AGENDA

VALLEJO DESIGN REVIEW BOARD
REGULAR MEETING – 7:00 P.M.
CITY COUNCIL CHAMBERS
October 12, 2023

Matt Kennedy, Chairperson
Oskar Lugtu
Michael Eli

www.cityofvallejo.net

NOTICE: Members of the Public will be able to participate in-person or remotely via Zoom. City Hall and the Council Chambers will be open to members of the public 30 minutes prior to the start of the meeting.

IMPORTANT NOTICE

This AGENDA contains a brief general description of each item to be considered. The posting of the recommended actions does not indicate what action may be taken. If comments come to the Design Review Board without prior notice for an item not listed on the AGENDA, no specific answers or responses should be expected at this meeting per State law.

Pursuant to Government Code Section 54954.3 of the Brown Act, members of the public shall be afforded the opportunity to speak on any agenda item of interest to them after being recognized by the presiding officer. Members of the public wishing to be so recognized are requested to submit a completed speaker card to the Secretary of the Design Review Board prior to the consideration of the item or raise their hand via ZOOM:(https://ZoomRegular.Cityofvallejo.net) or by phone: Dial (669) 900-6833. Enter Meeting ID: 914 0075 0676#. Press * 9 to digitally raise your hand from the phone. For additional instructions on how to speak remotely during public comment, please visit www.cityofvallejo.net/publiccomment. In person speakers will be recognized first.

Notice of Availability of Public Records: All public records relating to an open session item, which are not exempt from disclosure pursuant to the Public Records Act, that are distributed to a majority of the Design Review Board will be available on the City of Vallejo website at www.cityofvallejo.net subject to staff's ability to post the documents prior to the meeting.

Disclosure Requirements: Government Code Section 84308 (d) sets forth disclosure requirements which apply to persons who actively support or oppose projects in which they have a "financial interest", as that term is defined by the Political Reform Act of 1974. If you fall within that category, and if you (or your agent) have made a contribution of $250 or more to any commissioner within the last twelve months to be used in a federal, state or local election, you must disclose the fact of that contribution in a statement to the Commission.

Appeal Rights: The applicant or any party adversely affected by the decision of the Design Review Board may, within ten days after the rendition of the decision of the Design Review Board, by filing a written appeal with the Director of Planning and Development Services. Such written appeal shall state the reason or reasons for the appeal and why the applicant believes he or she is adversely affected by the decision of the Design Review Board. Such appeal shall not be timely filed unless it is actually received by Director of Planning and Development Services or designee no later than the close of business on the tenth calendar day after the rendition of the decision of the Design Review Board. If such date falls on a weekend or City holiday, then the deadline shall be extended until the next regular business day.

	The Council Chambers in City Hall is ADA compliant. Devices for the hearing impaired are available from the City Clerk. Requests for disability related modifications or accommodations, aids or services may be made by a person with a disability to the City Clerk's office no less than 72 hours prior to the meeting as required by Section 202 of the Americans with Disabilities Act of 1990 and the federal rules and regulations adopted in implementation thereof.

If you have any questions regarding any of the following agenda items, please call the assigned planner or project manager at (707) 648-4326.

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

4. APPROVAL OF MINUTES

A. June 8, 2023 Minutes

5. WRITTEN COMMUNICATIONS

6. REPORT OF THE SECRETARY

7. CITY ATTORNEY REPORT

8. REPORT OF THE PRESIDING OFFICER AND MEMBERS OF THE DESIGN REVIEW BOARD AND LIAISON REPORTS

A. Report of the Members of the Design Review Board
B. Council Liaison to Design Review Board

9. COMMUNITY FORUM

*Any interested members of the public desiring to communicate with the Design Review Board for which another opportunity to speak is not provided on the agenda and which is in the jurisdiction of the Design Review Board to resolve may do so in person by submitting a completed speaker's card to the Secretary or via ZOOM:(https://ZoomRegular.Cityofvallejo.net), or by phone: Dial (669) 900-6833. Enter Meeting ID: 914 0075 0676#. Press * 9 to digitally raise your hand from the phone. For additional instructions on how to speak remotely during public comment, please visit, www.cityofvallejo.net/publiccomment. In person speakers will be recognized first. When called upon, each speaker should step to the podium, state his/her name for the record. The conduct of the community forum shall be limited to a maximum of fifteen (15) minutes, with each speaker limited to a maximum of three minutes pursuant to Vallejo Municipal Code Section 2.02.300.*

10. CONSENT CALENDAR AND APPROVAL OF THE AGENDA

11. PUBLC HEARINGS

A. PROJECT NUMBER: Design Review (DR21-0005), Development Review (DVR21-0021) and Landscape Review (LR22-0009)

PROJECT LOCATION: 5180 Sonoma Boulevard / APN: 0067-150-280

PROJECT SUMMARY: The project consists of a Development Review, Design Review, and Landscape review for the demolition of an existing vacant commercial building and construction of 429 dwelling units distributed across 11 buildings and one central amenity building. The project also includes site improvements such as 105,959 square feet square feet of new landscaping, new lighting throughout the site, pedestrian paths along the new buildings, short-term bicycle racks and a total of 698 new off-street

parking spaces. The Design Review Board only has purview over the Design Review and Landscape Review.

RECOMMENDATION: Staff recommends that the Design Review Board adopt Resolution No. DRB 23-03 and Recommend Approval of Application numbers: DR21-0005 and LR22-0009. to the Planning Commission.

APPLICANT: Russell Square Consulting, Inc.
41428 McKenzie Court
Murrieta, CA 92562

PROPERTY OWNER: ACV Vallejo, LLC
465 First Street West, 2nd Floor
Sonoma, CA 95476

GENERAL PLAN DESIGNATION: District - North Gateway (D-NG)

ZONING DISTRICT: Central Corridor Commercial (CC)

B. PROJECT NUMBER: Design Review (DR23-0012) and Development Review (DVR23-0031)

PROJECT LOCATION: 1850 Broadway Street / APN: 0052-090-260

PROJECT SUMMARY: The proposed project consists of installing a new freestanding canopy at the SolTrans Administrative Office over an existing parking lot at 1850 Broadway Street. The freestanding canopy will have a total area of 35,146 square feet with an overall height of 31 feet and seven inches. All structures will be compromised of metal columns and beams supporting future electrical equipment for charging EV buses. Matching the existing façade of the main building, the equipment screening on the canopy will be a Ribbed Metal High Panel and the electrical conduit bridge will be a copper color panel grid. All exposed steel will be painted with Sherwin Williams 'High Reflective White' (SW 7757) and all bollards will be painted with Sherwin Williams 'Safety Yellow' (SW 4084). Power connection will be to existing utility grid on the site.

RECOMMENDATION: Staff recommends that the Design Review Board adopt Resolution No. DRB23-02 to Approve DR23-0012 and DVR23-0031

APPLICANT: Patricia Carr
311 Sacramento Street
Vallejo, CA 94590

PROPERTY OWNER: City of Vallejo
555 Santa Clara Street
Vallejo, CA 94590

GENERAL PLAN DESIGNATION:	Public Facilities and Institutions (PF)
ZONING DISTRICT:	Public and Semi-Public (PS)

C. PROJECT NUMBER: Design Review (DR22-0007), Development Review (DVR22-0013), Use Permit (UP22-0005), Parcel Map (PM22-0005) and Landscape Review (LR22-0003)

PROJECT LOCATION:	APN: 0067-140-200
PROJECT SUMMARY:	The project consists of a Major Use Permit, a Parcel Map, Design Review, Development Review and Landscape Review for a new 4,947 square-foot restaurant with a drive-through for Chick-Fil-A. The project will have an overall building footprint of 9,909 square feet including the two canopies proposed over the service area. In addition, the project will include site improvements for a three-lane drive through, new surface parking, a trash enclosure and new landscaping. Days and hours of operation are proposed as Monday through Saturday, 6 a.m. to 11 p.m. The Design Review Board only has purview over the Design Review and Landscape Review.
RECOMMENDATION:	Staff recommend that the Design Review Board adopt Resolution No. DRB23-0004 to Recommend Approval to the Planning Commission for DR22-0007 and LR22-0003.
APPLICANT:	LRG Investors JSR, LLC ATTN: Ryan Nickelson 2099 Mt. Diablo Blvd., Suite 206 Walnut Creek, CA 94596
PROPERTY OWNER:	Sonoma Gateway, LLC 2908 Dumbarton Street NW Washington, DC 20007
GENERAL PLAN DESIGNATION:	District – North Gateway (D-NG)
ZONING DISTRICT:	Central Corridor Commercial (CC)

12. OTHER AGENDA ITEMS – None

13. ADJOURNMENT

I, Jasmine Thibeaux, Executive Secretary, do hereby certify that I have caused a true copy of the above notice and agenda to be delivered to each of the members of the Design Review Board, at the time and in the manner prescribed by law and that this agenda was posted at City Hall, 555 Santa Clara Street, CA at 5:00 p.m., Friday, October 6, 2023

Jasmine Thibeaux

Dated: October 6, 2023 Executive Secretary

City of VALLEJO California

VIA TELECONFERENCE

www.cityofvallejo.net

MINUTES

VALLEJO DESIGN REVIEW BOARD
REGULAR MEETING – 7:00 P.M.

June 8, 2023

Matthew Kennedy, Chairperson
Adam Chavez
Latressa Wilson Alford
Oskar Lugtu

DRAFT

1. CALL TO ORDER

The meeting was called to order by Chair Kennedy at 7:04pm

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Present: Chair Kennedy, Board Members Alford, and Lugtu

Absent: Board Member Chavez (Excused)

Staff present: Cesar Orozco, Principal Planner, Laura Zagaroli, Assistant City Attorney

4. APPROVAL OF MINUTES

a. April 14, 2022 Minutes

Board member Alford, second by Board Member Lugtu, moved to approve the April 14, 2022 minutes.

Vote:

AYES: Chair Kennedy, Board Members Alford, and Lugtu
NOES: None
ABSENT: Board Member Chavez
ABSTAIN: None

5. WRITTEN COMMUNICATIONS – None

6. REPORT OF THE SECRETARY- None

a. Overview of State Housing Regulations

Assistant City Attorney Zagaroli provided an overview of the State Housing Regulations.

7. CITY ATTORNEY REPORT- None

8. REPORT OF THE PRESIDING OFFICER AND MEMBERS OF THE DESIGN REVIEW BOARD AND LIAISON REPORTS

A. Report of the Members of the Design Review Board - None

B. Council Liaison to Design Review Board - None

9. COMMUNITY FORUM - None

10. CONSENT CALENDAR AND APPROVAL OF THE AGENDA

Board member Alford, second by Board Member Lugtu, moved to approve the consent calendar and approval of the agenda.

Vote:

AYES: Chair Kennedy, Board Members Alford, and Lugtu
NOES: None
ABSENT: Board Member Chavez
ABSTAIN: None

11. PUBLC HEARING

A. Project Location: 961 Porter Street / APN: 0061-160-180

Summary: The project consists of a Design Review, Landscape review, Development Review and Lot Line Adjustment for the addition of 122 new units to an existing 182-unit multi-family apartment complex, totaling a total of 304 units. The project also includes site improvements 28,623 square feet square feet of new landscaping, a three new trash enclosure, new lighting throughout the site, pedestrian paths along the new buildings, short-term bicycle p racks and a total of 162 new off-street parking spaces. The Design Review Board only has purview over the Design Review and Landscape Review.

Principal Planner Orozco gave an overview of the project.

The applicant provided a presentation about the project.

Chair Kennedy opened the public hearing.

As there were no other requests to speak from the public, Chair Kennedy closed the public hearing.

The Commission deliberated the merits of the project, and a motion was made:

Motion: Board member Alford, second by Board Member Lugtu, moved to make the recommendation to the Planning Commission to approve Design Review (DR22-0013) and Landscape Review (LR22-0010) for 961 Porter Street.

Vote:

AYES: Chair Kennedy, Board Members Alford, and Lugtu
NOES: None
ABSENT: Board Member Chavez
ABSTAIN: None

DRAFT

OTHER – None

12. OTHER AGENDA ITEMS – None

13. ADJOURNMENT

The meeting adjourned at 8:07 p.m.

DRAFT

STAFF REPORT
CITY OF VALLEJO
DESIGN REVIEW BOARD

I. PROJECT INFORMATION

Item No. 11A

DATE OF MEETING:	October 12, 2023
PROJECT NUMBER:	Development Review (DVR21-0021) Design Review (DR21-0005) Landscape Review (LR21-0009)
PREPARED BY:	Cesar Orozco, Principal Planner
PROJECT LOCATION:	5180 Sonoma Boulevard / APN: 0067-150-280
APPLICABLE ZONING CODE SECTION(S):	Development Review (VMC Chapter 16.605) Design Review (VMC Chapter 16.604) Landscape Review (VMC Chapter 16.504)
PROJECT SUMMARY:	The project consists of a Development Review, Design Review, and Landscape review for the demolition of an existing vacant commercial building and construction of 429 dwelling units distributed across 11 buildings and one central amenity building. The project also includes site improvements such as 105,959 square feet of new landscaping, new lighting throughout the site, pedestrian paths along the new buildings, short-term bicycle racks and a total of 698 new off-street parking spaces. The Design Review Board only has purview over the Design Review and Landscape Review entitlements.
RECOMMENDATION:	Staff recommend that the Design Review Board adopt Resolution No. DRB23-03 to Recommend Approval to the Planning Commission DR21-0005 and LR22-0009.

PROJECT DATA SUMMARY

APPLICANT:	Russell Square Consulting, Inc. 41428 McKenzie Court Murrieta, CA 92562

PROPERTY OWNER:	ACV Vallejo, LLC 465 First Street West, 2nd Floor Sonoma, CA 95476
GENERAL PLAN DESIGNATION:	District - North Gateway (D-NG)
ZONING DISTRICT:	Central Corridor Commercial (CC)
EXISTING LAND USE:	Vacant Commercial Building
SURROUNDING LAND USE:	North – Commercial / Vacant Land South – Self Storage / Recology East – Broadway / Single-Family Residential West – Sonoma Boulevard / Single-family Residential
TOTAL LOT AREA:	548,856 square feet (12.60 Acres)

II. PROJECT DESCRIPTION

A. Background

On December 21, 2021, Russell Square Consulting, Inc., the applicant, applied for a Development Review, Design Review and Landscape Review for the demolition of an existing vacant commercial building and the construction of 429 dwelling units distributed across 11 buildings and one central amenity building, along with 105,959 square feet square feet of new landscaping at 5180 Sonoma Boulevard. The project plans were routed to various agencies for their review and the application was determined to be complete by the City on April 21, 2022.

Location and Land Use Context

The project site is located between Sonoma Boulevard and Broadway. It is surrounded by existing residential uses, commercial uses, and an industrial use:

Table 1 – Surrounding Uses

Direction	Land Uses
North	Commercial Center Vacant Land
East	Broadway Railroad Tracks Single-family Residential
South	Self-Storage Recology Highway 37
West	Sonoma Boulevard Single-family Residential

Interstate 80 (I-80) is approximately 2.0 miles to the east and State Route 37 (SR 37), is approximately 0.25 mile south of the project site. Each provide regional access while Sonoma Boulevard (State Route 29 (SR 29]) and Broadway Street provide direct access to the project site. The immediate vicinity of the project site is characterized by existing commercial uses, industrial uses and single-family residential (see Figure 1). The site's General Plan 2040 Land Use Designation is District – North Gateway (D-NG) and is implemented by Zoning District of Central Corridor Commercial (CC)

The subject site is currently occupied by a vacant 126,000 square-foot commercial building and associated asphalt parking lot that was formally occupied by Walmart that closed in 2007. According to the City's Planning Division records, the original Medows Plaza was approved by the Planning Commission on February 21, 1990 (see Figure 1).

Figure 1 – Vicinity Map



B. Project Description

The proposed project consists of a Design Review, Development Review and Landscape Review for the demolition of the existing 126,000 square foot vacant commercial building and the construction of a total of 11 multi-family residential buildings containing a total of 429 dwelling units. 184 units will be distributed between six "Building A" building types with 31 units per building. The remaining 245 units will be distributed between five "Building B" building types with 49 units per building. Both Building A and B types include residential units and a parking podium on the ground floor and three stories of residential units above, with an overall building height of 59 feet and four inches. The unit breakdown is as follows:

Table 2 – Unit Breakdown			
Unit Type	# bedrooms/ # bathrooms	Square footage	Total # for Project
A1	1 bed / 1 bath	767	25
A2	1 bed / 1 bath	784	81
A3	1 bed / 1 bath	820	96
A4	1 bed / 1 bath	854	22
B1	2 bed / 2 bath	1,063	18
B2	2 bed / 2 bath	1,086	18
B3	2 bed / 2 bath	1,196	48
B4	2 bed / 2 bath	1,237	15
B5	2 bed / 2 bath	1,237	33
B6	2 bed / 2 bath	1,328	33
C1	3 bed / 2 bath	1,637	30
Total number of units			429

Project amenities include 105,959 square feet of new landscaping, new exterior lighting, pedestrian paths, short-term bicycle racks and a total of 698 new off-street parking spaces. The project will also include a central amenity building containing the leasing offices, restrooms, and a mailroom. A fitness and club room would be provided on the second floor along with a large terrace balcony overlooking the central courtyard and pool areas.(see Figure 2).

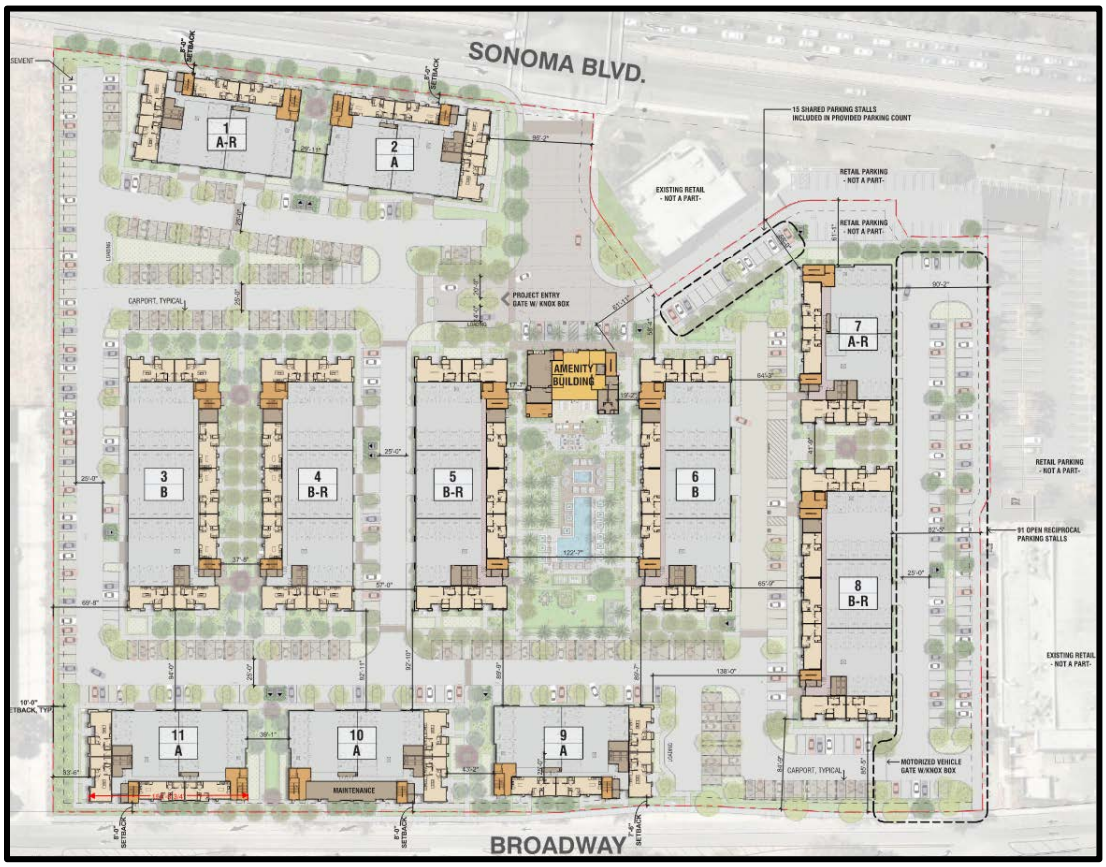


Figure 2 – Proposed Site Plan

III. STAFF ANALYSIS

Required Permits

The project requires the following approval under the Vallejo Municipal Code (VMC):

Table 2 – Required Permits			
Permit Type	**Description**	**VMC Chapter**	**Review Authority**
Design Review	Residential projects of 50 or more units.	16.604	Design Review Board Recommendation to Planning Commission
Landscape Review	Installation of new landscaping exceeding 500 square feet.	16.504	Design Review Board Recommendation to Planning Commission
Development Review	Construction of four new buildings.	16.605	Planning Commission Action.

As noted above, the Planning Commission will refer to the recommendation of the Design Review Board for the Design Review and Landscape Review in their action on those entitlements and act on the Development Review entitlement directly.

In addition to these entitlements, this project will also require building permits from the City of Vallejo.

General Plan Consistency

The General Plan 2040 Land Use Designation for the subject property is District – North Gateway (D-NG). The General Plan characterizes this designation as follows:

> *The D-NG designation applies to the northern portion of the area north of SR 37 between Sonoma Boulevard and Broadway Street, a highly visible area that serves as a gateway to Napa Valley from SR 37 (heading north) and to Vallejo from American Canyon (heading south). It is intended to foster an integrated, pedestrian-oriented place with a mix of uses, such as retail, dining, entertainment, and lodging, that cater to both motorists passing through and surrounding neighborhoods. It also incorporates higher-density residential development that supports nearby services and activates the area. The maximum permitted FAR in the D-NG designation is 2.0, with a minimum residential density of 30 dwelling units per acre up to 50 dwelling units per acre.*

The project is consistent with the D-NG land use designation in that it incorporates high-density residential development that will support nearby and future services and activities in the area. Additionally, the project is also consistent with applicable General Plan 2040 policies and actions. Key policies and actions relevant to the project are shown in **bold**, followed by staff's analysis in *italic*:

Table 3 - General Plan 2040 Policies and Actions	
Policies and Actions	**Staff's Analysis**
Policy NBE-1.8: Urban Forest. Encourage planting of street trees and landscaping to beautify the city, encourage walking and biking and create a stronger sense of identity.	*The project involves the planting of many trees, shrubs, and groundcovers contributing to the beautification of Vallejo and the cultivation of an urban forest. The construction of sidewalk improvements along the new residential buildings will contribute to the pedestrian realm within the subject site.*
Policy NBE-2.3: Inviting, Compatible Design. Promote attractive development that is compatible with surrounding uses.	*The project architecture is of a high quality that unifies the buildings of the proposed development with a variety of materials and architectural features that break up the expanse of wall planes.*
Policy NBE-2.8: Infill Development. Promote infill development targets vacant and underutilized sites for community-desired and enhancing uses that is compatible with surrounding uses.	*The project shall result in the development of additional units and will fulfill a housing need in the community and is compatible with the collection of surrounding uses.*
Policy NBE-1.15: Energy Efficiency: Support measures to reduce energy consumption and increase energy efficiency in residential, commercial, industrial, and public buildings.	*The project shall be required to comply with standards set in California Building Code (CBC) Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. California's Green Building Standards Code (CBC Title 24, Part 11) requires implementation of energy efficient light fixtures and building materials into the design of new construction projects. The project includes sustainable and energy-efficient features, including solar panels, electric vehicle (EV) chargers, and an all-electric design, each provided at or exceeding City requirements.*

Vallejo Municipal Code Compliance

The project site is zoned Central Corridor Commercial (CC). The Zoning Code provides the following description for the CC Zoning District:

> *The CC Zoning District is intended to create and establish regulations for community serving mixed-use areas along the Sonoma Boulevard Central Corridor and areas subject to the Sonoma Boulevard Specific Plan. Land uses include mixed-use with housing, medium and high density residential or non-residential uses at street level, subject to design and development standards to promote a mixed-use and pedestrian orientation.*

VMC Table 16.301 – A: Land Use Regulations states in part, a Multi-Unit Residential of 50 or more units requires a Design Review Board recommendation and Planning Commission final action.

The project is consistent with the applicable standards in the CC zoning districts as demonstrated in the Table, below:

Table 4 – Commercial Standards – Development Standards (VMC16.204-B)			
Development Standard		Proposal	Compliant
Density: Max.	16-50 units/acre (Allowed 202 – 630 units)	429 units	Yes
BUILDING PLACEMENT			
Minimum Front Setback, Residential Development	0-8 feet	7.5 feet to 8 feet	Yes
Setbacks, Residential-only Development: Residential-only development is subject to the setback requirement of the RHD District	Interior: 5 for the first 2 stories, 10 thereafter	33.5 feet to 90.2 feet	Yes
BUILDING HEIGHT			
Building Maximum Height (stories)	8	4	Yes
Ground Floor Residential Use (ft.)	12	12	Yes
Parking Podium	Maximum height of a parking podium visible from the street is 9 ft. from finished grade	0	Yes, parking podium is not visible from the street
GROUND FLOOR MINIMUM HEIGHT			
Ground Floor Residential Uses (ft.)	12	12	Yes
Parking Podium	Maximum height of a parking podium visible from the street is 9 ft. from finished grade	0	Yes, parking podium is not visible from the street
OPEN SPACE			
Minimum Private Open Space (sq. ft. per unit)	60	61 – 96 sq.ft.	Yes
Minimum Common Open Space (sq. ft. per Unit)	200 (85,800 sq.ft for 429 units)	87,300 sq.ft.	Yes
Street Trees (ft. frontage)	1 per 30 ft. of frontage	43	Yes

	1,278.41 ft. frontage = 43 street trees		
ADDITIONAL REGULATIONS			
Build to line – NC and CC	At least 60 percent of building frontage shall be constructed at the required set back or install substantial landscaping at least five feet wide between the build to line and ground floor residential use	7.5 – 8 feet landscaping	Yes
Required side and rear yards for Residential uses	In order to provide light and air for residential uses, any wall containing windows, living room or bedrooms = 10-foot setback	33.5 feet to 90.2 feet	Yes
Max Building Length (ft.)	150	150	Yes, buildings along Sonoma Boulevard and Broadway do not exceed maximum 150-foot length
Street Frontage Improvements	Sidewalks, street furniture, streetlights, and street trees	Installing sidewalks (where necessary), streetlights, furniture, and trees.	Yes
Building Orientation and Entrances	Building shall be oriented to face public streets, parallel to streets	Proposed buildings along Sonoma Boulevard and Broadway are oriented and parallel to streets	Yes
Pedestrian Access on Large Sites (over five acres)	Internal connections, circulations, and interior pedestrian walkways	Providing internal connections, vehicle circulation and interior pedestrian walkways	Yes

Discussion

The following comments provide a summary of the staff analysis of the project. They are separated by subject to facilitate the review by the Design Review Board. The information provided is also referenced in Section IV, the Findings section at the end of the report.

Architecture

The architectural design would reflect the coastal cottage style with recessed windows and rooflines articulated with raised elements and towers and detailed with shaped cornices. As noted above, the

429 units will be distributed between 11 residential buildings. The proposed buildings are visually interesting and will be constructed with a variety of high-quality building materials and painted with simple colors. Vertical and horizontal breaks façade breaks, building massing and modulation have been incorporated into the design of the buildings. The building features modulation, building wall articulation, and building materials that are aesthetically pleasing and compatible with the existing development. Staff notes that under State Housing law (see further discussion, below under IV. Findings), the project cannot be denied based on subjective design standards.

The two building types (A and B) are proposed with a mixture of one-, two-, and three-bedroom units. Both building types will have an overall building height of 59 feet and four inches tall and will be oriented to face the project frontages on Sonoma Boulevard and Broadway. Levels 2 through 4 of the residential buildings are designed with a 4-foot step back from the ground level. Building type A fronting Sonoma Boulevard and Broadway will have an overall building length of 150 feet, consistent with the development standard. This standard was created to ensure the buildings would not appear too massive and bulky along the public rights of way. Building type B, located within the interior of the site will have an overall building length of 239 feet. Since building type B does not face Sonoma Boulevard or Broadway, the maximum building length has been determined to be not applicable. Exterior materials would include a mixture of stucco, stone veneer, and horizontal siding will be painted a Sherwin Williams Peppercorn, Gray Matter, and Pure White (see figures 3 - 6).

Figure 3 – Building A (Front of the building - Facing Sonoma Boulevard and Broadway)



Figure 4 – Building A (Rear of the building)



Figure 5 – Building B (Front of the building)



Figure 6 – Building B (Rear)



In addition to the residential buildings, a central amenity building containing a leasing office, restrooms, a mail room, fitness and club rooms and a large terraced balcony overlooking the central courtyard and pool areas is being proposed. The amenity building will have an overall building height of 41 feet and six inches and overall building length of 86 feet. Similar to building types A and B, the amenity building will have exterior materials of stucco, stone veneer, and horizontal siding will be painted a Sherwin Williams Peppercorn, Gray Matter, and Pure White (see figure 7) .

Figure 7 – Amenity Building (Front)



Landscaping

The proposed landscaping is designed to complement the new buildings provide transition from the buildings to the public realm. A variety of new drought tolerant shrubs, ground cover and trees totaling 105,959 square feet of new landscaping are included in the plan. A total of 43 trees will be planted

along the south side of the entry driveway and along Sonoma Boulevard and Broadway, and 280 trees will be planted as part of the overall project. Staff believes that the new landscaping will create a visually pleasing settling (see Figure 8).

Figure 8 – Proposed Landscaping



IV. FINDINGS

Design Review Findings

VMC Section 16.604.03 (B) requires the Design Review Board to make a recommendation to the Planning Commission for final design review approval. The required findings are in bold, and staff's analysis follows in italics:

A. Is consistent with the purposes of this chapter, the design policies of the general plan and any applicable specific plan, any adopted applicable design guidelines.

Purposes of the Chapter

1. **Establish regulations for an objective process that applies urban design principles to ensure that new construction supports the best of the city's architectural traditions.**

   As proposed, the project meets the objective design standards called out in VMC Chapter 16.204 – Commercial Districts, as discussed in detail below.

2. **Encourage new structures that show creativity and imagination, add distinction, interest, and variety to the community, and are environmentally sustainable.**

   The project is visually interesting and will be constructed with a variety of high-quality building materials and painted with simple, bold colors. Vertical and horizontal façade breaks, building massing, and modulation have all been incorporated into the design of the building and will create distinction in the established neighborhood. The project will incorporate a fully electric proposal, provide electric vehicle chargers and solar panels to be environmentally sustainable. Additionally, the project will be designed to meet the California Building Code Title 24 (energy efficiency standards) and the Green Building Standards.

3. **Promote architectural and design excellence in new construction and discourage poor quality development.**

   The project will be comprised of a mixture of stucco, stone veneer, and horizontal siding and will be painted a Sherwin Williams Peppercorn, Gray Matter, and Pure White. The project details, colors, materials, and landscaping are integrated with one and another to create a visually consistent proposal. Overall, the project uses high-quality, long-lasting material resulting in quality development.

4. **Ensure that future development should:**
   a. **Reflect the values of the community.**
   b. **Enhance the surrounding environment.**
   c. **Visually harmonize with its surroundings and not unnecessarily obstruct scenic views; and**
   d. **Avoid nostalgic misrepresentations that may confuse the relationships among structures over time.**

   The project reflects the promotion of infill development that targets underutilized sites, which is a policy identified in the General Plan. It will enhance the surrounding environment by incorporating high-density residential development that will support nearby and future services and activities in the area. Due to its location, the project will not obstruct scenic views and due to its nature and design, nor will it confuse the relationships among structures over time.

5. **Ensure that decisions on housing development projects are based on objective design standards as required by the State Housing Accountability Act (Government Code Section 65589.5).**

   The Housing Accountability Act (HAA), California Government Code Section 65589.5(j), requires that when a proposed housing development complies with the applicable, objective general plan and zoning standards, but a local agency proposes to deny the project or approve it only if the density is reduced, the agency must base its decision on written findings supported by substantial evidence that:

   1. The development would have a specific adverse impact on public health or safety unless disapproved, or approved at a lower density; and

   2. There is no feasible method to satisfactorily mitigate or avoid the specific adverse impact, other than the disapproval, or approval at a lower density.

   As described in Tables 3 and 4 of the staff report above, the project complies with the applicable, objective general plan and zoning standards. Therefore, the city may not deny the project or approve the project at a reduced density without basing its decision on the written findings under Section 65589.5(j), above.

6. **Provide for new landscaping to create a visually pleasing setting for structures on the site.**

   The project includes a total of 105,959 square feet of new drought tolerant landscaping throughout the site. A total of 43 new street trees, shrubs and ground cover will be planted to enhance the public realm within the subject site.

7. **Promote the protection and retention of landmark, native, and specimen trees and if feasible mature canopy trees and other significant landscaping of aesthetic and environmental value.**

   Not applicable; the existing trees on the subject site do not meet the minimum dimensions of 24-inches in diameter as measured six-inches from the ground and therefore are not considered significant or specimen trees.

8. **Ensure that the design, quality, and location of signs are consistent with the character and scale of the structures to which they are attached and are visually harmonious with surrounding development.**

   Not applicable; no signs being proposed with the project.

9. **Promote the conservation, enhancement, preservation, and protection of historic resources.**

   Not applicable; there are no historic resources near this project's location.

Design policies of the General Plan

The project site is designated as District – North Gateway (D-NG) on the General Plan Land Use Map. The General Plan 2040 D-NG designation intended to foster an integrated, pedestrian-oriented place with a mix of uses, such as retail, dining, entertainment, and lodging, that cater to both motorists passing through and surrounding neighborhoods. It also incorporates higher-density residential development that supports nearby services and activates the area. As proposed, the

project is consistent with the D-NG land use designation in that it incorporates high-density residential development that will support nearby and future services and activities in the area. Additionally, the project is also consistent with applicable General Plan 2040 policies and actions.

Adopted applicable design guidelines.

The subject site is not within an adopted specific plan and design guidelines have not been adopted for this location.

B. Is consistent with any planning or zoning approvals by the director or the planning commission.

The project is consistent with the CC zoning district in that it is a proposal of a new 429 dwelling unit multi-family residential project and meets all appropriate development standards of the Vallejo Municipal Code. Vallejo Municipal Code Section 16.604.01(K.1.c), states residential projects with 50 or more units are a Design Review Board recommendation to the Planning Commission. The final authority of this action is the Planning Commission.

C. Complies with any other relevant city policies or regulations.

Not applicable; there are no additional city policies or regulations that are applicable to the project.

V. NOTICING AND PUBLIC COMMENTS

On September 28, 2023, pursuant to VMC Section 16.602.08(A), notice of this hearing was published in the Times Herald and mailed to all active neighborhood groups and property owners within 500 feet of the subject property and electronically mailed to the members of the Design Review Board and the applicant.

Staff have not received any comments or questions from the public on the application as of writing this staff report.

VI. CONCLUSION / STAFF RECOMMENDATION

Based on the analysis contained in this staff report, staff recommends that the Design Review Board make a recommendation to the Planning Commission to APPROVE Design Review (DR) 21-0005 and Landscape Review (LR) 22-0009 based on the findings and provided in the attached Resolution.

VII. ATTACHMENTS

1. Resolution No. DRB 23-03
2. Project Plans
3. Material Sample Board

CITY OF VALLEJO DESIGN REVIEW BOARD

RESOLUTION NO. DRB 23-03

A RESOLUTION RECOMMENDING APPROVAL TO THE PLANNING COMMISSION FOR DESIGN REVIEW (DR21-0005), DEVELOPMENT REVIEW (DVR21-0021), AND LANDSCAPE REVIEW (LR23-0009) FOR 429 DWELLING UNITS MULTI-FAMILY COMPLEX AT 5180 SONOMA BOULEVARD (APN: 0067-150-280)

* *

I. GENERAL FINDINGS

WHEREAS, on August 29, 2017, the City Council adopted General Plan 2040; and

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

WHEREAS, on December 21, 2021, Russell Square Consulting, Inc. submitted an application seeking a Development Review, Design Review Permit, and Landscape Review for the construction of a 429 dwelling unit multi-family complex ("Project") located at 5180 Sonoma Boulevard (the property); and

WHEREAS, the property has a General Plan 2040 land use designation of District – North Gateway; and

WHEREAS, the property is located in the Central Corridor Commercial Zoning District; and

WHEREAS, on April 21, 2022, the application for the Project was determined to be complete for processing; and

WHEREAS, on August 31, 2023, pursuant to Vallejo Municipal Code Section 16.602.08(A), notice of this hearing was published in the Times Herald and mailed to all active neighborhood groups and property owners within 500 feet of the subject property and electronically mailed to the members of the Design Review Board and to the applicant; and

WHEREAS, on October 12, 2023 at 7p.m., the City of Vallejo Design Review Board, after giving all public notices required by State law and the City of Vallejo Municipal Code, conducted a duly noticed public hearing; and

WHEREAS, the Design Review Board considered testimony and evidence, both written and oral, provided at the public hearing, as well as other documents contained in the record of proceedings relating to the Project, which are maintained in the offices of the City of Vallejo Planning Division; and

WHEREAS, based on evidence received in the staff report and at the public hearing, the Design Review Board makes the following factual findings:

III. FINDINGS RELEVANT TO THE APPROVAL OF THE DESIGN REVIEW PERMIT (VMC Section 16.604.03.B)

A. Is consistent with the purposes of this chapter, the design policies of the general plan and any applicable specific plan, any adopted applicable design guidelines.

Purposes of the Chapter

1. **Establish regulations for an objective process that applies urban design principles to ensure that new construction supports the best of the city's architectural traditions.**

   As proposed, the project meets the objective design standards called out in VMC Chapter 16.204 – Commercial Districts, as discussed in detail below.

2. **Encourage new structures that show creativity and imagination, add distinction, interest, and variety to the community, and are environmentally sustainable.**

   The project is visually interesting and will be constructed with a variety of high-quality building materials and painted with simple, bold colors. Vertical and horizontal façade breaks, building massing, and modulation have all been incorporated into the design of the building and will create distinction in the established neighborhood. The project will incorporate a fully electric proposal, provide electric vehicle chargers and solar panels to be environmentally sustainable. Additionally, the project will be designed to meet the California Building Code Title 24 (energy efficiency standards) and the Green Building Standards.

3. **Promote architectural and design excellence in new construction and discourage poor quality development.**

   The project will be comprised of a mixture of stucco, stone veneer, and horizontal siding and will be painted a Sherwin Williams Peppercorn, Gray Matter, and Pure White. The project details, colors, materials, and landscaping are integrated with one and another to create a visually consistent proposal. Overall, the project uses high-quality, long-lasting material resulting in quality development.

4. **Ensure that future development should:**
   a. **Reflect the values of the community.**
   b. **Enhance the surrounding environment.**
   c. **Visually harmonize with its surroundings and not unnecessarily obstruct scenic views; and**
   d. **Avoid nostalgic misrepresentations that may confuse the relationships among structures over time.**

   The project reflects the promotion of infill development that targets underutilized sites, which is a policy identified in the General Plan. It will enhance the surrounding environment by incorporating high-density residential development that will support nearby and future services and activities in the area. Due to its location, the project will not obstruct scenic views and due to its nature and design, nor will it confuse the relationships among structures over time.

5. **Ensure that decisions on housing development projects are based on objective design standards as required by the State Housing Accountability Act (Government Code Section 65589.5).**

   The Housing Accountability Act (HAA), California Government Code Section 65589.5(j), requires that when a proposed housing development complies with the applicable, objective general plan and zoning standards, but a local agency proposes to deny the project or approve it only if the density is reduced, the agency must base its decision on written findings supported by substantial evidence that:

1. The development would have a specific adverse impact on public health or safety unless disapproved, or approved at a lower density; and
2. There is no feasible method to satisfactorily mitigate or avoid the specific adverse impact, other than the disapproval, or approval at a lower density.

As described in Tables 3 and 4 of the staff report above, the project complies with the applicable, objective general plan and zoning standards. Therefore, the city may not deny the project or approve the project at a reduced density without basing its decision on the written findings under Section 65589.5(j), above.

6. **Provide for new landscaping to create a visually pleasing setting for structures on the site.**

   The project includes a total of 105,959 square feet of new drought tolerant landscaping throughout the site. A total of 43 new street trees, shrubs and ground cover will be planted to enhance the public realm within the subject site.

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Adopted applicable design guidelines.

The subject site is not within an adopted specific plan and design guidelines have not been adopted for this location.

B. Is consistent with any planning are zoning approvals by the director or the planning commission.

The project is consistent with the CC zoning district in that it is a proposal of a new 429 dwelling unit multi-family residential project and meets all appropriate development standards of the Vallejo Municipal Code. Vallejo Municipal Code Section 16.604.01(K.1.c), states residential projects with 50 or more units is a Design Review Board recommendation to the Planning Commission. The final authority of this action is the Planning Commission.

C. Complies with any other relevant city policies or regulations.

Not applicable; there are no additional city policies or regulations that are applicable to the project.

NOW, THEREFORE, LET IT BE RESOLVED that the Design Review Board hereby recommends that the Planning Commission **APPROVE** Design Review (DR) 21-0005 and Landscape Review (LR) 22-0009 t based on the above findings.

PASSED AND ADOPTED at a regular meeting of the Design Review Board of the City of Vallejo, State of California, on the 12h day of October 2023 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Matthew Kennedy, CHAIRPERSON
City of Vallejo Design Review Board

Attest:

_____
MARGARET KAVANAUGH-LYNCH, SECRETARY
City of Vallejo Design Review Board



RSC VALLEJO APARTMENTS

ENTITLEMENT SUBMITTAL

MARCH 21, 2021

RUSSELL SQUARE

TCA ARCHITECTS

MJS LANDSCAPE ARCHITECTURE

BKF

SALASOBRIEN expect a difference

PROJECT DESCRIPTION

The project is located in the city of Vallejo, California at the intersection of Sonoma Boulevard and Meadows Drive. Project consists of eleven 4-story residential apartment buildings providing a total of 429 apartment homes. The proposed 698 parking spaces are provided on the ground level of each building, carports and open surface parking. Utilities and trash enclosures are contained within the individual buildings.

The project proposes an enhanced vehicular entry accessed from Sonoma Boulevard that opens up to a generous central amenity building and courtyard housing leasing offices, a club room, fitness, pool area and outdoor amenities.

Ground-floor units are accessed from attractively landscaped pedestrian paseos. Each building provides a welcoming lobby space where residents can access an elevator and stairway to travel to the upper levels.

PROJECT TEAM

DEVELOPER:

Russell Square Consulting
700 Waterfront Way, Suite 301
Vancouver, Washington 98660
contact: Blaise Hilton
P: 360.773.0022
www.russellsquareconsulting.com
blaise@russellsquareconsulting.com

ARCHITECT:

TCA Architects
18821 Bardeen Ave.
Irvine, CA 92612
Contact: Wini Wang
P: 949.862.0270
P: 949.862.0289
www.tca-arch.com
wwang@tca-arch.com

LANDSCAPE:

MJS Landscape Architecture
507 30th Street
Newport Beach, CA 92663
Contact: Matt Jackson
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www.mjs-la.com
matt@mjs-la.com

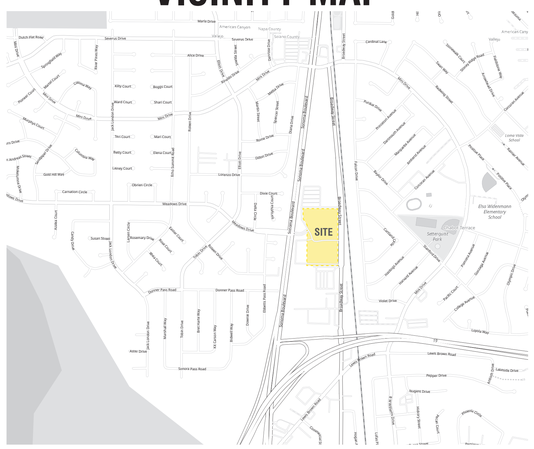
CIVIL:

BKF Engineers
1730 N. First Street, Suite 600
San Jose, CA 95112
Contact: Jacob Nguyen
P: 408.467.9100
www.bkf.com
jnguyen@bkf.com

LIGHTING:

Salas O'Brien
4745 N. 7th Street, Suite 200
Phoenix, AZ 85014
Contact: Victor Becerra
P: 949.753.1553
www.salasobrien.com
victor.becerra@salasobrien.com

VICINITY MAP



INDEX

COVER SHEET

GENERAL:

G-1 PROJECT INDEX & PROJECT DATA
G-2 VIEW OF PROJECT ENTRY
G-3 VIEW OF POOL COURTYARD AND AMENITY BUILDING
G-4 VIEW OF POOL COURTYARD AND PASEO
G-5 SITE PHOTOS

ARCHITECTURE:

A-0.1 ILLUSTRATIVE SITE PLAN
A-1.1 BUILDING TYPE A - FLOOR PLANS (BUILDING NO. 1,2,7,10)
A-1.2 BUILDING TYPE A - ELEVATIONS
A-1.3 BUILDING TYPE A - ELEVATIONS
A-1.4 BUILDING TYPE A - SECTIONS
A-2.1 BUILDING TYPE B - FLOOR PLANS (BUILDING NO. 3,4,5,6,8,9)
A-2.2 BUILDING TYPE B - ELEVATIONS
A-2.3 BUILDING TYPE B - ELEVATIONS
A-2.4 BUILDING TYPE B - SECTIONS
A-3.1 MATERIALS
A-4.1 ONE AND TWO BEDROOM UNIT PLANS
A-4.2 TWO BEDROOM UNIT PLANS
A-4.3 TWO AND THREE BEDROOM UNIT PLANS
A-5.1 AMENITY BUILDING FLOOR PLANS
A-5.2 AMENITY BUILDING ELEVATIONS
A-6.1 FIRE ACCESS EXHIBIT
A-6.2 OPEN SPACE DIAGRAM
A-6.3 SOLID WASTE MANAGEMENT DIAGRAM

LANDSCAPE:

L.1 LANDSCAPE SITE PLAN
L.2 CONCEPTUAL LANDSCAPE PLAN NORTH SECTION
L.3 CONCEPTUAL LANDSCAPE PLAN SOUTH SECTION
L.4 LANDSCAPE MATERIALS IMAGERY
L.5 POOL COURTYARD ENLARGEMENT
L.6 CIRCULATION PLAN - NORTH SECTION
L.7 CIRCULATION PLAN - SOUTH SECTION
L.8 PLANT LIST AND NOTES
L.9 UTILITY SCREENING DETAILS
L.10 CONCEPTUAL LIGHTING PLAN NORTH SECTION
L.11 CONCEPTUAL LIGHTING PLAN SOUTH SECTION
L.12 WALL AND FENCE PLAN NORTH SECTION
L.13 WALL AND FENCE PLAN SOUTH SECTION
L.14 TREE SURVEY

LIGHTING:

E-0.0 SITE LIGHTING COVER SHEET
E-1.0 SITE LIGHTING LAYOUT - AREA NORTH
E-1.1 SITE LIGHTING LAYOUT - AREA SOUTH
E-2.0 SITE LIGHTING PHOTOMETRICS - AREA NORTH
E-2.1 SITE LIGHTING PHOTOMETRICS - AREA SOUTH
E-3.0 SITE LIGHTING FIXTURE CUTSHEETS
E-3.1 SITE LIGHTING FIXTURE CUTSHEETS

CIVIL:

C0.0 TITLE SHEET
C1.0 EXISTING CONDITIONS PLAN
C2.0 OVERALL PRELIMINARY SITE PLAN
C2.1 PRELIMINARY SITE PLAN
C2.2 PRELIMINARY SITE PLAN
C2.3 PRELIMINARY SITE PLAN
C3.0 OVERALL PRELIMINARY GRADING & DRAINAGE PLAN
C3.1 PRELIMINARY GRADING & DRAINAGE PLAN
C3.2 PRELIMINARY GRADING & DRAINAGE PLAN
C3.3 PRELIMINARY GRADING & DRAINAGE PLAN
C3.4 GRADING SECTIONS
C4.0 OVERALL PRELIMINARY UTILITY PLAN
C4.1 PRELIMINARY UTILITY PLAN
C4.2 PRELIMINARY UTILITY PLAN
C4.3 PRELIMINARY UTILITY PLAN
C5.0 OVERALL PRELIMINARY STORMWATER CONTROL PLAN
C5.1 PRELIMINARY STORMWATER CONTROL PLAN
C5.2 PRELIMINARY STORMWATER CONTROL PLAN
C5.3 PRELIMINARY STORMWATER CONTROL PLAN
C5.4 PRELIMINARY STORMWATER CONTROL PLAN
C6.0 OVERALL PRELIMINARY EASEMENT PLAN

PROJECT DATA

SITE INFORMATION	
ASSESSOR PARCEL #	0067-150-280
ADDRESS	5180 Sonoma Boulevard
SITE AREA	548,856 SF
	12.60 AC
TOTAL BUILDING AREA	635,349 SF
TOTAL LANDSCAPE AREA	105,959 SF
LOT COVERAGE	31%

DEVELOPMENT PARAMETERS		PERMITTED/REQUIRED	PROPOSED
ZONING	NORTHERN GATEWAY OPPORTUNITY AREA CENTRAL CORRIDOR COMMERCIAL		
SETBACKS	FRONT	0'-8'	0'-8'
	INTERIOR SIDE	5' FOR FIRST 2 STORIES, 10' ABOVE	5' FOR FIRST 2 STORIES, 10' ABOVE
	REAR	10'	10'
MAX. BLDG HEIGHT	(FT / STORIES)	— / 8	— / 8
NUMBER OF UNITS	(MAX)	630	429
DENSITY	(MIN/MAX)	15 / 50 DU/AC	34 DU/AC
REQ. GROUND FLOOR HT		12'	TBD

UNIT SUMMARY

UNIT TYPE	BALCONY AVG. SF*	Average SF*	Total # Units	Unit Mix	Total Net Rent.
1 Bedroom:					
A1	60	767	25		19,175
A2	62	784	81		63,504
A3	65	820	96		78,720
A4	60	854	32		27,328
SUBTOTAL		807	234	55%	188,727 SF
2 Bedrooms:					
B1	62	1,063	18		19,134
B2	74	1,086	18		19,548
B3	62	1,196	48		57,408
B4	86	1,221	15		18,315
B5	75	1,237	33		40,821
B6	62	1,328	33		43,824
SUBTOTAL		1,206	165	38%	199,050 SF
3 Bedrooms:					
C1	79	1,637	30		49,110
SUBTOTAL		1,637	30	7%	49,110 SF
TOTAL		1018	429		436,887 SF

* Square footage is taken from centerline of parti walls and outside of exterior walls, excluding all decks

**Unit plans are conceptual and subject to change including, but not limited to square footage.

BUILDING UNIT MIX

BUILDING TYPE	QTY IN PROJECT	UNIT TYPE	UNIT NRSF	QTY PER BLDG	BLDG NRSF	Project TOTAL
BUILDING A	6	A1	767	2*	1534	10
		A2	784	6	4704	36
		A3	820	6	4920	36
		A4	854	2	1708	12
		SUBTOTAL		16	12,866 SF	94
		B1	1,063	3	3189	18
		B2	1,086	3	3258	18
		B3	1,196	3	3588	18
		B5	1,237	3	3711	18
		B6	1,328	3	3984	18
		SUBTOTAL		15	17,730 SF	90
		BLDG TOTAL		31	30,596 SF	184
BUILDING B	5	A1	767	3	2,301	15
		A2	784	9	7,056	45
		A3	820	12	9,840	60
		A4	854	4	3,416	20
		SUBTOTAL		28	22,613 SF	140
		B3	1,196	6	7176	30
		B4	1,221	3	3663	15
		B5	1,237	3	3711	15
		B6	1,328	3	3984	15
		SUBTOTAL		15	18,534 SF	75
		C1	1,637	6	9822	30
		SUBTOTAL		6	9,822 SF	30
		BLDG TOTAL		49	50,969 SF	245
					TOTAL UNITS	429

* Two Units removed at BLDG No. 10 for maintenance room

BUILDING SUMMARY

BUILDING TYPE	BLDG NUMBERS	QTY IN PROJECT	UNITS PER BUILDING	TOTAL UNITS PER BLDG TYPE	NRSF PER BUILDING	*GROSS AREA PER BUILDING	NRSF PROJECT TOTAL	PROJECT TOTAL BUILDING AREA
BUILDING A	1, 2, 7, 9, 10, 11	6	31	184	30,596 SF	44,846 SF	182,042*	269,076 SF
BUILDING B	3, 4, 5, 6, 8,	5	49	245	50,969 SF	71,772 SF	254,845 SF	358,860 SF
TOTAL		11		429			436,887 SF	627,936 SF

*Maintenance room at BLDG No. 10 excluded from NRSF
**Floor area is calculated per the city of Vallejo zoning code section 16.104 to be the sum of the gross horizontal area of all floors of a building measured from the interior face of the exterior walls, excluding stairways and elevator shafts (except at ground level), and unenclosed balconies, mechanical and maintenance rooms

PARKING SUMMARY

REQUIRED PARKING

# UNITS	Ratio	Total
429	1.0	429
RESIDENTIAL REQ.	1.0	429

ACCESSILBE PARKING

REQUIRED

	RATIO		TOTAL PARK'G	TOTAL REQ.
Assigned	2%	X	648	13
Van Accessible	(9'x18')			2
Standard Accessible	(9'x18')			11
			SUBTOTAL	13
Unassigned	5%	X	81	5
Van Accessible	(9'x18')			1
Standard Accessible	(9'x18')			4
			SUBTOTAL	5
			TOTAL	18

EV CHARGING STALLS

REQUIRED

RATIO		TOTAL PARK'G	TOTAL REQ.
10%	X	698	70

PARKING SUMMARY

PROVIDED PARKING

Covered			
Garage	9'-0" x 18'-0"		265
Carport	9'-0" x 18'-0"		145
Accessible Van	9'-0" x 18'-0"		2
Accessible	9'-0" x 18'-0"		10
		SUBTOTAL	422
Open			
Standard	9'-0" x 18'-0"		107
EV	9'-0" x 18'-0"		72
Accessible Van	9'-0" x 18'-0"		1
Accessible	9'-0" x 18'-0"		5
Reciprocal	9'-0" x 18'-0"		91
		SUBTOTAL	276
TOTAL			698
			1.63 RATIO

BIKE PARKING

REQUIRED

Short Term

Units	Ratio	Total
429	1/20	21
	+	1*
		22

*1 stall based required per section 16.508.12

Long Term

Units	Ratio	Total
429	1.0	429
		429

PROVIDED

Short Term	22
Long Term	429

AMENITY BUILDING AREA SUMMARY

LEVEL 1	3,883 SF
Leasing Offices, mail room, pool restrooms and equipment	
LEVEL 2	3,530 SF
Clubroom and Fitness	
TOTAL	7,413 SF

OPEN SPACE SUMMARY

Required		RATIO	UNITS	TOTAL
Common		200 SF/UNIT	429	85,800 SF
Private		60 SF/UNIT	429	25,740 SF
Provided				**TOTAL**
Common				87,300 SF
*Private				28,287 SF

*Project average private open space provide. Private open space to be minimum of 60 SF. Refer to Unit Summary for unit specific avg. areas.

GOVERNING CODES

2019 CBC, 2019 CRC, 2019 CA Mechanical Code, 2019 CA Plumbing Code, 2019 CA Electrical Code, 2019 CA Energy Code, 2019 CALGreen,
City of Vallejo Zoning Code



RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS





RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS

RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 21, 2021

VIEW OF POOL COURTYARD AND PASEO





1) VIEW FROM SOUTHWEST



2) VIEW FROM WEST



3) VIEW FROM NORTHWEST



4) VIEW FROM SOUTHEAST



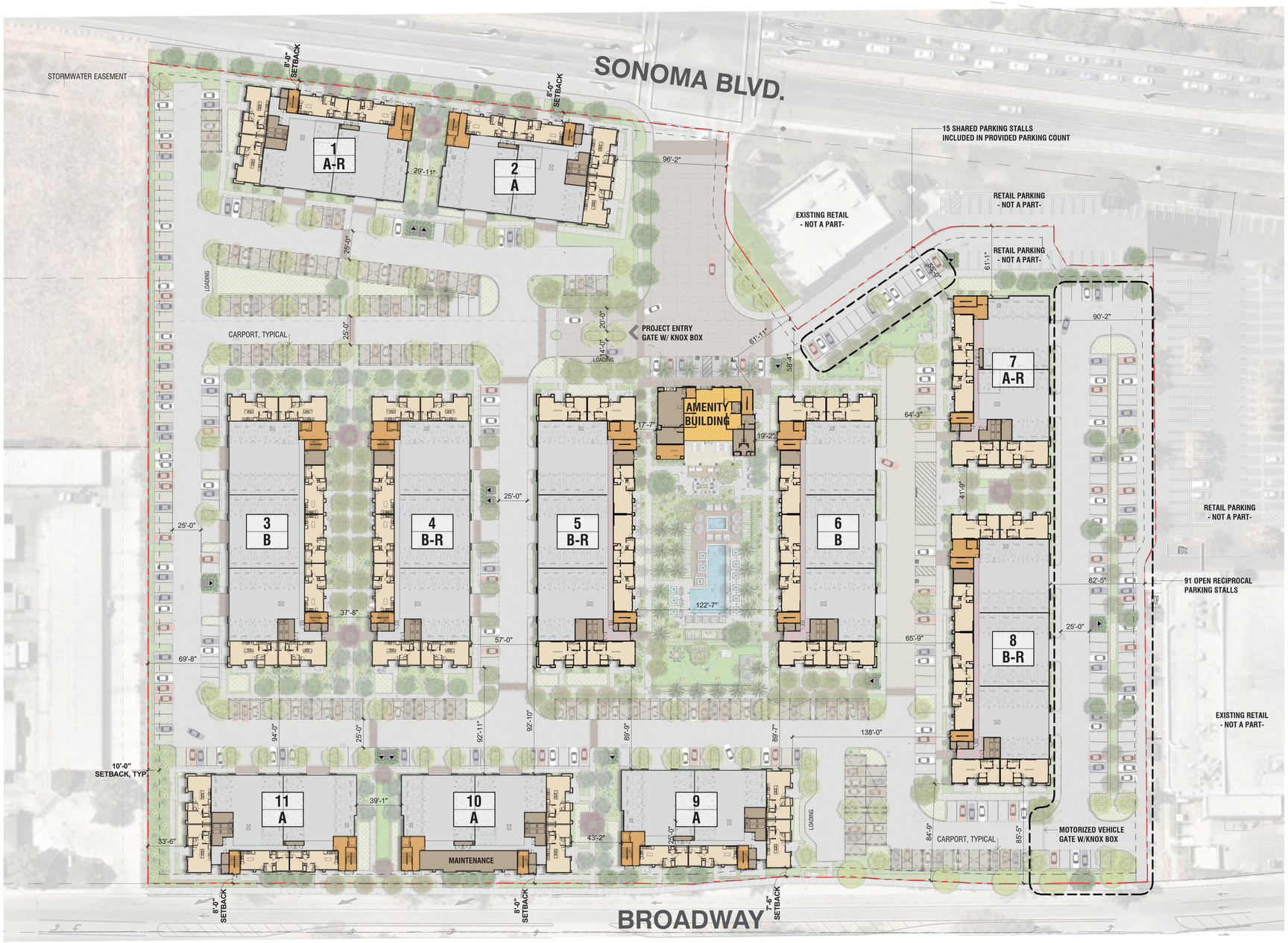
5) VIEW FROM EAST



6) VIEW FROM SOUTHEAST



KEY PLAN



BUILDING SUMMARY

BUILDING TYPE	BLDG NUMBERS	QTY IN PROJECT	UNITS PER BUILDING	TOTAL UNITS PER BLDG TYPE	NRSF PER BUILDING	*GROSS AREA PER BUILDING	NRSF PROJECT TOTAL	PROJECT TOTAL BUILDING AREA
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		A3	820	6	4920	36
		A4	854	2	1708	12
		SUBTOTAL		16	12,866 SF	94
		B1	1,063	3	3189	18
		B2	1,086	3	3258	18
		B3	1,196	3	3588	18
		B5	1,237	3	3711	18
		B6	1,328	3	3984	18
		SUBTOTAL		15	17,730 SF	90
		BLDG TOTAL		31	30,596 SF	184
BUILDING B	5	A1	767	3	2,301	15
		A2	784	9	7,056	45
		A3	820	12	9,840	60
		A4	854	4	3,416	20
		SUBTOTAL		28	22,613 SF	140
		B3	1,196	6	7176	30
		B4	1,221	3	3663	15
		B5	1,237	3	3711	15
		B6	1,328	3	3984	15
		SUBTOTAL		15	18,534 SF	75
		C1	1,637	6	9822	30

PARKING SUMMARY

REQUIRED PARKING

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SUBTOTAL				13
Unassigned	5%	X	81	5
Van Accessible	(9x18')			1
Standard Accessible	(9x18')			4
SUBTOTAL				5
TOTAL				18

EV CHARGING STALLS

REQUIRED

RATIO		TOTAL PARK'G	TOTAL REQ.
10%	X	698	70

PROVIDED PARKING

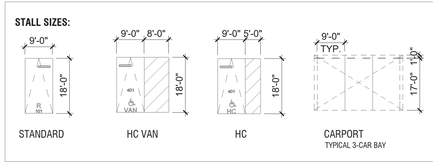
Covered		
Garage	9'-0" x 18'-0"	265
Carport	9'-0" x 18'-0"	145
Accessible Van	9'-0" x 18'-0"	2
Accessible	9'-0" x 18'-0"	10
SUBTOTAL		422
Open		
Standard	9'-0" x 18'-0"	107
EV	9'-0" x 18'-0"	72
Accessible Van	9'-0" x 18'-0"	1
Accessible	9'-0" x 18'-0"	5
Reciprocal	9'-0" x 18'-0"	91
SUBTOTAL		276
TOTAL		698
		1.63 RATIO

LEGEND

X / X-R — BUILDING NUMBER
INDICATES REVERSE BUILDING BUILDING TYPE

PARKING STALL LEGEND

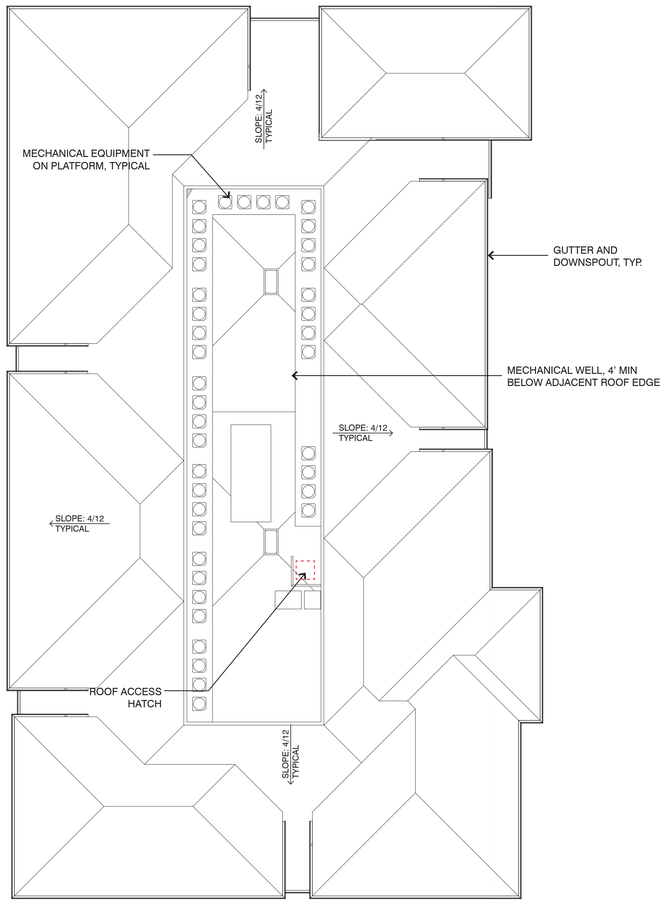
STALL SIZES:



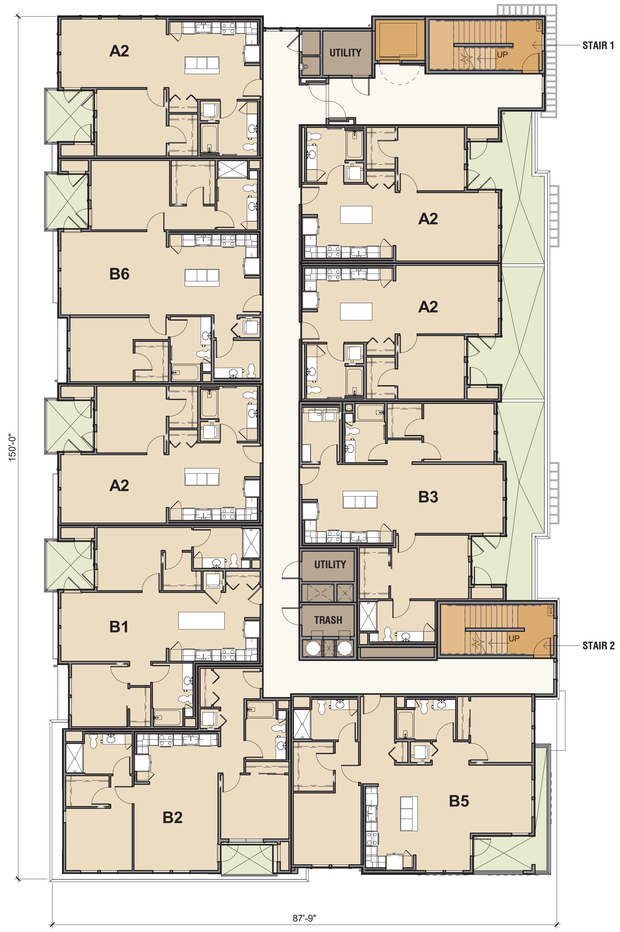
RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS | RSC VALLEJO | SITE DEVELOPMENT REVIEW
MARCH 21, 2021

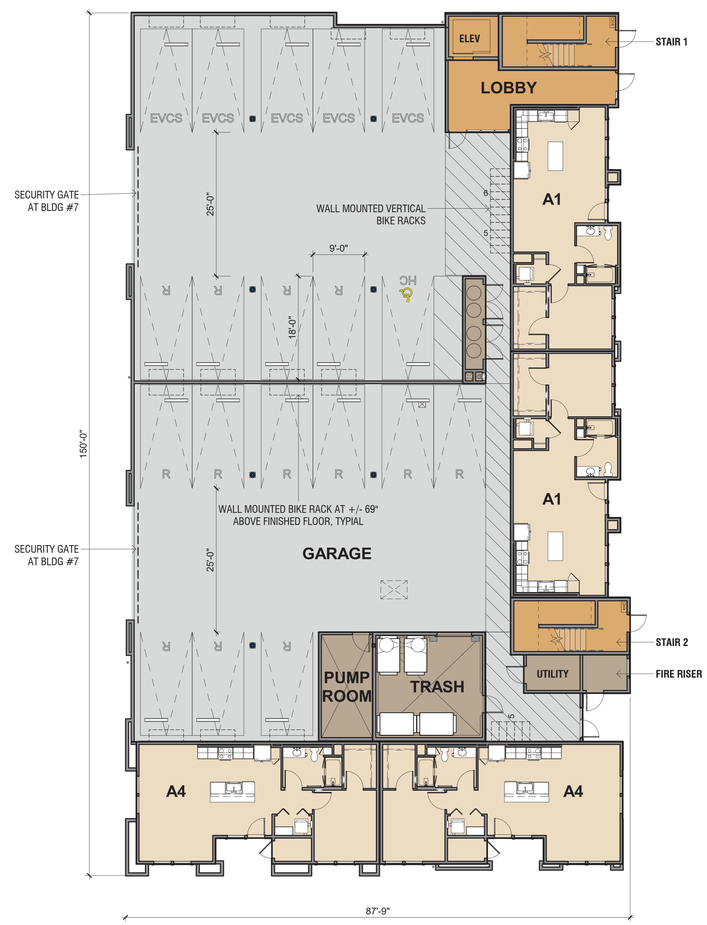
0' 40' 80' 160'



ROOF PLAN



LEVELS 2-4



LEVEL 1
29 GARAGE STALLS



FRONT



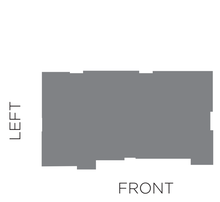
LEFT



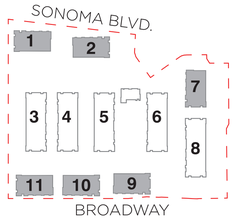
PERSPECTIVE

MATERIAL LEGEND

ST-1	STUCCO
SV-1	STONE VENEER
S-1	SMOOTH HORIZONTAL LAP SIDING
S-2	SMOOTH REVEAL PANEL
RM-1	METAL RAILING
A-1	METAL AWNING
W-1	VINYL WINDOW
R-1	ASPHALT SHINGLE ROOFING
R-2	STANDING SEAM METAL ROOFING



ELEVATION KEY MAP



SITE KEY MAP

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS

RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 21, 2021

0' 8' 16' 32'

BUILDING TYPE B (BLDG NO. 1, 2, 7, 9, 10, 11)
- ELEVATIONS -

A-1.2



REAR



RIGHT



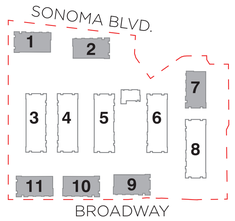
PERSPECTIVE

MATERIAL LEGEND

ST-1	STUCCO
SV-1	STONE VENEER
S-1	SMOOTH HORIZONTAL LAP SIDING
S-2	SMOOTH REVEAL PANEL
RM-1	METAL RAILING
A-1	METAL AWNING
W-1	VINYL WINDOW
R-1	ASPHALT SHINGLE ROOFING
R-2	STANDING SEAM METAL ROOFING



