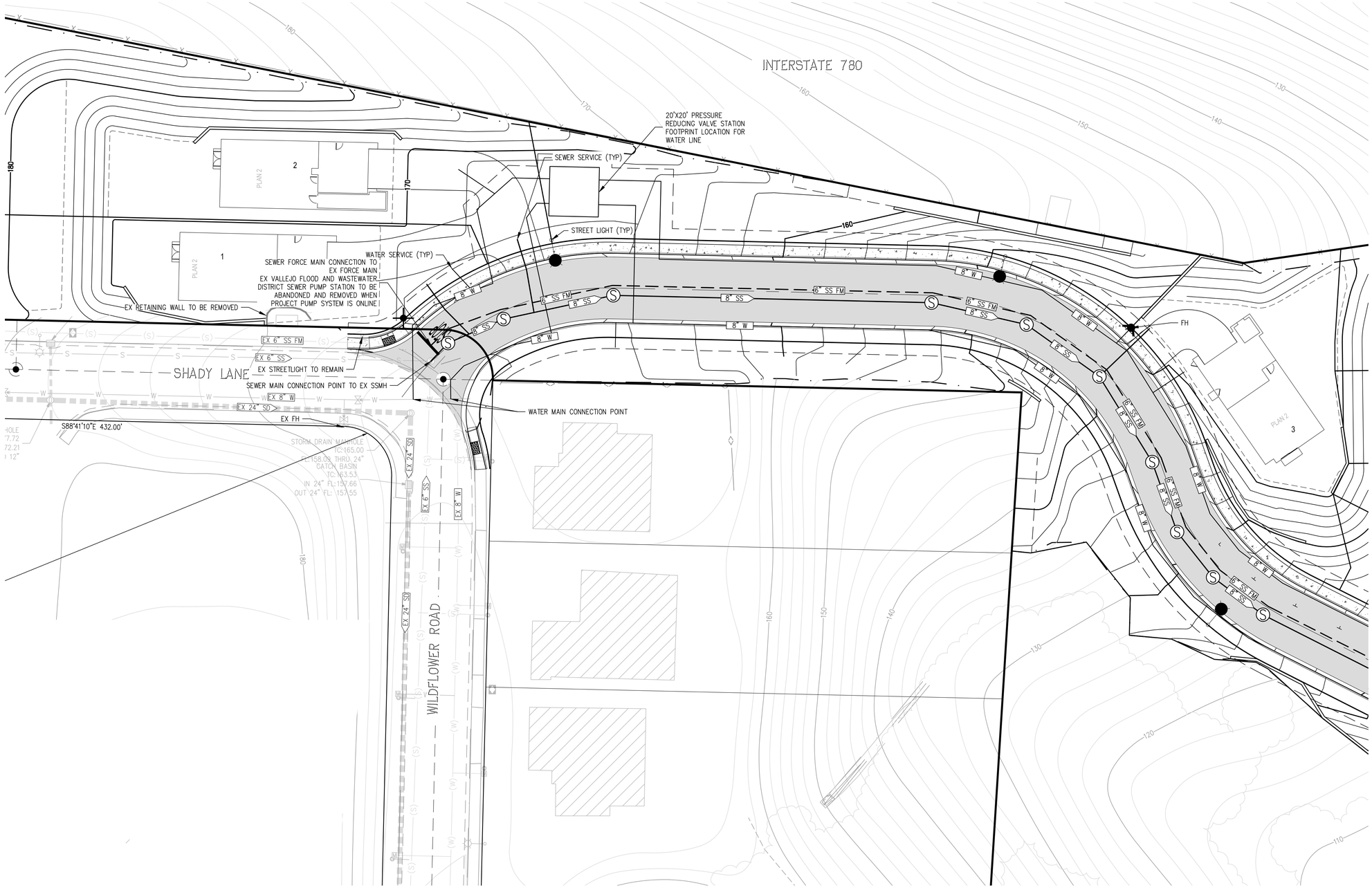
REVISED JUNE 10, 2025

ENGINEERING SURVEYING • PLANNING

1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C6.0

dk JOB# 22-1008-10



PROPOSED STRUCTURE TABLE	
STRUCTURE TYPE	STANDARD DETAIL
STORM DRAIN MANHOLE	VALLEJO FLOOD AND WASTEWATER SD-11
STORM DRAIN FIELD INLET	VALLEJO FLOOD AND WASTEWATER SD-3
STORM DRAIN CATCH BASIN	VALLEJO FLOOD AND WASTEWATER SD-1, SD-2
SEWER MANHOLE	VALLEJO FLOOD AND WASTEWATER SS-15, SS-6
SEWER CLEANOUT	VALLEJO FLOOD AND WASTEWATER SS-3
WATER METER	CITY OF VALLEJO DWG 4-02
WATER BLOW OFF VALVE	CITY OF VALLEJO DWG 4-08
FIRE HYDRANT	CTY OF VALLEJO DWG 4-05

NOTE:
LOCAL FIRE FLOW AS TESTED BY THE CITY OF VALLEJO: 1453 GPM

UTILITIES	
UTILITY	OWNER
STORM DRAIN	PRIVATE
SEWER MAIN	PUBLIC
WATER MAIN	PRIVATE

SEE SHEET C6.2

20' 0' 10' 20'
1 INCH = 20 FEET

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP
PRELIMINARY UTILITY PLAN
REVISED NOVEMBER 17, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C6.1

T:\PROJECTS\2022\22-1008 VISTA COVE - VALLEJO\CIVIL\TENTATIVE MAP\C6.1-4.4 PRELIMINARY UTILITY PLAN.DWG 11/17/2025

SANCERRA

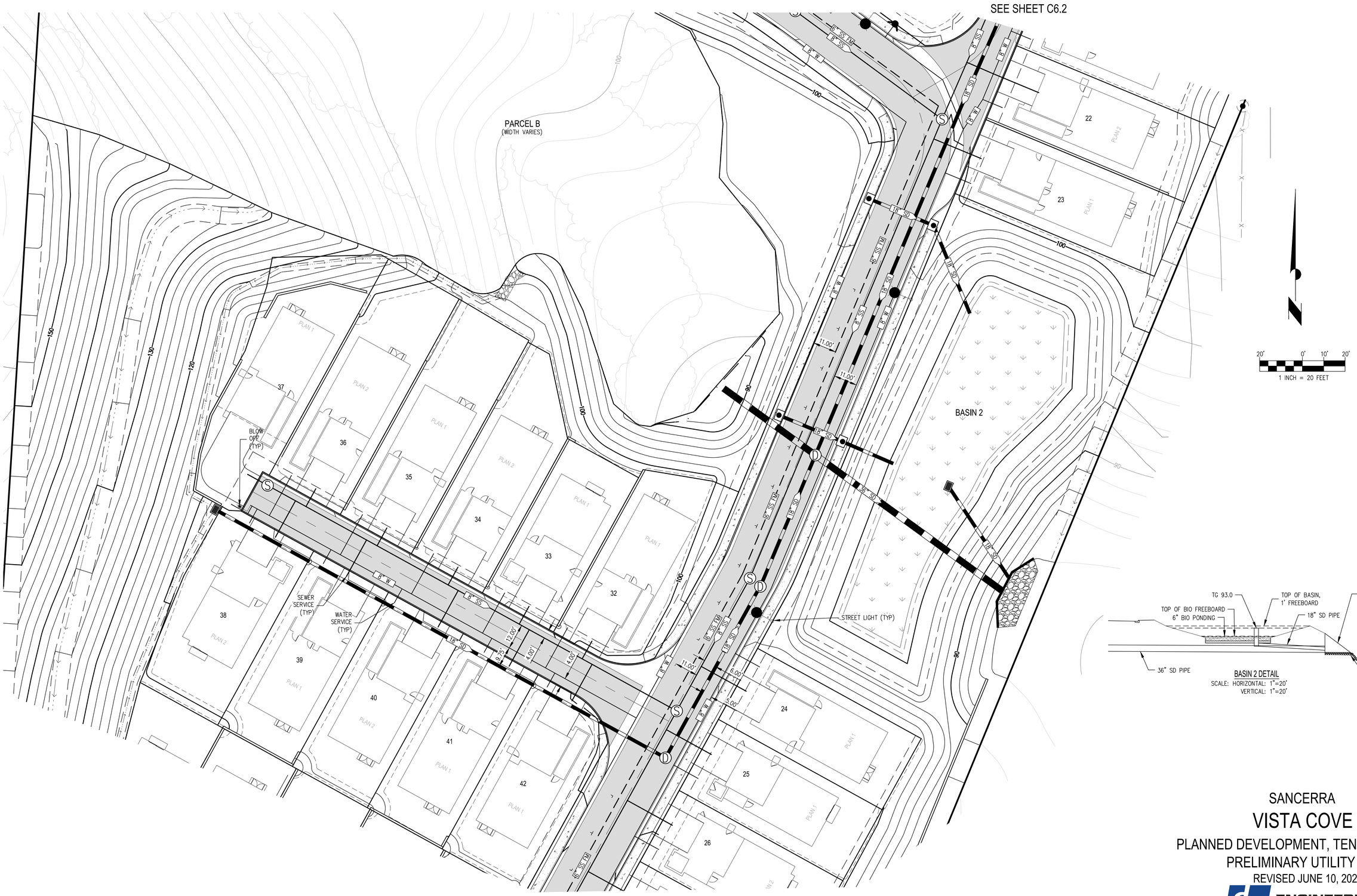
VISTA COVE

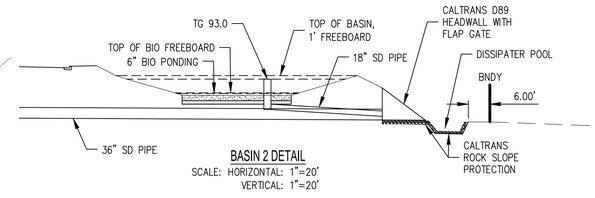
PLANNED DEVELOPMENT, TENTATIVE MAP
PRELIMINARY UTILITY PLAN
REVISED JUNE 10, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C6.4

dk JOB# 22-1008-10





BASIN 2 DETAIL
SCALE: HORIZONTAL: 1"=20'
VERTICAL: 1"=20'

SANCERRA

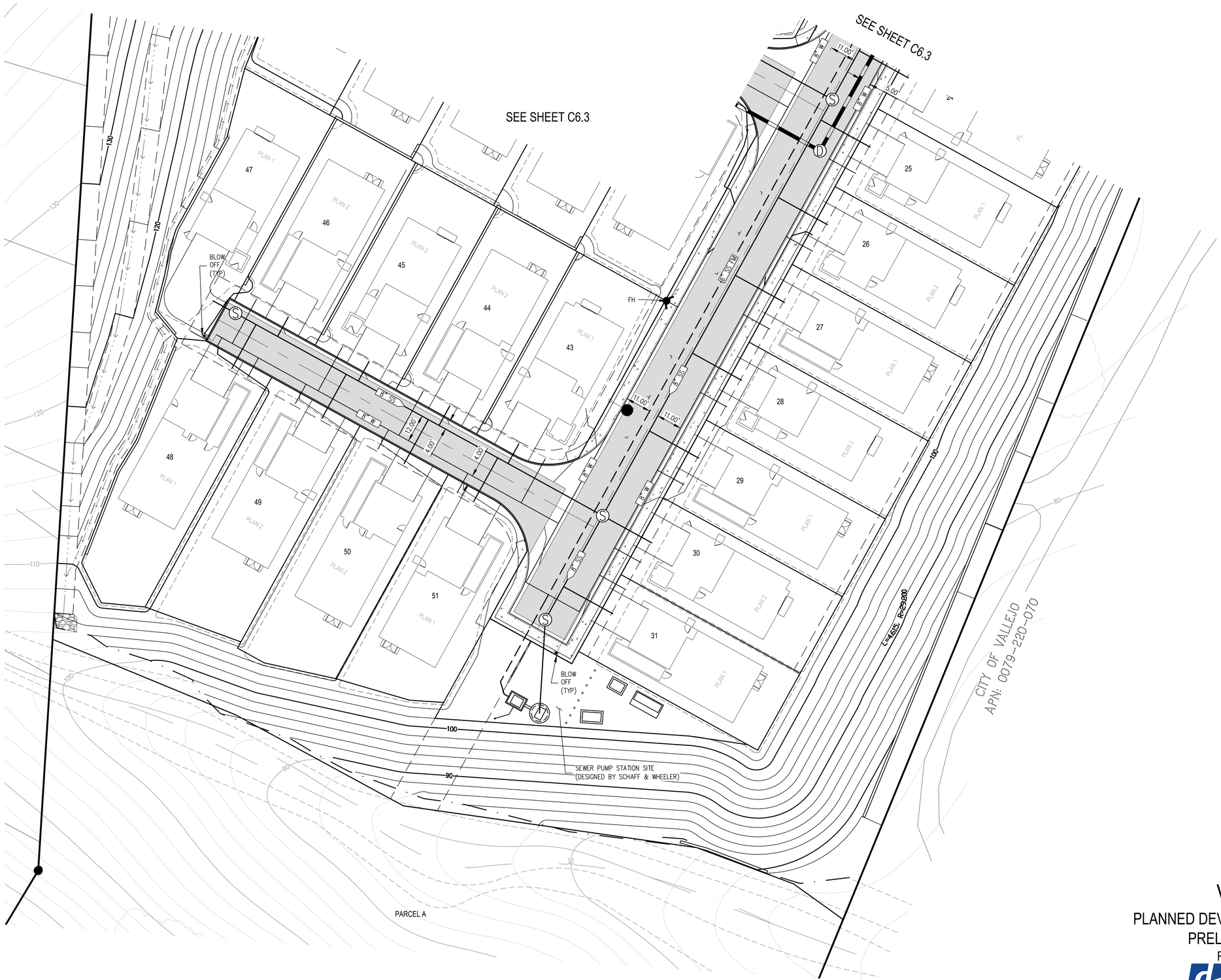
VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP
PRELIMINARY UTILITY PLAN
REVISED JUNE 10, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C6.3

dk JOB# 22-1008-10



20' 0' 10' 20'

1 INCH = 20 FEET

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP

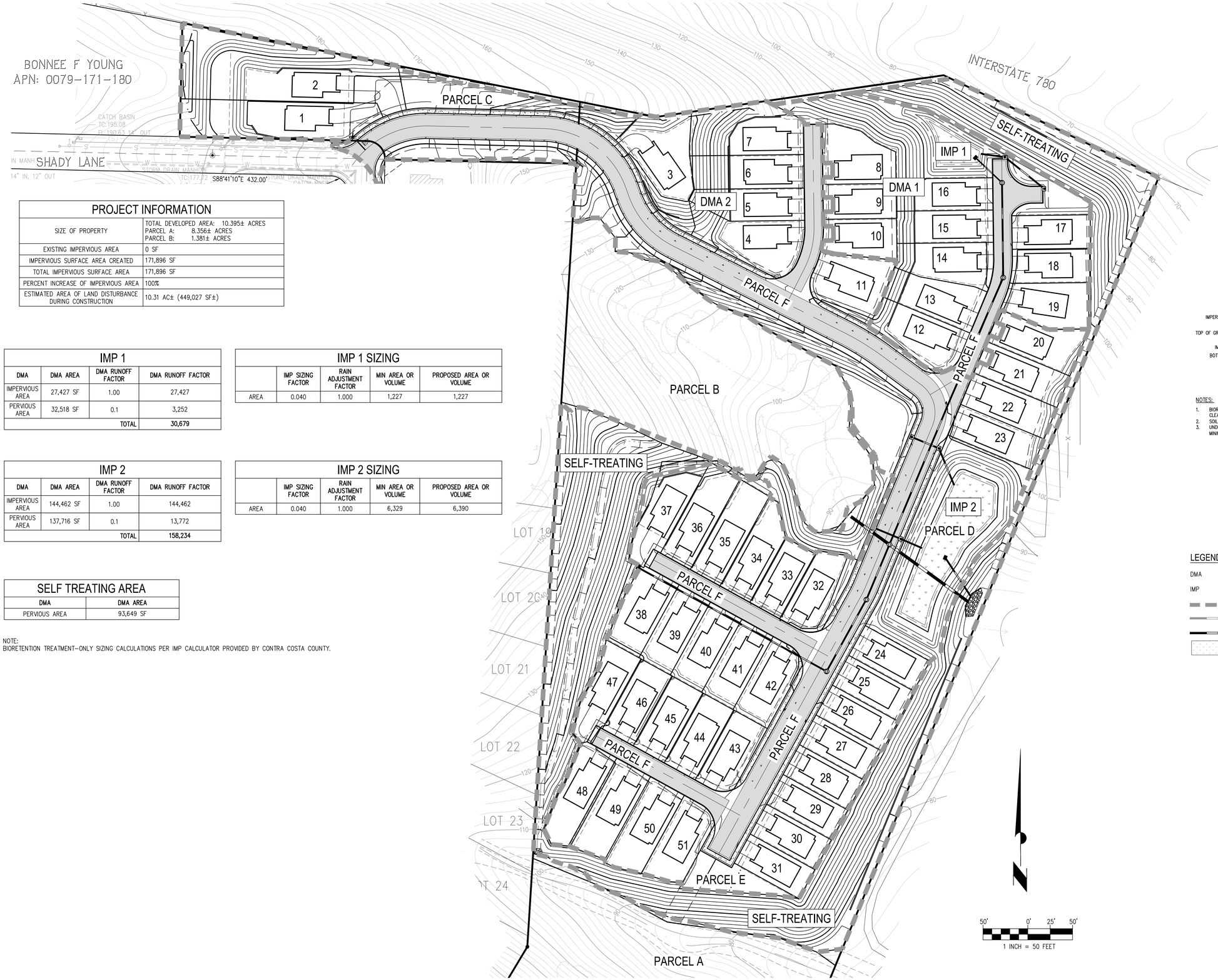
PRELIMINARY UTILITY PLAN

REVISED JUNE 10, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C6.4

I:\PROJECTS\2021\21-1008 VISTA COVE - VALLEJO\PLOT\TENTATIVE MAP\C6.1-6.4 PRELIMINARY UTILITY PLAN.DWG 6/5/2025



PROJECT INFORMATION	
SIZE OF PROPERTY	TOTAL DEVELOPED AREA: 10.395± ACRES PARCEL A: 8.356± ACRES PARCEL B: 1.381± ACRES
EXISTING IMPERVIOUS AREA	0 SF
IMPERVIOUS SURFACE AREA CREATED	171,896 SF
TOTAL IMPERVIOUS SURFACE AREA	171,896 SF
PERCENT INCREASE OF IMPERVIOUS AREA	100%
ESTIMATED AREA OF LAND DISTURBANCE DURING CONSTRUCTION	10.31 AC± (449,027 SF±)

IMP 1			
DMA	DMA AREA	DMA RUNOFF FACTOR	DMA RUNOFF FACTOR
IMPERVIOUS AREA	27,427 SF	1.00	27,427
PERVIOUS AREA	32,518 SF	0.1	3,252
		TOTAL	30,679

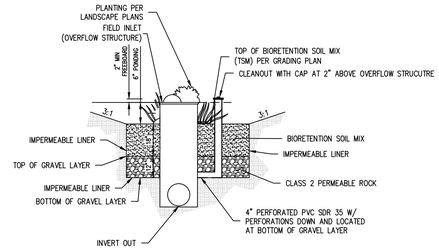
IMP 1 SIZING				
	IMP SIZING FACTOR	RAIN ADJUSTMENT FACTOR	MIN AREA OR VOLUME	PROPOSED AREA OR VOLUME
AREA	0.040	1.000	1,227	1,227

IMP 2			
DMA	DMA AREA	DMA RUNOFF FACTOR	DMA RUNOFF FACTOR
IMPERVIOUS AREA	144,462 SF	1.00	144,462
PERVIOUS AREA	137,716 SF	0.1	13,772
		TOTAL	158,234

IMP 2 SIZING				
	IMP SIZING FACTOR	RAIN ADJUSTMENT FACTOR	MIN AREA OR VOLUME	PROPOSED AREA OR VOLUME
AREA	0.040	1.000	6,329	6,390

SELF TREATING AREA	
DMA	DMA AREA
PERVIOUS AREA	93,649 SF

NOTE:
BIORETENTION TREATMENT-ONLY SIZING CALCULATIONS PER IMP CALCULATOR PROVIDED BY CONTRA COSTA COUNTY.



NOTES:
1. BIORETENTION FACILITY SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT CONTRA COSTA CLEAN WATER PROGRAM, C.3 GUIDEBOOK AND CITY OF VALLEJO APPENDIX A.
2. SOIL MIX SHALL HAVE A MINIMUM PERCOLATION RATE OF 5"/HOUR.
3. UNDERDRAIN SHALL HAVE CLEANOUTS CONSISTING OF RIGID, NON-PERFORATED PVC PIPE WITH A MINIMUM DIAMETER OF 4" AND A WATERTIGHT CAP.

TYPICAL BIORETENTION DETAIL
NOT TO SCALE

LEGEND

DMA	DRAINAGE MANAGEMENT AREA
IMP	INTEGRATED MANAGEMENT PRACTICE
	DMA BOUNDARY
	EXISTING STORM DRAIN PIPE
	PROPOSED STORM DRAIN PIPE
	BIORETENTION

SANCERRA
VISTA COVE
PLANNED DEVELOPMENT, TENTATIVE MAP
STORMWATER CONTROL PLAN
MAY 9, 2024

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C7.0

F:\PROJECTS\2022\22-1008 VISTA COVE - VALLEJO\CIVIL\TENTATIVE MAP\C7.0 STORMWATER CONTROL PLAN.DWG 5/9/2024

EROSION CONTROL NOTES

1. TEMPORARY EROSION CONTROL DEVICES SHOWN ON PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.

2. EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, ALL DEVICES SHOWN ON THE EROSION CONTROL PLAN SHALL BE IN PLACE THROUGHOUT THE DAY. ALL EROSION CONTROL FACILITIES MUST BE INSPECTED AND REPAIRED AT THE END OF EACH WORKING DAY DURING THE RAINY SEASON AND MAINTAINED AT ALL TIMES.

3. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE PROVISIONS OF THE ASSOCIATION OF BAY AREA GOVERNMENTS (ABAG) "MANUAL OF STANDARDS FOR EROSION AND SEDIMENT CONTROL MEASURES" UNLESS OTHERWISE STATED WITHIN THESE GENERAL NOTES. THE EROSION AND SEDIMENT CONTROL MEASURES SHALL ALSO CONFORM TO THE REQUIREMENTS OF THE CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA) STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK. CONTROL MEASURES ARE SUBJECT TO THE INSPECTION AND APPROVAL OF THE CITY ENGINEER.

4. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR. THE SITE SHALL BE MAINTAINED SO AS TO PREVENT SEDIMENT LADEN RUNOFF TO ANY STORM DRAIN SYSTEM.

5. ADDITIONAL CONTAINMENT METHODS MUST BE PROVIDED FOR ANY WASTE STORAGE AREA, STOCKPILE/MATERIAL STORAGE AREA AND/OR CONSTRUCTION TOILET AREA.

6. STAND-BY CREWS SHALL BE ALERTED BY THE PERMITTEE OR CONTRACTOR FOR EMERGENCY WORK DURING RAINSTORMS.

7. AS A PART OF THE EROSION CONTROL MEASURES, UNDERGROUND STORM DRAIN FACILITIES AND CONCRETE SHALL BE INSTALLED COMPLETE AS SHOWN ON THE PLANS.

8. ALL GRADED AREAS, INCLUDING, BUT NOT LIMITED TO, CUT AND FILL SLOPES, STREETS, PARKING AREAS, AND BUILDING PADS SHALL BE HYDROSEEDED PER ABAG. IN ADDITION TO HYDROSEEDING, APPLICATION OF STRAW WITH A TACKIFIER OR MULCH MAY BE REQUIRED BY THE CITY ENGINEER.

9. IF ANY GRADING OPERATIONS ARE TO BE PERFORMED AN EROSION CONTROL PLAN MUST BE SUBMITTED AND THE PLAN MUST BE APPROVED BY THE CITY PRIOR TO THE COMMENCEMENT OF ANY SUCH GRADING OPERATIONS.

10. TO PREVENT EROSION OF GRADED BANKS, ALL GRADED BANKS STEEPER THAN 2% AND HIGHER THAN 3 FEET, SHALL BE HYDROSEEDED, LANDSCAPED, OR SEALED. IN ADDITION TO HYDROSEEDING, APPLICATION OF STRAW WITH A TACKIFIER OR MULCH MAY BE REQUIRED BY THE CITY ENGINEER. IF THE PERMANENT STORM DRAIN SYSTEM IS NOT INSTALLED, TEMPORARY DITCHES SHALL BE CONSTRUCTED TO CONTAIN THE STORM WATER AND DIRECT IT, IN A MANNER THAT AVOIDS EROSION OF THE BANKS, TO THE EROSION AND SEDIMENT CONTROL FACILITIES. HYDROSEEDING, STRAW MULCH, OR OTHER SUCH EROSION CONTROL DEVICES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND SHALL MEET THE REQUIREMENTS OF THE CALIFORNIA STORMWATER QUALITY ASSOCIATION STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK. POTENTIAL RECOMMENDATIONS FOR STRAW MULCH INSTALLATION MAY BE ANCHORED WITH A TACKIFIER STABILIZING EMULSION. THE SLOPES SHALL BE LANDSCAPED OR HYDROSEEDED AS SOON AS POSSIBLE AFTER THE GRADING OPERATION CEASES.

11. ALL CUT AND FILL SLOPES ARE TO BE PROTECTED TO PREVENT OVERBANK FLOW USING SILT FENCES.

12. BORROW AREAS AND TEMPORARY STOCKPILES SHALL BE PROTECTED WITH APPROPRIATE EROSION CONTROL MEASURES TO THE SATISFACTION OF THE CITY ENGINEER. TEMPORARY AND/OR PERMANENT STOCKPILES SHALL BE COVERED WITH PLASTIC SHEETING (I.E., VISQUEEN) AND SECURED AT THE PERIMETER BASE AT ALL TIMES OR AT THE END OF EACH WORK DAY IF IN USE.