KEY MAP



SITE KEY MAP

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

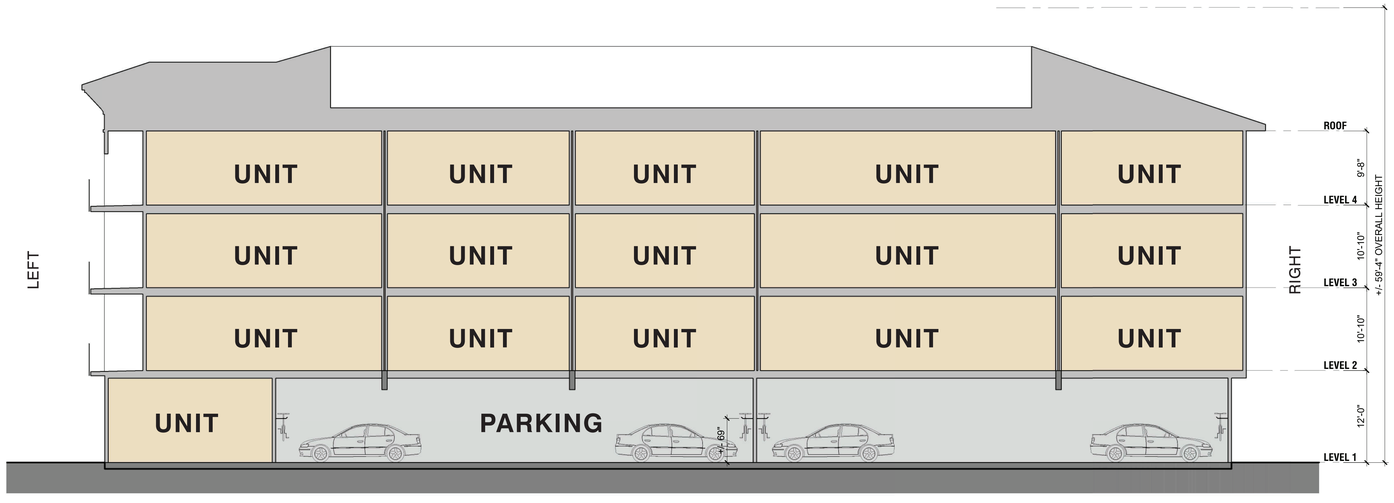
TCA ARCHITECTS

RSC VALLEJO

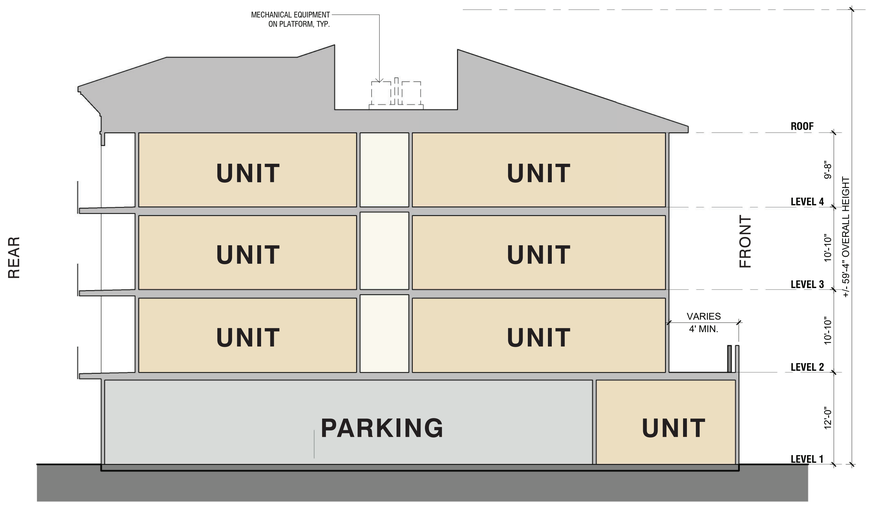
SITE DEVELOPMENT REVIEW
MARCH 21, 2021

0' 8' 16' 32'

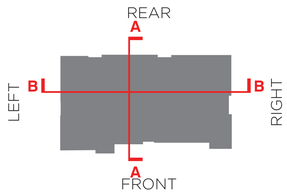
BUILDING TYPE A (BLDG NO. 1, 2, 7, 9, 10, 11)
- ELEVATIONS -



SECTION B



SECTION A



KEY MAP

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS

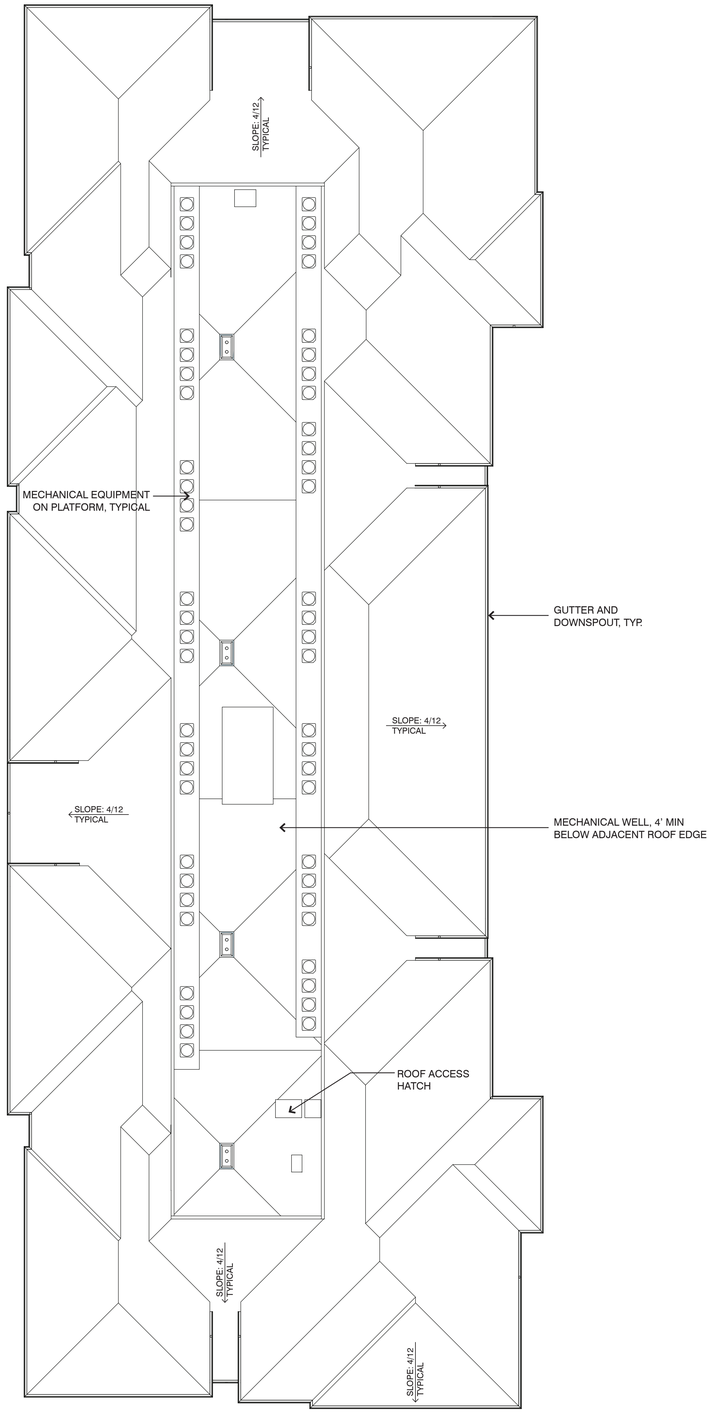
RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 21, 2021

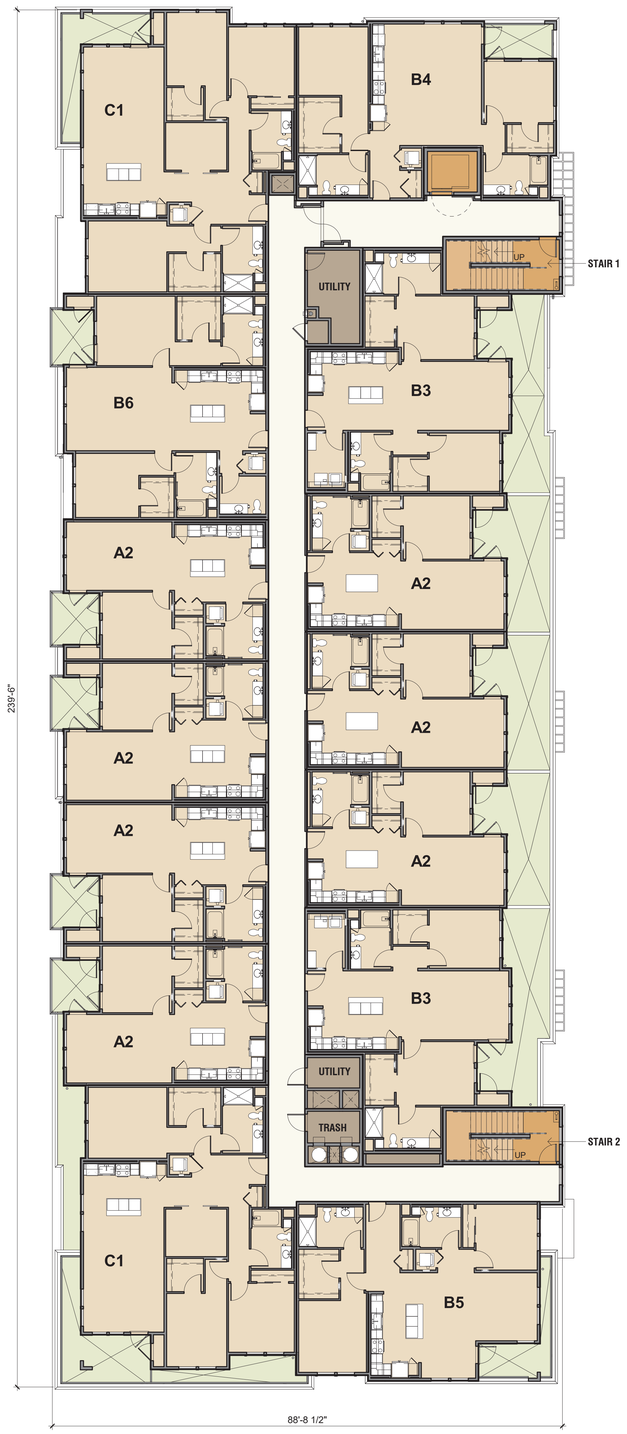
0' 8' 16' 32'

BUILDING TYPE A (BLDG NO. 1, 2, 7, 9, 10, 11)
- SECTIONS -

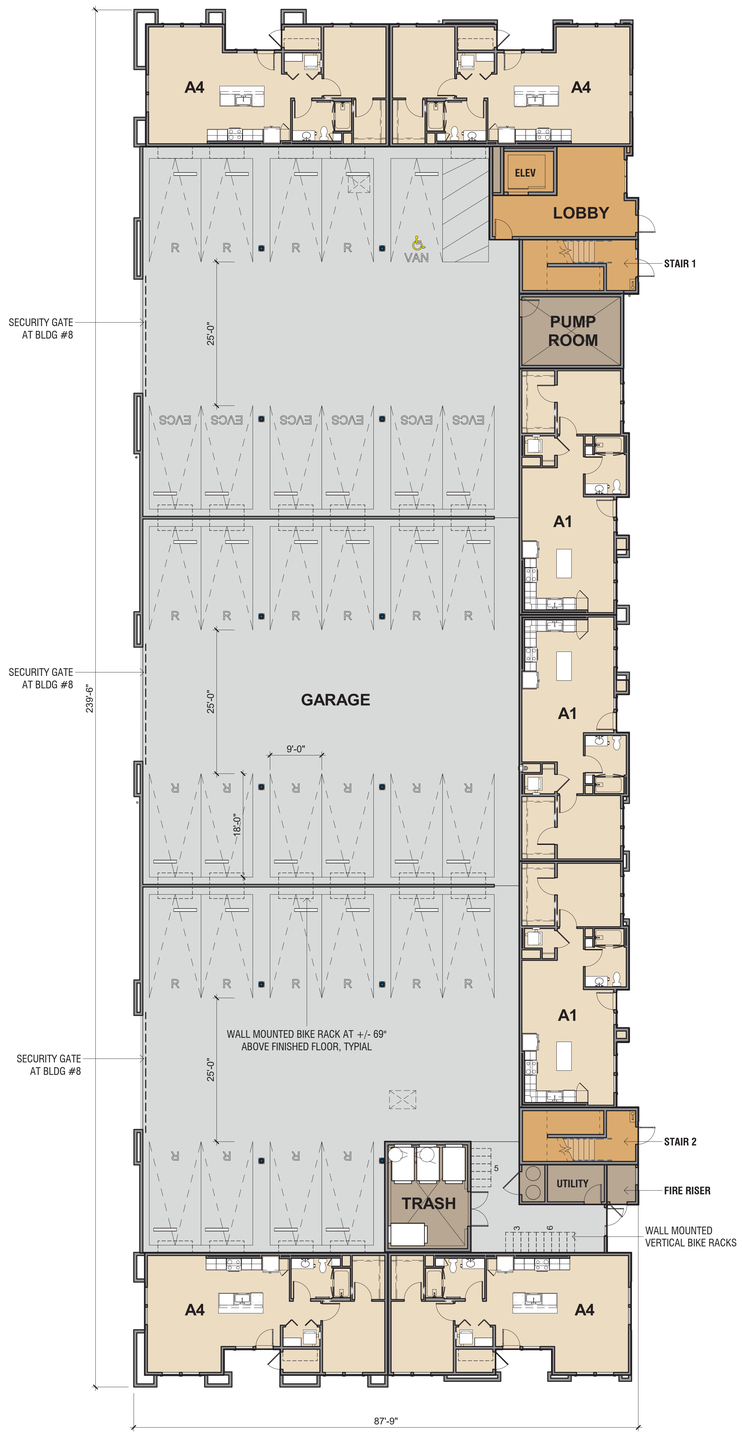
A-1.4



ROOF PLAN



LEVELS 2-4



LEVEL 1
33 GARAGE STALLS

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS | RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 21, 2021

0' 8' 16' 32'

BUILDING TYPE B (BLDG NO. 3, 4, 5, 6, 8)
- FLOOR PLANS -

A-2.1



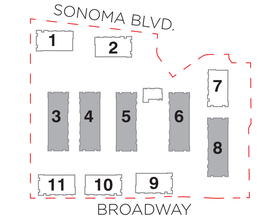
FRONT

MATERIAL LEGEND

ST-1	STUCCO
SV-1	STONE VENEER
S-1	SMOOTH HORIZONTAL LAP SIDING
S-2	SMOOTH REVEAL PANEL
RM-1	METAL RAILING
A-1	METAL AWNING
W-1	VINYL WINDOW
R-1	ASPHALT SHINGLE ROOFING
R-2	STANDING SEAM METAL ROOFING



ELEVATIONS KEY MAP



SITE KEY MAP



LEFT



PERSPECTIVE

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS

RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 21, 2021

0' 8' 16' 32'

BUILDING TYPE B (BLDG NO. 3, 4, 5, 6, 8)
- ELEVATIONS -

A-2.2



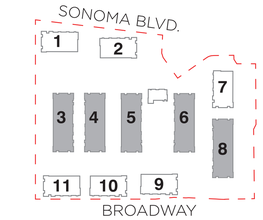
REAR

MATERIAL LEGEND

ST-1	STUCCO
SV-1	STONE VENEER
S-1	SMOOTH HORIZONTAL LAP SIDING
S-2	SMOOTH REVEAL PANEL
RM-1	METAL RAILING
A-1	METAL AWNING
W-1	VINYL WINDOW
R-1	ASPHALT SHINGLE ROOFING
R-2	STANDING SEAM METAL ROOFING



ELEVATIONS KEY MAP



SITE KEY MAP



RIGHT



PERSPECTIVE

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS

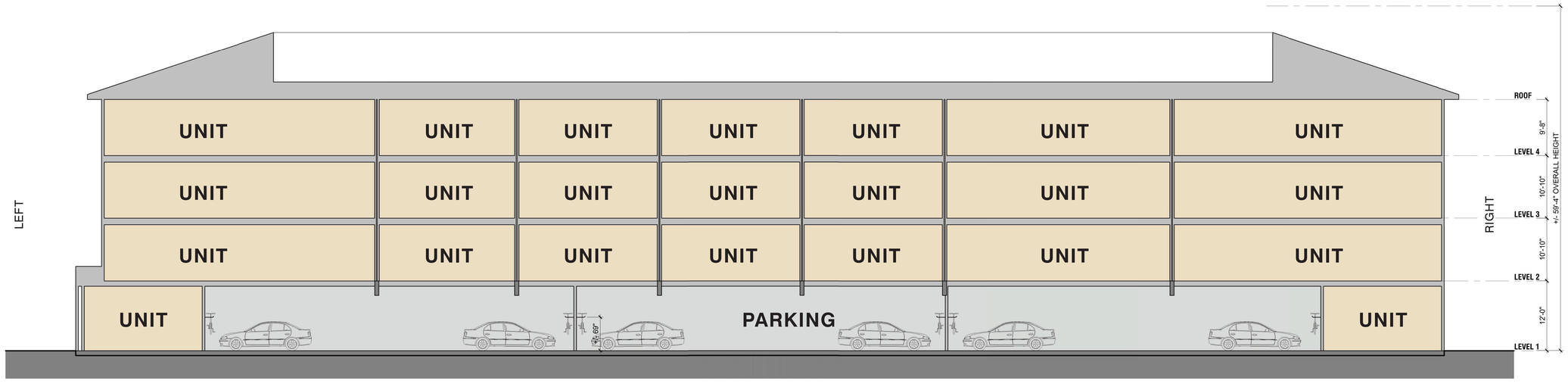
RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 21, 2021

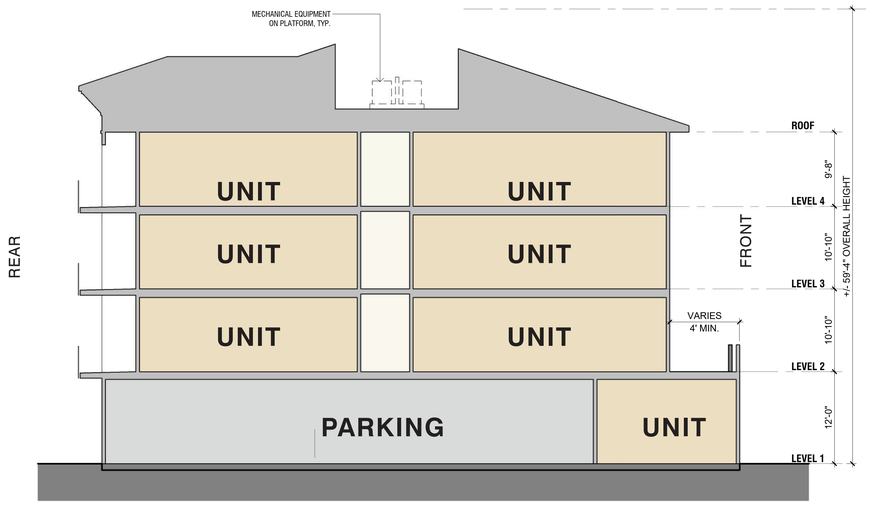
0' 8' 16' 32'

BUILDING TYPE B (BLDG NO. 3, 4, 5, 6, 8)
- ELEVATIONS -

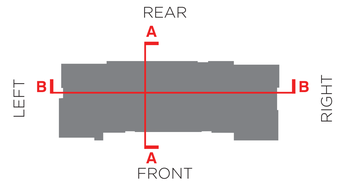
A-2.3



SECTION B



SECTION A



KEY MAP

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS

RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 21, 2021

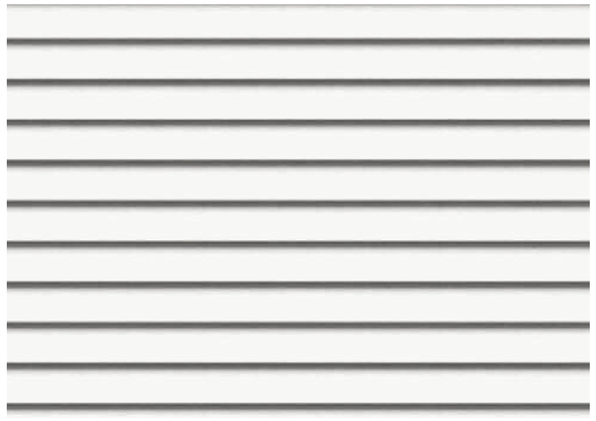
0' 8' 16' 32'

BUILDING TYPE B (BLDG NO. 3, 4, 5, 6, 8)
- SECTIONS -

A-2.4



STONE VENEER **SV-1**
CHOPLEDGE CREATIVE MINES LIGHTHOUSE OR SIM.



CEMENTITIOUS LAP SIDING **S-1**
HARDIE PLANK SMOOTH SIDING OR SIM.



CEMENTITIOUS REVEAL PANEL **S-2**
HARDIE PANEL SMOOTH REVEAL PANEL OR SIM.



STANDING SEAM METAL ROOFING **R-2**
METALSALES VERTICAL SEAM OR SIM.



ASPHALT SHINGLE ROOFING **R-1**
GAF TIMBERLINE CHARCOAL OR SIM.

EXTERIOR STUCCO **ST-1**
20/30 SAND FINISH

MATERIALS

*NOTE IMAGES ARE CONCEPTUAL AND REPRESENTATIVE OF DESIGN INTENT ONLY



PEPPERCORN SW 7674 OR SIM.



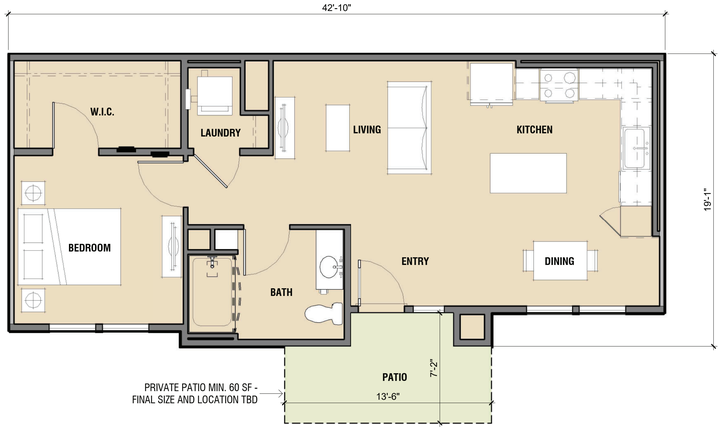
GRAY MAATTERS SW 7066 OR SIM.



PURE WHITE SW 7005 OR SIM.

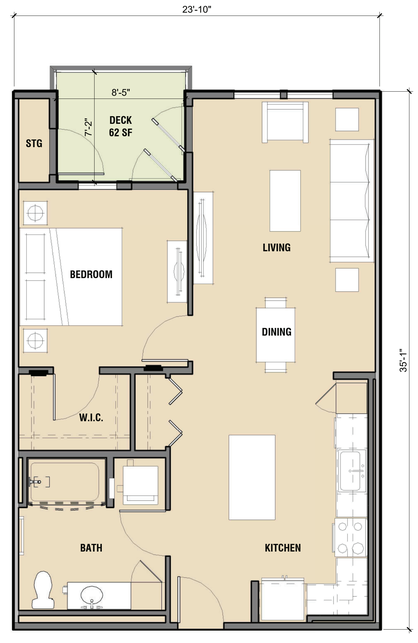
COLORS

*NOTE DIGITAL COLORS MAY NOT BE ACCURATELY REPRESENT OF REAL WORLD COLORS



UNIT A1

767 SF



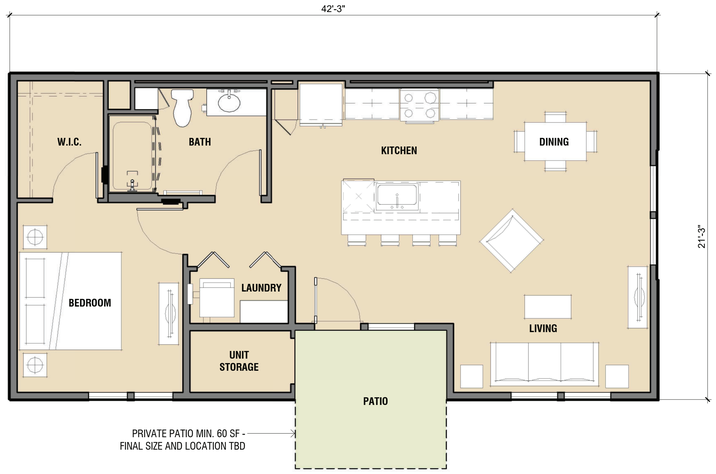
UNIT A2

784 SF



UNIT A3

820 SF



UNIT A4

954 SF

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS

RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 21, 2021

0' 4' 8' 16'

ONE BEDROOM UNITS



UNIT B1

1,063 SF



UNIT B2

1,086 SF



UNIT B3

1,196 SF



UNIT B4

1,221 SF

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS

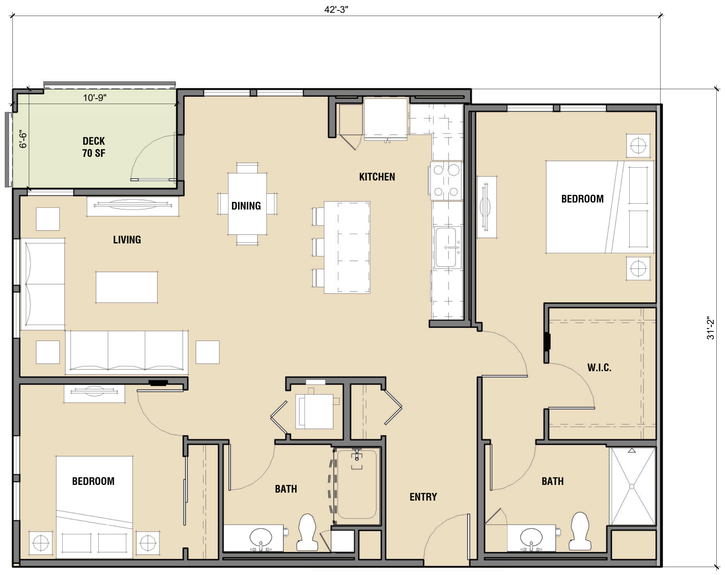
RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 21, 2021

0' 4' 8' 16'

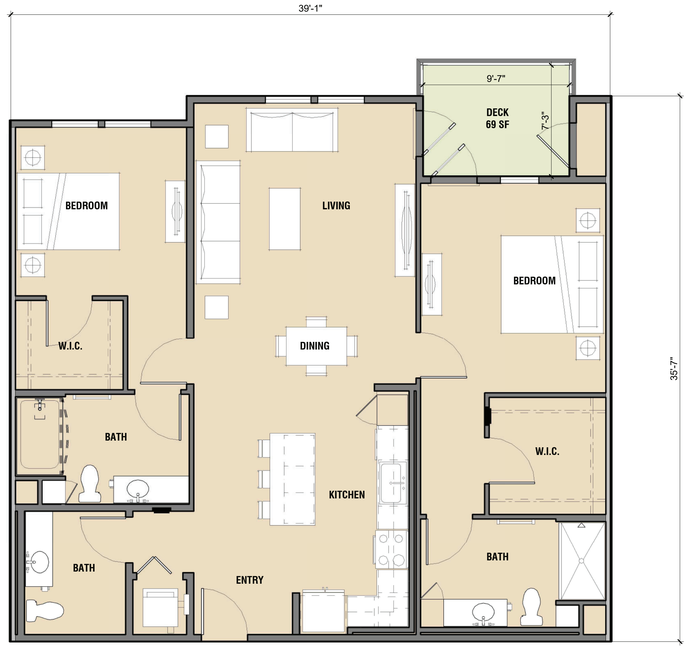
TWO BEDROOM UNIT PLANS

A-4.2



UNIT B5

1,237 SF



UNIT B6

1,328 SF



UNIT C1

1,637 SF

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

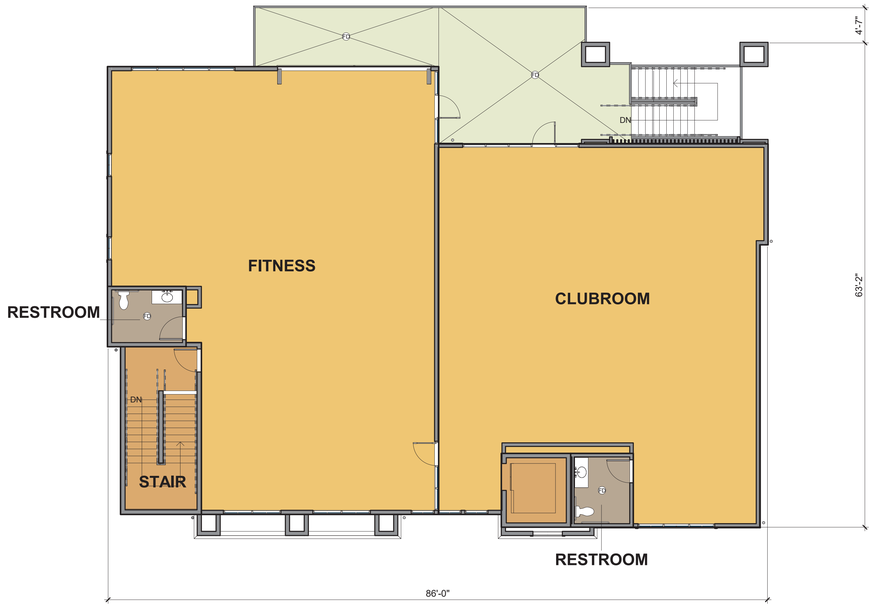
TCA ARCHITECTS

RSC VALLEJO

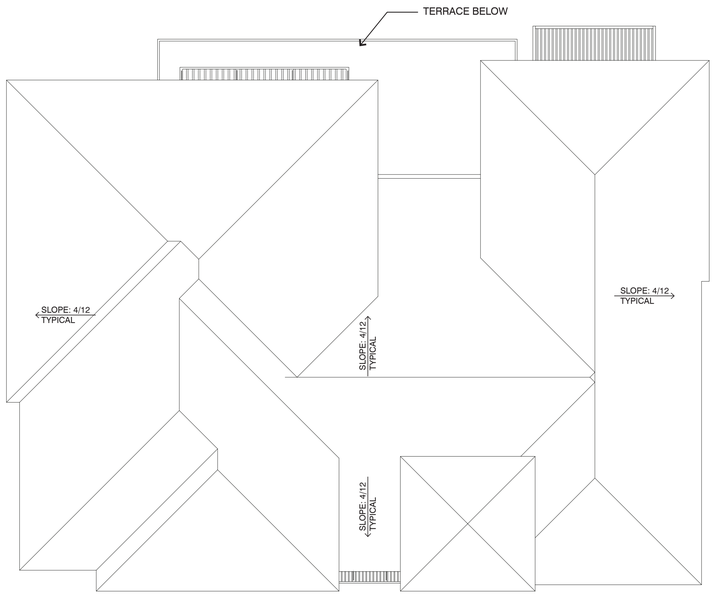
SITE DEVELOPMENT REVIEW
MARCH 21, 2021

0' 4' 8' 16'

TWO & THREE BEDROOM UNIT PLANS



LEVEL 2 - FLOOR PLAN



ROOF PLAN



LEVEL 1 - FLOOR PLAN

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS

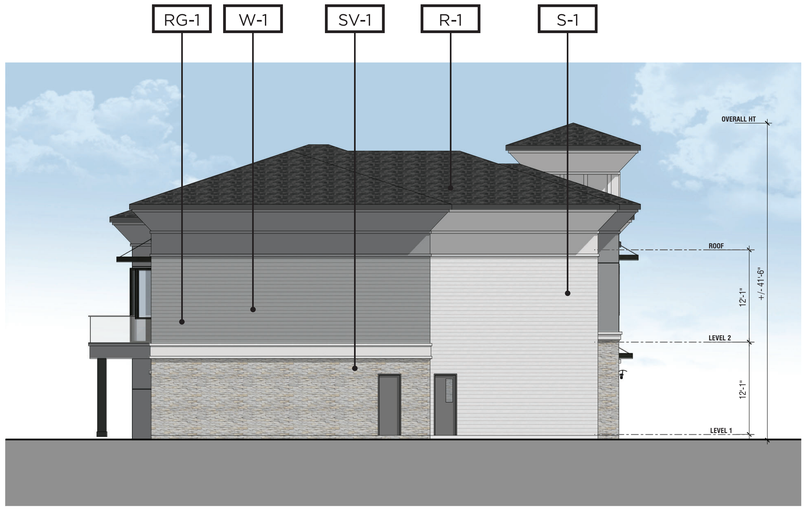
RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 21, 2021

0' 8' 16' 32'

AMENITY BUILDING PLANS & ROOF PLAN

A-5.1



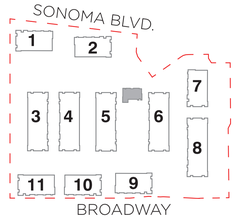
LEFT



REAR

MATERIAL LEGEND

ST-1	STUCCO
SV-1	STONE VENEER
S-1	SMOOTH HORIZONTAL LAP SIDING
S-2	SMOOTH REVEAL PANEL
RG-1	GLASS RAILING
A-1	METAL AWNING
W-1	VINYL WINDOW
SF-1	STOREFRONT WINDOW
R-1	ASPHALT SHINGLE ROOFING



SITE KEY MAP



RIGHT



FRONT



PERSPECTIVE



PERSPECTIVE

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

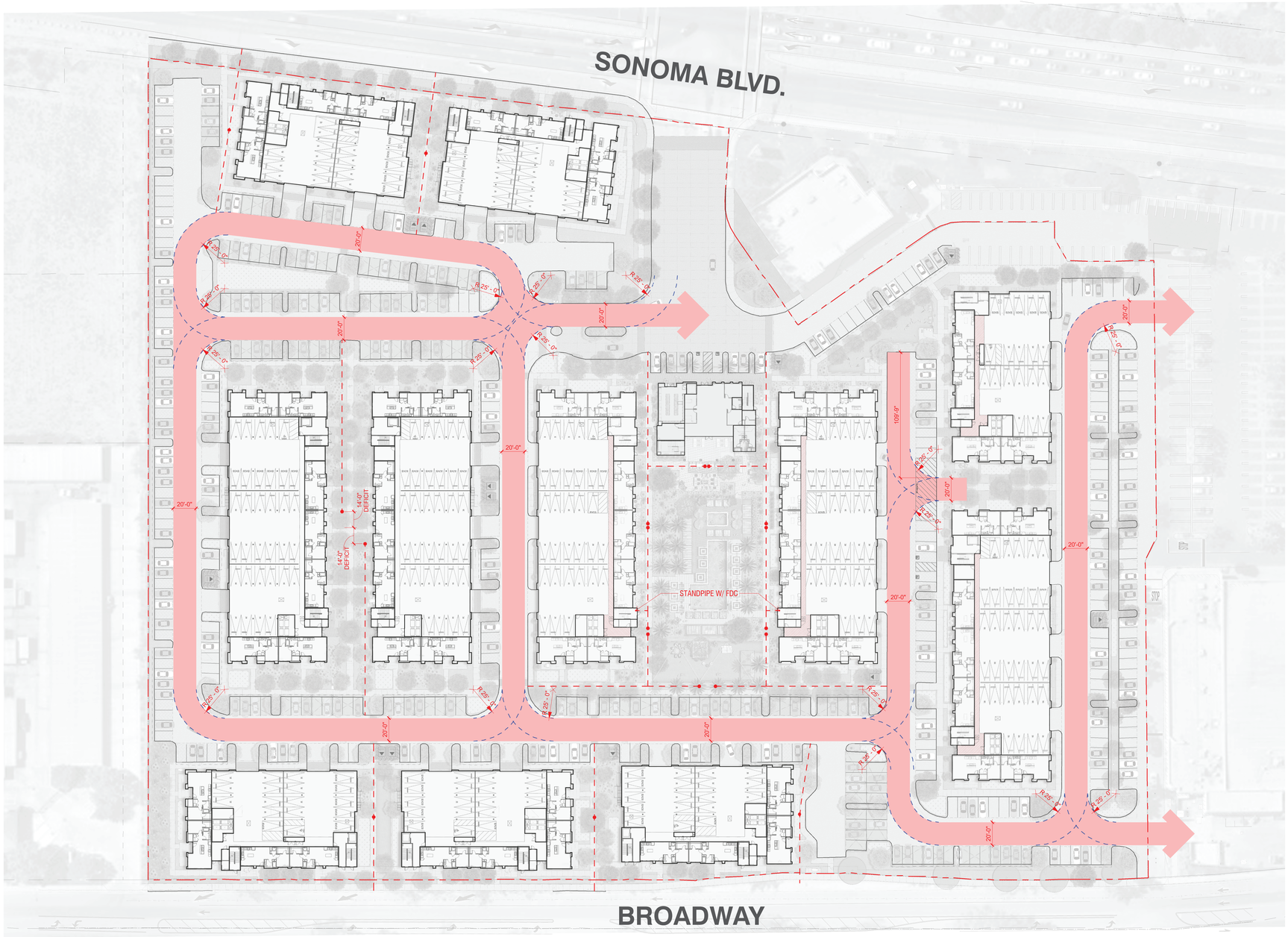
TCA ARCHITECTS

RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 21, 2021

0' 8' 16' 32'

AMENITY BUILDING ELEVATIONS



LEGEND

- 20' FIRE ACCESS LAND
- FIRE APPARATUS TURNING RADIUS
- 150' MAX HOSE PULL DISTANCE

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS

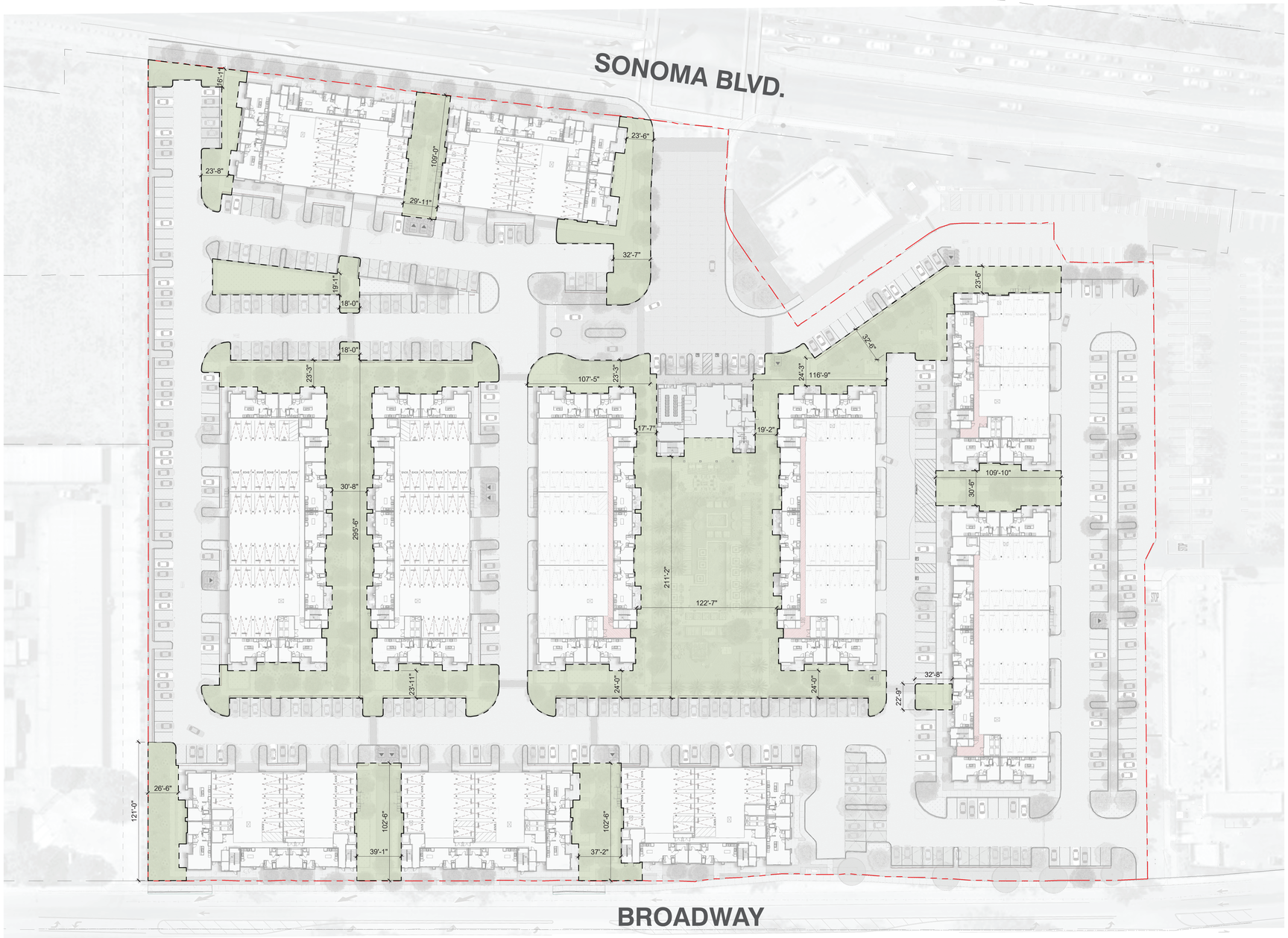
RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 21, 2021

0' 40' 80' 160'

FIRE ACCESS EXHIBIT

A-6.3



OPEN SPACE SUMMARY				
Required		**RATIO**	**UNITS**	**TOTAL**
Common		200 SF/UNIT	429	85,800 SF
Private		60 SF/UNIT	429	25,740 SF
Provided				**TOTAL**
Common				87,300 SF
*Private				28,287 SF
*Project average private open space provide. Private open space to be minimum of 60 SF. Refer to Unit Summary for unit specific avg. areas.				

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

TCA ARCHITECTS

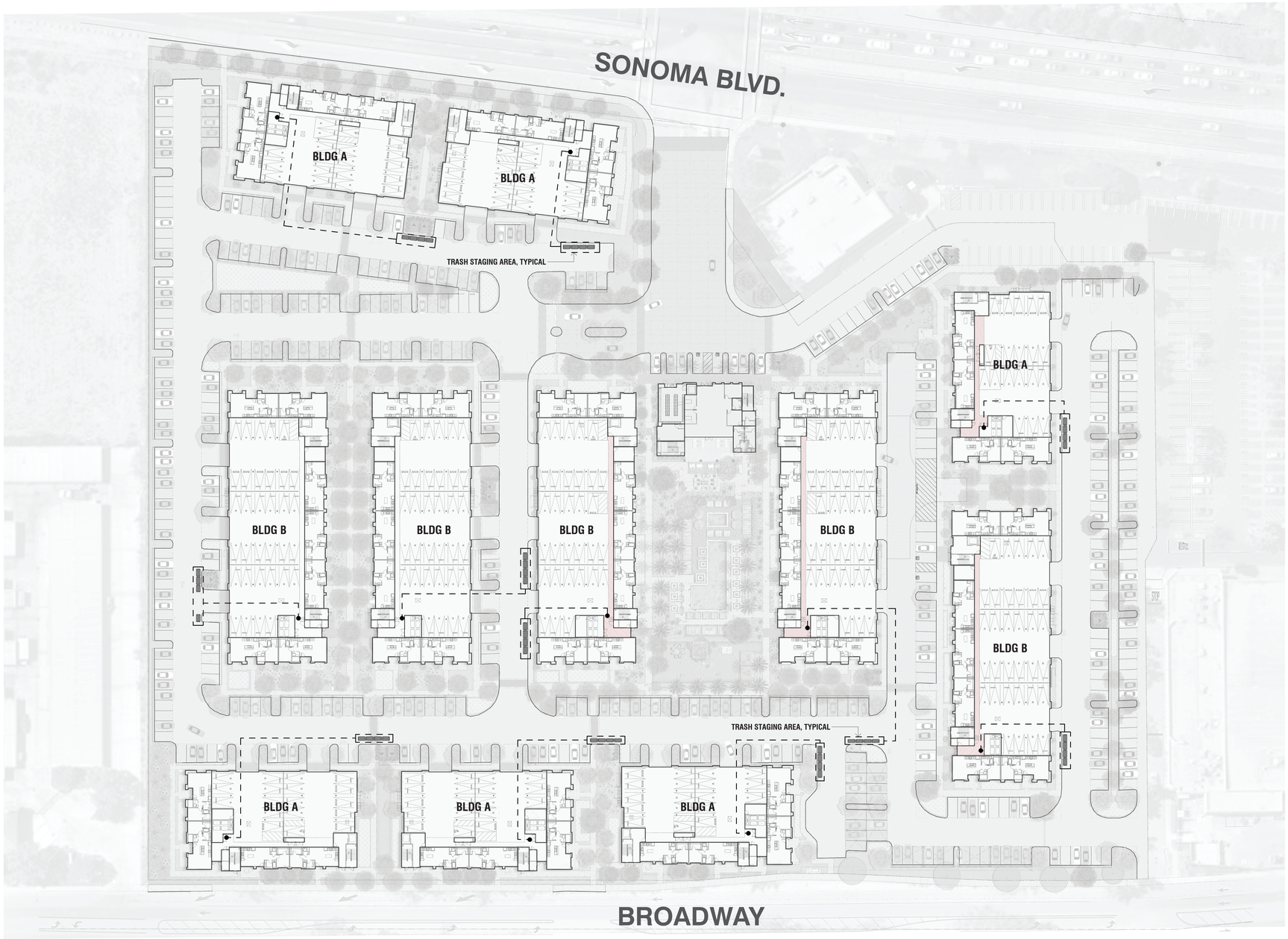
RSC VALLEJO

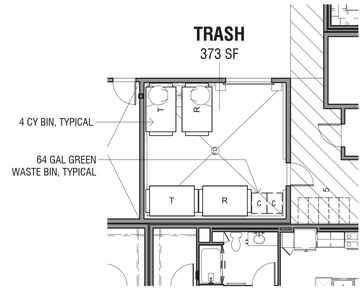
SITE DEVELOPMENT REVIEW
MARCH 21, 2021

0' 40' 80' 160'

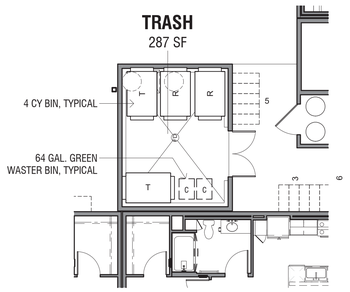
OPEN SPACE EXHIBIT

A-6.4





BLDG A - TRASH ROOM



BLDG B - TRASH ROOM

NOTES:

PROJECT WILL UTILIZE A TRASH MANAGEMENT SERVICE TO REMOVE BINS FROM BUILDING TRASH ROOMS AND STAGE AT NOTED LOCATIONS TO BE PICKED UP. AFTER PICK-UP BINS WILL BE BROUGHT BACK INTO TRASH ROOMS.



CITY OF VALLEJO NOTE:

- LANDSCAPE PLANS TO BE CONSISTENT TO SECTIONS 16.504.04 AND 16.5044.06 OF THE VMC
- LANDSCAPE SYMBOLS PROVIDED ARE SHOWN AT ESTIMATED 3RD YEAR SIZE

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

MJS LANDSCAPE ARCHITECTURE

RSC VALLEJO

SCHEMATIC DESIGN
MARCH 18, 2022

0' 25' 50' 100'

LANDSCAPE SITE PLAN

STORM WATER TREATMENT PLANTER TYP.

BARK PARK
- low fence
- synthetic turf
- benches

PEDESTRIAN GATE

EXISTING BUS SHELTER

TRANSFORMERS - TYP
SEE SCREENING EXHIBIT ON SHEET L.7

RESIDENT VEHICULAR GATE

EXISTING TREE TO REMAIN IF NO CONFLICTS

TUBULAR STEEL PERIMETER FENCE

ENLARGED PRIVATE PATIOS - (164 S.F. TYP)

PERVIOUS PAVING TYP.

TRANSFORMERS - TYP
SEE SCREENING EXHIBIT ON SHEET L.7

BIKE RACK WITHIN PUBLIC RIGHT-OF-WAY

EXISTING BUS SHELTER

CARPORTS TYP.

PROJECT ENTRY
- decorative scored concrete

POOL COURTYARD
- see enlargment sheet L.5

MATCHLINE - SEE SHEET L.3

PAVING KEY - SEE SHEET L.4

A	LINEAR CONCRETE PAVERS	D	CONCRETE PAVERS
B	SYNTHETIC TURF	E	SCORED CONCRETE WALKWAYS
C	WOOD PORCELAIN PAVERS	F	DECORATIVE CONCRETE AT PROJECT ENTRY

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

MJS LANDSCAPE ARCHITECTURE | RSC VALLEJO

SCHEMATIC DESIGN
MARCH 18, 2022

0' 10' 20' 40'

CONCEPTUAL LANDSCAPE PLAN - NORTH SECTION

MATCHLINE - SEE SHEET L.2

SONOMA BLVD.

BROADWAY

RESIDENT VEHICULAR GATE

BIKE RACK WITHIN PUBLIC RIGHT-OF-WAY

STORM WATER TREATMENT PLANTER TYP.

TRANSFORMERS - TYP
SEE SCREENING EXHIBIT ON SHEET L.7

PASEO w/ ACCENT TREES

CARPORT TYP.

STORM WATER TREATMENT PLANTER TYP.

UTILITY EASEMENT - NO TREES ALLOWED

PERIMETER WALL

EXISTING SELF STORAGE

PERVIOUS PAVING TYP.

1- BUILDING A

2- BUILDING A

3- BUILDING B

4- BUILDING B

5- BUILDING B

10- BUILDING A

11- BUILDING A

PAVING KEY - SEE SHEET L.4

- A LINEAR CONCRETE PAVERS
- B SYNTHETIC TURF
- C WOOD PORCELAIN PAVERS
- D CONCRETE PAVERS
- E SCORED CONCRETE WALKWAYS
- F DECORATIVE CONCRETE AT PROJECT ENTRY

RSC VALLEJO
VALLEJO, CALIFORNIA
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MJS LANDSCAPE ARCHITECTURE

RSC VALLEJO

SCHEMATIC DESIGN
MARCH 18, 2022

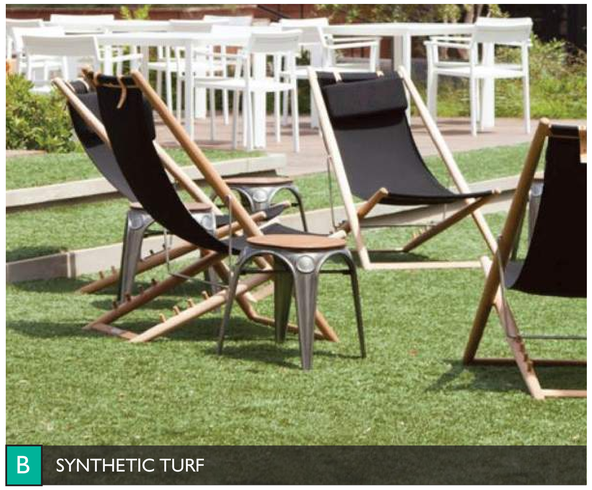
0' 10' 20' 40'

CONCEPTUAL LANDSCAPE PLAN - SOUTH SECTION

L.3



A LINEAR CONCRETE PAVERS



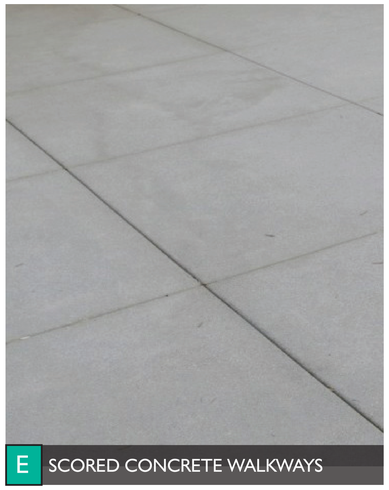
B SYNTHETIC TURF



C WOOD PORCELAIN PAVERS



D CONCRETE PAVERS



E SCORED CONCRETE WALKWAYS





POTTERY



DECORATIVE PEBBLE - SALT & PEP-



BIKE RACK



SHOT BLAST MASONRY WALL



CABANAS AT POOL



RECTANGULAR FIREPIT



ROUND FIREPIT

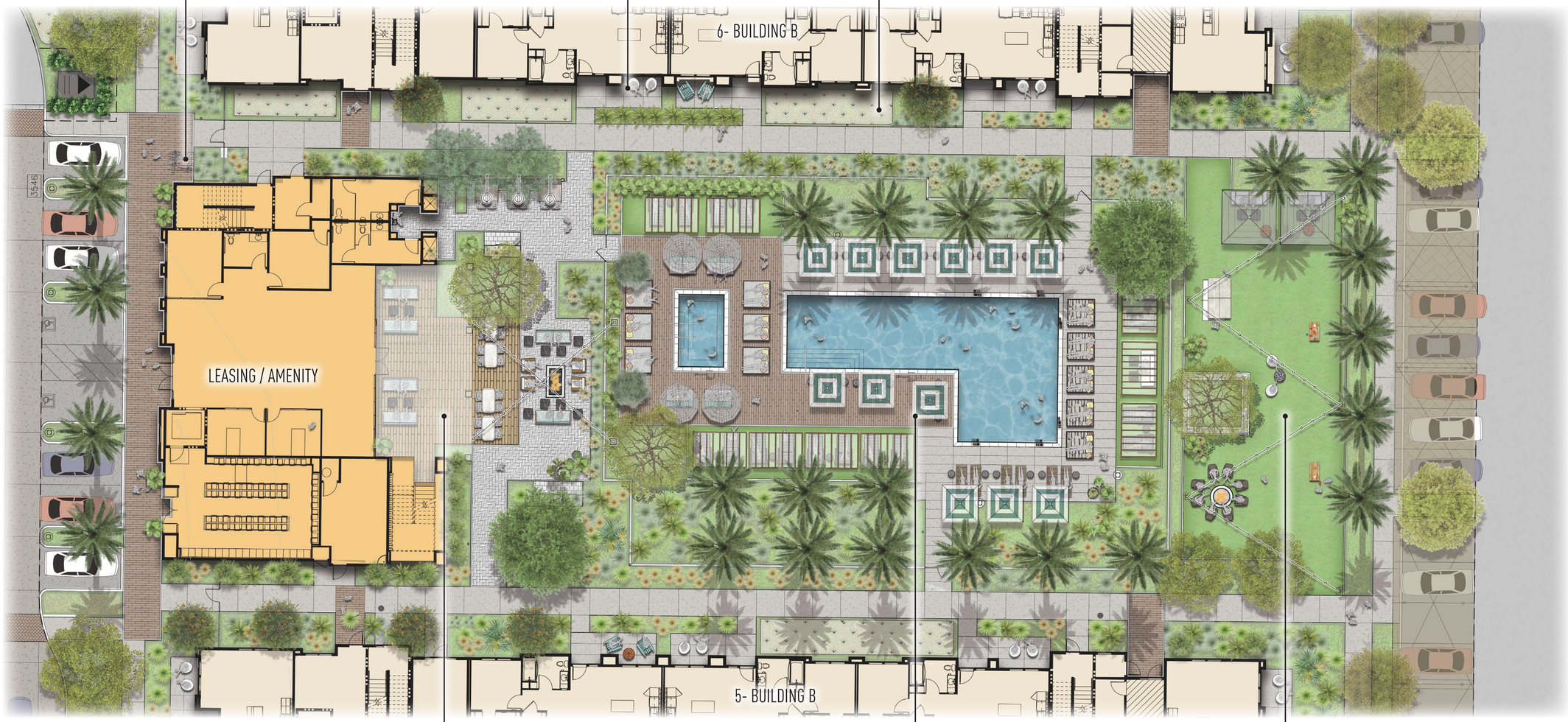


PING PONG TABLE

BIKE RACK

ENLARGED PATIOS - TYP.
- low wall and gate
- min. 7' wide
- direct access

STORM WATER TREATMENT PLANTER TYP.



THE SOCIAL
- firepit with lounge seating
- accent tree
- festival lights above
- (2) bbq counters
- dining tables
- built-in bench with arm lights
- views to pool deck

POOL DECK
- 60' long lap pool
- 10'x14' spa
- cabanas
- lawn sunning area
- chaise lounge chairs
- daybeds

THE LAWN
- synthetic turf - 2,872 s.f.
- lawn games - bocce ball, cornhole, and ping pong
- firepit with lounge chairs
- accent tree
- umbrellas with lounge seating
- festival lights

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MJS LANDSCAPE ARCHITECTURE

RSC VALLEJO

SCHEMATIC DESIGN
MARCH 18, 2022

0' 5' 10' 20'

POOL COURTYARD ENLARGEMENT

to existing retail

to existing retail

7- BUILDING A

8- BUILDING B

VEHICULAR GATE

EXISTING RETAIL

6- BUILDING B

LEASING

9- BUILDING A

BROADWAY

SONOMA BLVD.

MEADOWS DRIVE

MATCHLINE - SEE SHEET L.7

LEGEND

- PEDESTRIAN PATH of TRAVEL WITHIN PROJECT
- PRIVATE ACCESS TO APARTMENT HOMES
- PUBLIC PEDESTRIAN PATH
- PEDESTRIAN GATE
- LOBBY/ BUILDING ACCESS
- PUBLIC TRANSIT
- POOL GATE
- PRIVATE GATE TO APARTMENT HOMES

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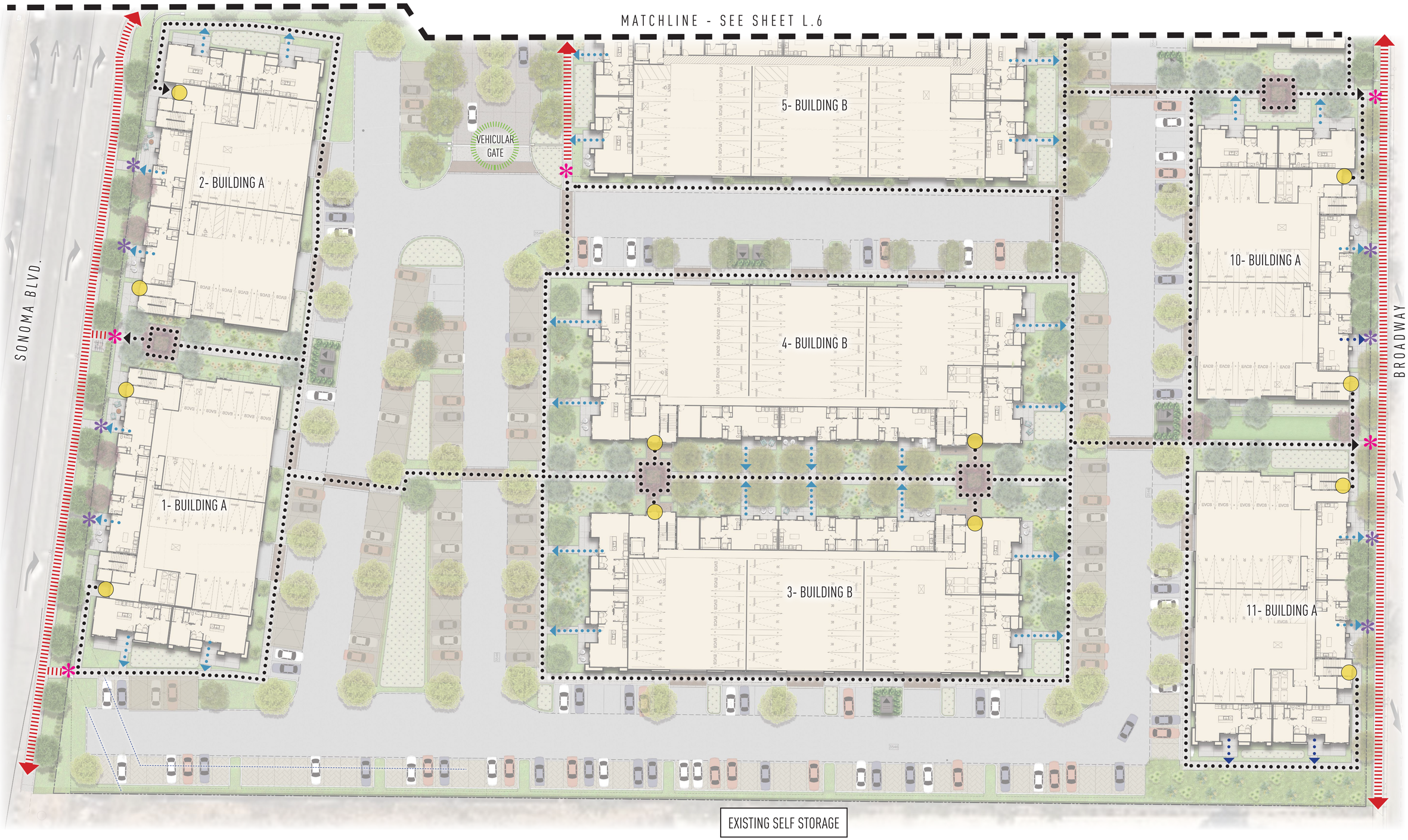
MJS LANDSCAPE ARCHITECTURE

RSC VALLEJO

SCHEMATIC DESIGN
MARCH 18, 2022

0' 10' 20' 40'

CIRCULATION PLAN - NORTH SECTION



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MJS LANDSCAPE ARCHITECTURE

RSC VALLEJO

SCHEMATIC DESIGN
MARCH 18, 2022

0' 10' 20' 40'

CIRCULATION PLAN - SOUTH SECTION

LANDSCAPE DESIGN PRINCIPLES

CONCEPTUAL PLANS DEMONSTRATE THAT THIS DEVELOPMENT SATISFIES THE FOLLOWING GUIDELINES.
1. PROVIDES VISUAL SCREENING, PRIVACY, AND NATURAL SURVEILLANCE, WHERE NEEDED
2. DEFINES PEDESTRIAN PATHWAYS AND OPEN SPACE AREAS WITH LANDSCAPE MATERIALS WHERE APPROPRIATE.
3. PROVIDES FOCAL POINTS WITHIN A DEVELOPMENT, SUCH AS SPECIMEN TREES, HEDGES, FLOWERING PLANTS, AND PEDESTRIAN AMENITIES.
4. USES A COMBINATION OF PLANTS FOR YEAR-LONG COLOR AND INTEREST
5. USE LANDSCAPE TREATMENTS TO ENHANCE THE SCREENING OF OUTDOOR STORAGE AND MECHANICAL EQUIPMENT AREAS, AND ENHANCE GRADED AREAS SUCH AS EARTH BERMS

IRRIGATION CONCEPT STATEMENT

IRRIGATION ZONES: IRRIGATION HYDRO-ZONES SHALL HAVE PLANTS GROUPED with SIMILAR WATERING REQUIREMENTS.
DEPTH OF IRRIGATION LINES: ALL ON-GRADE LATERAL LINES SHALL BE BURIED TO A DEPTH OF 18" MIN. ALL ON-GRADE MAINLINES SHALL BE BURIED TO A DEPTH OF 24" MIN.
BACKFLOW PREVENTER: BACKFLOW PREVENTER SHALL BE A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER (FEBCO 825Y OR EQUAL) TYPE AS APPROVED BY WATER PURVEYOR and SCREENED with LANDSCAPING from PUBLIC VIEW.
IRRIGATION EMITTERS: ALL SHRUB AREAS SHALL BE IRRIGATED USING DRIP TYPE IRRIGATION SYSTEM. ALL TREES SHALL BE IRRIGATED USING BUBBLER AND/OR DRIP IRRIGATION SYSTEM. ALL GROUNDCOVER AREAS SHALL BE IRRIGATED USING DRIP IRRIGATION SYSTEM.
IRRIGATION CONTROLLER: CONTROLLER SHALL BE AUTOMATIC WITH MULTIPLE PROGRAMMING CAPABILITY. CONTROLLER TO BE REPROGRAMMED SEASONALLY TO MINIMIZE RUNOFF AND OVER WATERING. "SMART" CONTROLLER WEATHER TRACKING DEVICES SHALL BE UTILIZED TO CONTROL IRRIGATION CYCLES ACCORDING TO SPECIFIC IRRIGATION REQUIREMENTS.
CLASS OF IRRIGATION PIPE: ALL MAINLINE SHALL BE CLASS 315 PVC. ALL LATERAL LINE SHALL BE CLASS 200 PVC.

THE IRRIGATION DESIGN SHALL COMPLY with THE CRITERIA of CITY of VALLEJO WATER CONSERVATION POLICIES and REQUIREMENTS INCLUDING BUT NOT LIMITED TO:

A. PLANT MATERIALS SHALL BE SELECTED FOR ENERGY EFFICIENCY AND DROUGHT TOLERANCE; ADAPTABILITY AND RELATIONSHIP TO WESTLAKE VILLAGE ENVIRONMENT; COLOR, FORM and PATTERN; ABILITY TO PROVIDE SHADE; SOIL RETENTION, FIRE RESISTIVENSS, ETC. THE OVERALL LANDSCAPE PLAN SHALL BE INTEGRATED WITH ALL ELEMENTS OF THE PROJECT, SUCH AS BUILDINGS, PARKING LOTS AND STREETS, TO ACHIEVE DESIRABLE MICRO-CLIMATE AND MINIMIZE ENERGY DEMAND AND WATER USE.
B. WHERE SHRUBS OR LOW-LEVEL VEGETATION ARE USED, VEGETATIVE MATTER AT MATURITY SHALL COVER AT LEAST 75% OF ACTUAL PLANTED AREA.
C. IRRIGATION SYSTEMS SHALL BE IN ACCORDANCE WITH THE CITY WATER EFFICIENT LANDSCAPE REQUIREMENTS AND THE ARBORICULTURAL STANDARDS AND SPECIFICATIONS ON FILE IN THE DEPARTMENT OF PUBLIC WORKS.

WATER CONSERVATION PRINCIPLES

PURPOSE: TO PROVIDE THE PROPERTY MANAGEMENT STAFF A MECHANICAL DEVICE TO DISTRIBUTE WATER AND ENSURE PLANT SURVIVAL IN THE MOST EFFICIENT MANNER AND WITHIN A TIME FRAME THAT LEAST INTERFERES WITH THE ACTIVITIES OF THE RESIDENTS.
CONCEPT: THE SYSTEM WILL UTILIZE DRIP and BUBBLER IRRIGATION COMPATIBLE WITH THE AREA BEING WATERED AND INFILTRATION RATES OF THE SOIL. THE SYSTEM WILL BE CONTROLLED BY A 'WEATHER TRAK' or 'SMART' CONTROLLER. VALVES PROGRAMMED FROM AUTOMATIC CONTROLLERS WILL MAXIMIZE EFFICIENT WATER APPLICATION.

TO AVOID WATER RUNOFF, THE CONTROLS WILL BE OVERSEEN BY A FLOW MONITOR THAT WILL DETECT ANY BROKEN BUBBLER HEADS or DRIP TUBING TO STOP THAT STATION'S OPERATION, ADVANCING TO THE NEXT WORKABLE STATION. IN THE EVENT OF PRESSURE SUPPLY LINE BREAKAGE, IT WILL COMPLETELY STOP THE OPERATION OF THE SYSTEM. ALL MATERIAL WILL BE NON-FERROUS, WITH THE EXCEPTION OF THE BRASS PIPING INTO AND OUT OF THE BACKFLOW UNITS. ALL WORK WILL BE IN THE BEST ACCEPTABLE MANNER IN ACCORDANCE WITH APPLICABLE CODES AND STANDARDS PREVAILING IN THE INDUSTRY.

SCREENING OF UTILITY EQUIPMENT:

ALL ABOVE-GROUND UTILITY EQUIPMENT WILL BE SCREENED FROM PUBLIC VIEW WITH A MINIMUM 3' WIDE PLANTING AREA. PROPOSED SCREEN SHRUB WILL BE 15 GALLON SIZE SPACED TO SCREEN 75% OF UTILITY AT THE TIME OF PLANTING.

EXISTING TREE NOTE:

NO EXISTING TREE TO REMAIN ON-SITE DUE TO PROPOSED CONSTRUCTION. EXISTING STREET TREES ON BROADWAY TO REMAIN WHERE FEASIBLE. ALL EXISTING TREES 6" DIA. OR LARGER ON-SITE TO BE INVENTORIED. REPLACEMENT TREES FOR MITIGATION OF REMOVED TREES TO BE IDENTIFIED IN FINAL LANDSCAPE PLAN.

WATER EFFICIENT LANDSCAPE ORDINANCE (WELO) NOTE

LANDSCAPE PLANS WILL ADHERE TO THE CITY OF VALLEJO WATER EFFICIENT LANDSCAPE ORDINANCE.

LINE-OF-SIGHT NOTE:

SHRUBS TO BE MAINTAINED AT MAXIMUM 24" HIGH WITHIN LINE OF SIGHT AT STREET INTERSECTIONS.

PROPOSED SHRUB LIST for COMMON AREAS

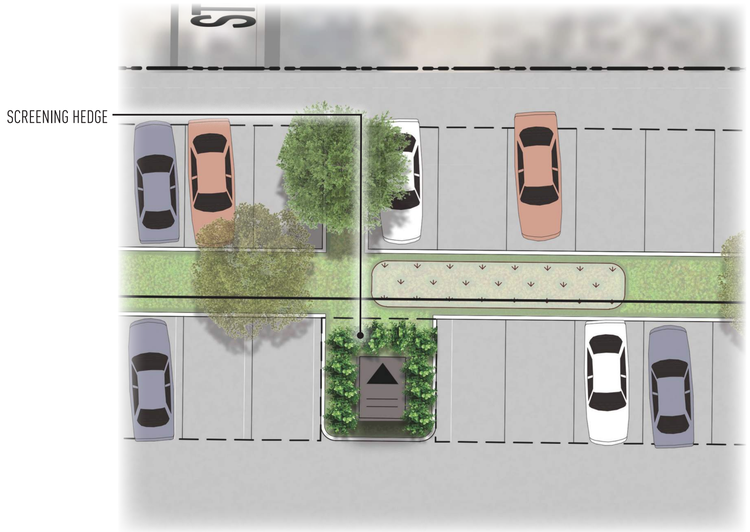
ALL PROPOSED SHRUBS will be COMPLIANT with CITY OF VALLEJO LANDSCAPE STANDARDS and GUIDELINES, CAL GREEN REQUIREMENTS FOR WATER CONSERVING and NON-INVASIVE AS DEFINED BY IPC.

SHRUBS and GROUNDCOVER			
ACACIA COGNATA ' COUSIN ITT'	RIVER WATTLE	5 GAL	Mod.
AEONIUM ARBOREUM 'ATROPURPUREUM'	TREE AEONIUM	5 GAL	Low
AGAVE ATTENUATA 'NOVA'	NOVA AGAVE	15 GAL	Low
ALOE FEROX	BITTER ALOE	15 GAL	Low
ALOE PLICATILIS	FAN ALOE	15 GAL	Low
ALOE STRIATA	CORAL ALUE	5 GAL	Low
ALYOGYNE HUEGELII	BLUE HIBISCUS	15 GAL	Low
ANIGOZANTHOS x 'BUSH GOLD'	KANGAROO PAW	5 GAL	Low
ANIGOZANTHOS X 'ORANGE CROSS'	KANGAROO PAW	5 GAL	Low
ARBUTUS UNEDO 'COMPACTA'	DWARF STRAWBERRY TREE	5 GAL	Low
ARCTOSTAPHYLOS D. 'HOWARD MCMINN'	HOWARD MCMINN MANZANITA	15 GAL	Low
ASPARAGUS DENSIFLORUS 'MYERS'	MYERS ASPARAGUS	5 GAL	Mod.
BOUGAINVILLEA x 'ROSENKA'	BOUGAINVILEA	5 GAL	Low
BUXUS MICROPHYLLA 'GREEN BEAUTY'	GREEN BEAUTY BOXWOOD	5 GAL	Mod.
CALAMAGROSTIS X A. 'KARL FOERSTER'	FEATHER REED GRASS	5 GAL	Mod.
CALLISTEMON CITRINUS 'LITTLE JOHN'	GREEN BEAUTY BOXWOOD	5 GAL	Low
CARISSA MACROCARPA 'GREEN CARPET'	GREEN CARPET NATAL PLUM	5 GAL	Mod.
CARPENTERIA CALIFORNICA	BUSH ANEMONE	15 GAL	Mod.
CEANOTHUS IMPRESSUS 'PUGET BLUE'	SANTA BARBARA CEANOTHUS	15 GAL	Low
CRASSULA ARBORESCENS 'BLUE WAVES'	SILVER DOLLAR PLANT	5 GAL	Low
DIANELLA REVOLUTA 'LITTLE REV'	LITTLE REV DIANELLA	1 GAL	Mod.
DIANELLA TASMANICA 'VARIEGATA'	FLAX LILY	5 GAL	Mod.
DIETES x 'ORANGE DROP'	FORTNIGHT LILY	5 GAL	Low
DODONAEA VISCOSA 'PURPUREA'	PURPLE HOPSEED BUSH	15 GAL	Low
ECHEVERIA X 'AFTERGLOW'	AFTERGLOW ECHEVERIA	1 GAL	Low
FESTUCA GLAUCA 'ELIJAH BLUE'	BLUE FESCUE	1 GAL	Low
FESTUCA MAIREI 'GREENLEE'S FORM'	GREENLEE ATLAS FESCUE	5 GAL	Low
GREVILLEA X 'NOELLII'	GREVILLEA	5 GAL	Low
HEMEROCALLIS X 'STARBURST'	EVERGREEN DAYLILY	5 GAL	Mod.
HESPERALOE PARVIFLORA	RED YUCCA	5 GAL	Low
HETEROMELES ARBUTIFOLIA	TOYON	15 GAL	Low
KNIPHOFIA UVARIA 'MALIBU YELLOW'	MALIBU YELLOW TORCH LILY	5 GAL	Low
LAVANDULA DENTATA	FRENCH LAVENDER	5 GAL	Low
LEUCADENDRON X 'SAFARI SUNSET'	CONEBUSH	15 GAL	Low
LIGUSTRUM TEXANUM (COLUMNS)	TEXAS PRIVET	15 GAL	Mod.
LIRIOPE GIGANTEA	GIANT LILY TURF	5 GAL	Mod.
LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH	1 GAL	Mod.
LOMANDRA L. 'PLATINUM BEAUTY'	PLATINUM BEAUTY LOMANDRA	5 GAL	Mod.
MAHONIA X 'SOFT CARESS'	SOFT CARESS MAHONIA	5 GAL	Mod.
OLEA EUROPAEA 'LITTLE OLLIE'	LITTLE OLLIE OLIVE	15 GAL	Low
PHILODENDRON SELLOUM	SPLIT LEAF PHILODENDRON	5 GAL	Mod.
PHILODENDRON X 'XANADU'	PHILODENDRON	5 GAL	Mod.
RHUS INTEGRIFOLIA	LEMONADE BERRY	5 GAL	Low
PITTOSPORUM TENUIFOLIUM 'SILVER SHEEN'	TAWHIWHI	15 GAL	Mod.
PITTOSPORUM TOBIRA	MOCK ORANGE	5 GAL	Mod.
PITTOSPORUM TOBIRA 'VARIEGATA'	VARIEGATED MOCK ORANGE	5 GAL	Low
PITTOSPORUM TOBIRA 'WHEELER'S DWARF'	DWARF MOCK ORANGE	5 GAL	Low
RHAPHIOLEPIS INDICA	INDIAN HAWTHORN	5 GAL	Low
RHAMNUS CALIFORNICA 'EVE CASE'	COFFEEBERRY	5 GAL	Low
ROSA X 'RED CARPET'	CARPET ROSE	5 GAL	Mod.
ROSMARINUS OFFICINALIS 'PROSTRATUS'	DWARF ROSEMARY	5 GAL	Low
SENECIO M. 'BLUE CHALK STICKS'	SENECIO	1 GAL	Low
SESLERIA AUTUMNALIS	AUTUMN MOOR GRASS	1 GAL	Low
STACHYS BYZANTINA	LAMB'S EAR	1 GAL	Low
TRACHELOSPERMUM JASMINOIDES	STAR JASMINE	1 GAL	Mod.
WESTRINGIA FRUTICOSA 'WYNABBIE GEM'	COAST WESTRINGIA	15 GAL	Low
PER CONTRA COSTA CO. C.3 TECHNICAL GUIDEBOOK			
ALYOGYNE HUEGELII	BLUE HIBISCUS	5 GAL	Low
BOUTELOUA GRACILIS ' BLONDE AMBITION'	BLUE GRAMA	1 GAL	Low
CAREX PRAEGRACILIS	CALIFORNIA FIELD SEDGE	PLUGS	Low
CEANOTHUS G. H. 'YANKEE POINT'	CALIFORNIA LILAC	5 GAL	Low
CHONDROPETALUM TECTORUM	CAPE RUSH	5 GAL	Low
FESTUCA CALIFORNICA	CALIFORNIA FESCUE	1 GAL	Low
JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GAL	Mod.
MAHONIA REPENS	CREEPING BARBERRY	1 GAL	Low
MIMULUS AURANTIACUS	STICKY MONKEY FLOWER	5 GAL	Low
MUHLENBERGIA CAPILLARIS 'REGAL MIST'	MUHLY GRASS	5 GAL	Low
PENSTEMON EATONII	FIRECRACKER PENSTEMON	5 GAL	Mod.
SANTOLINA CHAMAECYPARISSUS	LAVENDER COTTON	1 GAL	Low

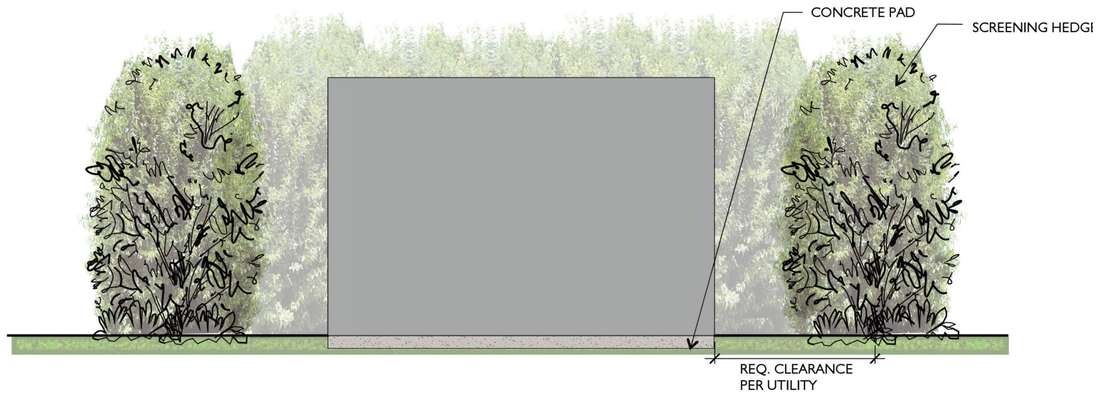
PROPOSED TREE LIST

ALL PROPOSED TREES will be COMPLIANT with CITY OF VALLEJO MUNICIPAL CODE CHAPTER 16.504 & LANDSCAPE STANDARDS and GUIDELINES, CAL GREEN REQUIREMENTS FOR WATER CONSERVING and NON-INVASIVE AS DEFINED BY IPC.

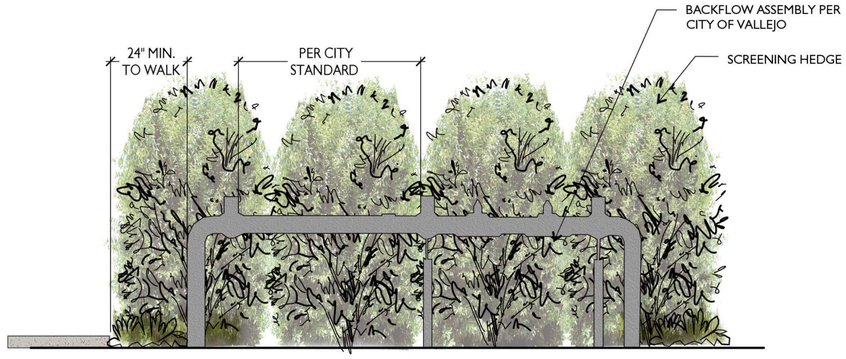
BOTANICAL NAME	COMMON NAME	SIZE	WUCOLS
SONOMA BLVD. LANDSCAPE SETBACK:			
DOMINANT STREET TREE: PYRUS CALLERYANA 'CAPITAL'	CAPITAL PEAR SPACE 30' O.C.	24" BOX	Mod.
BACKGROUND TREE: QUERCUS VIRGINIANA	SOUTHERN LIVE OAK BETWEEN PEAR TREES	24" BOX	Low
BACKGROUND TREE: CERCIS OCCIDENTALIS	WESTERN REDBUD SMALL GROUPINGS	24" BOX	Low
EXISTING TREES: SEQUOIA SEMPERVIRENS	COAST REDWOOD SMALL GROUPINGS	EXT'G.	Mod.
BROADWAY LANDSCAPE SETBACK			
DOMINANT STREET TREE: PLATANUS ACERIFOLIA	PLANE TREE PROTECT EXISTING	EXT'G.	Mod.
BACKGROUND TREE: SEQUOIA SEMPERVIRENS	COAST REDWOOD PROTECT EXISTING	EXT'G.	Mod
BACKGROUND TREE: CERCIS OCCIDENTALIS	WESTERN REDBUD SMALL GROUPINGS	24" BOX	Low
ENTRY DRIVE (south-side only)			
DOMINANT TREE: LAGERSTROEMIA HYBRID	CRAPE MYRTLE 20' O.C.	24" BOX	Mod.
POOL COURTYARD and LEASING PARKING			
PHOENIX DACTYLIFERA 'MEDJOOL'	DATE PALM DIAMOND CUT TRUNK	18' B.T.H. MATCH	Mod.
ACCENT: OLEA EUROPAEA 'SWAN HILL'	FRUITLESS OLIVE MULTI-TRUNK	48" BOX	Mod.
BACKGROUND TREE: LAURUS NOBLIS 'SARATOGA'	SWEET BAY COLUMNS	24" BOX	Low
BACKGROUND TREE: MAGNOLIA 'LITTLE GEM'	SOUTHERN MAGNOLIA LOW BRANCHING	24" BOX	Mod.
COMMON AREA LANDSCAPE			
ACER RUBRUM 'OCTOBER GLORY'	OCTOBER GLORY RED MAPLE	24" BOX	Mod.
ARBUTUS x 'MARINA'	HYBRID STRAWBERRY TREE	36" BOX	Low
BETULA NIGRA	RIVER BIRCH MULTI-TRUNK	24" BOX	Mod.
AGONIS FLEXUOSA	PEPPERMINT TREE	36" BOX	Mod.
GEIJERA PARVIFLORA	AUSTRALIAN WILLOW	24" BOX	Low
GINKGO BILOBA 'AUTUMN GOLD'	MAIDENHAIR TREE	24" BOX	Mod.
MAGNOLIA G. 'SAMUEL SOMMER'	SOUTHERN MAGNOLIA	36" BOX	Mod.
QUERCUS SHUMARDII	SHUMARDS RED OAK	24" BOX	Mod.
PISTACIA CHINENSIS 'KEITH DAVEY'	CHINESE PISTACHE	24" BOX	Low
COLUMNAR TREES SITEWIDE (NO CLOSER THAN 6' FROM BLDG.)			
CERCIS 'FOREST PANSY'	EASTERN REDBUD LOW BRANCHING	24" BOX	Mod.
HETEROMELES ARBUTIFOLIA	TOYON - SHRUB FORM	24" BOX	Low
LAURUS N. 'SARATOGA'	SWEET BAY - COLUMNAR	24" BOX	Low
PITTOSPORUM T. 'SILVER SHEEN'	SILVER SHEEN TAWHIWHI	24" BOX	Medium
PRUNUS LAUROCERASUS	ENGLISH LAUREL - COLUMNAR	15 GAL.	Medium



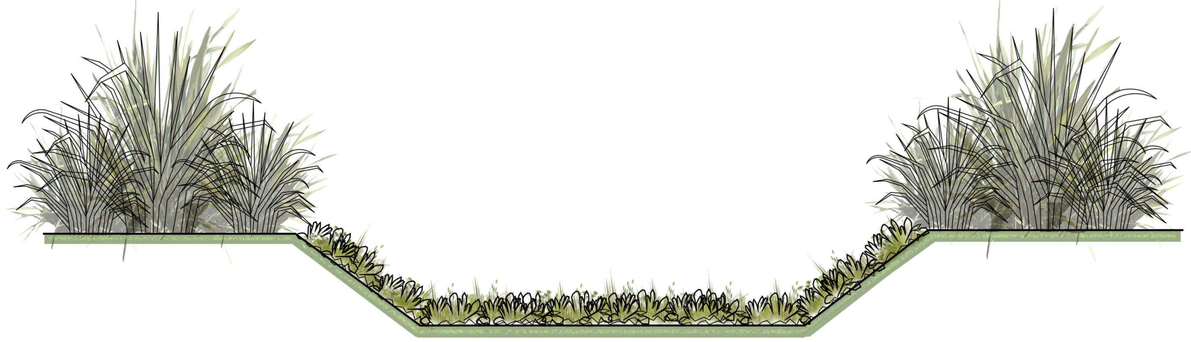
TYP. TRANSFORMER SCREENING PLAN VIEW



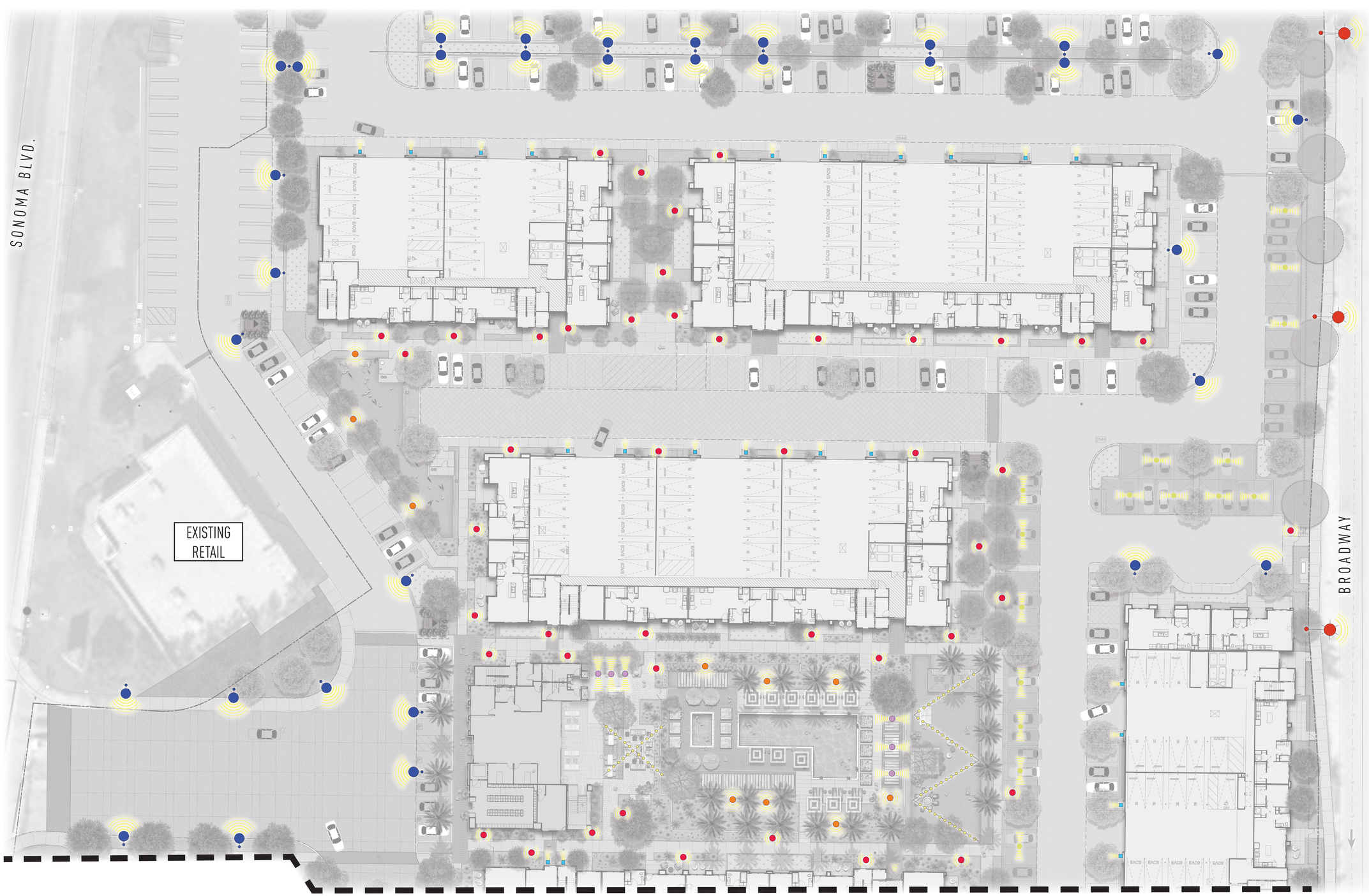
TYP. SECTION AT TRANSFORMER SCREENING



TYP. SECTION AT UTILITY SCREENING



TYP. SECTION AT C.3 BIO-SWALE
locations to be determined by civil engineer



EXTERIOR LIGHTING LEGEND

SYMBOL	TYPE/TECHNIQUE:	LOCATION:	SYMBOL	TYPE/TECHNIQUE:	LOCATION:	SYMBOL	TYPE/TECHNIQUE:	LOCATION:
	STREET LIGHT	PRIVATE STREET		RECESSED LOUVER LIGHTS	WALL MOUNTED		DOWNLIGHT	MOUNTED ON CARPORTS
	THEME POLE LIGHT			OVERHEAD FESTIVAL LIGHTING	ATTACHED TO POLES. MINIMUM 12' ABOVE FINISH SURFACE		WALL MOUNTED	ON GARAGE/BUILDING
	BOLLARD	AT PEDESTRIAN PATH OF TRAVEL		PENDENT LIGHT	MOUNTED ON ARM		SIGN LIGHT	AT MONUMENT SIGNS

LIGHTING CONCEPT:

THE OUTDOOR LIGHTING CONCEPT IS TO PROVIDE LEVELS OF LIGHTING SUFFICIENT TO MEET SAFETY AND ORIENTATION NEEDS.

WITHIN PUBLIC AREAS LIGHTING WILL BE WARM COLORED AND UNOBTRUSIVE. LIGHT SOURCES WILL BE TUNGSTEN OR METAL HALIDE.

LIGHTING SOURCES FOR THE LANDSCAPE AND PAVED AREAS WILL BE CONCEALED AND THE LIGHTING INDIRECT NOT VISIBLE FROM A PUBLIC VIEWPOINT. LIGHT SOURCES SHOULD BE DIRECTED SO THAT IT DOES NOT FALL OUTSIDE THE AREA TO BE LIGHTED.

ALL EXTERIOR SURFACE AND ABOVE-GROUND MOUNTED FIXTURES WILL BE SYMPATHETIC AND COMPLIMENTARY TO THE ARCHITECTURAL THEME.

STREET LIGHT

PER CITY OF VALLEJO STANDARD. LIGHTS TO BE PEDESTRIAN SCALE NOT TO EXCEED 14 FEET IN HEIGHT. LIGHTS TO INCLUDE ATTACHMENTS FROM WHICH TO HANG BANNERS.

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

MJS LANDSCAPE ARCHITECTURE

RSC VALLEJO

SCHEMATIC DESIGN
MARCH 18, 2022

0' 10' 20' 40'

CONCEPTUAL LIGHTING PLAN - NORTH SECTION

MATCHLINE - SEE SHEET L.8



EXTERIOR LIGHTING LEGEND

SYMBOL	TYPE/TECHNIQUE:	LOCATION:	SYMBOL	TYPE/TECHNIQUE:	LOCATION:	SYMBOL	TYPE/TECHNIQUE:	LOCATION:
	STREET LIGHT	PRIVATE STREET		RECESSED LOUVER LIGHTS	WALL MOUNTED		DOWNLIGHT	MOUNTED ON CARPORTS
	THEME POLE LIGHT			OVERHEAD FESTIVAL LIGHTING	ATTACHED TO POLES. MINIMUM 12' ABOVE FINISH SURFACE		WALL MOUNTED	ON GARAGE/BUILDING
	BOLLARD	AT PEDESTRIAN PATH OF TRAVEL		PENDENT LIGHT	MOUNTED ON ARM		SIGN LIGHT	AT MONUMENT SIGNS

LIGHTING CONCEPT:

THE OUTDOOR LIGHTING CONCEPT IS TO PROVIDE LEVELS OF LIGHTING SUFFICIENT TO MEET SAFETY AND ORIENTATION NEEDS.

WITHIN PUBLIC AREAS LIGHTING WILL BE WARM COLORED AND UNOBTRUSIVE. LIGHT SOURCES WILL BE TUNGSTEN OR METAL HALIDE.

LIGHTING SOURCES FOR THE LANDSCAPE AND PAVED AREAS WILL BE CONCEALED AND THE LIGHTING INDIRECT NOT VISIBLE FROM A PUBLIC VIEWPOINT. LIGHT SOURCES SHOULD BE DIRECTED SO THAT IT DOES NOT FALL OUTSIDE THE AREA TO BE LIGHTED.

ALL EXTERIOR SURFACE AND ABOVE-GROUND MOUNTED FIXTURES WILL BE SYMPATHETIC AND COMPLIMENTARY TO THE ARCHITECTURAL THEME.

STREET LIGHT

PER CITY OF VALLEJO STANDARD. LIGHTS TO BE PEDESTRIAN SCALE NOT TO EXCEED 14 FEET IN HEIGHT. LIGHTS TO INCLUDE ATTACHMENTS FROM WHICH TO HANG BANNERS.

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

MJS LANDSCAPE ARCHITECTURE

RSC VALLEJO

SCHEMATIC DESIGN
MARCH 18, 2022

0' 10' 20' 40'

CONCEPTUAL LIGHTING PLAN - SOUTH SECTION

SONOMA BLVD.

PEDESTRIAN GATE

PEDESTRIAN GATE

PEDESTRIAN GATE

VEHICULAR GATE

PEDESTRIAN GATE

EXISTING RETAIL

PEDESTRIAN GATE

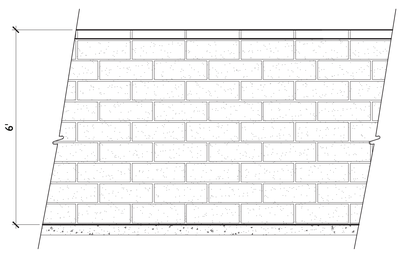
PEDESTRIAN GATE

PEDESTRIAN GATE

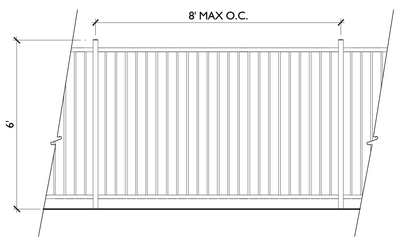
BROADWAY

PRIVATE GATE

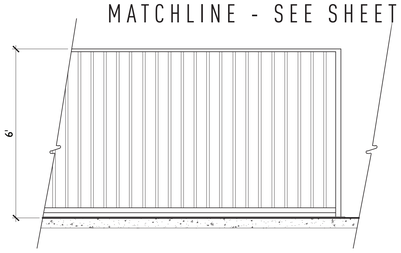
MATCHLINE - SEE SHEET L.11



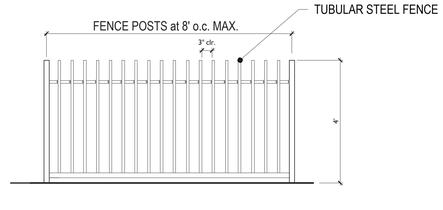
1 SHOT BLAST BLOCK ACCENT WALL
6' HIGH



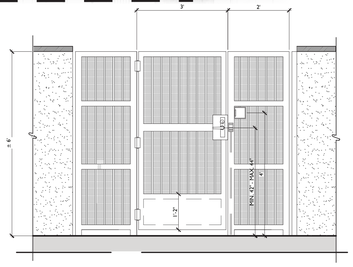
2 TUBULAR STEELPERIMETER FENCE
6' HIGH



3 TUBULAR STEEL POOL ENCLOSURE
6' HIGH



4 4' DOG PARK FENCE
4' HIGH



5 6' TUBULAR STEEL GATE
6' HIGH

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

MJS LANDSCAPE ARCHITECTURE

RSC VALLEJO

SCHEMATIC DESIGN
MARCH 18, 2022

0' 10' 20' 40'

WALL and FENCE PLAN - NORTH SECTION

MATCHLINE - SEE SHEET L.10

SONOMA BLVD.

BROADWAY

PEDESTRIAN GATE

VEHICULAR GATE

PEDESTRIAN GATE

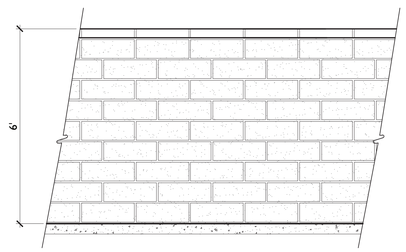
PRIVATE GATE

PEDESTRIAN GATE

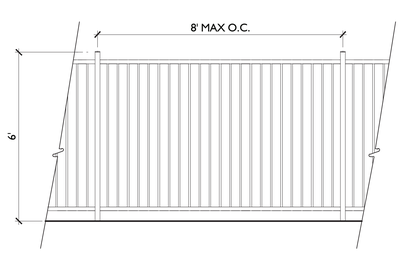
PRIVATE GATE

PEDESTRIAN GATE

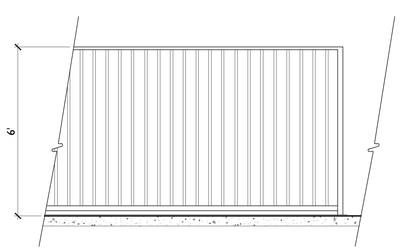
PRIVATE GATE



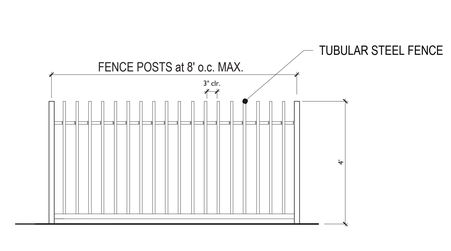
1 SHOT BLAST BLOCK ACCENT WALL
6' HIGH



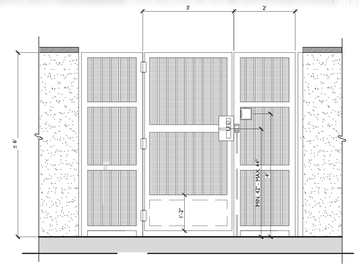
2 TUBULAR STEELPERIMETER FENCE
6' HIGH



3 TUBULAR STEEL POOL ENCLOSURE
6' HIGH



4 4' DOG PARK FENCE
4' HIGH



5 6' TUBULAR STEEL GATE
6' HIGH

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

MJS LANDSCAPE ARCHITECTURE

RSC VALLEJO

SCHEMATIC DESIGN
MARCH 18, 2022

0' 10' 20' 40'

WALL and FENCE PLAN - SOUTH SECTION

L.13

| | | |

SITE LIGHTING FIXTURE SCHEDULE

TYPE	SYMBOL	MANUFACTURER SPECS	DESCRIPTION	MOUNTING	LAMP INFO	LAMP TYPE CATEGORY PER C.O.V PART V TABLE 16.506.A	LUMEN FACTOR PER C.O.V PART V 16.506.04(J)1,2,3	TOTAL COUNT IN PROJECT	TOTAL LUMENS (SHIELDED)	TOTAL LUMENS (UNSHIELDED)
S1A	A	LITHONIA LIGHTING # DSXO-LED-P1-30K-T3M-MVOLT	POLE MOUNTED AREA LIGHTING TYPE 3 OPTICS TEXTURED BLACK – DIMMABLE	17'-0" AFG TO TOP OF FIXTURE –	38W LED 3000K 4376 LUMENS	CLASS '2' CATEGORY 'F'	100% 4376 LUMENS	7	30632	
S1B	B	LITHONIA LIGHTING # DSXO-LED-P1-30K-T3M-MVOLT-HS	POLE MOUNTED AREA LIGHTING TYPE 3 OPTICS WITH HOUSE SIDE SHIELD TEXTURED BLACK – DIMMABLE	17'-0" AFG TO TOP OF FIXTURE –	38W LED 3000K 4376 LUMENS	CLASS '2' CATEGORY 'F'	100% 4376 LUMENS	9	39384	
S1C	C	LITHONIA LIGHTING # DSXO-LED-P1-30K-T4M-MVOLT	POLE MOUNTED AREA LIGHTING TYPE 4 OPTICS TEXTURED BLACK – DIMMABLE	17'-0" AFG TO TOP OF FIXTURE –	38W LED 3000K 4281 LUMENS	CLASS '2' CATEGORY 'F'	100% 4281 LUMENS	3	12843	
S1D	D	LITHONIA LIGHTING # DSXO-LED-P1-30K-T4M-MVOLT-HS	POLE MOUNTED AREA LIGHTING TYPE 4 OPTICS WITH HOUSE SIDE SHIELD TEXTURED BLACK – DIMMABLE	17'-0" AFG TO TOP OF FIXTURE –	38W LED 3000K 4281 LUMENS	CLASS '2' CATEGORY 'F'	100% 4281 LUMENS	9	38529	
S1E	E	LITHONIA LIGHTING # DSXO-LED-P1-30K-T5W-MVOLT	POLE MOUNTED AREA LIGHTING TYPE 5 OPTICS TEXTURED BLACK – DIMMABLE	17'-0" AFG TO TOP OF FIXTURE –	38W LED 3000K 4576 LUMENS	CLASS '2' CATEGORY 'F'	100% 4576 LUMENS	7	32032	
S2		LITHONIA LIGHTING # KBC8-LED-12C-350-30K-ASY-MVOLT-DMG	PEDESTRIAN 8" ROUND 42"H BOLLARD ASYMMETRIC OPTICS TEXTURED BLACK – DIMMABLE	GROUND MOUNT –	16W LED 3000K 641 LUMENS	CLASS '2' CATEGORY 'F'	100% 641 LUMENS	61	39101	
S3		LITHONIA LIGHTING # DSXSC-LED-10C-700-30K-T5W-MVOLT-DMG	UNDER CANOPY LED STRIP TYPE 5 OPTICS NATURAL ALUMINUM – DIMMABLE	SURFACE MOUNTED UNDER CANOPY CEILING –	26W LED 3000K 2570 LUMENS	CLASS '2' CATEGORY 'F'	X 0.1 257 LUMENS	53	13621	
S4		LITHONIA LIGHTING # WDGE1-LED-P1-30K-90CRI-VF-DMG	ARCHITECTURAL WALL SCONCE TYPE VISUAL COMFORT FORWARD THROW TEXTURED BLACK – DIMMABLE	9'-0" AFG TO BOTTOM FIXTURE –	10W LED 3000K 1161 LUMENS	CLASS '2' CATEGORY 'F'	X 0.25 290 LUMENS	76	22040	
S5		EVERGREEN LIGHTING # BAR2112-12LED-DIM	RESIDENTIAL WALL SCONCE TEXTURED BLACK – DIMMABLE	80" AFG TO BOTTOM FIXTURE –	12W LED 3000K 1200 LUMENS	CLASS '2' CATEGORY 'F'	X 0.25 300 LUMENS	41	12300	
S6		TOKISTAR LIGHTING # EXBK-24-UBIW-S14-C / XFMR T24-300	FESTOON LIGHTS WITH 24" SPACING –	DECORATIVE STRING HUNG WITH 24VAC DIMMABLE TRANSFORMER	1.8W LED 3000K 50 LUMENS	CLASS '3' CATEGORY 'A'	100% 50 LUMENS	110		5500
S7A		AMERICAN ELECTRIC LIGHTING # AVPCL2-P452-30K-R3	POLE MOUNTED THEME LIGHTING TYPE 3 OPTICS TEXTURED BLACK – DIMMABLE	12'-0" AFG TO TOP OF FIXTURE –	110W LED 3000K 12600 LUMENS	SUBJECT TO C.O.V. PART 5 16.506.05(A)(1)	X 0.00 N/A	10	00000	
S7B		AMERICAN ELECTRIC LIGHTING # AVPCL2-P452-30K-R5	POLE MOUNTED THEME LIGHTING TYPE 5 OPTICS TEXTURED BLACK – DIMMABLE	12'-0" AFG TO TOP OF FIXTURE –	110W LED 3000K 12600 LUMENS	SUBJECT TO C.O.V. PART 5 16.506.05(A)(1)	X 0.00 N/A	4	00000	
S8		BARNLIGHT LIGHTING # WHA12-LED11-105	PENDANT HUNG DECORATIVE FIXTURE TEXTURED BLACK – DIMMABLE	PENDANT MOUNT –	11W LED 3000K 850 LUMENS	CLASS '2' CATEGORY 'F'	X 0.25 213 LUMENS	15	3195	

SITE PHOTOMETRICS STATISTICS SUMMARY

AREA	AVG	MAX	MIN	MAX/MIN	AVG/MIN
PARKING – CARPORTS TYPICAL	1.6 fc	2.0 fc	1.0 fc	2.0:1	1.6:1
PARKING – NORTH GENERAL	0.5 fc	1.1 fc	0.3 fc	3.7:1	1.7:1
PARKING – SOUTH GENERAL	0.7 fc	2.6 fc	0.2 fc	13.0:1	3.5:1
PASEO – BLDG 1 & 2	1.8 fc	6.8 fc	0.2 fc	34.0:1	9.0:1
PASEO – BLDG 3 & 4	2.2 fc	7.9 fc	0.2 fc	39.5:1	11.0:1
PASEO – BLDG 7 & 8	2.0 fc	5.2 fc	0.2 fc	26.0:1	10.0:1
PASEO – BLDG 9 & 10	3.3 fc	5.7 fc	0.9 fc	6.3:1	3.7:1
PASEO – BLDG 10 & 11	1.6 fc	4.5 fc	0.2 fc	22.5:1	8.0:1
AMENITY GENERAL COURTYARD	5.7 fc	20.0 fc	1.1 fc	18.2:1	5.2:1
AMENITY POOL DECK	11.7 fc	22.4 fc	3.5 fc	6.4:1	3.3:1
DOG PARK	1.6 fc	2.2 fc	1.0 fc	2.2:1	1.6:1

SITE LIGHTING PROJECT SUMMARY

PROJECT SITE ACREAGE
= 12.6 ACRES

PROJECT SITE LIGHTING ZONE
= CC COMMERCIAL CORRIDOR (RESIDENTIAL)

LUMEN ALLOWANCE PER ACRE (C.O.V. TABLE 16.506–B)
= 20000 LUMENS FULLY SHIELDED
= 5000 LUMENS UNSHIELDED

PROJECT SITE TOTAL LUMEN ALLOWANCE
= 252000 LUMENS FULLY SHIELDED (20000L X 12.6 ACRES)
= 63000 LUMENS UNSHIELDED

TOTAL LUMENS IN PROJECT – SHIELDED FIXTURES
(CLASS '2' / CATEGORY 'F')
= 243677 LUMENS

TOTAL LUMENS IN PROJECT – UNSHIELDED FIXTURES
(CLASS '3' / CATEGORY 'A')
= 5500 LUMENS

SITE LIGHTING SHEET INDEX

E–0.0	SITE LIGHTING COVER SHEET
E–1.0	SITE LIGHTING LAYOUT – AREA NORTH
E–1.1	SITE LIGHTING LAYOUT – AREA SOUTH
E–2.0	SITE LIGHTING PHOTOMETRICS – AREA NORTH
E–2.1	SITE LIGHTING PHOTOMETRICS – AREA SOUTH
E–3.0	SITE LIGHTING FIXTURE CUTSHEETS
E–3.1	SITE LIGHTING FIXTURE CUTSHEETS

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RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

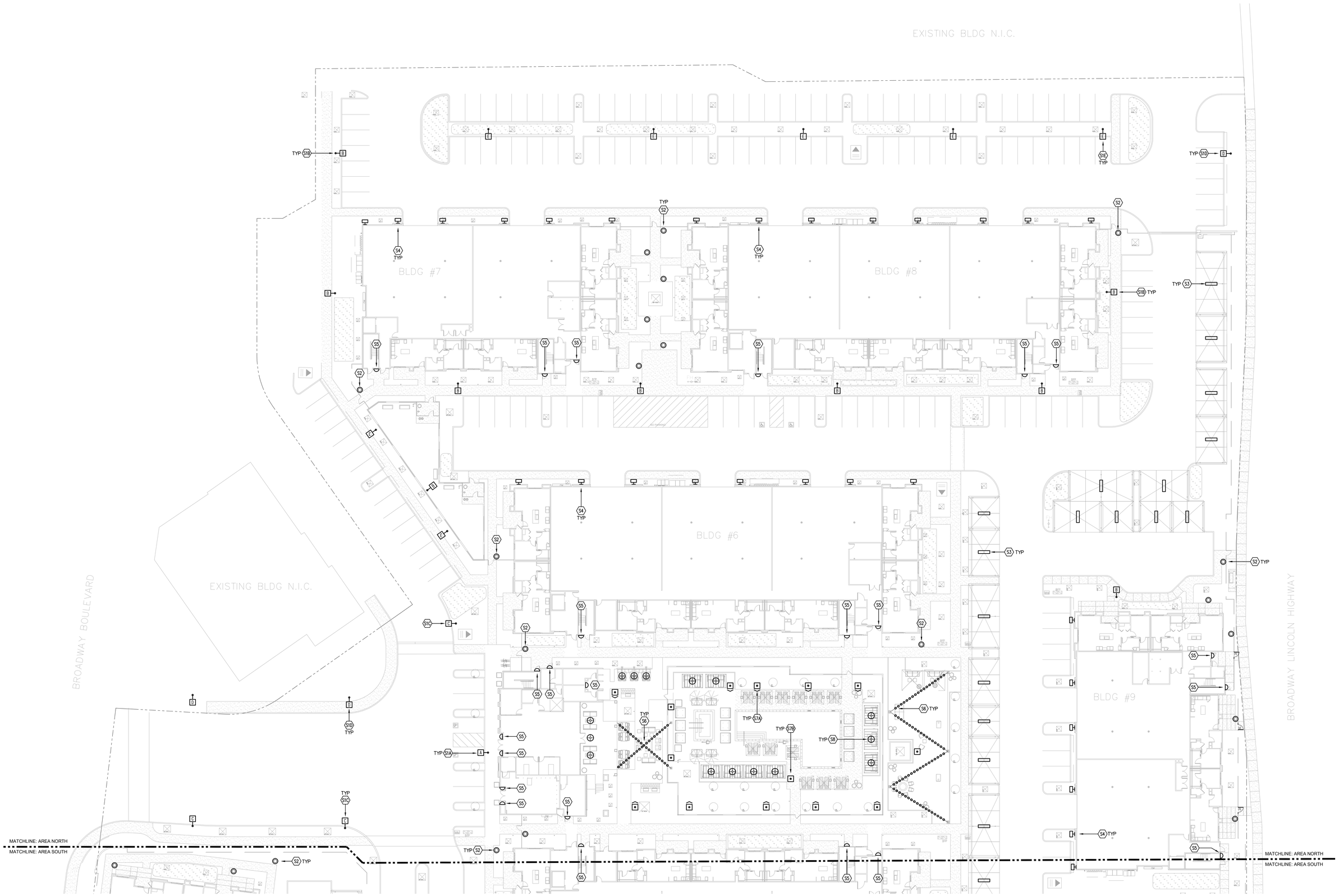
REGISTERED PROFESSIONAL ENGINEER
ROY L. OTT
No. E-13472
ELECTRICAL
STATE OF CALIFORNIA

SALAS O'BRIEN
[the art & difference]
4745 N. 7th STREET
SUITE 200
PHOENIX, AZ 85014
TEL: (480) 999-6096
PROJECT #2021-03112
03-18-22
www.salasobrien.com
E-Mail mail@sobengrs.com

TCA ARCHITECTS

RSC VALLEJO | SITE DEVELOPMENT REVIEW
MARCH 18, 2022

SITE LIGHTING COVER SHEET | E-0.0



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RSC VALLEJO

VALLEJO, CALIFORNIA
TCA # 2021-074

REGISTERED PROFESSIONAL ENGINEER — ROLLO DE LEON — ELECTRICAL — STATE OF CALIFORNIA

SALAS O'BRIEN [expect a difference]
4745 N. 7th STREET
SUITE 200
PHOENIX, AZ 85014
TEL: (480) 906-6206
PROJECT #2021-03112
03-18-22
www.salasobrien.com
E-Mail: mail@sobengrs.com
SOP | GSP | SBE

TCA ARCHITECTS

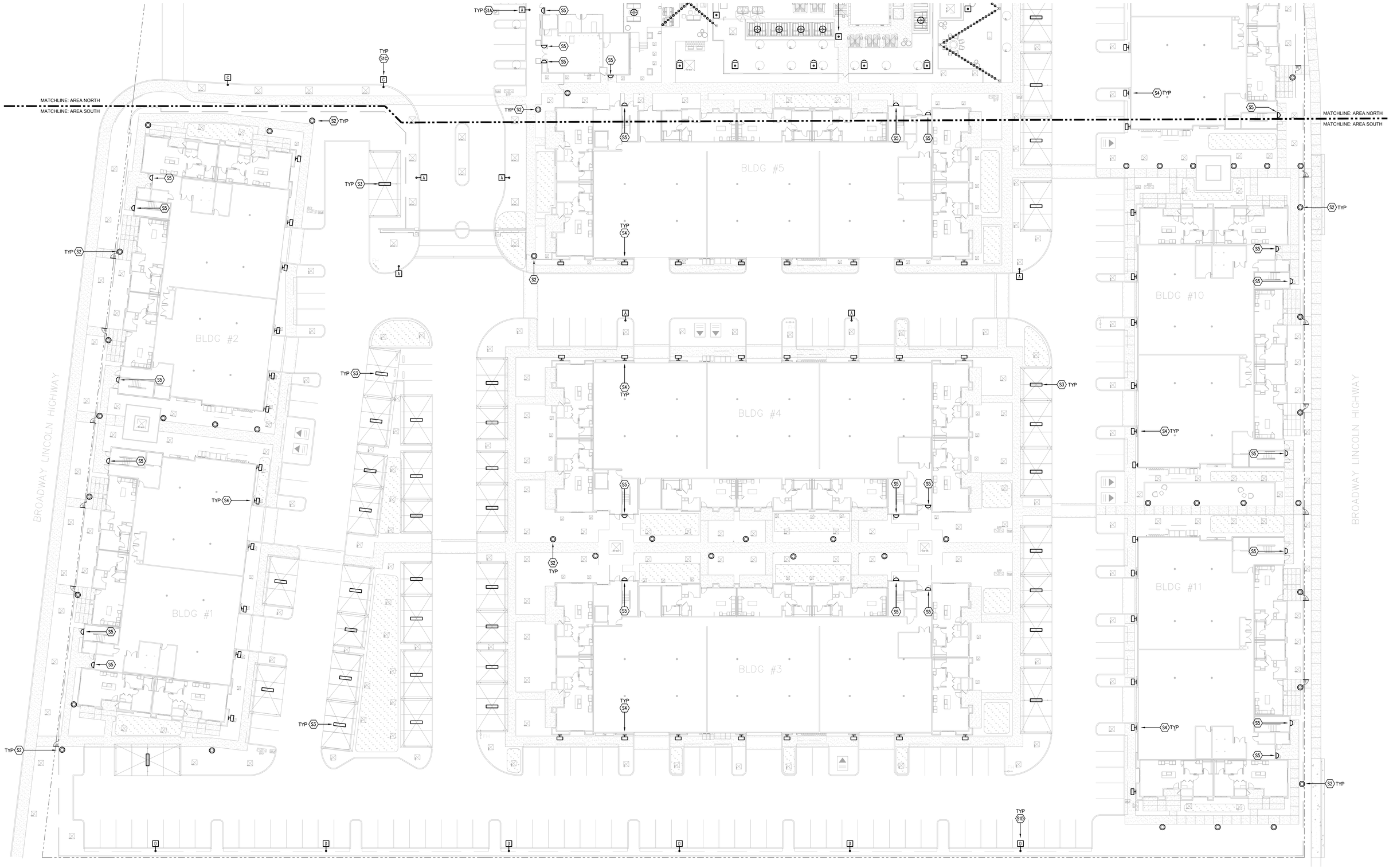
RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 18, 2022

SITE LIGHTING LAYOUT - AREA NORTH
SCALE: 1-0" = 20'-0"

N

E-1.0



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RSC VALLEJO

VALLEJO, CALIFORNIA
TCA # 2021-074

REGISTERED PROFESSIONAL ENGINEER — ROY L. OTT — No. E 21472 — ELECTRICAL — STATE OF CALIFORNIA

SALASOBRIEN
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SUITE 200
PHOENIX, AZ 85014
TEL: (480) 966-6266
PROJECT #2021-03112
03-18-22
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E-Mail mail@sobergrs.com

TCA ARCHITECTS

RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 18, 2022

SITE LIGHTING LAYOUT - AREA SOUTH
SCALE: 1-0" = 20'-0"

N

E-1.1

EXISTING BLDG N.I.C.

EXISTING BLDG N.I.C.

BROADWAY BOULEVARD

BROADWAY LINCOLN HIGHWAY

MATCHLINE: AREA NORTH
MATCHLINE: AREA SOUTH

MATCHLINE: AREA NORTH
MATCHLINE: AREA SOUTH

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RSC VALLEJO

VALLEJO, CALIFORNIA
TCA # 2021-074

REGISTERED PROFESSIONAL ENGINEER
RAMON BENJAMIN
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TCA ARCHITECTS

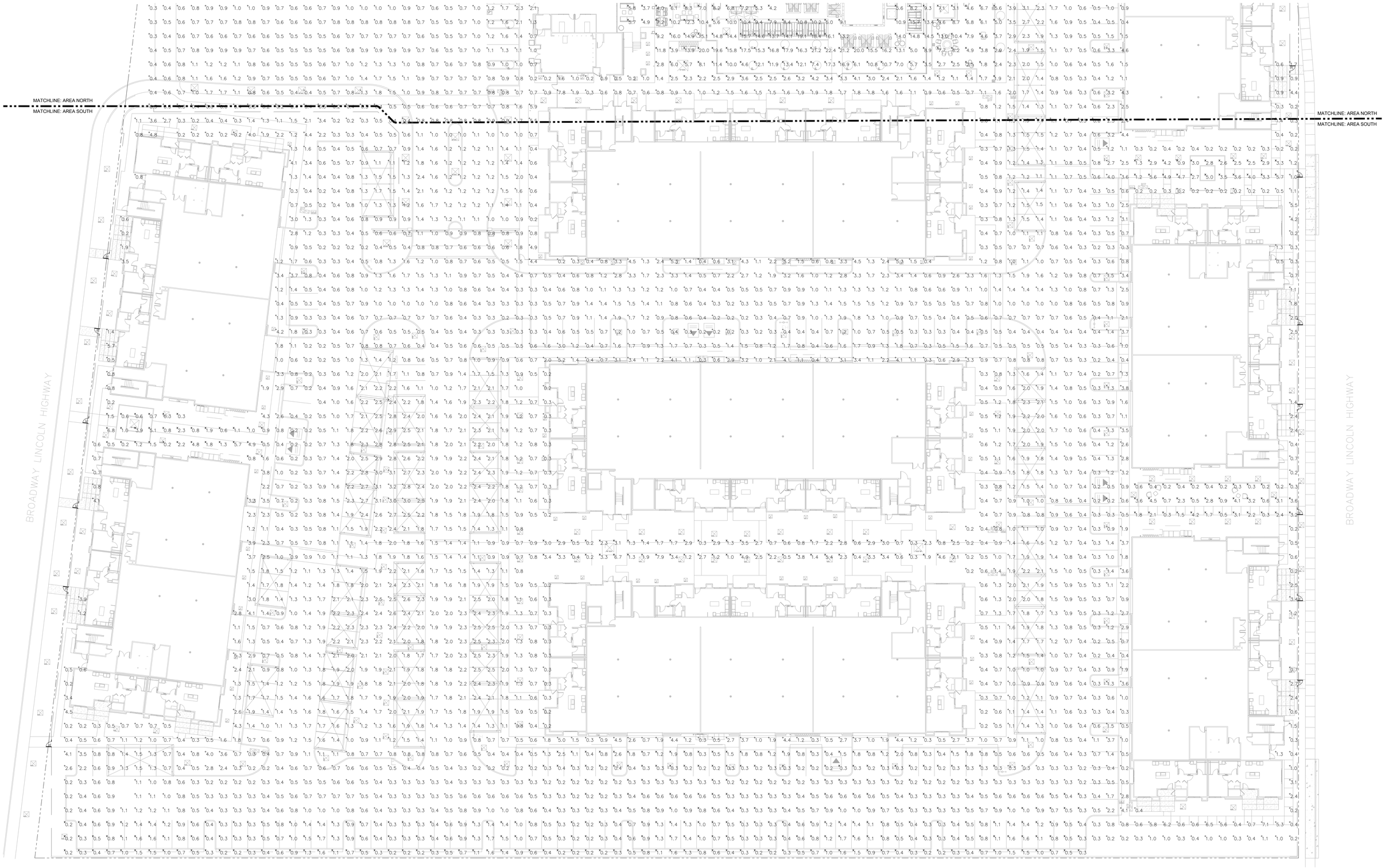
RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 18, 2022

SITE LIGHTING PHOTOMETRICS - AREA NORTH
SCALE: 1-0" = 20'-0"

N

E-2.0



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RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

REGISTERED PROFESSIONAL ENGINEER — ROY L. COX — ELECTRICAL — STATE OF CALIFORNIA

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TCA ARCHITECTS

RSC VALLEJO

SITE DEVELOPMENT REVIEW
MARCH 18, 2022

SITE LIGHTING PHOTOMETRICS - AREA SOUTH
SCALE: 1-0" = 20'-0"

N

E-2.1

TYPE S1A S1B S1C S1D S1E



D-Series Size 0
LED Area Luminaire

d*series

Buy American

Specifications

EPA: 0.95 ft² (.09 m²)

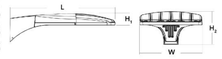
Length: 26" (66.0 cm)

Width: 13" (33.0 cm)

Height,: 3" (7.6 cm)

Height,: 7" (17.8 cm)

Weight (max): 16 lbs (7.0 kg)



Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 400W metal halide with typical energy savings of 70% and expected service life of over 100,000 hours.

Ordering Information

EXAMPLE: DSX0 LED P6 40K T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX0 LED

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX0 LED	**Forward optics** P1 P5 P2 P6 P3 P7[1] P4[1] **Rotated optics** P10[1] P12[1] P11[1] P13[1,2]	30K 3000 K 40K 4000 K 50K 5000 K	T1S Type I short (Automotive) T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium T5VS Type V very short[1]	T5S Type V short[1] T5M Type V medium[1] T5W Type V wide[1] BLC Backlight control[4] LCCO Left corner cutoff[4] RCCO Right corner cutoff[4]	MVOLT (120V-277V)[3,6] XVOLT (277V-480V)[3,6,5] 120[7] 208[7] 240[7] 277[7] 347[7] 480[7] **Shipped included** KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[8]

Control options	Other options	Finish (required)
Shipped installed NLTAIR2 nLight AIR generation 2 enabled[9,10,11] PIRHN Network, high/low motion/ambient sensor[10] PER NEMA twist-lock receptacle only (control ordered separately)[12] PERS Five-pin receptacle only (control ordered separately)[12] PER7 Seven-pin receptacle only (leads not factory) (control ordered separately)[12] DMG 0-10V dimming extend out back of housing for external control (control ordered separate)[14]	PIR High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc[10] PIRH High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc[10] PIR1FC3V High/low, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc[10] PIRH1FC3V High/low, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc[10] FAO Field adjustable output[1] **Shipped installed** HS House-side shield[13] SF Single fuse (120, 277, 347V)[1] DF Double fuse (208, 240, 480V)[1] L90 Left rotated optics[1] R90 Right rotated optics[1] DDL Diffused drop lens[13] HA 50°C ambient operation[1] BAA Buy American Act Compliance **Shipped separately** BS Bird spikes[15] EGS External glare shield	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Accessories

Ordered and shipped separately.

KMA8 U Anchor bolts for KBC6 LED[8]

NOTES

1 Not available with P4, P7, and P13.
2 P10, P11, P12 and P13 not rotated options (L90 or R90) only available together.
3 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Not available with HS or DCL.
4 Not available with HS or DCL.
5 XVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Not available with fusing (SF or DF), PIR, PIRH, PIR1FC3V, PIRH1FC3V, PER, PER7, PERS, DMG, BL30, BL50, or PIRBBW. XVOLT driver is suitable for use with P4, P7 and P13.
6 XVOLT operates with any voltage between 277V and 480V.
7 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V, FAO.
8 Suitable for mounting to round poles between 3.5" and 12" diameter.
9 Reference Motion Sensor Default Table on page 4 to see functionality.
10 Not available with other dimming controls options.
11 Not available with BLC, LCCO and RCCO distribution.
12 Must be ordered with fixture for factory pre-drilling.
13 Consult factory for availability of DDL and DDL/PER7 option. See Controls Table on page 4.
14 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template M.
15 Must be ordered with NLTAIR2. For more information on nLight Air 2 visit this page.
16 Shipped separately. Requires a Wireless Enabled Area Lighting Control. See Controls. See accessories. Shorting Cap included.
17 EGSMAT mode required. It must be ordered and shipped as a separate line item from Acuity Brands Controls. Shorting Cap included.
18 DRG not available with P3WH, P3DG, P3ST, P3FTWH, P3FTCW or P3FHTCW, FAO.
19 Reference Sensor Default Table on page 4 to see functionality.
20 Reference Motion Sensor Default Table on page 4 to see functionality.
21 Not available with other dimming controls options.
22 Not available with BLC, LCCO and RCCO distribution.
23 Must be ordered with fixture for factory pre-drilling.
24 Consult factory for availability of DDL and DDL/PER7 option. See Controls Table on page 4.
25 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template M.

EGS – External Glare Shield

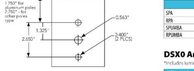


Drilling

HANDHOLE ORIENTATION
(from top of pole)



Tenon/Lute #8



Tenon Mounting Slipfitter

Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
2-3/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490



Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#B	DM19B5	DM28B5	DM29B5	DM39B5	DM32B5	DM49B5
Maximum Acceptable Outside Pole Dimension							
EPA	#B	2-7/8"	2-7/8"	3.5"	3.5"		3.5"
RPA	#B	2-7/8"	2-7/8"	3.5"	3.5"	3"	3.5"
VPORRA	#5	2-7/8"	3"	4"	4"		4"
RPUMRA	#5	2-7/8"	3.5"	5"	5"	3.5"	5"

DSX0 Area Luminaire - EPA

*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type						
DSX0 LED	0.950	1.900	1.830	2.850	2.850	3.544

TYPE S2



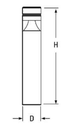
KBC8 LED
LED Specification Bollard

Buy American

Specifications

Height: 42" (106.7 cm)

Weight (max): 27lbs (12.25 kg)



Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The KBC8 Bollard is a stylish, fully integrated LED solution for walkways. It features a sleek, modern design and is carefully engineered to provide long-lasting, energy-efficient lighting with a variety of optical and control options for customized performance.

With an expected service life of over 20 years of nighttime use and up to 70% in energy savings over comparable 100W metal halide luminaires, the KBC8 Bollard is a reliable, low-maintenance lighting solution that produces sites that are exceptionally illuminated.

Ordering Information

EXAMPLE: KBC8 LED 16C 700 40K SYM MVOLT DDBXD

KBC8 LED

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Control options	Other options	Finish (required)
KBC8 LED	**Asymmetric** 12C 12 LEDs[1] **Symmetric** 16C 16 LEDs[1]	350 350 mA 450 450 mA[2,3] 530 530 mA 700 700 mA	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted AMBLW Amber limited wavelength[4,5]	ASY Asymmetric[1] SYM Symmetric[1]	MVOLT[6] 120[7] 208[7] 240[7] 277[7] 347[7]	**Shipped installed** PE Photoelectric cell, button type DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) ELCW Emergency battery backup, CA Title 20 Non-compliant[8]	**Shipped installed** SF Single fuse (120, 277, 347V)[9] DF Double fuse (208, 240, 480V)[9] H24 24" overall height H30 30" overall height H36 36" overall height FG Ground-fault receptacle L18B Without anchor bolts (3 bolt base) L18BA 4 bolt retrofit base without anchor bolts[9]	DWHXD White DNAXD Natural aluminum DDBXD Dark bronze DBLXD Black DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white

Accessories

Ordered and shipped separately.

KWA8 U Anchor bolts for KBC6 LED[9]

NOTES

1 Only available in the 12C, ASY version.
2 Only available in the 16C, SYM version.
3 Only available with 450 AMBLW version.
4 Not available with ELCW.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 option only when ordering with fusing (SF, DF options), or photocontrol (PE option).
6 Single fuse (SF) requires 120, 277, or 347 volt option. Double fuse (DF) requires 208 or 240 voltage option.
7 MVAB U not available with L18BA option.
8 Not available with 700mA or 1000mA option only.
9 See the electrical section on page 3 for more details.
10 DMG not available with all PIR options
11 Dimming driver standard. Available in layouts up to 30'. Not available with 347V or 480V. Not available with fusing.
12 PIR & PIR1FC3V specifies the Acuity Controls SENSOR M CMDP motion/ambient sensor, the PIRH & PIRH1FC3V specifies the Acuity Controls SENSOR X CMDP motion/ambient sensor.

TYPE S3



D-Series
LED Surface Canopy

d*series

Buy American

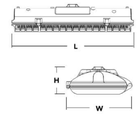
Specifications

Length: 17-3/4" (45.1 cm)

Width: 8-1/2" (21.6 cm)

Height: 3-7/16" (8.7 cm)

Weight (max): 16 lbs (7.3 kg)



Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The D-series LED Surface Canopy luminaire is ideal for covered walkways or drive-thrus, semi-covered outdoor aisles, and walk-in coolers and freezers. Its five optical choices provide the design flexibility to potentially reduce luminaire counts while still meeting IES criteria, lowering overall energy consumption.

Its expected service life of over 100,000 hours (20 years of nighttime operation) combined with the available motion/ambient sensor offers an extremely low maintenance solution that yields quick payback.

Ordering Information

EXAMPLE: DSXSC LED 20C 700 40K T5M MVOLT SRM DWHXD

DSXSC LED

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Mounting
DSXSC LED	10C 10 LEDs (one engine)[1,2] 20C 20 LEDs (two engines) 30C 30 LEDs (three engines)	350 350 mA 530 530 mA 700 700 mA 1000 1000 mA (1 A)	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted[3]	T5E Type V, entry way[4] T5M Type V, medium T5W Type V, wide T5R Type V, rectangular ASY Asymmetric	MVOLT[5] 277[7] 120[7] 347[7] 208[7] 480[7] 240[7]	**Shipped included** SRM Surface mount (12-inch length supply leads)

Options	Finish (required)
Shipped installed HS House-side shield (factory preset)[6] SF Single fuse (120, 277, 347V)[7] DF Double fuse (208, 240, 480V)[7] SPD Separate surge protection[8] DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) PIR Motion/ambient sensor for 8-15' mounting heights.[9] PIRH Motion/ambient sensor for 15-30' mounting heights.[9] PIR1FC3V Motion/ambient sensor for 8-15' mounting heights and for typical applications requiring daylight harvesting and Title 24 compliance[9,10] PIRH1FC3V Motion/ambient sensor for 15-30' mounting heights and for typical applications requiring daylight harvesting and Title 24 compliance[9,10] PIR1FC3V24 Motion/ambient sensor for emergency circuits for 8-15' mounting heights.[10,11] PIRH1FC3V24 Motion/ambient sensor for emergency circuits for 15-30' mounting heights.[10,11] **Shipped separately** BDS Bird shroud[12]	DWHXD White DNAXD Natural aluminum DDBXD Dark bronze

Accessories

Ordered and shipped separately.

DSXSCBC U Hause-side shield (1 per light engine)
DSXSCBDSD DWHXD U Bird shroud for DSR on surface 4 low only, white (specify finish)

NOTES

1 Available with 700mA or 1000mA option only.
2 Not available with 347 or 480V.
3 AMBPC only available with 530mA or 700mA.
4 DesignLights Consortium qualified.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Specify 120, 208, 240 or 277 option only when ordering with fusing (SF, DF options).
6 N/A with one light engine (10C). Only available with 700mA or 1000mA.
7 Also available as a separate accessory; see Accessories information at left.
8 Single fuse (SF) requires 120, 277 or 347 voltage opt on. Double fuse (DF) requires 208, 240 or 480 voltage option.
9 See the electrical section on page 3 for more details.
10 DMG not available with all PIR options
11 Dimming driver standard. Available in layouts up to 30'. Not available with 347V or 480V. Not available with fusing.
12 PIR & PIR1FC3V specifies the Acuity Controls SENSOR M CMDP motion/ambient sensor, the PIRH & PIRH1FC3V specifies the Acuity Controls SENSOR X CMDP motion/ambient sensor.

TYPE S4



WDGE1 LED
Architectural Wall Sconce

Buy American

Specifications

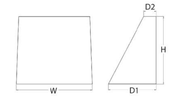
Depth (D1): 5.5"

Depth (D2): 1.5"

Height: 8"

Width: 9"

Weight: (without options) 9 lbs



Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing true site-wide solution.

WDGE1 delivers up to 2,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of WDGE1, with its integrated emergency battery backup option, makes it an ideal over-the-door wall-mounted lighting solution.

WDGE LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Sensor	Lumens (4000K)				
				P1	P2	P3	P4	P5
WDGE1 LED	4W	--	--	1,200	2,000	--	--	--
WDGE2 LED	10W	18W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000
WDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	--
WDGE4 LED	--	--	Standalone / nLight	12,000	16,000	18,000	20,000	22,000

Ordering Information

EXAMPLE: WDGE1 LED P2 40K 80CRI VF MVOLT SRM PE DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGE1 LED	P1 P2	27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K[1] 5000K	80CRI 90CRI	VF Visual comfort forward throw VW Visual comfort wide	MVOLT 347[2]	**Shipped included** SRM Surface mounting bracket RCW Recessed ceiling/soffit mounting bracket (specify clamp locations only)[3] **Shipped separately** AWS 3.5" Arch Architectural wall spacer PBBW Surface-mounted back box (top, left, right conduit entry). Use when more than one junction box available.

Options	Finish
E4WH[4] Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min) PE[5] Photocell, Button Type DS Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details) DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately) BCE Bottom-conduit entry for back box (PBBW). Total of 4 entry points.	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSTD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTDD Textured sandstone

Accessories

Ordered and shipped separately.

WDGLNS1 DDBXD WDGE 1 Block Architectural Wall Spacer (specify finish)
WDGE1PBBWDDBXD U WDGE1 surface-mounted back box (specify finish)

NOTES

1 50K not available in 90CRI.
2 347V not available with E4WH, DS or PE.
3 E4WH not available with PE or DS.
4 PE not available with DS.
5 Not qualified for DLC. Not available with E4WH.

Ordering Information

Accessories

Ordered and shipped separately.

DLL127F 1.5 JU Photocell - SSL twist-lock (120-277V)[1]
DLL347F 1.5 CUL JU Photocell - SSL twist-lock (347V)[1]
DLL480F 1.5 CUL JU Photocell - SSL twist-lock (480V)[1]
DSHORT SBK U Shorting cap[2]
DSX0HS SBK U House-side shield for P1,P2,P3 and P4[3]
DSX0DDL SBK U Diffused drop lens (polycarbonate)[3]
PUMBA DDBXD U[4] Square pole universal mounting bracket adaptor (specify finish)[4]
KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish)[4]
DSX0EGS DDBXD U External glare shield

For more control options, visit DTL and ROAM1 online. Link to nLight Air 2.

NOTES

1 Not available with P4, P7, and P13.
2 P10, P11, P12 and P13 not rotated options (L90 or R90) only available together.
3 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Not available with HS or DCL.
4 Not available with HS or DCL.
5 MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Not available with fusing (SF or DF), PIR, PIRH, PIR1FC3V, PIRH1FC3V, PER, PER7, PERS, DMG, BL30, BL50, or PIRBBW. XVOLT driver is suitable for use with P4, P7 and P13.
6 XVOLT operates with any voltage between 277V and 480V.
7 XVOLT not available with fusing (SF or DF) and not available with PIR, PIRH, PIR1FC3V, PIRH1FC3V, FAO.
8 Suitable for mounting to round poles between 3.5" and 12" diameter.
9 DRG not available with P3WH, P3DG, P3ST, P3FTWH, P3FTCW or P3FHTCW, FAO.
10 Reference Motion Sensor Default Table on page 4 to see functionality.
11 Reference Motion Sensor Default Table on page 4 to see functionality.
12 Not available with other dimming controls options.
13 Not available with BLC, LCCO and RCCO distribution.
14 Must be ordered with fixture for factory pre-drilling.
15 Consult factory for availability of DDL and DDL/PER7 option. See Controls Table on page 4.
16 For retrofit use only. Only usable when pole's drill pattern is NOT Lithonia template M.

Performance Data

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Actual wattage may differ by +/- 8% when operating between 120-480V +/- 10%.

Light Engines	Drive Current (mA)	System Watts	3000 K						4000 K						5000 K						Limited Wavelength Amber					
			Lumens	LPW	B	U	G		Lumens	LPW	B	U	G		Lumens	LPW	B	U	G		Lumens	LPW	B	U	G	
Asymmetric (1 Engine) (10 LEDs)	350	56	6411	114	1	1	1	5	8119	145	1	1	1	5	8701	155	1	1	1	5						
	530	22	947	43	1	1	1	1	1,191	54	1	1	1	1	1,282	58	1	1	1	1						
	700	31	1,214	40	1	1	1	1	1,527	51	1	1	1	1	1,646	55	1	1	1	1						
	Amber 450	16																			324	20	0	1	0	
Symmetric (2 Engines) (16 LEDs)	350	20	888	44	1	0	0	1	1,116	56	1	0	0	1	1,203	60	1	0	0	1						
	530	28	1,254	45	1	0	0	1	1,598	57	1	0	0	1	1,739	63	1	0	0	1						
	700	39	1,608	41	1	0	1	1	2,022	52	1	0	1	1	2,180	56	2	0	1	1						
	Amber 450	20																			374	19	0	0	0	

Note: Available with phosphor-converted amber LEDs (nomenclature AMBPC). These LEDs produce light with 97+% >530 nm. Output can be calculated by applying a 0.1 factor to 4000 K lumen values and photometric files.

Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.00	0.98	0.97	0.95

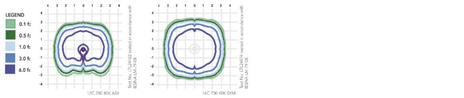
Electrical Load

Light Engines	Drive Current (mA)	System Watts	Current (A)					
			120V	208V	240V	277V	347V	480V
12C	350	56W	0.470	0.278	0.244	0.209	0.165	--
	530	22W	0.217	0.146	0.126	0.128	0.118	--
	700	31W	0.296	0.185	0.168	0.153	0.139	--
	Amber 450	16W	0.161	0.128	0.135	0.110	0.106	--
16C	350	20W	0.197	0.137	0.128	0.121	0.114	--
	530	28W	0.262	0.178	0.162	0.148	0.155	--
	700	39W	0.365	0.231	0.207	0.185	0.163	--
	Amber 450	20W	0.199	0.139	0.150	0.135	0.116	--

Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's KBC8 Bollard homepage.

Isofootcandle plots for the KBC8 LED Bollards. Distances are in units of mounting height (0').



FEATURES & SPECIFICATIONS

INTENDED USE
The rugged construction and clean lines of the KBA bollard is ideal for illuminating building entryways, walking paths, and pedestrian plazas, as well as any other location requiring a low mounting height light source with fully cutoff illumination.

CONSTRUCTION
One-piece 8-inch round extruded aluminum shaft with thick side walls for extreme durability, a high-impact clear acrylic lens and welded top cap. Die-cast aluminum mounting ring allows for easy leveling even in sloped locations and a full 360-degree rotation for precise alignment during installation. Three ½" x 11" anchor bolts with double nuts and washers and 3 ¾" bolt circle template ensure stability. Overall height is 42" standard.

FINISH
Exterior parts are protected by a zinc-infused super durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering for maximum retention of gloss and luster. A tightly controlled multi-stage process ensures a minimum 3-mil thickness for a finish that can withstand the elements without cracking or peeling. Available in both textured and non-textured finishes.

OPTICS
Two fully cutoff optical distributions are available: symmetrical and asymmetrical. IP66 sealed LED light engine provides smoothly graduated illumination without any spotlight. Light engines are available in standard 4000 K (+70 CRI) or optional 3000 K (+80 CRI) or 5000 K (67 CRI). Limited-wavelength amber LEDs are also available.

ELECTRICAL
Light engines consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (L95/100,000 hours at 700mA at 25°C). Class 2 electronic drivers are designed for an expected life of 100,000 hours with < 1% failure rate. Electrical components are mounted on a removable power tray.

LISTINGS
CSA certified to U.S. and Canadian standards. Light engines are IP66 rated. Rated for -40°C minimum ambient. Cold-weather emergency battery backup rated for -22°C minimum ambient.

BUY AMERICAN
This product is assembled in the USA and meets the Buy American(r) government procurement requirements under FARS, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY
Five-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Light Engines	Drive Current (mA)	System Watts	Dist. Type	10K (10000K, 80 CRI)					40K (4000K, 80 CRI)					50K (5000K, 80 CRI)				
				Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
10C (10 LEDs)	700 mA	26W	AST	2,603	100	0	0	1	2,710	104	1	0	1	2,810	108	1	0	1
			T2M	2,731	105	0	0	1	2,843	109	1	0	1	2,949	113	1	0	1
			T3M	2,742	105	0	0	1	2,855	110	1	0	1	2,961	114	1	0	1
			T4M	2,742	105	0	0	1	2,855	110	1	0	1	2,961	114	1	0	1
	1000 mA	37W	AST	3,696	100	0	0	1	3,848	104	1	0	1	3,990	108	1	0	1
			T2M	3,877	105	0	0	1	4,037	109	1	0	1	4,186	113	1	0	1
			T3M	3,894	105	0	0	1	4,054	110	1	0	1	4,203	114	1	0	1
			T4M	3,894	105	0	0	1	4,054	110	1	0	1	4,203	114	1	0	1
20C (20 LEDs)	350 mA	22W	AST	2,603	100	0	0	1	2,710	104	1	0	1	2,810	108	1	0	1
			T2M	2,731	105	0	0	1	2,843	109	1	0	1	2,949	113	1	0	1
			T3M	2,742	105	0	0	1	2,855	110	1	0	1	2,961	114	1	0	1
			T4M	2,742	105	0	0	1	2,855	110	1	0	1	2,961	114	1	0	1
	530 mA	37W	AST	3,696	100	0	0	1	3,848	104	1	0	1	3,990	108	1	0	1
			T2M	3,877	105	0	0	1	4,037	109	1	0	1	4,186	113	1	0	1
			T3M	3,894	105	0	0	1	4,054	110	1	0	1	4,203	114	1	0	1
			T4M	3,894	105	0	0	1	4,054	110	1	0	1	4,203	114	1	0	1
	700 mA	46W	AST	4,847	105	0	0	1	5,047	109	1	0	1	5,232	113	1	0	1
			T2M	5,085	110	0	0	1	5,294	115	1	0	1	5,488	119	1	0	1
			T3M	5,105	111	0	0	1	5,316	115	1	0	1	5,512	120	1	0	1
			T4M	5,105	111	0	0	1	5,316	115	1	0	1	5,512	120	1	0	1
30C (30 LEDs)	350 mA	33W	AST	3,904	100	0	0	1	4,065	104	1	0	1	4,215	108	1	0	1
			T2M	4,097	105	0	0	1	4,265	109	1	0	1	4,424	113	1	0	1
			T3M	4,113	105	0	0	1	4,282	110	1	0	1	4,442	114	1	0	1
			T4M	4,113	105	0	0	1	4,282	110	1	0	1	4,442	114	1	0	1
	530 mA	47W	AST	5,544	100	0	0	1	5,772	104	1	0	1	5,985	108	1	0	1
			T2M	5,817	105	0	0	1

TYPE S5

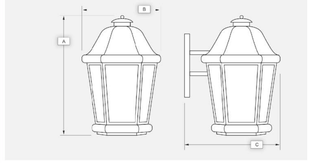
EVERGREEN LIGHTING

BARCELONA

Catalog #		Type	
Project			
Description		Date	

ARM MOUNT





Standard Features

Material
Paintok sheet; Standard Powdecoat Finish, White Acrylic Lens; .125 thickness, ETL Wet Location.

Installation
Mounting/wireway hole in center of backplate. Supplied with standard mounting hardware to mount to a 4" J-box or plaster ring.

Optics*
Contact Evergreen Lighting for complete photometrics.

LED Features

LED
Alta LED #AL-R-1W-30LED array to be mounted onto an Aluminum MPCB Board configured to the proper wattage. The LED arrays will be centered within the Lens area and mounted on a white aluminum reflective plate.

Driver
Specific Drivers will be matched with each different LED array configuration/wattage.
Standard Driver Features:
- Constant Current
- 3 / 5 year warranty
- 120/277 multi-voltage power supplies
- Kelvin - 2700K, 3000K, 3500K, 4100K, 5000K

Fluorescent Features

Ballast
SC programmed electronic high power factor ballast, multivoltage 120V/277V. Lamps not included

Finishes

Ballast

Architectural Bronze (AB)	Textured Gold (TG)
Textured Bronze (TBR)	Metallic Nickel (MN)
Matte Black (MBK)	Textured Verde Patina (TVP)
Semi Gloss Black (GBK)	Satin Brass (SB)
Textured Black (TBK)	Copper Vein (CV)
Textured Rust (TR)	Gold Vein (GV)
Matte White (MW)	Silver Vein (SV)
Textured White (TW)	Chrome (CH)
Gloss White (GW)	Oil Rubbed Bronze (ORB)
Metallic Grey (MG)	

Options*

Emergency (EMR)	Special Lens
Photocell (PC)	Incandescent
Lamp Sources	
Size Modifications	
Vandal Proof Enclosure (VPE)	

Sample Spec Number: BAR2103Q-AB-A

Part #	Lamp/Watts	Lumens	A	B	C
BAR2103Q	13Q	800	16	11	12
BAR2105T	26T	1800	16	11	12
BAR2104Q	2-13Q	1600	16	11	12
BAR2105	26Q	1800	16	11	12
BAR2221	32T	2200	19	14	15
BAR2204Q	2-13Q	1600	19	14	15
BAR2206	2-26Q	3600	19	14	15
BAR2222	42T	3200	19	14	15
BAR2106L	6LED	600	16	11	12
BAR2110L	10LED	1000	16	11	12
BAR2112L	12LED	1200	16	11	12
BAR2220L	20LED	2000	19	14	15
BAR2224L	24LED	2400	19	14	15
BAR2240L	40LED	4000	19	14	15
DARK SKY					
BAR2109LS	9LED	900	16	11	12
BAR2115LS	15LED	1500	16	11	12
BAR2220LS	20LED	2000	19	14	15

*Consult Factory

MADE IN CALIFORNIA

Evergreen Lighting
1379 Ridgeway Street, Pomona, CA 91768
Ph: 909-865-5599 Fax: 909-865-5539
www.evergreenlighting.com

TYPE S6

The Basic System

The Exhibitor Series sockets are permanently sealed to flexible cable with shatterproof polycarbonate globes. Fixtures are wet-location listed and rated IP65. When specifying an Exhibitor Lighting System, take into consideration: Socket Spacing, LED Style and Globe Selection.

EXBK - 6 - VIWW - S14 - C

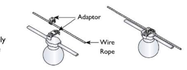
Cable / Socket Color		Socket Spacing		LED			Globe Style		Globe Color	
Code	Color	Code	Inches (mm)	Code	Color	Watts/Volts	Code	Style	Code	Color
BK	Black	6	6" (150 mm)	UBLW	2000K White	1.8 W / 24 VAC	G19	G-19	C	Clear
WH	White	12	12" (300 mm)	UBWW	2400K White	1.8 W / 24 VAC	G14	G-14	F	Frosted
		18	18" (450 mm)	UBIW	3000K White	1.8 W / 24 VAC	S14	S-14	G	Green
		24	24" (600 mm)	VILW	2000K White	1.8 W / 24 VAC	G-14 & S-14 n clear and frosted only		A	Amber
				VIWW	2400K White	1.8 W / 24 VAC			B	Blue
				VIIW	3000K White	1.8 W / 24 VAC			R	Red
				Virtual Incandescent (VILW, VIWW & VIIW) not for use with Frosted Globes					V	Violet
				WW	2500K White	0.48 W / 24 VAC			M	Multi-Color
				WH	5500K White	0.48 W / 24 VAC				
				BL	Blue	0.48 W / 24 VAC				
				GR	Green	0.48 W / 24 VAC				
				OR	Orange	0.48 W / 24 VAC				
				PL	Purple	0.48 W / 24 VAC				
				RD	Red	0.48 W / 24 VAC				
				YG	Yellow-Green	0.48 W / 24 VAC				
				(Any Combination of 0.48 Watt Colors is Possible)						
				Xenon Lamp						
				124	2500K	7.5 W / 24 VAC				
				Xenon lamp not for use with G-14 globes or Exhibitor Pendants						

Custom spacing is available.

Mounting Options

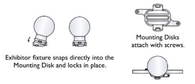
Festoon Mounting

Part# EX-MDA-WH (White)
Part# EX-MDA-BK (Black)
For festoon applications to a catenary cable, our wire-rope adaptors securely hold each socket in place to a 1/16" or 1/8" diameter wire rope. Wire rope and associated mounting hardware is not provided with the system.



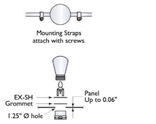
Surface Mounting with Disks

Part# EX-MD-WH (White)
Part# EX-MD-BK (Black)
Exhibitor Series can be surface mounted to structures using mounting disks. One disk is required for mounting each socket. The socket can be snapped into the disk and screwed in place to the structure.



Surface Mounting with Straps

Part# EX-MS-WH (White)
Part# EX-MS-BK (Black)
Exhibitor Series may be surface mounted to structures using our mounting straps. Two straps are required for mounting each socket. Straps are positioned on either side of the socket, and then screwed securely to the structure.



Panel/Extrusion Mounting

Part# EX-SH
For installations to flat panels or extrusions up to 0.06", we offer stainless-steel panel fasteners. The socket assembly is inserted from below, then the panel fastener and grommet are pressed in place from above.

Fixture Lengths

To minimize voltage drop and keep conductors safely within their ratings, do not exceed the maximum lengths shown for each independent fixture.

	Maximum Run Lengths		
	0.48 W LEDs	UB & VI LEDs	Xenon Lamp
Socket Spacing	0.48 Watt / 24 VAC	1.8 Watt / 24 VAC	7.5 Watt / 24 VAC
6" (150 mm)	250' (76 M)	125' (38 M)	32' (10 M)
12" (300 mm)	350' (106 M)	200' (60 M)	56' (17 M)
18" (450 mm)	420' (128 M)	225' (68 M)	72' (22 M)
24" (600 mm)	500' (152 M)	250' (76 M)	80' (24 M)

Transformers

Tokistar transformers operate from a 120 VAC / 60 Hz input and are fully dimmable. They are provided in a Nema 3R enclosure. The secondary outputs are protected by circuit breakers. Transformers should be installed in an accessible location where there is free air circulation.

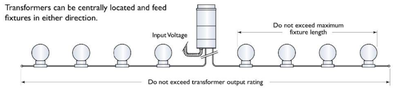


24 VAC Transformers					
Number	Outputs	D	H	W	Weight
C2-40-24V	1 @ 40 Watt / 24 VAC	2.25"	5.75"	2.25"	2 lbs
C2-96-24V	1 @ 96 Watt / 24 VAC	2.5"	6.5"	3.0"	3 lbs
T24-150	1 @ 150 Watt / 24 VAC	3.0"	9.0"	3.0"	5 lbs
T24-300	1 @ 300 Watt / 24 VAC	3.5"	9.5"	4.5"	8 lbs
T24-600	1 @ 600 Watt / 24 VAC	4.5"	10.5"	4.5"	15 lbs
T24-1200	2 @ 600 Watt / 24 VAC	5.0"	11.5"	7.0"	28 lbs

Exhibitor Pendants are for use with the C2-40-24V and C2-96-24V Class 2 transformers.

Consult factory for transformers with input voltages of 230 or 277 VAC. Sizes and weights shown are approximate and subject to change without notice.

Transformers can be centrally located and feed fixtures in either direction.



Specifications



- **Polycarbonate Globe** with flammability rating UL 94V-2
- **Light Sources** include LED and Xenon lamps
- **Flexible Conductors** #12 AWG stranded and plated wire
- **Two O-Rings** on each globe for weatherproof seal
- **Sockets** permanently fastened to cable with sealant
- **Insulation** is flexible PVC with flammability rating UL 94 HB

Exhibitor Series is ETL Wet-Location Listed to UL Standards and marked in accordance with CE Standards.

TYPE S7AS7B

Valiant™ Full Cutoff LED
Series AVPCL2

PRODUCT OVERVIEW



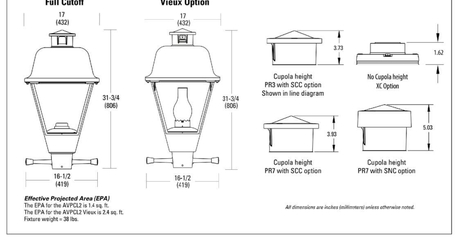
Applications:

Streetscapes
Walkways
Pathways
Parks

Features:

- Colonial LED lantern, replaces up to 250W HID models for street and area lighting applications
- Fourteen (14) LED performance packages deliver just the right amount of light for any given application up to 13,000 lumens
- Available in color temperature choices of 2700K, 3000K and 4000K
- Designed for up-light restrictive applications, AVPCL2 has zero up-light
- Three (3) distinct light distribution options provide design flexibility, available in Type II, Type III and Type V
- Die-cast aluminum housing, engineered for sturdy life-long performance
- Die-cast aluminum hood features a trigger latch (TL) option and captive thumb screws for fast, easy electrical and optical chamber access
- Standard black finish is matte texture. All other finishes are smooth gloss.
- Housing is tenon pole-mounted and designed for use with a 3" tall by 2-3/8" to 3" diameter tenon, and secured by three set screws.
- Rated LED and driver life greater than 100,000 hours at 25°C
- Complies with ANSI: C136.2, C136.10, C136.15
- CSA listed and suitable for up to 40°C ambient
- Surge protection device (standard) exceeds ANSI/IEEE C62.41-2002 Category C High (10kV/10kA) and ANSI C136.2-2015 Enhanced (10kV/5kA). 20kV Option exceeds ANSI/IEEE C62.41-2002 Category C High (10kV/10kA) and ANSI C136.2-2015 Extreme (20kV/10kA)
- Equipped with LED electronic 0-10V dimmable driver

DIMENSIONS



Effective Projected Area (EPA)
The EPA for the AVPCL2 is 1.4 sq. ft.
The EPA for the AVPCL2 Vieux is 2.4 sq. ft.
Fixture weight = 38 lbs.

All dimensions are inches (millimeters) unless otherwise noted.

Note: Specifications subject to change without notice.
Valiant Full Cutoff LED Series - AVPCL2

AEL American Electric Lighting

TYPE S7AS7B

Valiant™ Full Cutoff LED
Series AVPCL2

ORDERING INFORMATION

Example: AVPCL2 P301 MVOLT 30K R3 BK SCC PR7

Series	Performance Package		Voltage	Color Temperature (CCT)
AVPCL2 Valiant Full Cutoff LED	Package	Input Watts / Lumens (nominal)	MVOLT 120-277V	27K 2700K
	P101	39 / 3,200	HVOLT 347-480V	30K 3000K
	P102	49 / 4,100	XVOLT 277-480V with enhanced power quality protection	40K 4000K
	P103	58 / 4,900		
	P151	58 / 5,300		
	P152	68 / 6,300		
	P153	78 / 7,100		
	P201	78 / 7,400		
	P202	88 / 8,200		
	P203	98 / 8,900		
	P301	78 / 7,900		
	P302	88 / 8,900		
	P303	98 / 9,800		
	P304	100 / 10,600		
	P451	100 / 11,600		
	P452	110 / 12,600		

Distribution	Finish	Cupola	Photocontrol Receptacle
R2 Type II	BK Black matte texture	SCC Standard cupola	NR No photocontrol receptacle
R3 Type III	GY Gray, smooth gloss	SNC Smart node cupola	PR3 3 pin NEMA photocontrol
R5 Type V	DOB Dark Bronze, smooth gloss	XC No cupola	PR7 7 pin NEMA photocontrol
	WH White, smooth gloss		
	BZ Bronze, smooth gloss		

Options

Controls	Miscellaneous	House-Side Shields	Accessory
PCLL Solid state long life photocontrol 120-277V (fail off)	SS Stainless steel hardware	HSS House Side Shield	**House Side Shield shipped separately and installed in the field**
P34 Solid state long life photocontrol, 347 Volt only (fail off)	TL Tool-less trigger latch entry	**Prewired leads**	FHSSLEM10-15R2/R5 P10x or P15x package, R2 or R5 optic
P48 Solid state long life photocontrol, 480 Volt only (fail off)	NL1Y1 1"x 1" NEMA label	L1R 1.5 ft. prewired leads	FHSSLEM16-15R3 P16x or P15x package, R3 optic
PCSS Solid state photocontrol, 120-277V (not CSA Listed) (fail on)	NL2X2 2"x 2" NEMA label	L03 3 ft. prewired leads	FHSSLEM20-30R2/R5 P20x or P30x package, R2 or R5 optic
SH Shorting cap	XL Not CSA Listed	L10 10 ft. prewired leads	FHSSLEM20-30R3 P20x or P30x package, R3 optic
AO Field adjustable output module	LDR Ladder Rest	L20 20 ft. prewired leads	FHSSLEM4SR2/R5 P45x pacxage, R2 or R5 optic
DALI DALI driver (HID required)	CR Epoxy Pre-Coat Finish	L25 25 ft. prewired leads	FHSSLEM4SR3 P45x pacxage, R3 optic
	20KV 20kV/10kA surge protection device	L30 30 ft. prewired leads	
	VX Vieux Option		
	VXCA VX option with Clear Acrylic lens		

Note: Check the OPTIONS MATRIX on Page 3 for compatibility & restrictions

AEL American Electric Lighting
AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com

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Warranty Five-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions
Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

TYPE S8

SPS-0457 REV B

AVALON INTEGRATED LED SERIES

JOB NAME _____ FIXTURE TYPE _____



BLE - [A] - [B] - [C] - [D] - [E] - [F] - [G] - [H] - [I] - [J] - [K] - [L]

Order Example: BLE - G - WHA14 - 130 - G15 - 100 - NA - WC - 400 - LED27 - 3000K - DL

A - MOUNTING STYLE
C Cord Hung
CN Chain Hung
F Flush Mount[1]
G Gooseneck
S Stem Mount

B - SHADE SIZE
AVALON:
WHA8 8" Shade[1]
WHA10 10" Shade[1]
WHA12 12" Shade
WHA14 14" Shade
WHA16 16" shade

C - SHADE FINISH
PORCELAIN FINISHES[2]:
150 Black
250 White
350 Vintage Green
355 Jadite
455 Cherry Red
550 Yellow
650 Bronze
750 Cobalt Blue
765 Delphite Blue
850 Graphite
950 Metallic Chrome
POWDER COAT FINISHES[2]:
100 Black
105 Textured Black
106 Matte Black
200 White
206 Matte White
300 Dark Green
307 Emerald Green
311 Jadite
370 Mint
380 Chartreuse
390 Teal
400 Barn Red
420 Orange
470 Watermelon
480 Blush Pink
490 Magenta
495 Sherbet Orange
500 Buttery Yellow
570 Sunflower
600 Bronze
601 Chocolate

C - SHADE FINISH (CONTINUED)
POWDER COAT FINISHES[2]:
605 Rust
615 Oil-Rubbed Bronze
700 Royal Blue
705 Navy
710 Cobalt Blue
715 Delphite Blue
790 Lavender
800 Industrial Grey
805 Charcoal Granite
810 Graphite
975 Galvanized
NATURAL METALS[2]:
995 Raw Copper
996 Weathered Copper
997 Raw Brass
998 Weathered Brass
999 Oil-Rubbed Copper

D - MOUNTING
Please Note: If Flush Mount (F) is selected in Section A, please select **NA**
NA Not Applicable

CSA LISTED CORDS:
SBK Standard Black
SWH Standard White
CSB Black Cloth
CSW White Cloth
CMG Grey Cloth
CSR Red Cloth
CRZ Red Chevron Cloth
CSBB Black & Brown Cloth
CSBW Red & White Cloth
CSGW Gold & White Cloth
CSBG Black & Gold Cloth
CSBW Black & White Cloth
CSBP Black & Pink Cloth
CSUW Blue & White Cloth
CHAIN MOUNT OPTIONS[1,4]:
CN36 3' of Chain
CN48 4' of Chain
CN60 5' of Chain
CN72 6' of Chain

D - MOUNTING (CONTINUED)
GOOSENECK OPTIONS:
G9[1] G10[1] G24[1]
G22[1,5] G19[1] G25[1]
G37[1] G12[1] G26[1]
G41[1,7] G13[1] G32[1]
G5[1] G14[1] G34[1,6]
G6[1] G15[1] G35[1]
G7[1] G16[1] G36[1,6]
G8[1] G17[1] G64[1,6]
G9[1] G22[1] G65[1,5]
STEM MOUNT OPTIONS:
ST506 .5" Stem Mount, 6"[1]
ST512 .5" Stem Mount, 12"[1]
ST518 .5" Stem Mount, 18"[1]
ST524 .5" Stem Mount, 24"[1]
ST536 .5" Stem Mount, 36"[1]
ST548 .5" Stem Mount, 48"[1]
ST706 .75" Stem Mount, 6"[1]
ST712 .75" Stem Mount, 12"[1]
ST718 .75" Stem Mount, 18"[1]
ST724 .75" Stem Mount, 24"[1]
ST736 .75" Stem Mount, 36"[1]
ST748 .75" Stem Mount, 48"[1]

E - MOUNTING FINISH
Please Note: See **Section C** *for Finish Options. 980-Brushed Aluminum is also available for Gooseneck (Not Available with G36, G40, G64 & G65) and Stem mounting styles. If a Porcelain shade finish is selected, mounting will be powder coat painted-to-match. Porcelain shade finishes are not available with a Natural Metal mounting finish.*
(1) If Cord Hung (C), selection identifies canopy finish
(2) If Chain Hung (CN) Mounting Style, selection identifies chain and canopy finish.
(3) If Flush Mount (F) Mounting Style, selection identifies canopy finish.
(4) If Stem Mount (S) Mounting Style, selection identifies stem and canopy finish.
(5) If Flush Mount (F) Mounting Style, selection identifies luminaire finish.
Natural Metals are not applicable
980 Brushed Aluminum

F - CORDS[1]
Please Note: See **Section D** *for all applicable CSA Listed Cord Options*
NA Not Applicable

G - SHADE ACCESSORIES[1]
NA None
WC Wire Cage
ACR Acrylic Diffuser[8,10]

H - SHADE ACCESSORY FINISH
Please Note: See **Section C** *for Finish Options. Natural Metals not applicable. If Porcelain Finish is selected, accessory will be powder coat painted-to-match*
NA Not Applicable

I - MOUNTING ACCESSORY
Please Note: Mounting Accessories below are only applicable with select Mounting Styles. Please refer to product listings on our website for further details.
NA None/Not Applicable
HSC Hang Straight Canopy[9,11]
LDBPC LED Decorative Backing Plate Cover[9,11,12]
LDCHX LED Decorative Backing Plate Cover & Hex Cover[9,11,13]

J - LIGHT SOURCE
LED11 850 Lumen, 11W LED
LED16 1250 Lumen, 16W LED
LED27 2000 Lumen, 27W LED[14]
LED38 3000 Lumen, 38W LED[14]
LED43 4000 Lumen, 43W LED[14]

K - COLOR TEMPERATURE
2700K 2700K, Warm White
3000K 3000K, Neutral White
3500K 3500K, Bright White
4000K 4000K, Cool White

L - LED LENS
DL Domed Lens
FL Flat Lens

[IMPORTANT]: *(1) Not available with Acrylic Diffuser shade accessory. (2) All Porcelain Enamel finished shades feature a white interior and a black outer rim. (3) All Powder Coat finished shades, Galvanized excluded, feature a white interior. (4) Natural Metals have a longer estimated manufacturing time, please check the website for exact lead time. There are no returns accepted on Natural Metals. (5) Not available in Natural Metals. (6) Not applicable if WHA8 is selected in Section B. (7) Not compatible with 16" shade size. (8) Only applicable if Chain Hung Mounting Style selected in Section A, select NA if another Mounting Style is selected. (9) Acrylic Diffuser limits the maximum lumen selection as well as reduces lumens delivered and LPW. Maximum Lumen Value Not To Exceed Value For 22" Through 24" shades. (10) Feature is CSA Listed for Damp Locations with Acrylic Diffuser. (11) Only applicable if Gooseneck Mounting Style is selected in Section A. (12) Not Available with G5, G6, G12, G15, G26 & G28 Gooseneck option. (14) Not applicable if WHA8 or WHA10 is selected in Section B.*

Address: 320 Knox McRae Drive Titusville, FL 32780 Phone: (800) 407-8784 Email: sales@barnlight.com Website: www.barnlight.com

BARN LIGHT ELECTRIC CO. AVALON INTEGRATED LED SERIES SPS-0457 REV B

MOUNTING STYLE

HIGH LUMEN CANOPY FOR PENDANT & FLUSH MOUNT



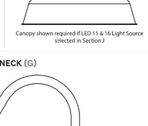
Required if LED 27, 38, 43 Light Source selected in Section J

FLUSH MOUNT (F)



Canopy shown required if LED 11 & 16 Light Source selected in Section J

STEM MOUNT PENDANT (S)

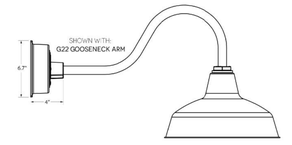


Canopy shown required if LED 11 & 16 Light Source selected in Section J

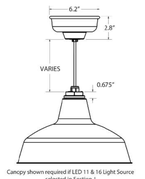
CHAIN HUNG PENDANT (CN)

Canopy shown required if LED 11 & 16 Light Source selected in Section J

GOOSENECK (G)

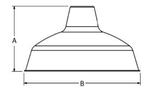


CORD HUNG PENDANT (C)



Canopy shown required if LED 11 & 16 Light Source selected in Section J

LUMINAIRE DIMENSIONS



SHADE CODE	HEIGHT (A)	DIAMETER (B)
WHA8	5.25"	8"
WHA10	6"	10"
WHA12	6.75"	12"
WHA14	7.75"	14"
WHA16	8.50"	16"

Address: 320 Knox McRae Drive Titusville, FL 32780 Phone: (800) 407-8784 Email: sales@barnlight.com Website: www.barnlight.com

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Last plotted by ramon.benjamin Layout1 P:\2021\2021-03112\Cad\T_ENTITLEMENT\P21037_E31.dwg 03/18/2022 11:24

RSC VALLEJO
VALLEJO, CALIFORNIA
TCA # 2021-074

REGISTERED PROFESSIONAL ENGINEER — ROBERT S. CRAWFORD — No. E-21291 — ELECTRICAL — STATE OF CALIFORNIA

SALAS O'BRIEN [respect a difference]
47411 N. 7th STREET
SUITE 100
PHOENIX, AZ 85014
TEL: (480) 906-6200
PROJECT #2021-03112
03-18-22
www.salasobrien.com
E-Mail mail@sobergs.com

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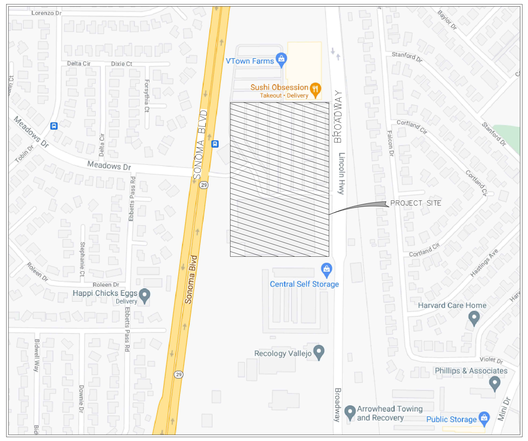
RSC VALLEJO | SITE DEVELOPMENT REVIEW
MARCH 18, 2022

SITE LIGHTING FIXTURE CUTSHEETS

E-3.1

RSC VALLEJO

5180 SONOMA BOULEVARD
VALLEJO, SOLANO COUNTY, CALIFORNIA



VICINITY MAP
N.T.S.

GENERAL NOTES

1. CITY'S APPROVAL OF PLANS DOES NOT RELIEVE THE OWNER OF THE RESPONSIBILITY FOR THE CORRECTION OF MISTAKES, ERRORS OR OMISSIONS CONTAINED THEREIN.
2. ALL WORK SHALL CONFORM TO THE CURRENTLY ADOPTED EDITIONS OF THE STANDARD PLANS AND SPECIFICATIONS OF THE CITY OF VALLEJO UNLESS OTHERWISE NOTED.
3. "CITY ENGINEER" SHALL MEAN THE CITY ENGINEER OR HIS/HER DESIGNEE ACTING WITHIN THE SCOPE OF HIS/HER AUTHORITY.
4. THE DEVELOPER SHALL TELEPHONE THE CITY OF VALLEJO ENGINEERING SERVICES DEPARTMENT INSPECTION HOTLINE AT (XXX) XXX–XXXX, AT LEAST TWO (2) WORKING DAYS PRIOR TO STARTING CONSTRUCTION WORK.
5. ALL CONTRACTORS WILL BE RESPONSIBLE FOR THE VERIFICATION OF LOCATIONS OF ALL EXISTING UTILITIES IN THE FIELD. ALL CONTRACTORS SHALL CALL U.S.A. (CA. 1–800–277–2600) 48 HOURS BEFORE DIGGING. EXCAVATION FOR UNDERGROUND FACILITIES SHALL NOT BE PERMITTED PRIOR TO CONTACTING UNDERGROUND SERVICE ALERT. UNDER NO CIRCUMSTANCES WILL EXCAVATION COMMENCE BEFORE BEING ISSUED AN IDENTIFICATION NUMBER FROM U.S.A. (SECTION 4210.1 OF THE GOVERNMENT CODE).
6. HAZARDOUS MATERIALS:
   UPON DISCOVERY OF HAZARDOUS MATERIAL, THE CONTRACTOR SHALL STOP THE WORK PROMPTLY AND NOTIFY THE FIRE DEPARTMENT, DEPARTMENT OF ENVIRONMENTAL SERVICES AND PUBLIC WORKS INSPECTION FOLLOWED BY WRITTEN NOTICE OF ANY:
   A. MATERIAL THAT THE CONTRACTOR BELIEVES MAY BE HAZARDOUS WASTE, AS DEFINED IN SECTION 25117 OF THE HEALTH AND SAFETY CODE, THAT IS REQUIRED TO BE REMOVED TO A CLASS I, CLASS II, OF CLASS III DISPOSAL SITE IN ACCORDANCE WITH PROVISIONS OF EXISTING LAW.
   B. SUBSURFACE OR LATENT PHYSICAL CONDITIONS AT THE SITE DIFFERING FROM THOSE INDICATED ON THE PLANS, NOTES, OR SOILS REPORT.
   C. UNKNOWN PHYSICAL CONDITIONS AT THE SITE OF ANY UNUSUAL NATURE, DIFFERING MATERIALLY FROM THOSE ORDINARILY ENCOUNTERED AND GENERALLY RECOGNIZED AS INHERENT IN WORK OF THE CHARACTER PROVIDED FOR IN THE CONTRACT. THE DEVELOPER'S AGENT SHALL PROMPTLY INVESTIGATE THE SUSPECTED CONDITION AND, AS NECESSARY, INITIATE FURTHER ANALYSIS OF THE PROBLEM. IF REMEDIATION IS REQUIRED, THE OWNER SHALL SUBMIT A REMEDIATION PLAN TO THE DIRECTOR OF PUBLIC WORKS AND, UPON APPROVAL BY THE DIRECTOR, SHALL IMPLEMENT THE PLAN AT THE DEVELOPER'S SOLE EXPENSE.
7. IN THE EVENT THAT HUMAN REMAINS AND/OR CULTURAL MATERIALS ARE FOUND, ALL PROJECT–RELATED CONSTRUCTION SHALL CEASE WITHIN A 100–FOOT RADIUS. THE CONTRACTOR SHALL, PURSUANT TO SECTION 7050.5 OF THE HEALTH AND SAFETY CODE, AND SECTION 5097.94 OF THE PUBLIC RESOURCES CODE OF THE STATE OF CALIFORNIA, NOTIFY THE SOLANO COUNTY CORONER IMMEDIATELY.
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL PERMITS NECESSARY TO PERFORM THE IMPROVEMENTS IN THESE PLANS FROM THE APPROPRIATE AGENCIES AND TO COMPLY WITH THE AGENCIES' REQUIREMENTS. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE AND LOCAL LAWS.
9. LOCATION AND ELEVATION OF EXISTING IMPROVEMENTS SHALL BE CONFIRMED BY FIELD MEASUREMENTS PRIOR TO CONSTRUCTION OF NEW WORK.
10. WHEN IT IS FOUND THAT FIELD CONDITIONS ARE NOT AS SHOWN ON THE PLANS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER PRIOR TO FURTHER CONSTRUCTION.
11. CONTRACTOR SHALL CAREFULLY PRESERVE THE SURROUNDING PROPERTY BY CONFINING OPERATION WITHIN THE LIMITS OF WORK AREA. ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE OWNER.

GRADING NOTES

1. CONTRACTOR SHALL GRADE TO THE LINE AND ELEVATIONS SHOWN ON THE PLANS WITHIN THE FOLLOWING HORIZONTAL AND VERTICAL TOLERANCES AND DEGREES OF COMPACTION AS INDICATED.

	HORIZONTAL	VERTICAL	COMPACTION
PAVEMENT SUBGRADE	0.1'±	+0.1' TO –0.1'	95%

2. NON–CRYSTALLIZING TYPE WEED KILLER SHALL BE SPREAD OVER THE AGGREGATE BASE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
3. CONTRACTOR SHALL ADJUST ALL NEW INLETS, VALVE BOXES, AND OTHER UTILITY STRUCTURES, AND ALL EXISTING UTILITY STRUCTURES WHICH ARE TO REMAIN, TO THE NEW FINISH GRADE.
4. ALL GRADING SHALL CONFORM TO APPROVED SPECIFICATIONS PRESENTED HEREON OR ATTACHED HERETO. ALL GRADING WORK SHALL BE OBSERVED AND APPROVED BY THE GEOTECHNICAL ENGINEER.

EARTHWORK QUANTITIES

1. IT IS ASSUMED THAT THE ROUGH GRADING WILL BE PER A SEPARATE PERMIT AND ONLY MINIMAL EARTHWORK WILL BE REQUIRED FOR BUILDING FOOTINGS AND UTILITY TRENCHING.
2. BIDDERS ARE RESPONSIBLE FOR DOING THEIR OWN QUANTITY TAKEOFF.

TREE/PLANT PROTECTION NOTES

1. PRIOR TO BEGINNING CONSTRUCTION ON SITE, CONTRACTOR SHALL IDENTIFY AND PROTECT EXISTING TREES AND PLANTS DESIGNATED AS TO REMAIN.
2. PROVIDE 6 FOOT TALL TREE PROTECTION FENCE WITH DISTINCTIVE MARKING VISIBLE TO CONSTRUCTION EQUIPMENT, ENCLOSING DRIP LINES OF TREES DESIGNATED TO REMAIN.
3. WORK REQUIRED WITHIN FENCE LINE SHALL BE HELD TO A MINIMUM, AVOID UNNECESSARY MOVEMENT OF HEAVY EQUIPMENT WITHIN FENCED AREA AND DO NOT PARK VEHICLES WITH IDLE RUNNING ENGINES UNDER DRIP LINE OF TREES.
4. PRIOR TO REMOVING ROOTS AND BRANCHES LARGER THAN 2" IN DIAMETER OF TREES OR PLANTS THAT ARE TO REMAIN CONSULT WITH THE CONSTRUCTION PROJECT MANAGER.
5. ANY GRADE CHANGES GREATER THAN 6" WITHIN THE DRIPLINE OF EXISTING TREES SHALL NOT BE MADE WITHOUT FIRST CONSULTING THE LANDSCAPE ARCHITECT/CIVIL ENGINEER.
6. PROTECT EXISTING TREES TO REMAIN FROM SPILLED CHEMICALS, FUEL OIL, MOTOR OIL, GASOLINE AND ALL OTHER CHEMICALLY INJURIOUS MATERIAL; AS WELL AS FROM PUDDLING OR CONTINUOUSLY RUNNING WATER. SHOULD A SPILL OCCUR, STOP WORK IN THAT AREA AND CONTACT THE CITY'S ENGINEER/INSPECTOR IMMEDIATELY. CONTRACTOR SHALL BE RESPONSIBLE TO MITIGATE DAMAGE FROM SPILLED MATERIAL AS WELL AS MATERIAL CLEAN UP.
7. PROVIDE TEMPORARY IRRIGATION TO ALL TREES AND PLANTS THAT ARE IN OR ADJACENT TO CONSTRUCTION AREAS WHERE EXISTING IRRIGATION SYSTEMS MAY BE AFFECTED BY THE CONSTRUCTION. ALSO PROVIDE TEMPORARY IRRIGATION TO RELOCATED TREES.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR ONGOING MAINTENANCE OF ALL TREES DESIGNATED TO REMAIN AND FOR MAINTENANCE OF RELOCATED TREES STOCKPILED DURING CONSTRUCTION. CONTRACTOR WILL BE REQUIRED TO REPLACE TREES THAT DIE DUE TO LACK OF MAINTENANCE.

EROSION AND SEDIMENT CONTROL MAINTENANCE NOTES

1. MAINTENANCE IS TO BE PERFORMED AS FOLLOWS:
   A. REPAIR DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION AT THE END OF EACH WORKING DAY.
   B. SWALES SHALL BE INSPECTED PERIODICALLY AND MAINTAINED AS NEEDED.
   C. SEDIMENT TRAPS, BERMS, AND SWALES ARE TO BE INSPECTED AFTER EACH STORM AND REPAIRS MADE AS NEEDED.
   D. SEDIMENT SHALL BE REMOVED AND SEDIMENT TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A DEPTH OF 1 FOOT.
   E. SEDIMENT REMOVED FROM TRAP SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
   F. RILLS AND GULLIES MUST BE REPAIRED.
2. SAND BAG INLET PROTECTION SHALL BE CLEANED OUT WHENEVER SEDIMENT DEPTH IS ONE HALF THE HEIGHT OF ONE SAND BAG.
3. SEDIMENT DAMS AND TRAPS SHALL BE CHECKED FOR SEDIMENT ACCUMULATION AFTER EACH SIGNIFICANT RAINFALL. SEDIMENT SHALL BE REMOVED FROM THESE DEVICES WHEN IT HAS ACCUMULATED TO A DEPTH OF 1 FOOT.
4. DAMAGED EROSION CONTROL DEVICES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS SOON AS PRACTICAL AFTER THE DAMAGE OCCURS.
5. DURING PERIODS WHEN STORMS ARE FORECAST –
   A. EXCAVATED SOILS SHOULD NOT BE PLACED IN STREETS OR ON PAVED AREAS.
   B. ANY EXCAVATED SOILS SHOULD BE REMOVED FROM THE SITE BY THE END OF THE DAY.
   C. WHERE STOCKPILING IS NECESSARY, USE A TARPAULIN OR SURROUND THE STOCKPILED MATERIAL WITH FIBER ROLLS OR OTHER RUNOFF CONTROLS.
   D. USE INLET CONTROLS (E.G. FILTER MAT) FOR STORM DRAINS ADJACENT TO STOCKPILED SOIL.
   E. THOROUGHLY SWEEP ALL PAVED AREAS EXPOSED TO SOIL EXCAVATION AND PLACEMENT.
6. DURING PERIODS WHEN STORMS ARE NOT FORECAST –
   A. PREVENT STOCKPILED MATERIAL FROM ENTERING THE STORM DRAIN SYSTEM.
   B. THOROUGHLY REMOVE LOOSE SOIL VIA SWEEPING FOLLOWING REMOVAL OF DIRT.

SHEET INDEX:

1	C0.0	TITLE SHEET
2	C1.0	EXISTING CONDITIONS PLAN
3	C2.0	OVERALL PRELIMINARY SITE PLAN
4	C2.1	PRELIMINARY SITE PLAN
5	C2.2	PRELIMINARY SITE PLAN
6	C2.3	PRELIMINARY SITE PLAN
7	C3.0	OVERALL PRELIMINARY GRADING & DRAINAGE PLAN
8	C3.1	PRELIMINARY GRADING & DRAINAGE PLAN
9	C3.2	PRELIMINARY GRADING & DRAINAGE PLAN
10	C3.3	PRELIMINARY GRADING & DRAINAGE PLAN
11	C3.4	GRADING SECTIONS
12	C4.0	OVERALL PRELIMINARY UTILITY PLAN
13	C4.1	PRELIMINARY UTILITY PLAN
14	C4.2	PRELIMINARY UTILITY PLAN
15	C4.3	PRELIMINARY UTILITY PLAN
16	C5.0	OVERALL PRELIMINARY STORMWATER CONTROL PLAN
17	C5.1	PRELIMINARY STORMWATER CONTROL PLAN
18	C5.2	PRELIMINARY STORMWATER CONTROL PLAN
19	C5.3	PRELIMINARY STORMWATER CONTROL PLAN
20	C5.4	PRELIMINARY STORMWATER CONTROL PLAN
21	C6.0	OVERALL PRELIMINARY EASEMENT PLAN

PROJECT CONTACTS

PROPERTY OWNER:

RUSSELL SQUARE CONSULTING
ATTN: BLAISE HILTON
700 WATERFRONT WAY, #301
VANCOUVER, WA 98660

CIVIL ENGINEER:

BKF ENGINEERS
300 FRANK OGAWA H. PLAZA, #380
OAKLAND, CA 94612
CONTACT: COLE GAUMNITZ
925–396–7700

CONTRACTOR:

NAME:
ADDRESS:

PHONE:
CONTACT:

ENGINEER'S STATEMENT

THESE PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

COLE GAUMNITZ, P.E. DATE
BKF ENGINEERS
R.C.E. NO. 75787

CALL 1–800–642–2444 BEFORE YOU DIG
USA
UNDERGROUND SERVICE ALERT

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DESCRIPTION
REVISION

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5180 SONOMA BLVD, VALLEJO, CA

RUSSELL SQUARE CONSULTING
700 WATERFRONT WAY, SUITE 301, VANCOUVER, WA 98660

DRAWING CONTENTS
TITLE SHEET

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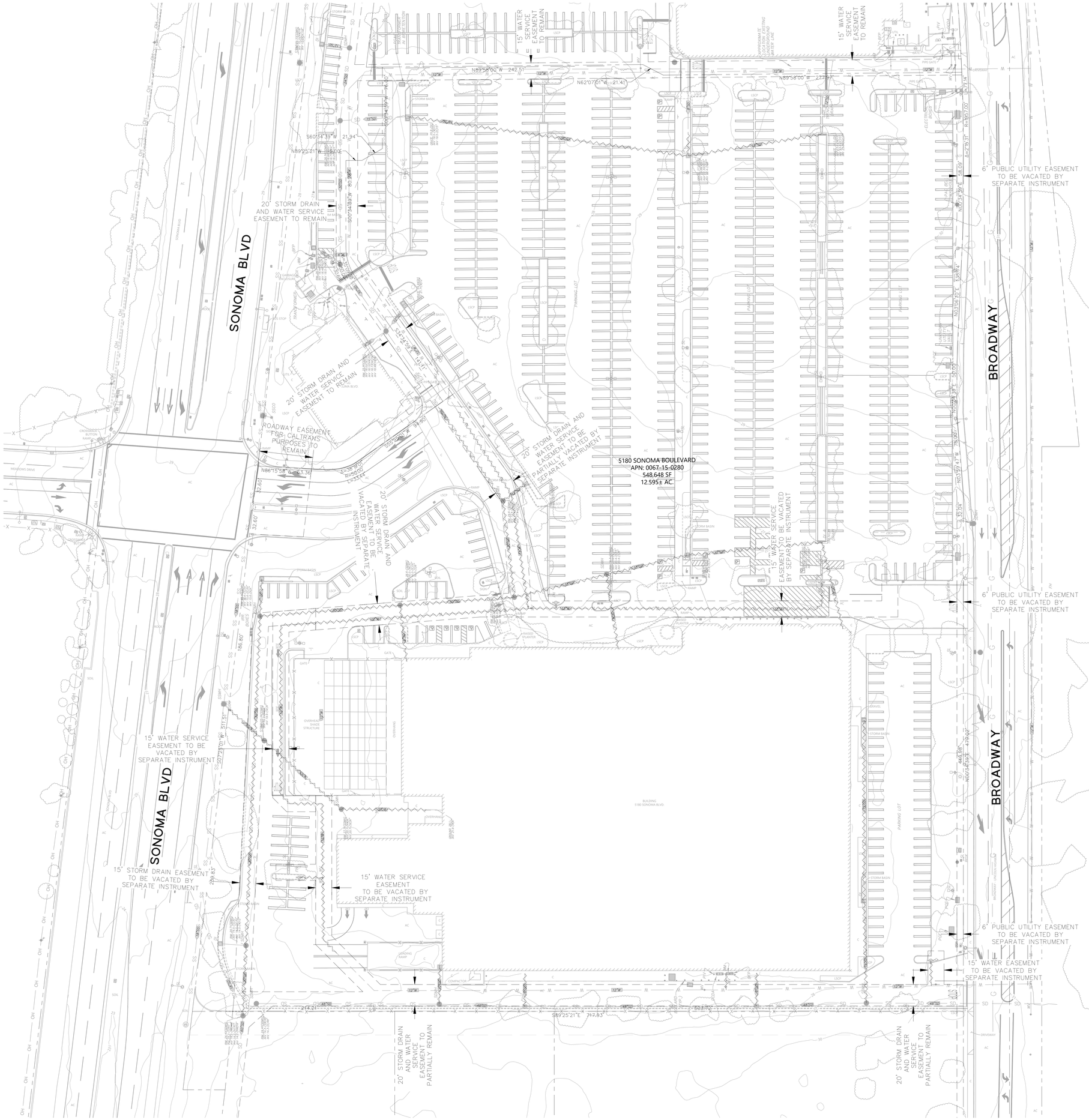
C0.0

2021-074
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SCALE

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ISSUED AS

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SURVEY NOTES

1. BENCHMARK:
   POINT #1 (LOCATION SHOWN HEREON), BEING A MAG NAIL & WASHER, ELEVATION = 27.04'
2. BASIS OF BEARING:
   THE BEARING OF NORTH 0°34'39" EAST BETWEEN THE TWO FOUND STREET MONUMENTS ALONG BROADWAY, AS SHOWN ON THAT CERTAIN MAP FILED IN BOOK 12 OF SURVEYS, AT PAGE 35, SOLANO COUNTY RECORDS, WAS TAKEN AS THE BASIS OF BEARING FOR THIS SURVEY.
3. EASEMENTS:
   SEE SHEETS C2.0–C2.4 AND C6.0 FOR PROPOSED EASEMENTS TO COMPLETE THE EXISTING EASEMENTS INDICATED HEREON TO BE PARTIALLY VACATED/QUIT CLAIMED BY SEPARATE INSTRUMENT.

ABBREVIATIONS

AB	ASPHALT BERM
AC	ASPHALTIC CONCRETE
AD	AREA DRAIN
APN	ASSESSORS PARCEL NUMBER
CB	CATCH BASIN
CLDR	CENTERLINE OF DOOR
COM	COMMUNICATIONS' PULLBOX
CONC	CONCRETE
DI	DROP INLET
DW	DRIVEWAY
E	EAST
EB	ELECTRIC PULLBOX
EP	EDGE OF PAVEMENT
EV	ELECTRIC VAULT
EX.	EXISTING
FL	FLOW LINE
FOC	FACE OF CURB
FNC	FENCE
FH	FIRE HYDRANT
GM	GAS METER
GV	GAS VALVE
INV	INVERT
JP	JOINT POLE
LG	LIP OF GUTTER
LSCP	LANDSCAPING
M–M	MONUMENT TO MONUMENT
MH	MANHOLE
ML	MONUMENT LINE
N	NORTH
PL	PROPERTY LINE
ROW	RIGHT OF WAY
S	SOUTH
S.F.	SQUARE FEET
S.F.N.F.	SEARCHED FOR, NOT FOUND
SD	STORM DRAIN
SDAD	STOR DRAIN AREA DRAIN
SDCB	STORM DRAIN CATCH BASIN
SDCO	STORM DRAIN CLEANOUT
SDDI	STORM DRAIN DROP INLET
SDJB	STORM DRAIN JUNCTION BOX
SDMH	STORM DRAIN MANHOLE
SJWC	SAN JOSE WATER COMPANY
SLB	STREET LIGHT BOX
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
STD.	STANDARD
TC	TOP OF CURB, AT FACE
TMH	TELEPHONE MANHOLE
TSB	TRAFFIC SIGNAL BOX
UMH	UNKNOWN MANHOLE
UNK	UNKNOWN MATERIAL
W	WEST
WM	WATER METER
WV	WATER VALVE

LEGEND

BOUNDARY LINE
LOT LINE
EASEMENT LINE
ROADWAY CENTER LINE
BUILDING WALL LINE
FENCE LINE
DRIVEWAY (EXISTING DRIVEWAY)
SIDEWALK (CC SW)
OVERHEAD LINE
COMMUNICATION LINE
ELECTRICAL LINE
GAS LINE
STORM DRAIN LINE
SANITARY SEWER LINE
WATER LINE
ELEVATION (TC XX.XX)
BOLLARD
COMMUNICATION BOX (COM)
ELECTRIC BOX (EB)
FIRE HYDRANT
GAS METER (GM)
GUY WIRE
JOINT POLE (JP)
SANITARY SEWER CLEANOUT (SSCO)
SANITARY SEWER MANHOLE
STORM DRAIN CATCH BASIN
STORM DRAIN DROP INLET
STORM DRAIN MANHOLE
STREET LIGHT BOX (SLB)
SURVEY IRON PIPE
SURVEY STREET MONUMENT
TRAFFIC SIGNAL
TRAFFIC SIGNAL BOX (TSB)
UNKNOWN MANHOLE
WATER METER (WM)
WATER VALVE (WV)
REMOVE UTILITY LINE

NORTH

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

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700 WATERFRONT WAY, SUITE 301, VANCOUVER, WA 98660

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EXISTING CONDITIONS PLAN

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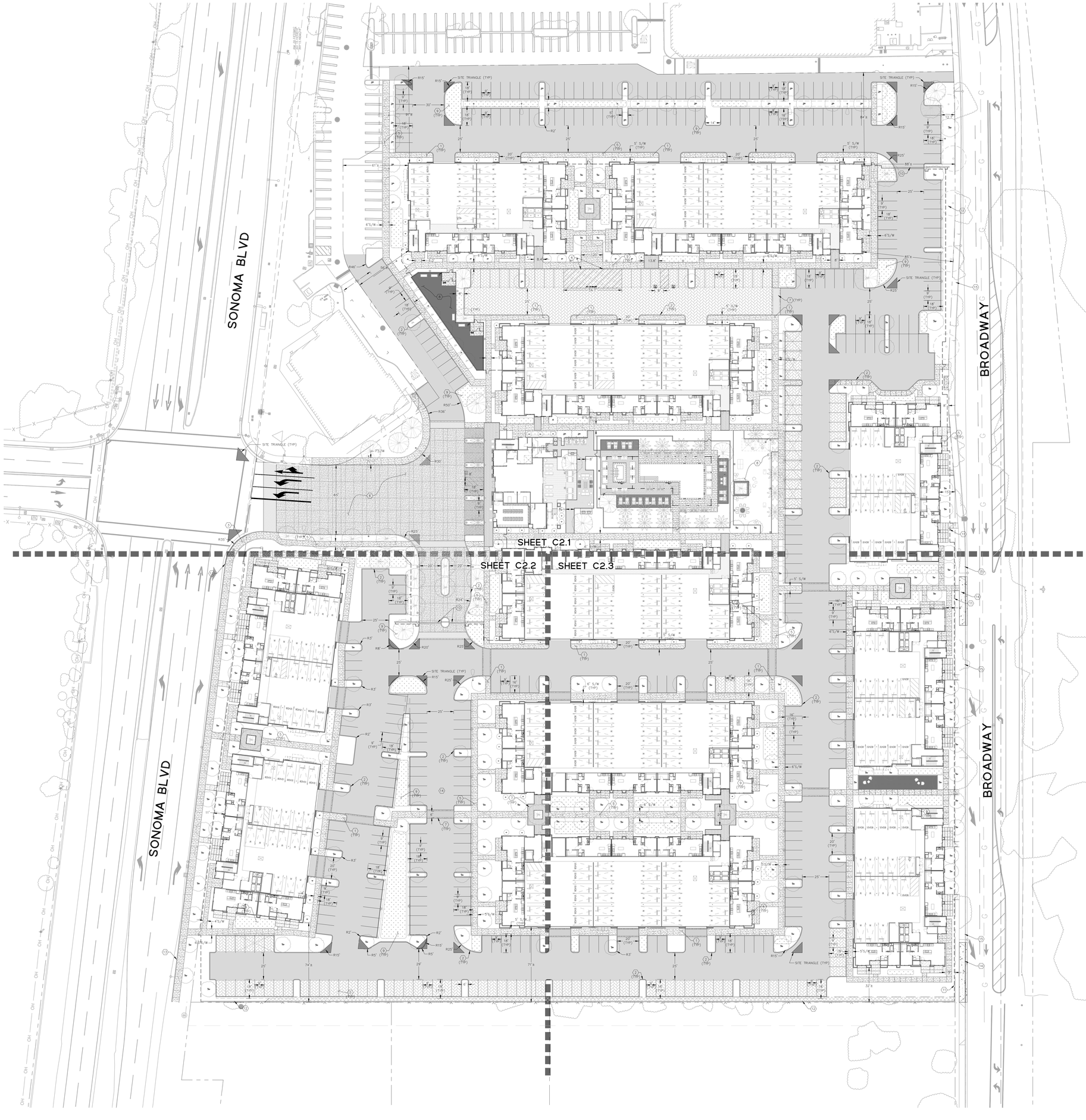
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KEY NOTES

1. CURB RAMP
2. VERTICAL CURB
3. CITY STANDARD SIDEWALK
4. MOUNTABLE CURB FOR FIRE TRUCK TURNAROUND
5. PRIVATE CONCRETE SIDEWALK
6. DECORATIVE CONCRETE AT PROJECT ENTRY, SLP
7. LINEAR CONCRETE PAVERS, SLP
8. SYNTHETIC TURF, SLP
9. BIORETENTION BASINS, SEE SHEETS C5.1–C5.3
10. RESIDENT VEHICULAR GATE, SLP
11. TUBULAR STEEL PERIMETER FENCE, SLP
12. PERIMETER WALL
13. PROPOSED SIDEWALK PER CITY STANDARDS
14. EXISTING DRIVEWAY TO BE REMOVED AND REPLACED WITH SIDEWALK, CURB AND GUTTER
15. EXISTING SIDEWALK TO REMAIN. REMOVE AND REPLACE DAMAGED PANELS AS REQUIRED.

ABBREVIATIONS

AC	ASPHALT CONCRETE
(E)	EXISTING
ESMT	EASEMENT
R	RADIUS
SLP	SEE LANDSCAPE PLAN
S/W	SIDEWALK
(TYP)	TYPICAL

SITE PLAN NOTES

1. SEE ARCHITECT PLANS FOR PARKING ANALYSIS.
2. SONOMA BLVD. FRONTAGE TO BE COORDINATED WITH CITY AND CALTRANS.
3. NEW CURB, GUTTER, AND SIDEWALK TO REPLACE EXISTING DRIVEWAYS OUT TO BROADWAY ALONG PROJECT FRONTAGE.
4. EXISTING BUS STOPS ON BROADWAY AND SONOMA BLVD TO REMAIN.
5. RECIPROCAL ACCESS EASEMENTS ARE PROPOSED FOR DRIVE AISLES THAT SERVE BOTH ON-SITE PARCELS AND OFFSITE PARCELS-INCLUDING BUT NOT LIMITED TO 5182 AND 5184 SONOMA BLVD.

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- AC PAVEMENT
- PERVIOUS PAVERS
- CONCRETE SIDEWALK
- DECORATIVE VEHICULAR CONCRETE
- BIORETENTION BASIN
- VERTICAL CURB
- SITE VISION TRIANGLE

NORTH

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

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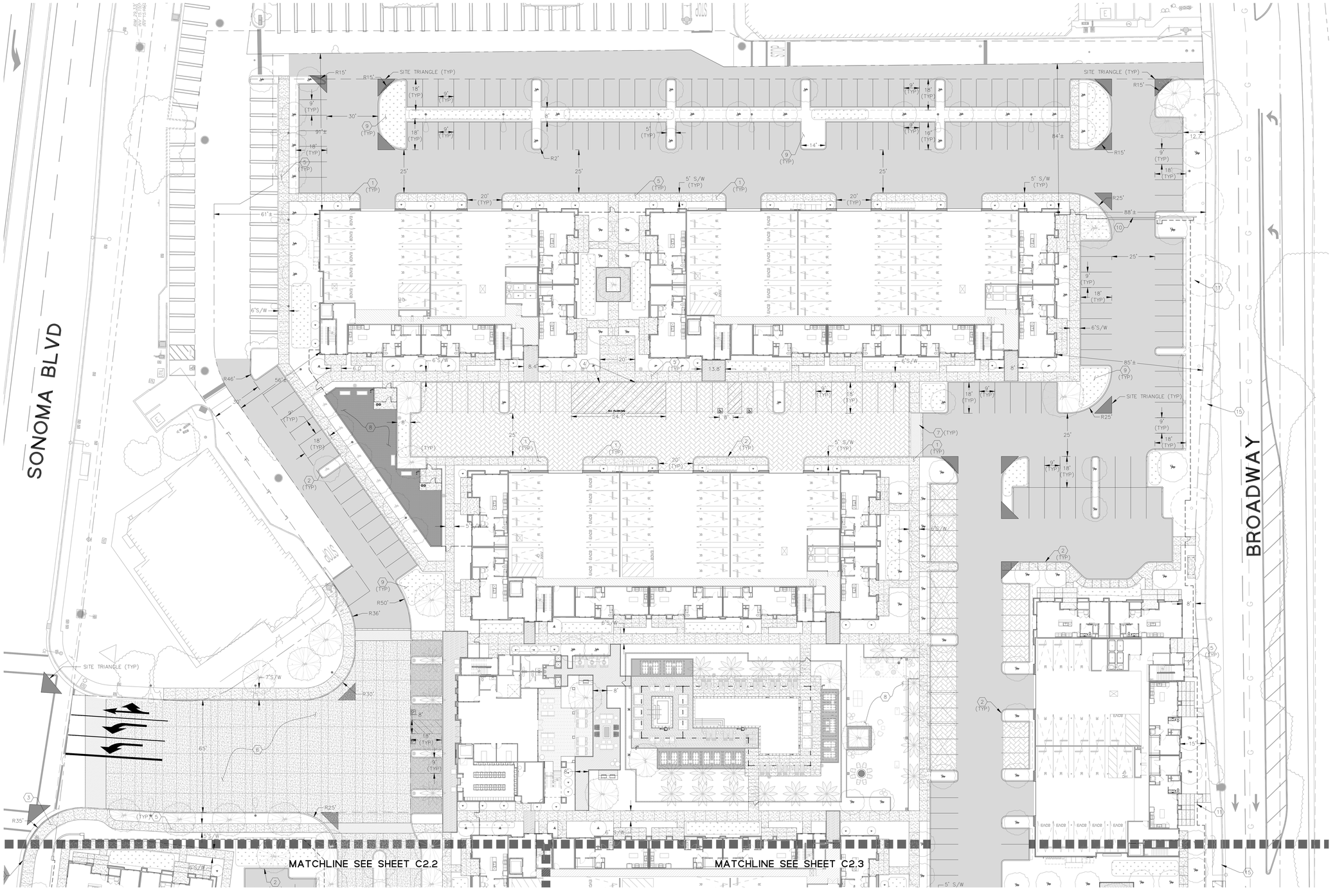
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ESMT	EASEMENT
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(TYP)	TYPICAL

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- BIORETENTION BASIN
- VERTICAL CURB
- SITE VISION TRIANGLE

NORTH

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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8. SYNTHETIC TURF, SLP
9. BIORETENTION BASINS, SEE SHEETS C5.1–C5.3
10. RESIDENT VEHICULAR GATE, SLP
11. TUBULAR STEEL PERIMETER FENCE, SLP
12. PERIMETER WALL
13. PROPOSED SIDEWALK PER CITY STANDARDS
14. EXISTING DRIVEWAY TO BE REMOVED AND REPLACED WITH SIDEWALK, CURB AND GUTTER
15. EXISTING SIDEWALK TO REMAIN. REMOVE AND REPLACE DAMAGED PANELS AS REQUIRED.

ABBREVIATIONS

AC	ASPHALT CONCRETE
(E)	EXISTING
ESMT	EASEMENT
R	RADIUS
SLP	SEE LANDSCAPE PLAN
S/W	SIDEWALK
(TYP)	TYPICAL

SITE PLAN NOTES

1. SEE ARCHITECT PLANS FOR PARKING ANALYSIS.
2. SONOMA BLVD. FRONTAGE TO BE COORDINATED WITH CITY AND CALTRANS.
3. NEW CURB, GUTTER, AND SIDEWALK TO REPLACE EXISTING DRIVEWAYS OUT TO BROADWAY ALONG PROJECT FRONTAGE.
4. EXISTING BUS STOPS ON BROADWAY AND SONOMA BLVD TO REMAIN.
5. RECIPROCAL ACCESS EASEMENTS ARE PROPOSED FOR DRIVE AISLES THAT SERVE BOTH ON-SITE PARCELS AND OFFSITE PARCELS—INCLUDING BUT NOT LIMITED TO 5182 AND 5184 SONOMA BLVD.

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- AC PAVEMENT
- PERVIOUS PAVERS
- CONCRETE SIDEWALK
- DECORATIVE VEHICULAR CONCRETE
- BIORETENTION BASIN
- VERTICAL CURB
- SITE VISION TRIANGLE

NORTH

GRAPHIC SCALE

0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

TCA ARCHITECTS
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DATE
DESCRIPTION
REVISION

RSC VALLEJO
5180 SONOMA BLVD, VALLEJO, CA

RUSSELL SQUARE CONSULTING
700 WATERFRONT WAY, SUITE 301, VANCOUVER, WA 98660

DRAWING CONTENTS
PRELIMINARY SITE PLAN

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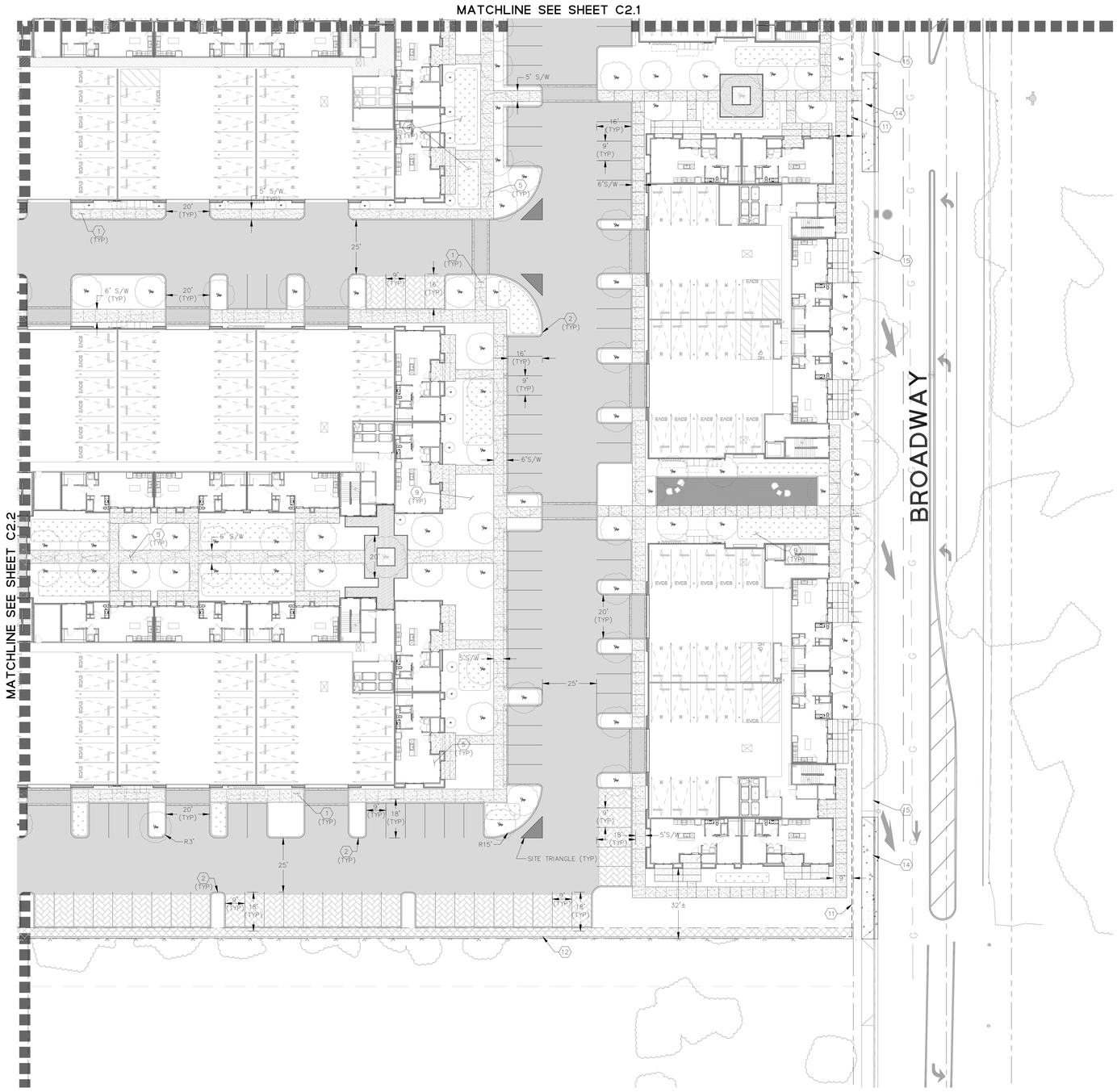
C2.2

2021-074
JOB NUMBER

SCALE

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ISSUED AS

03-18-2022
ISSUE DATE



KEY NOTES

1. CURB RAMP
2. VERTICAL CURB
3. CITY STANDARD SIDEWALK
4. MOUNTABLE CURB FOR FIRE TRUCK TURNAROUND
5. PRIVATE CONCRETE SIDEWALK
6. DECORATIVE CONCRETE AT PROJECT ENTRY, SLP
7. LINEAR CONCRETE PAVERS, SLP
8. SYNTHETIC TURF, SLP
9. BIORETENTION BASINS, SEE SHEETS C5.1–C5.3
10. RESIDENT VEHICULAR GATE, SLP
11. TUBULAR STEEL PERIMETER FENCE, SLP
12. PERIMETER WALL
13. PROPOSED SIDEWALK PER CITY STANDARDS
14. EXISTING DRIVEWAY TO BE REMOVED AND REPLACED WITH SIDEWALK, CURB AND GUTTER
15. EXISTING SIDEWALK TO REMAIN. REMOVE AND REPLACE DAMAGED PANELS AS REQUIRED.