13. SANDBAGS AND/OR STRAW WATTLES SHALL BE STOCKPILED ON SITE AND PLACED AT INTERVALS SHOWN ON EROSION CONTROL PLANS OR WHEN DIRECTED BY THE INSPECTOR.

14. SANDBAGS REFERRED TO IN THE PRECEDING ITEMS MUST BE FULL. APPROVED SANDBAG FILL MATERIALS ARE DECOMPOSED GRANITE AND/OR GRAVEL, OR OTHER MATERIALS APPROVED BY THE INSPECTOR.

15. THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THESE PLANS IN THE FIELD, SUBJECT TO APPROVAL OF THE CITY ENGINEER.

16. EROSION CONTROL STRUCTURES SHALL BE ADJUSTED AND UPDATED ON THESE MAPS BY THE CONTRACTOR TO REFLECT ALL CHANGES IN DRAINAGE AS STREETS AND BUILDING PADS ARE BEING INSTALLED.

17. STORM DRAIN TRENCHES THAT ARE OUT THROUGH BASIN DIKES OR BASIN INLET DIKES, SHALL BE PLUGGED WITH SANDBAGS FROM TOP OF PIPE TO TOP OF DIKE.

18. PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED GRADED CHANNELS AT THE INTERVALS INDICATED BELOW:

GRADE OF CHANNEL	INTERVAL
LESS THAN 3%	100 FEET
3% TO 6%	50 FEET
OVER 6%	25 FEET

VELOCITY CHECK DAMS SHALL BE CONSTRUCTED OF GRAVEL BAGS AND SHALL EXTEND 2/3 OF THE DISTANCE ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. EARTH DIKES MAY NOT BE USED AS VELOCITY CHECK DAMS. THE GRAVEL BAGS SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE PROJECT'S SWPPP.

19. SEDIMENT TRAPS SHALL BE CLEANED OUT WHENEVER SEDIMENT REACHES 6" FROM THE OUTLET. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAN THE DESILTING BASINS AND THE SEDIMENT TRAPS.

20. ALL OPEN UTILITY TRENCHES SHALL BE BLOCKED AT THE PRESCRIBED INTERVALS FROM THE BOTTOM TO TOP WITH A DOUBLE ROW OF SANDBAGS PRIOR TO BACKFILL. SANDBAGS ARE TO BE PLACED WITH ALTERNATE HEADER AND STRETCHER COURSES. THE INTERVALS PRESCRIBED BETWEEN SANDBAG LOCKING SHALL DEPEND ON THE SLOPE OF THE GROUND SURFACE, BUT NOT EXCEED THE FOLLOWING:

GRADE OF THE STREET	INTERVAL
LESS THAN 2%	AS REQUIRED
2% TO 4%	100 FEET
4% TO 10%	50 FEET
OVER 10%	25 FEET

21. AFTER STORM DRAIN AND UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY AND COVERED OR HYDROSEEDED TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTER LINE OF A CROWNED STREET.

EROSION CONTROL NOTES (CON'T)

22. ALL EXISTING CATCH BASINS ON THE SITE OR IMMEDIATELY DOWNSTREAM FROM THE SITE SHALL BE PROTECTED WITH A CITY APPROVED STORM DRAIN INLET PROTECTION DEVICE. THE STORM DRAIN INLET DEVICE SHALL MEET THE MINIMUM REQUIREMENTS IN THE CALIFORNIA STORMWATER QUALITY ASSOCIATION STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

23. FOR THE DISPOSAL OF CONCRETE WASTE, A CONCRETE WASH OUT SHALL BE PLACED IN THE VEHICLE AND EQUIPMENT STORAGE AND MAINTENANCE AREA. THE CONCRETE WASH OUT SHALL MEET THE MINIMUM REQUIREMENTS IN THE CALIFORNIA STORMWATER QUALITY ASSOCIATION STORMWATER BEST MANAGEMENT PRACTICE HANDBOOK AND INSTALLED, USED, AND MAINTAINED PER MANUFACTURER'S RECOMMENDATIONS.

24. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED DURING ALL CONSTRUCTION PHASES.

25. THE DEVELOPER SHALL POST DUST CONTROL SIGNAGE WITH A CONTACT NUMBER OF THE DEVELOPER, CITY STAFF, AND THE AIR QUALITY CONTROL BOARD.

26. FOR DETAILS NOT SHOWN ON THESE PLANS, REFER TO THE FOLLOWING CASQA BMP FACT SHEETS:

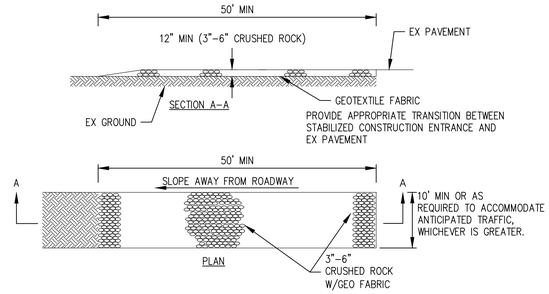
SE-1	SILT FENCE
SE-4	CHECK DAMS
SE-5	FIBER ROLLS
SE-6	GRAVEL BAG BERM
SE-10	STORM DRAIN INLET PROTECTION
WM-1	MATERIAL DELIVERY & STORAGE
WM-8	CONCRETE WASTE MANAGEMENT

27. THE EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THIS PLAN MAY NOT COVER ALL UNFORESEEN FIELD AND/OR WEATHER CONDITIONS. VARIATIONS OF DESIGNS MAY BE ALTERED TO FIT ACTUAL FIELD CONDITIONS. UNDER THE DIRECTIONS OF THE SITE QUALIFIED SWPPP PRACTITIONER (QSP), CONTRACTOR SHALL MAKE NECESSARY ADJUSTMENTS ACCORDINGLY.

AIR QUALITY CONTROL NOTES

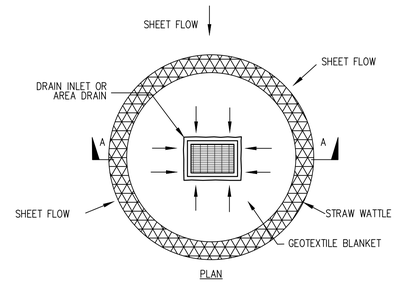
AQ-1 – DURING CONSTRUCTION ACTIVITIES, THE PROJECT APPLICANT AND/OR ITS CONTRACTOR SHALL ENSURE THAT THE BAAQMD'S BASIC CONSTRUCTION MITIGATION MEASURES ARE IMPLEMENTED:

1. ALL EXPOSED SURFACES (E.G. PARKING AREAS, STAGING AREAS, SOIL PILES, GRADED AREAS, AND UNPAVED ACCESS ROADS SHALL BE WATERED TWO TIMES PER DAY.
2. ALL HAUL TRUCKS TRANSPORTING SOIL, SAND OR OTHER LOOSE MATERIAL OFF-SITE SHALL BE COVERED.
3. ALL VISIBLE MUD OR DIRT TRACK-OUT ON TO ADJACENT PUBLIC ROADS SHALL BE REMOVED USING WET POWER VACUUM STREET SWEEPERS AT LEAST ONCE PER DAY. THE USE OF DRY POWER SWEEPING IS PROHIBITED.
4. ALL VEHICLE SPEEDS ON UNPAVED ROADS SHALL BE LIMITED TO 15 MPH.
5. ALL ROADWAYS, DRIVEWAYS, AND SIDEWALKS TO BE PAVED SHALL BE COMPLETED AS SOON AS POSSIBLE. BUILDING PADS SHALL BE LAID AS SOON AS POSSIBLE AFTER GRADING UNLESS SEEDING OR SOIL BINDERS ARE USED.
6. IDLING TIMES SHALL BE MINIMIZED EITHER BY SHUTTING EQUIPMENT OFF WHEN NOT IN USE OR REDUCING THE MAXIMUM IDLING TIME TO 5 MINUTES (AS REQUIRED BY THE CALIFORNIA AIRBORNE TOXICS CONTROL MEASURE TITLE 13, SECTION 2485 OF THE CALIFORNIA CODE OF REGULATIONS).
7. ALL CONSTRUCTION EQUIPMENT SHALL BE MAINTAINED AND PROPERLY TUNED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. ALL EQUIPMENT SHALL BE CHECKED BY A CERTIFIED VISIBLE EMISSIONS EVALUATOR.
8. POST A PUBLICLY VISIBLE SIGN WITH THE TELEPHONE NUMBER AND PERSON TO CONTACT THE LEAD AGENCY REGARDING DUST COMPLAINTS. THIS PERSON SHALL RESPOND AND TAKE CORRECTIVE ACTION WITHIN 48 HOURS. THE AIR DISTRICT'S PHONE NUMBER SHALL ALSO BE VISIBLE TO ENSURE COMPLIANCE WITH APPLICATION REGULATIONS.



STABILIZED CONSTRUCTION ENTRANCE

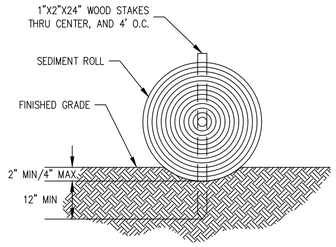
NOT TO SCALE



STORM DRAIN INLET PROTECTION DETAIL

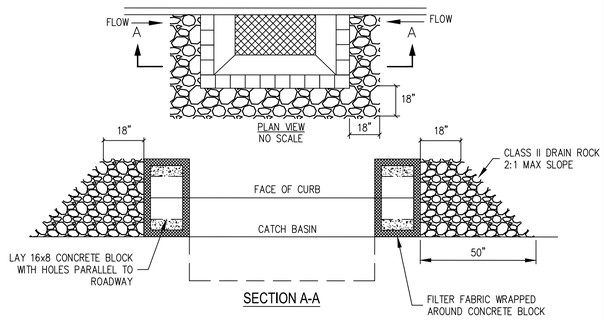
NOT TO SCALE

SPACING REQUIREMENTS	
SLOPE PERCENTAGE	SHEET FLOW LENGTH NOT TO EXCEED
0-25%	20 FEET
25-50%	15 FEET
OVER 50%	10 FEET



FIBER ROLL DETAIL

NOT TO SCALE



TYPE B STORM DRAIN INLET PROTECTION

NOT TO SCALE

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP

EROSION CONTROL NOTES

MAY 9, 2024

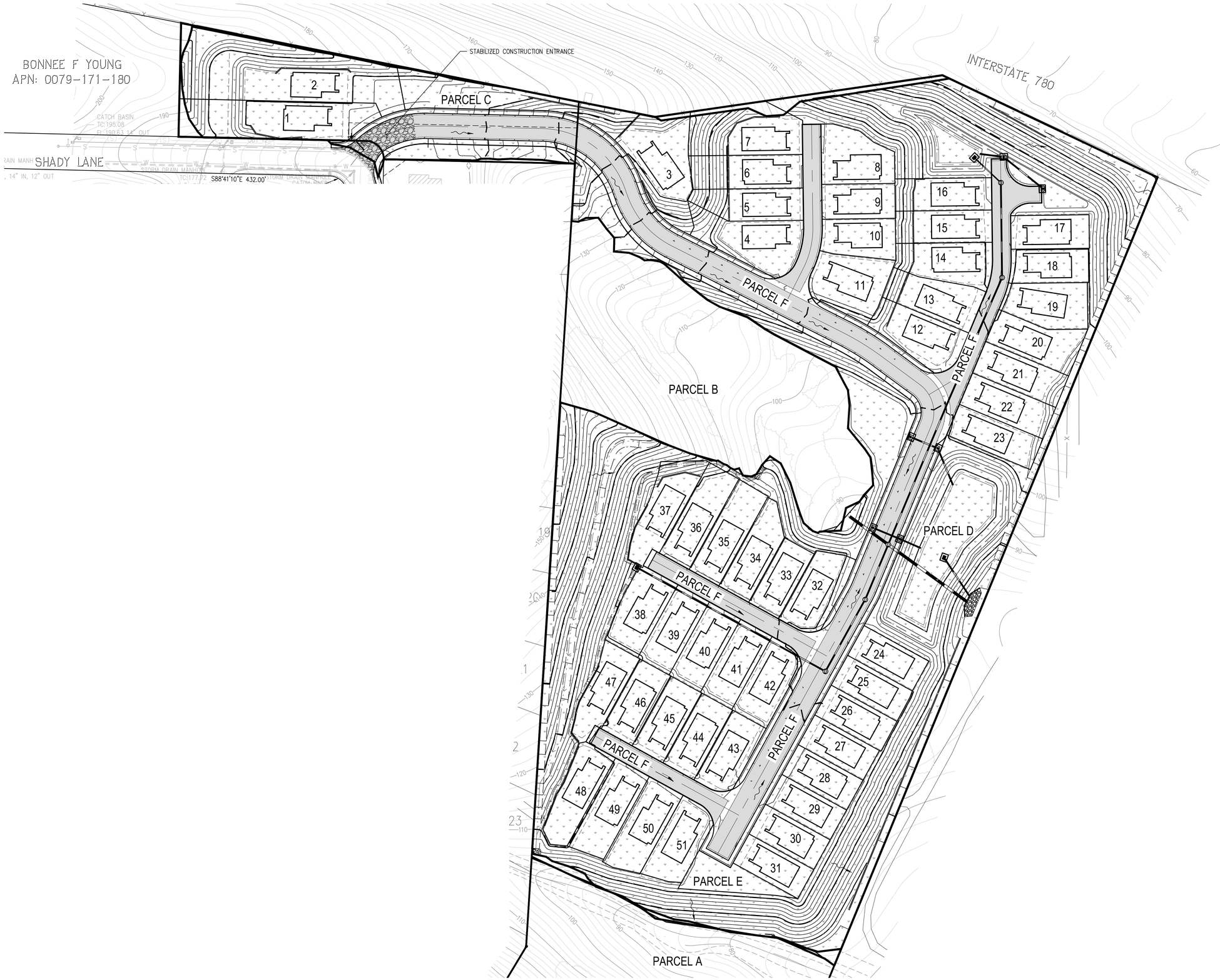
ENGINEERING SURVEYING • PLANNING

1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596

WWW.DKENGIN.COM (925) 932-6868

C8.0

I:\PROJECTS\2022\22-1008 VISTA COVE - VALLEJO\PLANS\TENTATIVE MAP\CES\ EROSION CONTROL NOTES.DWG 5/9/2024



LEGEND

- INLET PROTECTION (SE-10)
- FIBER ROLL (SE-5)
- SILT FENCE (SE-1)
- HYDROSEED (EC-4)
- STABILIZED CONSTRUCTION ENTRANCE (TC-1)
- PROPOSED PAD LIMITS
- DIRECTION OF FLOW WITH STORM DRAIN INSTALLED

SWPPP MANAGER TO MARK KNOWN LOCATIONS

- MATERIALS AND EQUIPMENT STORAGE AREA (WM-1 TO WM-3)
- VEHICLE MAINTENANCE/FUELING AREA (NS-8 TO NS-10)
- SANITARY FACILITY (WM-9)
- CONCRETE/WASTE WASHOUT (WM-81)

NOTES:

1. BEST MANAGEMENT PRACTICE (BMP) DESIGNATIONS ARE PER THE CASQA STORMWATER BMP HANDBOOK.
2. THE MATERIALS AND EQUIPMENT STORAGE AREA, VEHICLE MAINTENANCE/FUELING AREA, SANITARY FACILITY, AND CONCRETE/WASTE WASHOUT WILL BE PLACED AT THE QSP'S DISCRETION AND ARE SUBJECT TO CHANGE.

EXPLANATION OF EROSION CONTROL PLAN

SINCE IT IS NEVER KNOWN AT WHAT POINT IN THE CONSTRUCTION PROJECT THE RAINS WILL COME, THIS EROSION CONTROL PLAN IS A SNAPSHOT IN TIME, DEPICTING WHAT MEASURES SHOULD BE IMPLEMENTED ASSUMING THAT THE RAINS WILL ARRIVE WHEN THE PROJECT IS AT THE FOLLOWING DESCRIBED LEVEL OF COMPLETENESS:

- MASS GRADING IS COMPLETE;
- THE HARDSCAPE SUBGRADE IS GRADED PROPERLY, BUT REMAINS EXPOSED WITHOUT ANY GRAVEL OR CONCRETE;
- THE UNDERGROUND PORTION OF THE ENTIRE STORM DRAIN SYSTEM IS COMPLETE;
- THE MAJOR STORM DRAIN INLETS HAVE BEEN CONSTRUCTED;
- CURB INLETS HAVE BEEN CONSTRUCTED, BUT HAVE NOT BEEN "TOPPED OUT", I.E. THE OPEN TOP OF THE INLET IS APPROXIMATELY AT ROAD SUBGRADE ELEVATION;
- THE MINOR STORM DRAIN INLETS (YARD DRAINS, ETC.) HAVE NOT YET BEEN CONSTRUCTED.

THE CONDITION DESCRIBED ABOVE IS THE MOST CRITICAL TIME IN THE PROJECT FROM THE STANDPOINT OF EROSION AND SEDIMENT CONTROL. BECAUSE THE SITE HAS THE MAXIMUM AMOUNT OF EXPOSED SOIL, WHILE THE STORM DRAIN PIPES CA CONVEY SEDIMENT VERY RAPIDLY TO THE OUTFALL OR TO THE MUNICIPAL STORM DRAIN SYSTEM. THE EROSION CONTROL PLAN ASSUMES THIS WORST CASE CONDITION, BUT, SINCE IT IS VERY UNLIKELY THAT THE RAINS WILL ARRIVE PRECISELY AT THE ABOVE-DESCRIBED MOMENT, THE CONTRACTOR, AS DIRECTED BY THE QSP, MUST BE PREPARED TO PROTECT THE PROJECT SITE UNDER ANY OTHER CONDITIONS. THE CONTRACTOR MUST PLACE THE EROSION AND SEDIMENTATION CONTROLS AS AND WHERE NECESSARY FOR CONDITIONS OTHER THAN THAT DESCRIBED ABOVE, AND MOVE THEM AS NECESSARY AS CONSTRUCTION PROGRESSES.

50' 0' 25' 50'

1 INCH = 50 FEET

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP
EROSION CONTROL PLAN
MAY 9, 2024

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C8.1

dk JOB# 22-1008-10

SHEET 21 OF 25

Page 2092 of 2151

LEGEND

ON-STREET PARKING STALL	
RED STRIPE MARKED "NO PARKING - FIRE LANE"	
FIRE HYDRANT	
REFLECTIVE BLUE DOT, FIRE HYDRANT MARKER INSTALLED ADJACENT TO THE HYDRANT, 6" FROM THE STREET CENTERLINE	
STREET NAME SIGN	
STOP SIGN	R1-1
STOP PAVEMENT MARKING WITH 12" STOP BAR	STOP

ON- STREET PARKING SUMMARY

TOTAL ON-STREET PARKING STALLS: 24 STALLS
MAILBOX PARKING ONLY STALL: 1 STALL

50' 0' 25' 50'
1 INCH = 50 FEET

SANCERRA

VISTA COVE

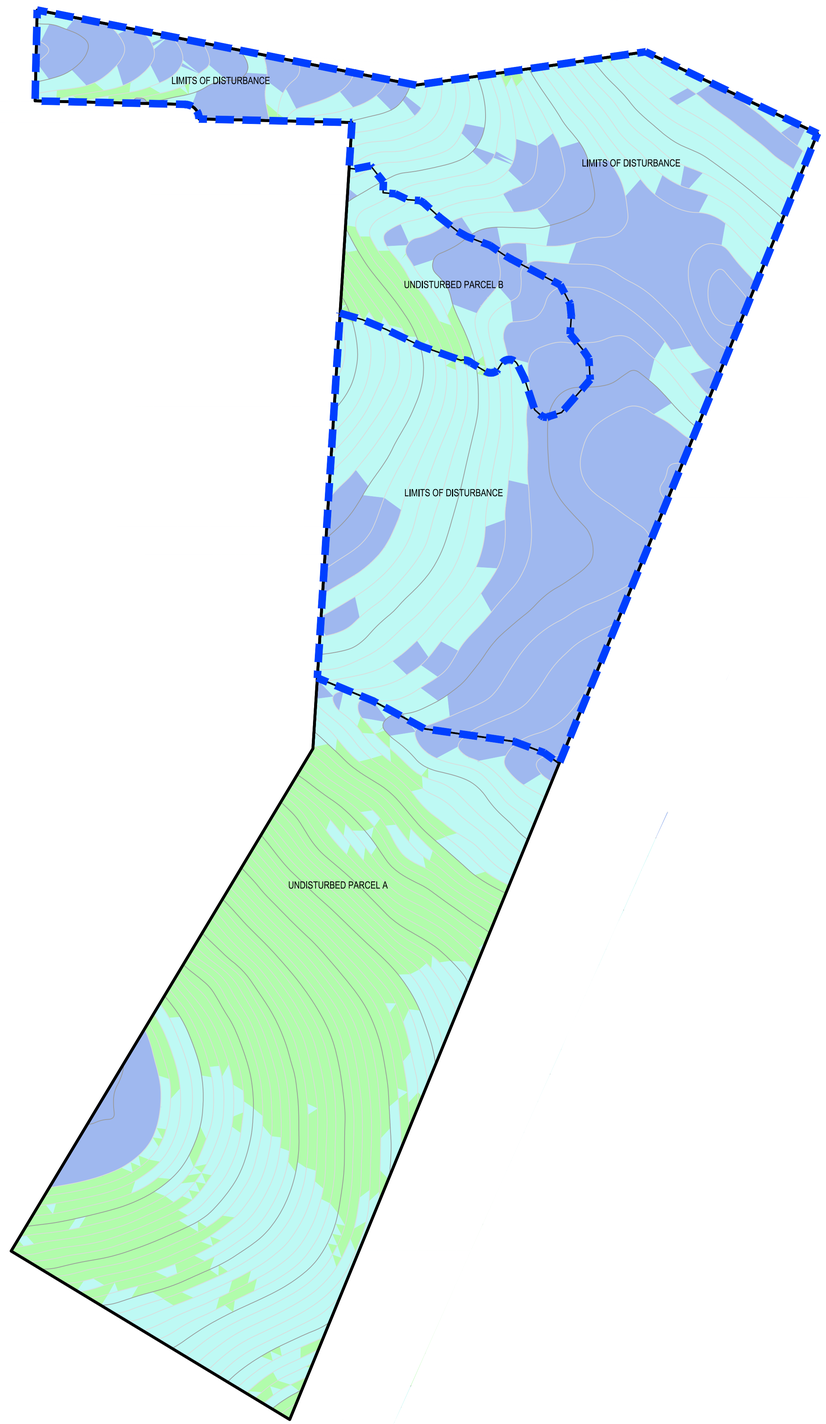
PLANNED DEVELOPMENT, TENTATIVE MAP
SIGNING AND STRIPING PLAN
MAY 9, 2024

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C9.0

F:\PROJECTS\2022\22-1008 VISTA COVE - PHILLIP\CAD\TENTATIVE MAP\C9.0 SIGNING AND STRIPING PLAN.DWG 5/7/2024

dk JOB# 22-1008-10



SLOPES TABLE

NUMBER	MINIMUM SLOPE	MAXIMUM SLOPE	COLOR
1	0.00%	14.49%	
2	14.50%	29.49%	
3	29.50%	1000.00%	

PROPOSED PARCEL LINE
PROPERTY BOUNDARY
LIMITS OF DISTURBANCE

SLOPE CONTOUR MEASUREMENT	
PARCEL	CONTOUR MEASUREMENT
LIMITS OF DISTURBANCE	14.43%

CONTOUR MEASUREMENT OF LIMITS OF DISTURBANCE:

S = AVERAGE SLOPE
L= LENGTH OF CONTOURS (LINEAR FEET) = 16,375 LF
I = CONTOUR INTERVAL = 4' INTERVAL
A= AREA OF PROJECT SITE (ACRES) = 10.395 ACRES

S = (L*I*0.00229)/A
S = 14.43%

% LIMITS OF DISTURBANCE:

AREA DISTURBED: 10.395± ACRES
AREA UNDISTURBED: 9.737± ACRES
TOTAL AREA: 20.132± ACRES

PERCENT DISTURBED: 51.6%
PERCENT UNDISTURBED: 48.4%

100' 0' 50' 100'
1 INCH = 100 FEET

SANCERRA
VISTA COVE
PLANNED DEVELOPMENT, TENTATIVE MAP
HILLSIDE DEVELOPMENT
MAY 9, 2024

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C10.0

dk JOB# 22-1008-10
SHEET 23 OF 25
Page 2094 of 2151

LEGEND

PROPOSED FIRE HYDRANT

FH FIRE HYDRANT

FIRE TRUCK TURNING SIMULATION

NOTE:
TRUCK CIRCULATION TEMPLATE PROVIDED BY CITY OF VALLEJO FIRE PROTECTION MANAGER

40' 0' 20' 40'

1 INCH = 40 FEET

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP

FIRE TRUCK TURNAROUND

MAY 9, 2024

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C11.0

F:\PROJECTS\2022\22-1008 VISTA COVE - VALLEJO\CAD\TENTATIVE MAP\C11.0 FIRE TRUCK TURNAROUND.DWG 5/7/2024

dk JOB# 22-1008-10

PLAN TYPE SUMMARY		
DESCRIPTION	# OF HOMES	SYMBOL
PLAN TYPE 1	9	
PLAN TYPE 2	13	
PLAN TYPE 3	17	
PLAN TYPE 4	12	

SANCERRA

VISTA COVE

PLANNED DEVELOPMENT, TENTATIVE MAP
PLOTTED SITE PLAN
REVISED JUNE 10, 2025

ENGINEERING
SURVEYING • PLANNING
1931 SAN MIGUEL DRIVE, SUITE 100, WALNUT CREEK, CA 94596
WWW.DKENGIN.COM (925) 932-6868

C12.0

dk JOB# 22-1008-10

PROPOSED PLANT PALETTE

BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS IV	SPACING
TREES				
ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	15 GAL	MOD	15' O.C.
GINKGO BILOBA 'AUTUMN GOLD'	AUTUMN GOLD MAIDENHAIR TREE	15 GAL	MOD	30' O.C.
QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	LOW	25' O.C.
QUERCUS LOBATA	VALLEY OAK	15 GAL	LOW	35' O.C.
QUERCUS ROBUR 'FASTIGIATA'	SKYROCKET ENGLISH OAK	15 GAL	MOD	15' O.C.
TILIA CORDATA 'GREENSPIRE'	GREENSPIE LITTLELEAF LINDEN	15 GAL	MOD	25' O.C.