ABBREVIATIONS

AC	ASPHALT CONCRETE
(E)	EXISTING
ESMT	EASEMENT
R	RADIUS
SLP	SEE LANDSCAPE PLAN
S/W	SIDEWALK
(TYP)	TYPICAL

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4. EXISTING BUS STOPS ON BROADWAY AND SONOMA BLVD TO REMAIN.
5. RECIPROCAL ACCESS EASEMENTS ARE PROPOSED FOR DRIVE AISLES THAT SERVE BOTH ON-SITE PARCELS AND OFFSITE PARCELS-INCLUDING BUT NOT LIMITED TO 5182 AND 5184 SONOMA BLVD.

LEGEND

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- AC PAVEMENT
- PERVIOUS PAVERS
- CONCRETE SIDEWALK
- DECORATIVE VEHICULAR CONCRETE
- BIORETENTION BASIN
- VERTICAL CURB
- SITE VISION TRIANGLE

NORTH

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

TCA ARCHITECTS
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700 WATERFRONT WAY, SUITE 301, VANCOUVER, WA 98660

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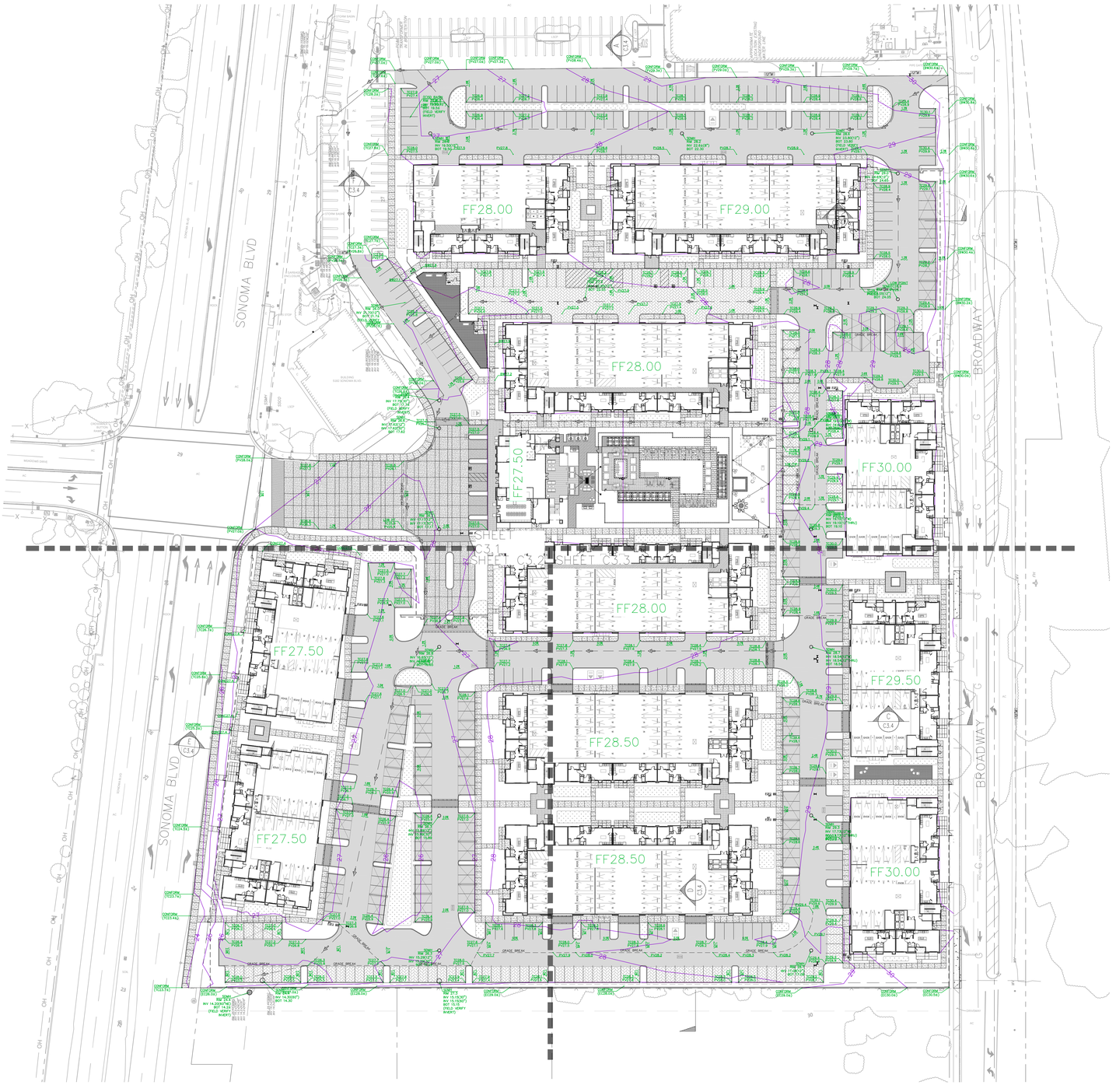
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2021-074
JOB NUMBER

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ABBREVIATIONS

BW	BACK OF WALK
C	CONCRETE
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOW LINE
GB	GRADE BREAK
HP	HIGH POINT
LG	LIP OF GUTTER
LP	LOW POINT
P/PV	PAVEMENT
SLD	SEE LANDSCAPE DRAWINGS
SSD	SEE STRUCTURAL DRAWINGS
TC	TOP OF CURB
TTS	TOP OF TREATMENT SOIL
TW	TOP OF WALL
(X.X±)	EXISTING ELEVATION
	FLOW ON HARDSCAPE
	FLOW ON SOFTSCAPE
	OVERLAND RELEASE PATH

GRADING AND DRAINAGE NOTES

1. ALL PAVED AREAS ARE TO SLOPE A MINIMUM OF 0.5%. ACCESSIBLE STALLS AND LOADING ZONES ARE TO SLOPE AT A MAXIMUM OF 2% IN ALL DIRECTIONS. ACCESSIBLE PATHWAYS ARE TO SLOPE AT A MAXIMUM OF 5% IN THE DIRECTION OF TRAVEL AND THE SLOPE CROSSWAYS TO THE DIRECTION OF TRAVEL SHALL BE AT A MAXIMUM OF 2%. ANY AREAS ON THE SITE NOT CONFORMING TO THESE BASIC RULES DUE TO EXISTING CONDITIONS AR DISCREPANCIES IN THE DOCUMENTS ARE TO BE REPORTED TO THE ENGINEER/ARCHITECT PRIOR TO PROCEEDING WITH PLACEMENT OF BASE ROCK, FORM WORK AND/OR FLATWORK.
2. ROUGH GRADING TO BE WITHIN 0.1' AND FINISH GRADES ARE TO BE WITHIN 0.05'. HOWEVER, CONTRACTOR SHALL NOT CONSTRUCT ANY IMPROVEMENTS THAT WILL CAUSE WATER TO POND OR NOT MEET REQUIREMENTS IN NOTE 1.
3. WALKWAYS ALONG ADA ACCESSIBLE PATHS OF TRAVEL:
   - CONTINUOUSLY ACCESSIBLE
   - MAXIMUM 1/2" CHANGES IN ELEVATION OR PROVIDE CURB RAMPS COMPLYING WITH LATEST CBC SECTION 1127B.5
   - MINIMUM 48" IN WIDTH
   - WHERE SLOPE EXCEEDING 5% SHALL HAVE PEDESTRIAN RAMPS COMPLYING WITH CBC SECTION 1127B.5 AND 1133B.7

LEGEND

- PROPERTY LINE
- VERTICAL CURB
- PROPOSED CONTOUR
- OVERLAND RELEASE PATH
- DRAIN INLET
- STORM DRAIN CLEANOUT
- STORM DRAIN JUNCTION BOX
- STORM DRAIN MANHOLE
- BUBBLE UP BOX
- LANDSCAPE AREA DRAIN
- AC PAVEMENT
- BIORETENTION BASIN
- PERVIOUS PAVERS

NORTH

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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OVERALL PRELIMINARY GRADING & DRAINAGE PLAN

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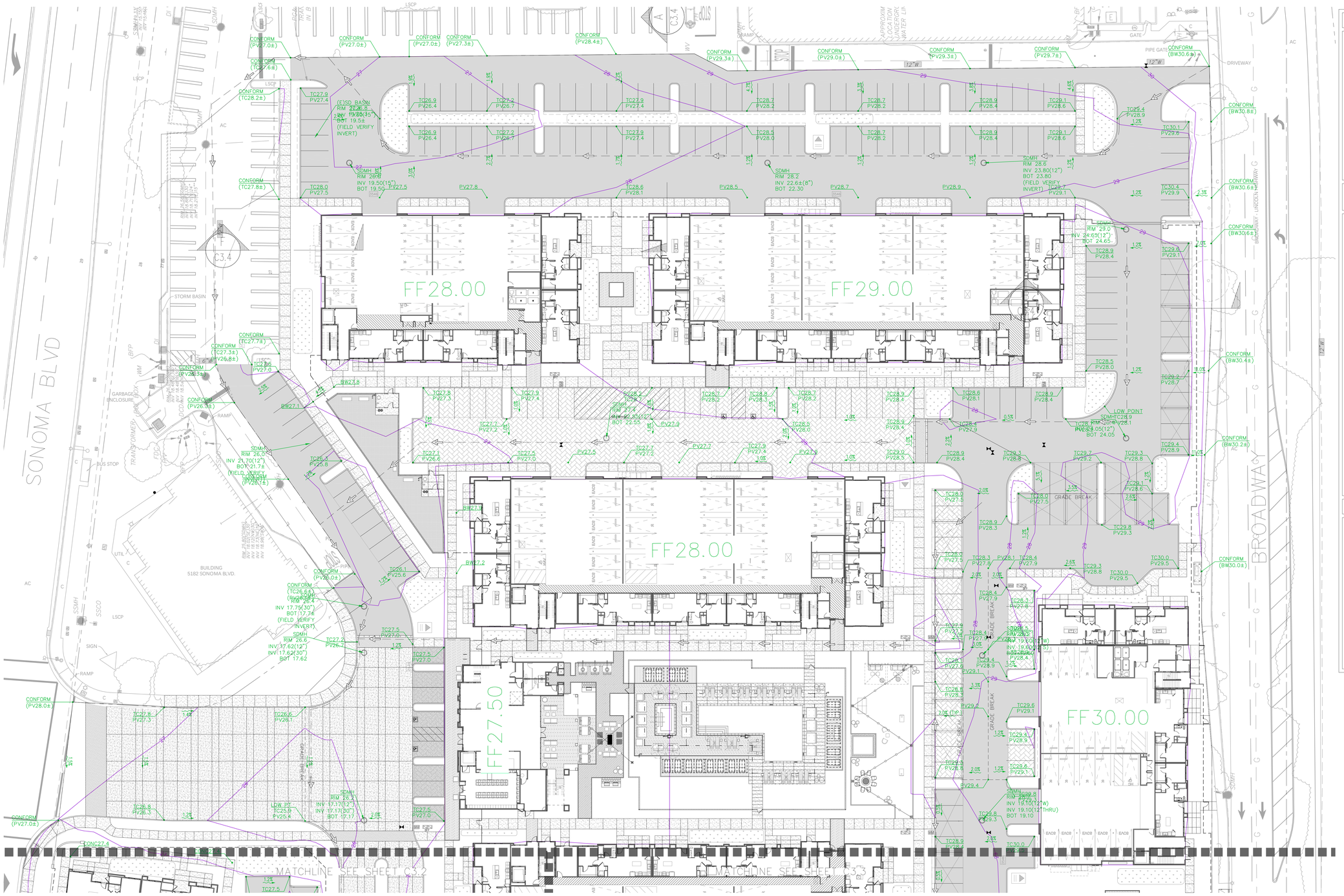
C3.0

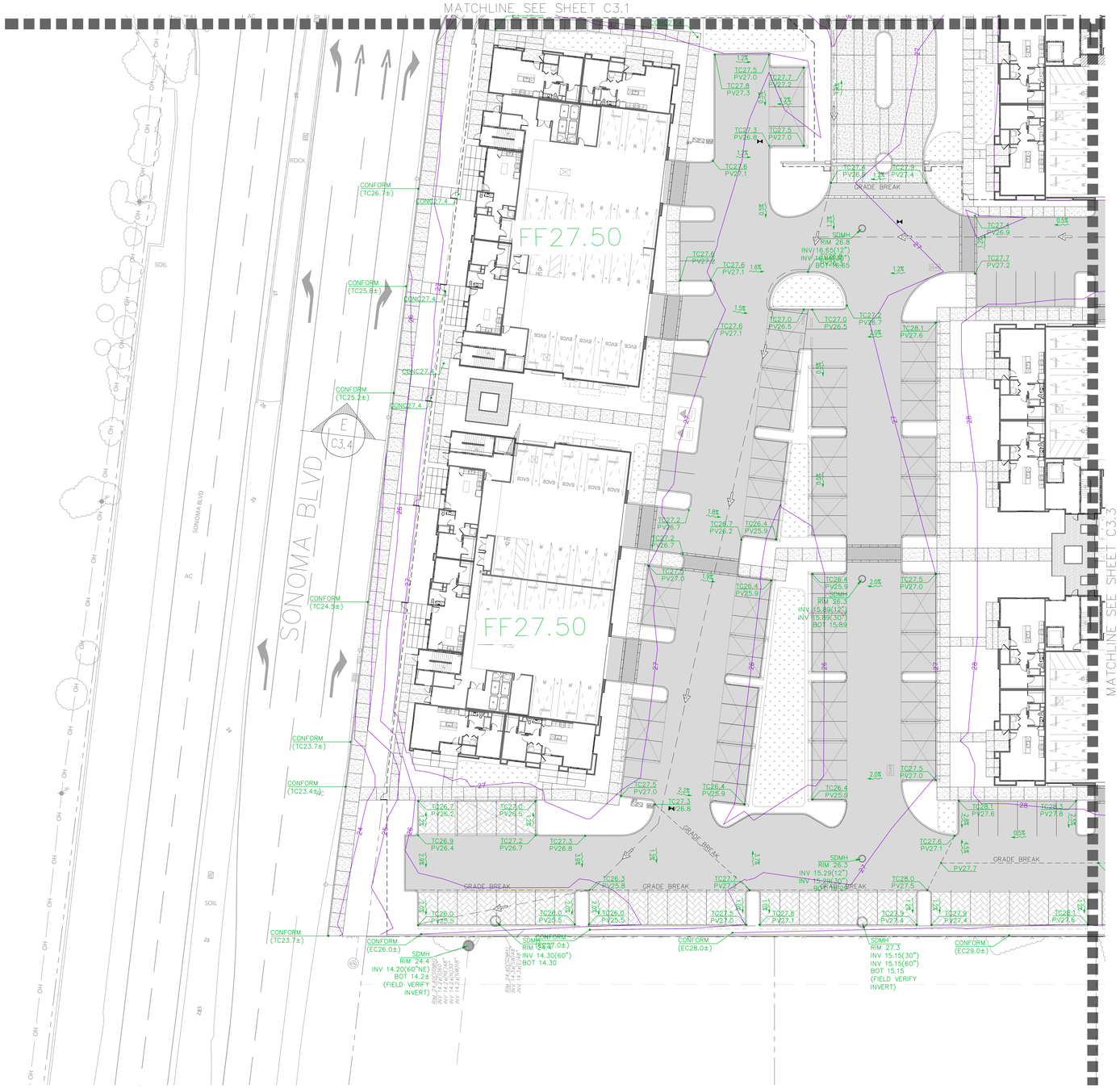
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SONOMA BLVD
BROADWAY
BROADWAY - LINCOLN HIGHWAY
FF28.00
FF29.00
FF28.00
FF27.50
FF30.00
STORM BASIN
GARBAGE ENCLOSURE
BUS STOP
BUILDING
5182 SONOMA BLVD.
RAMP
SIGN
DRIVEWAY
PIPE GATE
GRADE BREAK
LOW POINT
MATCHLINE SEE SHEET C3.2
MATCHLINE SEE SHEET C3.4
(E)SD BASIN
RIM 26.6
24" W 19.80(45°)
BOT 19.5±
(FIELD VERIFY INVERT)
SDMH
RIM 28.6
INV 23.60(12")
BOT 23.80
(FIELD VERIFY INVERT)
SDMH
RIM 28.2
INV 22.6±(8")
BOT 22.30
SDMH
RIM 29.0
INV 24.65(12")
BOT 24.65
SDMH
RIM 27.7
INV 22.85(12")
BOT 22.95
SDMH
RIM 26.0
INV 21.70(12")
BOT 21.7±
(FIELD VERIFY INVERT)
SDMH
RIM 26.6
INV 17.75(30")
BOT 17.7±
(FIELD VERIFY INVERT)
SDMH
RIM 26.6
INV 17.62(12")
INV 17.62(30")
BOT 17.62
SDMH
RIM 26.4
INV 17.17(12")
INV 17.17(30")
BOT 17.17
SDMH
RIM 28.9
INV 19.10(12"W)
INV 19.10(12"THRU)
BOT 19.10
SDMH
RIM 28.9
INV 19.90(12"W)
INV 19.90(12"THRU)
BOT 19.90
SDMH
RIM 28.05(12")
BOT 24.05
LDW PT
TC25.9
PV25.6
CONFORM (PV27.0±)
CONFORM (PV27.3±)
CONFORM (PV27.6±)
CONFORM (PV28.2±)
CONFORM (PV28.4±)
CONFORM (PV29.3±)
CONFORM (PV29.7±)
CONFORM (BW30.8±)
CONFORM (BW30.6±)
CONFORM (BW30.4±)
CONFORM (BW30.2±)
CONFORM (BW30.0±)
CONFORM (BW30.6±)
CONFORM (PV26.0±)
CONFORM (PV26.4±)
CONFORM (PV28.0±)
CONFORM (PV27.0±)
CONC27.4
BW27.8
BW27.1
BW27.5
BW27.2
TC27.9 PV27.4
TC26.9 PV26.4
TC27.2 PV26.7
TC27.9 PV27.4
TC28.7 PV28.2
TC28.9 PV28.4
TC29.1 PV28.6
TC28.0 PV27.5
PV27.8
TC28.6 PV28.1
PV28.5
PV28.7
PV28.9
TC29.7 PV29.1
TC29.4 PV28.9
TC30.1 PV29.6
TC30.4 PV29.9
TC29.6 PV29.1
TC28.5 PV28.0
TC29.2 PV28.7
TC29.4 PV28.9
TC26.6 PV27.0
TC26.3 PV25.8
TC26.1 PV25.6
TC27.8 PV27.3
TC26.6 PV26.1
TC26.8 PV26.3
TC27.5 PV27.0
TC27.7 PV27.2
TC27.1 PV26.6
TC28.2 PV28.7
TC28.8 PV28.3
TC28.6 PV28.1
TC28.4 PV27.9
TC29.3 PV28.8
TC29.7 PV29.2
TC29.3 PV28.8
TC28.0 PV27.5
TC28.9 PV28.3
TC28.1 PV27.6
TC28.4 PV27.9
TC29.1 PV28.6
TC29.8 PV29.3
TC30.0 PV29.5
TC28.3 PV27.8
TC28.4 PV27.9
TC29.3 PV28.8
TC29.6 PV29.1
TC29.4 PV28.9
TC29.8 PV29.3
TC30.0 PV29.5
TC28.9 PV28.4
TC29.3 PV28.8
TC29.2 PV28.7
TC29.4 PV28.9
TC28.4 PV27.9
TC28.6 PV28.1
TC28.9 PV28.4
TC29.1 PV28.6
TC29.3 PV28.8
TC29.7 PV29.2
TC29.3 PV28.8
TC28.0 PV27.5
TC28.9 PV28.4
TC29.3 PV28.8
TC29.7 PV29.2
TC29.3 PV28.8
TC29.1 PV28.6
TC29.8 PV29.3
TC30.0 PV29.5
GRADE BREAK
LOW POINT
SDMH
RIM 28.9
INV 19.10(12"W)
INV 19.10(12"THRU)
BOT 19.10
SDMH
RIM 28.9
INV 19.90(12"W)
INV 19.90(12"THRU)
BOT 19.90
SDMH
RIM 28.9
INV 19.10(12"W)
INV 19.10(12"THRU)
BOT 19.10
SDMH
RIM 28.9
INV 19.90(12"W)
INV 19.90(12"THRU)
BOT 19.90
EACB
EACB
EACB



ABBREVIATIONS

BW	BACK OF WALK
C	CONCRETE
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOW LINE
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HP	HIGH POINT
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LEGEND

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- OVERLAND RELEASE PATH
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- AC PAVEMENT
- BIORETENTION BASIN
- PERVIOUS PAVERS

NORTH

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

TCA ARCHITECTS
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5180 SONOMA BLVD, VALLEJO, CA

RUSSELL SQUARE CONSULTING
700 WATERFRONT WAY, SUITE 301, VANCOUVER, WA 98660

DRAWING CONTENTS
PRELIMINARY GRADING & DRAINAGE PLAN

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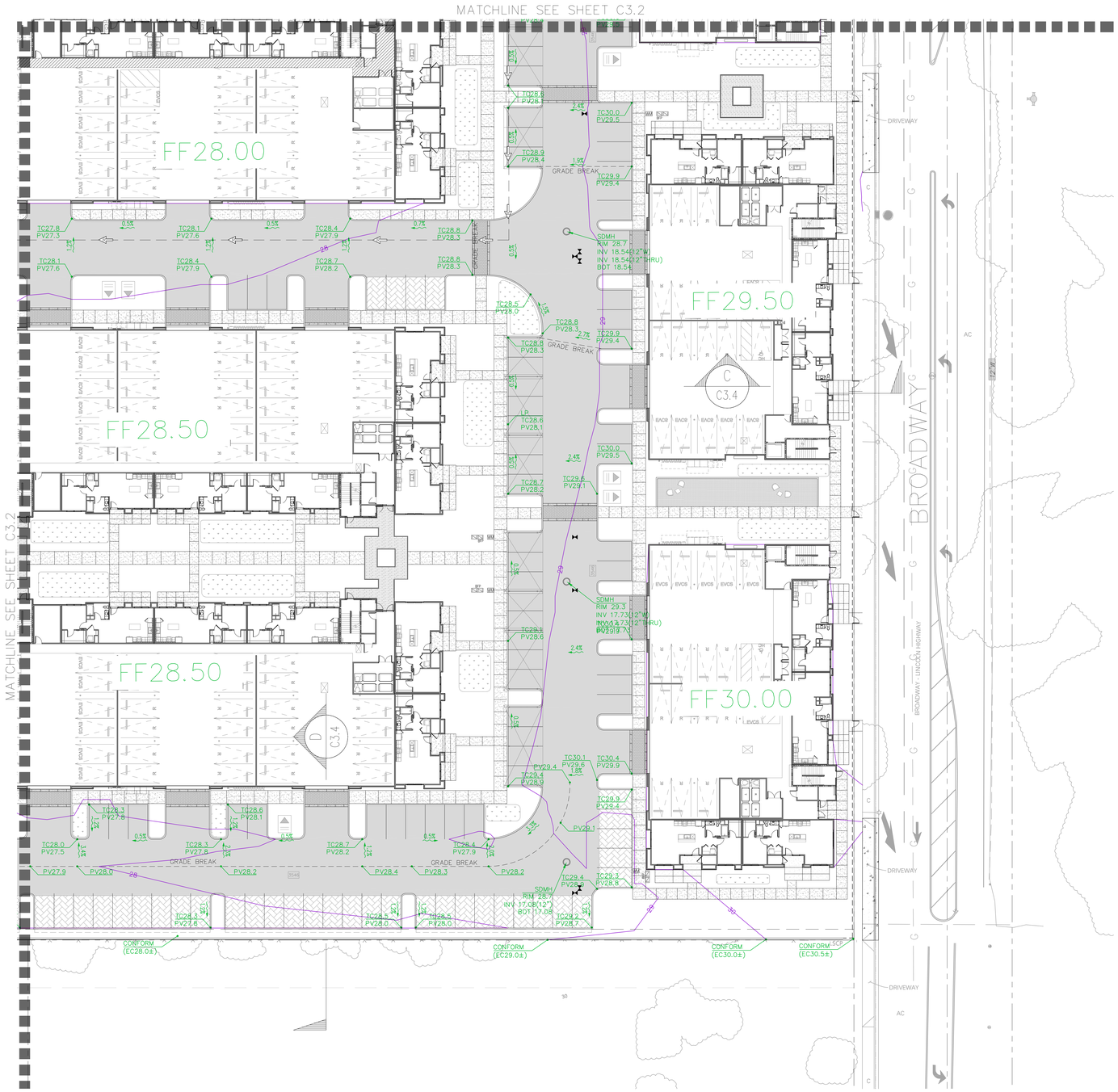
C3.2

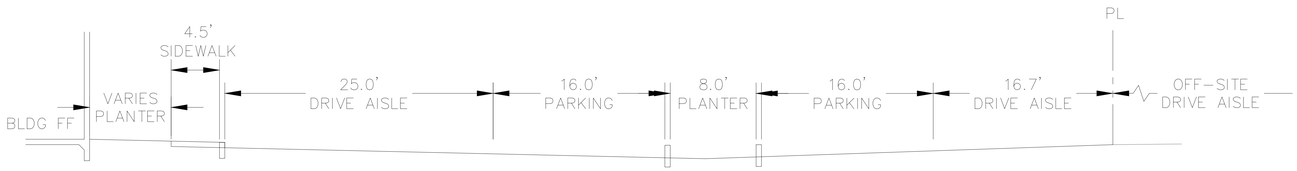
2021-074
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MATCHLINE SEE SHEET C3.2
MATCHLINE SEE SHEET C3.2
FF28.00
FF28.50
FF28.50
FF29.50
FF30.00
Levcs
BROADWAY
BROADWAY - LINCOLN HIGHWAY
DRIVEWAY
DRIVEWAY
DRIVEWAY
AC
AC
GRADE BREAK
GRADE BREAK
GRADE BREAK
GRADE BREAK
SDMH
RIM 28.7
INV 18.54(12"W)
INV 18.54(12"THRU)
BOT 18.54
SDMH
RIM 29.3
INV 17.73(12"W)
INV 17.73(12"THRU)
BOT 17.73
SDMH
RIM 28.79
INV 17.08(12")
BOT 17.08
CONFORM (EC28.0±)
CONFORM (EC29.0±)
CONFORM (EC30.0±)
CONFORM (EC30.5±)
C3.4
C3.4
C3.4
TC27.8 PV27.3
TC28.1 PV27.6
TC28.4 PV27.9
TC28.7 PV28.2
TC28.8 PV28.3
TC28.5 PV28.0
TC28.6 PV28.1
TC29.9 PV29.4
TC30.0 PV29.5
TC29.6 PV29.1
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TC30.4 PV29.9
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TC29.4 PV29.1
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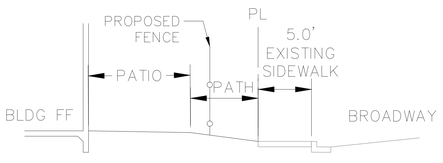
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NTS



SECTION B

NTS



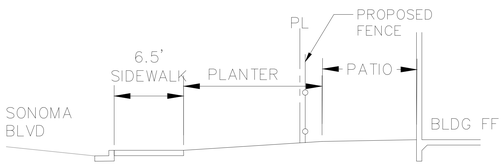
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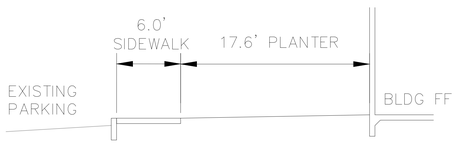
SECTION D

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SECTION E

NTS



SECTION E

NTS

TCA ARCHITECTS
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DATE
DESCRIPTION
REVISION

RSC VALLEJO
5180 SONOMA BLVD, VALLEJO, CA

RUSSELL SQUARE CONSULTING
700 WATERFRONT WAY · SUITE 301 · VANCOUVER, WA 98660

DRAWING CONTENTS
GRADING SECTIONS

NOT FOR CONSTRUCTION

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C3.4

2021-074
JOB NUMBER

SCALE

100% DD
ISSUED AS

03-18-2022
ISSUE DATE

SONOMA BLVD

BROADWAY

SHEET C4.1

SHEET C4.2 SHEET C4.3

KEY NOTES

1. CONNECT TO EXISTING WATER MAIN
2. CONNECT TO EXISTING SD SYSTEM
3. CONNECT TO EXISTING SS SYSTEM
4. INSTALL (N) SDMH
5. INSTALL (N) OFD
6. INSTALL (N) SDJB
7. INSTALL (N) SSCO/SDCO
8. INSTALL (N) SSMH
9. (E) FH TO REMAIN
10. (E) FH TO BE REMOVED
11. INSTALL (N) FH
12. INSTALL (N) TRANSFORMER
13. INSTALL (N) GAS METER
14. INSTALL (N) BUBBLE UP BOX
15. INSTALL (N) SDCB
16. INSTALL (N) WATER METER
17. INSTALL (N) BACK FLOW PREVENTER
18. INSTALL (N) SDCB WITH SUBMERSIBLE PUMPS

ABBREVIATIONS

(E)	EXISTING
FH	FIRE HYDRANT
INV	INVERT ELEVATION
(INV XX.X±)	(E) INVERT ELEVATION
JT	JOINT TRENCH
OFD	OVER FLOW DRAIN
PERF	PERFORATED
RTG	RIM TO GRADE
S	SLOPE
SDCB	STORM DRAIN CATCH BASIN
SDCO	STORM DRAIN CLEANOUT
SDJB	STORM DRAIN JUNCTION BOX
SDMH	STORM DRAIN MANHOLE
SED	SEE ELECTRICAL DRAWINGS
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE

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LEGEND

- STORM DRAIN LINE (TREATED)
- SD — STORM DRAIN LINE (UNTREATED)
- SS — SANITARY SEWER LINE
- JT — JOINT TRENCH (JT) LINE
- G — GAS LINE
- IRR — IRRIGATION LINE
- DW — DOMESTIC WATER LINE
- FW — FIRE WATER LINE, PVC C900 CLASS 200
- PERFORATED PIPE
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- STORM DRAIN JUNCTION BOX
- STORM DRAIN CLEANOUT
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- BUBBLE UP BOX
- CHECK VALVE IN BOX.
- SANITARY SEWER MANHOLE
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- UTILITY CROSSING NUMBER. SEE UTILITY CROSSING TABLE THIS SHEET.
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- STORM DRAIN AND WATER SERVICE EASEMENT (SDE & WSE)
- EXISTING UTILITY EASEMENT TO REMAIN

NORTH

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

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RUSSELL SQUARE CONSULTING
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DRAWING CONTENTS
OVERALL PRELIMINARY UTILITY PLAN

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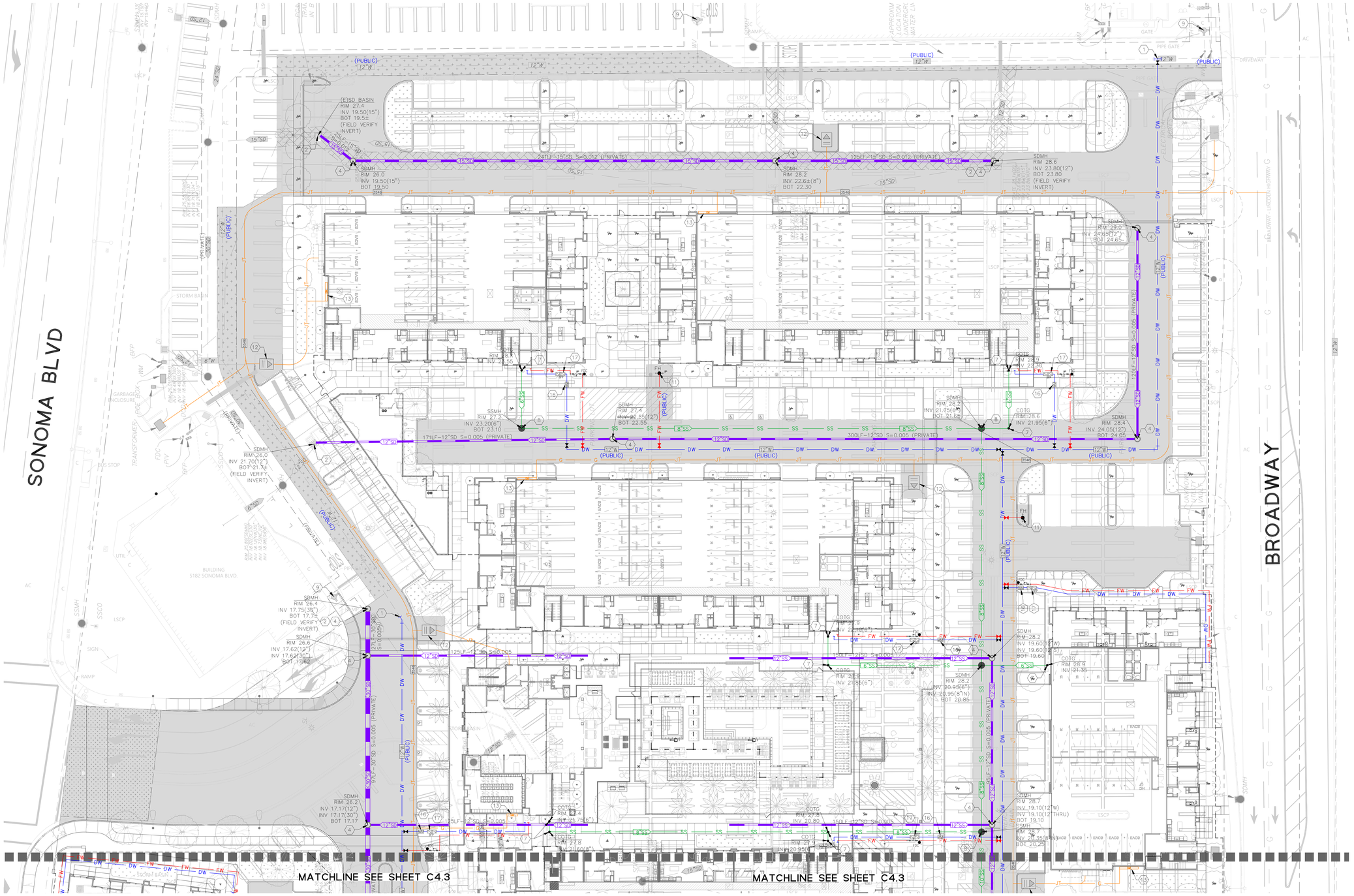
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KEY NOTES

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ABBREVIATIONS

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- GAS LINE
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- FIRE WATER LINE, PVC C900 CLASS 200
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- STORM DRAIN JUNCTION BOX
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- WATER METER
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- STORM DRAIN CATCH BASIN WITH SUBMERSIBLE PUMPS

LEGEND

- EMERGENCY VEHICLE ACCESS EASEMENT (EVAE), PUBLIC ACCESS EASEMENT (PAE), PUBLIC UTILITY EASEMENT (PUE)
- STORM DRAIN EASEMENT (SDE)
- STORM DRAIN AND WATER SERVICE EASEMENT (SDE & WSE)
- EXISTING UTILITY EASEMENT TO REMAIN

NORTH

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

TCA ARCHITECTS
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DATE
DESCRIPTION
REVISION

RSC VALLEJO
5180 SONOMA BLVD, VALLEJO, CA

RUSSELL SQUARE CONSULTING
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DRAWING CONTENTS
PRELIMINARY UTILITY PLAN

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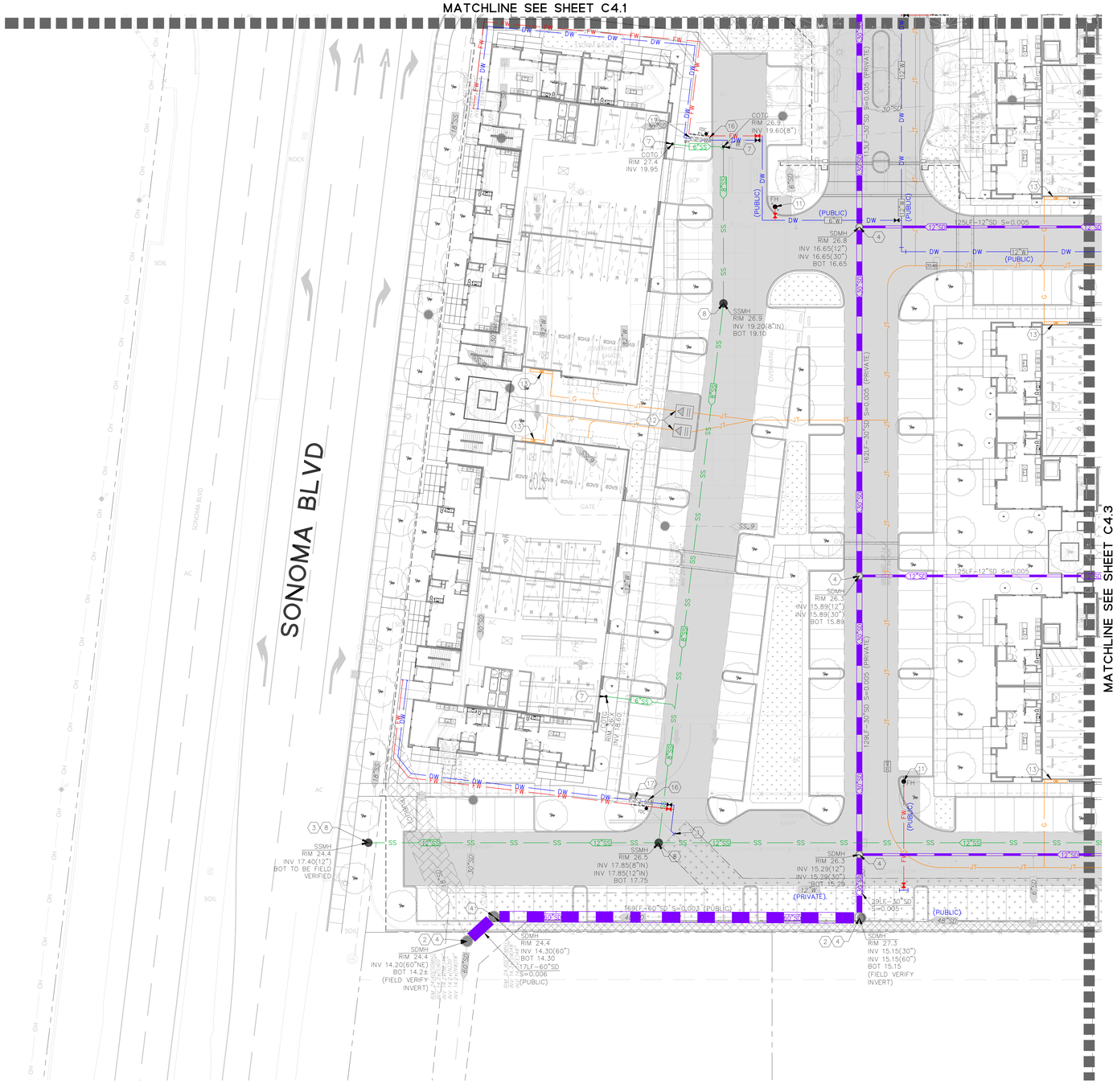
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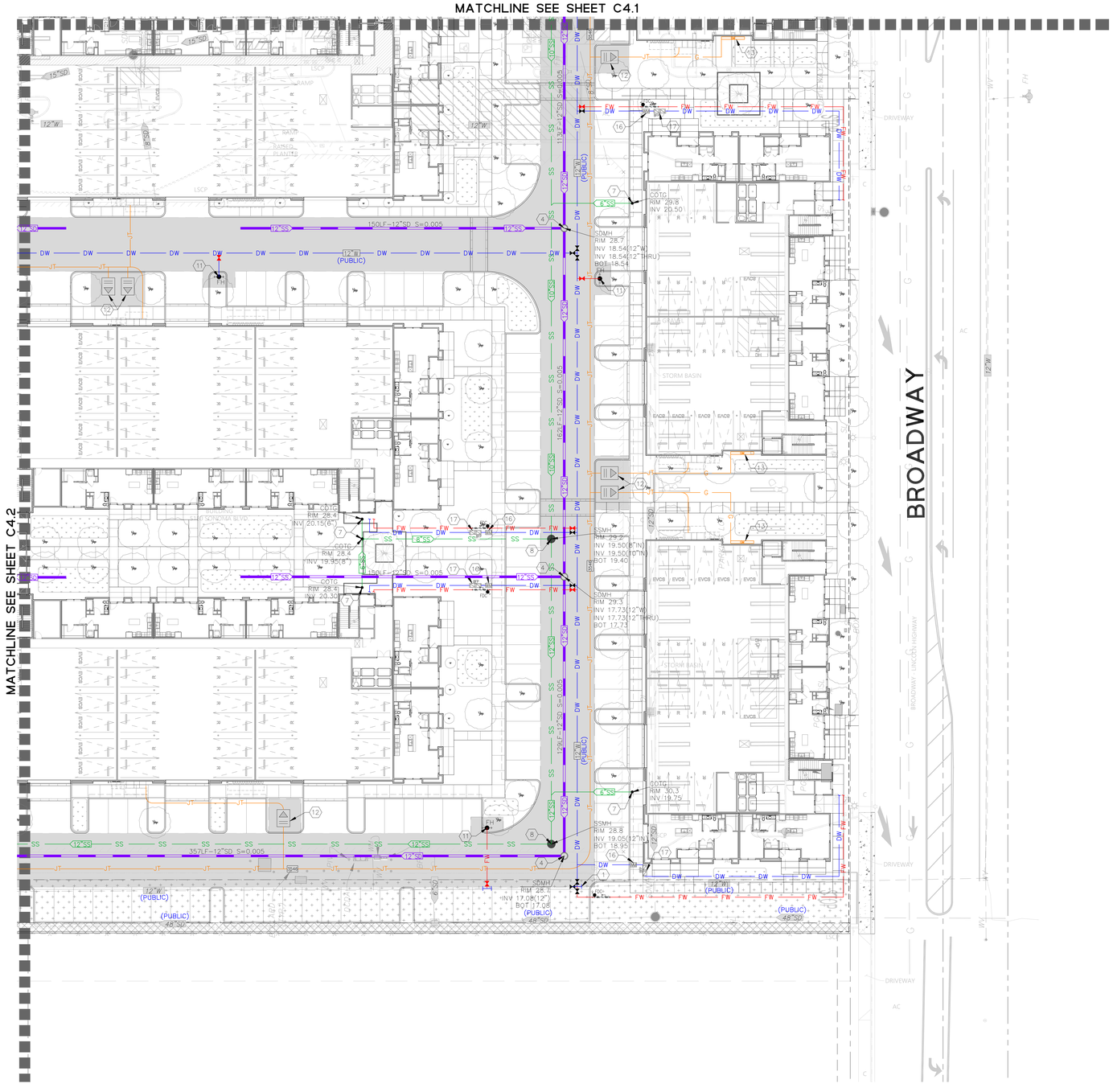
2021-074
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MATCHLINE SEE SHEET C4.1
MATCHLINE SEE SHEET C4.3
SONOMA BLVD
SONOMA BLVD
COTC
RIM 26.9
INV 19.60(8")
COTC
RIM 27.4
INV 19.95
SDMH
RIM 26.8
INV 16.65(12")
INV 16.65(30")
BOT 16.65
SSMH
RIM 26.9
INV 19.20(8"IN)
BOT 19.10
SDMH
RIM 26.3
INV 15.89(12")
INV 15.89(30")
BOT 15.89
SSMH
RIM 24.4
INV 17.40(12")
BOT TO BE FIELD VERIFIED
SSMH
RIM 26.5
INV 17.85(8"IN)
INV 17.85(12"IN)
BOT 17.75
SDMH
RIM 26.3
INV 15.29(12")
INV 15.29(30")
BOT 15.29
SDMH
RIM 24.4
INV 14.30(60")
BOT 14.30
17LF-60"SD
S=0.006
(PUBLIC)
SDMH
RIM 24.4
INV 14.20(60"NE)
BOT 14.2±
(FIELD VERIFY
INVERT)
SDMH
RIM 27.3
INV 15.15(30")
INV 15.15(60")
BOT 15.15
(FIELD VERIFY
INVERT)
125LF-12"SD S=0.005
125LF-12"SD S=0.005
169LF-60"SD S=0.003 (PUBLIC)
29LF-30"SD
S=0.005
(PUBLIC)
(PRIVATE)
(PUBLIC)
(PUBLIC)
(PUBLIC)
(PRIVATE)
(PRIVATE)
(PRIVATE)
(PRIVATE)
(PUBLIC)
(PUBLIC)
(PUBLIC



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- GAS METER
- WM — WATER METER
- BFP — BACK FLOW PREVENTER
- STORM DRAIN CATCH BASIN WITH SUBMERSIBLE PUMPS

NORTH

GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

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DRAWING CONTENTS
OVERALL PRELIMINARY STORMWATER CONTROL PLAN

THIS SET OF CONSTRUCTION DOCUMENTS HAS BEEN PREPARED FOR THE CONSTRUCTION OF AN APARTMENT PROJECT.

C5.0

2021-074
JOB NUMBER

SCALE
100% DD
ISSUED AS

05-19-2022
ISSUED DATE

ABBREVIATIONS

DMA	DRAINAGE MANAGEMENT AREA
SF	SQUARE FEET
TM	TREATMENT MEASURE

STORMWATER CONTROL PLAN NOTES

1. SEE DRAFT STORMWATER CONTROL REPORT FOR NARRATIVE AND PERFORMANCE CALCULATIONS OF STORMWATER TREATMENT MEASURES AND HYDROMODIFICATION.
2. SEE SHEET C5.4 FOR TREATMENT CONTROL MEASURE SUMMARY TABLE.

LIST OF POTENTIAL POLLUTANTS:
- --LITTER
- --MOTOR OIL
- --GASOLINE
- --HYDROCARBONS
- --HEAVY METALS
- --PESTICIDES

LEGEND

- PROPERTY LINE
- DMA-X — DRAINAGE AREA BOUNDARY
- BIORETENTION BASIN
- DRAIN INLET
- STORM DRAIN CLEANOUT
- STORM DRAIN JUNCTION BOX
- STORM DRAIN MANHOLE
- BUBBLE UP BOX
- PERVIOUS PAVERS

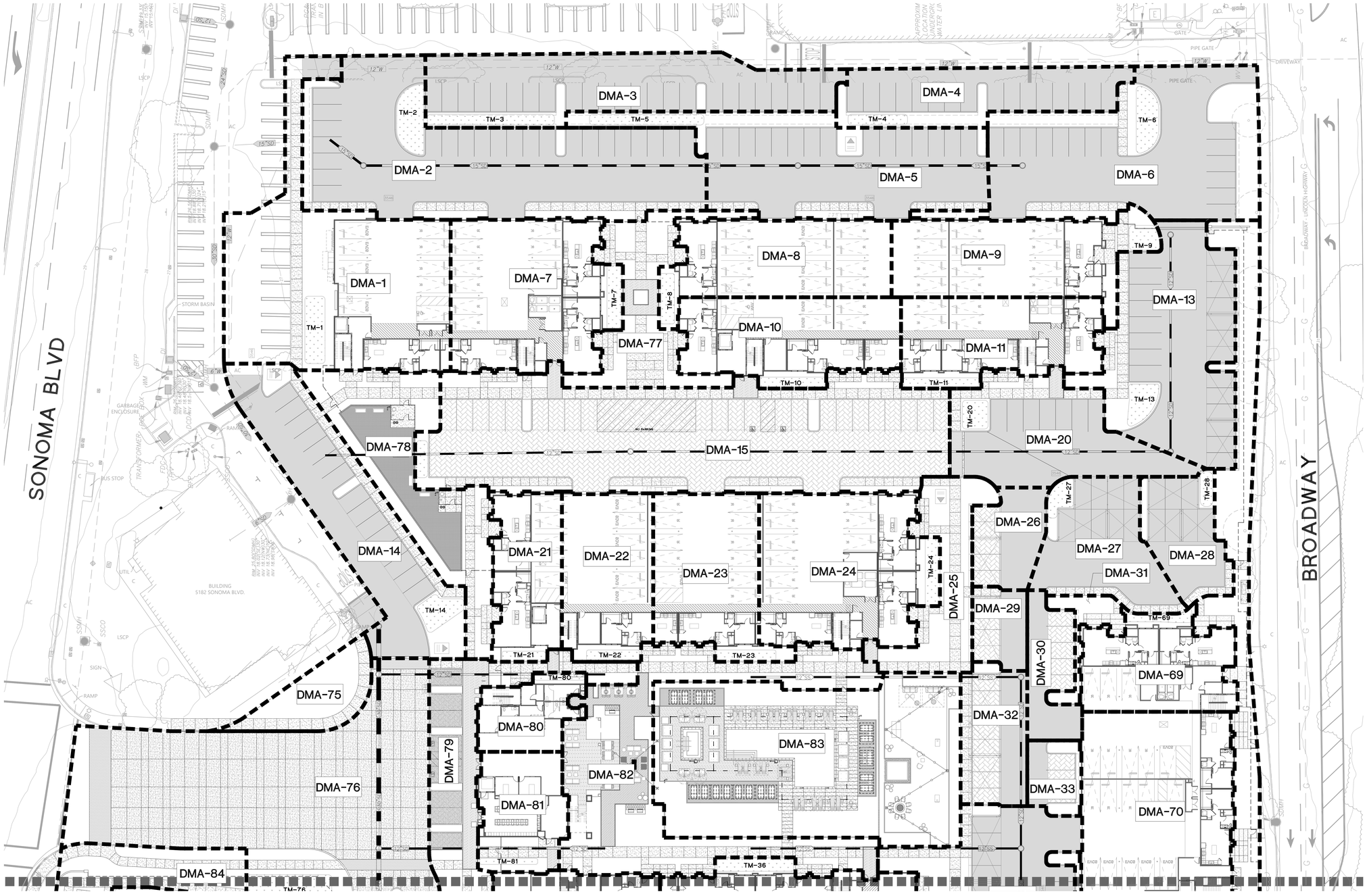
NORTH

GRAPHIC SCALE
1 INCH = 50 FT.
0 25 50 100 200

BROADWAY

SONOMA BLVD

SHEET C5.1
SHEET C5.2
SHEET C5.3



ABBREVIATIONS

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NORTH

GRAPHIC SCALE

(IN FEET)
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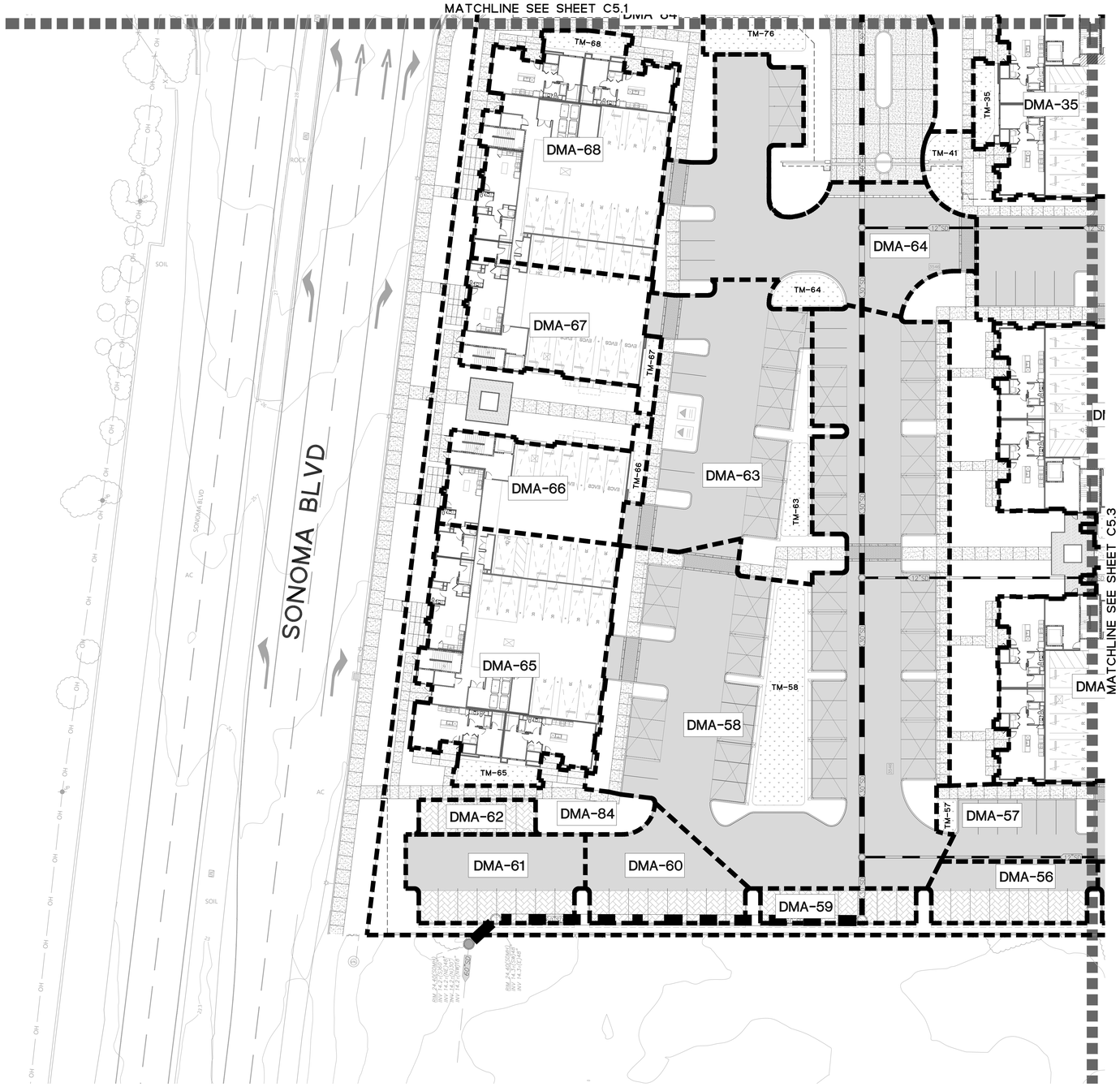
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5180 SONOMA BLVD, VALLEJO, CA

RUSSELL SQUARE CONSULTING
700 WATERFRONT WAY, SUITE 301, VANCOUVER, WA 98660

DRAWING CONTENTS
PRELIMINARY STORMWATER CONTROL PLAN

NOT FOR CONSTRUCTION



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- BUBBLE UP BOX
- PERVIOUS PAVERS

NORTH

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

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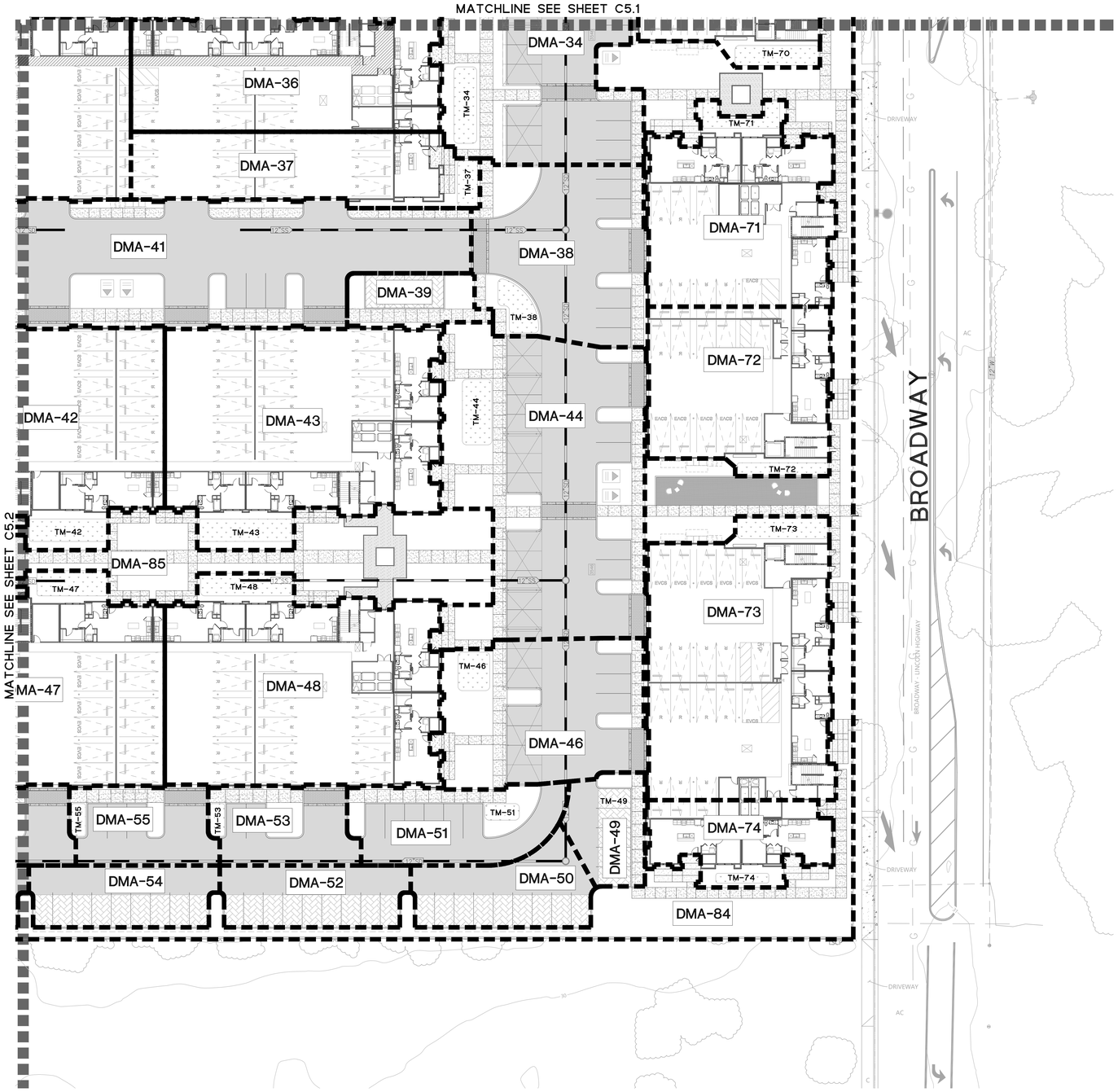
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ABBREVIATIONS

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TM	TREATMENT MEASURE

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NORTH

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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TREATMENT CONTROL MEASURE SUMMARY								
DRAINAGE AREAS	DRAINAGE AREA SIZE (SF)	EXISTING CONDITION		PROPOSED CONDITION		TREATMENT MEASURE SIZE		TREATMENT MEASURE TYPE
		PERVIOUS SURFACE (SF)	IMPERVIOUS SURFACE (SF)	PERVIOUS SURFACE (SF)	IMPERVIOUS SURFACE (SF)	REQUIRED (SF)	PROVIDED (SF)	
DMA-1	11988	0	11988	1721	10267	411	416	BIORETENTION BASIN
DMA-2	13440	0	13440	1550	11890	476	500	BIORETENTION BASIN
DMA-3	7599	0	7599	818	6781	271	419	BIORETENTION BASIN
DMA-4	4575	0	4575	839	3736	149	194	BIORETENTION BASIN
DMA-5	9072	0	9072	1703	7369	295	377	BIORETENTION BASIN
DMA-6	11069	0	11069	3161	7908	316	395	BIORETENTION BASIN
DMA-7	7406	0	7406	421	6985	279	294	BIORETENTION BASIN
DMA-8	5448	0	5448	375	5073	203	217	BIORETENTION BASIN
DMA-9	6046	0	6046	622	5424	217	218	BIORETENTION BASIN
DMA-10	5435	0	5435	348	5087	203	214	BIORETENTION BASIN
DMA-11	5008	0	5008	398	4610	184	207	BIORETENTION BASIN
DMA-12 (VOID)	-	-	-	-	-	-	-	-
DMA-13	8462	0	8462	856	7606	304	315	BIORETENTION BASIN
DMA-14	7581	0	7581	808	6773	271	307	BIORETENTION BASIN
DMA-15	17906	0	17906	14037	3869	1935	12662	SELF-RETAINING
DMA-16 (VOID)	-	-	-	-	-	-	-	-
DMA-17 (VOID)	-	-	-	-	-	-	-	-
DMA-18 (VOID)	-	-	-	-	-	-	-	-
DMA-19 (VOID)	-	-	-	-	-	-	-	-
DMA-20	5768	0	5768	436	5332	213	225	BIORETENTION BASIN
DMA-21	3483	0	3483	248	3235	129	130	BIORETENTION BASIN
DMA-22	4638	0	4638	344	4294	172	176	BIORETENTION BASIN
DMA-23	5339	0	5339	397	4942	198	200	BIORETENTION BASIN
DMA-24	7815	0	7815	472	7343	294	302	BIORETENTION BASIN
DMA-25	3534	0	3534	1852	1682	841	1852	SELF-RETAINING
DMA-26	1995	0	1995	675	1320	660	675	SELF-RETAINING
DMA-27	4262	0	4262	314	3948	158	201	BIORETENTION BASIN
DMA-28	2733	0	2733	326	2407	96	128	BIORETENTION BASIN
DMA-29	1319	0	1319	540	779	390	540	SELF-RETAINING
DMA-30	2000	0	2000	675	1325	663	675	SELF-RETAINING
DMA-31	870	0	870	626	244	122	626	SELF-RETAINING
DMA-32	2828	0	2828	1172	1656	828	1080	SELF-RETAINING
DMA-33	1190	0	1190	517	673	337	405	SELF-RETAINING
DMA-34	8795	0	8795	1856	6939	278	367	SELF-RETAINING
DMA-35	8297	0	8297	457	7840	314	320	BIORETENTION BASIN
DMA-36	7932	0	7932	408	7524	301	304	BIORETENTION BASIN
DMA-37	5088	0	5088	463	4625	185	195	BIORETENTION BASIN
DMA-38	6351	0	6351	1154	5197	208	301	BIORETENTION BASIN
DMA-39	1479	0	1479	1000	479	240	540	SELF-RETAINING
DMA-40 (VOID)	-	-	-	-	-	-	-	-
DMA-41	14775	0	14775	2536	12239	490	500	BIORETENTION BASIN
DMA-42	9864	0	9864	700	9164	367	371	BIORETENTION BASIN
DMA-43	11448	0	11448	793	10655	426	442	BIORETENTION BASIN
DMA-44	12352	0	12352	2887	9465	379	409	BIORETENTION BASIN
DMA-45 (VOID)	-	-	-	-	-	-	-	-
DMA-46	6155	0	6155	1647	4508	180	255	BIORETENTION BASIN
DMA-47	9738	0	9738	577	9161	366	374	BIORETENTION BASIN
DMA-48	11247	0	11247	592	10655	426	439	BIORETENTION BASIN
DMA-49	1698	0	1698	776	922	461	675	SELF-RETAINING
DMA-50	2636	0	2636	1215	1421	711	1215	SELF-RETAINING
DMA-51	3337	0	3337	513	2824	113	117	BIORETENTION BASIN
DMA-52	2398	0	2398	1215	1183	592	1215	SELF-RETAINING
DMA-53	2364	0	2364	118	2246	90	90	BIORETENTION BASIN
DMA-54	2398	0	2398	1215	1183	592	1215	SELF-RETAINING
DMA-55	2374	0	2374	236	2138	86	87	BIORETENTION BASIN
DMA-56	2102	0	2102	1215	887	444	1215	SELF-RETAINING
DMA-57	3352	0	3352	277	3075	123	125	BIORETENTION BASIN
DMA-58	28993	0	28993	4587	24406	976	1790	BIORETENTION BASIN
DMA-59	1154	0	1154	1080	74	37	1080	SELF-RETAINING
DMA-60	2875	0	2875	1080	1795	898	1080	SELF-RETAINING
DMA-61	3229	0	3229	1080	2149	1075	1080	SELF-RETAINING
DMA-62	866	0	866	810	56	28	810	SELF-RETAINING
DMA-63	9919	0	9919	1830	8089	324	443	BIORETENTION BASIN
DMA-64	9303	0	9303	682	8621	345	401	BIORETENTION BASIN
DMA-65	9253	0	9253	485	8768	351	367	BIORETENTION BASIN
DMA-66	3888	0	3888	273	3615	145	158	BIORETENTION BASIN
DMA-67	4409	0	4409	270	4139	166	171	BIORETENTION BASIN
DMA-68	8690	0	8690	439	8251	330	332	BIORETENTION BASIN
DMA-69	4238	0	4238	315	3923	157	167	BIORETENTION BASIN
DMA-70	9065	0	9065	566	8499	340	350	BIORETENTION BASIN
DMA-71	7079	0	7079	499	6580	263	266	BIORETENTION BASIN
DMA-72	6241	0	6241	400	5841	234	235	BIORETENTION BASIN
DMA-73	10541	0	10541	582	9959	398	409	BIORETENTION BASIN
DMA-74	2846	0	2846	383	2463	99	109	BIORETENTION BASIN
DMA-75	2139	0	2139	1340	799	400	1340	SELF-RETAINING
DMA-76	22130	0	22130	3034	19096	764	777	BIORETENTION BASIN
DMA-77	4033	0	4033	1796	2237	1119	1796	SELF-RETAINING
DMA-78	6463	0	6463	2412	4051	2026	2412	SELF-RETAINING
DMA-79	5614	0	5614	2908	2706	1353	2908	SELF-RETAINING
DMA-80	2103	0	2103	186	1917	77	89	BIORETENTION BASIN
DMA-81	3126	0	3126	495	2631	105	107	BIORETENTION BASIN
DMA-82	9844	0	9844	3785	6059	3030	3785	SELF-RETAINING
DMA-83	14865	0	14865	5895	8970	4485	5895	SELF-RETAINING
DMA-84	36737	0	36737	17500	19237	9619	17500	SELF-RETAINING
DMA-85	13946	0	13946	8258	5688	2844	8258	SELF-RETAINING

ABBREVIATIONS

DMA	DRAINAGE MANAGEMENT AREA
SF	SQUARE FEET
TM	TREATMENT MEASURE

STORMWATER CONTROL PLAN NOTES

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DRAWING CONTENTS
OVERALL PRELIMINARY EASEMENT PLAN

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C6.0

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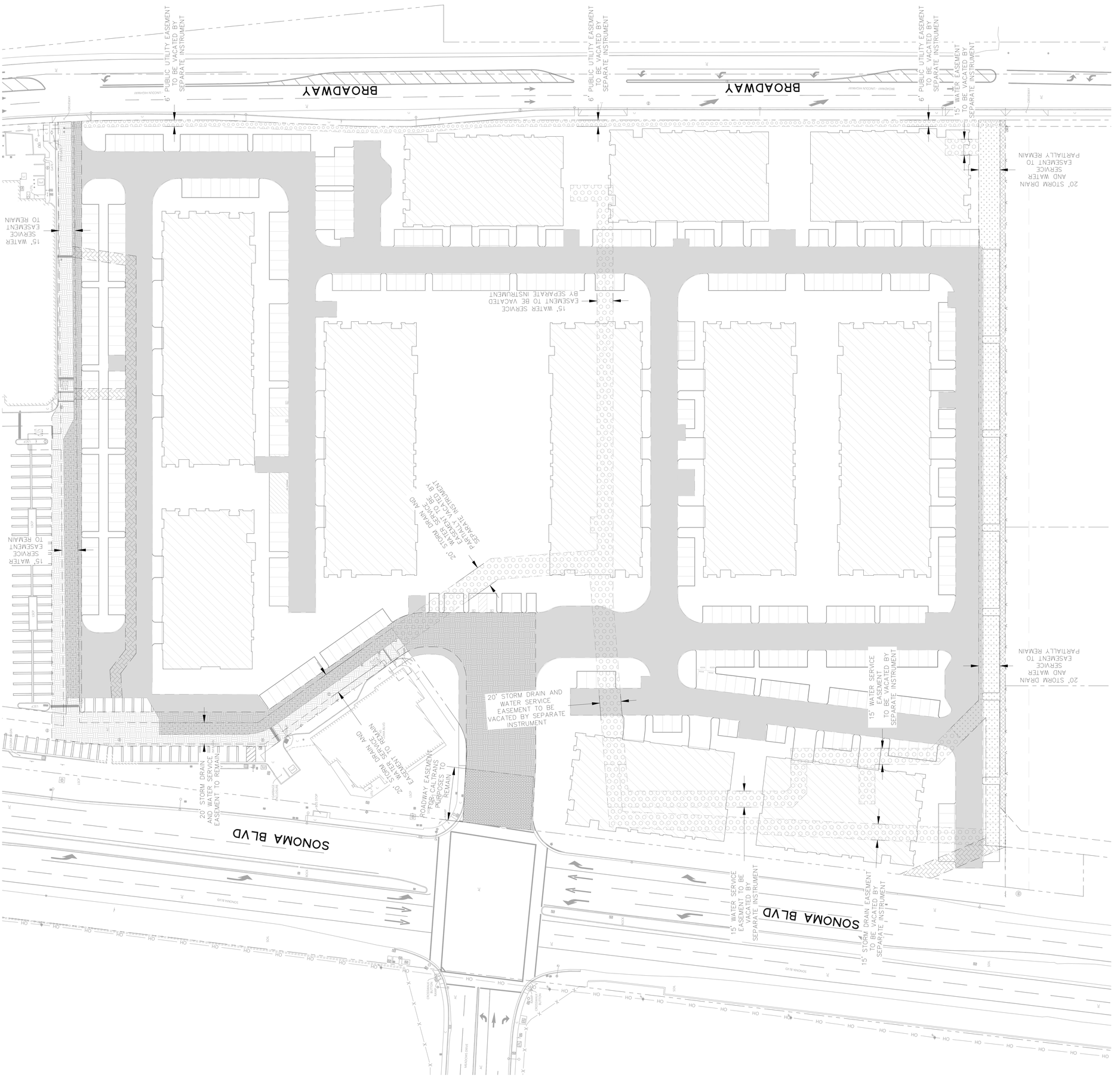
LEGEND

- EMERGENCY VEHICLE ACCESS EASEMENT (EVAE), PUBLIC ACCESS EASEMENT (PAE), PUBLIC UTILITY EASEMENT (PUE)
- RECIPROCAL ACCESS EASEMENT (RAE)
- STORM DRAIN EASEMENT (SDE)
- STORM DRAIN AND WATER SERVICE EASEMENT (SDE & WSE)
- EXISTING UTILITY EASEMENT TO REMAIN
- EXISTING UTILITY EASEMENT TO BE VACATED OR PARTIALLY VACATED

EASEMENT VACATION NOTE:
EXISTING PUBLIC UTILITY, WATER AND/OR STORM DRAIN EASEMENTS THAT ARE TO BE VACATED SHALL REQUIRE WRITTEN APPROVAL FROM EACH UTILITY COMPANY THAT THEY HAVE NO ISSUES WITH THE VACATION.

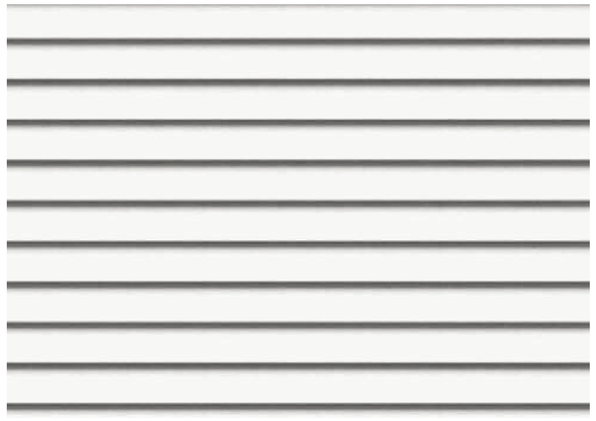
NORTH

GRAPHIC SCALE
(IN FEET)
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STONE VENEER **SV-1**
CHOPLEDGE CREATIVE MINES LIGHTHOUSE OR SIM.



CEMENTITIOUS LAP SIDING **S-1**
HARDIE PLANK SMOOTH SIDING OR SIM.



CEMENTITIOUS REVEAL PANEL **S-2**
HARDIE PANEL SMOOTH REVEAL PANEL OR SIM.



STANDING SEAM METAL ROOFING **R-2**
METALSALES VERTICAL SEAM OR SIM.



ASPHALT SHINGLE ROOFING **R-1**
GAF TIMBERLINE CHARCOAL OR SIM.

EXTERIOR STUCCO **ST-1**
20/30 SAND FINISH

MATERIALS

*NOTE IMAGES ARE CONCEPTUAL AND REPRESENTATIVE OF DESIGN INTENT ONLY



PEPPERCORN SW 7674 OR SIM.



GRAY MAATTERS SW 7066 OR SIM.



PURE WHITE SW 7005 OR SIM.

COLORS

*NOTE DIGITAL COLORS MAY NOT BE ACCURATELY REPRESENT OF REAL WORLD COLORS

STAFF REPORT
CITY OF VALLEJO
DESIGN REVIEW BOARD

I. PROJECT INFORMATION

Item No. 11-B

DATE OF MEETING:	October 12, 2023
PROJECT NUMBER:	Design Review (DR23-0012) Development Review (DVR23-0031)
PREPARED BY:	Laura Solomon, Associate Planner
PROJECT LOCATION:	1850 Broadway Street / APN: 0052-090-260
APPLICABLE ZONING CODE SECTION(S):	Design Review (VMC Chapter 16.604) Development Review (VMC Chapter 16.605)
PROJECT SUMMARY:	The proposed project consists of installing a new freestanding canopy at the SolTrans Administrative Office over an existing parking lot at 1850 Broadway Street. The freestanding canopy will have a total area of 35,146 square feet with an overall height of 31 feet and seven inches. All structures will be comprised of metal columns and beams that will support future electrical equipment for charging EV buses. The equipment screening on the canopy will be a Ribbed Metal High Panel to match the façade and the electrical conduit bridge will be a copper color. All exposed steel will be painted with Sherwin Williams 'High Reflective White' (SW 7757) and all bollards will be painted with Sherwin Williams 'Safety Yellow' (SW 4084). Power connection will be to existing utility grid on the site.
CEQA DETERMINATION:	The project is statutorily exempt from the California Environmental Quality Act (CEQA) pursuant to Section 21080.25(b)(6)(A) of the Public Resources Code; therefore, no environmental review is required.
RECOMMENDATION:	Staff recommends that the Design Review Board adopt Resolution No. DRB23-02 to Approve DR23-0012 and DVR23-0031.

PROJECT DATA SUMMARY

APPLICANT:	**SolTrans** 311 Sacramento Street Vallejo, CA 94590
PROPERTY OWNER:	City of Vallejo 555 Santa Clara Street

	Vallejo, CA 94590
GENERAL PLAN DESIGNATION:	Public Facilities and Institutions (PF)
ZONING DISTRICT:	Public and Semi-Public (PS)
EXISTING LAND USE:	Business and Professional Offices with an associated parking lot.
SURROUNDING LAND USE:	North – Single-Family Home/Industrial Light East - CA Northern Railroad / Almond Avenue South – Tow Service / Commercial Building West – Broadway Street / Residential
LOT AREA:	249,599 square feet (5.73 Acres)

II. PROJECT DESCRIPTION

A. Background

On May 23, 2023, SolTrans, the applicant, applied for a Design Review and a Development Review for the installation of a freestanding canopy structure over an existing parking lot located at 1850 Broadway Street. The project plans were routed to various agencies for their review and the application was determined to be complete by the City on August 3, 2023.

Required Permits

The project requires the following approvals under the Vallejo Municipal Code (VMC):

Table 2 – Required Permits

Permit Type	Description	VMC Code Section	Review Authority
Design Review	35,146 square feet freestanding structure	16.604.03.B	Design Review Board
Development Review	35,146 square feet freestanding structure	16.605.03	Planning and Development Services Director

Vallejo Municipal Code Section 16.604.01.(K.2), non-residential projects with an area of 5,000 square feet or more require a Design Review Board (DRB) action. Additionally, VMC Section 16.605.02 (A.1) Development Review Procedures states, *When a development project requires a use permit, variance, or any other discretionary approval, the development review application shall be submitted to the planning division as part of the application for the use permit, variance, or other discretionary approval development review decisions shall be made by the review authority for the use permit, variance or any other discretionary permit*. The Design Review Board will take action on both the Design Review and Development Review.

Location and Land Use Context

The project site is located on Broadway Street adjacent to the California Northern Railroad, south of Tuolumne Street. It is surrounded by existing industrial uses, vacant lots, and residential uses:

Table 3 – Surrounding Uses	
Direction	**Land Uses**
North	Tuolumne Street Vacant Industrial Zone Single-family Residences
East	California Northern Railroad Almond Avenue Single-family Residences
South	Garibaldi Drive Industrial Building and Tow Service Single-family Residences
West	Broadway Street Industrial Buildings Mobile Home Park

Sonoma Boulevard is located approximately 0.2 mile to the west and Highway 37 is located approximately one-half mile to the north. The immediate vicinity of the project site is characterized by existing industrial uses, vacant lots, and residential land uses (see Figure 1). The site's General Plan 2040 Land Use Designation is Public Facilities and Institutions (PF) and is implemented by Zoning District of Public and Semi-Public (PS).

Figure 1 – Vicinity Map



B. Project Description

The proposed project consists of installing a new freestanding canopy at the SolTrans Administrative Office over an existing parking lot at 1850 Broadway Street. The freestanding canopy will have a total area of 35,146 square feet with an overall height of 31 feet and seven inches. All structures will be compromised of metal columns and beams supporting future electrical equipment for charging EV buses. Matching the existing façade of the main building, the equipment screening on the canopy will be a Ribbed Metal High Panel and the electrical conduit bridge will be a copper panel grid. All exposed steel will be painted with Sherwin Williams 'High Reflective White' (SW 7757) and all bollards will be

painted with Sherwin Williams 'Safety Yellow' (SW 4084). Power connection will be to existing utility grid on the site (see Figure 2 and 3).

Figure 2 – Proposed Site Plan

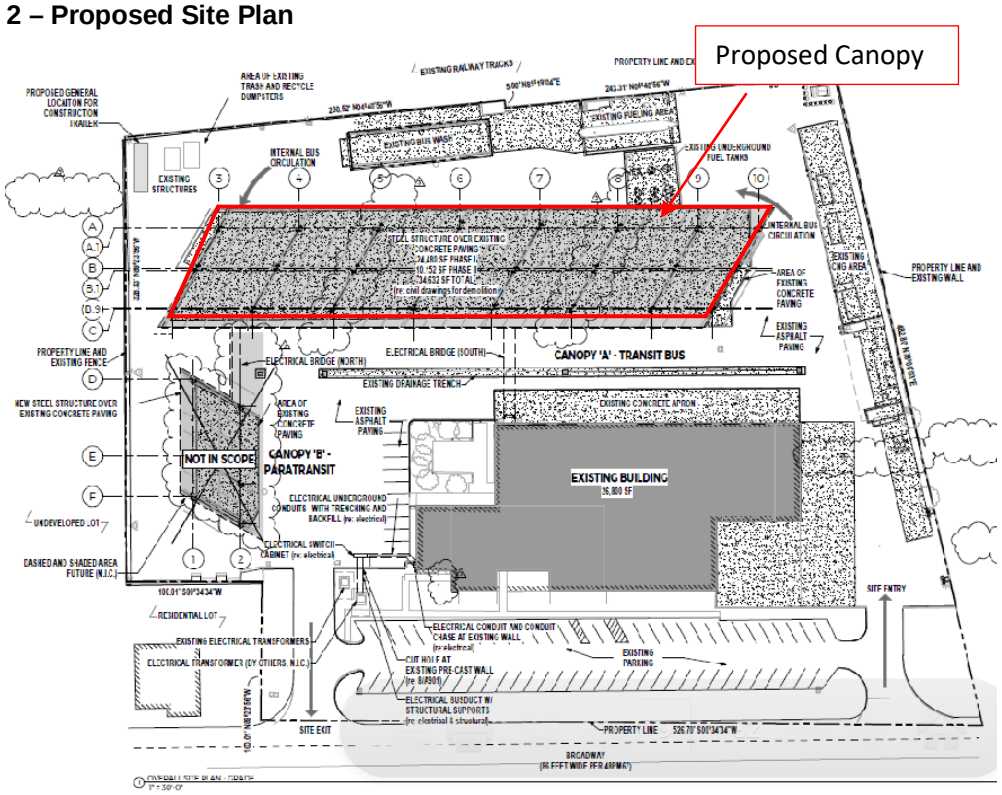


Figure 3 – Proposed Elevation



III. STAFF ANALYSIS

General Plan Consistency

The General Plan 2040 Land Use Designation for the subject property is Public Facilities and Institutions (PF). The General Plan characterizes this designation as follows:

> *"The PF designation encompasses facilities serving the good of the community, including fire and police stations; government buildings; health and social service clinics; hospitals; libraries; schools; educational institutions; and transit stations, as well as churches, community centers and community-serving recreational facilities. In some cases, it includes excess public rights-of-way. Assisted living facilities and neighborhood-oriented retail are conditional uses in this designation requiring permits. Co-location of multiple public facilities on a single site is encouraged where it will increase access to community services while offering cost savings and other benefits to community service providers. The maximum permitted FAR in the PF designation is from 0.1 to 1.0, determined on a case-by-case basis in consideration of the neighborhood context."*

The project is consistent with the PF land use designation in that it is an ancillary use to the SolTrans Administrative Office, a government building.

Additionally, the project is also consistent with applicable General Plan 2040 policies and actions. Key policies and actions relevant to the project are shown in **bold**, followed by staff's analysis in *italic*:

Table 4 - General Plan 2040 Policies and Actions	
Policies and Actions	**Staff's Analysis**
Action MTC-2.13B: Work with public transportation agencies, such as the Solano Transportation Authority and SolTrans, to develop a strategy to implement a network of public and private alternative fueling stations, such as electric vehicle charging stations and stations providing compressed natural gas (CNG).	*The installation of the freestanding canopy structure over an existing bus parking lot at SolTrans will allow them to incorporate future electric vehicle charging equipment to support their future electric buses.*

Vallejo Municipal Code Compliance

The project site is zoned Public and Semi-Public (PS). The Zoning Code provides the following description for the RC Zoning District:

> *The PS Zoning District is intended to regulate areas that provide governmental and quasi-governmental services and supportive services.*

The project is consistent with the applicable standards in the PS zoning district as demonstrated in the table below:

Table 4 – Public and Semi-Public (PS) – Development Standards (VMC Table 16.208-A)			
Development Standard		Proposal	Compliant
Maximum Height (ft.)	45; 35 within 50 feet of a R District	31 feet and 7 inches	Yes
Minimum Setbacks (ft.)			
Front	10; when adjacent to an R district, the front setback is the same as that of the R district	289 feet	Yes
Side	10 - street side; 5 interior side, plus 2 ft.	26 feet and 32 feet	Yes

	per story for buildings over two stories adjacent to an R District		
Rear	10; 15 adjacent to an R District	28 feet	Yes
Maximum Floor Area Ratio (FAR)	1.0	0.25	Yes

Accessory Structures are regulated in VMC Section 16.501.02. This section notes that "accessory buildings in mixed-use and non-residential zoning districts shall be subject to the same regulations as main buildings". Due to the size of this project, it requires both a Development and Design Review entitlements. As mentioned above, staff has verified that the project is consistent with the applicable development standards outlined in Title 16 of the Vallejo Municipal Code, as proposed and conditioned.

Design Review Findings

VMC Section 16.604.03.B provides that the director or the design review board shall approve, conditionally approve or deny, or make recommendations to the planning commission for final design review approval after finding that the application (the findings are in **bold**, and staff's determination follows in *italics*):

1. **Is consistent with the purposes of this chapter, the design policies of the general plan and any applicable specific plan, any adopted applicable design guidelines.**

   The project site is designated as Public Facilities and Institutions (PF) on the General Plan Land Use Map. The General Plan 2040 anticipates the district to encompasses facilities serving the good of the community, including fire and police stations; government buildings; health and social service clinics; hospitals; libraries; schools; educational institutions; and transit stations, as well as churches, community centers and community-serving recreational facilities. As proposed, the project is consistent with the PF general land use designation in that the proposed project is an ancillary use to SolTrans Administrative Office and will host future equipment to recharge EV buses. The project is also consistent with applicable General Plan 2040 policies.

   The subject site is not within an adopted specific plan and design guidelines have not been adopted for this location.

2. **Is consistent with any planning are zoning approvals by the director or the planning commission.**

   The project is consistent with the Public and Semi-Public (PS) zoning district in that it is an ancillary use to the SolTrans Administrative Office and will host future equipment to recharge EV buses. The project is consistent with the applicable development standards outlined in Title 16 of the Vallejo Municipal Code.

3. **Complies with any other relevant city policies or regulations.**

   The project as proposed complies with VMC Section 16.501.02, Accessory Buildings and Structures, as the project has been designed within required setbacks and associated equipment and the necessary support structure are not visible from the public right-of-way.

4. **Meets the following criteria:**
   a. **The aesthetic design, including its exterior design and landscaping, is appropriate to the function of the project and will provide an attractive and comfortable environment for occupants, visitors, and the general community.**

The overall design of the project is appropriate to the function of the project and will obscure roof top equipment from the public right-of-way.

b. **Project details, colors, materials, and landscaping are fully integrated with one another and used in a manner that is visually consistent with the proposed architectural design.**

All structures will be comprised of metal columns and beams supporting the canopy. All exposed steel will be painted with 'High Reflective White' (SW 7757 or equal) and all bollards will be painted with 'Safety Yellow' (SW 4084 or equal). Matching the existing façade of the main building, the equipment screening on the canopy will be a Ribbed Metal High Panel and the electrical conduit bridge will be a copper color metal panel grid.

c. **The project has been designed with consideration of neighboring development.**

The project has been designed with consideration of existing neighboring development in such that it is set back 26 feet from the north property line, 28 feet from the east property line and 32 feet from the south property line and has an overall height of 31 feet and 7 inches.

d. **The project contributes to the creation of an attractive and visually interesting built environment that includes well-articulated structures that present varied building facades, rooflines, and building heights and encourages increased pedestrian activity and transit use.**

Not applicable; the proposed project is the installation of a freestanding canopy over an existing parking lot in the rear of the parcel utilized by SolTrans for future equipment to charge the EV buses.

e. **Street frontages are attractive and interesting for pedestrians, address the street and provide for greater safety by allowing for surveillance of the street by people inside buildings and elsewhere.**

Not applicable; the proposed project is a freestanding canopy over an existing parking lot in the rear of the parcel utilized by SolTrans.

f. **The proposed design is compatible with the historical or visual character of any area recognized by the city as having such character.**

Not applicable; the project site is not located within the boundaries of a historical area as identified by the City of Vallejo.

g. **The aesthetic design preserves significant public views and vistas from public streets and open spaces and enhances them by providing areas for pedestrian activity.**

The proposed project will be installed over an existing parking lot and will continue to have no impact on public views from public streets.

h. **The proposed landscaping plan is suitable for the type of project and will improve the appearance of the community by enhancing the building, minimizing hardscape and softening walls; and the landscape plan incorporates plant materials that are drought-tolerant, will minimize water usage, and are compatible with Vallejo's climate.**

Not applicable; as there is no landscaping plan associated with this entitlement.

i. **The project has been designed to be energy efficient including, but not limited to, landscape design and green or eco-friendly design and materials.**

As proposed, the project will install a freestanding canopy structure over an existing parking lot to be utilized by SolTrans for future equipment to recharge EV buses that will create an energy efficient site.

j. **The project design protects and integrates natural features including creeks, open space, significant vegetation, and geologic features.**

Not applicable as the project site does not include natural features such as creeks, open space, significant vegetation, or geologic features.

Development Review Findings

VMC Section 16.605.03, requires the review authority make the following findings prior to granting a Development Review (the findings are in **bold**, and staff's determination follows in *italics*):

1. **Complies with all applicable specific standards and criteria of this Zoning Code.**

   The project is consistent with the Public and Semi-Public (PS) zoning district in that it is an ancillary use to SolTrans Administrative Office and will host future equipment to recharge EV buses. The project is consistent with the applicable development standards outlined in Title 16 of the Vallejo Municipal Code.

2. **Is consistent with the purposes of this chapter, the design policies of the general plan and any applicable specific plan, any adopted applicable design guidelines.**

   The project site is designated as Public Facilities and Institutions (PF) on the General Plan Land Use Map. The General Plan 2040 anticipates the district to encompasses facilities serving the good of the community, including fire and police stations; government buildings; health and social service clinics; hospitals; libraries; schools; educational institutions; and transit stations, as well as churches, community centers and community-serving recreational facilities. As proposed, the project is consistent with the PF general land use designation in that the proposed project is an ancillary use to SolTrans Administrative Office and will host future equipment to recharge EV buses. The project is also consistent with applicable General Plan 2040 policies.

   The subject site is not within an adopted specific plan and design guidelines have not been adopted for this location.

3. **Complies with any design conditions, standards, or requirements imposed by a discretionary approval including but not limited to a Major or Minor Use Permit, Variance, Specific Plan, Planned Development, or tentative map applicable to the project or the location where it is proposed.**

   VMC Section 16.604.01(K.2) Design Review responsibility states, non-residential projects with a building area of 5,000 square feet or greater is a Design Review Board Decision. On October 12, 2023, the City of Vallejo's Design Review Board held a public hearing and staff made the recommendation to approve the Design Review Permit (DR23-0012) and the Development Review Permit (DVR23-0031) for the installation of a freestanding canopy over an existing parking lot for charging SolTrans EV buses.

4. **Is in substantial compliance with any applicable adopted design guidelines.**

   The project is not subject to any applicable adopted design guidelines.

5. **Will serve to achieve groupings of structures that are well related one to another and which, taken together, will result in a well-composed urban design, with consideration given to site, height, arrangement, texture, material, color and appurtenances, the relation of these factors to other structures in the immediate area, and the relation of the development to the total setting as seen from key points in the surrounding area; only elements of design which have some significant relationship to outside appearance shall be considered.**

   The overall design of the project is appropriate to the function of the project and will provide a shaded parking lot for the SolTrans Administrative EV buses. All exposed steel will be painted with 'High Reflective White' (SW 7757 or equal) and all bollards will be painted with 'Safety Yellow' (SW 4084 or equal). Matching the existing façade of the main building, the equipment screening on the canopy will be a Ribbed Metal High Panel and the electrical conduit bridge will be a copper color metal panel grid.

6. **Will be of a quality and demonstrates thoughtful site planning that will serve to protect the value of private and public investments in the area.**

   The proposed project demonstrates thoughtful site planning in that it meets all the development standards required in the subject location and will serve to protect the value of the private and public investments in the area.

7. **That the project has been reviewed in compliance with the California Environmental Quality Act, if applicable, and the requirements of this Chapter.**

   The proposed project is statutorily exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 21080.25(b)(6)(A) of the Public Resources Code; therefore, no further environmental review is required.

   Public Resources Code Section 21080.25(b)(6)(A) exempts a public project from CEQA to construct or maintain infrastructure or facilities to charge, refuel, or maintain zero-emission public transit buses, provided the project is carried out by a public transit agency [in accordance with the State's air quality regulations] and the project is located on property owned by a local agency or within an existing right-of-way.

IV. ENVIRONMENTAL REVIEW

Following a review of the project, staff has determined the project is statutorily exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 21080.25(b)(6)(A) of the Public Resources Code.

Public Resources Code Section 21080.25(b)(6)(A) provides that CEQA does not apply to a public project to construct or maintain infrastructure or facilities to charge, refuel, or maintain zero-emission public transit buses, provided the project is carried out by a public transit agency [in accordance with the State's air quality regulations] and the project is located on property owned by a local agency or within an existing right-of-way.

The proposed project consists of installing a freestanding canopy structure over an existing City-owned parking lot to hold future equipment for charging EV buses. All associated equipment will connect to the existing utility grid on the site; therefore, there is no equipment installed on the ground. No plants protected by the Native Plant Protection Act would be disturbed, since no such plants exist in the project area. The project does not require any permits under the Clean Water Act, Porter-Cologne Water Quality Control Act, or Federal Endangered Species Act, since no waterbody or endangered species exist in the project areas. The project does not require a streambed alteration permit, as there is no stream bed on the project site. Therefore, the statute's requirements have been met and no further environmental review is required.

V. NOTICING AND PUBLIC COMMENTS

On September 28, 2023, pursuant to VMC Section 16.602.08(A), notice of this hearing was published in the Times Herald and mailed to all active neighborhood groups and property owners within 500 feet of the subject property and electronically mailed to the members of the Design Review Board and the applicant.

Staff has not received any comments or questions from the public on the application as of the writing of this staff report.

VI. CONCLUSION / STAFF RECOMMENDATION

Based on the analysis contained in this staff report and the project's consistency with General Plan 2040 and the Vallejo Municipal Code, staff recommends that the Design Review Board APPROVE Design Review (DR) 23-0012 and Development Review (DVR) 23-0031 based on the findings and provided in the attached Resolution No. DRB23-02 and subject to the Conditions of Approval provided as Exhibit A to the Resolution.

VII. EXPIRATION

Pursuant to VMC Section 16.602.12(A), approval of this Design Review and Development Review shall automatically expire 24 months after its approval, unless authorized construction has commenced prior to the expiration date of October 12, 2025 (if approved at this meeting and not appealed).

VIII. APPEAL PROCEDURE

VMC Section 16.602.14, Appeals, the applicant, or any party adversely affected by the decision of the Design Review Board may, within ten days after the rendering of the decision of the Design Review Board appeal in writing to the City Council by filing a written appeal with a fee of $1,409.21 dollars with the City Clerk. Such written appeal shall state the reason or reasons for the appeal and why the applicant believes he or she is adversely affected by the decision of the Design Review Board. Such appeal shall not be timely filed unless it is actually received by the City Clerk or designee no later than the close of business on the tenth calendar day after the rendition of the decision of the Design Review Board. If such date falls on a weekend or City holiday, then the deadline shall be extended until the next regular business day.

Notice of the appeal, including the date and time of the City Council's consideration of the appeal, shall be sent by the City Clerk to all property owners within five hundred feet of the project boundary. The Council may affirm, reverse, or modify any decision of the Design Review Board that is appealed.

IX. ATTACHMENTS

1. Resolution No. DRB 23-02
    a. Exhibit A – Conditions of Approval
2. Project Plans
3. Material Sample Board

CITY OF VALLEJO DESIGN REVIEW BOARD

RESOLUTION NO. DRB 23-02

RESOLUTION APPROVING DESIGN REVIEW (DR 23-0012) AND DEVELOPMENT REVIEW (DVR23-0031) ENTITLMENTS FOR THE INSTALLATION OF A FREESTANDING CANOPY STRUCTURE OVER AN EXISTING PARKING LOT AT 1850 BROADWAY STREET (APN: 0052-090-260)

* *

I. GENERAL FINDINGS

WHEREAS, on August 29, 2017, the City Council of the City of Vallejo adopted General Plan 2040; and

WHEREAS, on July 22, 2021, the City Council adopted Zoning Code and Zoning Map; and

WHEREAS, on May 23, 2023, SolTrans submitted an application seeking Design Review and Development Review entitlements to install a freestanding canopy structure over an existing parking lot ("Project") used by SolTrans and owned by the City of Vallejo located at 1850 Broadway Street ("the property"); and

WHEREAS, the property has a General Plan 2040 land use designation of Public Facilities and Institutions; and

WHEREAS the property is located in the Public and Semi-Public Zoning District; and

WHEREAS, on August 3, 2023, the application for the Project was determined to be complete for processing; and

WHEREAS, on September 28, 2023, pursuant to Vallejo Municipal Code Section16.602.08(A), notice of this hearing was published in the Times Herald and mailed to all active neighborhood groups and property owners within 500 feet of the subject property and electronically mailed to the members of the Design Review Board and to the applicant; and

WHEREAS, on October 12, 2023, at 7p.m., the City of Vallejo Design Review Board, after giving all public notices required by State law and the City of Vallejo Municipal Code, conducted a duly noticed public hearing; and

WHEREAS, the Design Review Board considered testimony and evidence, both written and oral, provided at the public hearing, as well as other documents contained in the record of proceedings relating to the Project, which are maintained in the offices of the City of Vallejo Planning Division; and

WHEREAS, based on evidence received in the staff report and at the public hearing, the Design Review Board makes the following factual findings:

II. FINDINGS RELEVANT TO THE APPROVAL OF THE DESIGN REVIEW PERMIT (VMC Section 16.604.03.B)

1. **Is consistent with the purposes of this chapter, the design policies of the general plan and any applicable specific plan, any adopted applicable design guidelines.** *The project site is designated as Public Facilities and Institutions (PF) on the General Plan Land Use Map. The General Plan 2040 anticipates the district to encompasses facilities serving the good of the community, including fire and police stations;*

government buildings; health and social service clinics; hospitals; libraries; schools; educational institutions; and transit stations, as well as churches, community centers and community-serving recreational facilities. As proposed, the project is consistent with the PF general land use designation in that the proposed project is an ancillary use to SolTrans Administrative Office and will host future equipment to recharge EV buses. The project is also consistent with applicable General Plan 2040 policies.

The subject site is not within an adopted specific plan and design guidelines have not been adopted for this location.

2. **Is consistent with any planning are zoning approvals by the director or the planning commission.**

   The project is consistent with the Public and Semi-Public (PS) zoning district in that it is an ancillary use to the SolTrans Administrative Office and will host future equipment to recharge EV buses. The project is consistent with the applicable development standards outlined in Title 16 of the Vallejo Municipal Code.

3. **Complies with any other relevant city policies or regulations.**

   The project as proposed complies with VMC Section 16.501.02, Accessory Buildings and Structures, as the project has been designed within required setbacks and associated equipment and the necessary support structure are not visible from the public right-of-way.

4. **Meets the following criteria:**
   a. **The aesthetic design, including its exterior design and landscaping, is appropriate to the function of the project and will provide an attractive and comfortable environment for occupants, visitors, and the general community.**

      The overall design of the project is appropriate to the function of the project and will obscure roof top equipment from the public right-of-way.

   b. **Project details, colors, materials, and landscaping are fully integrated with one another and used in a manner that is visually consistent with the proposed architectural design.**

      All structures will be comprised of metal columns and beams supporting the canopy. All exposed steel will be painted with 'High Reflective White' (SW 7757 or equal) and all bollards will be painted with 'Safety Yellow' (SW 4084 or equal). Matching the existing façade of the main building, the equipment screening on the canopy will be a Ribbed Metal High Panel and the electrical conduit bridge will be a copper color metal panel grid.

   c. **The project has been designed with consideration of neighboring development.**

      The project has been designed with consideration of existing neighboring development in such that it is set back 26 feet from the north property line, 28 feet from the east property line and 32 feet from the south property line and has an overall height of 31 feet and 7 inches.

   d. **The project contributes to the creation of an attractive and visually interesting built environment that includes well-articulated structures**

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that present varied building facades, rooflines, and building heights and encourages increased pedestrian activity and transit use.

Not applicable; the proposed project is the installation of a freestanding canopy over an existing parking lot in the rear of the parcel utilized by SolTrans for future equipment to charge the EV buses.

e. **Street frontages are attractive and interesting for pedestrians, address the street and provide for greater safety by allowing for surveillance of the street by people inside buildings and elsewhere.**

Not applicable; the proposed project is a freestanding canopy over an existing parking lot in the rear of the parcel utilized by SolTrans.

f. **The proposed design is compatible with the historical or visual character of any area recognized by the city as having such character.**

Not applicable; the project site is not located within the boundaries of a historical area as identified by the City of Vallejo.

g. **The aesthetic design preserves significant public views and vistas from public streets and open spaces and enhances them by providing areas for pedestrian activity.**

The proposed project will be installed over an existing parking lot and will continue to have no impact on public views from public streets.

h. **The proposed landscaping plan is suitable for the type of project and will improve the appearance of the community by enhancing the building, minimizing hardscape and softening walls; and the landscape plan incorporates plant materials that are drought-tolerant, will minimize water usage, and are compatible with Vallejo's climate.**

Not applicable; as there is no landscaping plan associated with this entitlement.

i. **The project has been designed to be energy efficient including, but not limited to, landscape design and green or eco-friendly design and materials.**

As proposed, the project will install a freestanding canopy structure over an existing parking lot to be utilized by SolTrans for future equipment to recharge EV buses that will create an energy efficient site.

j. **The project design protects and integrates natural features including creeks, open space, significant vegetation, and geologic features.**

Not applicable as the project site does not include natural features such as creeks, open space, significant vegetation, or geologic features.

III. FINDINGS RELEVANT TO THE APPROVAL OF THE DEVELOPMENT REVIEW PERMIT (VMC Section 16.605.03)

1. Complies with all applicable specific standards and criteria of this Zoning Code.

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The project is consistent with the Public and Semi-Public (PS) zoning district in that it is an ancillary use to SolTrans Administrative Office and will host future equipment to recharge EV buses. The project is consistent with the applicable development standards outlined in Title 16 of the Vallejo Municipal Code.

2. **Is consistent with the purposes of this chapter, the design policies of the general plan and any applicable specific plan, any adopted applicable design guidelines.**

   The project site is designated as Public Facilities and Institutions (PF) on the General Plan Land Use Map. The General Plan 2040 anticipates the district to encompasses facilities serving the good of the community, including fire and police stations; government buildings; health and social service clinics; hospitals; libraries; schools; educational institutions; and transit stations, as well as churches, community centers and community-serving recreational facilities. As proposed, the project is consistent with the PF general land use designation in that the proposed project is an ancillary use to SolTrans Administrative Office and will host future equipment to recharge EV buses. The project is also consistent with applicable General Plan 2040 policies.

   The subject site is not within an adopted specific plan and design guidelines have not been adopted for this location.

3. **Complies with any design conditions, standards, or requirements imposed by a discretionary approval including but not limited to a Major or Minor Use Permit, Variance, Specific Plan, Planned Development, or tentative map applicable to the project or the location where it is proposed.**

   VMC Section 16.604.01(K.2) Design Review responsibility states, non-residential projects with a building area of 5,000 square feet or greater is a Design Review Board Decision. On October 12, 2023, the City of Vallejo's Design Review Board held a public hearing and staff made the recommendation to approve the Design Review Permit (DR23-0012) and the Development Review Permit (DVR23-0031) for the installation of a freestanding canopy over an existing parking lot for charging SolTrans EV buses.

4. **Is in substantial compliance with any applicable adopted design guidelines.**

   The project is not subject to any applicable adopted design guidelines.

5. **Will serve to achieve groupings of structures that are well related one to another and which, taken together, will result in a well-composed urban design, with consideration given to site, height, arrangement, texture, material, color and appurtenances, the relation of these factors to other structures in the immediate area, and the relation of the development to the total setting as seen from key points in the surrounding area; only elements of design which have some significant relationship to outside appearance shall be considered.**

   The overall design of the project is appropriate to the function of the project and will provide a shaded parking lot for the SolTrans Administrative EV buses. All exposed steel will be painted with 'High Reflective White' (SW 7757 or equal) and all bollards will be painted with 'Safety Yellow' (SW 4084 or equal). Matching the existing façade of the main building, the equipment screening on the canopy will be a Ribbed Metal High Panel and the electrical conduit bridge will be a copper color metal panel grid.

6. **Will be of a quality and demonstrates thoughtful site planning that will serve to protect the value of private and public investments in the area.**

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The proposed project demonstrates thoughtful site planning in that it meets all the development standards required in the subject location and will serve to protect the value of the private and public investments in the area.

7. That the project has been reviewed in compliance with the California Environmental Quality Act, if applicable, and the requirements of this Chapter.

The proposed project is statutorily exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 21080.25(b)(6)(A) of the Public Resources Code; therefore, no further environmental review is required.

Public Resources Code Section 21080.25(b)(6)(A) exempts a public project from CEQA to construct or maintain infrastructure or facilities to charge, refuel, or maintain zero-emission public transit buses, provided the project is carried out by a public transit agency [in accordance with the State's air quality regulations] and the project is located on property owned by a local agency or within an existing right-of-way.

III. CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDING

Following a review of the project, staff has determined that it is statutorily exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 21080.25 of the Public Resources Code.

Public Resources Code Section 21080.25(b)(6)(A) exempts a public project from CEQA to construct or maintain infrastructure or facilities to charge, refuel, or maintain zero-emission public transit buses, provided the project is carried out by a public transit agency [in accordance with the State's air quality regulations] and the project is located on property owned by a local agency or within an existing right-of-way.

The proposed project consists of installing a freestanding canopy structure over an existing City-owned parking lot to hold future equipment for charging EV buses. All associated equipment will connect to the existing utility grid on the site; therefore, there is no equipment installed on the ground. No plants protected by the Native Plant Protection Act would be disturbed, since no such plants exist in the project area. The project does not require any permits under the Clean Water Act, Porter-Cologne Water Quality Control Act, or Federal Endangered Species Act, since no waterbody or endangered species exist in the project areas. The project does not require a streambed alteration permit, as there is no stream bed on the project site. Therefore, the statute's requirements have been met and no further environmental review is required.

IV. RESOLUTION APPROVING THE PROJECT AT 961 PORTER STREET

NOW, THEREFORE, LET IT BE RESOLVED that the Design Review Board hereby APPROVES Design Review (DR) 23-0012 and Development Review (DVR) 23-0031 for the installation of a freestanding canopy structure for SolTrans over an existing parking lot at 1850 Broadway Street based on the above findings and subject to the Conditions of Approval attached to this Resolution.

V. VOTE

PASSED AND ADOPTED at a regular meeting of the Design Review Board of the City of Vallejo, State of California, on October 12, 2023, by the following vote:

AYES:
NOES:

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ABSENT:
ABSTAIN:

MATTHEW KENNEDY, CHAIRPERSON
City of Vallejo Design Review Board

Attest:

MARGARET KAVANAUGH-LYNCH, SECRETARY
City of Vallejo Design Review Board

DRAFT

CONDITIONS OF APPROVAL
DESIGN REVIEW (DR) #23-0012
DEVELOPMENT REVIEW (DVR) #23-0031
1850 BROADWAY STREET
APN: 0054-232-150

PROJECT DESCRIPTION

The proposed project consists of installing a new freestanding canopy at the SolTrans Administrative Office over an existing parking lot at 1850 Broadway Street. The freestanding canopy will have a total area of 35,146 square feet with an overall height of 31 feet and seven inches. All structures will be compromised of metal columns and beams supporting the array panels. Matching the existing façade of the main building, the equipment screening on the canopy will be a Ribbed Metal High Panel and the electrical conduit bridge will be a copper panel grid. All exposed steel will be painted with Sherwin Williams 'High Reflective White' (SW 7757) and all bollards will be painted with Sherwin Williams 'Safety Yellow' (SW 4084). Power connection will be to existing utility grid on the site.

A. Planning Division

Staff Contact: Laura Solomon, Associate Planner | (707) 648-4391
laura.solomon@cityofvallejo.net

Pre-Building Permit:

1. Prior to building permit issuance, submit a numbered list to the Planning Division with a written response on how each condition of project approval contained in this report will be satisfied. The list should be submitted to the project planner who will coordinate development of the project. The approved COA will be included in the permit set after the cover sheet with each condition listed and how the applicant will address each condition in writing.

2. Prior to building permit issuance, the Planning Division shall confirm that the building permit, grading permit and all other drawings and documents substantially conform with the documents and/or representations, whether oral or written. Pursuant to VMC 16.602.10.b the site plan, floor plans, building elevations and/or any additional information or representations, whether oral or written, indicating the proposed structure or manner of operation submitted with an application or submitted during the approval process shall be deemed conditions of approval. Any approval may be subject to requirements that the applicant guarantees, warranties, or ensures compliance with the plans and conditions in all respects.

3. Prior to building permit issuance, Applicant shall apply for and receive a Temporary Use Permit from the Planning Division for any temporary office or construction trailer.

During Construction:

1. Construction activities shall be managed in compliance with the following requirements:
   a. Site Watering. During the construction of a project, all portions of the site shall be watered as necessary to reduce emissions of dust and other particulate matter, and all stockpiles shall be covered.
   b. Maintenance. Streets and sidewalks shall be made dirt free at the completion of construction.
   c. Noise. All construction and transport equipment shall be muffled in accordance with state and federal laws.

d. Emissions. Construction and transport equipment shall be operated so as to minimize exhaust emissions. During construction, trucks and equipment should be running only when necessary.
e. Hours of Operation. Grading and pile driving operations within ¼ mile of residential units shall be limited to between 8:00 am and 5:00 p.m. on weekdays to ensure compliance with the requirements for construction activity in Subsection 16.502.12.D.1., Maximum Noise Level for Temporary Construction Activity, or as otherwise restricted as part of an approval.
f. Water Run-off. All water run-off from construction sites shall be controlled. During construction, trucks and equipment should be running only when necessary, and shall comply with Chapter 12.41 of the Vallejo Municipal Code.

2. No person shall make, or cause to suffer, or permit to be made upon any public property, public right-of-way or private property, any excessive noise, annoying noise, amplified sound or vibrations that are physically annoying to reasonable persons of normal sensitivity or that are so harsh or so prolonged or unnatural or unusual in their use, time or place as to cause or contribute to the unnecessary and unreasonable discomfort of any persons of normal sensitivity located at the lot line of the property from which these noises emanate or that interfere with the peace and comfort of residents or their guests, or the operators or customers in places of business in the vicinity, or that may detrimentally or adversely affect such residences or places of business. (VMC Section 16.502.09 (C)

3. Construction, demolition, and related loading/unloading activities that may generate noise shall be limited to the following: 7 a.m. and 6 p.m. on Monday- Friday, Saturday 9 am- 6 pm and Sundays and holidays not allowed. (VMC Section 16.502.09 (D)

4. The fencing for construction sites shall not be installed until a building permit or grading permit has been issued and shall be removed prior to final inspection. In the event that the building permits expire before the construction is completed, the Planning and Development Services Director may issue a temporary use permit pursuant to Chapter 16.339, Temporary Uses, to allow the fencing to remain for a longer period of time. (VMC Section 16.505.08 (B)

General Requirements

1. A final decision on an application for any discretionary approval subject to appeal shall become effective after the expiration of ten calendar days following the date of action unless an appeal is filed. No building permit or business license shall be issued until the 11th day following the date of the action. If a different termination date is fixed at the time of granting, or if actual construction or alteration has begun under valid building permits, the ten-day period may be waived. (VMC Section 16.602.11)

2. The review authority, in the granting of any permit, may specify a time, consistent with the purposes of the use and necessary to safeguard the public safety, health and welfare, within which the proposed use must be undertaken and actively and continuously pursued. If no time period is specified, any permit granted under the Zoning Code shall automatically expire within two years of the effective date (August 31, 2025; if approved) (VMC Section 16.602.12 (A)). All Planning permits associated with this approval shall expire on August 31, 2025, unless exercised or extended.

3. If a permit is granted in conjunction with approval of new construction, issuance of a building permit shall constitute exercise of rights; provided, however, that, unless otherwise specified as a condition of project approval, the permit shall expire if:
    i. The Building Permit expires.

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ii. Final inspection is not completed, or certificate of occupancy issued within the time specified as a condition of project approval.
iii. The rights granted under the permit are not exercised within one year following the earliest to occur of the following: issuance of a certificate of occupancy; or if no certificate of occupancy is required, the last required final inspection for the new construction. (VMC Section 16.602.11 (B)

4. The Planning and Development Services Director may approve a one-year extension of any permit or approval granted for a residential or non-residential project under the Zoning Code upon receipt of a written application and fees received fifteen calendar days (August 31, 2025) before the expiration date with the required fee prior to expiration of the permit. (VMC Section 16.602.11 (C.1)

5. No change in the use or structure for which a permit or other approval has been issued is permitted unless the permit is modified as provided for in the Zoning Code. For the purpose of this chapter, the modification of a permit may include minor modification of a development review approval that is in substantial compliance as determined by the Planning and Development Services Director. (VMC Section 16.602.11 (D)

6. Applications for changes to an approved permit must be filed and processed in compliance with the requirements in VMC Section 16.602.02, Application Forms and Fees, and shall be subject to a fee established by the Master Fee Schedule.
    i. Minor Modifications. The Planning and Development Services Director may approve minor changes to approved plans that are consistent with the original findings and conditions approved by the hearing body and would not intensify any potentially detrimental effects of the project.
    ii. Major Modifications. A request for changes in conditions of approval of a discretionary permit or a change in an approved site plan or building plan that would affect the findings adopted as a basis for project approval shall be treated as a new application, except that the Planning and Development Services Director may approve changes that she determines to be minor. (VMC Section 16.602.11 (E)

7. A request for major changes to an approved site plan or building plan that will not affect the findings adopted as a basis for project approval, but are still considered substantial, shall be forwarded to the original review authority for the discretionary permit for review and approval. Any changes to the proposed colors shall require approval by the Planning and Development Services Director. (VMC Section 16.602.11 (F)

8. For new developments, utilities including, but not limited to, all electrical, telephone, cable television, fiber-optic cable, gas, water, sewer, irrigation/recycled water, and similar distribution lines providing direct service to a project shall be installed underground within the site. This requirement may be waived by the Planning and Development Services Director upon determining that underground installation is infeasible, or the electrical line is otherwise exempt from an under-grounding requirement. (VMC Section 16.501.10)

9. The Applicant shall obtain an inspection from the Planning Division prior to final building inspection. All inspections require a minimum of 24-hour notice. Occupancy permits shall not be granted until all construction and landscaping are completed and finaled in accordance with the approved plans and required conditions of approval or a bond has been posted to cover all costs of the unfinished work as agreed to by the Planning and Development Services Director.

10. Applicant shall indemnify, hold harmless, and defend City, its officers, officials, directors, employees, agents, volunteers and affiliates and each of them from any and all claims, demands, causes of action, damages, costs, expenses, actual attorney's

fees, applicant's fees, expert fees, losses or liability, in law or in equity, of every kind and nature whatsoever arising out of or in connection with Applicant's operations, or any subcontractor's operations, to be performed under this agreement for Applicant's or subcontractor's tort negligence including active or passive, or strict negligence, including but not limited to personal injury including, but not limited to bodily injury, emotional injury, sickness or disease, or death to persons and/or damage to property of anyone, including loss of use thereof, caused or alleged to be caused by any act or omission of Applicant, or any subcontractor, or anyone directly or indirectly employed by any of them or anyone for the full period of time allowed by the law, regardless to any limitation by insurance, with the exception of the sole negligence or willful misconduct of the City. No modification of the project, any application, permit, certification, condition, environmental determination, other approval, change in applicable laws and regulations, or change in processing methods shall alter the Applicant's indemnity obligation.

B. Building Division

Staff Contact: Steve Arnold, (707) 648-4387, Steve.Arnold@cityofvallejo.net

1. Plans and permits will be required for Building, mechanical, plumbing, and electrical work per California Code of Regulations, Title 24, and applicable City Ordinance in effect at the time of completed Building Permit application date and required fees paid at time of application.

C. Vallejo Flood and Wastewater (VFWD)

Staff Contact: Alan Mitchell, (530) 681-0553, Alan.Mitchell@ponticelloinc.com

1. Plans will be subject to VFWD approval during the Building Permit Process.

2. Applicant will need to fill out a Sanitary Sewer Information Form to get a connection permit and pay applicable District Fees.

D. Fire Prevention Division

Staff Contact: Vince Sproete, (707) 648-4565, Vince.Sproete@cityofvallejo.net

1. Fire Apparatus access is required. Access roads shall have an unobstructed width of not less than 20' with a maximum grade of 15%. Access roads shall have a minimum of 13'-6" of vertical clearance, including trees, wires and overhead signs. Speed bumps or other vertical traffic calming devices are prohibited on routes of fire access.

2. Fire Access turning radius requires fire department review and approval . Please submit to the Fire Prevention Division a scaled site plan drawing at 1 inch = 40 or 1 inch = 20 or 1 inch = 10 prior to construction.

3. All fire protection equipment and building utilities including gas shut-off valves, and electrical service disconnects shall be located in a single area to allow use by the Fire Department without having to transit through a structure. In new construction, equipment should be located within an interior room having an exterior access door or in an exterior enclosure attached to the building, specifically for the purpose of housing such equipment. Please indicate on the plans these locations prior to building permit submittal.

4. The building electrical service disconnecting means shall be installed in a readily accessible location either outside the building or nearest the point of entrance of the service conductors. The disconnecting means shall be accessible to emergency personnel, either directly or by a remote actuating device without requiring transit of the building interior.

5. Prior to final Inspection, in accordance with the 2022 California Fire Code rooms or areas containing controls for HVAC systems, electrical panels, automatic fire extinguishing

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systems, fire alarm equipment or other detection, suppression or control elements shall be identified with appropriate signs.

6. Prior to final inspection, the minimum fire-extinguisher requirement shall be one 4A-40BC rated portable unit in such locations so that maximum floor-travel distance does not exceed 75' to the nearest extinguisher from any portion of the building with a maximum of 3,000 square feet of floor area surveyed. Plan submittal shall include the proposed location of extinguishers. Final location shall be approved in the field by the Fire Department.

7. All fire extinguishers shall be mounted in a conspicuous and readily accessible location either on a bracket or within an approved storage cabinet. Fire extinguishers shall be mounted so the top of the unit is 3 feet to 5 feet off the finished floor. If the extinguisher is not readily visible, a sign shall be located directly above the extinguisher. The sign shall be legible and of a contrasting color with its background. Final installation measures and identification signage shall be approved in the field by the Fire Department prior to final inspection sign-off.

8. CFC 903.4 A fire alarm system is required. Please submit 2 sets of fire alarm plans and obtain a permit from the Fire Marshal's Office prior to installation. Please include listed device selections cut sheets.

9. CFC 903.2.10.1 An automatic fire sprinkler system is required for these buildings. Please submit 2 sets of plans and calculations to the Fire Marshal's Office and obtain a permit prior to installation. Please note the density of the system must be compatible with the occupancy classification.

10. Fire sprinkler "wet standpipe" hose stations are required in parking garages. Hose stations shall be located in a manner that will allow access to any point in the parking garages using a 150-foot hose pack without obstruction. (2 ½ inch hose connection is required)

11. The Fire Department Connection (FDC) shall be located on the building on a side facing the street and approved by the Fire Department.

12. An underground fire service main is required for this building. Please submit 2 sets of plans for the underground fire service main for review and permitting requirements.

13. Means of egress illumination shall be provided and maintained at any time the building is occupied. The means of egress shall be illuminated of not less than 1 foot candle power and shall be approved by the Fire Prevention Division prior to sign-off of the final inspection.

14. A final inspection from the Fire Prevention Division is required.

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BEB YARD IMPROVEMENTS

OPERATIONS AND MAINTENANCE FACILITY
1850 BROADWAY STREET
VALLEJO, CA 94589
(707) 648-4666



OWNER

SOLTRANS
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Pat Carr

ARCHITECT / ENGINEERS

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SURVEYORS

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Arvin Chaudhary

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SUITE 400
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NO.	DATE	REVISIONS
4	05/26/2023	CCO #001
3	03/31/2023	CONFORM SET
2	10/20/2022	ADDENDUM 1
1	10/18/2022	ISSUE FOR BID

REVISION LIST

LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
RENEWAL 08/31/2024
STATE OF CALIFORNIA

PROJECT TITLE
BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	ER
DATE	05/26/2023

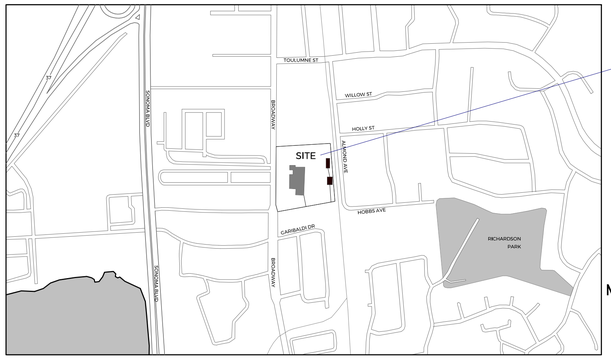
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COVER SHEET

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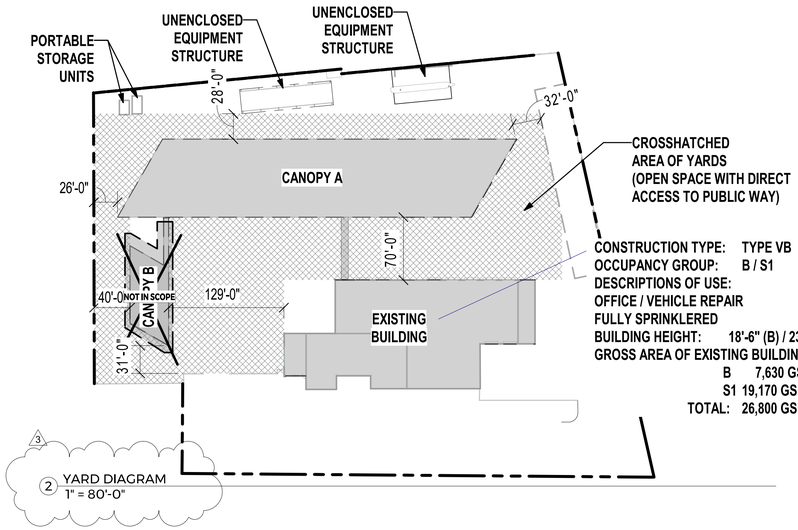
VICINITY MAP



3 LOCATION MAP
1/4" = 1'-0"

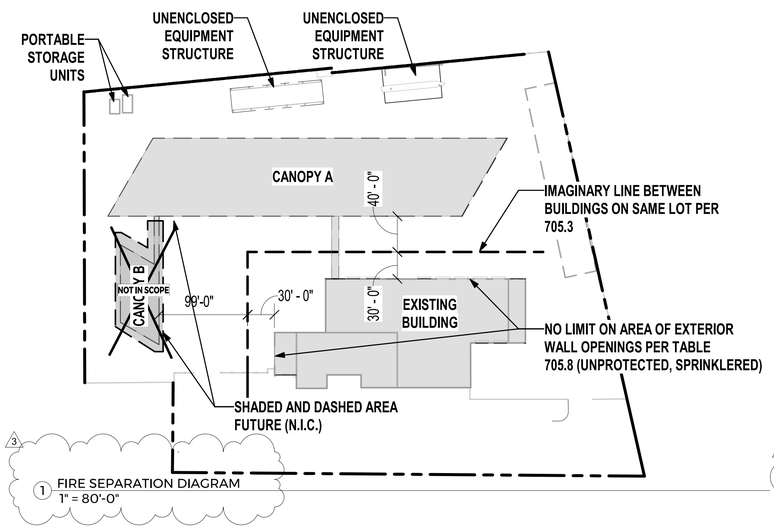
PROJECT ADDRESSS

SOLTRANS MAINTENANCE FACILITY
1850 BROADWAY
VALLEJO CALIFORNIA 94589
(EXISTING STRUCTURES ON-SITE)
APPROX. 249,507.97SF / 5.73 ACRES
ASSESSOR'S MAP PARCEL NUMBER:
054-232-150
PUBLIC FACILITY & INSTITUTION,
PER PF-6



CONSTRUCTION TYPE: TYPE VB
OCCUPANCY GROUP: B / S1
DESCRIPTIONS OF USE:
OFFICE / VEHICLE REPAIR
FULLY SPRINKLERED
BUILDING HEIGHT: 18'-6" (B) / 23'-0" (S1)
GROSS AREA OF EXISTING BUILDING:
B 7,630 GSF
S1 19,170 GSF
TOTAL: 26,800 GSF

2 YARD DIAGRAM
1" = 80'-0"



1 FIRE SEPARATION DIAGRAM
1" = 80'-0"

CODE ANALYSIS

APPLICABLE CODES
2022 CALIFORNIA BUILDING CODE
2022 CALIFORNIA EXISTING BUILDING CODE
2022 CALIFORNIA ELECTRICAL CODE
2022 CALIFORNIA MECHANICAL CODE
2022 CALIFORNIA PLUMBING CODE
2022 CALIFORNIA ENERGY CODE
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGreen)
2022 CALIFORNIA FIRE CODE
INCLUDING ALL SUPPLEMENTS AND ERRATA AS ISSUED BY THE STATE OF CALIFORNIA, AND ALL LOCAL AMENDMENTS / ORDINANCES FILED BY THE CITY OF VALLEJO TO THE CALIFORNIA BUILDING STANDARDS COMMISSION
CITY OF VALLEJO MUNICIPAL CODE

CANOPY
OCCUPANCY: S-2 LOW HAZARD STORAGE GROUP PER SECTION 311
CLASSIFIED AND REGULATED AS A MOTOR FUEL DISPENSING CANOPY PER SECTION 406.7.2.
TYPE OF CONSTRUCTION: TYPE IIB, NON-SPRINKLERED (PER SECTION 602).
EXT. WALL FIRE RESISTANCE REQUIREMENT (EXISTING BLDG) BASED ON FIRE SEPARATION DISTANCE: 0, BASED ON TABLE 705.5, REFER TO FIRE SEPARATION DIAGRAM ON THIS PAGE.

NO LIMIT ON AREA OF EXTERIOR WALL OPENINGS (EXSTING BLDG) PER TABLE 705.8, REFER TO FIRE SEPARATION DIAGRAM ON THIS PAGE.

INITIAL ALLOWABLE AREA = 26,000 SF PER TABLE 506.2 FOR TYPE IIB CONSTRUCTION AND S-2 OCCUPANCY, NON-SPRINKLERED.

FRONTAGE INCREASE ALLOWED UNDER SECTION 506.3.2 MINIMUM FRONTAGE DISTANCE WITH A FRONTAGE INCREASE FACTOR OF .63 PER TABLE 506.3.3.

FINAL ALLOWABLE AREA FOR SINGLE OCCUPANCY SINGLE STORY BUILDING (NON-SPRIKLERED) PER SECTION 506.2.1 = (26,000 SF + (26,000 SF X .63))
= (26,000 SF + 16,380 SF)
= 42,380 SF
ACTUAL AREA = 35,146 SF

MEZZANINE / EQUIPMENT PLATFORMS ALLOWABLE AREA IS 2/3rds THE FLOOR AREA, PER SECTION 505
35,146 SF (PHASE I) X 0.66 = 23,197 SF
ACTUAL AREA = 10,238 SF

ALLOWABLE HEIGHT: 55 FEET PER TABLE 504.3
ACTUAL HEIGHT:
21 FEET 7 INCHES - TOP OF PLATFORM
28 FEET 7 INCHES - TOP OF EQUIPMENT ON PLATFORM

ELECTRICAL CHASE AT EXISTING BUILDING
OCCUPANCY: S-1 MODERATE HAZARD STORAGE GROUP PER SECTION 311
CLASSIFIED AS AN ACCESSORY USE AREA PER 508.2
AREA IS AN ELECTRICAL CHASE AND NOT OCCUPIED.
TYPE OF CONSTRUCTION: TYPE VB (PER SECTION 602).
ALLOWABLE AREA = 36,000 SF PER TABLE 506.2
EXISTING AREA = 26,800 SF
ADDED AREA = 8.26 SF
NEW TOTAL AREA 26,808.26 SF
ALLOWABLE HEIGHT: 60 FEET PER TABLE 504.3
ACTUAL HEIGHT: 23 FEET 5 INCHES

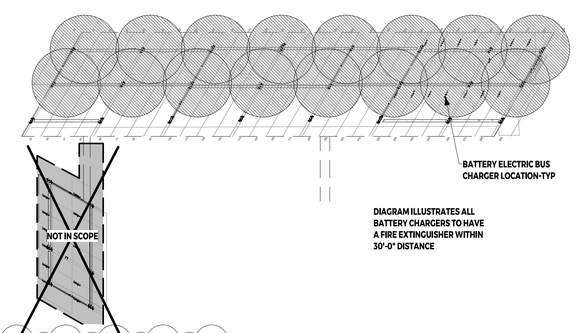


DIAGRAM ILLUSTRATES ALL BATTERY CHARGERS TO HAVE A FIRE EXTINGUISHER WITHIN 30'-0" DISTANCE

4 FIRE EXTINGUISHER LAYOUT
1" = 60'-0"

ABBREVIATIONS

AFF:	ABOVE FINISH FLOOR	SIM:	SIMILAR
CLR:	CLEAR	SF:	SQUARE FEET
FE:	FIRE EXTINGUISHER	SQIN:	SQUARE INCHES
RE:	REFERENCE	TYP:	TYPICAL
RO:	ROUGH OPENING	NIC:	NOT IN CONTRACT

PROJECT DESCRIPTION

NEW FREESTANDING CANOPY ADDED TO THE OWNER'S SITE WITH A PRE-EXISTING DEVELOPMENT. CANOPY IS DESIGNED AND PURPOSED FOR OVERHEAD SUPPORT AND DISTRIBUTION OF ELECTRICAL EQUIPMENT NECESSARY FOR CHARGING TRANSIT TYPE BATTERY ELECTRIC BUSES. PROJECT INCLUDES MODIFICATION TO ON-SITE ELECTRICAL AND EXISTING BUILDING FOR THE DISTRIBUTION OF NEW ELECTRICAL SYSTEMS TO THE CANOPY.

DRAWING LIST

ELECTRICAL

Sheet Number	Sheet Name	Sheet Issue Date
E 001	ELECTRICAL NOTES	03/31/2023
E 101	ELECTRICAL POWER PLAN- SOUTH	03/31/2023
E 102	ELECTRICAL POWER PLAN- NORTH	03/31/2023
E 201	LIGHTING PLAN 1- UNDER CANOPY	03/31/2023
E 202	LIGHTING PLAN 2- ROOF TOP	03/31/2023
E 301	GROUNDING PLAN	03/31/2023
E 501	PANEL SCHEDULES 1	03/31/2023
E 502	PANEL SCHEDULES 2	03/31/2023
E 503	PANEL SCHEDULES 3	03/31/2023
E 504	PANEL SCHEDULES 4	03/31/2023
E 601	SINGLE LINE DIAGRAM	03/31/2023
E 602	SINGLE LINE DIAGRAM-2	03/31/2023
E 801	ELEVATION VIEWS- ELECTRICAL EQUIPMENT	03/31/2023
E 901	GENERAL DETAILS 1	03/31/2023
E 902	GENERAL DETAILS 2	03/31/2023
E 903	DETAILS CABLE LADDER	03/31/2023
E 904	LIGHTING DETAILS	03/31/2023

PHOTOVOLTAIC

Sheet Number	Sheet Name	Sheet Issue Date
PV 001	PV ONELINE DIAGRAMS	10/20/2022
PV 002	PV ARRAY STRING MATRIX	10/20/2022
PV 010	PV ONELINE DIAGRAMS	10/20/2022
PV 100	PV CANOPY L	10/20/2022
PV 101	SOUTH CANOPY PHOTOVOLTAIC ARRAY	10/20/2022
PV 102	NORTH CANOPY PHOTOVOLTAIC ARRAY	10/20/2022
PV 103	CENTER CANOPY PHOTOVOLTAIC	10/20/2022
PV 200	SUN ANALYSIS	10/20/2022
PV 300	PV DETAILS	10/20/2022

NOT IN SCOPE

EQUIPMENT

Sheet Number	Sheet Name	Sheet Issue Date
Q101	PARTIAL FLOOR PLAN - CANOPY 'A' (SOUTH)	05/26/2023
Q201	REFLECTED CEILING PLAN - CANOPY 'A' (SOUTH)	05/26/2023
Q901	EQUIPMENT DETAILS	05/26/2023
Q902	EQUIPMENT DETAILS - BUS DETECTION SYSTEM	05/26/2023

GENERAL NOTES

1. GRADES / FLOOR ELEVATIONS INDICATED ON THE ARCHITECTURAL DRAWINGS ARE PROVIDED AS A POINT OF REFERENCE ONLY. REFER TO SURVEY DRAWINGS FOR ACTUAL ELEVATION HEIGHTS

2. AS-BUILT DRAWINGS OF THE EXISTING PORTIONS OF THE FACILITY ARE PROVIDED UNDER SEPARATE COVER AS RESOURCE DRAWINGS ONLY, AND ARE NOT PART OF THE CONTRACT DOCUMENTS. FIELD VERIFY ALL EXISTING CONDITIONS AS NEEDED.

3. WORK IS LOCATED ON A SITE WITH EXISTING CONSTRUCTION. ALL WORK IS NEW UNLESS SPECIFICALLY NOTED AS EXISTING.

4. ALL EXPOSED STEEL STRUCTURE IS TO BE PAINTED. REFER TO SPECIFICATION FOR PAINT PRODUCT INFORMATION AND APPLICATION

GENERAL

Sheet Number	Sheet Name	Sheet Issue Date
G100	COVER SHEET	05/26/2023
G101	DRAWING LIST/ CODE STUDY	05/26/2023
G102	CALGREEN BUILDING CODE	05/26/2023
G103	CALGREEN BUILDING CODE CONT.	05/26/2023
G104	CALGREEN BUILDING CODE CONT.	05/26/2023
G105	TOPOGRAPHIC SURVEY	05/26/2023
G106	BOUNDARY SURVEY	05/26/2023
G107	EXISTING SITE PHOTOGRAPHS	05/26/2023
AS101	OVERALL SITE PLAN - GRADE	05/26/2023

CIVIL

Sheet Number	Sheet Name	Sheet Issue Date
C 101	CIVIL DEMOLITION PLAN	05/26/2023
C 102	CIVIL OVERALL SITE PLAN	05/26/2023
C 201	CIVIL CONSTRUCTION DETAIL	03/31/2023
C 202	CIVIL CONSTRUCTION DETAIL CONT.	03/31/2023

STRUCTURAL

Sheet Number	Sheet Name	Sheet Issue Date
S 001	STRUCTURAL GENERAL NOTES	05/26/2023
S 002	STRUCTURAL SPECIAL INSPECTIONS	05/26/2023
S 010	TYPICAL CONCRETE DETAILS	05/26/2023
S 020	TYPICAL STEEL DETAILS	05/26/2023
S 021	TYPICAL STEEL DETAILS	05/26/2023
S 100	LOAD MAP	05/26/2023
S 101	FOUNDATION PLAN- OVERALL	05/26/2023
S 102	ENLARGED FOUNDATION PLAN- AREA A	05/26/2023
S 103	ENLARGED FOUNDATION PLAN- AREA B	05/26/2023
S 104	ENLARGED FOUNDATION PLAN- AREA C	05/26/2023
S 105	ENLARGED FOUNDATION PLAN- AREA D	05/26/2023
S 106	ENLARGED FOUNDATION PLAN- AREA E	05/26/2023
S 110	FRAMING PLAN- OVERALL	05/26/2023
S 111	ENLARGED FRAMING PLAN- AREA A	05/26/2023
S 112	ENLARGED FRAMING PLAN- AREA B	05/26/2023
S 113	ENLARGED FRAMING PLAN- AREA C	05/26/2023
S 114	ENLARGED FRAMING PLAN- AREA D	05/26/2023
S 115	ENLARGED FRAMING PLAN- AREA E	05/26/2023
S 200	BRACE ELEVATIONS	05/26/2023
S 201	BUILDING SECTIONS	05/26/2023
S 400	SUPERSTRUCTURE DETAILS 1/3	05/26/2023
S 401	SUPERSTRUCTURE DETAILS 2/3	05/26/2023
S 402	SUPERSTRUCTURE DETAILS 3/3	05/26/2023

ARCHITECTURAL

Sheet Number	Sheet Name	Sheet Issue Date
A100	OVERALL FLOOR PLAN	05/26/2023
A101	PARTIAL FLOOR PLAN - CANOPY 'A' (SOUTH)	05/26/2023
A102	PARTIAL FLOOR PLAN - CANOPY 'A' (NORTH)	05/26/2023
A103	CANOPY 'B' PLAN & DETAIL PLANS	05/26/2023
A200	OVERALL REFLECTED CEILING PLAN	05/26/2023
A201	REFLECTED CEILING PLAN CANOPY 'A' (SOUTH)	05/26/2023
A202	REFELCTED CEILING PLAN - CANOPY 'A' (NORTH)	05/26/2023
A203	PARTIAL REFELCTED CEILING PLANS	05/26/2023
A300	OVERALL ROOF PLAN	05/26/2023
A301	PARTIAL ROOF PLAN - CANOPY 'A' (SOUTH)	05/26/2023
A302	PARTIAL ROOF PLAN - CANOPY 'A' (NORTH)	05/26/2023
A303	PARTIAL ROOF PLANS	05/26/2023
A400	OVERALL ELEVATIONS	05/26/2023
A401	OVERALL ELEVATIONS	05/26/2023
A402	OVERALL ELEVATIONS	05/26/2023
A500	OVERALL SECTIONS	05/26/2023
A501	OVERALL SECTIONS	05/26/2023
A600	WALL SECTIONS	05/26/2023
A601	WALL SECTIONS	05/26/2023
A602	WALL SECTIONS	05/26/2023
A603	WALL SECTIONS	03/31/2023
A900	DETAILS	05/26/2023
A901	DETAILS	05/26/2023

WSP USA Inc.
2150 RIVER PLAZA DR
SUITE 400
SACRAMENTO, CA 95833
TEL: (916) 567-2500

SolTrans

NO.	DATE	REVISIONS
3	05/26/2023	CCO #001
2	03/31/2023	CONFORM SET
1	10/18/2022	ISSUE FOR BID

REVISION LIST

LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
EXP. 08/31/2024
STATE OF CALIFORNIA

PROJECT TITLE
BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	ESR
DATE	05/26/2023

DRAWING TITLE
DRAWING LIST/ CODE STUDY

G101

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2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
NONRESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y | N/A | RESPON. PARTY

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

301.3 NONRESIDENTIAL ADDITIONS AND ALTERATIONS. [BSC-CG] The provisions of individual sections of Chapter 5 apply to newly constructed buildings, building additions of 1,000 square feet or greater, and/or building alterations with a permit valuation of $200,000 or above (for occupancies within the authority of California Building Standards Commission). Code sections relevant to additions and alterations shall only apply to the portions of the building being added or altered within the scope of the permitted work.

A code section will be designated by a banner to indicate where the code section only applies to newly constructed buildings [N] or to additions and/or alterations [A]. When the code section applies to both, no banner will be used.

301.3.1 Nonresidential additions and alterations that cause updates to plumbing fixtures only:

Note: On and after January 1, 2014, certain commercial real property, as defined in Civil Code Section 1101.3, shall have its noncompliant plumbing fixtures replaced with appropriate water-conserving plumbing fixtures under specific circumstances. See Civil Code Section 1101.1 *et seq.* for definitions, types of commercial real property affected, effective dates, circumstances necessitating replacement of noncompliant plumbing fixtures, and duties and responsibilities for ensuring compliance.