NOTES: ALL TREES ARE STANDARD FORM UNLESS OTHERWISE NOTED
SEE LANDSCAPE PLAN SHEETS L-2 - L-5 FOR QUANTITIES AND ESTIMATED REPRESENTATION OF TREE CANOPY WITHIN 3 YEARS

SHRUBS				
ACACIA COGNATA `COUSIN ITT`	RIVER WATTLE	1 GAL	LOW	48" o.c.
ACHILLEA SPP.	YARROW	1 GAL	LOW	36" o.c.
AGAVE X `BLUE GLOW`	BLUE GLOW AGAVE	5 GAL	LOW	30" o.c.
ANIGOZANTHOS SPP.	KANGAROO PAW	1 GAL	LOW	24" o.c.
ARCTOSTAPHYLOS SPP.	MANZANITA	5 GAL	LOW	60" o.c.
BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLUE GRAMA	1 GAL	LOW	36" o.c.
BULBINE FRUTESCENS	STALKED BULBINE	1 GAL	LOW	36" o.c.
CALAMAGROSTIS X ACUTIFLORA `KARL FOERSTER`	FEATHER REED GRASS	1 GAL	LOW	36" o.c.
CALANDRINIA SPECTABILIS	PINK CALANDRINIA	1 GAL	LOW	24" o.c.
CALLISTEMON VIMINALIS 'LITTLE JOHN'	LITTLE JOHN WEEPING BOTTLEBRUSH	5 GAL	LOW	36" o.c.
CAREX DIVULSA	EUROPEAN GREY SEDGE	1 GAL	LOW	24" o.c.
CEANOTHUS SPP.	CEANOTHUS	5 GAL	LOW	60" o.c.
CHONDROPETALUM SPP.	CAPE RUSH	1 GAL	LOW	36" o.c.
CISTUS SPP.	ROCKROSE	1 GAL	LOW	60" o.c.
DIETES IRIDIOIDES	FORTNIGHT LILY	1 GAL	LOW	36" o.c.
DODONAEA VISCOSA `PURPUREA`	PURPLE LEAFED HOPSEED BUSH	5 GAL	LOW	72" o.c.
EPILOBIUM CANUM	CALIFORNIA FUCHSIA	1 GAL	LOW	36" o.c.
ERIGERON GLAUCUS	BEACH DAISY	1 GAL	LOW	12" o.c.
ERIGERON KARVINSKIANUS	FLEABANE	1 GAL	LOW	36" o.c.
ERIOGONUM SPP.	BUCKWHEAT	1 GAL	LOW	36" o.c.
ERIOPHYLLUM SPP.	WOOLLY SUNFLOWER	1 GAL	LOW	24" o.c.
ESCALLONIA X `COMPACTA`	COMPACT ESCALLONIA	5 GAL	MOD	36" o.c.
FESTUCA SPP.	FESCUE	1 GAL	LOW	24" o.c.
FREMONTODENDRON CALIFORNICUM	CALIFORNIA FLANNEL BUSH	5 GAL	V. LOW	96" o.c.
GAURA LINDHEIMERI	SISKIYOU PINK GAURA	1 GAL	MOD	36" o.c.
GREVILLEA SPP.	GREVILLEA	1 GAL	LOW	48" o.c.
HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	1 GAL	LOW	24" o.c.
HEMEROCALLIS X `EVERGREEN YELLOW`	DAYLILY	5 GAL	MOD	24" o.c.
HESPERALOE PARVIFLORA	YUCCA	1 GAL	LOW	36" o.c.
HETEROMELES ARBUTIFOLIA	TOYON	5 GAL	V. LOW	96" o.c.
JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	LOW	24" o.c.
KNIPHOFIA UVARIA	TORCHLILY	1 GAL	LOW	36" o.c.
LANTANA SPP.	LANTANA	1 GAL	LOW	48" o.c.
LIGUSTRUM JAPONICUM `TEXANUM`	WAXLEAF PRIVET	5 GAL	LOW	72" o.c.
LIMONIUM PEREZII	STATICE	1 GAL	LOW	36" o.c.
LOROPETALUM CHINENSE	FRINGE FLOWER	5 GAL	LOW	60" o.c.
MIMULUS AURANTIACUS	STICKY MONKEYFLOWER	1 GAL	LOW	36" o.c.
MUHLENBERGIA CAPILLARIS	PINK MUHLY	1 GAL	LOW	36" o.c.
MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	LOW	48" o.c.
NANDINA DOMESTICA	LEMON LIME NANDINA	1 GAL	LOW	36" o.c.
NEPETA X FAASSENII `SIX HILLS GIANT`	GIANT CATMINT	1 GAL	LOW	36" o.c.
PENSTEMON SPP.	BEARD TONGUE	1 GAL	LOW	36" o.c.
PITTOSPORUM SPP.	PITTOSPORUM	5 GAL	LOW	60" o.c.
POLYGALA SPP.	SWEET PEA SHRUB	5 GAL	LOW	36" o.c.
PRUNUS CAROLINIANA `COMPACTA`	COMPACT CAROLINA LAUREL CHERRY	5 GAL	LOW	72" o.c.
RHAMNUS CALIFORNICA	COFFEEBERRY	5 GAL	LOW	72" o.c.
RHAPHIOLEPIS SPP.	INDIAN HAWTHORN	1 GAL	LOW	48" o.c.
ROSA SPP.	ROSE	5 GAL	MOD	36" o.c.
ROSMARINUS OFFICINALIS	TUSCAN BLUE ROSEMARY	1 GAL	LOW	48" o.c.
SALVIA SPP.	SAGE	1 GAL	LOW	48" o.c.
TULBAGHIA VIOLACEA	SOCIETY GARLIC	1 GAL	LOW	24" o.c.
WESTRINGIA FRUTICOSA	COAST ROSEMARY	5 GAL	LOW	48" o.c.
XYLOSMA CONGESTUM 'COMPACTA'	COMPACT XYLOSMA	5 GAL	LOW	72" o.c.
GROUNDCOVERS				
ARCTOSTAPHYLOS SPP.	GROUNDCOVER MANZANITA	1 GAL	LOW	60" o.c.
CEANOTHUS GRISEUS HORIZONTALIS	CALIFORNIA LILAC	1 GAL	LOW	72" o.c.
GREVILLEA LANIGERA `COASTAL GEM`	COASTAL GEM GREVILLEA	1 GAL	LOW	48" o.c.
HELIANTHEMUM NUMMULARIUM `HENFIELD BRILLIANT`	HENFIELD BRILLIANT ROCK ROSE	1 GAL	LOW	36" o.c.
MYOPORUM PARVIFOLIUM	MYOPORUM	1 GAL	LOW	60" o.c.
SCAEVOLA `MAUVE CLUSTERS`	FAN FLOWER	1 GAL	LOW	48" o.c.
SENECIO MANDRALISCAE	BLUE FINGER	1 GAL	LOW	36" o.c.
VERBENA SPP.	VERBENA	1 GAL	LOW	36" o.c.

IRRIGATION NOTES

1. THE IRRIGATION DESIGN FOR THE SITE SHALL COMPLY WITH THE STATE MANDATED MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO).
2. THE IRRIGATION SYSTEMS WILL BE AUTOMATICALLY CONTROLLED BY AN ET/'SMART' IRRIGATION CONTROLLER CAPABLE OF MULTIPLE PROGRAMMING AND INDEPENDENT TIMING OF INDIVIDUAL IRRIGATION SYSTEMS. THE CONTROLLER WILL HAVE A 24-HOUR CLOCK TO ALLOW MULTIPLE START TIMES AND REPEAT CYCLES TO ADJUST FOR SOIL PERCOLATION RATES.
3. THE IRRIGATION SYSTEMS WILL CONSIST PRIMARILY OF LOW VOLUME, LOW FLOW BUBBLERS FOR TREES, AND POINT SOURCE DRIP IRRIGATION FOR SHRUBS AND GROUNDCOVERS.
4. PLANTS WILL BE GROUPED ONTO SEPARATE VALVES ACCORDING TO SUN EXPOSURE AND WATER USE TO ALLOW FOR IRRIGATION APPLICATION BY HYDROZONE. THE IRRIGATION SCHEDULING WILL REFLECT THE REGIONAL EVAPO-TRANSPIRATION RATES. THE ENTIRE SITE WILL BE DESIGNED TO RUN DURING NIGHTTIME HOURS WHEN IRRIGATION IS MOST EFFICIENT.
5. ALL MWELO DOCUMENTATION INCLUDING IRRIGATION PLANS, WATER USE CALCULATIONS AND CERTIFICATES SHALL BE SUBMITTED WITH THE LANDSCAPE IMPROVEMENT PLANS FOR REVIEW AND APPROVAL.

PLANTING NOTES

1. THE PLANTING DESIGN FOR THE SITE IS DROUGHT TOLERANT AND CONSISTS OF A BALANCE OF EVERGREEN AND DECIDUOUS PLANTING AS WELL AS NATIVE AND ORNAMENTAL PLANTING.
2. PROPOSED TREE LOCATIONS ARE BASED ON STANDARD JOINT TRENCH LOCATIONS. FINAL TREE LOCATIONS TO BE DETERMINED WHEN FINAL UTILITY LOCATIONS ARE PROVIDED. TREE PLACEMENT MAY BE ADJUSTED AND FINAL TREE COUNT MAY CHANGE.
3. ALL SHRUBS AND GROUNDCOVER MATERIAL SELECTED HAVE A WUCOLS WATER USE RATING OF VERY LOW TO MODERATE.
4. PROPOSED TREE CANOPIES ARE SHOWN AT 85% MATURE GROWTH DIAMETER IN ORDER TO ENSURE THERE IS SUFFICIENT ROOM FOR TREE GROWTH AND HEALTH.

PROPOSED HYDROSEED PALETTE

BIORETENTION AREAS NATIVE ORNAMENTAL BIOSWALE MIX	AVAILABLE FROM: PACIFIC COAST SEED 925.373.4417	APPLICATION RATE: 80 LBS/ACRE	QUANTITY: 18,530 SF	
	BOTANICAL NAME	COMMON NAME	WATER USE	
	FESTUCA RUBRA	MOLATE RED FESCUE	MOD	
	FESTUCA OVINA INGRATA	WESTERN FESCUE	MOD	
	FESTUCA IDAHOENSIS	IDAHO FESCUE	LOW	
	DESCHAMPSIA CAESPITOSA	TUFTED HAIRGRASS	LOW	
	CAREX DIVULSA	CLUSTERED FIELD SEDGE	LOW	
GRADED HILLSIDE AREAS NATIVE EROSION CONTROL MIX	AVAILABLE FROM: PACIFIC COAST SEED 925.373.4417	APPLICATION RATE: 45 LBS/ACRE	QUANTITY: 107,205 SF	
	BOTANICAL NAME	COMMON NAME	WATER USE	
	BROMUS CARINATUS	CALIFORNIA BROME	LOW	
	ELYMUS GLAUCUS	BLUE WILDRYE	LOW	
	FESTUCA MICROSTACHYS	SMALL FESCUE	LOW	
	TRIFOLIUM WILLDENOVII	TOMCAT CLOVER	LOW	

sancerra

VISTA COVE

Vallejo, California

OVERALL LANDSCAPE PLAN

CONCEPTUAL PHASE
May 14, 2024

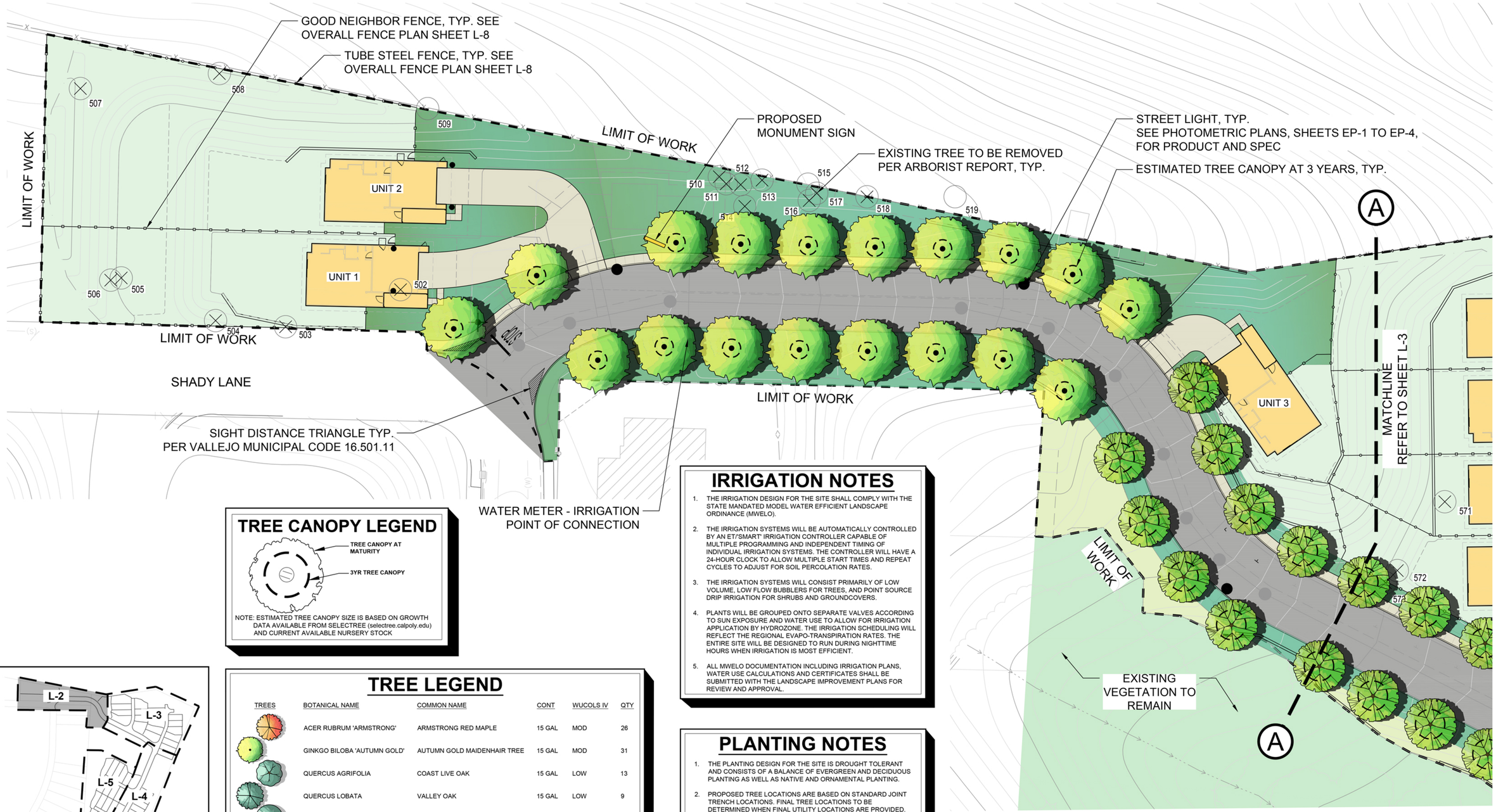
vanderToolen Associates
700 Ygnacio Valley Rd.
Suite 100
Walnut Creek, CA 94596

tel: 925.274.1305
www.vandertoolen.com

SCALE: 1" = 50'-0" (0' 25' 50' 100')
NORTH

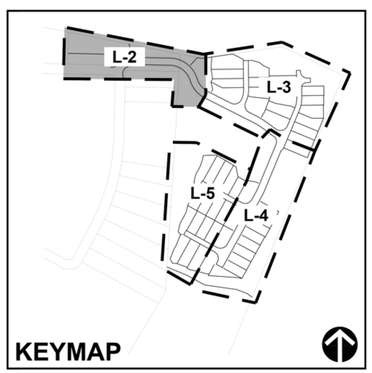
L-1
Project No. 03622

Copyright 2024 vanderToolen Associates. The drawings or written materials contained herein constitute the original and unpublished work of the landscape architect. Reproduction, use or alteration in any form is strictly prohibited without the written consent of vanderToolen Associates.



TREE CANOPY LEGEND

NOTE: ESTIMATED TREE CANOPY SIZE IS BASED ON GROWTH DATA AVAILABLE FROM SELECTREE (selectree.calpoly.edu) AND CURRENT AVAILABLE NURSERY STOCK



TREE LEGEND

TREES	BOTANICAL NAME	COMMON NAME	CONT	WUCOLS IV	QTY
	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	15 GAL	MOD	26
	GINKGO BILOBA 'AUTUMN GOLD'	AUTUMN GOLD MAIDENHAIR TREE	15 GAL	MOD	31
	QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	LOW	13
	QUERCUS LOBATA	VALLEY OAK	15 GAL	LOW	9
	QUERCUS ROBUR 'FASTIGIATA'	SKYROCKET® ENGLISH OAK	15 GAL	MOD	23
	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	15 GAL	MOD	39

NOTES:
- ALL PROPOSED TREES ARE MITIGATION TREES
- ALL TREES ARE STANDARD FORM UNLESS OTHERWISE NOTED

TOTALS
15 GAL = 141 TOTAL TREES

IRRIGATION NOTES

1. THE IRRIGATION DESIGN FOR THE SITE SHALL COMPLY WITH THE STATE MANDATED MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO).
2. THE IRRIGATION SYSTEMS WILL BE AUTOMATICALLY CONTROLLED BY AN ET/SMART IRRIGATION CONTROLLER CAPABLE OF MULTIPLE PROGRAMMING AND INDEPENDENT TIMING OF INDIVIDUAL IRRIGATION SYSTEMS. THE CONTROLLER WILL HAVE A 24-HOUR CLOCK TO ALLOW MULTIPLE START TIMES AND REPEAT CYCLES TO ADJUST FOR SOIL PERCOLATION RATES.
3. THE IRRIGATION SYSTEMS WILL CONSIST PRIMARILY OF LOW VOLUME, LOW FLOW BUBBLERS FOR TREES, AND POINT SOURCE DRIP IRRIGATION FOR SHRUBS AND GROUNDCOVERS.
4. PLANTS WILL BE GROUPED ONTO SEPARATE VALVES ACCORDING TO SUN EXPOSURE AND WATER USE TO ALLOW FOR IRRIGATION APPLICATION BY HYDROZONE. THE IRRIGATION SCHEDULING WILL REFLECT THE REGIONAL EVAPO-TRANSPIRATION RATES. THE ENTIRE SITE WILL BE DESIGNED TO RUN DURING NIGHTTIME HOURS WHEN IRRIGATION IS MOST EFFICIENT.
5. ALL MWELO DOCUMENTATION INCLUDING IRRIGATION PLANS, WATER USE CALCULATIONS AND CERTIFICATES SHALL BE SUBMITTED WITH THE LANDSCAPE IMPROVEMENT PLANS FOR REVIEW AND APPROVAL.

PLANTING NOTES

1. THE PLANTING DESIGN FOR THE SITE IS DROUGHT TOLERANT AND CONSISTS OF A BALANCE OF EVERGREEN AND DECIDUOUS PLANTING AS WELL AS NATIVE AND ORNAMENTAL PLANTING.
2. PROPOSED TREE LOCATIONS ARE BASED ON STANDARD JOINT TRENCH LOCATIONS. FINAL TREE LOCATIONS TO BE DETERMINED WHEN FINAL UTILITY LOCATIONS ARE PROVIDED. TREE PLACEMENT MAY BE ADJUSTED AND FINAL TREE COUNT MAY CHANGE.
3. ALL SHRUBS AND GROUNDCOVER MATERIAL SELECTED HAVE A WUCOLS WATER USE RATING OF VERY LOW TO MODERATE.
4. PROPOSED TREE CANOPIES ARE SHOWN AT 85% MATURE GROWTH DIAMETER IN ORDER TO ENSURE THERE IS SUFFICIENT ROOM FOR TREE GROWTH AND HEALTH.

sancerra

VISTA COVE

Vallejo, California

LANDSCAPE PLAN

CONCEPTUAL PHASE
May 14, 2024

vanderToolen Associates
700 Ygnacio Valley Rd.
Suite 100
Walnut Creek, CA 94596

tel: 925.274.1305
www.vandertoolen.com

0' 10' 20' 40'
SCALE: 1" = 20'-0"
NORTH

L-2
Project No. 03622

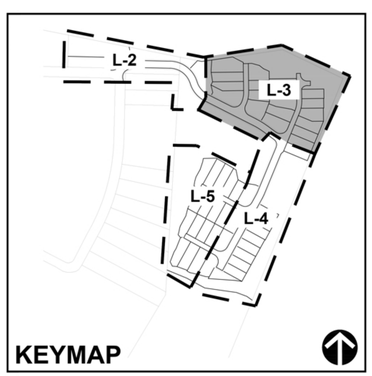
Copyright 2024 vanderToolen Associates. The drawings or written materials contained herein constitute the original and unpublished work of the landscape architect. Reproduction, use or alteration in any form is strictly prohibited without the written consent of vanderToolen Associates.

IRRIGATION NOTES

1. THE IRRIGATION DESIGN FOR THE SITE SHALL COMPLY WITH THE STATE MANDATED MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO).
2. THE IRRIGATION SYSTEMS WILL BE AUTOMATICALLY CONTROLLED BY AN ET/'SMART' IRRIGATION CONTROLLER CAPABLE OF MULTIPLE PROGRAMMING AND INDEPENDENT TIMING OF INDIVIDUAL IRRIGATION SYSTEMS. THE CONTROLLER WILL HAVE A 24-HOUR CLOCK TO ALLOW MULTIPLE START TIMES AND REPEAT CYCLES TO ADJUST FOR SOIL PERCOLATION RATES.
3. THE IRRIGATION SYSTEMS WILL CONSIST PRIMARILY OF LOW VOLUME, LOW FLOW BUBBLERS FOR TREES, AND POINT SOURCE DRIP IRRIGATION FOR SHRUBS AND GROUNDCOVERS.
4. PLANTS WILL BE GROUPED ONTO SEPARATE VALVES ACCORDING TO SUN EXPOSURE AND WATER USE TO ALLOW FOR IRRIGATION APPLICATION BY HYDROZONE. THE IRRIGATION SCHEDULING WILL REFLECT THE REGIONAL EVAPO-TRANSPIRATION RATES. THE ENTIRE SITE WILL BE DESIGNED TO RUN DURING NIGHTTIME HOURS WHEN IRRIGATION IS MOST EFFICIENT.
5. ALL MWELO DOCUMENTATION INCLUDING IRRIGATION PLANS, WATER USE CALCULATIONS AND CERTIFICATES SHALL BE SUBMITTED WITH THE LANDSCAPE IMPROVEMENT PLANS FOR REVIEW AND APPROVAL.

PLANTING NOTES

1. THE PLANTING DESIGN FOR THE SITE IS DROUGHT TOLERANT AND CONSISTS OF A BALANCE OF EVERGREEN AND DECIDUOUS PLANTING AS WELL AS NATIVE AND ORNAMENTAL PLANTING.
2. PROPOSED TREE LOCATIONS ARE BASED ON STANDARD JOINT TRENCH LOCATIONS. FINAL TREE LOCATIONS TO BE DETERMINED WHEN FINAL UTILITY LOCATIONS ARE PROVIDED. TREE PLACEMENT MAY BE ADJUSTED AND FINAL TREE COUNT MAY CHANGE.
3. ALL SHRUBS AND GROUNDCOVER MATERIAL SELECTED HAVE A WUCOLS WATER USE RATING OF VERY LOW TO MODERATE.
4. PROPOSED TREE CANOPIES ARE SHOWN AT 85% MATURE GROWTH DIAMETER IN ORDER TO ENSURE THERE IS SUFFICIENT ROOM FOR TREE GROWTH AND HEALTH.



TREE CANOPY LEGEND

NOTE: ESTIMATED TREE CANOPY SIZE IS BASED ON GROWTH DATA AVAILABLE FROM SELECTREE (selectree.calpoly.edu) AND CURRENT AVAILABLE NURSERY STOCK

- FOR TREE LEGEND, SEE SHEETS L-1, L-2, L-4 & L-5

sancerra

VISTA COVE
Vallejo, California

LANDSCAPE PLAN
CONCEPTUAL PHASE
May 14, 2024

vanderToolen Associates
700 Ygnacio Valley Rd.
Suite 100
Walnut Creek, CA 94596

tel: 925.274.1305
www.vandertoolen.com

VTA

0' 10' 20' 40'
SCALE: 1" = 20'-0"
NORTH

L-3
Project No. 03622

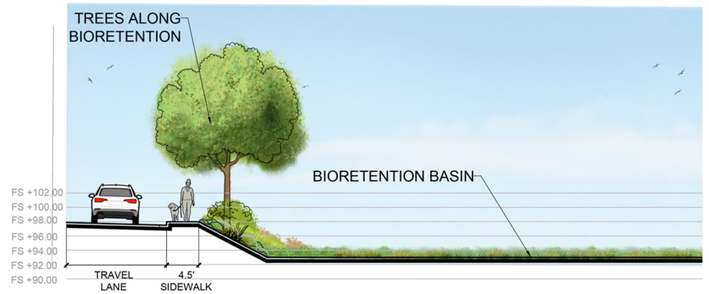
Copyright 2024 vanderToolen Associates. The drawings or written materials contained herein constitute the original and unpublished work of the landscape architect. Reproduction, use or alteration in any form is strictly prohibited without the written consent of vanderToolen Associates.

TREE LEGEND

TREES	BOTANICAL NAME	COMMON NAME	CONT	WUCOLS IV	QTY
	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	15 GAL	MOD	26
	GINKGO BILOBA 'AUTUMN GOLD'	AUTUMN GOLD MAIDENHAIR TREE	15 GAL	MOD	31
	QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	LOW	13
	QUERCUS LOBATA	VALLEY OAK	15 GAL	LOW	9
	QUERCUS ROBUR 'FASTIGIATA'	SKYROCKET® ENGLISH OAK	15 GAL	MOD	23
	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	15 GAL	MOD	39

NOTES:
- ALL PROPOSED TREES ARE MITIGATION TREES
- ALL TREES ARE STANDARD FORM UNLESS OTHERWISE NOTED

TOTALS
15 GAL = 141 TOTAL TREES



SECTION A-A - STORMWATER TREATMENT BASIN PLANTING
SCALE: 1"=10'-0"

TREE CANOPY LEGEND

NOTE: ESTIMATED TREE CANOPY SIZE IS BASED ON GROWTH DATA AVAILABLE FROM SELECTREE (selectree.calpoly.edu) AND CURRENT AVAILABLE NURSERY STOCK

sancerra

VISTA COVE
Vallejo, California

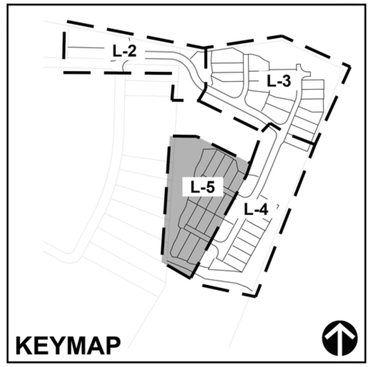
LANDSCAPE PLAN
CONCEPTUAL PHASE
May 14, 2024

vanderToolen Associates
700 Ygnacio Valley Rd.
Suite 100
Walnut Creek, CA 94596
tel: 925.274.1305
www.vandertoolen.com

0' 10' 20' 40'
SCALE: 1" = 20'-0"
NORTH

L-4
Project No. 03622

Copyright 2024 vanderToolen Associates. The drawings or written materials contained herein constitute the original and unpublished work of the landscape architect. Reproduction, use or alteration in any form is strictly prohibited without the written consent of vanderToolen Associates.



TREE LEGEND

TREES	BOTANICAL NAME	COMMON NAME	CONT	WUCOLS IV	QTY
	ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	15 GAL	MOD	26
	GINKGO BILOBA 'AUTUMN GOLD'	AUTUMN GOLD MAIDENHAIR TREE	15 GAL	MOD	31
	QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	LOW	13
	QUERCUS LOBATA	VALLEY OAK	15 GAL	LOW	9
	QUERCUS ROBUR 'FASTIGIATA'	SKYROCKET® ENGLISH OAK	15 GAL	MOD	23
	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	15 GAL	MOD	39

NOTES:
- ALL PROPOSED TREES ARE MITIGATION TREES
- ALL TREES ARE STANDARD FORM UNLESS OTHERWISE NOTED

TOTALS
15 GAL = 141 TOTAL TREES

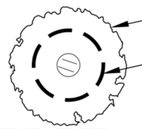
IRRIGATION NOTES

1. THE IRRIGATION DESIGN FOR THE SITE SHALL COMPLY WITH THE STATE MANDATED MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO).
2. THE IRRIGATION SYSTEMS WILL BE AUTOMATICALLY CONTROLLED BY AN ET/SMART IRRIGATION CONTROLLER CAPABLE OF MULTIPLE PROGRAMMING AND INDEPENDENT TIMING OF INDIVIDUAL IRRIGATION SYSTEMS. THE CONTROLLER WILL HAVE A 24-HOUR CLOCK TO ALLOW MULTIPLE START TIMES AND REPEAT CYCLES TO ADJUST FOR SOIL PERCOLATION RATES.
3. THE IRRIGATION SYSTEMS WILL CONSIST PRIMARILY OF LOW VOLUME, LOW FLOW BUBBLERS FOR TREES, AND POINT SOURCE DRIP IRRIGATION FOR SHRUBS AND GROUNDCOVERS.
4. PLANTS WILL BE GROUPED ONTO SEPARATE VALVES ACCORDING TO SUN EXPOSURE AND WATER USE TO ALLOW FOR IRRIGATION APPLICATION BY HYDROZONE. THE IRRIGATION SCHEDULING WILL REFLECT THE REGIONAL EVAPO-TRANSPIRATION RATES. THE ENTIRE SITE WILL BE DESIGNED TO RUN DURING NIGHTTIME HOURS WHEN IRRIGATION IS MOST EFFICIENT.
5. ALL MWELO DOCUMENTATION INCLUDING IRRIGATION PLANS, WATER USE CALCULATIONS AND CERTIFICATES SHALL BE SUBMITTED WITH THE LANDSCAPE IMPROVEMENT PLANS FOR REVIEW AND APPROVAL.

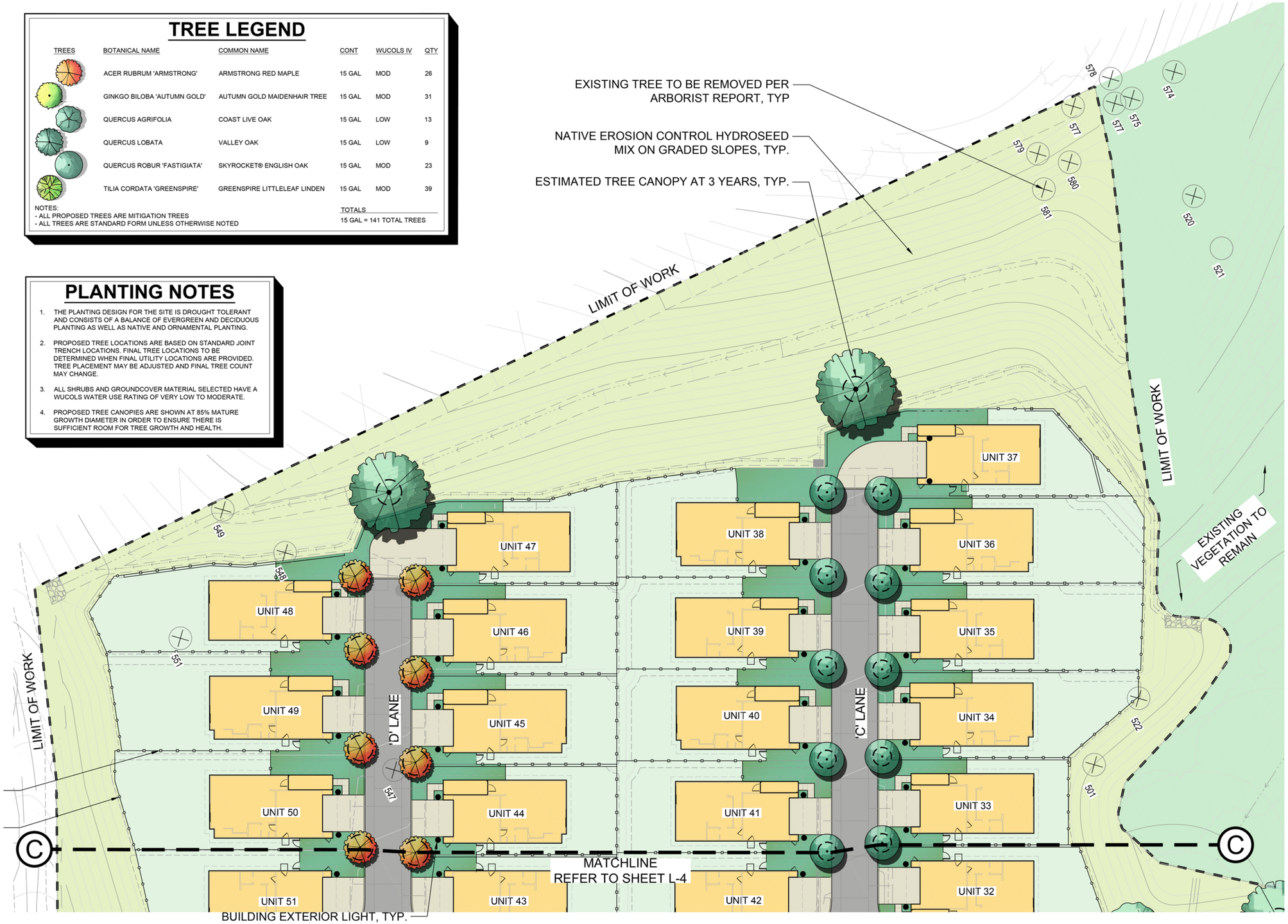
PLANTING NOTES

1. THE PLANTING DESIGN FOR THE SITE IS DROUGHT TOLERANT AND CONSISTS OF A BALANCE OF EVERGREEN AND DECIDUOUS PLANTING AS WELL AS NATIVE AND ORNAMENTAL PLANTING.
2. PROPOSED TREE LOCATIONS ARE BASED ON STANDARD JOINT TRENCH LOCATIONS. FINAL TREE LOCATIONS TO BE DETERMINED WHEN FINAL UTILITY LOCATIONS ARE PROVIDED. TREE PLACEMENT MAY BE ADJUSTED AND FINAL TREE COUNT MAY CHANGE.
3. ALL SHRUBS AND GROUNDCOVER MATERIAL SELECTED HAVE A WUCOLS WATER USE RATING OF VERY LOW TO MODERATE.
4. PROPOSED TREE CANOPIES ARE SHOWN AT 85% MATURE GROWTH DIAMETER IN ORDER TO ENSURE THERE IS SUFFICIENT ROOM FOR TREE GROWTH AND HEALTH.

TREE CANOPY LEGEND



NOTE: ESTIMATED TREE CANOPY SIZE IS BASED ON GROWTH DATA AVAILABLE FROM SELECTREE (selectree.calpoly.edu) AND CURRENT AVAILABLE NURSERY STOCK



sancerra

VISTA COVE
Vallejo, California

LANDSCAPE PLAN
CONCEPTUAL PHASE
May 14, 2024

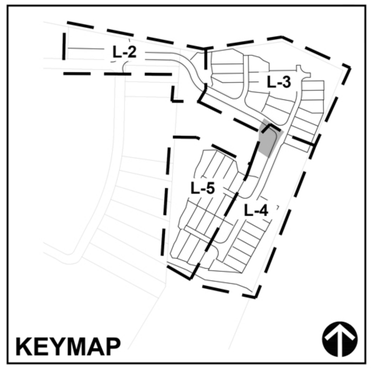
vanderToolen Associates
700 Ygnacio Valley Rd.
Suite 100
Walnut Creek, CA 94596

tel: 925.274.1305
www.vandertoolen.com

0' 10' 20' 40'
SCALE: 1" = 20'-0"
NORTH

L-5
Project No. 03622

Copyright 2024 vanderToolen Associates. The drawings or written materials contained herein constitute the original and unpublished work of the landscape architect. Reproduction, use or alteration in any form is strictly prohibited without the written consent of vanderToolen Associates.



ARCTOSTAPHYLOS SPP.

BOUTELOUA GRACILIS

CAREX DIVULSA

CEANOTHUS SPP.

EPILOBIUM CANUM

ERIOGONUM SPP.

JUNCUS PATENS

MIMULUS AURANTIACUS

MUHLENBERGIA RIGENS

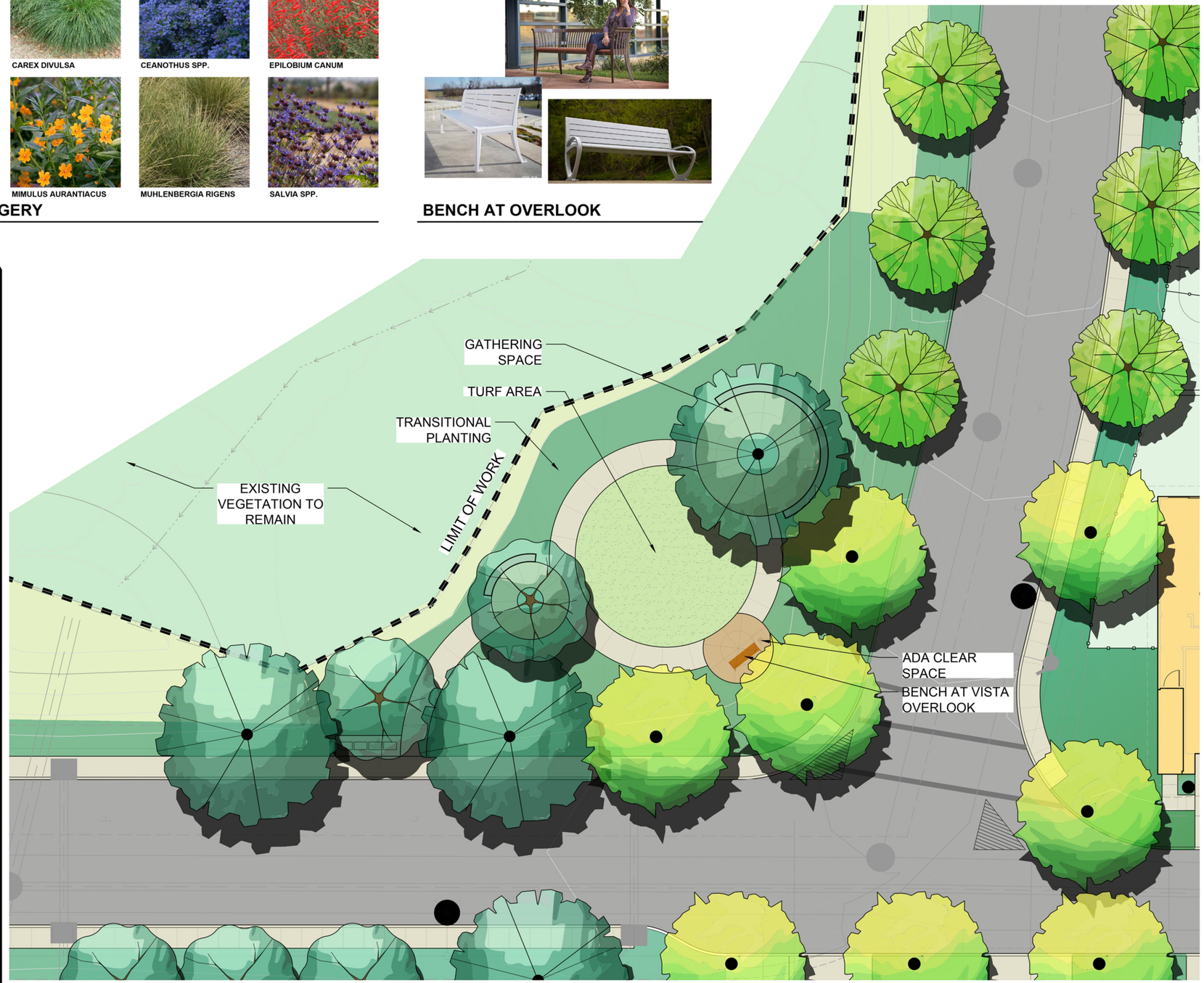
SALVIA SPP.

TRANSITIONAL PLANTING IMAGERY

BENCH AT OVERLOOK

PROPOSED PLANT PALETTE

BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS IV	SPACING
TREES				
ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	15 GAL	MOD	15' O.C.
GINKGO BILOBA 'AUTUMN GOLD'	AUTUMN GOLD MAIDENHAIR TREE	15 GAL	MOD	30' O.C.
QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	LOW	25' O.C.
QUERCUS LOBATA	VALLEY OAK	15 GAL	LOW	35' O.C.
QUERCUS ROBUR 'FASTIGIATA'	SKYROCKET ENGLISH OAK	15 GAL	MOD	15' O.C.
TILIA CORDATA 'GREENSPIRE'	GREENSPIE LITTLELEAF LINDEN	15 GAL	MOD	25' O.C.
SHRUBS				
ACACIA COGNATA `COUSIN ITT`	RIVER WATTLE	1 GAL	LOW	48" o.c.
ACHILLEA SPP.	YARROW	1 GAL	LOW	36" o.c.
AGAVE X `BLUE GLOW`	BLUE GLOW AGAVE	5 GAL	LOW	30" o.c.
ANIGOZANTHOS SPP.	KANGAROO PAW	1 GAL	LOW	24" o.c.
ARCTOSTAPHYLOS SPP.	MANZANITA	5 GAL	LOW	60" o.c.
BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLUE GRAMA	1 GAL	LOW	36" o.c.
BULBINE FRUTESCENS	STALKED BULBINE	1 GAL	LOW	36" o.c.
CALAMAGROSTIS X ACUTIFLORA `KARL FOERSTER`	FEATHER REED GRASS	1 GAL	LOW	36" o.c.
CALANDRINIA SPECTABILIS	PINK CALANDRINIA	1 GAL	LOW	24" o.c.
CALLISTEMON VIMINALIS 'LITTLE JOHN'	LITTLE JOHN WEEPING BOTTLEBRUSH	5 GAL	LOW	36" o.c.
CAREX DIVULSA	EUROPEAN GREY SEDGE	1 GAL	LOW	24" o.c.
CEANOTHUS SPP.	CEANOTHUS	5 GAL	LOW	60" o.c.
CHONDROPETALUM SPP.	CAPE RUSH	1 GAL	LOW	36" o.c.
CISTUS SPP.	ROCKROSE	1 GAL	LOW	60" o.c.
DIETES IRIDIOIDES	FORTNIGHT LILY	1 GAL	LOW	36" o.c.
DODONAEA VISCOSA `PURPUREA`	PURPLE LEAFED HOPSEED BUSH	5 GAL	LOW	72" o.c.
EPILOBIUM CANUM	CALIFORNIA FUCHSIA	1 GAL	LOW	36" o.c.
ERIGERON GLAUCUS	BEACH DAISY	1 GAL	LOW	12" o.c.
ERIGERON KARVINSKIANUS	FLEABANE	1 GAL	LOW	36" o.c.
ERIOGONUM	BUCKWHEAT	1 GAL	LOW	36" o.c.
ERIOPHYLLUM SPP.	WOOLLY SUNFLOWER	1 GAL	LOW	24" o.c.
ESCALLONIA X `COMPACTA`	COMPACT ESCALLONIA	5 GAL	MOD	36" o.c.
FESTUCA SPP.	FESCUE	1 GAL	LOW	24" o.c.
FREMONTODENDRON CALIFORNICUM	CALIFORNIA FLANNEL BUSH	5 GAL	V. LOW	96" o.c.
GAURA LINDHEIMERI	SISKIYOU PINK GAURA	1 GAL	MOD	36" o.c.
GREVILLEA SPP.	GREVILLEA	1 GAL	LOW	48" o.c.
HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	1 GAL	LOW	24" o.c.
HEMEROCALLIS X `EVERGREEN YELLOW`	DAYLILY	5 GAL	MOD	24" o.c.
HESPERALOE PARVIFLORA	YUCCA	1 GAL	LOW	36" o.c.
HETEROMELES ARBUTIFOLIA	TOYON	5 GAL	V. LOW	96" o.c.
JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	LOW	24" o.c.
KNIPHOFIA UVARIA	TORCHLILY	1 GAL	LOW	36" o.c.
LANTANA SPP.	LANTANA	1 GAL	LOW	48" o.c.
LIGUSTRUM JAPONICUM `TEXANUM`	WAXLEAF PRIVET	5 GAL	LOW	72" o.c.
LIMONIUM PEREZII	STATICE	1 GAL	LOW	36" o.c.
LOROPETALUM CHINENSE	FRINGE FLOWER	5 GAL	LOW	60" o.c.
MIMULUS AURANTIACUS	STICKY MONKEYFLOWER	1 GAL	LOW	36" o.c.
MUHLENBERGIA CAPILLARIS	PINK MUHLY	1 GAL	LOW	36" o.c.
MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	LOW	48" o.c.
NANDINA DOMESTICA	LEMON LIME NANDINA	1 GAL	LOW	36" o.c.
NEPETA X FAASSENII `SIX HILLS GIANT`	GIANT CATMINT	1 GAL	LOW	36" o.c.
PENSTEMON SPP.	BEARD TONGUE	1 GAL	LOW	36" o.c.
PITTOSPORUM SPP.	PITTOSPORUM	5 GAL	LOW	60" o.c.
POLYGALA SPP.	SWEET PEA SHRUB	5 GAL	LOW	36" o.c.
PRUNUS CAROLINIANA `COMPACTA`	COMPACT CAROLINA LAUREL CHERRY	5 GAL	LOW	72" o.c.
RHAMNUS CALIFORNICA	COFFEEBERRY	5 GAL	LOW	72" o.c.
RHAPHIOLEPIS SPP.	INDIAN HAWTHORN	1 GAL	LOW	48" o.c.
ROSA SPP.	ROSE	5 GAL	MOD	36" o.c.
ROSMARINUS OFFICINALIS	TUSCAN BLUE ROSEMARY	1 GAL	LOW	48" o.c.
SALVIA SPP.	SAGE	1 GAL	LOW	48" o.c.
TULBAGHIA VIOLACEA	SOCIETY GARLIC	1 GAL	LOW	24" o.c.
WESTRINGIA FRUTICOSA	COAST ROSEMARY	5 GAL	LOW	48" o.c.
XYLOSMA CONGESTUM 'COMPACTA'	COMPACT XYLOSMA	5 GAL	LOW	72" o.c.
GROUNDCOVERS				
ARCTOSTAPHYLOS SPP.	GROUNDCOVER MANZANITA	1 GAL	LOW	60" o.c.
CEANOTHUS GRISEUS HORIZONTALIS	CALIFORNIA LILAC	1 GAL	LOW	72" o.c.
GREVILLEA LANIGERA `COASTAL GEM`	COASTAL GEM GREVILLEA	1 GAL	LOW	48" o.c.
HELIANTHEMUM NUMMULARIUM `HENFIELD BRILLIANT`	HENFIELD BRILLIANT ROCK ROSE	1 GAL	LOW	36" o.c.
MYOPORUM PARVIFOLIUM	MYOPORUM	1 GAL	LOW	60" o.c.
SCAEVOLA `MAUVE CLUSTERS`	FAN FLOWER	1 GAL	LOW	48" o.c.
SENECIO MANDRALISCAE	BLUE FINGER	1 GAL	LOW	36" o.c.
VERBENA SPP.	VERBENA	1 GAL	LOW	36" o.c.



sancerra

VISTA COVE

Vallejo, California

COMMON OPEN SPACE ENLARGEMENT

CONCEPTUAL PHASE

May 14, 2024

vanderToolen Associates
700 Ygnacio Valley Rd.
Suite 100
Walnut Creek, CA 94596

tel: 925.274.1305
www.vandertoolen.com

SCALE: 1" = 10'-0"

NORTH

L-6

Project No. 03622

Copyright 2024 vanderToolen Associates. The drawings or written materials contained herein constitute the original and unpublished work of the landscape architect. Reproduction, use or alteration in any form is strictly prohibited without the written consent of vanderToolen Associates.