301.3.2 Waste Diversion. The requirements of Section 5.408 shall be required for additions and alterations whenever a permit is required for work.

301.4 PUBLIC SCHOOLS AND COMMUNITY COLLEGES. (see GBSC)
301.5 HEALTH FACILITIES. (see GBSC)

SECTION 302 MIXED OCCUPANCY BUILDINGS

☒ ☐ ARCH (A)

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

SECTION 303 PHASED PROJECTS

☐ ☒

303.1 PHASED PROJECTS. For shell buildings and others constructed for future tenant improvements, only those code measures relevant to the building components and systems considered to be new construction (or newly constructed) shall apply.

303.1.1 Initial Tenant improvements. The provisions of this code shall apply only to the initial tenant improvements to a project. Subsequent tenant improvements shall comply with the scoping provisions in Section 301.3 non-residential additions and alterations.

ABBREVIATION DEFINITIONS:

HCD	Department of Housing and Community Development
BSC	California Building Standards Commission
DSA-SS	Division of the State Architect, Structural Safety
OSHPD	Office of Statewide Health Planning and Development
LR	Low Rise
HR	High Rise
AA	Additions and Alterations
N	New

CHAPTER 5
NONRESIDENTIAL MANDATORY MEASURES
DIVISION 5.1 PLANNING AND DESIGN
SECTION 5.101 GENERAL

5.101.1 SCOPE
The provisions of this chapter outline planning, design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties.

SECTION 5.102 DEFINITIONS

5.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

☒ ☐ ELECT (E)

CUTOFF LUMINAIRES. Luminaires whose light distribution is such that the candela per 1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle of 90 degrees above nadir, and 100 (10 percent) at a vertical angle of 80 degrees above nadir. This applies to all lateral angles around the luminaire.

☒ ☐ ARCH (A)

LOW-EMITTING AND FUEL EFFICIENT VEHICLES.
Eligible vehicles are limited to the following:

1. Zero emission vehicle (ZEV), enhanced advanced technology PZEV (enhanced AT ZEV) or transitional zero emission vehicles (TZEV) regulated under CCR, Title 13, Section 1962.
2. High-efficiency vehicles, regulated by U.S. EPA, bearing a fuel economy and greenhouse gas rating od 9 oe 10 as regulated under 40 CFR Section 600 Subpart D,

NEIGHBORHOOD ELECTRIC VEHICLE (NEV). A motor vehicle that meets the definition of "low-speed vehicle" either in Section 385.5 of the Vehicle Code or in 49CFR571.500 (as it existed on July 1, 2000), and is certified to zero-emission vehicle standards.

TENANT-OCCUPANTS. Building occupants who inhabit a building during its normal hours of operation as permanent occupants, such as employees, as distinguished from customers and other transient visitors.

VANPOOL VEHICLE. Eligible vehicles are limited to any motor vehicle, other than a motortruck or truck tractor, designed for carrying more than 10 but not more than 15 persons including the driver, which is maintained and used primarily for the nonprofit work-related transportation of adults for the purpose of ridesharing.

Note: Source: Vehicle Code, Division 1, Section 668

ZEV. Any vehicle certified to zero-emission standards.

SECTION 5.106 SITE DEVELOPMENT

☒ ☐ CIVIL (C)

5.106.1 STORM WATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB LESS THAN ONE ACRE OF LAND. Newly constructed projects and additions which disturb less than one acre of land, and are not part of a larger common plan of development or sale, shall prevent the pollution of storm water runoff from the construction activities through one or more of the following measures:

5.106.1.1 Local ordinance. Comply with a lawfully enacted storm water management and/or erosion control ordinance.

5.106.1.2 Best Management Practices (BMPs). Prevent the loss of soil through wind or water erosion by implementing an effective combination of erosion and sediment control and good housekeeping BMPs.

1. Soil loss BMPs that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   a. Scheduling construction activity during dry weather, when possible,
   b. Preservation of natural features, vegetation, soil, and buffers around surface waters.
   c. Drainage swales or lined ditches to control stormwater flow.
   d. Mulching or hydroseeding to stabilize disturbed soils.
   e. Erosion control to protect slopes.
   f. Protection of storm drain inlets (gravel bags or catch basin inserts).
   g. Perimeter sediment control (perimeter silt fence, fiber rolls).
   h. Sediment trap or sediment basin to retain sediment on site.
   i. Stabilized construction exits.
   j. Wind erosion control.
   k. Other soil loss BMPs acceptable to the enforcing agency.
2. Good housekeeping BMPs to manage construction equipment, materials, non-stormwater discharges and wastes that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   a. Dewatering activities.
   b. Material handling and waste management.
   c. Building materials stockpile management.
   d. Management of washout areas (concrete, paints, stucco, etc.),
   e. Control of vehicle/equipment fueling to contractor's staging area.
   f. Vehicle and equipment cleaning performed off site.
   g Spill prevention and control.
   h. Other housekeeping BMPs acceptable to the enforcing agency.

Y | N/A | RESPON. PARTY

☐ ☒

☐ ☒

5.106.2 STORMWATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB ONE OR MORE ACRES OF LAND. Comply with all lawfully enacted stormwater discharge regulations for projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of a larger common plan of development sale,

Note: Projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of the larger common plan of development or sale must comply with the post-construction requirements detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board or the Lahontan Regional Water Quality Control Board (for projects in the Lake Tahoe Hydrologic Unit).

The NPDES permits require postconstruction runoff (post-project hydrology) to match the preconstruction runoff (pre-project hydrology) with the installation of postconstruction stormwater management measures. The NPDES permits emphasize runoff reduction through on-site stormwater use, interception, evapotranspiration, and infiltration through nonstructural controls, such as Low Impact Development (LID) practices, and conversation design measures. Stormwater volume that cannot be addressed using nonstructural practices is required to be captured in structural practices and be approved by the enforcing agency.

Refer to the current applicable permits on the State Water Resources Control Board website at: www.waterboards.ca.gov/constructionstormwater. Consideration to the stormwater runoff management measures should be given during the initial design process for appropriate integration into site development.

☐ ☒

5.106.4 BICYCLE PARKING. For buildings within the authority of California Building Standards Commission as specified in Section 103, comply with Section 5.106.4.1. For buildings within the authority of the Division of the State Architect pursuant to Section 105, comply with Section 5.106.4.2

5.106.4.1 Bicycle parking. [BSC-CG] Comply with Sections 5.106.4.1.1 and 5.106.4.1.2; or meet the applicable local ordinance, whichever is stricter.

5.106.4.1.1 Short-term bicycle parking. If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack.
Exception: Additions or alterations which add nine or less visitor vehicular parking spaces.

5.106.4.1.2 Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility.

5.106.4.1.3 For additions or alterations that add 10 or more tenant-occupant vehicular parking spaces, provide secure bicycle parking for 5 percent of the tenant vehicular parking spaces being added, with a minimum of one bicycle parking facility.

5.106.4.1.4 For new shell buildings in phased projects provide secure bicycle parking for 5 percent of the anticipated tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility.

5.106.4.1.5 Acceptable bicycle parking facility for Sections 5.106.4.1.2, 5.106.4.1.3, and 5.106.4.1.4 shall be convenient from the street and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

Note: Additional information on recommended bicycle accommodations may be obtained from Sacramento Area Bicycle Advocates.

5.106.4.2 Bicycle parking. [DSA-SS] For public schools and community colleges, comply with Sections 5.106.4.2.1 and 5.106.4.2.2

5.106.4.2.1 Student bicycle parking. Provide permanently anchored bicycle racks conveniently accessed with a minimum of four two-bike capacity racks per new building.
5.106.4.2.2 Staff bicycle parking. Provide permanent, secure bicycle parking conveniently accessed with a minimum of two staff bicycle parking spaces per new building. Acceptable bicycle parking facilities shall be convenient from the street or staff parking area and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

☐ ☒

5.106.5.3 Electric vehicle (EV) charging. [N] Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3.1 and shall be provided in accordance with regulations in the California Building Code and the California Electrical Code.

Exceptions:
1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
   a. Where there is no local utility power supply
   b. Where the local utility is unable to supply adequate power.
   c. Where there is evidence suitable to the local enforcement agency substantiating that local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.
2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with this code section

5.106.5.3.1 EV capable spaces.
[N] EV capable spaces shall be provided in accordance with Table 5.106.5.3.1 and the following requirements:
1. Raceways complying with the California Electrical Code and no less that 1-inch (25 mm) diameter shall be provided and shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the EV capable and into a suitable listed cabinet, box,enclosure or equivalent. A common raceway may be used to serve multiple EV charging spaces.
2. A service panel or subpanel (s) shall be provided with panel space and electrical load capacity for a dedicated 208/240 volt, 40-ampere minimum branch circuit for each EV capable space, with delivery of 30-ampere minimum to an installed EVSE at each EVCS.
3. The electrical system and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each EV capable space.
4. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective devices space(s) as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE."

Note: A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by an enforcement agency. See vehicle Code Section 22511.2 for further details.

TABLE 5.106.5.3.1

TOTAL NUMBER OF ACTUAL PARKING SPACES	NUMBER OF REQUIRED EV CAPABLE SPACES	NUMBER OF EVCS (EV CAPABLE SPACES PROVIDED WITH EVSE)^2
0-9	0	0
10-25	2	0
26-50	8	2
51-75	13	3
76-100	17	4
101-150	25	6
151-200	35	9
201 AND OVER	20% of total^1	25% of EV capable spaces^1

1. Where there is insufficient electrical supply.
2. The number of required EVCS (EV capable spaces provided with EVSE) in column 3 count towards the total number of required EV capable spaces shown in column 2.

5.106.5.3.2 Electric vehicle charging stations (EVCS)
EV capable spaces shall be provided with EVSE to create EVCS in the number indicated in Table 5.106.5.3.1. The EVCS required by Table 5.106.5.3.1 may be provided with EVSE in any combination of Level 2 and Direct Current Fast Charging (DCFC), except that at least one Level 2 EVSE shall be provided.

One EV charger with multiple connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required by Section 5.106.5.3.1 for each EV capable space is accumulatively supplied to the EV charger.

The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces without EVSE by five and reduce proportionally the required electrical load capacity to the service panel or subpanel.

Y | N/A | RESPON. PARTY

☒ ☐ ELECT (E)

☒ ☐ ELECT (E)

5.106.5.3.3 Use of automatic load management systems (ALMS).
ALMS shall be permitted for EVCS. When ALMS is installed, the required electrical load capacity specified in Section 5.106.5.3.1 for each EVCS may be reduced when serviced by an EVSE controlled by an ALMS. Each EVSE controlled by an ALMS shall deliver a minimum 30 amperes to an EV when charging one vehicle and shall deliver a minimum 3.3 kW while simultaneously charging multiple EVs.

5.106.5.3.4 Accessible EVCS.
When EVSE is installed, accessible EVSC shall be provided in accordance with the *California Building Code*, Chapter 11B, Section 11B-228.3.
Note: For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

5.106.5.4 Electric Vehicle (EV) charging: medium-duty and heavy-duty. [N]
Construction shall comply with section 5.106.5.4.1 to facilitate future installation of electric vehicle supply equipment (EVSE). Construction for warehouses, grocery stores and retail stores with planned off-street loading spaces shall also comply with Section 5.106.5.4.1 for future installation of medium- and heavy-duty EVSE.
Exceptions:
1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
   a. Where there is no local utility power supply.
   b. Where the local utility is unable to supply adequate power.
   c. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.

When EVSE(s) is/are Installed, it shall be in accordance with the *California Building Code*, the *California Electrical Code* and as follows:

5.106.5.4.1 Electric vehicle charging readiness requirements for warehouse, grocery stores and retail stores with planned off-street loading spaces.
[N] In order to avoid future demolition when adding EV charging supply and distribution equipment, spare raceways(s) or busway(s) and adequate capacity for transformers(s), service panels(s) or subpanel(s) shall be installed at the time of construction in accordance with the California Electrical Code. Construction plans and specifications shall include but are not limited to, the following:
1. The transformer, main service equipment and subpanel shall meet the minimum power requirement in Table 5.106.5.4.1 to accommodate the dedicated branch circuits for the future installation of EVSE,
2. The construction documents shall indicate on or more location(s) convenient to the planned offstreet loading space(s) reserved for medium-and heavy-duty ZEV charging cabinets and charging dispensers, and a pathway reserved for routing of conduit from the termination of the raceway(s) or busway(s) to the charging cabinet(s) and dispenser(s) as shown in Table 5.106.5.4.1
3. Raceway(s) or busway(s) originating at a main service panel or a subpanel(s) serving the area where potential future medium-and heavy-duty EVSE will be located and shall terminate in close proximity to the potential future location of the charging equipments for medium- and heavy-duty vehicles.
4. The raceway(s) or busway(s) shall be sufficient size to carry the minimum additional system load to the future location of the charging for medium- and heavy-duty ZEVs as shown in Table 5.106.5.4.1.

TABLE 5.106.5.4.1 RACEWAY CONDUIT AND PANEL POWER REQUIREMENTS FOR MEDIUM- AND HEAVY-DUTY EVSE [N]

BUILDING TYPE	BUILDING SIZE (SQ. FT.)	NUMBER OF OFF-STREET LOADING SPACES	ADDITIONAL CAPACITY REQUIRED (KVA) FOR RACEWAY & BUSWAY AND TRANSFORMER & PANEL
Grocery	10,000 to 90,000	1 or 2	200
		3 or Greater	400
	Greater than 90,000	1 or Greater	400
Retail	10,000 to 135,000	1 or 2	200
		3 or Greater	400
	Greater than 135,000	1 or Greater	400
Warehouse	20,000 to 256,000	1 or 2	200
		3 or Greater	400
	Greater than 256,000	1 or Greater	400

☒ ☐ ELECT (E)

5.106.8 LIGHT POLLUTION REDUCTION. [N]. | Outdoor lighting systems shall be designed and installed to comply with the following:

1. The minimum requirements in the California Energy Code for Lighting Zones 0-4 as defined in Chapter 10, Section 10-114 of the California Administrative Code; and
2. Backlight (B) ratings as defined in IES TM-15-11 (shown in Table A-1 in Chapter 8);
3. Uplight and Glare ratings as defined in California Energy Code (shown in Tables 130.2-A and 130.2-B in Chapter 8) and
4. Allowable BUG ratings not exceeding those shown in Table 5.106.8, [N] or Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

Exceptions: [N]

1. Luminaires that qualify as exceptions in Sections 130.2 (b) and 140.7 of the California Energy Code.
2. Emergency lighting.
3. Building facade meeting the requirements in Table 140.7-B of the California Energy Code, Part 6.
4. Custom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8 Alternate materials, designs and methods of construction.
5. Luminaires with less than 6,200 initial luminaire lumens.

TABLE 5.106.8 [N] MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS 1,2

ALLOWABLE RATING	LIGHTING ZONE LZ0	LIGHTING ZONE LZ1	LIGHTING ZONE LZ2	LIGHTING ZONE LZ3	LIGHTING ZONE LZ4
MAXIMUM ALLOWABLE BACKLIGHT RATING 3					
Luminaire greater than 2 mounting heights (MH) from property line	N/A	No Limit	No Limit	No Limit	No Limit
Luminaire back hemisphere is 1-2 MH from property line	N/A	B2	B3	B4	B4
Luminaire back hemisphere is 0.5–1 MH from property line	N/A	B1	B2	B3	B3
Luminaire back hemisphere is less than 0.5 MH from property line	N/A	B0	B0	B1	B2
MAXIMUM ALLOWABLE UPLIGHT RATING (U)					
For area lighting 3	N/A	U0	U0	U0	U0
For all other outdoor lighting,including decorative luminaires	N/A	U1	U2	U3	UR

Y | N/A | RESPON. PARTY

☒ ☐ CIVIL (C)

☐ ☒

MAXIMUM ALLOWABLE GLARE RATING 1 (G)					
MAXIMUM ALLOWABLE GLARE RATING 1 (G)	N/A	G1	G2	G3	G4
MAXIMUM ALLOWABLE GLARE RATING 1 (G)	N/A	G0	G1	G1	G2
MAXIMUM ALLOWABLE GLARE RATING 1 (G)	N/A	G0	G0	G1	G1
MAXIMUM ALLOWABLE GLARE RATING 1 (G)	N/A	G0	G0	G0	G1

1. IESNA Lighting Zones 0 and 5 are not applicable; refer to Lighting Zones as defined in the *California Energy Code* and Chapter 10 of the *California Administrative Code.*

2. For property lines that abut public walkways, bikeways, plazas and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section.

3. General lighting luminaires in areas such as outdoor parking, sales or storage lots shall meet these reduced ratings. Decorative luminaries located in these areas shall meet *U*-value limits for "all other outdoor lighting"

5.106.8.1 Facing- Backlight
Luminaries within 2MH of a property line shall be oriented so that the nearest property line is behind the fixture, and shall comply with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point of that property line.
Exception: Corners. If two property lines (or two segments of the same property line) have equidistant point to the luminaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is directly behind the luminaire. The luminaire shall still use the distance to the nearest points(s) on the property lines to determine the required backlight rating.

5.106.8.2 Facing-Glare.
For luminaires covered by 5.106.8.1, if a property line also exists within or extends into the front hemisphere within 2MH of the luminaire then the luminaire shall comply with the more stringent glare rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point on the nearest property line within the front hemisphere.

Note: [N]
1.See also *California Building Code*, Chapter 12, Section 1205.6 for college campus lighting requirements for parking facilities and walkways.
2.Refer to Chapter 8 (Compliance Forms, Worksheets and Reference Material) for IES TM-15-11 Table A-1, *California Energy Code* Tables 130.2-A and 130.2-B.
3. Refer to the *California Building Code* for requirements for additions and alterations.

5.106.10 GRADING AND PAVING. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales.
2. Water collection and disposal systems.
3. French drains.
4. Water retention gardens.
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.
Exception: Additions and alterations not altering the drainage path.

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5.106.12 SHADE TREES [DSA-SS]. Shade Trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2, and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice. Landscape irrigation necessary to establish and maintain tree health shall comply with Section 5.304.6.

5.106.12.1 Surface parking areas. Shade tree plantings, minimum #10 container size or equal, shall be installed to provide shade over 50 percent of the parking area within 15 years.

Exceptions: Surface parking area covered by solar photovoltaic shade structures with roofing materials that comply with Table A5.106,11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree planting.

5.106.12.2 Landscape areas. Shade tress plantings, minimum #10 container size or equal shall be installed to provide shade of 20% of the landscape area within 15 years.

Exceptions: Playfields for organized sport activity are not included in the total area calculation.

5.106.12.3. Hardscape areas. Shade tree plantings, minimum #10 container size or equal shall be installed to provide shade over 20 percent of the hardscape area within 15 years.

Exceptions:
1. Walks, hardscape areas covered by solar photovoltaic shade structures or shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree planting.
2. Designated and marked play areas of organized sport activity are not included in the total area calculation.

DIVISION 5.2 ENERGY EFFICIENCY
SECTION 5.201 GENERAL

5.201.1 Scope [BSC-CG]. *California Energy Code [DSA-SS].* For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory building standards.

DIVISION 5.3 WATER EFFICIENCY AND CONSERVATION
SECTION 5.301 GENERAL

5.301.1 Scope. The provisions of this chapter shall establish the means of conserving water use indoors, outdoors and in wastewater conveyance.

SECTION 5.302 DEFINITIONS

5.302.1 Definitions. The following terms are defined in Chapter 2 *(and are included here for reference)*

EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF) [DSA-SS]. An adjustment factor when applied to reference evapotranspiration that adjusts for plant factors and irrigation efficiency, which ae two major influences on the amount of water that needs to be applied to the landscape.

FOOTPRINT AREA [DSA-SS]. The total area of the furthest exterior wall of the structure projected to natural grade, not including exterior areas such as stairs, covered walkways, patios and decks.

METERING FAUCET. A self-closing faucet that dispenses a specific volume of water for each actuation cycle. The volume or cycle duration can be fixed or adjustable.

GRAYWATER. Pursuant to Health and Safety Code Section 17922.12, "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines and laundry tubs, but does not include waste water from kitchen sinks or dishwashers.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped area and climatological parameters.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). [HCD] The California model ordinance (California Code of Regulations, Title 23, Division 2, Chapter 2.7), regulating landscape design, installation and maintenance practices. Local agencies are required to adopt the updated MWELO, or adopt a local ordinance at least as effective as the MWELO.

POTABLE WATER. Water that is drinkable and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards. See definition in the California Plumbing Code, Part 5.

POTABLE WATER. [HCD] Water that is satisfactory for drinking, culinary, and domestic purposes, and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards and the requirements of the Health Authority Having Jurisdiction.

RECYCLED WATER. Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur [Water Code Section 13050 (n)]. Simply put, recycled water is water treated to remove waste matter attaining a quality that is suitable to use the water again.

SUBMETER. [HCD 1] A secondary device beyond a meter that measures water consumption of an individual rental unit within a multiunit residential structure or mixed-use residential and commercial structure. (See Civic Code Section 1954.202 (g) and Water code Section 517 for additional details.)

WATER BUDGET. Is the estimated total landscape irrigation water use which shall not exceed the maximum applied water allowance calculated in accordance with the Department of Water Resources Model Efficient Landscape Ordinance (MWELO).

DISCLAIMER:*THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

NONRESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y	N/A	RESPON. PARTY

SECTION 5.303 INDOOR WATER USE

5.303.1 METERS. Separate submeters or metering devices shall be installed for the uses described in Sections 503.1.1 and 503.1.2.

5.303.1.1 Buildings in excess of 50,000 square feet. Separate submeters shall be installed as follows:

1. For each individual leased, rented or other tenant space within the building projected to consume more than 100 gal/day (380 L/day), including, but not limited to, spaces used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop.
2. Where separate submeters for individual building tenants are unfeasible, for water supplied to the following subsystems:
   a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s).
   b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s).
   c. Steam and hot water boilers with energy input more than 500,000 Btu/h (147 kW).

5.303.1.2 Excess consumption. A separate submeter or metering device shall be provided for any tenant within a new building or within an addition that is projected to consume more than 1,000 gal/day.

5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:

5.303.3.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-Type toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

5.303.3.2 Urinals.

5.303.3.2.1 Wall-mounted Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush.

5.303.3.2.2 Floor-mounted Urinals. The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush.

5.303.3.3 Showerheads. [BSC-CG]

5.303.3.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

5.303.3.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time.
Note: A hand-held shower shall be considered a showerhead.

5.303.3.4 Faucets and fountains.

5.303.3.4.1 Nonresidential Lavatory faucets. Lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi.

5.303.3.4.2 Kitchen faucets. Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

5.303.3.4.3 Wash fountains. Wash fountains shall have a maximum flow rate of not more than1.8 gallons per minute/20 [rim space (inches) at 60 psi].

5.303.3.4.4 Metering faucets. Metering faucets shall not deliver more than 0.20 gallons per cycle.

5.303.3.4.5 Metering faucets for wash fountains. Metering faucets for wash fountains shall have a maximum flow rate of not more than 0.20 gallons per minute/20 [rim space (inches) at 60 psi].

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

5.303.3.4.6 Pre-rinse spray value
When installed, shall meet the requirements in the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7), and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019

PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)
Product Class 1 (≤ 5.0 ozf)	1.00
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20
Product Class 3 (> 8.0 ozf)	1.28

5.303.4 COMMERCIAL KITCHEN EQUIPMENT.

5.303.4.1 Food Waste Disposers. Disposers shall either modulate the use of water to no more than 1 gpm when the disposer is not in use (not actively grinding food waste/no-load) or shall automatically shut off after no more than 10 minutes of inactivity. Disposers shall use no more than 8 gpm of water.
Note: This code section does not affect local jurisdiction authority to prohibit or require disposer installation.

5.303.5 AREAS OF ADDITION OR ALTERATION. For those occupancies within the authority of the California Building Standards Commission as specified in Section 103, the provisions of Section 5.303.3 and 5.303.4 shall apply to new fixtures in additions or areas of alteration to the building.

5.303.6 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code* and in Chapter 6 of this code.

SECTION 5.304 OUTDOOR WATER USE

5.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

Notes:
1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code of Regulations, Title 23, Chapter 2.7, Division 2.
2. MWELO and supporting documents, including a water budget calculator, are available at: https://www.water.ca.gov/.

5.304.6 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. For public schools and community colleges, landscape projects as described in Sections 5.304.6.1 and 5.304.6.2 shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, *California Code of Regulations*, except that the evapotranspiration adjustment factor (ETAF) shall be 0.65 with an additional water allowance for special landscape areas (SLA) of 0.35.

Exception: Any project with an aggregate landscape area of 2,500 square feet or less may comply with the prescriptive measures contained in Appendix D of the MWELO.

5.304.6.1 Newly constructed landscapes. New construction projects with an aggregate landscape area equal to or greater than 500 square feet.

5.304.6.2 Rehabilitated landscapes. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,200 square feet.

DIVISION 5.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

SECTION 5.401 GENERAL

5.401.1 SCOPE. The provisions of this chapter shall outline means of achieving material conservation and resource efficiency through protection of buildings from exterior moisture, construction waste diversion, employment of techniques to reduce pollution through recycling of materials, and building commissioning or testing and adjusting.

SECTION 5.402 DEFINITIONS

5.402.1 DEFINITIONS. The following terms are defined in Chapter 2 *(and are included here for reference)*

ADJUST. To regulate fluid flow rate and air patterns at the terminal equipment, such as to reduce fan speed or adjust a damper.

BALANCE. To proportion flows within the distribution system, including sub-mains, branches and terminals, according to design quantities.

BUILDING COMMISSIONING. A systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated and maintained to meet the owner's project requirements.

ORGANIC WASTE. Food waste, green waste, landscape and pruning wste, nonhazardous wood waste, and food soilled paper waste that is mixed in with food waste.

TEST. A procedure to determine quantitative performance of a system or equipment

SECTION 5.407 WATER RESISTANCE AND MOISTURE MANAGEMENT

5.407.1 WEATHER PROTECTION. Provide a weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1402.2 (Weather Protection), manufacturer's installation instructions or local ordinance, whichever is more stringent.

Y	N/A	RESPON. PARTY
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5.407.2 MOISTURE CONTROL. Employ moisture control measures by the following methods.

5.407.2.1 Sprinklers. Design and maintain landscape irrigation systems to prevent spray on structures.

5.407.2.2 Entries and openings. Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings as follows:

5.407.2.2.1 Exterior door protection. Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within at least 2 feet around and perpendicular to such openings plus at least one of the following:

1. An installed awning at least 4 feet in depth.
2. The door is protected by a roof overhang at least 4 feet in depth.
3. The door is recessed at least 4 feet.
4. Other methods which provide equivalent protection.

5.407.2.2.2 Flashing. Install flashings integrated with a drainage plane.

SECTION 5.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

Y	N/A	RESPON. PARTY
☒	☐	CONTRACTOR

5.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65% of the non-hazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.

5.408.1.1 Construction waste management plan. Where a local jurisdiction does not have a construction and demolition waste management ordinance, submit a construction waste management plan that:

1. Identifies the construction and demolition waste materials to be diverted from disposal by efficient usage, recycling, reuse on the project or salvage for future use or sale.
2. Determines if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream).
3. Identifies diversion facilities where construction and demolition waste material collected will be taken.
4. Specifies that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

5.408.1.2 Waste Management Company. Utilize a waste management company that can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with this section.

Note: The owner or contractor shall make the determination if the construction and demolition waste material will be diverted by a waste management company.

Exceptions to Sections 5.408.1.1 and 5.408.1.2:

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist.
3. Demolition waste meeting local ordinance or calculated in consideration of local recycling facilities and markets.

5.408.1.3 Waste stream reduction alternative. The combined weight of new construction disposal that does not exceed two pounds per square foot of building area may be deemed to meet the 65% minimum requirement as approved by the enforcing agency.

5.408.1.4 Documentation. Documentation shall be provided to the enforcing agency which demonstrates compliance with Sections 5.408.1.1. through 5.408.1.3. The waste management plan shall be updated as necessary and shall be accessible during construction for examination by the enforcing agency.

Notes:

1. Sample forms found in "A Guide to the California Green Building Standards Code (Nonresidential)" located at www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen may be used to assist in documenting compliance with the waste management plan.
2. Mixed construction and demolition debris processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

Y	N/A	RESPON. PARTY
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5.408.2 UNIVERSAL WASTE. [A] Additions and alterations to a building or tenant space that meet the scoping provisions in Section 301.3 for nonresidential additions and alterations, shall require verification that Universal Waste items such as fluorescent lamps and ballast and mercury containing thermostats as well as other California prohibited Universal Waste materials are disposed of properly and are diverted from landfills. A list of prohibited Universal Waste materials shall be included in the construction documents.

Note: Refer to the Universal Waste Rule link at: http://www.dtsc.ca.gov/universalwaste/

Y	N/A	RESPON. PARTY
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5.408.3 EXCAVATED SOIL AND LAND CLEARING DEBRIS. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed.

Exception: Reuse, either on or off-site, of vegetation or soil contaminated by disease or pest infestation.

Notes:

1. If contamination by disease or pest infestation is suspected, contact the County Agricultural Commissioner and follow its direction for recycling or disposal of the material.
2. For a map of know pest and/or disease quarantine zones, consult with the California Department of Food and Agriculture. (www.cdfa.ca.gov)

SECTION 5.410 BUILDING MAINTENANCE AND OPERATIONS

5.410.1 RECYCLING BY OCCUPANTS. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive.

Y	N/A	RESPON. PARTY
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Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code 42649.82 (a)(2)(A) et seq. shall also be exempt from the organic waste portion of this section.

5.410.1.1 Additions. All additions conducted within a 12-month period under single or multiple permits, resulting in an increase of 30% or more in floor area, shall provide recycling areas on site.

Exception: Additions within a tenant space resulting in less than a 30% increase in the tenant space floor area.

5.410.1.2 Sample ordinance. Space allocation for recycling areas shall comply with Chapter 18, Part 3, Division 30 of the *Public Resources Code*. Chapter 18 is known as the California Solid Waste Reuse and Recycling Access Act of 1991 (Act).

Note: A sample ordinance for use by local agencies may be found in Appendix A of the document at the CalRecycle's web site.

Y	N/A	RESPON. PARTY
☒	☐	CONTRACTOR

5.410.2 COMMISSIONING. [N] New buildings 10,000 square feet and over. For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements. Commissioning shall be performed in accordance with this section by trained personnel with experience on projects of comparable size and complexity. For I-occupancies that are not regulated by OSHPD or for I-occupancies and L-occupancies that are not regulated y the California Energy Code Section 100.0 Scope, all requirements in Sections 5.410.2 through 5.410.2.6 shall apply.

Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting systems and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements

Commissioning requirements shall include:

1. Owner's or Owner representative's project requirements.
2. Basis of design.
3. Commissioning measures shown in the construction documents.
4. Commissioning plan.
5. Functional performance testing.
6. Documentation and training.
7. Commissioning report.

Exceptions:

1. Unconditioned warehouses of any size.
2. Areas less than 10,000 square feet used for offices or other conditioned accessory spaces within unconditioned warehouses.
3. Tenant improvements less than 10,000 square feet as described in Section 303.1.1.
4. Open parking garages of any size, or open parking garage areas, of any size, within a structure.

Note: For the purposes of this section, unconditioned shall mean a building, area, or room which does not provide heating and or air conditioning.

Informational Notes:

1. IAS AC 476 is an accreditation criteria for organizations providing training and/or certification of commissioning personnel. AC 476 is available to the Authority Having Jurisdiction as a reference for qualifications of commissioning personnel. AC 476 des not certify individuals to conduct functional performance tests or to adjust and balance systems.
2. Functional performance testing for heating, ventilation, air conditioning systems and lighting controls must be performed in compliance with the *California Energy Code*.

5.410.2.1 Owner's or Owner Representative's Project Requirements (OPR). [N] The expectations and requirements of the building appropriate to its phase shall be documented before the design phase of the project begins. This documentation shall include the following:

1. Environmental and sustainability goals.
2. Building sustainable goals.
3. Indoor environmental quality requirements,
4. Project program, including facility functions and hours of operation, and need for after hours operation.
5. Equipment and systems expectations.
6. Building occupant and operation and maintenance (O&M) personnel expectations.

5.410.2.2 Basis of Design (BOD). [N] A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase of the building project. The Basis of Design document shall cover the following systems:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse system.

5.410.2.3 Commissioning plan. [N] Prior to permit issuance a commissioning plan shall be completed to document how the project will be commissioned. The commissioning plan shall include the following:

1. General project information.
2. Commissioning goals.
3. Systems to be commissioned. Plans to test systems and components shall include:
   a. An explanation of the original design intent.
   b. Equipment and systems to be tested, including the extent of tests.
   c. Functions to be tested.
   d. Conditions under which the test shall be performed.
   e. Measurable criteria for acceptable performance.
4. Commissioning team information.
5. Commissioning process activities, schedules and responsibilities. Plans for the completion of commissioning shall be included.

5.410.2.4 Functional performance testing. [N] Functional performance tests shall demonstrate the correct installation and operation of each component, system and system-to-system interface in accordance with the approved plans and specifications. Functional performance testing reports shall contain information addressing each of the building components tested, the testing methods utilized, and include any readings and adjustments made.

5.410.2.5 Documentation and training. [N] A Systems Manual and Systems Operations Training are required, including Occupational Safety and Health Act (OSHA) requirements in *California Code of Regulations* (CCR), Title 8, Section 5142, and other related regulations.

5.410.2.5.1 Systems manual. [N] Documentation of the operational aspects of the building shall be completed within the systems manual and delivered to the building owner or representative. The systems manual shall include the following:

1. Site information, including facility description, history and current requirements.
2. Site contact information.
3. Basic operations and maintenance, including general site operating procedures, basic troubleshooting, recommended maintenance requirements, site events log.
4. Major systems.
5. Site equipment inventory and maintenance notes.
6. A copy of verifications required by the enforcing agency or this code.
7. Other resources and documentation, if applicable.

5.410.2.5.2 Systems operations training. [N] A program for training of the appropriate maintenance staff for each equipment type and/or system shall be developed and documented in the commissioning report and shall include the following:

1. System/equipment overview (what it is, what it does and with what other systems and/or equipment it interfaces).
2. Review and demonstration of servicing/preventive maintenance.
3. Review of the information in the Systems Manual.
4. Review of the record drawings on the system/equipment.

5.410.2.6 Commissioning report. [N] A report of commissioning process activities undertaken through the design and construction phases of the building project shall be completed and provided to the owner or representative.

Y	N/A	RESPON. PARTY
☒	☐	CONTRACTOR

5.410.4 TESTING AND ADJUSTING. New buildings less than 10,000 square feet. Testing and adjusting of systems shall be required for new buildings less than 10,000 square feet or new systems to serve an addition or alteration subject to Section 303.1.

5.410.4.2 (Reserved)

Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting system and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements and Sections 120.5, 120.6, 130.4, and 140.9(b)3 for additional testing requirements of specific systems.

5.410.4.2 Systems. Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include at a minimum, as applicable to the project:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse systems.

5.410.4.3 Procedures. Perform testing and adjusting procedures in accordance with manufacturer's specifications and applicable standards on each system.

5.410.4.3.1 HVAC balancing. In addition to testing and adjusting, before a new space-conditioning system serving a building or space is operated for normal use, the system shall be balanced in accordance with the procedures defined by the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; Associated Air Balance Council National Standards or as approved by the enforcing agency.

Y	N/A	RESPON. PARTY

5.410.4.4 Reporting. After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.

5.410.4.5 Operation and maintenance (O & M) manual. Provide the building owner or representative with detailed operating and maintenance instructions and copies of guaranties/warranties for each system. O & M instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other related regulations.

5.410.4.5.1 Inspections and reports. Include a copy of all inspection verifications and reports required by the enforcing agency.

DIVISION 5.5 ENVIRONMENTAL QUALITY

SECTION 5.501 GENERAL

5.501.1 SCOPE. The provisions of this chapter shall outline means of reducing the quantity of air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of a building's installers, occupants and neighbors.

SECTION 5.502 DEFINITIONS

5.502.1 DEFINITIONS. The following terms are defined in Chapter 2 *(and are included here for reference)*

ARTERIAL HIGHWAY. A general term denoting a highway primarily for through traffic usually on a continuous route.

A-WEIGHTED SOUND LEVEL (dBA). The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made.

1 BTU/HOUR. British thermal units per hour, also referred to as Btu. The amount of heat required to raise one pound of water one degree Fahrenheit per hour, a common measure of heat transfer rate. A ton of refrigeration is 12,000 Btu, the amount of heat required to melt a ton (2,000 pounds) of ice at 32^{0} Fahrenheit.

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL). A metric similar to the day-night average sound level (Ldn), except that a 5 decibel adjustment is added to the equivalent continuous sound exposure level for evening hours (7pm to 10pm) in addition to the 10 dB nighttime adjustment used in the Ldn.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, timber, prefabricated wood I–joists or finger–jointed lumber, all as specified in California Code of Regulations (CCR), Title 17, Section 93120.1(a).

Note: See CCR, Title 17, Section 93120,1.

DAY-NIGHT AVERAGE SOUND LEVEL (Ldn). The A-weighted equivalent continuous sound exposure level for a 24-hour period with a 10 dB adjustment added to sound levels occurring during nighttime hours (10p,m, to 7 a,m,).

DECIBEL (db). A measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power, sound intensity) with respect to a reference quantity.

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the *California Electrical Code*, off-road, self-propelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

ELECTRIC VEHICLE CHARGING STATION(S) (EVCSj). One or more spaces intended for charging electric vehicles.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). The conductors, including the ungrounded, grounded, and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

ENERGY EQUIVALENT (NOISE) LEVEL (Leq). The level of a steady noise which would have the same energy as the fluctuating noise level integrated over the time of period of interest.

EXPRESSWAY. An arterial highway for through traffic which may have partial control of access, but which may or may not be divided or have grade separations at intersections.

FREEWAY. A divided arterial highway with full control of access and with grade separations at intersections.

GLOBAL WARMING POTENTIAL (GWP). The radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time. Carbon dioxide is the reference compound with a GWP of one.

GLOBAL WARMING POTENTIAL VALUE (GWP VALUE). A 100-year GWP value published by the Intergovernmental Panel on Climate Change (IPCC) in either its Second Assessment Report (SAR) (IPCC, 1995); or its Fourth Assessment A-3 Report (AR4) (IPCC, 2007). The SAR GWP values are found in column "SAR (100-yr)" of Table 2.14,; the AR4 GWP values are found in column "100 yr" of Table 2.14.

HIGH-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that is: (a) a chlorofluorocarbon, a hdrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon, or any compound or blend of compounds, with a GWP value equal to or greater than 150, or (B) any ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009).

LONG RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.5 times the pipe diameter,

LOW-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that: (A) has a GWP value less than 150, and (B) is not an ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009),

MERV. Filter minimum efficiency reporting value, based on ASHRAE 52.2–1999.

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base REactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundreths of a gram (g O^{3}/g ROC).

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).

PSIG. Pounds per square inch, guage.

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

SCHRADER ACCESS VALVES. Access fittings with a valve core installed.

SHORT RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.0 times the pipe diameter.

SUPERMARKET. For the purposes of Section 5.508.2, a supermarket is any retail food facility with 8,000 square feet or more conditioned area, and that utilizes either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units.

VOC. A volatile organic compound broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a)

Note: Where specific regulations are cited from different agencies such as SCAQMD, ARB, etc., the VOC definition included in that specific regulation is the one that prevails for the specific measure in question.

SECTION 5.503 FIREPLACES

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5.503.1 FIREPLACES. Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or a sealed woodstove or pellet stove, and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150. Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordinances.

5.503.1.1 Woodstoves. Woodstoves and pellet stoves shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits.

SECTION 5.504 POLLUTANT CONTROL

Y	N/A	RESPON. PARTY
☒	☐	CONTRACTOR

5.504.1 TEMPORARY VENTILATION. The permanent HVAC system shall only be used during construction if necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of 8, based on ASHRAE 52.2-1999, or an average efficiency of 30% based on ASHRAE 52.1-1992 Replace all filters immediately prior to occupancy, or, if the building is occupied during alteration, at the conclusion of construction.

Y	N/A	RESPON. PARTY
☐	☐	

5.504.3 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation and during storage on the construction site until final startup of the heating, cooling and ventilation equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may enter the system.

DISCLAIMER: *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
NONRESIDENTIAL MANDATORY MEASURES, SHEET 3 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y	N/A	RESPON. PARTY
☒	☐	ARCH (A)

5.504.4 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.

5.504.4.1 Adhesives, sealants and caulks. Adhesives, sealants, and caulks used on the project shall meet the requirements of the following standards:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection 2, below.

2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with Section 94507.

TABLE 5.504.4.1 - ADHESIVE VOC LIMIT[1,2]

Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVES	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT SPECIFICALLY LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168, www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF

TABLE 5.504.4.2 - SEALANT VOC LIMIT

Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NONPOROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

NOTE: FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THESE TABLES, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in Subsections 4.21, 4.36 and 4.37 of the 2007 California Air Resources Board Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 5.504.4.3 shall apply.

5.504.4.3.1 Aerosol Paints and coatings. Aerosol paints and coatings shall meet the PWMIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of *California Code of Regulations*, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8 Rule 49.

Y	N/A	RESPON. PARTY

TABLE 5.504.4.3 - CONT.

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS

COATING CATEGORY	CURRENT VOC LIMIT
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH-TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS[1]	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS:	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

5.504.4.3.2 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

1. Manufacturer's product specification
2. Field verification of on-site product containers

5.504.4.4 Carpet Systems.
All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.4.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,"Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.4.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 5.504.4.1.

5.504.4.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure (ATCM) for Composite Wood (17 CCR 93120 et seq.). Those materials not exempted under the ATCM must meet the specified emission limits, as shown in Table 5.504.4.5.

5.504.4.5.3 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269 or European 636 3S standards.
5. Other methods acceptable to the enforcing agency.

TABLE 5.504.4.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD[2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16 INCHES (8 MM).

Y	N/A	RESPON. PARTY
☐	☒	
☐	☒	
☐	☒	
☐	☒	
☐	☒	
☐	☒	
☐	☒	

5.504.4.6 Resilient flooring systems. Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health,"Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specifications 01350)

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.6.1 Verification of compliance. Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.

5.504.4.7 Thermal insulation
Comply with the requirements of the California Department of Public Health, "Standard Method of the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, "Version 1.2, January 1.2, January 2017 (Emission testing method for California Specification 01350),
See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.7.1 Verification of compliance.
Documentation shall be provided verifying that thermal insulation materials meet the pollutant emission limits.

5.504.4.8 Acoustical ceiling and wall panels.
Comply with the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, " Version 1.2, January 2017 (Emission testing method for California Specification 01350).
See California Department of Public Health's website for certification programs and testing labs.

5.504.4.8.1 Verification of compliance. Documentation shall be provided verifying that acoustical finish materials meet the pollutant emission limits.

5.504.5.3 Filters. In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Exceptions: Existing mechanical equipment.

5.504.5.3.1 Labeling. Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

5.504.7 ENVIRONMENTAL TOBACCO SMOKE (ETS) CONTROL. Where outdoor areas are provided for smoking, prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows and within the building as already prohibited by other laws or regulations: or as enforced by ordinances, regulations or policies of any city, county, city and county, California Community College, campus of the California State University, or campus of the University of California, whichever are more stringent. When ordinances, regulations or policies are not in place, post signage to inform building occupants of the prohibitions.

SECTION 5.505 INDOOR MOISTURE CONTROL

5.505.1 INDOOR MOISTURE CONTROL. Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2, Sections 1202 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures, see Section 5.407.2 of this code.

SECTION 5.506 INDOOR AIR QUALITY

5.506.1 OUTSIDE AIR DELIVERY. For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 120.1 (Requirements For Ventilation) of the *California Energy Code*, or the applicable local code, whichever is more stringent, and Division 1, Chapter 4 of CCR, Title 8.

5.506.2 CARBON DIOXIDE (CO_2) MONITORING. For buildings or additions equipped with demand control ventilation, CO_2 sensors and ventilation controls shall be specified and installed in accordance with the requirements of the California Energy Code, Section 120(c)(4).

5.506.3 Carbon dioxide (CO2) monitoring in classrooms.
(DSA-SS) Each public K-12 school classroom, as listed in Table 120.1-A of the *California Energy Code*, shall be equipped with a carbon dioxide monitor or sensor that meets the following requirements:

1. The monitor or sensor shall be permanently affixed in a tamper-proof manner in each classroom between 3 and 6 feet (914 mm and 1829 mm) above the floor and at least 5 feet (1524 mm) away from door and operable windows.
2. When the monitor or sensor is not integral to an Energy Management Control System (EMCS), the monitor or sensor shall display the carbon dioxide readings on the device. When the sensor is integral to an EMCS, the carbon dioxide readings shall be available to and regularly monitored by facility personnel.
3. A monitor shall provide notification though a visual indicator on the monitor when the carbon dioxide levels in the classroom have exceeded 1,100ppm. A sensor integral to an EMCS shall provide notification to facility personnel through a visual and/or audible indicator when the carbon dioxide levels in the classroom have exceeded 1,100ppm.
4. The monitor or sensor shall measure carbon dioxide levels at minimum 15- minute intervals and shall maintain a record of previous carbon dioxide measurements of not less than 30 days duration.
5. The monitor or sensor used to measure carbon dioxide levels shall have the capacity to measure carbon dioxide levels with a range of 400ppm to 2000ppm or greater.
6. The monitor or sensor shall be certified by the manufacturer to be accurate within 75ppm at 1,000ppm carbon dioxide concentration and shall be certified by the manufacturer to require calibration no more frequently than once every 5 years.

SECTION 5.507 ENVIRONMENTAL COMFORT

5.507.4 ACOUSTICAL CONTROL. Employ building assemblies and components with Sound Transmission Class (STC) values determined in accordance with ASTM E 90 and ASTM E 413, or Outdoor-Indoor Sound Transmission Class (OITC) determined in accordance with ASTM E 1332, using either the prescriptive or performance method in Section 5.507.4.1 or 5.507.4.2.

Exception: Buildings with few or no occupants or where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures and utility buildings.

Exception: [DSA-SS] For public schools and community colleges, the requirements of this section and all subsections apply only to new construction.

5.507.4.1 Exterior noise transmission, prescriptive method. Wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 in the following locations:

1. Within the 65 CNEL noise contour of an airport.

   Exceptions:

   1. L_{dn} or CNEL for military airports shall be determined by the facility Air Installation Compatible Land Use Zone (AICUZ) plan.
   2. L_{dn} or CNEL for other airports and heliports for which a land use plan has not been developed shall be determined by the local general plan noise element.

2. Within the 65 CNEL or L_{dn} noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway source as determined by the Noise Element of the General Plan.

5.507.4.1.1. Noise exposure where noise contours are not readily available. Buildings exposed to a noise level of 65 dB L_{eq} - 1-hr during any hour of operation shall have building, addition or alteration exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composite STC rating of at least 45 (or OITC 35), with exterior windows of a minimum STC of 40 (or OITC 30).

5.507.4.2 Performance Method. For buildings located as defined in Section 5.507.4.1 or 5.507.4.1.1, wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (Leq-1HR) of 50 dBA in occupied areas during any hour of operation.

5.507.4.2.1 Site Features. Exterior features such as sound walls or earth berms may be utilized as appropriate to the building, addition or alteration project to mitigate sound migration to the interior.

5.507.4.2.2 Documentation of Compliance. An acoustical analysis documenting complying interior soundlevels shall be prepared by personnel approved by the architect or engineer of record.

5.507.4.3 Interior sound transmission. Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40.

Note: Examples of assemblies and their various STC ratings may be found at the California Office of Noise Control: www.todbase.org/PDF/CaseStudies/stc_icc_ratings.pdf.

SECTION 5.508 OUTDOOR AIR QUALITY

5.508.1 Ozone depletion and greenhouse gas reductions. Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.

5.508.1.1 Chlorofluorocarbons (CFCs). Install HVAC, refrigeration and fire suppression equipment that do not contain CFCs.

5.508.1.2 Halons. Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.

Y	N/A	RESPON. PARTY
☐	☒	

5.508.2 Supermarket refrigerant leak reduction. New commercial refrigeration systems shall comply with the provisions of this section when installed in retail food stores 8,000 square feet or more conditioned area, and that utilize either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units. The leak reduction measures apply to refrigeration systems containing high-global-warming potential (high-GWP) refrigerants with a GWP of 150 or greater. New refrigeration systems include both new facilities and the replacement of existing refrigeration systems in existing facilities.

Exception: Refrigeration systems containing low-global warming potential (low-GWP) refrigerant with a GWP value less than 150 are not subject to this section, Low-GWP refrigerants are nonozone-depleting refrigerants that include ammonia, carbon dioxide (CO_2), and potentially other refrigerants.

5.508.2.1 Refrigerant piping. Piping compliant with the California Mechanical Code shall be installed to be accessible for leak protection and repairs. Piping runs using threaded pipe, copper tubing with an outside diameter (OD) less than 1/4 inch, flared tubing connections and short radius elbows shall not be used in refrigerant systems except as noted below.

5.508.2.1.1 Threaded pipe. Threaded connections are permitted at the compressor rack.

5.508.2.1.2 Copper pipe. Copper tubing with an OD less than 1/4 inch may be used in systems with a refrigerant charge of 5 pounds or less.

5.508.2.1.2.1 Anchorage. One-fouth-inch OD tubing shall be securely clamped to a rigid base to keep vibration levels below 8 mils.

5.508.2.1.3 Flared tubing connections. Double-flared tubing connections may be used for pressure controls, valve pilot lines and oil.

Exception: Single-flared tubing connections may be used with a multiring seal coated with industrial sealant suitable for use with refrigerants and tightened in accordance with manufacturer's recommendations.

5.508.2.1.4 Elbows. Short radius elbows are only permitted where space limitations prohibit use of long radius elbows.

5.508.2.2 Valves. Valves Valves and fittings shall comply with the *California Mechanical Code* and as follows.

5.508.2.2.1 Pressure relief valves. For vessels containing high-GWP refrigerant, a rupture disc shall be installed between the outlet of the vessel and the inlet of the pressure relief valve.

5.508.2.2.1.1 Pressure detection. A pressure gauge, pressure transducer or other device shall be installed in the space between the rupture disc and the relief valve inlet to indicate a disc rupture or discharge of the relief valve.

5.508.2.2.2 Access valves. Only Schrader access valves with a brass or steel body are permitted for use.

5.508.2.2.2.1 Valve caps. For systems with a refrigerant charge of 5 pounds or more, valve caps shall be brass or steel and not plastic.

5.508.2.2.2.2 Seal caps. If designed for it, the cap shall have a neoprene O-ring in place.

5.508.2.2.2.2.1 Chain tethers. Chain tethers to fit ovr the stem are required for valves designed to have seal caps.

Exception: Valves with seal caps that are not removed from the valve during stem operation.

5.508.2.3 Refrigerated service cases. Refrigerated service cases holding food products containing vinegar and salt shall have evaporator coils of corrosion-resistant material, such as stainless steel; or be coated to prevent corrosion from these substances.

5.508.2.3.1 Coil coating. Consideration shall be given to the heat transfer efficiency of coil coating to maximize energy efficiency.

5.508.2.4 Refrigerant receivers. Refrigerant receivers with capacities greater than 200 pounds shall be fitted with a device tha indicates the level of refrigerant in the receiver.

5.508.2.5 Pressure testing. The system shall be pressure tested during installation prior to evacuation and charging.

5.508.2.5.1 Minimum pressure. The system shall be charged with regulated dry nitrogen and appropriate tracer gas to bring system pressure up to 300 psig minimum.

5.508.2.5.2 Leaks. Check the system for leaks, repair any leaks, and retest for pressure using the same gauge.

5.508.2.5.3 Allowable pressure change. The system shall stand, unaltered, for 24 hours with no more than a +/- one pound pressure change from 300 psig, measured with the same gauge.

5.508.2.6 Evacuation. The system shall be evacuated after pressure testing and prior to charging.

5.508.2.6.1 First vacuum. Pull a system vacuum down to at least 1000 microns (+/- 50 microns), and hold for 30 minutes.

5.508.2.6.2 Second vacuum. Pull a second system vacuum to a minimum of 500 microns and hold for 30 minutes.

5.508.2.6.3 Third vacuum. Pull a third vacuum down to a minimum of 300 microns, and hold for 24 hours with a maximum drift of 100 microns over a 24-hour period.

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

Notes:

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

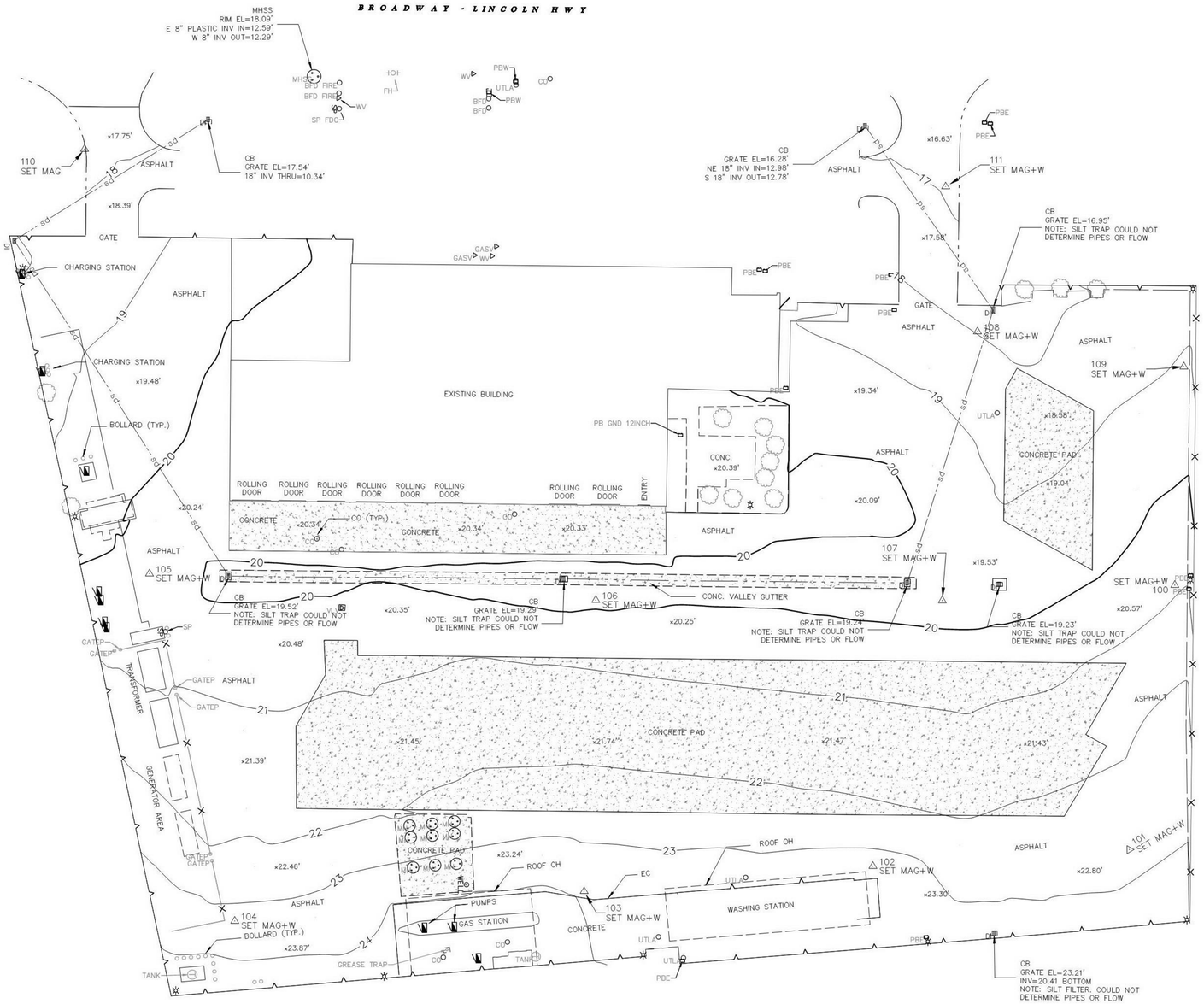
[BSC-CG] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

DISCLAIMER: *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*


BROADWAY - LINCOLN HWY
MHSS
RIM EL=18.09'
E 8" PLASTIC INV IN=12.59'
W 8" INV OUT=12.29'
110
SET MAG
CB
GRATE EL=17.54'
18" INV THRU=10.34'
ASPHALT
GATE
CHARGING STATION
CHARGING STATION
BOLLARD (TYP.)
EXISTING BUILDING
ROLLING DOOR
ENTRY
CONCRETE
CO (TYP.)
105
SET MAG+W
CB
GRATE EL=19.52'
NOTE: SILT TRAP COULD NOT DETERMINE PIPES OR FLOW
CB
GRATE EL=19.29'
NOTE: SILT TRAP COULD NOT DETERMINE PIPES OR FLOW
106
SET MAG+W
CONC. VALLEY GUTTER
CB
GRATE EL=19.24'
NOTE: SILT TRAP COULD NOT DETERMINE PIPES OR FLOW
CB
GRATE EL=19.23'
NOTE: SILT TRAP COULD NOT DETERMINE PIPES OR FLOW
107
SET MAG+W
SET MAG+W
100
CB
GRATE EL=16.28'
NE 18" INV IN=12.98'
S 18" INV OUT=12.78'
111
SET MAG+W
CB
GRATE EL=16.95'
NOTE: SILT TRAP COULD NOT DETERMINE PIPES OR FLOW
108
SET MAG+W
109
SET MAG+W
PB GND 12INCH
CONC.
CONCRETE PAD
CONCRETE PAD
GENERATOR AREA
TRANSFORMER
PUMPS
GAS STATION
WASHING STATION
ROOF OH
EC
102
SET MAG+W
103
SET MAG+W
104
SET MAG+W
BOLLARD (TYP.)
101
SET MAG+W
GREASE TRAP
TANK
CB
GRATE EL=23.21'
INV=20.41 BOTTOM
NOTE: SILT FILTER. COULD NOT DETERMINE PIPES OR FLOW

N

LEGEND

BFP	BACK FLOW PREVENTER
CO/COSS	SEWER CLEAN-OUT
CONC.	CONCRETE
EC	EDGE OF CONCRETE
FH	FIRE HYDRANT
FF	FINISH FLOOR
GASV	GAS VALVE
GATEP	GATE POLE
IV	IRRIGATION VALVE
PP	POWER POLE
PBE	PULLBOX ELECTRIC
PBW	PULLBOX WATER
WM	WATER METER
WV	WATER VALVE
	CHAIN LINK FENCE
	WALL
	TREE, SIZE AS NOTED (IN INCHES)
×20.35'	SPOT ELEVATION
	STREET LIGHT
	CABINET
	VALVE (TYPE AS NOTED)
	MANHOLE (TYPE AS NOTED)
PBE	PULLBOX ELECTRIC
GM	GAS METER
WM	WATER METER
	DRAIN INLET
	CONTROL POINT
CO	CLEAN OUT

30 15 0 30

(IN FEET)
1 INCH = 30 FEET

NOTES

BASIS OF BEARINGS AND COORDINATES: NAD 83 ZONE II HELD COORDINATE OF N 1811842.91 E 6491439.14 AT CITY OF VALLEJO P.T. 9629 AS SHOWN ON RECORD OF SURVEY BOOK 22 OF SURVEYS AT PAGES 23–25, SOLANO COUNTY RECORDS

VERTICAL DATUM: NAVD 88, HELD ELEVATION OF 179.10' AT CITY OF VALLEJO P.T. 9629 AS SHOWN ON RECORD OF SURVEY BOOK 22 OF SURVEYS AT PAGES 23–25, SOLANO COUNTY RECORDS

CHAUDHARY & ASSOCIATES, INC.
ENGINEERS SURVEYORS INSPECTORS
211 GATEWAY ROAD WEST, SUITE 204
NAPA, CALIFORNIA 94558
Tel: (707) 255-2729 FAX. (707) 255-5021 WWW.CHAUDHARY.COM

JANUARY 4, 2021
1850 BROADWAY SITE

WSP USA Inc.
2150 RIVER PLAZA DR
SUITE 400
SACRAMENTO, CA 95833
TEL: (916) 567-2500

SolTrans

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3	05/26/2023	CCO #001
2	03/31/2023	CONFORM SET
1	10/18/2022	ISSUE FOR BID

REVISION LIST

LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
RENEWAL DATE
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	FGPS
DATE	05/26/2023

DRAWING TITLE

TOPOGRAPHIC SURVEY

G105

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LICENSED ARCHITECT
REGINALD D. JONES
C-28941
EXP. 08/31/2023
STATE OF CALIFORNIA

PROJECT TITLE
BEB YARD IMPROVEMENTS

PROJECT NO. I189249
DRAWN BY
DATE 05/26/2023

DRAWING TITLE
BOUNDARY SURVEY

G106

5/26/2023 1:36:49 PM

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Adeline Nettleton
APN 52-090-130
Doc. No. 201800058726 S.C.R.

328.33'
N89°23'56"W

Adeline Nettleton
APN 52-090-250
S.C.R.

100.01'
S00°34'34"W

100.01'
N89°23'56"W

N04°40'56"W
280.52'

N85°19'04"E
5.00'

Southern Pacific Railroad
APN 52-090-070 S.C.R.

City of Vallejo
APN 52-090-260
1985-104408, Doc. No. 51574 S.C.R.

43.00'
43.00'

BROADWAY
86' Wide Per 48PM67

526.70'
S00°34'34"W

N00°34'34"E
1615.74'

N04°40'56"W
243.31'

N78°05'03"E
482.80'

Southern Pacific Railroad
APN 52-090-070
Book 112, Page 377 S.C.R.

Gale A. Gibb
APN 52-090-050
1984-28744, Doc. No. 15000 S.C.R.