PROPOSED PLANT PALETTE

BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS IV	SPACING
TREES				
ACER RUBRUM 'ARMSTRONG'	ARMSTRONG RED MAPLE	15 GAL	MOD	15' O.C.
GINKGO BILOBA 'AUTUMN GOLD'	AUTUMN GOLD MAIDENHAIR TREE	15 GAL	MOD	30' O.C.
QUERCUS AGRIFOLIA	COAST LIVE OAK	15 GAL	LOW	25' O.C.
QUERCUS LOBATA	VALLEY OAK	15 GAL	LOW	35' O.C.
QUERCUS ROBUR 'FASTIGIATA'	SKYROCKET ENGLISH OAK	15 GAL	MOD	15' O.C.
TILIA CORDATA 'GREENSPIRE'	GREENSPIE LITTLELEAF LINDEN	15 GAL	MOD	25' O.C.
SHRUBS				
ACACIA COGNATA `COUSIN ITT`	RIVER WATTLE	1 GAL	LOW	48" o.c.
ACHILLEA SPP.	YARROW	1 GAL	LOW	36" o.c.
AGAVE X `BLUE GLOW`	BLUE GLOW AGAVE	5 GAL	LOW	30" o.c.
ANIGOZANTHOS SPP.	KANGAROO PAW	1 GAL	LOW	24" o.c.
ARCTOSTAPHYLOS SPP.	MANZANITA	5 GAL	LOW	60" o.c.
BOUTELOUA GRACILIS 'BLONDE AMBITION'	BLUE GRAMA	1 GAL	LOW	36" o.c.
BULBINE FRUTESCENS	STALKED BULBINE	1 GAL	LOW	36" o.c.
CALAMAGROSTIS X ACUTIFLORA `KARL FOERSTER`	FEATHER REED GRASS	1 GAL	LOW	36" o.c.
CALANDRINIA SPECTABILIS	PINK CALANDRINIA	1 GAL	LOW	24" o.c.
CALLISTEMON VIMINALIS 'LITTLE JOHN'	LITTLE JOHN WEEPING BOTTLEBRUSH	5 GAL	LOW	36" o.c.
CAREX DIVULSA	EUROPEAN GREY SEDGE	1 GAL	LOW	24" o.c.
CEANOTHUS SPP.	CEANOTHUS	5 GAL	LOW	60" o.c.
CHONDROPETALUM SPP.	CAPE RUSH	1 GAL	LOW	36" o.c.
CISTUS SPP.	ROCKROSE	1 GAL	LOW	60" o.c.
DIETES IRIDIOIDES	FORTNIGHT LILY	1 GAL	LOW	36" o.c.
DODONAEA VISCOSA `PURPUREA`	PURPLE LEAFED HOPSEED BUSH	5 GAL	LOW	72" o.c.
EPILOBIUM CANUM	CALIFORNIA FUCHSIA	1 GAL	LOW	36" o.c.
ERIGERON GLAUCUS	BEACH DAISY	1 GAL	LOW	12" o.c.
ERIGERON KARVINSKIANUS	FLEABANE	1 GAL	LOW	36" o.c.
ERIOGONUM	BUCKWHEAT	1 GAL	LOW	36" o.c.
ERIOPHYLLUM SPP.	WOOLLY SUNFLOWER	1 GAL	LOW	24" o.c.
ESCALLONIA X `COMPACTA`	COMPACT ESCALLONIA	5 GAL	MOD	36" o.c.
FREMONTODENDRON CALIFORNICUM	CALIFORNIA FLANNEL BUSH	5 GAL	V. LOW	96" o.c.
GAURA LINDHEIMERI	SISKIYOU PINK GAURA	1 GAL	MOD	36" o.c.
GREVILLEA SPP.	GREVILLEA	1 GAL	LOW	48" o.c.
HELICTOTRICHON SEMPERVIRENS	BLUE OAT GRASS	1 GAL	LOW	24" o.c.
HEMEROCALLIS X `EVERGREEN YELLOW`	DAYLILY	5 GAL	MOD	24" o.c.
HESPERALOE PARVIFLORA	YUCCA	1 GAL	LOW	36" o.c.
HETEROMELES ARBUTIFOLIA	TOYON	5 GAL	V. LOW	96" o.c.
JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	LOW	24" o.c.
KNIPHOFIA UVARIA	TORCHLILY	1 GAL	LOW	36" o.c.
LANTANA SPP.	LANTANA	1 GAL	LOW	48" o.c.
LIGUSTRUM JAPONICUM `TEXANUM`	WAXLEAF PRIVET	5 GAL	LOW	72" o.c.
LIMONIUM PEREZII	STATICE	1 GAL	LOW	36" o.c.
LOROPETALUM CHINENSE	FRINGE FLOWER	5 GAL	LOW	60" o.c.
MIMULUS AURANTIACUS	STICKY MONKEYFLOWER	1 GAL	LOW	36" o.c.
MUHLENBERGIA CAPILLARIS	PINK MUHLY	1 GAL	LOW	36" o.c.
MUHLENBERGIA RIGENS	DEER GRASS	1 GAL	LOW	48" o.c.
NANDINA DOMESTICA	LEMON LIME NANDINA	1 GAL	LOW	36" o.c.
NEPETA X FAASSENII `SIX HILLS GIANT`	GIANT CATMINT	1 GAL	LOW	36" o.c.
PENSTEMON SPP.	BEARD TONGUE	1 GAL	LOW	36" o.c.
PITTOSPORUM SPP.	PITTOSPORUM	5 GAL	LOW	60" o.c.
POLYGALA SPP.	SWEET PEA SHRUB	5 GAL	LOW	36" o.c.
PRUNUS CAROLINIANA `COMPACTA`	COMPACT CAROLINA LAUREL CHERRY	5 GAL	LOW	72" o.c.
RHAMNUS CALIFORNICA	COFFEEBERRY	5 GAL	LOW	72" o.c.
RHAPHIOLEPIS SPP.	INDIAN HAWTHORN	1 GAL	LOW	48" o.c.
ROSA SPP.	ROSE	5 GAL	MOD	36" o.c.
ROSMARINUS OFFICINALIS	TUSCAN BLUE ROSEMARY	1 GAL	LOW	48" o.c.
SALVIA SPP.	SAGE	1 GAL	LOW	48" o.c.
TULBAGHIA VIOLACEA	SOCIETY GARLIC	1 GAL	LOW	24" o.c.
WESTRINGIA FRUTICOSA	COAST ROSEMARY	5 GAL	LOW	48" o.c.
XYLOSMA CONGESTUM 'COMPACTA'	COMPACT XYLOSMA	5 GAL	LOW	72" o.c.
GROUNDCOVERS				
ARCTOSTAPHYLOS SPP.	GROUNDCOVER MANZANITA	1 GAL	LOW	60" o.c.
CEANOTHUS GRISEUS HORIZONTALIS	CALIFORNIA LILAC	1 GAL	LOW	72" o.c.
GREVILLEA LANIGERA `COASTAL GEM`	COASTAL GEM GREVILLEA	1 GAL	LOW	48" o.c.
HELIANTHEMUM NUMMULARIUM `HENFIELD BRILLIANT`	HENFIELD BRILLIANT ROCK ROSE	1 GAL	LOW	36" o.c.
MYOPORUM PARVIFOLIUM	MYOPORUM	1 GAL	LOW	60" o.c.
SCAEVOLA 'MAUVE CLUSTERS`	FAN FLOWER	1 GAL	LOW	48" o.c.
SENECIO MANDRALISCAE	BLUE FINGER	1 GAL	LOW	36" o.c.
VERBENA SPP.	VERBENA	1 GAL	LOW	36" o.c.

PROPOSED HYDROSEED PALETTE

BIORETENTION AREAS NATIVE ORNAMENTAL BIOSWALE MIX	AVAILABLE FROM: PACIFIC COAST SEED 925.373.4417	APPLICATION RATE: 80 LBS/ACRE	QUANTITY: 18,530 SF	
	BOTANICAL NAME	COMMON NAME	WATER USE	
	FESTUCA RUBRA	MOLATE RED FESCUE	MOD	
	FESTUCA OVINA INGRATA	WESTERN FESCUE	MOD	
	FESTUCA IDAHOENSIS	IDAHO FESCUE	LOW	
	DESCHAMPSIA CAESPITOSA	TUFTED HAIRGRASS	LOW	
	CAREX DIVULSA	CLUSTERED FIELD SEDGE	LOW	
GRADED HILLSIDE AREAS NATIVE EROSION CONTROL MIX	AVAILABLE FROM: PACIFIC COAST SEED 925.373.4417	APPLICATION RATE: 45 LBS/ACRE	QUANTITY: 107,205 SF	
	BOTANICAL NAME	COMMON NAME	WATER USE	
	BROMUS CARINATUS	CALIFORNIA BROME	LOW	
	ELYMUS GLAUCUS	BLUE WILDRYE	LOW	
	FESTUCA MICROSTACHYS	SMALL FESCUE	LOW	
	TRIFOLIUM WILLDENOVII	TOMCAT CLOVER	LOW	

TREES

ACER RUBRUM 'ARMSTRONG'

GINKGO BILOBA 'AUTUMN GOLD'

QUERCUS AGRIFOLIA

QUERCUS LOBATA

QUERCUS ROBUR 'FASTIGIATA'

TILIA CORDATA 'GREENSPIRE'

SHRUBS

ANIGOZANTHOS SPP.

BULBINE FRUTESCENS

CEANOTHUS SPP.

CISTUS SPP.

DIETES IRIDIOIDES

GREVILLEA SPP.

HESPERALOE PARVIFLORA

LANTANA SPP.

LIMONIUM PEREZII

MUHLENBERGIA CAPILLARIS

PENSTEMON SPP.

POLYGALA SPP.

RHAPHIOLEPIS SPP.

SALVIA SPP.

WESTRINGIA FRUTICOSA

EPILOBIUM CANUM

GROUNDCOVERS

ARCTOSTAPHYLOS SPP.

CEANOTHUS GRISEUS HORIZONTALIS

GREVILLEA LANIGERA 'COASTAL GEM'

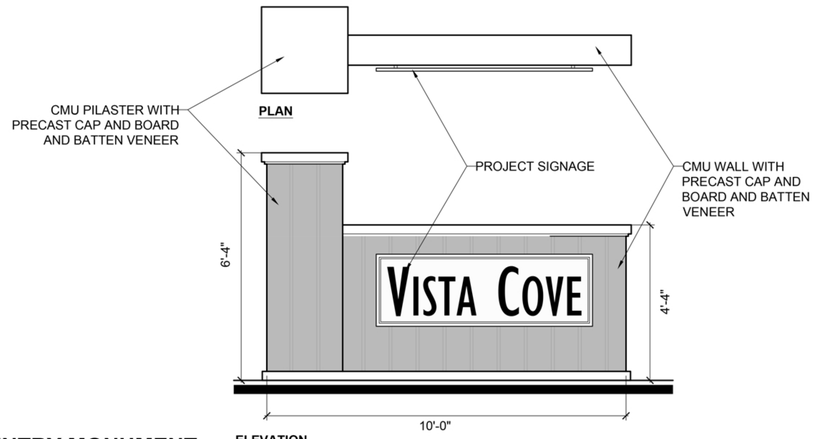
HELIANTHEMUM NUMMULARIUM 'HENFIELD BRILLIANT'

MYOPORUM PARVIFOLIUM

SCAEVOLA 'MAUVE CLUSTERS'

SENECIO MANDRALISCAE

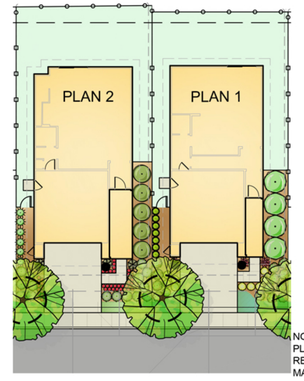
VERBENA SPP.



ENTRY MONUMENT

ELEVATION

MAILBOX UNIT



NOTE:
PLANS SHOW ESTIMATED REPRESENTATION OF SHRUB MATERIAL WITHIN THREE YEARS

TYPICAL FRONT YARD PLANTING

sancerra

VISTA COVE

Vallejo, California

PLANT AND SITE IMAGERY

CONCEPTUAL PHASE

MAY 14, 2024

vanderToolen Associates
855 Bordeaux Way
Suite 240
Napa, CA 94558

tel: 707.224.2299
www.vandertoolen.com

L-7

Project No. 03622

Copyright 2024 vanderToolen Associates. The drawings or written materials contained herein constitute the original and unpublished work of the landscape architect. Reproduction, use or alteration in any form is strictly prohibited without the written consent of vanderToolen Associates.

FENCE AND WALL LEGEND

- PROPOSED 6' HIGH WOOD GOOD NEIGHBOR FENCE
  SEE DESIGN DETAIL A, THIS SHEET
- PROPOSED 6' HIGH TUBE STEEL VIEW FENCE
  SEE DESIGN DETAIL B, THIS SHEET
- EXISTING FENCE TO REMAIN
- RETAINING WALL - STYLE AND MATERIALS PER CIVIL ENGINEER'S PLANS

NOTE: SEE LANDSCAPE PLAN SHEETS L-2 - L-5 FOR 20 SCALE PLAN ENLARGEMENTS

A GOOD NEIGHBOR FENCE

6' HIGH WOOD FENCE AT PRODUCTION HOMES

B VIEW FENCE

6' HIGH TUBE STEEL AT PRODUCTION HOMES

sancerra

VISTA COVE
Vallejo, California

OVERALL FENCE PLAN
CONCEPTUAL PHASE
June 9, 2025

vanderToolen Associates
700 Ygnacio Valley Rd.
Suite 100
Walnut Creek, CA 94596

tel: 925.274.1305
www.vandertoolen.com

0' 25' 50' 100'
SCALE: 1" = 50'-0"
NORTH

L-8
Project No. 03622

Copyright 2025 vanderToolen Associates. The drawings or written materials contained herein constitute the original and unpublished work of the landscape architect. Reproduction, use or alteration in any form is strictly prohibited without the written consent of vanderToolen Associates.

FENCE AND WALL LEGEND

- PROPOSED 6' HIGH WOOD GOOD NEIGHBOR FENCE
  SEE DESIGN DETAIL A, THIS SHEET
- PROPOSED 6' HIGH TUBE STEEL VIEW FENCE
  SEE DESIGN DETAIL B, THIS SHEET
- EXISTING FENCE TO REMAIN
- RETAINING WALL - STYLE AND MATERIALS PER CIVIL ENGINEER'S PLANS

NOTE: SEE LANDSCAPE PLAN SHEETS L-2 - L-5 FOR 20 SCALE PLAN ENLARGEMENTS

A GOOD NEIGHBOR FENCE

6' HIGH WOOD FENCE AT PRODUCTION HOMES

B VIEW FENCE

6' HIGH TUBE STEEL AT PRODUCTION HOMES

sancerra

VISTA COVE

Vallejo, California

OVERALL FENCE PLAN

CONCEPTUAL PHASE

June 9, 2025

vanderToolen Associates
700 Ygnacio Valley Rd.
Suite 100
Walnut Creek, CA 94596

tel: 925.274.1305
www.vandertoolen.com

0' 25' 50' 100'

SCALE: 1" = 50'-0"

NORTH

L-8

Project No. 03622

Copyright 2025 vanderToolen Associates. The drawings or written materials contained herein constitute the original and unpublished work of the landscape architect. Reproduction, use or alteration in any form is strictly prohibited without the written consent of vanderToolen Associates.

R H A

ROBERT HIDEY ARCHITECTS

VISTA COVE

VALLEJO, CA

SHEET INDEX

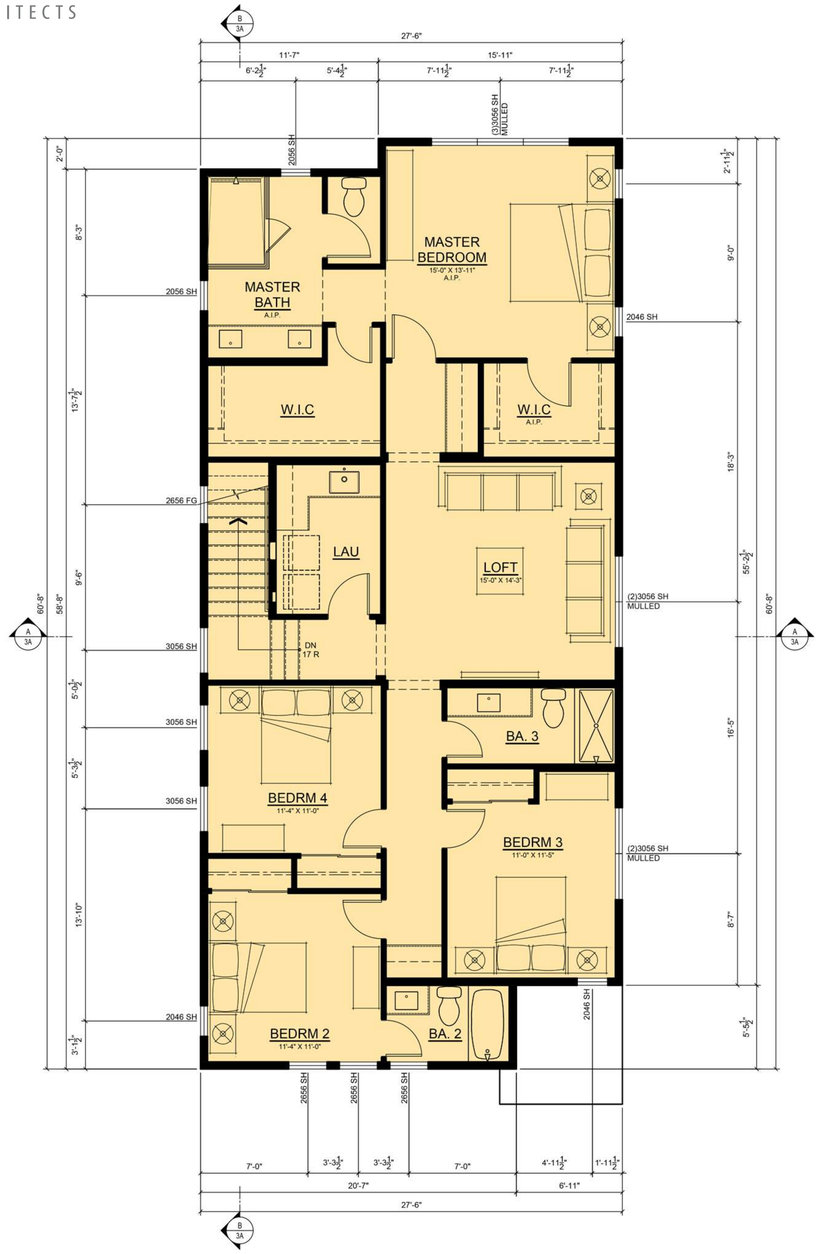
	ARCHITECTURE
A-1	COVER SHEET
A-2	PLAN 1A FLOOR PLAN
A-3	PLAN 1A SECTIONS
A-4	PLAN 1A ELEVATIONS
A-5	PLAN 1A ROOF PLAN
A-6	PLAN 1B FLOOR PLAN
A-7	PLAN 1B SECTIONS
A-8	PLAN 1B ELEVATIONS
A-9	PLAN 1B ROOF PLAN
A-10	PLAN 1C FLOOR PLAN
A-11	PLAN 1C SECTIONS
A-12	PLAN 1C ELEVATIONS
A-13	PLAN 1C ROOF PLAN
A-14	PLAN 1 STREETSCENE
A-15	PLAN 2A FLOOR PLAN
A-16	PLAN 2A SECTIONS
A-17	PLAN 2A ELEVATIONS
A-18	PLAN 2A ROOF PLAN
A-19	PLAN 2B FLOOR PLAN
A-20	PLAN 2B SECTIONS
A-21	PLAN 2B ELEVATIONS
A-22	PLAN 2B ROOF PLAN
A-23	PLAN 2C FLOOR PLAN
A-24	PLAN 2C SECTIONS
A-25	PLAN 2C ELEVATIONS
A-26	PLAN 2C ROOF PLAN
A-27	PLAN 2 STREETSCENE
A-28	PLAN 3A FLOOR PLAN
A-29	PLAN 3A SECTIONS
A-30	PLAN 3A ELEVATIONS
A-31	PLAN 3A ROOF PLAN
A-32	PLAN 3B FLOOR PLAN
A-33	PLAN 3B SECTIONS
A-34	PLAN 3B ELEVATIONS
A-35	PLAN 3B ROOF PLAN
A-36	PLAN 3 STREETSCENE
A-37	PLAN 4A FLOOR PLAN
A-38	PLAN 4A SECTIONS
A-39	PLAN 4A ELEVATIONS
A-40	PLAN 4A ROOF PLAN
A-41	PLAN 4B FLOOR PLAN
A-42	PLAN 4B SECTIONS
A-43	PLAN 4B ELEVATIONS
A-44	PLAN 4B ROOF PLAN
A-45	PLAN 4 STREETSCENE

SANCERRA

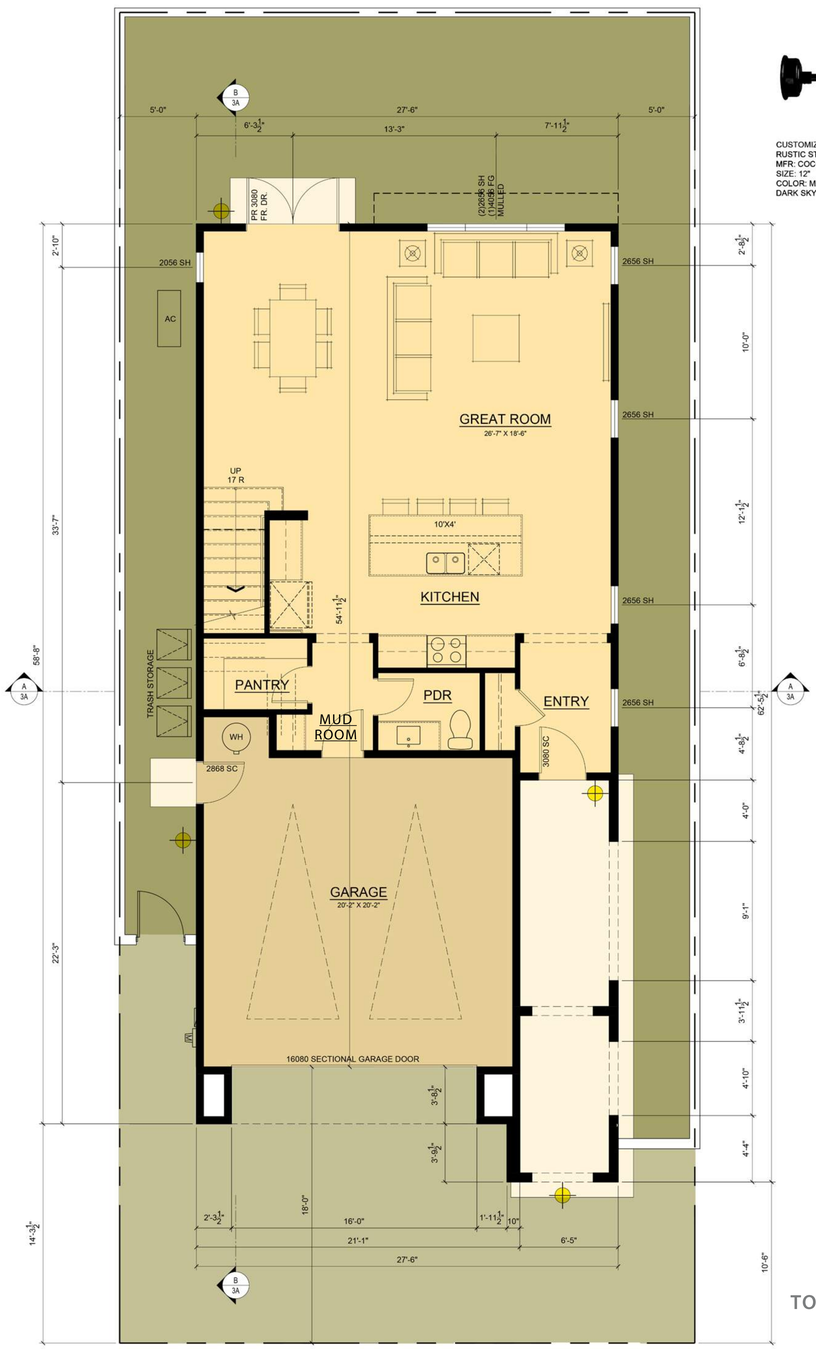
22029 .01 05/19/25

R H A

ROBERT HIDEY ARCHITECTS



SECOND FLOOR
1,540 SF



FIRST FLOOR
954 SF

EXTERIOR LIGHT FIXTURE:

CUSTOMIZABLE CALLA LED BARN LIGHT w/
RUSTIC STYLE STEM
MFR: COCOWEB
SIZE: 12"
COLOR: MATTE BLACK
DARK SKY COMPLIANT: YES

4 BED+LOFT, 3.5 BA
GREAT ROOM,
2-CAR GARAGE

1st FLOOR =	954 sf
2nd FLOOR =	1,540 sf
TOTAL =	**2,494 sf**
GARAGE =	447 sf
TOTAL CONSTRUCTION AREA =	**2,941 sf**

City of Vallejo Zoning Code
Floor Area Calculation per 16.104
TOTAL = 2,792 sf

FLOOR PLAN
PLAN 3A - 2,494 SF

0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

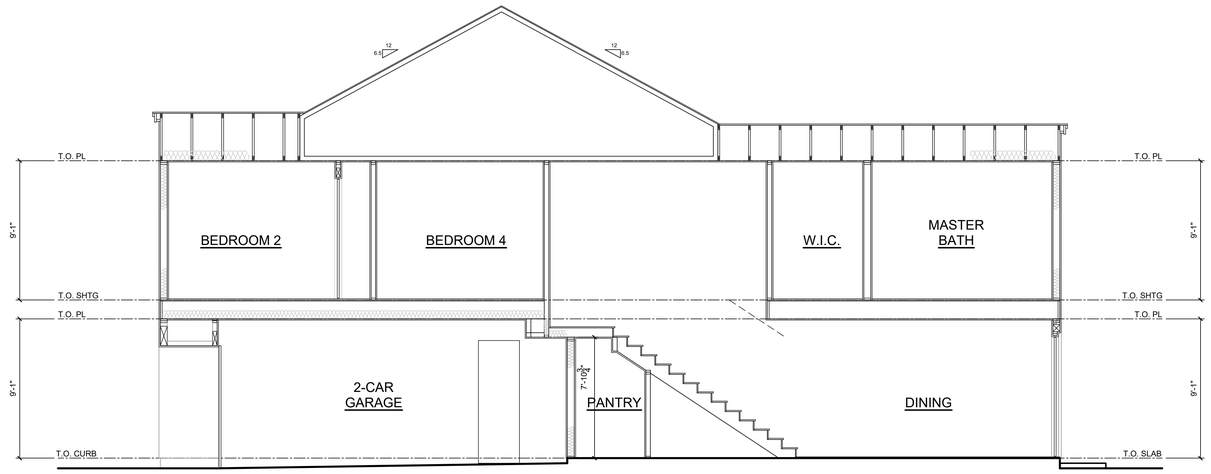
VISTA COVE
VALLEJO, CALIFORNIA

SANCERRA

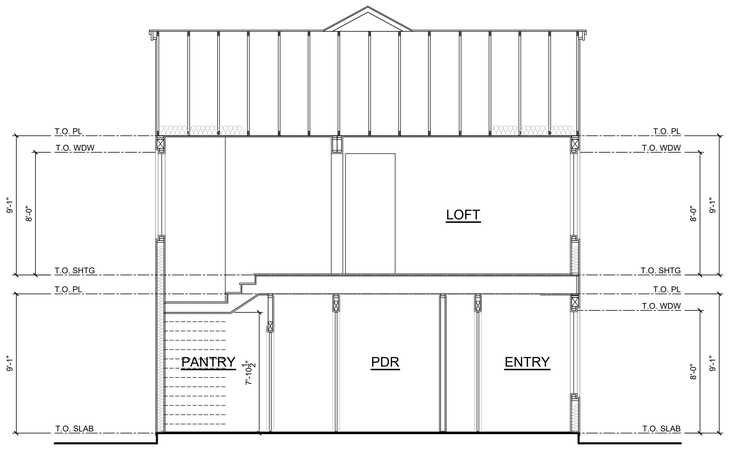
22029.01 05/19/25

A-28

R H A
ROBERT HIDEY ARCHITECTS



SECTION B



SECTION A

VISTA COVE
VALLEJO, CALIFORNIA

SECTIONS
PLAN 3A

0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

SANCERRA

22029.01 05/19/25

A-29

R H A

ROBERT HIDEY ARCHITECTS

LEFT

FRONT

RIGHT

REAR

LEGEND

1	COMPOSITION ROOF SHINGLES	8	WOOD TRIM
2	WOOD BARGE BOARDS	9	VINYL WINDOWS
3	WOOD RAFTER TAILS	10	STUCCO (FOAM) TRIM
4	WOOD POSTS / COLUMNS	11	STUCCO (FOAM) CORBELS
5	HORIZONTAL SIDING	12	SECTIONAL GARAGE DOOR
6	BOARD & BATTEN SIDING	13	WOOD BALCONY W/ CABLING
7	STUCCO		

VISTA COVE

VALLEJO, CALIFORNIA

ELEVATIONS

PLAN 3A - FARMHOUSE

0 1' 2' 4' 8'

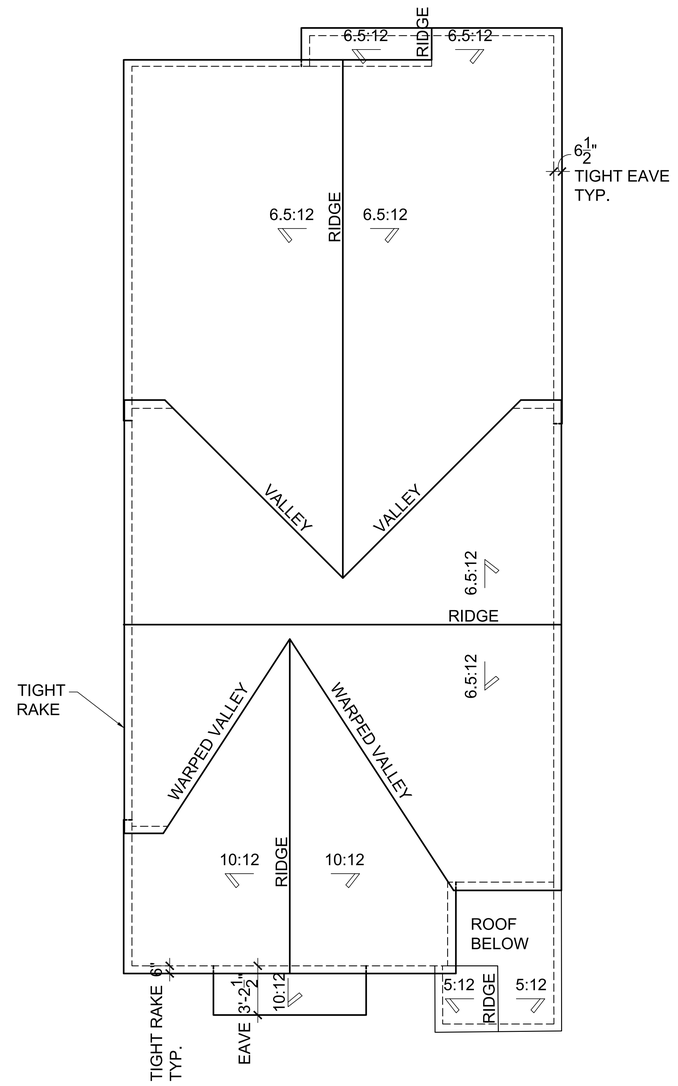
SCALE: 1/4"=1'-0"

SANCERRA

22029.01 05/19/25

A-30

R H A
ROBERT HIDEY ARCHITECTS



VISTA COVE
VALLEJO, CALIFORNIA

ROOF PLAN
PLAN 3A

0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

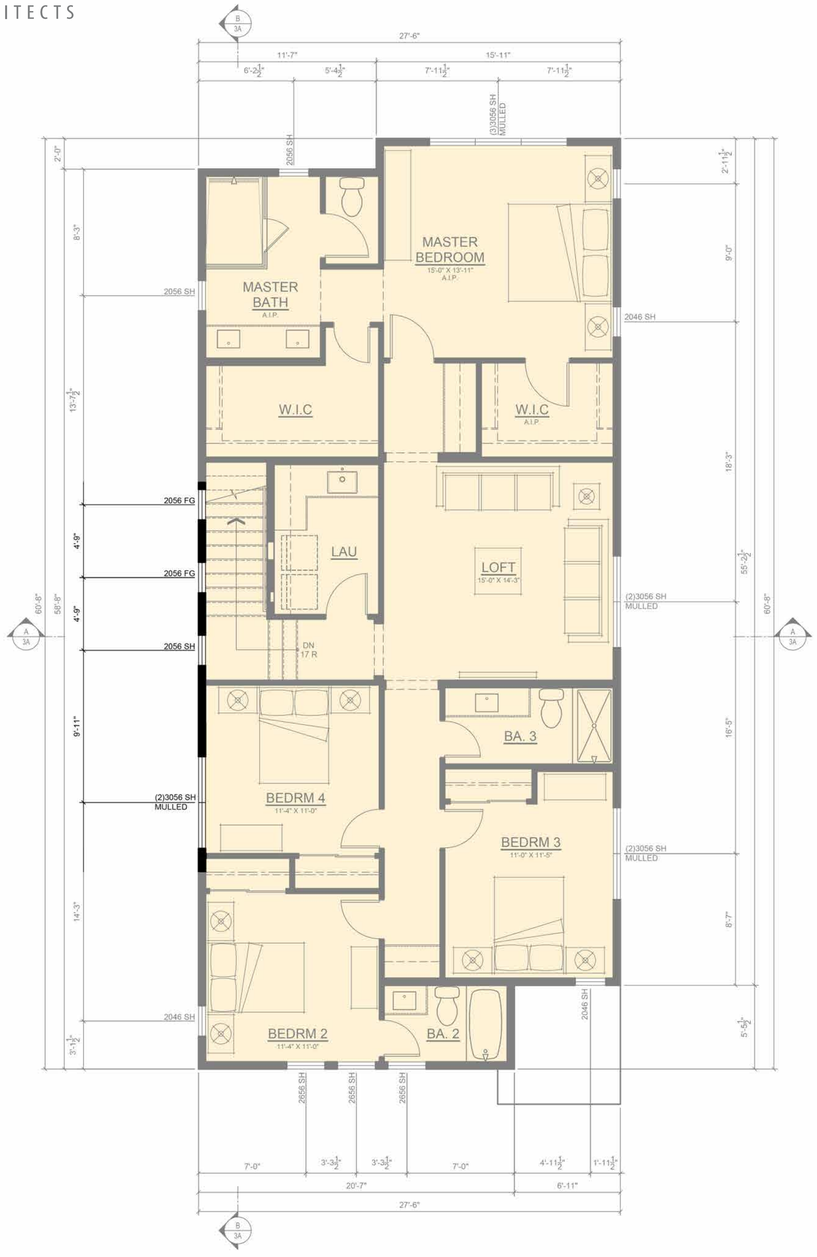
SANCERRA

22029.01 05/19/25

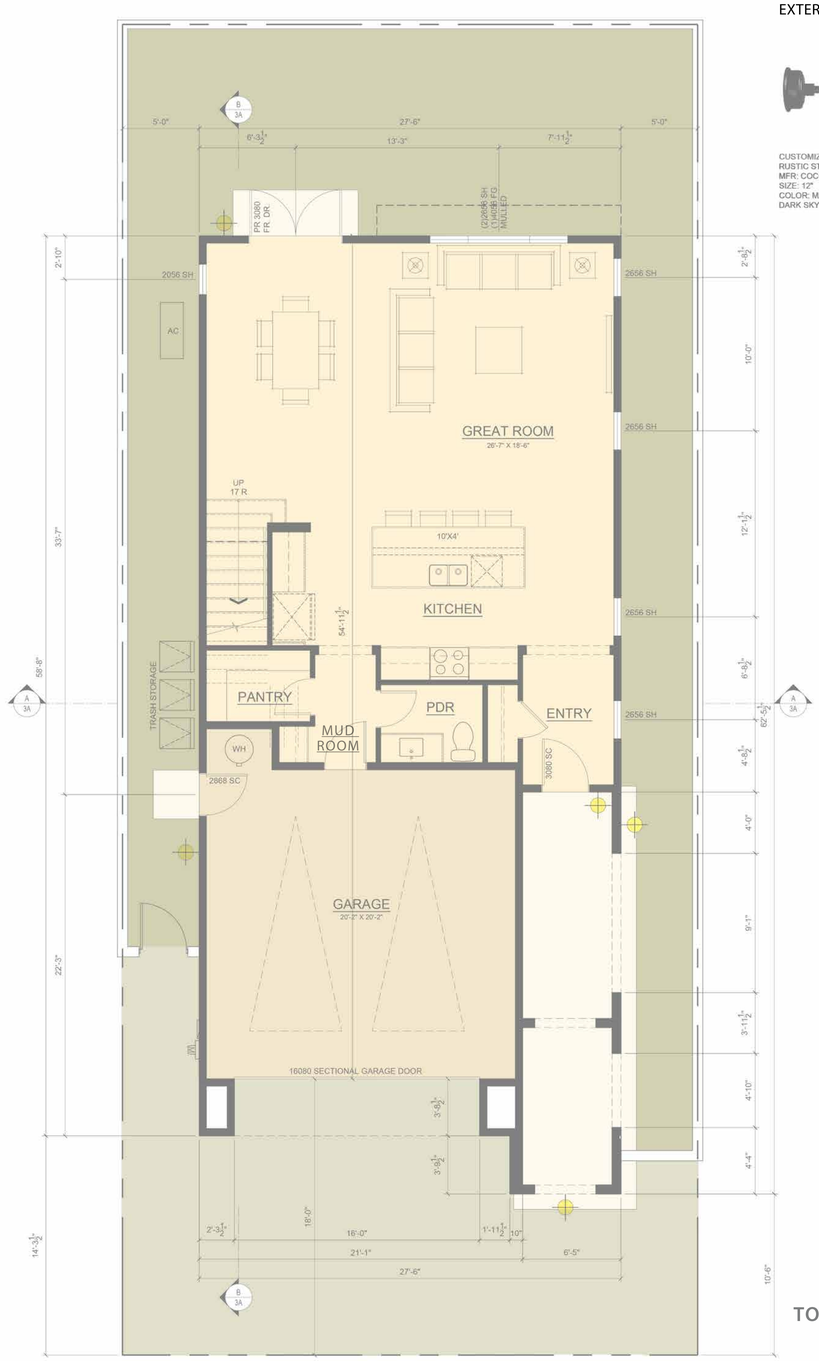
A-31

R H A

ROBERT HIDEY ARCHITECTS



SECOND FLOOR
1,540 SF



FIRST FLOOR
954 SF

EXTERIOR LIGHT FIXTURE:

CUSTOMIZABLE CALLA LED BARN LIGHT w/
RUSTIC STYLE STEM
MFR: COCOWEB
SIZE: 12"
COLOR: MATTE BLACK
DARK SKY COMPLIANT: YES

4 BED+LOFT, 3.5 BA
GREAT ROOM,
2-CAR GARAGE

1st FLOOR =	954 sf
2nd FLOOR =	1,540 sf
TOTAL =	**2,494 sf**
GARAGE =	447 sf
TOTAL CONSTRUCTION AREA =	**2,941 sf**

City of Vallejo Zoning Code
Floor Area Calculation per 16.104
TOTAL = 2,792 sf

FLOOR PLAN
PLAN 3B - 2,494 SF

0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

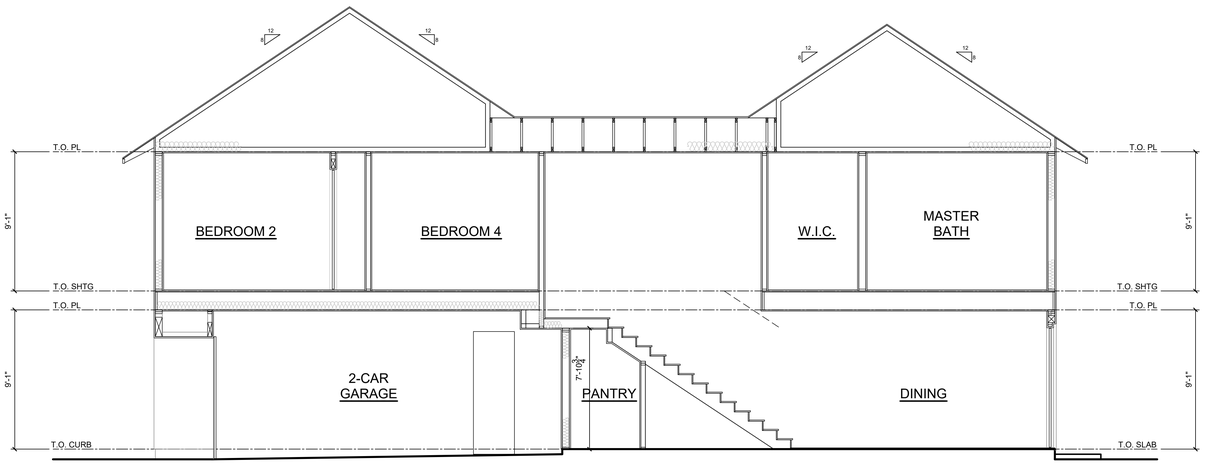
VISTA COVE
VALLEJO, CALIFORNIA

SANCERRA

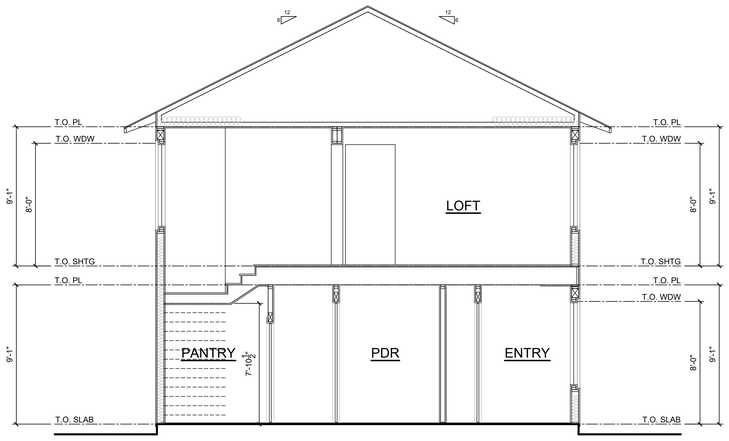
22029.01 05/19/25

A-32

R H A
ROBERT HIDEY ARCHITECTS



SECTION B



SECTION A

VISTA COVE
VALLEJO, CALIFORNIA

SECTIONS
PLAN 3B

0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

SANCERRA

22029.01 05/19/25

A-33

R H A

ROBERT HIDEY ARCHITECTS

LEFT

FRONT

RIGHT

REAR

LEGEND

1	COMPOSITION ROOF SHINGLES	8	WOOD TRIM
2	WOOD BARGE BOARDS	9	VINYL WINDOWS
3	WOOD RAFTER TAILS	10	STUCCO (FOAM) TRIM
4	WOOD POSTS / COLUMNS	11	STUCCO (FOAM) CORBELS
5	HORIZONTAL SIDING	12	SECTIONAL GARAGE DOOR
6	BOARD & BATTEN SIDING	13	WOOD BALCONY W/ CABLING
7	STUCCO		

VISTA COVE

VALLEJO, CALIFORNIA

ELEVATIONS

PLAN 3B - FARMHOUSE

0 1' 2' 4' 8'

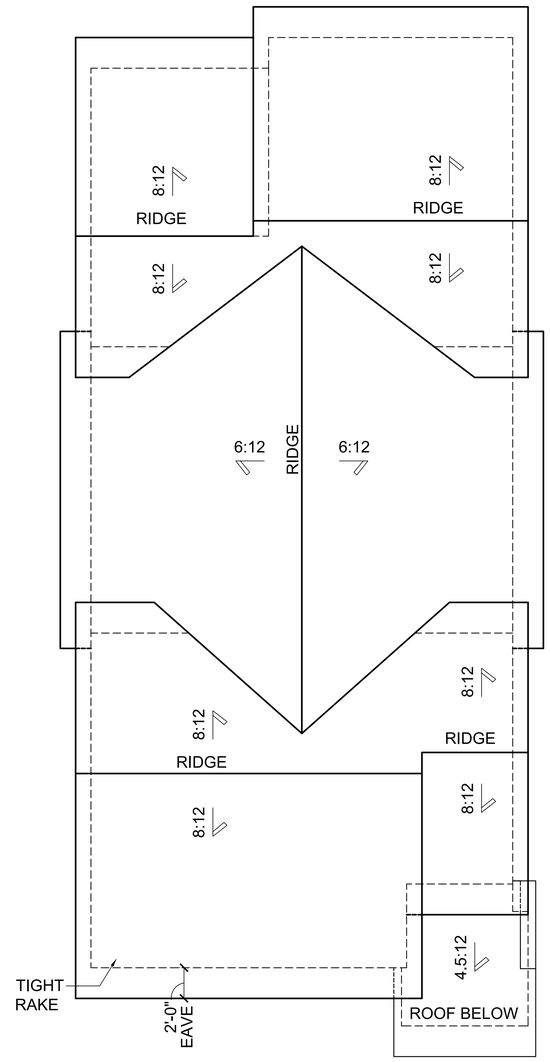
SCALE: 1/4"=1'-0"

SANCERRA

22029.01 05/19/25

A-34

R H A
ROBERT HIDEY ARCHITECTS



VISTA COVE
VALLEJO, CALIFORNIA

ROOF PLAN
PLAN 3B

0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

SANCERRA

22029.01 05/19/25

A-35

R H A
ROBERT HIDEY ARCHITECTS

FARMHOUSE 'A'
COLOR SCHEME 1

FARMHOUSE 'B'
COLOR SCHEME 2

VISTA COVE
VALLEJO, CALIFORNIA

STREETSCENE
PLAN 3

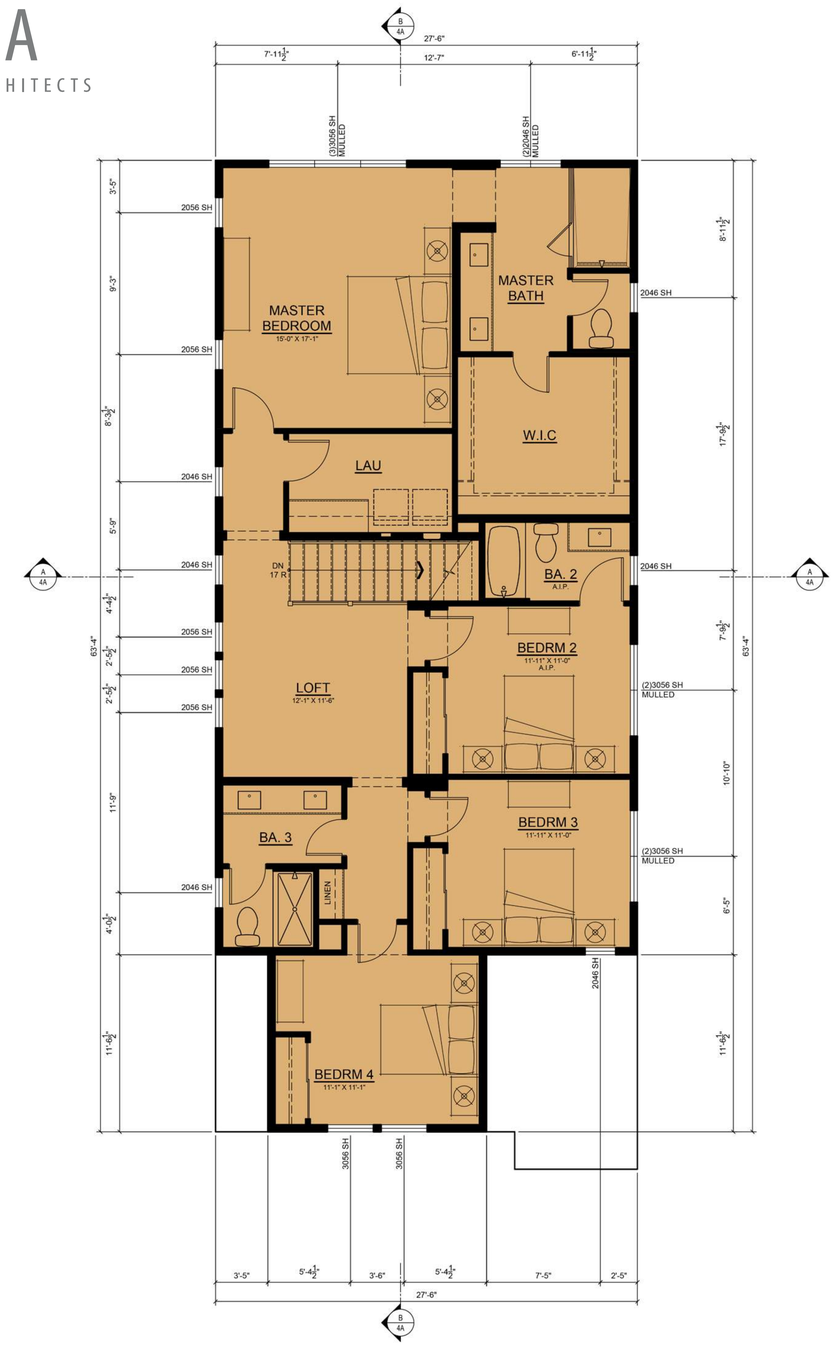
0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

SANCERRA

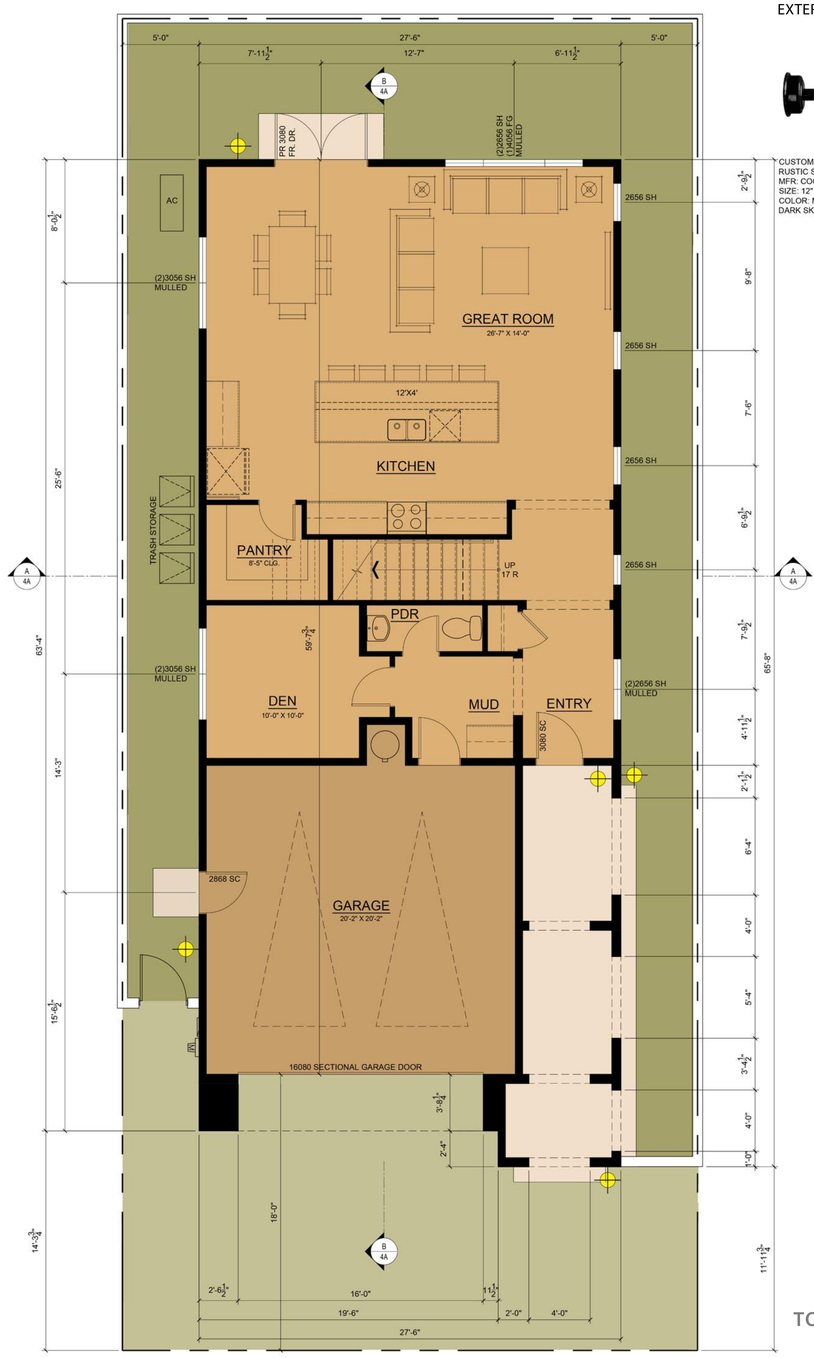
22029.01 05/19/25

A-36

R H A
ROBERT HIDEY ARCHITECTS



SECOND FLOOR
1,539 SF



FIRST FLOOR
1,079 SF

EXTERIOR LIGHT FIXTURE:

CUSTOMIZABLE CALLA LED BARN LIGHT w/
RUSTIC STYLE STEM
MFR: COCOWEB
SIZE: 12'
COLOR: MATTE BLACK
DARK SKY COMPLIANT: YES

4 BED+LOFT, 3.5 BA
GREAT ROOM,
2-CAR GARAGE

1st FLOOR =	1,079 sf
2nd FLOOR =	1,539 sf
TOTAL =	**2,618 sf**
GARAGE =	441 sf
TOTAL CONSTRUCTION AREA =	**3,059 sf**

City of Vallejo Zoning Code
Floor Area Calculation per 16.104
TOTAL = 2,898 sf

FLOOR PLAN
PLAN 4A - 3,059 SF

0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

VISTA COVE
VALLEJO, CALIFORNIA

SANCERRA

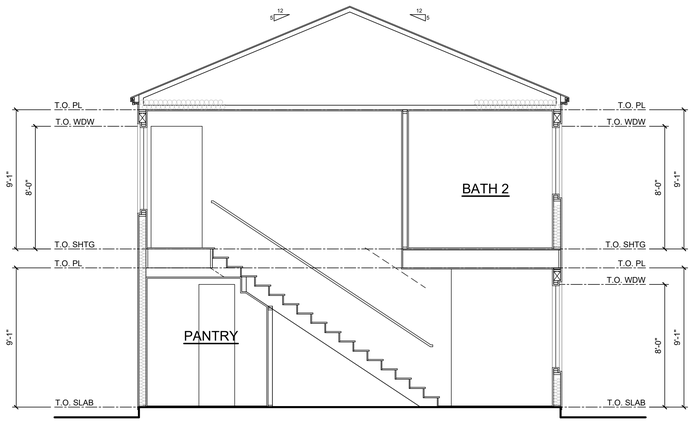
22029.01 05/19/25

A-37

R H A

ROBERT HIDEY ARCHITECTS

SECTION B



SECTION A

VISTA COVE

VALLEJO, CALIFORNIA

SECTIONS

PLAN 4A

0 1' 2' 4' 8'

SCALE: 1/4"=1'-0"

SANCERRA

22029.01 05/19/25

A-38

R H A

ROBERT HIDEY ARCHITECTS

LEFT

FRONT

RIGHT

REAR

LEGEND

1	COMPOSITION ROOF SHINGLES	8	WOOD TRIM
2	WOOD BARGE BOARDS	9	VINYL WINDOWS
3	WOOD RAFTER TAILS	10	STUCCO (FOAM) TRIM
4	WOOD POSTS / COLUMNS	11	STUCCO (FOAM) CORBELS
5	HORIZONTAL SIDING	12	SECTIONAL GARAGE DOOR
6	BOARD & BATTEN SIDING	13	WOOD BALCONY W/ CABLING
7	STUCCO		

VISTA COVE

VALLEJO, CALIFORNIA

ELEVATIONS

PLAN 4A - FARMHOUSE

0 1' 2' 4' 8'

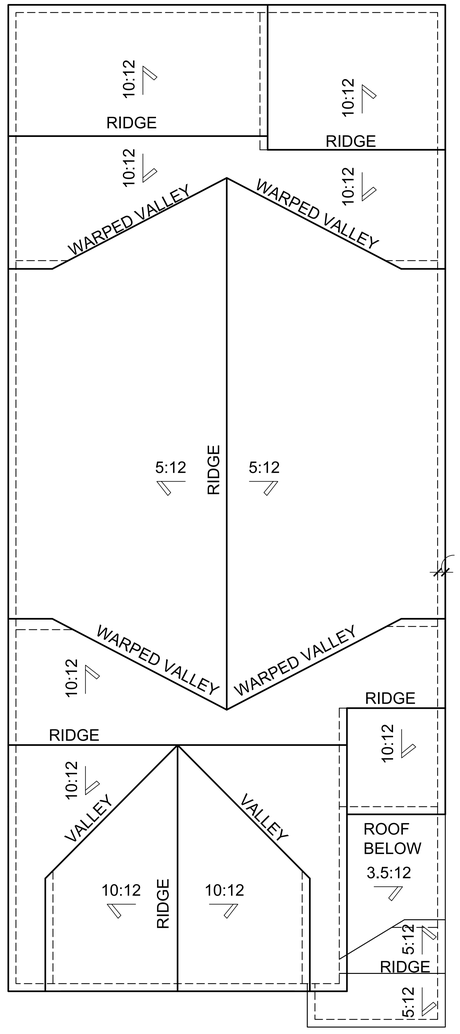
SCALE: 1/4"=1'-0"

SANCERRA

22029.01 05/19/25

A-39

R H A
ROBERT HIDEY ARCHITECTS



VISTA COVE
VALLEJO, CALIFORNIA

ROOF PLAN
PLAN 4A

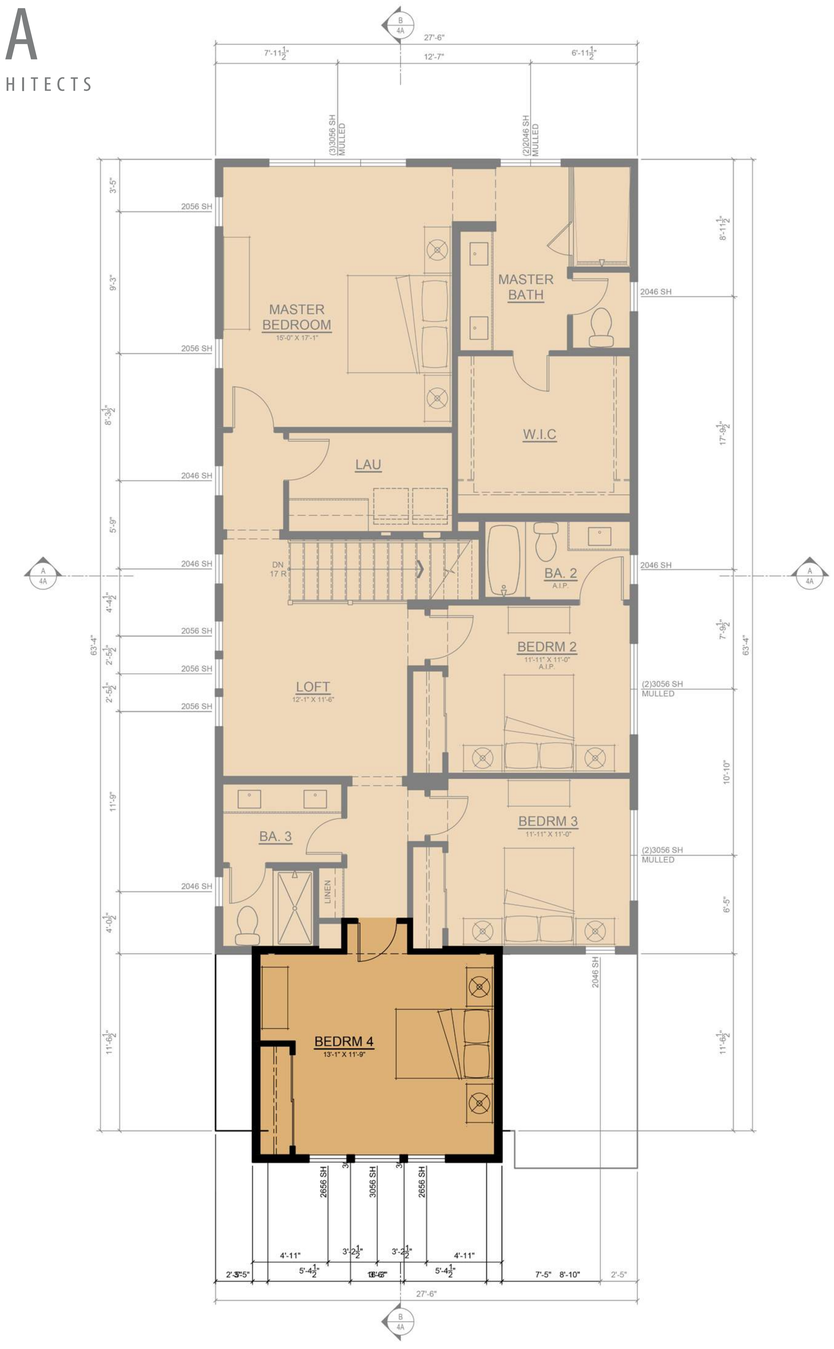
0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

SANCERRA

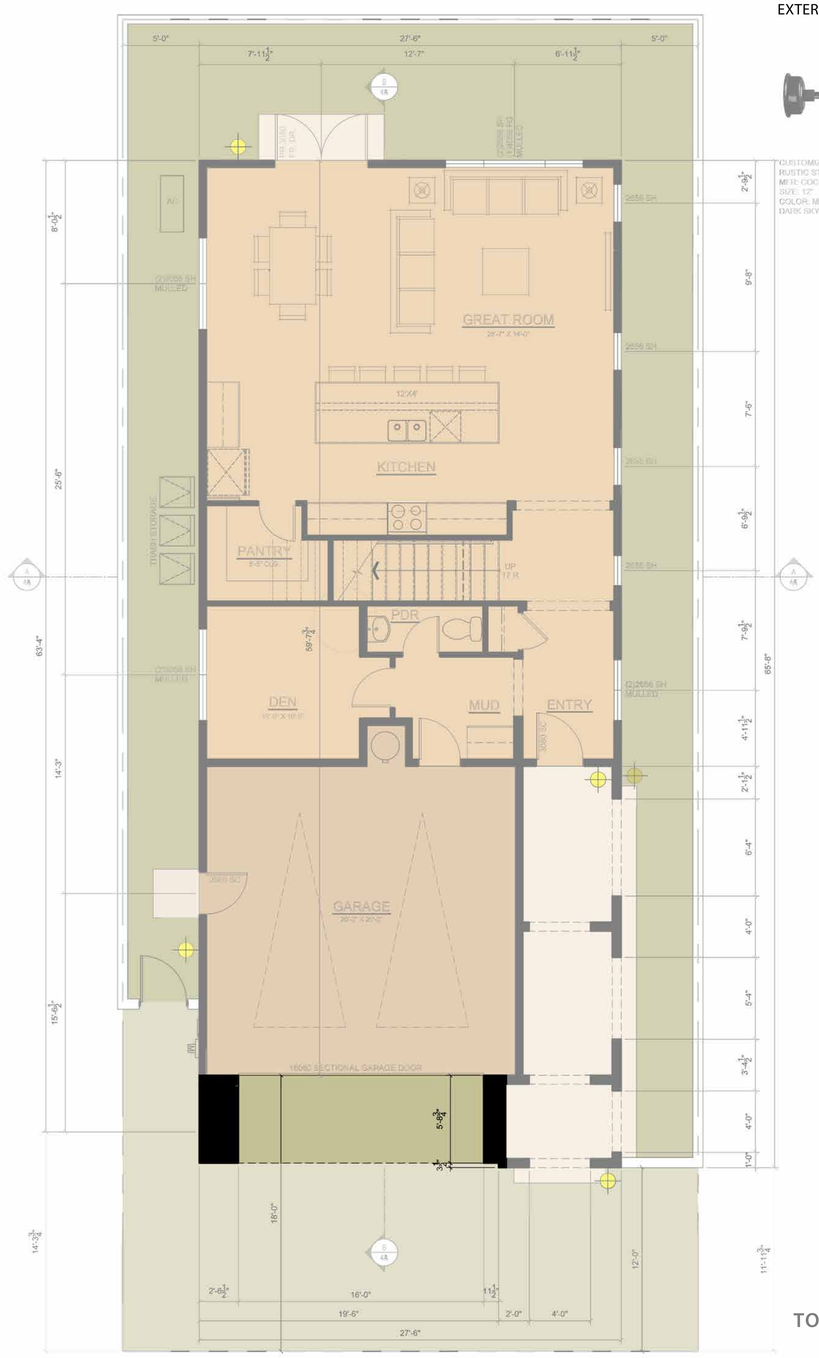
22029.01 05/19/25

A-40

R H A
ROBERT HIDEY ARCHITECTS



SECOND FLOOR
1,399 SF



FIRST FLOOR
827 SF

EXTERIOR LIGHT FIXTURE:

*CUSTOMIZABLE CALLA LED BARN LIGHT w/
RUSTIC STYLE STEM
MFR: COCOWEB
SIZE: 12"
COLOR: MATTE BLACK
DARK SKY COMPLIANT: YES

4 BED+LOFT, 3.5 BA
GREAT ROOM,
2-CAR GARAGE

1st FLOOR =	1,079 sf
2nd FLOOR =	1,595 sf
TOTAL =	**2,674 sf**
GARAGE =	444 sf
TOTAL CONSTRUCTION AREA =	**3,118 sf**

City of Vallejo Zoning Code
Floor Area Calculation per 16.104
TOTAL = 2,952 sf

FLOOR PLAN
PLAN 4B - 2,674 SF

0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

VISTA COVE
VALLEJO, CALIFORNIA

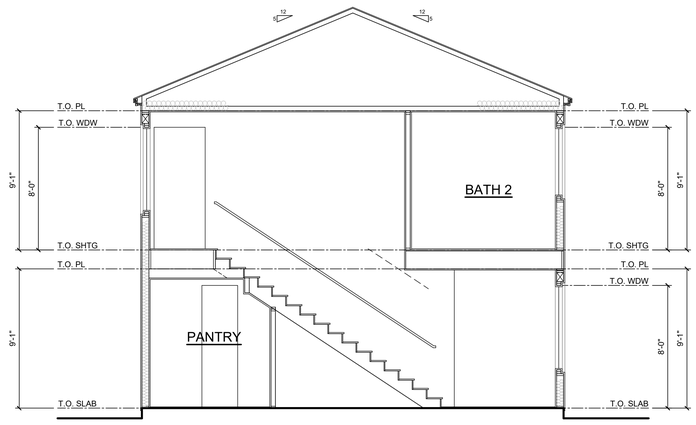
SANCERRA

22029.01 05/19/25

A-41

R H A
ROBERT HIDEY ARCHITECTS

SECTION B



SECTION A

SECTIONS
PLAN 4B

0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

VISTA COVE
VALLEJO, CALIFORNIA

SANCERRA

22029.01 05/19/25

A-42

R H A

ROBERT HIDEY ARCHITECTS

LEFT

FRONT

RIGHT

REAR

LEGEND

1	COMPOSITION ROOF SHINGLES	8	WOOD TRIM
2	WOOD BARGE BOARDS	9	VINYL WINDOWS
3	WOOD RAFTER TAILS	10	STUCCO (FOAM) TRIM
4	WOOD POSTS / COLUMNS	11	STUCCO (FOAM) CORBELS
5	HORIZONTAL SIDING	12	SECTIONAL GARAGE DOOR
6	BOARD & BATTEN SIDING	13	WOOD BALCONY W/ CABLING
7	STUCCO		

ELEVATIONS

PLAN 4B - FARMHOUSE

0 1' 2' 4' 8'

SCALE: 1/4"=1'-0"

VISTA COVE

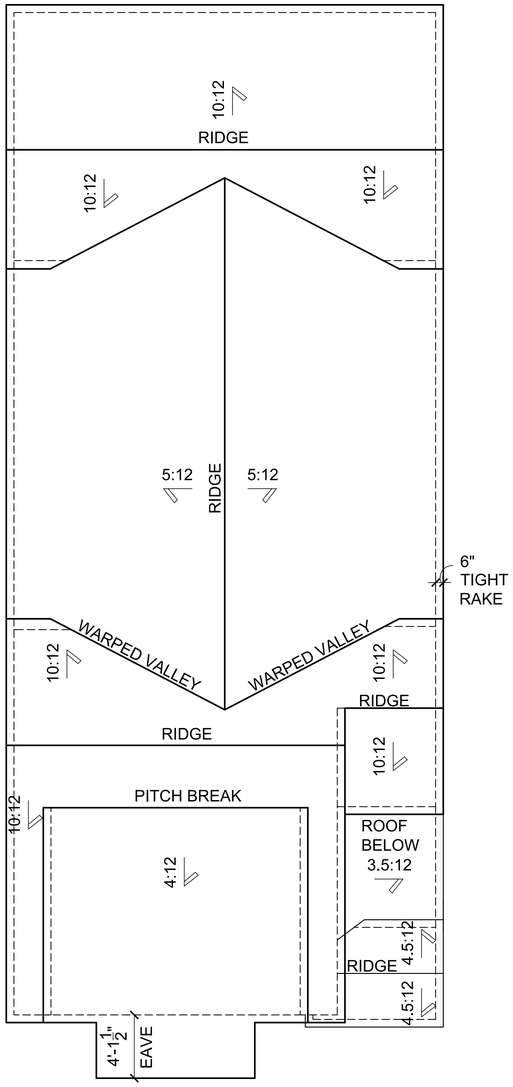
VALLEJO, CALIFORNIA

SANCERRA

22029.01 05/19/25

A-43

R H A
ROBERT HIDEY ARCHITECTS



VISTA COVE
VALLEJO, CALIFORNIA

ROOF PLAN
PLAN 4B

0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

SANCERRA

22029.01 05/19/25

A-44

R H A
ROBERT HIDEY ARCHITECTS

FARMHOUSE 'A'
COLOR SCHEME 3

FARMHOUSE 'B'
COLOR SCHEME 5

VISTA COVE
VALLEJO, CALIFORNIA

STREETSCENE
PLAN 4

0 1' 2' 4' 8'
SCALE: 1/4"=1'-0"

SANCERRA

22029.01 05/19/25

A-45

Docusign Envelope ID: 14B5CAF5-1B63-4EAB-B92C-6667DDF9CC2C

CITY OF VALLEJO DESIGN REVIEW BOARD

RESOLUTION NO. DRB 25-02

RESOLUTION RECOMMENDING THE PLANNING COMMISSION APPROVE DESIGN REVIEW (DR23-0006) AND LANDSCAPE REVIEW (LR23-0002) FOR A 51-UNIT SINGLE FAMILY RESIDENTIAL SUBDIVISION ("VISTA COVE"), LOCATED ON A VACANT SITE NEAR THE INTERSECTION OF SHADY LANE AND WILDFLOWER AVENUE (APNs: 0079-171-170 & 0079-120-100)

* *

WHEREAS, on August 29, 2017, the City Council adopted General Plan 2040; and

WHEREAS, the property has a General Plan 2040 land use designation of Primarily Single-Family (PSF) and Mix of Housing types/Medium Density (R-MH); and

WHEREAS, on July 22, 2021, the City Council adopted a new Zoning Code and Zoning Map; and

WHEREAS, the property is located in the Residential Low Density and Residential Medium Density Zoning Districts; and

WHEREAS, on November 29, 2022, Sancerra Vista Cove, LLC., the applicant, submitted for a Preliminary Review Application pursuant to California Senate Bill (SB) 330, "the Housing Crisis Act of 2019; and

WHEREAS, on December 28, 2022, the Preliminary Application SB330 was found to satisfy the checklist as listed in California Government Code Section 65941.1; and

WHEREAS, on February 13, 2023, the applicant formally submitted an application for Tentative Map, Development Review, Design Review, Landscape Review and Minor Use permit, to develop 51 detached single-family homes on a vacant 20.13-acre site located near the intersection of Shady Lane and Wildflower Avenue (APN:0079-171-170 and 0079-120-100); and

WHEREAS, the project went through multiple rounds of completeness review and on December 18, 2023, the project was deemed complete; and

WHEREAS, on May 16, 2024, the applicant revised the project description to withdraw the Minor Use Permit application, and add a request for a Planned Development and Zoning Map amendment to change the project site's zoning districts from Residential Low Density and Residential Medium Density Zoning to Planned Development with a proposed "Vista Cove Planned Development Plan"; and

WHEREAS, on July 24, 2024, the application for the revised project was deemed complete; and

WHEREAS, the Vallejo Municipal Code (VMC) Section 2.59.020(A), states that the Design Review Board shall "advise the Planning Commission when requested or when required by an applicable local ordinance;" and

WHEREAS, VMC Sections 16.604.01(K) and 16.604.03.B, require either the Director or the Design Review Board to make a recommendation to the Planning Commission for any Design Review (including Landscape Review) entitlement involving 50 or more residential units; and

Docusign Envelope ID: 14B5CAF5-1B63-4EAB-B92C-6667DDF9CC2C

WHEREAS, on June 26, 2025, a notice of this hearing was published in the Times Herald and mailed to all active neighborhood groups and property owners within 500 feet of the subject property, the Vallejo City Unified School District and any other local agency expected to provide water, wastewater treatment, streets, roads, schools, or other essential facilities or services to the project, and electronically mailed to the members of the Design Review Board, to the applicant and to all interested parties; and

WHEREAS, on July 10, 2025, the Design Review Board considered testimony and evidence, both written and oral, provided at the public hearing, as well as other documents contained in the record of proceedings relating to the project, which are maintained in the offices of the City of Vallejo Planning Division; and

NOW, THEREFORE, based on evidence received in the staff report and at the public hearing, the Design Review Board makes the following factual findings:

I. FINDINGS RELEVANT TO THE SCOPE OF DESIGN REVIEW (VMC 16.604.02)

A. In accordance with VMC Section 16.604.02 the Design Review Board has reviewed and independently considered the applicable development standards (including the zoning adjustments proposed in conjunction with the Draft Planned Development Plan, as described in the staff report), the overall design, architecture, landscaping and project aesthetics proposed, and the Design Review Board finds that all of the design elements are satisfactory as presented with no project modifications recommended to the Planning Commission at this time.

II. FINDINGS RELEVANT TO THE APPROVAL OF THE DESIGN REVIEW PERMIT (VMC Section 16.604.03.B)

In accordance with VMC Section 16.604.03.B, the Design Review Board finds that the application:

A. Is consistent with the purposes of this chapter, the design policies of the general plan and any applicable specific plan, any adopted applicable design guidelines.

Purposes of the Chapter

1. **Establish regulations for an objective process that applies urban design principles to ensure that new construction supports the best of the city's architectural traditions.**

   As proposed, the project meets objective process that applies urban design principles to ensure that new construction supports the best of the city's architectural traditions, as discussed in detail below.

2. **Encourage new structures that show creativity and imagination, add distinction, interest, and variety to the community, and are environmentally sustainable.**

   The proposed home designs include 'Modern Farmhouse' architecture that will be constructed with a variety of high-quality building materials and painted with simple, neutral colors. Vertical and horizontal façade breaks, and appropriate building massing have been incorporated into the design of the subdivision and will create distinction in the context of the larger established neighborhood.

3. **Promote architectural and design excellence in new construction and discourage poor quality development.**

Docusign Envelope ID: 14B5CAF5-1B63-4EAB-B92C-6667DDF9CC2C

The project details, colors, materials, and landscaping are integrated with one another in a way that ensures a visually consistent proposal. Each building elevation will consist of building features, materials, and colors typically associated with the Modern Farmhouse architectural style. The homes will incorporate different finished materials such as stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and batten siding, and naturally decay resistant wood. The architectural detailing (shutters, eave brackets, corbels, exposed rafters/rafter tails, and/or beams) have been proposed to provide visual interest and richness to the elevations. Overall, the project architecture and landscaping propose high-quality, long-lasting material that will result in a quality development.

4. **Ensure that future development should:**
   a. **Reflect the values of the community.**
   b. **Enhance the surrounding environment.**
   c. **Visually harmonize with its surroundings and not unnecessarily obstruct scenic views; and**
   d. **Avoid nostalgic misrepresentations that may confuse the relationships among structures over time.**

   The project reflects the promotion of development that targets underutilized sites, which is a policy identified in the General Plan. Due to its location, the project will sit lower on the site as to not obstruct scenic views from existing residences to the east, and due to its nature and design, nor will it confuse the relationships among structures in the vicinity over time. The overall project has been designed to wrap around the back side of the existing residential development in order to fit in with the existing development pattern.

5. **Ensure that decisions on housing development projects are based on objective design standards as required by the State Housing Accountability Act (Government Code Section 65589.5).**

   The project complies with applicable, objective general plan and zoning standards. Therefore, in accordance with the provisions of the Housing Accountability Act (HAA), California Government Code Section 65589.5(j), the city may not deny the project or approve the project at a reduced density without basing its decision on the written findings under Section 65589.5(j), which read as follows:

   1. The development would have a specific adverse impact on public health or safety unless disapproved, or approved at a lower density; and
   2. There is no feasible method to satisfactorily mitigate or avoid the specific adverse impact, other than the disapproval, or approval at a lower density

6. **Provide for new landscaping to create a visually pleasing setting for structures on the site.**

   Landscaping will be provided in the front yards, open spaces and around the bioretention basins. A total of 141 new trees, as well as shrubs and ground cover, will be planted within the project to enhance the project site. The new landscaping will create a visually pleasing setting for the homes to be constructed on the site.

7. **Promote the protection and retention of landmark, native, and specimen trees and if feasible mature canopy trees and other significant landscaping of aesthetic and environmental value.**

   The project will remove a total of 69 on-site trees. An arborist report was prepared and a total of 83 trees were assessed, identifying seven different tree species, e.g. Coast

Docusign Envelope ID: 14B5CAF5-1B63-4EAB-B92C-6667DDF9CC2C

Live Oak, Plum Cherry, Apple, Monterey Pine, Valley Oak, Toyon, and Strawberry Tree, with Coast Live Oak as the most common species. The trees ranged from poor to good condition. A total of 47 significant trees will be removed and replaced with a total of 141 new trees, as part of the project.

8. **Ensure that the design, quality, and location of signs are consistent with the character and scale of the structures to which they are attached and are visually harmonious with surrounding development.**

   As part of the project, an entry monument sign, with an overall height of six feet and four inches, will be placed at the entrance of the new subdivision. The monument sign will be constructed of CMU blocks and will be precasted with board and batten veneer. The new sign will create a sense of place and is appropriately scaled with surrounding structures and is visually harmonious with the overall development. Additionally, new street and directional signage will be included.

9. **Promote the conservation, enhancement, preservation, and protection of historic resources.**

   Not applicable; there are no historic resources near this project's location.

Design policies of the General Plan

The project is consistent with applicable General Plan 2040 design policies such as:

NBE-2.3 (Inviting, Compatible Design. Promote attractive development that is compatible with surrounding uses)

The 51 detached single-family residences incorporate a Modern Farmhouse style home, and the building height and mass are not out of scale with existing structures located in proximity.

NBE-1.8 (Urban Forest. Encourage planting of street trees and landscaping to beautify the city, encourage walking and biking, and create a stronger sense of identity)

The project involves the planting of many trees, shrubs, and ground covers contributing to the beautification of Vallejo and the cultivation of an urban forest. The construction of sidewalk improvements within the project would encourage walking and contribute to the pedestrian realm within the subject site.

POLICY NBE-1.6 (Open Space. Conserve and enhance natural open space areas in and adjacent to Vallejo and its waterfront)

The proposed project would preserve approximately 9.74-acres of the project site as natural open space.

Policy NBE-1.15

Energy Efficiency: Support measures to reduce energy consumption and increase energy efficiency in residential, commercial, industrial, and public buildings.

The project would be required to comply with standards set in the California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California's Green Building Standards Code (CBC Title 24, Part 11) requires implementation of energy efficient light fixtures and building materials into the design of new construction projects. The project includes sustainable

Docusign Envelope ID: 14B5CAF5-1B63-4EAB-B92C-6667DDF9CC2C

and energy-efficient features, including solar panels and an all-electric design, each provided at or exceeding City requirements.

Adopted applicable design guidelines.

The rezoning of the subject site from Residential Low Density and Residential Medium Density to Planned Development, will include adoption of the Vista Cove Planned Development Plan which includes design guidelines for residential development and design standards, landscaping, and fencing standards. As proposed, the project is consistent with the proposed Vista Cove Planned Development Plan.

B. Is consistent with any planning or zoning approvals by the director or the planning commission.

Not applicable; Neither the Director, nor the Planning Commission, have approved any previous entitlements at the site.

C. Complies with any other relevant city policies or regulations.

The project as proposed complies with VMC Chapter 16.202 – Residential Districts, as the project has been designed to meet the requirements, as detailed in Table 3 and 4 of Attachment 2 of the staff report. The Planning Commission will act on the Development Review for the project.

D. Meets the following criteria:

a. The aesthetic design, including its exterior design and landscaping, is appropriate to the function of the project and will provide an attractive and comfortable environment for occupants, visitors, and the general community.

The proposed Modern Farmhouse architectural style includes a variety of different building materials such as stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and batten siding, and naturally decay resistant wood. With the application of neutral paint colors and installation of drought tolerant front yard landscaping as proposed, all design elements will complement each other and provide an attractive and comfortable environment for occupants and visitors to the subdivision.

b. Project details, colors, materials, and landscaping are fully integrated with one another and used in a manner that is visually consistent with the proposed architectural design.

As described above, the proposed materials, colors and landscaping will be fully integrated with one another and will be used in a manner that is visually consistent with the proposed architectural design of a Modern Farmhouse style.

c. The project has been designed with consideration of neighboring development.

The project has been designed with consideration of the existing neighborhood development to the east. The existing development is classified as detached, single- and two-story homes with hip and gable roofs, with a mixture of stucco, wood and batten siding. The proposed project will incorporate two-story homes that include a variety of different building materials such as stucco, stone or brick veneer, cementitious lap siding or panels, cementitious board and batten siding, and naturally decay resistant wood. With the application of neutral paint colors,

Docusign Envelope ID: 14B5CAF5-1B63-4EAB-B92C-6667DDF9CC2C

and installation of drought tolerant front yard landscaping as proposed, all design elements will not only complement each other but will also complement the existing surrounding development to the west.

d. The project contributes to the creation of an attractive and visually interesting built environment that includes well-articulated structures that present varied building facades, rooflines, and building heights and encourages increased pedestrian activity and transit use.

The proposed detached single-family residences have been designed to be visually interesting, and they will be constructed with a variety of high-quality building materials and painted with simple, complementary colors. Vertical and horizontal façade breaks, and building massing have all been incorporated into the design of the homes. The building features wall articulation, and materials that are aesthetically pleasing and compatible with other newer developments in the community.

e. Street frontages are attractive and interesting for pedestrians, address the street and provide for greater safety by allowing for surveillance of the street by people inside buildings and elsewhere.

The proposed project will activate an underutilized, vacant site by creating new roads and alleys for the subdivision. The street frontages have been designed to include a variety of different building materials, colors and landscaping to create an attractive streetscape and create an attractive street presence for pedestrians and passing motorists.

f. The proposed design is compatible with the historical or visual character of any area recognized by the city as having such character.

Not applicable; the subject site is not within any historic district of the city.

g. The aesthetic design preserves significant public views and vistas from public streets and open spaces and enhances them by providing areas for pedestrian activity.

The project has been designed to take advantage of the views of vistas of the Carquinez Strait that will be visible from public streets and open spaces. To the extent feasible, the project will preserve the views and vistas of the existing neighborhood to the west of the site. The project will incorporate common open space to create a sense of place and provide an area for pedestrian activity.

h. The proposed landscaping plan is suitable for the type of project and will improve the appearance of the community by enhancing the building, minimizing hardscape and softening walls; and the landscape plan incorporates plant materials that are drought-tolerant, will minimize water usage, and are compatible with Vallejo's climate.

The proposed landscaping, including trees, shrubs and ground covering has been designed to improve the appearance of an underutilized site and minimize hardscape. The landscaping incorporates plant materials that are drought-tolerant, would minimize water usage, and are compatible with City of Vallejo's climate.

i. The project has been designed to be energy efficient including, but not limited to, landscape design and green or eco-friendly design and materials.

Docusign Envelope ID: 14B5CAF5-1B63-4EAB-B92C-6667DDF9CC2C

As required by the California Building Code, the project has been designed to be energy efficient and will include features such as LED lighting and solar panels. The proposed landscaping has been designed to incorporate plant materials that are drought tolerant consistent with the California Water Efficient Landscaping Standards.

j. The project design protects and integrates natural features including creeks, open space, significant vegetation, and geologic features.

The project will only develop approximately 10-acres of the vacant 20.13-acre site. The development has been designed to protect natural features and significant vegetation. The remaining 10.13-acre site will be left undeveloped and preserved as undisturbed open space.

NOW, THEREFORE, LET IT BE RESOLVED that the Design Review Board hereby recommends that the Planning Commission approve Design Review (DR23-0006) and Landscape Review (LR23-0013), as presented, based on the above findings.

PASSED AND ADOPTED at a regular meeting of the Design Review Board of the City of Vallejo, State of California, on the 10th day of July 2025 by the following vote:

AYES: Kennedy, Eli and Adams
NOES: None
ABSENT: Logtu
ABSTAIN: None

DocuSigned by:
Matthew Kennedy
A2EFD5679ACC487...
MATTHEW KENNEDY, CHAIRPERSON
City of Vallejo Design Review Board

Attest:
Signed by:
Cesar Orozco
F230526BB0ED413...
CESAR OROZCO, SECRETARY
City of Vallejo Design Review Board

From: Sherry Dunbar
To: Cesar Orozco
Subject: Vista Cove
Date: Wednesday, December 10, 2025 7:49:22 PM

This Message Is From an External Sender
This message came from outside your organization.

Dear Mr. Orozco,

I am writing to express my opposition to the proposed Vista Cove development currently under review. My primary concern—and a significant reason this project should be denied—is the substantial traffic impacts it will create on the already overburdened Robles Way.
The surrounding streets are operating near or at capacity during peak hours. Residents regularly experience congestion, and delays that compromise safe travel for both drivers and pedestrians. With the additional 130 homes currently underway near Rollingwood, our roads will face increased pressure. Adding the Vista Cove development will introduce hundreds of additional daily vehicle trips, placing an unsafe and unsustainable burden on Shady Lane and Robles Way.

If this project moves forward, congestion will worsen, commute times will increase, and overall frustration among residents will grow. More importantly, these conditions raise significant safety concerns that cannot be ignored.
Given these serious traffic and safety issues, I strongly urge the Planning Division to deny approval of the proposed Vista Cove development.

Thank you for your attention to this important matter and for your ongoing commitment to protecting public safety and preserving the quality of life for all residents.

Sincerely,
Mrs. Sherry Dunbar

From: Alison Axworthy
To: Cesar Orozco
Subject: Glenn Cove Housing Development Plans
Date: Wednesday, December 10, 2025 6:53:49 PM

This Message Is From an External Sender
This message came from outside your organization.

Dear Planning Committee:

I strongly opposed to the building of new homes near the Benicia State Recreation Area. This project poses significant and irreversible risks to the environmental integrity of the park, the safety of the surrounding community, and the long-term preservation of one of our region's most valued natural resources.

The Benicia State Recreation Area provides essential habitat for wildlife, serves as a natural buffer for the surrounding neighborhoods, and offers residents a rare opportunity to experience open space and quiet recreation. Building homes in such close proximity to the park would undermine these values. Increased noise, lighting, and human activity will disrupt sensitive species and degrade habitat that cannot be replaced once it is disturbed.

I have witnessed firsthand the importance of this natural corridor. Wildlife depends on the surrounding open space to forage, migrate, and survive. Once the land is developed or paved, these animals will be displaced into ever-shrinking areas, creating additional stress on the ecosystem and diminishing the overall health of the park.

In addition to the environmental impacts, constructing homes so close to a state park threatens to overwhelm existing infrastructure, increase traffic on already burdened roadways, and erode the quiet character of the surrounding community. The long-term consequences of such development far outweigh any short-term housing gains.
For these reasons, I strongly urge the Planning Committee to deny this proposal. Protecting the Benicia State Recreation Area and the surrounding open space is essential for maintaining the ecological health, livability, and natural heritage of our community.
Thank you for your attention and for your commitment to responsible land-use planning.

Sincerely,
Alison Axworthy

From: kulpreet kaur
To: Cesar Orozco
Subject: Vista cove
Date: Wednesday, December 10, 2025 6:41:48 PM

This Message Is From an External Sender
This message came from outside your organization.

Dear Planning Division:

I am writing to express my opposition to the proposed Vista Cove homes currently under review. After learning more about the proposed homes being built and considering their potential impacts, I believe this development would have serious negative consequences for the surrounding community, local infrastructure, and the adjacent Benicia State Recreation Area.

As someone who regularly walks in the state park, I am deeply concerned about the development's proximity to this protected natural space. The area supports wildlife and offers one of the few remaining open spaces in town. Any encroachment on this boundary would significantly disrupt habitat, increase noise pollution and human disturbance, and diminish the natural experience that residents and visitors rely on for recreation and well-being.

I urge you to disapprove of this project. We need open space preserved for the future.

Thank you,
Kulpreet Kaur
707-567-6855

From: Karl Schiller
To: Cesar Orozco
Subject: 09DEC2025, Planning Commission
Date: Tuesday, December 9, 2025 5:01:35 PM

This Message Is From an External Sender
This message came from outside your organization.

Mr. Orozco,

We oppose the Vista Cove Development.
Respectfully submitted,

K. Schiller
S. Mochizuki
121 Bluebell Pl.

From: Sigi Hawkins
To: Cesar Orozco
Subject: Glen Cove Hills II Development Proposal
Date: Friday, December 5, 2025 3:55:42 PM

This Message Is From an External Sender
This message came from outside your organization.

To Whom it May Concern:

I am against developing open space in Glen Cove, especially in our last remaining open spaces. It will impact neighbors negatively, reduce wildlife habitat, disrupt wildlife using it as corridors. Develop in downtown Vallejo!

Sigi Hawkins
406

From: Brian Meineche
To: Cesar Orozco
Subject: Opposition to Vista Cove development
Date: Wednesday, December 10, 2025 6:43:15 AM

This Message Is From an External Sender
This message came from outside your organization.

December 10, 2025
Cesar Orozco
Planning Manager
555 Santa Clara
Vallejo, CA 94590
cesar.orozco@cityofvallejo.net

Dear Mr. Orozco,

The Glen Cove Vista development poses significant environmental risks that cannot be overlooked. The proposed project threatens to disrupt local ecosystems and wildlife habitats, leading to irreversible damage to the delicate balance of the area's natural environment. Increased construction and human activity will result in heightened pollution levels, including noise, air, and water contamination. Moreover, the expansion of impervious surfaces such as roads and buildings will exacerbate stormwater runoff issues, leading to flooding and erosion, while also endangering nearby Benicia State Park. The long-term implications of such development jeopardize not only the regional biodiversity but also the health and well-being of the community that relies on these natural resources. Prioritizing economic growth over ecological preservation could lead to severe environmental degradation that future generations will be forced to grapple with.
I want to emphasize my opposition to the development not only for the above stated environmental reasons, but also for the sake of future Vallejo. We have essentially no wilderness left and this drainage into the Benicia state park really is very important, not only for the health of the state park, but also for the present and future residents of the city.
Thank you for your consideration of this important matter.

Respectfully,

Brian Meineche
(707)319-8152

From: Jill Cook
To: Cesar Orozco
Subject: Planned Development Glen Cove
Date: Thursday, December 4, 2025 9:29:04 PM

This Message Is From an External Sender
This message came from outside your organization.

Just say NO!!
We need to clean up what's wrong in our city before building more homes the average family cannot afford!

You want to make some good changes around here, clean up downtown, where the hookers walk in broad daylight and drug deals are done in front of your eyes. Shame on Vallejo for aiming to enrich the few without helping the many!!

From: Bruce Layne
To: Cesar Orozco
Subject: Public Review for Vista Cove Planned Development Project: NIMBY
Date: Wednesday, December 10, 2025 2:22:40 PM

This Message Is From an External Sender
This message came from outside your organization.

Hello Mr. Orozco,

My family and I have lived at 157 Silverpine Lane in Glen Cove since 1988. The land behind our lot is open space. It was intended to be a public park. When I attended a public meeting concerning the first Vista Cove development in 1989 a resident questioned where that park would be built. The city planner curtly replied that this was "unstable land." This "unstable land" has been subjected to Loma Prieta, the South Napa earthquake, plus many smaller shakes including the the most recent one south of Vallejo.

This is my NIMBY response to another proposed development. This potential development comes close to this "unstable land."

Now I would like to respond to the effect this development would have on the Benicia State Recreation Area. There are many animals who would say NIMBY including deer, coyotes, foxes, squirrels, lizards, skunks, racoons, jack rabbits, and more. The added light and noise pollution would affect not only these animals but also the birds. Bald eagles, red tailed hawks, white tailed kites, wild turkeys and many other smaller birds. Have you seen the bald eagles? They say NIMBY to any more development.

Sincerely,
Jeanne and Bruce Layne

From: CHRISTINA HALDENWANG
To: Cesar Orozco
Subject: Vista Cove Comments
Date: Wednesday, December 3, 2025 7:46:49 PM

This Message Is From an External Sender
This message came from outside your organization.

Mr. Orozco, I'm against this project for the following reasons:

1. The character of the hillside viewed from walking along the road leading into the Benicia State Recreation Area and out to Dillon Point will be forever negatively impacted. Why can't we leave the few open spaces we have - and so much need - untouched? Wildlife will be displaced and harmed by this development. Has your adjoiner, the State of California - Parks, been informed about planned destruction of wildlife habitat and the marsh? Is the City's assessment objective when they decide that there is no significant impact on visual character of the area and the biological/natural resources? Or what are the exact mitigation measures, please? Already on the northside of I-780 the new development off of Columbus Parkway ruined the character of the scenic hillside.
2. Removing 69 mature trees for the project should not be allowed. We need trees to stay healthy and to cool the planet. Only mature ones provide shade from the sun. Replacement trees take many years before they can provide shade or habitat for animals.

Thank you.
Christina Haldenwang

From: Leah Shelhorn
To: Cesar Orozco
Subject: Vista Cove - Public Comment on SMND
Date: Thursday, December 4, 2025 7:58:55 PM

This Message Is From an External Sender
This message came from outside your organization.

Good evening: I am against the project. Plain and simple. We already have traffic, we do not need trucks, dirt, noise, and a hillside taken out.
We live here for the beauty. Not to be crammed with more housing and disrupting the people that would have to live with this construction.

I am certain I do not need to go on. Not a good idea.

Leah Shelhorn
We are original Glen Cove Homeowners, 1988

From: Home M
To: Cesar Orozco
Subject: Vista Cove
Date: Wednesday, December 10, 2025 8:33:30 AM

This Message Is From an External Sender
This message came from outside your organization.

Dear Mr. Orozco,

I'm writing as a Glen Cove resident who cares deeply about the safety, character, and natural environment of our community. I am strongly opposed to the proposed Vista Cove development planned for the Glen Cove area. After reviewing the project details and considering its impacts, I'm convinced that moving forward with this development would have serious consequences for traffic, emergency service access, and the fragile wildlife habitats that make Glen Cove such a special place to live.

Glen Cove already experiences traffic bottlenecks during commuting hours, especially along Glen Cove Parkway and the connecting roads leading toward I-780. In addition, increased traffic along Shady Lane and Robles would further affect residents' ability to safely and efficiently exit the neighborhood. These routes were never designed to absorb the significant increase in vehicles this development would bring. With limited entry and exit points, Glen Cove is particularly vulnerable to congestion and potential gridlock during peak hours.

When speaking with my neighbors, there is also a growing concern about the additional homes being constructed along Rollingwood, which will add even more strain to Glen Cove traffic heading toward Safeway and increase

pressure along Robles Drive.

This contributes to a more pressing concern: emergency-service access. With only a few main routes in and out of Glen Cove, any added congestion could delay fire, medical, or police responders when every second counts. Residents rely on the assurance that emergency vehicles can reach them quickly, and introducing a development that strains these pathways poses an unacceptable risk.

Additionally, the Vista Cove development is planned near Benicia State Park—an area that supports a diverse range of wildlife, including birds, deer, bobcats, small mammals, and species that depend on the surrounding open space for survival. Further development would fragment these habitats, disrupt migration and nesting areas, and permanently alter the environment that both wildlife and residents cherish. Once these spaces are lost, they cannot be replaced.

For all these reasons, I respectfully urge the Planning Commission to deny the Vista Cove Development. Glen Cove deserves thoughtful planning that protects residents' safety and preserves the natural beauty and biodiversity that define our neighborhood. This development has been proposed twice before, and the same concerns raised in the past remain unresolved. Nothing has changed, and these issues still exist today.

Thank you for your time, attention, and service to Vallejo. I hope you will give serious consideration to the long-term impacts this development would have on Glen Cove.

Sincerely,

Wendy Meineche

707-342-8170

From: Eileen Fahy
To: Cesar Orozco
Cc: resavy1@comcast.net
Subject: Vista Cove Planned Development - Public Comment
Date: Wednesday, December 3, 2025 6:58:03 PM

This Message Is From an External Sender
This message came from outside your organization.

I am writing to express my opinion as a 30 year resident of Glen Cove. We live at 513 Fairhaven Way which is located near the proposed Vista Cove Development. The proposed 51 residential lots would have a severe impact on the traffic flow near the Safeway Shopping Center, with only one way in and out of the neighborhood. It could be a catastrophe if a fire or earthquake evacuation was needed in an emergency.
The proposed project would also severely impact the wildlife and their environment. I have witnessed deer, bobcats, hawks, coyotes, raccoons, wild turkeys in the neighboring open space. It is a buffer between Highway 780 and a refuge to the wildlife. Once the land is developed, this will be gone forever.
I understand almost seventy mature trees would be removed from the area. This is detrimental to all the hawks, owls, crows, blue jays and other birds living in the trees. The character and habitat would be lost. Please do not allow this to be destroyed.
My neighbors and I are concerned about property values, the views being lost, and the reason we chose this neighborhood to live, as being destroyed.
Sincerely,
Eileen and Richard Resavy
513 Fairhaven Way
Glen Cove, Vallejo

From: Julie Lake
To: Cesar Orozco
Subject: Vista Cove
Date: Wednesday, December 10, 2025 3:08:12 PM

This Message Is From an External Sender
This message came from outside your organization.

Dear Mr. Orozco,

I am 84 years old and have lived in my home on Wildflower Ave. for over 30 years. My home overlooks the State Park and the Carcuinez Straights. On Thursday evenings in summer I watch the sail boats from my kitchen window. To think That I would have to endure 6 months or more of machines and building going on right down from my house disturbs me and causes me such grief I can't even explain it. We will be the victims of mouse, grey squirrel and rat infestations and worse. Also Animals who have made their home in the state park and the whole property beneath Wildflower Ave. will have WHERE to go? It feels criminal to deny them all the home they have had living in the wild right next to humanity. Where will the deer, turkeys, peacocks, skunks, racoons, frogs, mice, rats, squirrels, coyotes, birds, and others go? Please do what you can to stop this invasion of our privacy, and then joy we experience living so close to nature. This is why we bought our houses on Wildflower……to be close to nature! How will we you. Don't let this happen!!!

Wildflower Ave. Homeowner,

Julie Lake

From: Emil Meineche
To: Cesar Orozco
Subject: Vista Cove
Date: Wednesday, December 10, 2025 10:53:54 AM

This Message Is From an External Sender
This message came from outside your organization.

Vallejo Planning Division
City of Vallejo
555 Santa Clara Street
Vallejo, CA 94590

Dear Members of the Vallejo Planning Division,

I'm writing as a deeply concerned Vallejo resident to express my strong opposition to the proposed housing development near Shady Lane, known as Vista Cove. While I recognize the importance of thoughtful, responsible growth, this project raises serious concerns about the well-being, safety, and long-term character of our community.
To begin with, the cumulative impact of recent and upcoming developments—including the already approved Rollingwood homes and now the Vista Cove proposal—would place additional
strain on Vallejo's already overextended public-safety infrastructure. The city of Vallejo continues to face significant challenges with police response times for 911 calls. Adding hundreds of new residents without a corresponding expansion of emergency services will only worsen an already critical situation.

I also want to highlight the direct neighborhood impact. My home is located on Georgia Street,
and the increased traffic from the new Benicia Road and Rollingwood homes will heavily affect
daily access to one of the closest grocery stores, Safeway. The parking lot is already at capacity, and entering from Robles Way is frequently difficult and congested. This development
would compound those issues for current residents who rely on that location for essential needs.

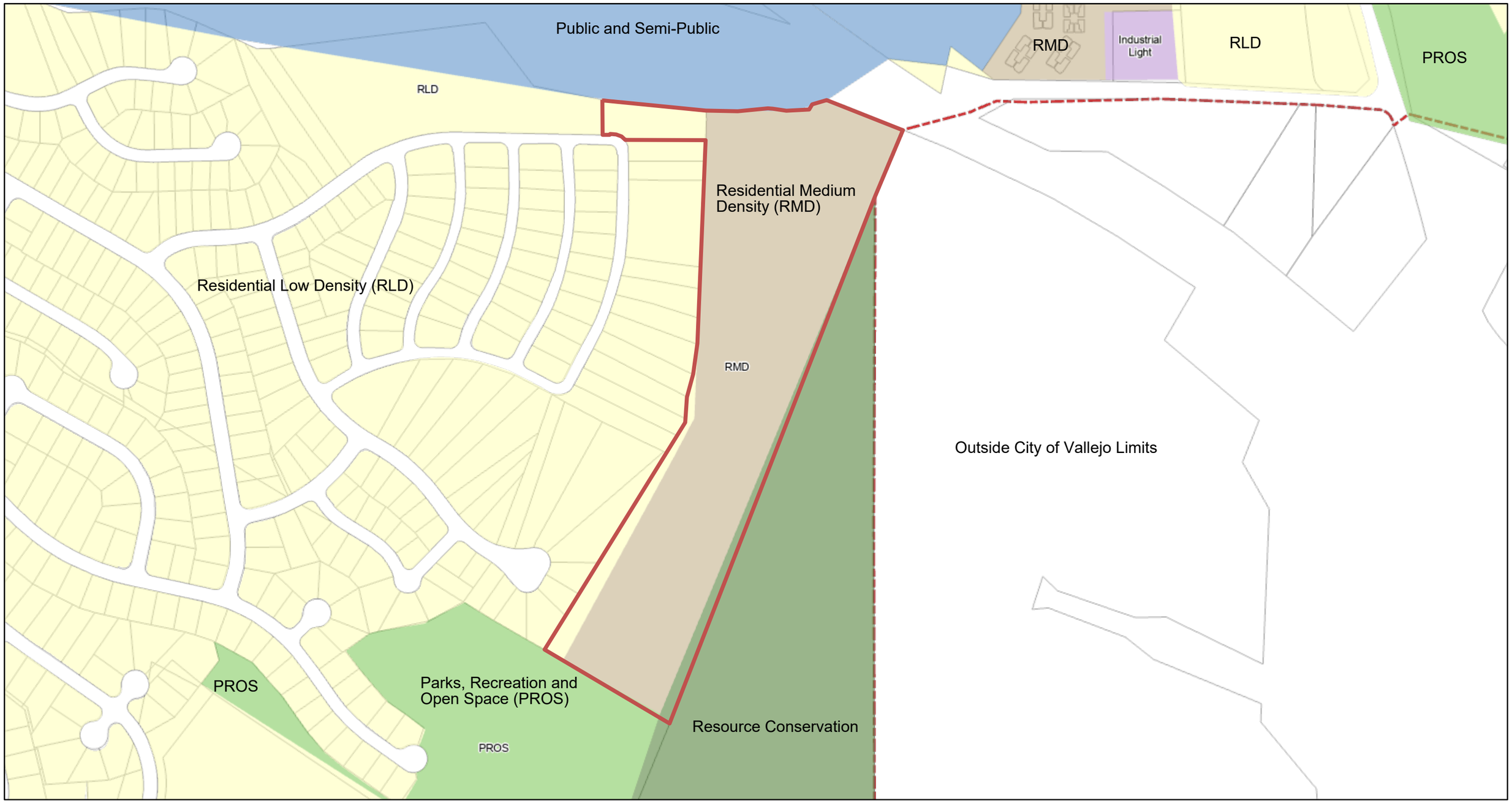
Additionally, I am deeply troubled by the environmental consequences of the Vista Cove proposal. The project site, located near the Benicia State Recreation Area, contains rare and valuable natural habitat that supports wildlife dependent on the remaining open spaces in this part of Vallejo. Once this land is disturbed or paved over, the ecological loss is permanent. I walk the State Park regularly, and I've seen firsthand how many species rely on these areas for food, shelter, and safe movement. If Vista Cove is built, displaced wildlife will have nowhere else
to go and will be forced deeper into the State Park, intensifying pressure on the habitat that remains and disrupting the delicate ecological balance that makes this area so special.

For all these reasons, I strongly urge the Planning Division to reject the Vista Cove proposal.
Thank you for your attention to this important issue. I truly hope you will stand with all

Vallejo
residents who are committed to preserving safety, balance, and environmental integrity.

Sincerely,
Emil Meineche
(707)567-8274

Vista Cove Planned Development - Existing Zoning District



Subject Property

Current Zoning Districts

- Residential Low Density
- Residential Medium Density
- Limited Industrial
- Parks, Recreation and Open Space
- Resource Conservation
- Public and Semi-Public
- City Limit
- Parcel (most recent)

1:4,514

0 0.04 0.09 0.17 mi

0 0.05 0.1 0.2 km

Originally this layer was developed for Solano County by Barclay MapWorks, Inc. Since earlier on 2011, Solano County DoIT GIS services updates this dataset, and it the data is planned to come directly from CAD into ORACLE Spatial and SDE using MUNSYS.

Disclaimer: This map was made using City of Vallejo GIS files with varying degrees of scale, accuracy, precision, correctness, and alignment and therefore cannot be used for situations requiring survey grade measurements of legal boundary determination. City of Vallejo disclaims liability for any loss that may result.

Vista Cove Planned Development - Proposed Zoning District

Planned Development
Subject Property
Current Zoning Districts
Residential Low Density
Residential Medium Density
Limited Industrial
Parks, Recreation and Open Space
Resource Conservation
Public and Semi-Public
City Limit
Parcel (most recent)

1:4,514

0 0.04 0.09 0.17 mi

0 0.05 0.1 0.2 km

Originally this layer was developed for Solano County by Barclay MapWorks, Inc. Since earlier on 2011, Solano County DoIT GIS services updates this dataset, and it the data is planned to come directly from CAD into ORACLE Spatial and SDE using MUNSYS.

Disclaimer: This map was made using City of Vallejo GIS files with varying degrees of scale, accuracy, precision, correctness, and alignment and therefore cannot be used for situations requiring survey grade measurements of legal boundary determination. City of Vallejo disclaims liability for any loss that may result.