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

NORTH

LAND NET OF THE VALLEJO TRANSIT BUS MAINTENANCE CENTER

BEARINGS AND DISTANCES BASED ON CCS ZONE 2 GRID (1991.35)
SF=0.999934554 (GRID TO GROUND)
BASED UPON RTK TIES TO STREET MONUMENTS
(CALIBRATING ON THE MONS. AS SHOWN ON 22 RS 23-25)

REFERENCES
9RS7
9RS32
26RS44
48PM67
51574 OR NOV. 1, 1985

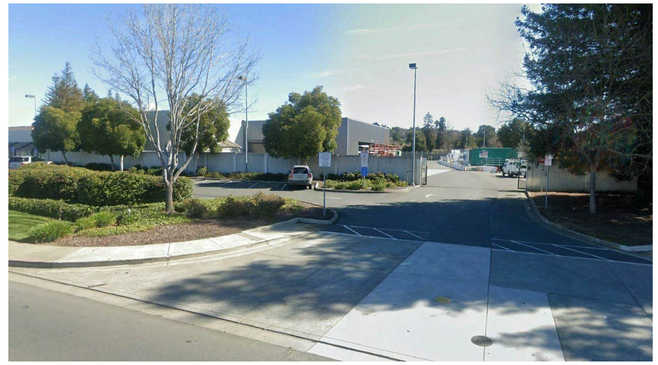
Q:\2020\20-11-033 WSP SOLTRANS\Phase A Vallejo 3 sites\1850-Broadway\DWG\01LN-2011033A-NAD-83_BRDWY.dwg ***PLOTTED MAR. 19, 2021***



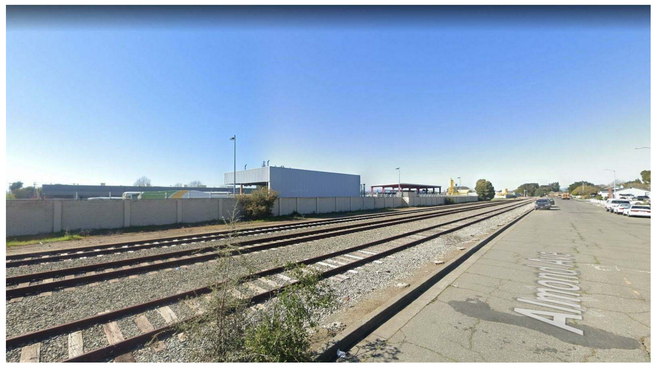
9 EXISTING MAINTENANCE
12" = 1'-0"



6 EXISTING FACADE
12" = 1'-0"



3 EXISTING ENTRY STREET VIEW
12" = 1'-0"



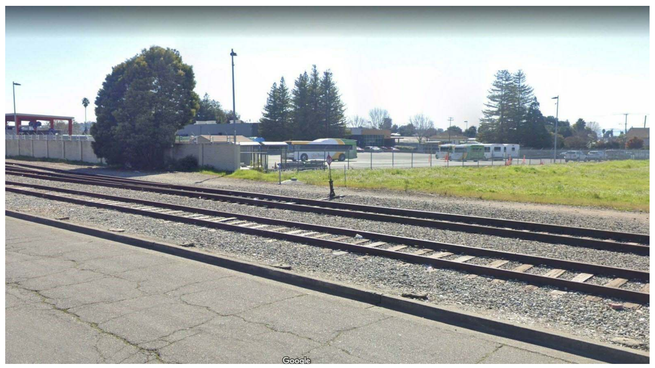
8 EXISTING REAR VIEW
12" = 1'-0"



5 EXISTING FUELING
12" = 1'-0"



2 EXISTING STREET VIEW
12" = 1'-0"



7 EXISTING VIEW FROM REAR
12" = 1'-0"



4 EXISTING EXIT STREET VIEW
12" = 1'-0"



1 EXISTING AERIAL
12" = 1'-0"

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REGINALD D. KEYS
C-28841
RENEWAL DATE
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	ER
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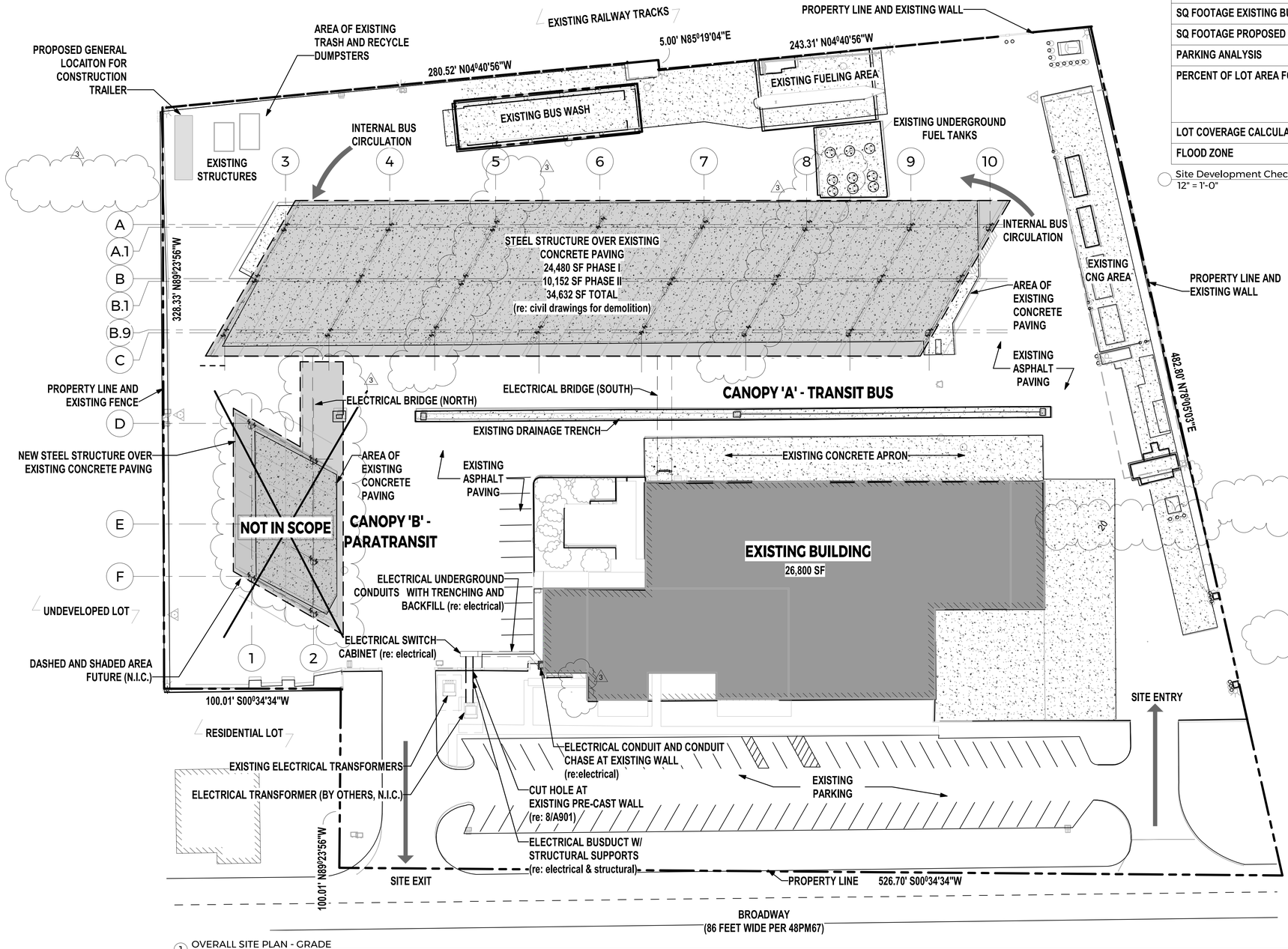
DRAWING TITLE

EXISTING SITE PHOTOGRAPHS

G107

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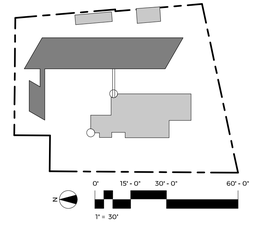
1 OVERALL SITE PLAN - GRADE
1" = 30'-0"

ITEM	INDICATION OF COMPLIANCE
SITE ADDRESS	1850 BROADWAY, VALLEJO CA, 94589
ASSESSOR'S MAP PARCEL NUMBER	52-090-260
GENERAL PLAN / ZONING DISTRICT	PUBLIC FACILITY AND INSTITUTION, PER PF-6
LOT SIZE	APPROXIMATELY 249,507.97 SF / 5.73 ACRES
ADJACENT LAND USES	RESIDENTIAL, EMPTY LOT, RAILWAY, COMMERCIAL
DEVELOPMENT STANDARDS PER VALLEJO MUNICIPAL CODE	MAKES POSITIVE CONTRIBUTION, COMPATIBLE AND HARMONIOUS WITH EXISTING, RESPECTS VIEW, DOES NOT ADVERSLY AFFECT NEIGHBORING PROP.
SQ FOOTAGE EXISTING BUILDINGS	26,800 SF
SQ FOOTAGE PROPOSED BUILDINGS	24,480 SF (PH I) + 10,152 SF (PH 2) = 34,632 SF TOTAL
PARKING ANALYSIS	NO INCREASE PER 16.62.020
PERCENT OF LOT AREA FOR:	LANDSCAPING: NO CHANGE IMPERVIOUS SURFACES: NO CHANGE COMMON OPEN SPACE: NO CHANGE PRIVATE USABLE SPACE: NO CHANGE
LOT COVERAGE CALCULATIONS	21.9 % COVERAGE
FLOOD ZONE	AREA OF MINIMAL FLOOD HAZARD (ZONE X)

Site Development Checklist
12" = 1'-0"

SHEET NOTES:
1. ALL WORK IS NEW UNLESS SPECIFICALLY NOTED AS EXISTING OR FUTURE (N.I.C)

2. ALL WORK IS TO REMAIN, UNLESS SPECIFICALLY NOTED FOR DEMOLITION



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SUITE 400
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TEL: (916) 567-2500

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REGINALD D. KEYS
C-28841
STATE OF CALIFORNIA

PROJECT TITLE
BEB YARD IMPROVEMENTS

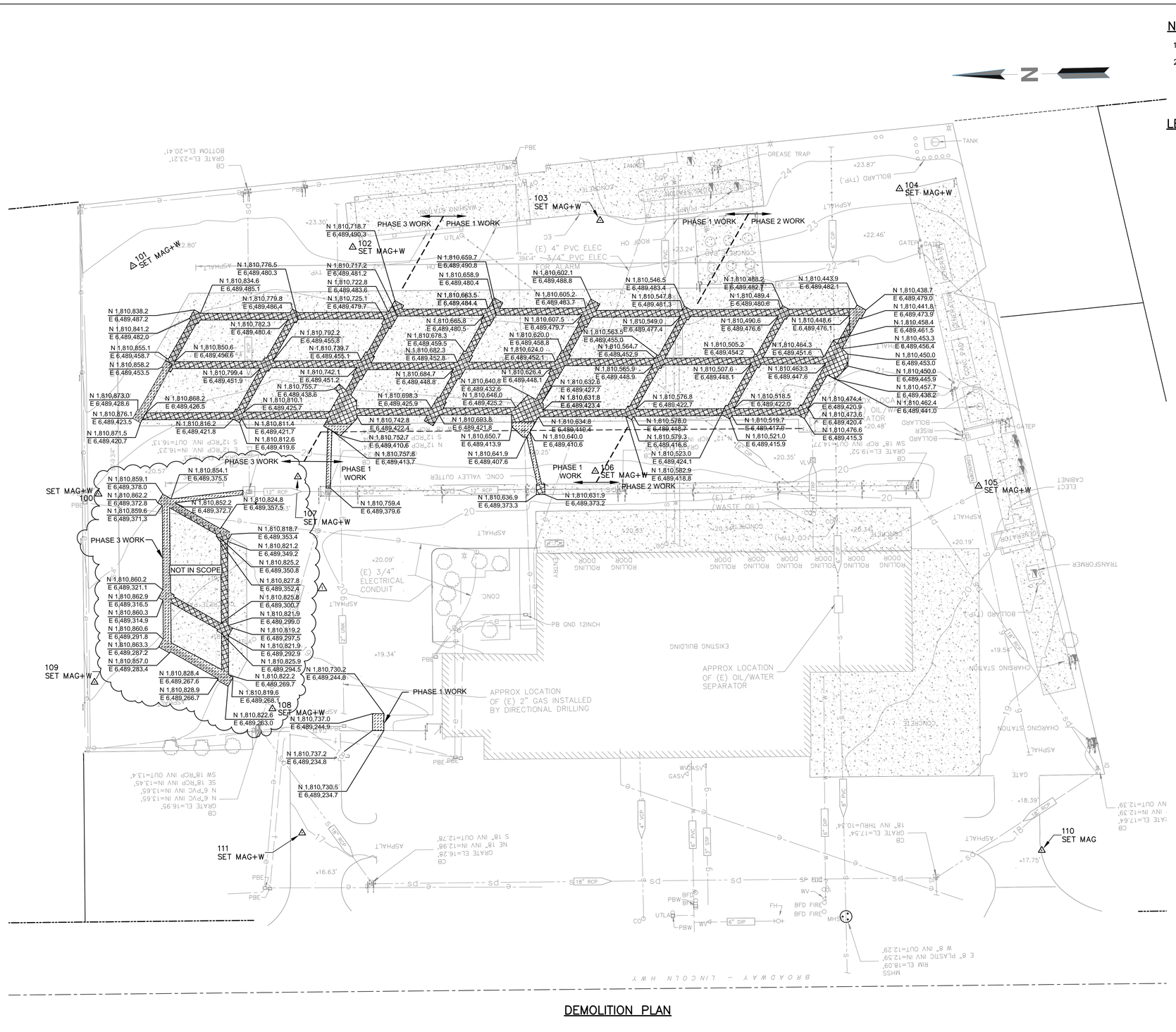
PROJECT NO.	189249
DRAWN BY	ESR
DATE	05/26/2023

DRAWING TITLE
OVERALL SITE PLAN - GRADE

AS101

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DEMOLITION PLAN

NOTE:

1. SEE DRAWING C102 FOR SHEET NOTES AND ABBREVIATIONS
2. DEMOLITION LIMITS SHOWN ARE THE MINIMUM REQUIRED. NO ADDITIONAL COMPENSATION WILL BE PROVIDED FOR DEMOLITION AND REPLACEMENT OF EXISTING PAVEMENT BEYOND THE LIMITS SHOWN

LEGEND:

- REMOVE ASPHALT CONCRETE
- REMOVE PORTLAND CEMENT CONCRETE
- SAWCUT LINE

30 15 0 30

(IN FEET)
1 INCH = 30 FEET

SURVEY NOTES:

BASIS OF BEARINGS AND COORDINATES: NAD 83 ZONE II
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Point Table (partial)				
Point Number	Northing	Easting	Elevation	Description
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104	1810417.23	6489550.74	23.32	set mag+w
111	1810780.31	6489174.81	17.01	set mag+w

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SEAL:

REGISTERED PROFESSIONAL ENGINEER
James D. Gomez
No. C 46628
Exp. 6-30-23
CIVIL
STATE OF CALIFORNIA

PROJECT TITLE

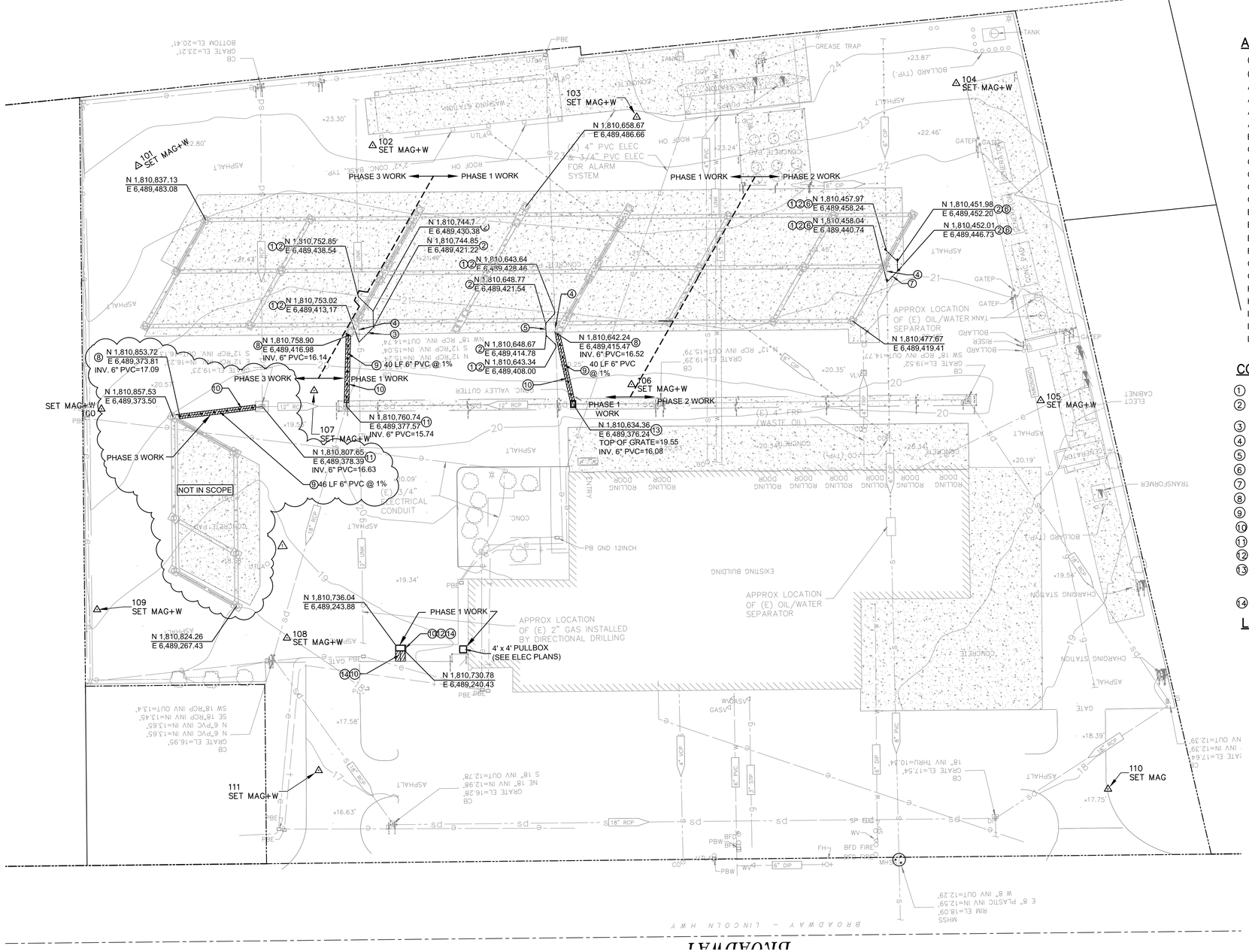
MAINTENANCE & OPERATIONS FACILITY BEB INFRASTRUCTURE IMPROVEMENTS

PROJECT NO.	
DRAWN BY	MG
DATE	10/18/22
ISSUE FOR BID	

DRAWING TITLE

OVERALL CIVIL DEMOLITION PLAN

C101



SITE PLAN

SHEET NOTES:

1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THE SERVICES OF A SUBSURFACE UTILITY LOCATING COMPANY TO LOCATE AND MARK ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES THAT MAY BE AFFECTED BY THIS PROJECT.
2. REMOVE AND REPLACE ANY FEATURES (SURFACE OR SUBSURFACE) CONFLICTING WITH CONSTRUCTION AND REPLACE IN-KIND UNLESS OTHERWISE NOTED. RESTORE ANY PAVEMENT, CURB, AND PAVEMENT MARKINGS TO ORIGINAL CONDITION.

ABBREVIATIONS:

(E)	EXISTING	MAGN	MAG-NAIL
(N)	NEW/PROPOSED	MAG+W	MAG PLUS WASHER
AB	AGGREGATE BASE	MH	MANHOLE
AC	ASPHALT CONCRETE	MIN	MINIMUM
APPROX	APPROXIMATE	MOD	MODIFIED
ARCH	ARCHITECTURAL	N	NORTH
BOC	BACK OF CURB	POC	POINT OF CONNECTION
CA	COMPRESSED AIR	PVC	POLYVINYL CHLORIDE
CB	CATCH BASIN	R	RADIUS
CIP	CAST IRON PIPE	RCP	REINFORCED CONC PIPE
CL	CENTERLINE	S	SOUTH
CONC	CONCRETE	SCH	SCHEDULE
E	EAST	SD	STORM DRAIN
ELEC	ELECTRICAL	SS	SANITARY SEWER
EL/ELEV	ELEVATION	TOC	TOP OF CURB
FL	FLOWLINE	TYP	TYPICAL
G	GAS	UON	UNLESS OTHERWISE NOTED
GND	GROUND	W	WATER/WEST
HMA	HOT-MIX ASPHALT		
HT	HEIGHT		
IW	INDUSTRIAL WASTE		
INV	INVERT		
LF	LINEAR FEET		

CONSTRUCTION NOTES:

1. POC OF (N) UTILITY TO (E) UTILITY. MATCH (E) INVERT UON
2. INSTALL 45° PIPE FITTING BEND (ELEC CONDUIT TO HAVE MIN 16" BENDING RADIUS)
3. INSTALL (N) 2" GAS [MATCH (E) MATERIAL, SEE DETAIL 6 ON C202]
4. ABANDON (E) UTILITY
5. INSTALL (N) CONDUIT & REROUTE (E) CONDUCTORS
6. INSTALL CLEANOUT (SEE DETAIL 5 ON C201)
7. INSTALL (N) 6" CIP (SEE DETAIL 6 ON C202)
8. INSTALL 6" PVC DOWNSPOUT W/CLEANOUT (SEE DETAIL 4 ON C201)
9. INSTALL 6" PVC STORM DRAIN (SEE DETAIL 6 ON C202)
10. REMOVE & REPLACE (E) ASPHALT. MATCH (E) GRADE.
11. CORE INTO (E) SD CB (SEE DETAIL 3 ON C201)
12. RESTORE PLANTING AREA TO ORIGINAL CONDITIONS
13. INSTALL 3' x 4' PRECAST DRAIN INLET WITH GALVANIZED, TRAFFIC RATED GRATE AS PROVIDED BY OLDCASTLE INFRASTRUCTURE, JENSEN PRECAST, COLUMBIA PRECAST, OR APPROVED EQUAL.
14. INSTALL DUCT BANK (SEE DETAIL 1 ON C201 AND ELEC PLANS)

LEGEND:

REMOVE/REPLACE ASPHALT

SAWCUT ASPHALT (SEE SHEET C101 FOR ADDITIONAL DEMO/SAWCUT DETAIL)

30 15 0 30

(IN FEET)
1 INCH = 30 FEET

SURVEY NOTES:

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No. C 46628
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CIVIL
STATE OF CALIFORNIA

PROJECT TITLE

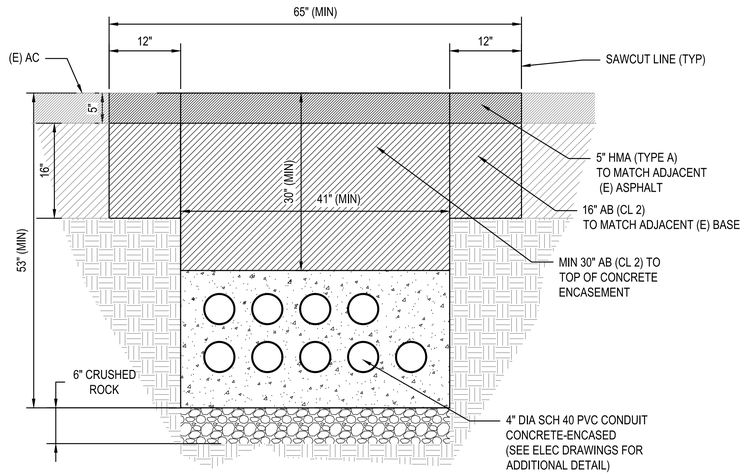
MAINTENANCE & OPERATIONS FACILITY BEB INFRASTRUCTURE IMPROVEMENTS

PROJECT NO.	
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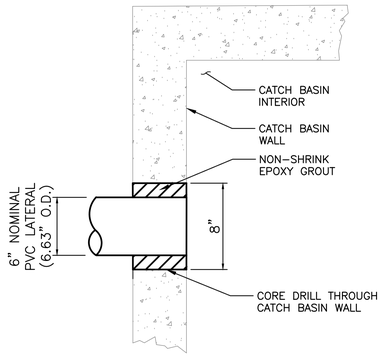
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OVERALL CIVIL SITE PLAN

C102



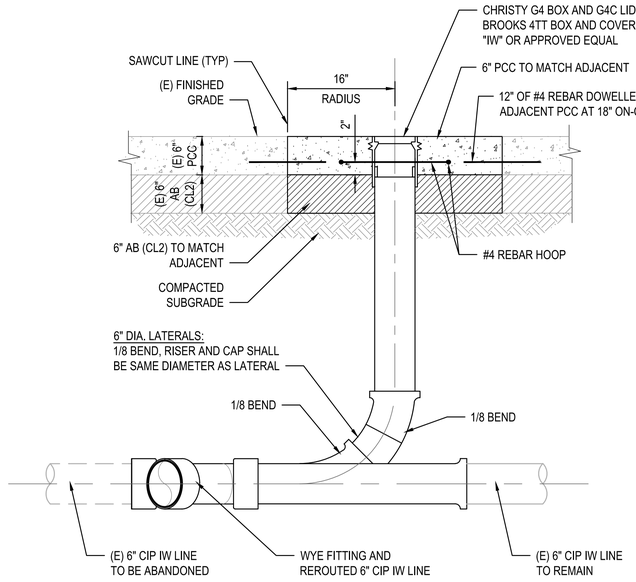
1 ELECTRICAL DUCT BANK TRENCH
SCALE: NONE



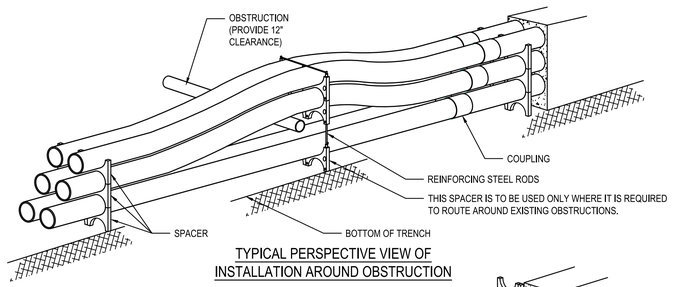
3 CORING LATERAL INTO EXISTING CATCH BASIN
SCALE: NONE

NOTE:

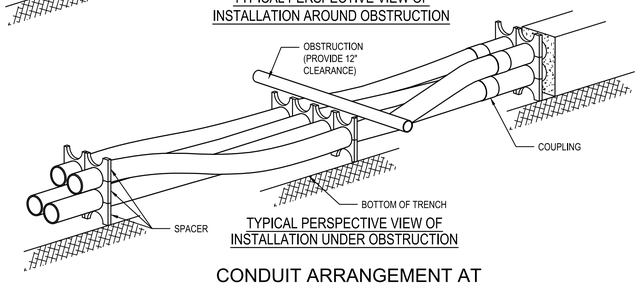
1. SEE DRAWING C102 FOR SHEET NOTES AND ABBREVIATIONS



5 INDUSTRIAL WASTE LATERAL CLEAN OUT
SCALE: NONE

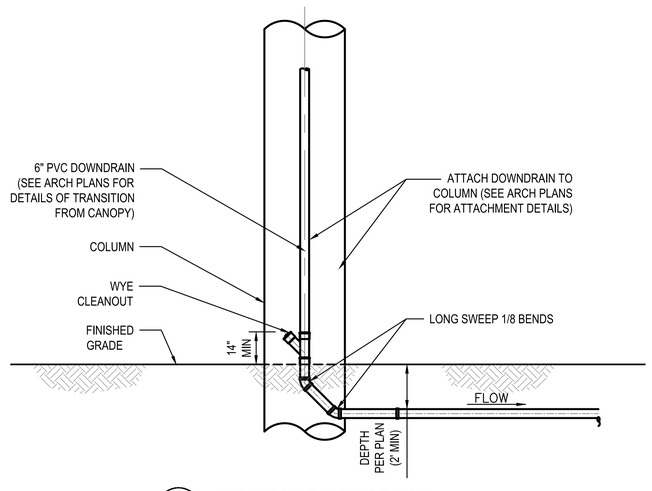


TYPICAL PERSPECTIVE VIEW OF
INSTALLATION AROUND OBSTRUCTION



TYPICAL PERSPECTIVE VIEW OF
INSTALLATION UNDER OBSTRUCTION

2 CONDUIT ARRANGEMENT AT
ACTIVE OBSTRUCTION DETAIL
SCALE: NONE



4 COLUMN DOWNDRAINS
SCALE: NONE

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SEAL:



PROJECT TITLE

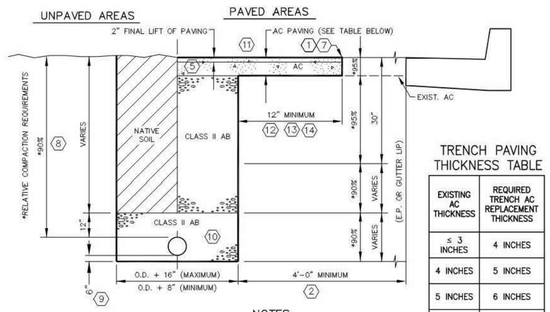
MAINTENANCE &
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BEB INFRASTRUCTURE
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PROJECT NO.	
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DRAWING TITLE

CIVIL
CONSTRUCTION
DETAILS -
SHEET 1 OF 2

C201



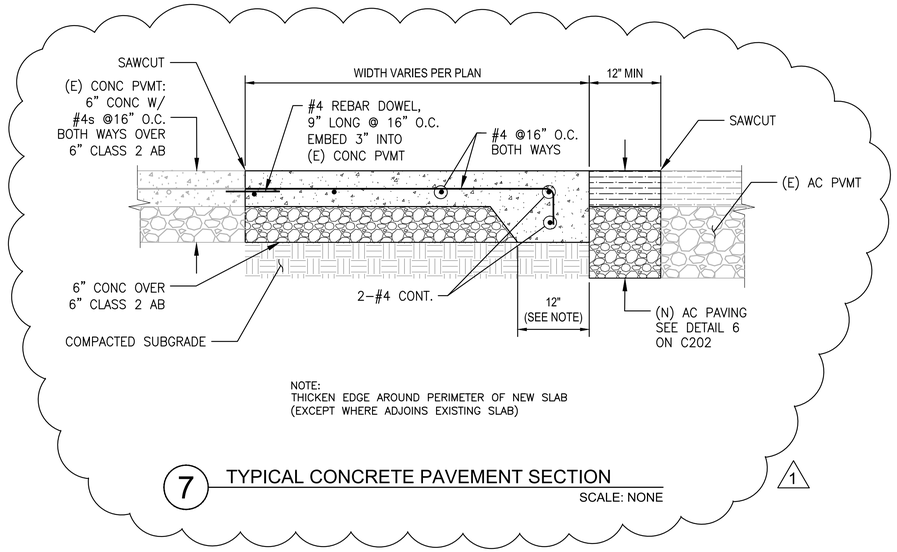
NOTES

1. ASPHALT CONCRETE (AC) MUST BE SAWCUT FULL DEPTH.
2. IF DISTANCE BETWEEN EDGE OF TRENCH TO GUTTER LIP (OR EDGE OF PAVEMENT) IS 4' OR LESS, THEN REMOVE ALL AC UP TO GUTTER LIP (OR E.P.) AND REPAVE.
3. SHORING SHALL BE REQUIRED FOR TRENCH DEPTH OF 5'-0" OR GREATER AND WHERE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED.
4. IN BACKFILLING UTILITY WIRES, A MAXIMUM OF 12" OF SAND ABOVE THEM WILL BE PERMITTED.
5. AC SHALL BE TYPE B; 1/2" MAX.; AND MEDIUM GRADING, TO INSURE ADEQUATE BONDING; A TACK COAT (SS-1) SHALL BE APPLIED OVER EXISTING AC PAVEMENT AND A PRIME COAT (MC-250) SHALL BE APPLIED OVER COMPACTED AB (SS-1 MAYBE SUBSTITUTED FOR EXISTING STREETS). USE OF MC-250 SHALL COMPLY WITH E.P.A. (ENVIRONMENTAL PROTECTION AGENCY) REGULATIONS.
6. TRAFFIC CONTROL AND WARNING SIGNS SHALL BE PER THE MANUAL OF TRAFFIC CONTROLS; PUBLISHED BY THE DEPARTMENT OF TRANSPORTATION, STATE OF CALIFORNIA.
7. SPRAY AC JOINT WITH SS-1.
8. IN PREVIOUSLY UNDEVELOPED AREAS TO BE PAVED; THE RELATIVE COMPACTION REQUIREMENTS IS AS SHOWN UNDER PAVED AREAS.
9. IF SURROUNDING MATERIALS ARE OF A HIGHLY IMPERMEABLE COMPOSITION, THEN TYPE I BEDDING IS REQUIRED.
10. USE SAND BACKFILL FOR DUCTILE IRON PIPE.
11. MATCH EXISTING AC THICKNESS IF GREATER THAN 4".
12. STREET PAVEMENT CONSTRUCTED WITHIN THE MORATORIUM PERIOD (5 YEARS) SHALL BE GROUND AND PAVED A MINIMUM DEPTH OF 2 IN. THICKNESS AND A MINIMUM WIDTH OF 20 FEET FROM EACH SIDE OF TRENCH CENTER LINE FROM GUTTER LIP TO GUTTER LIP OF THE EXISTING ROADWAY UNLESS APPROVED BY THE CITY ENGINEER.
13. GRINDING AND PAVING SHALL BE PERFORMED AFTER THE TYPICAL BACKFILL & PAVING OF TRENCH HAS BEEN COMPLETED AND INSPECTED.
14. THE EDGE OF THE GRIND AND PAVE AREA SHALL BE PERPENDICULAR TO ALL CONTIGUOUS LANES OF A A TRAVELED WAY. THE DISTANCE BETWEEN EACH PERPENDICULAR EDGE SHALL NOT BE GREATER THAN 10 FEET NOR LESS THAN 5 FEET.

TRENCH PAVING THICKNESS TABLE

EXISTING AC THICKNESS	REQUIRED TRENCH AC REPLACEMENT THICKNESS
≤ 3 INCHES	4 INCHES
4 INCHES	5 INCHES
5 INCHES	6 INCHES
≥ 6 INCHES	7 INCHES

6 TYPICAL TRENCH DETAIL
SCALE: NONE



NOTE:
THICKEN EDGE AROUND PERIMETER OF NEW SLAB (EXCEPT WHERE ADJOINS EXISTING SLAB)

7 TYPICAL CONCRETE PAVEMENT SECTION
SCALE: NONE

NOTE:

1. SEE DRAWING C102 FOR SHEET NOTES AND ABBREVIATIONS

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REVISION LIST

NO.	DATE	REVISIONS
1	05/26/23	CCO #001

SEAL:



PROJECT TITLE

MAINTENANCE & OPERATIONS FACILITY BEB INFRASTRUCTURE IMPROVEMENTS

PROJECT NO.	
DRAWN BY	MG
DATE	10/18/22
ISSUE FOR BID	

DRAWING TITLE

CIVIL CONSTRUCTION DETAILS - SHEET 2 OF 2

C202

I. GENERAL DESIGN CRITERIA:

1. APPLICABLE CODES:
   A. CALIFORNIA BUILDING CODE / INTERNATIONAL BUILDING CODE
   B. CONCRETE CODE: ACI 318-14 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE; ACI 315-05, "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT.
   C. STRUCTURAL STEEL: "MANUAL OF STEEL CONSTRUCTION" AISC 360,10
   D. COLD FORMED STEEL: AISI S100-12, "NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS."
   E. WELDING: AWS D1,1-10, "STRUCTURAL WELDING CODE"
   F. AMERICAN SOCIETY OF CIVIL ENGINEERS "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES," ASCE/SEI 7-16

2. GRAVITY DESIGN LOADS:

   LIVE LOADS:
   A. MECHANICAL AREAS.....= 150 PSF, MINIMUM
   B. MINIMUM ROOF CONSTRUCTION LIVE LOAD.....= 20 PSF

3. WIND LOADS:
   A. TYPICAL AREAS:
      1. BASIC WIND SPEED.....= 110 MPH
      2. RISK CATEGORY.....=II
      3. WIND EXPOSURE.....= C
      4. DIRECTIONALITY FACTOR.....Kd = 0.85
      5. INTERNAL PRESSURE COEFFICIENT.....= +/- 0.18
      6. GUST EFFECT FACTOR.....Gf = 0.85
      7. TOPOGRAPHY FACTOR.....Kzt = 1.0

4. SEISMIC LOADS:
   A. USE GROUP / OCCUPANCY CATEGORY.....= II
   B. IMPORTANCE FACTOR.....= 1.0
   C. SITE CLASS.....= C
   D. MAPPED SPECTRAL RESPONSE ACCELERATION, Ss.....= 2.001
   E. MAPPED SPECTRAL RESPONCE ACCELERATION, S1.....= 0.690
   F. SPECTRAL RESPONCE COEFFICIENT, Sds.....= 1.601
   G. SPECTRAL RESPONCE COEFFICIENT, Sd1.....= 0.644
   H. DESIGN CATEGORY.....= D
   I. NORTH-SOUTH BASIC SEISMIC FORCE RESISTING SYSTEM.....= STEEL SPECIAL CONCENTRICALLY BRACED FRAME
   J. NORTH-SOUTH RESPONCE MODIFICATION FACTOR.....= 6
   K. EAST-WEST BASIC SEISMIC FORCE RESISTING SYSTEM.....= STEEL SPECIAL MOMENT FRAMES
   L. EAST-WEST RESPONCE MODIFICATION FACTOR.....= 8
   M. ANALYSIS PROCEDURE.....= EQUIVALENT LATERAL FORCE.

II. GENERAL CONCRETE NOTES:

1. MATERIAL
   A. UNLESS NOTED OTHERWISE, ALL CAST IN PLACE CONCRETE SHALL CONFORM TO SPECIFICATION SECTION 033000, "CAST-IN PLACE CONCRETE" AND HAVE THE FOLLOWING PHYSICAL PROPERTIES:
      - NORMAL WEIGHT CONCRETE
      - COMPRESSIVE STRENGTH, F'C = 4000 PSI AT 28 DAYS
      - SLUMP = 4" MAX
      - MAX WATER / CEMENT RATIO = 0,45
      - AGGREGATE SIZE = SIZE #67 AS DEFINED BY ASTM C33
   B. ADMIXTURES SHALL BE AS REQUIRED FOR HOT/COLD WEATHER CONCRETING.
   C. REINFORCEMENT UNLESS NOTED OTHERWISE: REINFORCING STEEL SHALL CONFORM TO SPECIFICATION SECTION 033000 "CAST-IN-PLACE CONCRETE" AND SHALL CONFORM TO ASTM A615, GRADE 60

2. BEGIN DISCHARGE OF CONCRETE FROM TRUCK WITHIN 45 MINUTES AFTER ARRIVAL ON SITE. COMPLETE DISCHARGE OF CONCRETE WITHIN 90 MINUTES OR 300 REVOLUTIONS AFTER INTRODUCTION OF WATER INTO THE MIX.

3. FOR SPECIAL WEATHER CONCRETING (HOT AND COLD WEATHER CONCRETING) SEE ACI 305 "HOT WEATHER CONCRETING"AND ACI 306 "COLD WEATHER CONCRETING" RESPECTIVELY.

4. CONCRETE FINISHES.
   A. EXPOSED FLOOR SLAB AND HOUSEKEEPING PADS: ALL SLABS SHALL BE SCREED AND FLOATED WITH STRAIGHT EDGES TO BRING THE SURFACES TO THE REQUIRED FINISH ELEVATION WITH NO COARSE AGGREGATE VISIBLE. FLOATING SHALL LEAVE THE SURFACE OPEN AND SHALL NOT HAVE A SLICK-TIGHT SURFACE. DUSTING WITH ANY MATERIAL TO ABSORB SURFACE WATER IS PROHIBITED.
   B. FLOOR SLABS SHALL ADDITIONALLY RECEIVE TROWEL, TROWEL AND LIGHT BROOM, OR SUP RESISTIVE FINISH AS PER SPECIFICATION SECTION 033000.
   C. FORMED SURFACES: PROVIDE A SMOOTH FORMED FINISH ON FORMED CONCRETE SURFACES EXPOSED TO VIEW. REPAIR AND PATCH DEFECTIVE AREAS WITH FINS AND OTHER PROJECTIONS COMPLETELY REMOVED AND SMOOTHED.
   D. FORMED SURFACES NOT EXPOSED TO VIEW: PROVIDE A ROUGH FORMED FINISH ON FORMED SURFACES NOT EXPOSED TO VIEW IN THE FINISHED WORK OR CONCEALED BY OTHER CONSTRUCTION.

5. CLEAR COVER TO REINFORCEMENT SHALL CONFORM TO ACI 318 UNLESS OTHERWISE NOTED. DETAILS OF REINFORCEMENT SHALL CONFORM TO ACI 315.

6. WELDING OF REINFORCEMENT IS PROHIBITED.

7. FIELD WELDING TO ANCHOR BOLTS IS PROHIBITED.

8. OBSERVE ALL RULES OF LOCAL AGENCIES WITH RESPECT TO SAFETY, BADGES, PERMITS, CUTTING AND WELDING, ETC,

9. ANCHOR BOLTS FOR COLUMNS SHALL CONFORM TO ASTM F1554, GRADE 36.

10. MINIMUM REINFORCING LAP SPLICES SHALL BE CLASS 'B', AS DEFINED IN ACI 318.

III. FOUNDATIONS:

1. THE FOUNDATION HAS BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION PREPARED BY SOAR ENVIRONMENTAL CONSULTING, INC. ON MARCH 2ND 2021.

2. SPREAD FOOTINGS:
   A. FOOTINGS SHALL BEAR ON ENGINEERED FILL OR VIRGIN SOIL CAPABLE OF SUSTAINING A BEARING PRESSURE OF 1,800 P.S.F. UNDER FULL SERVICE LIVE AND DEAD LOAD.
   B. FOOTINGS SHALL BE POURED INTO AN EARTH-FORMED TRENCH, UNLESS NOTED OTHERWISE.
   C. ALL BEARING MATERIAL SHALL BE INSPECTED BY THE ON-SITE GEOTECHNICAL REPRESENTATIVE PRIOR TO CONCRETE PLACEMENT. THE GEOTECHNICAL ENGINEER OR HIS ON-SITE REPRESENTATIVE SHALL BE THE SOLE JUDGE AS TO THE SUITABILITY OF THE BEARING MATERIAL. FOOTING ELEVATIONS SHALL BE ADJUSTED, OR LEAN FILL ADDED AS REQUIRED.
   D. BOTTOM OF EXTERIOR FOOTINGS SHALL BEAR A MINIMUM OF 48 INCHES BELOW FINAL GRADE FOR FROST PROTECTION.
   E. GRANULAR BASE UNDER SLABS-ON-GRADE SHALL BE COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698
   F. EL 100'-0" = U.S.G.S. EL 22.28.
   G. COMPACT SUBGRADE AND PREPARE WITH 10 MIL VAPOR BARRIER.

3. DRILLED CAST-IN-PLACE FRICTION PIERS
   A. AN ALLOWABLE SKIN FRICTION OF 750 PSF HAS BEEN USED FOR DEAD AND LIVE LOADS AT CANOPY A (EAST CANOPY) AND 500 PSF AT CANOPY B (WEST CANOPY)

IV. STRUCTURAL STEEL NOTES:

1. QUALITY ASSURANCE:
   A. MATERIALS, FABRICATION AND ERECTION ARE SUBJECT TO INSPECTION AND TESTS IN THE SHOP AND FIELD.
   B. ALL WELDERS MUST BE QUALIFIED IN ACCORDANCE WITH THE AWS CODE BY AN INDEPENDENT AGENCY WITHIN ONE YEAR PRIOR TO THEIR EMPLOYMENT FOR THIS WORK. WELDING CERTIFICATE FOR EACH WELDER SHALL BE ON FILE AND AVAILABLE FOR INSPECTION AT ANYTIME.
   C. MILL TEST REPORTS OF THE MATERIAL USED SHALL BE AVAILABLE FOR REVIEW AT ANYTIME.
   D. PROVIDE ACCESS FOR THE TESTING AGENCIES AND INSPECTORS TO PLACES WHERE STRUCTURAL STEEL WORK IS BEING FABRICATED OR PRODUCED, SO THAT REQUIRED TESTING AND INSPECTING MAY BE ACCOMPLISHED.

2. CONFORM TO THE CURRENT EDITION OF THE FOLLOWING REFERENCES:
   A. AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.
   B. AISC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.
   C. SSPC PA1 PAINT APPLICATION SPECIFICATIONS AND APPLICABLE SSPC SURFACE PREPARATION SPECIFICATIONS.

3. SHOP DRAWINGS:
   A. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH SPECIFICATIONS.

4. MATERIALS:
   A. ROLLED STEEL SHAPES (W SHAPES) COMPLY WITH ASTM A992.
   B. CHANNELS, ANGLES AND PLATES: COMPLY WITH ASTM A36.
   C. STEEL TUBE: COMPLY WITH ASTM A500, GRADE B.
   D. HEADED BOLTS: ASTM A325 HEAVY HEX STEEL STRUCTURAL BOLTS AND HEAVY HEX CARBON-STEEL NUTS MADE TO A563 OR A194, WASHERS: ASTM F436. ASTM F1852 TWIST-OFF-TYPE TENSION-CONTROLLED BOLT ASSEMBLIES MAY BE SUBSTITUTED FOR A325 BOLTS.
   E. PAINT FOR SHOP PRIME COAT AND FIELD TOUCH-UP: GRAY ALKYD.
   F. ELECTRODES FOR WELDING: COMPLY WITH AWS CODE, USING E70XX ELECTRODES.
   F. FURNISH EXACT SECTIONS, SIZES, SHAPES AND WEIGHTS AS SPECIFIED AND/OR SHOWN ON THE DRAWINGS EXCEPT SUBSTITUTIONS MAY BE MADE IF:
      1. REQUIRED BY SHOP PRACTICE OR PROCUREMENT OF SUBSTITUTED MATERIAL.
   H. GROUT: NON-SHRINK, NON-METALLIC GROUT- SEE SPECIFICATIONS.

5. SHOP FABRICATION AND ASSEMBLY:
   A. FABRICATE ITEMS OF STRUCTURAL STEEL IN ACCORDANCE WITH SPECIFICATIONS, AND AS INDICATED ON THE REVIEWED SHOP DRAWINGS.
   B. PROPERLY MARK AND MATCH-MARK MATERIALS FOR FIELD ASSEMBLY AND FOR IDENTIFICATION AS TO LOCATION FOR WHICH INTENDED.
   C. FABRICATE FOR DELIVERY SEQUENCE WHICH WILL EXPEDITE ERECTION AND MINIMIZE FIELD HANDLING OF MATERIALS.
   D. PROVIDE FINISH SURFACES OF MEMBERS EXPOSED IN THE FINAL STRUCTURE FREE FROM MARKINGS, BURRS AND OTHER DEFECTS.
   E. BEFORE FABRICATION, CONTRACTOR SHALL VERIFY EXISTING DIMENSIONS AFFECTING FIT, LOCATION, FABRICATION, ERECTION AND CLEARANCE OF STRUCTURAL AND MISCELLANEOUS STEEL.

6. SHOP CONNECTIONS:
   A. USE WELDED OR BOLTED SHOP CONNECTIONS, AND BOLTED FIELD CONNECTIONS, U.N.O
   B. USE 7/8" DIA. A325 BOLTS IN TYPE "X" CONNECTION WITH STANDARD HOLES, U.O.N.
   C. WELDED CONSTRUCTION: COMPLY WITH AWS CODE FOR PROCEDURES, APPEARANCE AND QUALITY OF WELDS, AND METHODS USED IN CORRECTING WELDED WORK.
   D. USE 3/8" GUSSET & STITCH PLATES, U.N.O. CONNECTION ANGLES SHALL BE 5/16" MINIMUM, U.N.O
   E. MINIMUM SIZE OF FILLET WELDS SHALL BE 3/16", U.O.N.
   F. CONNECTIONS FOR HOLLOW STRUCTURAL SECTIONS SHALL CONFORM TO AISC PUBLICATION "HOLLOW STRUCTURAL SECTIONS CONNECTIONS MANUAL", FIRST EDITION, 1997.
   G. HOLES REQUIRED FOR BOLTING SHALL BE SHOP PUNCHED OR FIELD DRILLED. THE MAKING OF HOLES OR ENLARGEMENT OF HOLES BY TORCH CUTTING WILL NOT BE PERMITTED.
   H. WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS, EVEN THOUGH NOT SPECIFICALLY CALLED FOR ON THE DRAWINGS.

7. ERECTION:
   A. ERECT STRUCTURAL STEEL IN ACCORDANCE WITH THE SPECIFICATIONS.
   B. IN PLANNING THE ERECTION METHOD, MAKE ALLOWANCE FOR OBSTRUCTIONS WHICH MAY RESULT FROM WORK PERFORMED BY OTHER TRADES AS WELL AS THE OPERATIONS OF THE OWNER.

8. FIELD CONNECTIONS:
   A. USE MINIMUM OF (2) 7/8" DIA. A325 BOLTS, BEARING-TYPE CONNECTIONS WITH THREADS EXCLUDED FROM SHEAR PLANE, EXCEPT WHERE OTHERWISE NOTED.
   B. FIELD WELDING WILL BE PERMITTED ONLY WHERE SHOWN ON DRAWINGS, OR RELEASED SHOP DRAWINGS.
   C. DO NOT USE GAS CUTTING TORCHES FOR CORRECTING FABRICATING ERRORS IN STRUCTURAL FRAMING. CUTTING WILL BE PERMITTED ONLY ON SECONDARY MEMBERS WHICH ARE NOT UNDER STRESS, AS ACCEPTABLE TO THE ENGINEER.

9. FLOOR DECK:

   1. 3" COMPOSITE, 20 GAUGE.
   2. DECK IS GALVANIZED EXCEPT WHERE FIREPROOFING IS REQUIRED.
   2. PERIMETER SUPPORTS WITH A 5/8" DIA. PUDDLE WELDS AT 12" O.C.
   3. AT INTERNAL SUPPORTS FASTEN WITH 5/8" PUDDLE WELD IN A 36/4 PATTERN.
   4. AT SIDELAPS, FASTEN WITH # 10 SCREWS @ 36" O.C. MAX.
   5. DECK SHALL HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
      SP = 0.534 IN^3 / FT
      SN = 0.551 IN^3 / FT
      IP = 0.920 IN^4 / FT
      IN = 0.919 IN^4 / FT
      FY = 33 KSI

10. STEEL JOISTS
   A. GENERAL
      1. ALIGN ALL STEEL JOIST PANEL POINTS TO PERMIT PASSAGE OF ELECTRICAL AND PLUMBING SYSTEMS.
      2. STEEL JOIST SHALL HAVE BRIDGING SIZED AND SPACED IN ACCORDANCE WITH SJI STANDARD SPECIFICATIONS.
      3. STEEL JOIST SHALL BE DESIGNED FOR A MINIMUM NET UPLIFT AS FOLLOWS (ASD) :
         A. TYPICAL
            1) 15 PSF FOR A 10'-0" X 10'-0" AREA AT BUILDING CORNERS
            2) 15 PSF FOR A 10'-0" WIDE STRIP ALONG BUILDING EDGES.
            3) 10 PSF FOR ALL OTHER AREAS.

VII. MISCELLANEOUS NOTES

1. EMPLOY A LICENSED SURVEYOR TO VERIFY EXISTING DIMENSIONS, FLOOR ELEVATIONS, AND FLOOR-TO-FLOOR HEIGHTS BEFORE ORDERING, DETAILING, FABRICATING, OR ERECTING STRUCTURAL STEEL. THIS INFORMATION MUST BE CONFIRMED AT LOCATIONS WHERE NEW FLOORS AND ROOFS MEET EXISTING CONSTRUCTION.

2. CONSULT THE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR LOCATION AND SIZE OF CHASES, INSERTS, OPENINGS, SLEEVES, WASHES, DRIPS, REVEALS, DEPRESSIONS, EQUIPMENT PADS AND OTHER PROJECT REQUIREMENTS. COMBINE THE REQUIREMENTS INTO THE SHOP DRAWINGS AND THE WORK. PROVIDE STRUCTURAL FRAMING PER TYPICAL DETAILS AS REQUIRED AT FLOOR AND ROOF OPENINGS WHERE STRUCTURAL FRAMING IS NOT SHOWN.

3. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION OF CONSTRUCTION OF THE PROJECT AND THEN, ONLY TO SUPPORT THE DESIGN LOADS INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR MEANS, METHODS AND SEQUENCE OF CONSTRUCTION AND FOR THE ADEQUACY OF THE STRUCTURE TO SUPPORT LOADS OCCURRING DURING CONSTRUCTION. FURNISH TEMPORARY BRACING, SHORING, AND/OR SUPPORT AS REQUIRED.

4. CHECK DIMENSIONS AGAINST THE REQUIREMENTS OF OTHER CONTRACT DOCUMENTS. RESOLVE APPARENT INCONSISTENCIES IN THE CONTRACT DOCUMENTS WITH THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH WORK.

5. SHOW OPENINGS THROUGH STRUCTURAL MEMBERS ON THE SHOP DRAWINGS SUBMITTED FOR REVIEW. OPENINGS WHICH ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS ARE SUBJECT TO REVIEW AND ACCEPTANCE AND ARE TO BE CLEARLY INDICATED FOR REVIEW AND ACCEPTANCE ON THE SHOP DRAWINGS.

6. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, USE DETAILS OF SIMILAR CONSTRUCTION, SUBJECT TO APPROVAL BY THE ENGINEER.

7. WHEREVER THERE IS CONFLICT BETWEEN DETAILS OR TWO DETAILS APPLYING TO THE SAME CONDITION, THE ARCHITECT WILL HAVE SOLE AUTHORITY TO DETERMINE WHICH DETAIL IS THE MOST APPROPRIATE FOR THE CONDITION.

8. SUBMIT SHOP DRAWINGS AND CALCULATIONS SEALED BY A REGISTERED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CALIFORNIA FOR EACH OF THE FOLLOWING ASSEMBLIES. COMPLY WITH THE APPLICABLE PROVISIONS OF THE SPECIFICATIONS AND BUILDING CODE FOR LOADING, ALLOWABLE STRESSES AND DEFLECTION LIMITS. SUBMITTALS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE CONTRACT DOCUMENTS:
   A. COLD FORMED METAL FRAMING ASSEMBLIES THAT ARE NOT USED AS THE PRIMARY VERTICAL LOAD BEARING ELEMENTS OF THE BUILDING. INCLUDE DESIGN OF CONNECTIONS.
   B. METAL STAIRS, LADDERS AND METAL RAILINGS: DESIGN THESE ASSEMBLIES TO BE SUPPORTED OFF OF THE BASE BUILDING STRUCTURAL MEMBERS DESIGNED FOR THAT PURPOSE. DESIGN CONNECTIONS THAT MINIMIZE APPLIED TORSIONAL OR ECCENTRIC LOADS INTO THESE MEMBERS.
   C. CALL OTHER ASSEMBLIES LISTED IN THE SPECIFICATIONS THAT REQUIRE ENGINEERING CALCULATIONS.

9. PROMPTLY NOTIFY THE ENGINEER OF ANY STRUCTURAL MEMBER CALLED OUT ON THE ARCHITECTURAL, MECHANICAL, PLUMBING OR ELECTRICAL DRAWINGS THAT IS NOT IDENTIFIED ON THE STRUCTURAL DRAWINGS. DESIGN OF THESE MEMBERS WILL BE PROVIDED AS NECESSARY BY THE STRUCTURAL ENGINEER UPON NOTIFICATION.

10. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATION AND PLACEMENT OF INSERTS, HANGERS AND OTHER MISCELLANEOUS ITEMS REQUIRED FOR THE SUPPORT OF MECHANICAL, ELECTRICAL AND PLUMBING ITEMS SUSPENDED FROM THE STRUCTURE.

11. DO NOT MAKE MODIFICATIONS, ALTERATIONS OR REPAIRS TO THE STRUCTURE WITHOUT PRIOR REVIEW BY THE STRUCTURAL ENGINEER. SUBMIT DETAILS AND CALCULATIONS PREPARED BY A PROFESSIONAL ENGINEER REGISTERED IN STATE WHERE PROJECT IS LOCATED AND EMPLOYED BY CONTRACTOR.

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SolTrans

REVISION LIST

NO.	DATE	REVISIONS
1	05/26/2023	CCO #1
0	10-18-22	Issue for Bid

REGISTERED PROFESSIONAL ENGINEER
S. B. ALI WAHIDI
No. S3744
Exp. 06-30-24
STRUCTURAL
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189247
DRAWN BY	EKH
DATE	10/18/22

DRAWING TITLE

STRUCTURAL GENERAL NOTES

S001

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SPECIAL INSPECTIONS PROGRAM

I. GENERAL:

1. THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL ACTING AS THE OWNER'S AGENT SHALL EMPLOY A SPECIAL INSPECTION AGENCY TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS.

2. SPECIAL INSPECTION SHALL BE PERFORMED IN ADDITION TO INSPECTION BY THE BUILDING OFFICIAL AS REQUIRED IN SECTION 109 OF THE BUILDING CODE. SPECIAL INSPECTION SHALL NOT BE A SUBSTITUTE FOR INSPECTION BY THE BUILDING OFFICIAL.

3. WHEN WORK IN MORE THAN ONE CATEGORY OF WORK REQUIRING SPECIAL INSPECTION IS TO BE PERFORMED SIMULTANEOUSLY, OR THE GEOGRAPHIC LOCATION OF THE WORK IS SUCH THAT IT CANNOT BE OBSERVED IN ACCORDANCE WITH THE STATEMENT OF SPECIAL INSPECTIONS AND SECTION 1704 OF THE BUILDING CODE, IT SHALL BE THE AGENCY'S RESPONSIBILITY TO EMPLOY A SUFFICIENT NUMBER OF INSPECTORS TO ASSURE THAT THE REQUIRED WORK IS INSPECTED.

4. THE SPECIAL INSPECTION AGENCY SHALL BE APPROVED BY THE BUILDING OFFICIAL FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.
   EXCEPTIONS:
   A. SOILS INSPECTIONS SHALL BE PERFORMED BY THE GEOTECHNICAL ENGINEER OF RECORD.
   B. WHEN THIS REQUIREMENT IS WAIVED BY THE BUILDING OFFICIAL.

5. DRILLING OPERATIONS, VERIFICATION OF PLACEMENT, PLUMBNESS, DIAMETER, LENGTH, EMBEDMENT INTO BEDROCK OR ADEQUATE END-BEARING STRATA OF EACH CAST-IN-PLACE DEEP FOUNDATION ELEMENT SHALL BE PERFORMED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE (SOILS ENGINEER OR GEOTECHNICAL ENGINEER OF RECORD), WHO HAS PREPARED THE APPROVED GEOTECHNICAL REPORT.

6. EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF THE MAIN SEISMIC-FORCE-RESISTING SYSTEM SHALL SUBMIT A STATEMENT OF RESPONSIBILITY TO THE OWNER AND BUILDING OFFICIAL PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN THE FOLLOWING:
   A. ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL INSPECTION REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS.
   B. ACKNOWLEDGEMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.
   C. PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, INCLUDING THE METHOD AND FREQUENCY OF REPORTING AND THE DISTRIBUTION OF REPORTS.
   D. IDENTIFICATION AND QUALIFICATION OF THE PERSON(S) IN THEIR ORGANIZATION WHO ARE EXERCISING SUCH CONTROL.

7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE SPECIAL INSPECTION AGENCY AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION.

8. WORK REQUIRING SPECIAL INSPECTION THAT IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE BUILDING OFFICIAL IS SUBJECT TO REMOVAL OR EXPOSURE AT THE CONTRACTOR'S EXPENSE.

9. NOTICE TO THE APPLICANT/OWNER/OWNER'S AGENT/ARCHITECT OR ENGINEER OF RECORD: BY USING THESE PERMITTED CONSTRUCTION DRAWINGS FOR CONSTRUCTION/INSTALLATION OF THE WORK SPECIFIED HEREIN, YOU AGREE TO COMPLY WITH THE REQUIREMENTS OF THE CITY OF VALLEJO, CA FOR SPECIAL INSPECTIONS, STRUCTURAL OBSERVATIONS, CONSTRUCTION MATERIAL TESTING AND OFF-SITE FABRICATION OF BUILDING COMPONENTS, CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS AND, AS REQUIRED BY THE CALIFORNIA CONSTRUCTION CODES.

II. REQUIRED REPORTS:

1. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.

2. SPECIAL INSPECTION REPORTS SHALL INDICATE THAT THE WORK INSPECTED WAS PERFORMED IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS.

3. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.

4. IF DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO COMPLETION OF THAT PHASE OF WORK.

5. A FINAL REPORT DOCUMENTING THE REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED A POINT IN TIME AGREED UPON BY THE PERMIT APPLICANT AND THE BUILDING OFFICIAL PRIOR TO THE START OF WORK.

6. A GEOTECHNICAL INSPECTION REPORT (SEALED, SIGNED AND DATED BY THE SOILS ENGINEER OR GEOTECHNICAL ENGINEER OF RECORD) SHALL BE SUBMITTED TO AND APPROVED BY THE CITY'S BUILDING INSPECTOR PRIOR TO SUPERSTRUCTURE PLACEMENT.

III. CONTINUOUS AND PERIODIC INSPECTIONS:

1. WHERE CONTINUOUS SPECIAL INSPECTION IS REQUIRED, THE SPECIAL INSPECTOR SHALL CONTINUOUSLY PROVIDE FULL-TIME VERIFICATION OF THE WORK.

IV. OFF-SITE FABRICATION:

1. SPECIAL INSPECTION IS REQUIRED FOR THE OFF-SITE FABRICATION OF STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES, UNLESS THE FABRICATION IS PERFORMED BY AN APPROVED FABRICATOR..

2. AN APPLICATION FOR OFF-SITE FABRICATION MUST BE SUBMITTED TO THE BUILDING OFFICIAL FOR APPROVAL PRIOR TO COMMENCING ANY FABRICATION WORK REQUIRING SPECIAL INSPECTION.

3. A CERTIFICATE OF COMPLIANCE FOR OFF-SITE FABRICATION MUST BE COMPLETED BY THE SPECIAL INSPECTOR AND SUBMITTED TO THE BUILDING OFFICIAL PRIOR TO ERECTION OF PREFABRICATED COMPONENTS.

4. WHERE PERIODIC SPECIAL INSPECTION IS REQUIRED, THE SPECIAL INSPECTOR NEED NOT BE CONTINUOUSLY PRESENT DURING THE WORK WHERE PERIODIC INSPECTION IS INDICATED. AS A MINIMUM, PERIODIC SPECIAL INSPECTION SHALL OCCUR DAILY.

5. PERIODIC INSPECTION SHALL BE PERMITTED FOR SLIP-CRITICAL HIGH STRENGTH BOLTS WHERE BOLT TENSION IS VERIFIED BY ANY OF THE FOLLOWING METHODS:
   A. TURN-OF-NUT METHOD USING MATCH-MARKING TECHNIQUES.
   B. DIRECT TENSION INDICATOR METHOD.
   C. ALTERNATE DESIGN FASTENER (TWIST-OFF BOLT) METHOD.

V. STRUCTURAL OBSERVATIONS:

1. STRUCTURAL OBSERVATIONS ARE REQUIRED IN ACCORDANCE WITH SECTION 1709 OF THE BUILDING CODE.

2. THE OWNER SHALL EMPLOY THE ENGINEER OR ARCHITECT RESPONSIBLE FOR THE STRUCTURAL DESIGN TO PERFORM VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM FOR GENERAL CONFORMANCE TO THE APPROVED PLANS AND SPECIFICATIONS.

3. CONTRACTOR SHALL NOTIFY THE STRUCTURAL OBSERVER AT THE CONSTRUCTION STAGES INDICATED AND AT COMPLETION OF THE STRUCTURAL SYSTEM.

4. STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR SPECIAL INSPECTION NOR INSPECTION BY THE BUILDING OFFICIAL.

5. OBSERVED DEFICIENCIES SHALL BE REPORTED IN WRITING TO THE OWNER, SPECIAL INSPECTION AGENCY, CONTRACTOR AND BUILDING OFFICIAL.

6. THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE STRUCTURAL OBSERVATIONS HAVE BEEN MADE AND IDENTIFYING AND REPORTED DEFICIENCIES, WHICH, TO THE BEST OF THE OBSERVERS KNOWLEDGE, HAVE NOT BEEN RESOLVED.

SPECIAL INSPECTION NOTES

1. AT TIME OF AUGER DISPLACEMENT PILE DRILLING, RECORD THE FOLLOWING:
   A. PILE DIAMETER
   B. PILE LENGTH AND EMBEDMENT INTO FORMATIONAL MATERIAL (IF APPLICABLE)

2. AT TIME OF CONCRETE SAMPLING:
   A. FABRICATE SPECIMENS FOR STRENGTH TESTS
   B. PERFORM SLUMP AND AIR CONTENT TESTS
   C. DETERMINE CONCRETE TEMPERATURE

3 VERIFICATION MAY BE BY VISUAL INSPECTION OR CERTIFICATE OF COMPLIANCE. HIGH-STRENGTH BOLTS, NUTS, AND WASHERS MAY BE REQUIRED TO BE SAMPLED, TESTED AND INSPECTED BY THE BUILDING OFFICIAL, INSPECTOR SERVICES DIVISION PRIOR TO INSTALLATION.

4 PERIODIC INSPECTION SHALL BE PERMITTED FOR SLIP-CRITICAL HIGH STRENGTH BOLTS WHERE BOLT TENSION IS VERIFIED BY ANY OF THE FOLLOWING METHODS:
   A. TURN-OF-NUT METHOD USING MATCH-MARKING TECHNIQUES.
   B. DIRECT TENSION INDICATOR METHOD.
   C. ALTERNATE DESIGN FASTENER (TWIST-OFF BOLT) METHOD.

STATEMENT OF SPECIAL INSPECTIONS (CBC)

SOIL

NO.	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, REFERENCE DETAIL	CONTINUOUS	PERIODIC
1	SOIL MATERIAL BELOW FOUNDATIONS FOR ADEQUACY TO ACHIEVE DESIGN BEARING CAPACITY		X
2	EXCAVATIONS EXTEND TO PROPER DEPTH AND BEARING STRATA		X
3	CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIAL		X
4	SUBGRADE AND SITE PREPARATION PRIOR TO PLACEMENT OF CONTROLLED FILL		X
5	PLACEMENT AND COMPACTION OF CONTROLLED FILL: INCLUDING RELATIVE DENSITY AND LIFT THICKNESS	X	
6	SOIL EXPANSION TEST RESULTS: INCLUDING EXPANSION INDEX, RECOMMENDATIONS FOR FOUNDATION AND FLOOR SLAB DESIGN.		X

PILE FOUNDATIONS

NO.	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, REFERENCE DETAIL	CONTINUOUS	PERIODIC
1	DRILLING OPERATION AND RECORD-KEEPING FOR EACH PIER (SEE NOTE 2)	X	
2	PIER PLACEMENT LOCATION AND PLUMBNESS	X	

COLD-FORMED STEEL FRAMING

NO.	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, REFERENCE DETAIL	CONTINUOUS	PERIODIC
1	WELDING OF COLD-FORMED STEEL FRAMING		X
2	SCREW ATTACHMENT, BOLTING ANCHORING AND OTHER FASTENERS WITHIN THE SEISMIC-FORCE RESISTING SYSTEM INCLUDING STRUTS, BRACES AND HOLD-DOWNS		X

POST-INSTALLED ANCHORS

NO.	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, REFERENCE DETAIL	CONTINUOUS	PERIODIC
1	DRILLING OF HOLES FOR EXPANSION AND ADHESIVE ANCHORS		X
2	CLEANING OF HOLES AND INSTALLATION OF EXPANSION AND ADHESIVE ANCHORS	X	

STATEMENT OF SPECIAL INSPECTIONS (CBC)

CONCRETE

NO.	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, REFERENCE DETAIL	CONTINUOUS	PERIODIC
1	SHAPE, LOCATION AND DIMENSION OF CONCRETE FORMWORK PRIOR TO PLACEMENT OF REINFORCING		X
	REINFORCING STEEL MATERIAL		
2	PLACEMENT OF REINFORCING STEEL PRIOR TO CLOSING OF FORMS OR DELIVERY OF CONCRETE		X

STRUCTURAL STEEL

NO.	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, REFERENCE DETAIL	CONTINUOUS	PERIODIC
	STRUCTURAL STEEL MATERIAL		X
1	STRUCTURAL STEEL FRAMING AND CONNECTIONS CONFIGURATION		X
2	STRUCTURAL STEEL CONNECTIONS AT SPECIAL MOMENT RESISTING FRAMES		
3	STRUCTURAL STEEL CONNECTIONS AT OTHER SEISMIC LOAD RESISTING FRAMES (SEE AISC 341, APP Q)		

HIGH-STRENGTH BOLTING

NO.	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, REFERENCE DETAIL	CONTINUOUS	PERIODIC
1	MATERIAL OF HIGH STRENGTH BOLTS, NUTS AND WASHERS		X
2	INSTALLATION OF HIGH STRENGTH BOLTS (BEARING-TYPE CONNECTIONS)		X
3	INSTALLATION OF HIGH STRENGTH BOLTS (SLIP-CRITICAL TYPE CONNECTIONS)	X	

WELDING OF STRUCTURAL STEEL

NO.	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, REFERENCE DETAIL	CONTINUOUS	PERIODIC
1	**WELD FILLER MATERIALS**		X
2	**EXECUTION OF GROOVE WELDS**	X	
3	**EXECUTION OF MULTI PASS FILLET WELDS**	X	
4	EXECUTION OF SINGLE PASS FILLET WELDS LARGER THAN 5/16 INCH		X
5	**WELDING OF STEEL FLOOR OR ROOF DECK**		X
6	INSTALLATION OF WELDED STUDS AT THE STRUCTURAL DIAPHRAGM		X
7	INSTALLATION OF WELDED STUDS AT LOCATIONS OTHER THAN DIAPHRAGMS	X	
8	WELDING OF LADDER SYSTEMS		X

&	AND
@	AT
ADDL	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
APPROX	APPROXIMATE
AR	ANCHOR RODS
ARCH	ARCHITECT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATFP	ANTI-TERRORISM FORCE PROTECTION
BAL	BALANCE
BLDG	BUILDING
BLKG	BLOCKING
BLW	BELOW
BM	BEAM
BOT	BOTTOM
BRG	BEARING
BTWN	BETWEEN
CFS	COLD-FORMED STEEL
CIP	CAST IN PLACE
CJ	CONTROL JOINT
CJ	CONSTRUCTION JOINT
CL	CENTERLINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
COORD	COORDINATE
CTR	CENTER
DEMO	DEMOLISH
DET	DETAIL
DIA OR Ø	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DIST	DISTANCE
DL	DEAD LOAD
DWG	DRAWING
EA	EACH
EF	EACH FACE
EL	ELEVATION
EMBED	EMBEDMENT
ENGR	ENGINEER
EQ	EQUAL
EQUIV	EQUIVALENT
EW	EACH WAY
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FD	FLOOR DRAIN
FDTN	FOUNDATION
FIN	FINISH(ED)
FIN FLR	FINISHED FLOOR
FLG	FLANGE
FLR	FLOOR
FRMG	FRAMING
FT	FOOT, FEET
FTG	FOOTING
GA	GAGE
GALV	GALVANIZED
HDG	HOT-DIP GALVANIZED
HORIZ	HORIZONTAL
HS	HIGH STRENGTH
HSA	HEADED STUD ANCHOR
HT	HEIGHT
ID	INSIDE DIAMETER
IJ	ISOLATION JOINT
IN	INCH
INFO	INFORMATION
INT	INTERIOR
JT	JOINT
KSI	KIPS PER SQUARE INCH
LBS	POUNDS
LF	LINEAR FEET
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LSL	LONG SLOTTED HOLE
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
#	NUMBER
NIC	NOT IN CONTRACT
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OPNG	OPENING
OPP	OPPOSITE
OWJ	OPEN WEB JOIST
PCF	POUNDS PER CUBIC FOOT
PEMB	PRE-ENGINEERED METAL BUILDING
PERP	PERPENDICULAR
PL	PLATE
PREFAB	PREFABRICATED
PROJ	PROJECT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POST TENSIONED
QTY	QUANTITY
R	RADIUS
REF	REFERENCE
REINF	REINFORCE, REINFORCEMENT
REQD	REQUIRED
REV	REVISION
SC	SLIP-CRITICAL
SCHED	SCHEDULE
SECT	SECTION
SF	SQUARE FOOT
SHT	SHEET
SIM	SIMILAR
SOG	SLAB ON GRADE
SPA	SPACE, SPACING
SPEC	SPECIFICATION
SQ	SQUARE
SSL	SHORT SLOTTED HOLE
SST	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SYMM	SYMMETRICAL
T&B	TOP AND BOTTOM
TEMP	TEMPORARY
THK	THICK
THRU	THROUGH
TOB	TOP OF BEAM
TOC	TOP OF CONCRETE
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TOW	TOP OF WALL
TRANSV	TRANSVERSE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
VOL	VOLUME
W/	WITH
W/O	WITHOUT
WD	WOOD
WP	WORKING POINT
WT	WEIGHT
WTS	WELDED THREADED STUDS
WWR	WELDED WIRE REINFORCEMENT

STRUCTURAL DRAWING LEGEND

TB1 INDICATES TIE BEAM PER SCHEDULE

F3 INDICATES FOOTING MARK PER SCHEDULE

INDICATES STEP IN SLAB

INDICATES SLOPE IN SLAB

INDICATES SPOT ELEVATION

INDICATES POUR STRIP

℄ CENTERLINE

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2150 RIVER PLAZA DR
SUITE 400
SACRAMENTO, CA 95833
TEL: (916) 567-2500

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NO.	DATE	REVISIONS
1	05/26/2023	CCO #1
0	10-18-22	Issue for Bid

REGISTERED PROFESSIONAL ENGINEER
S. B. ALI WAHIDI
No. S3744
Exp. 06-30-24
STRUCTURAL
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189247
DRAWN BY	EKH
DATE	10/18/22

DRAWING TITLE

STRUCTURAL SPECIAL INSPECTIONS

S002

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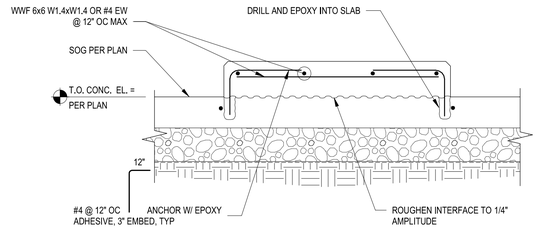
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SIZE	Ld	Ldt	Lb	Lbt	Ldh
#4	19	25	25	32	9
#5	24	31	31	40	12
#6	28 (43)	37 (55)	37 (55)	48 (72)	14
#7	42 (62)	54 (81)	54 (81)	70 (105)	17
#8	47 (71)	62 (92)	62 (92)	80 (120)	19
#9	54 (80)	70 (104)	70 (104)	90 (136)	21
#10	60 (90)	78 (117)	78 (117)	102 (153)	24
#11	67 (100)	87 (130)	87 (130)	113 (170)	27

NOTES
1. USE THE LENGTH IN THESE SCHEDULES, UNLESS NOTED OTHERWISE.
2. USE LENGTH IN () WHEN BAR COVER IS db OR LESS OR BAR CLEAR SPACING IS 2db OR LESS.
3. TOP BAR IS HORIZONTAL BAR WITH MORE THAN 12" OF FRESH CONCRETE CAST BELOW IT.

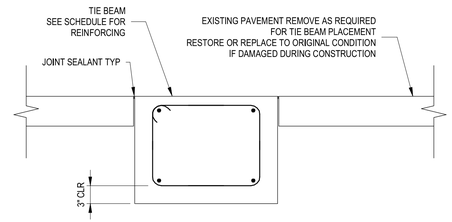
ABBREVIATIONS
db = BAR DIAMETER
Ld = TENSION DEVELOPMENT LENGTH
Ldt = TENSION DEVELOPMENT LENGTH FOR A TOP BAR
Lb = CLASS B LAP SPLICE LENGTH, 1.3Ld
Lbt = CLASS B LAP SPLICE LENGTH FOR A TOP BAR, 1.3 Ldt
Ldh = TENSION DEVELOPMENT LENGTH FOR A STANDARD HOOK
f'c = CONCRETE COMPRESSIBLE STRENGTH AT 28 DAYS
fy = BAR YIELD STRENGTH

1 TYP DEVELOPMENT LENGTH AND LAP SPLICE SCHEDULE
12" = 1'-0"

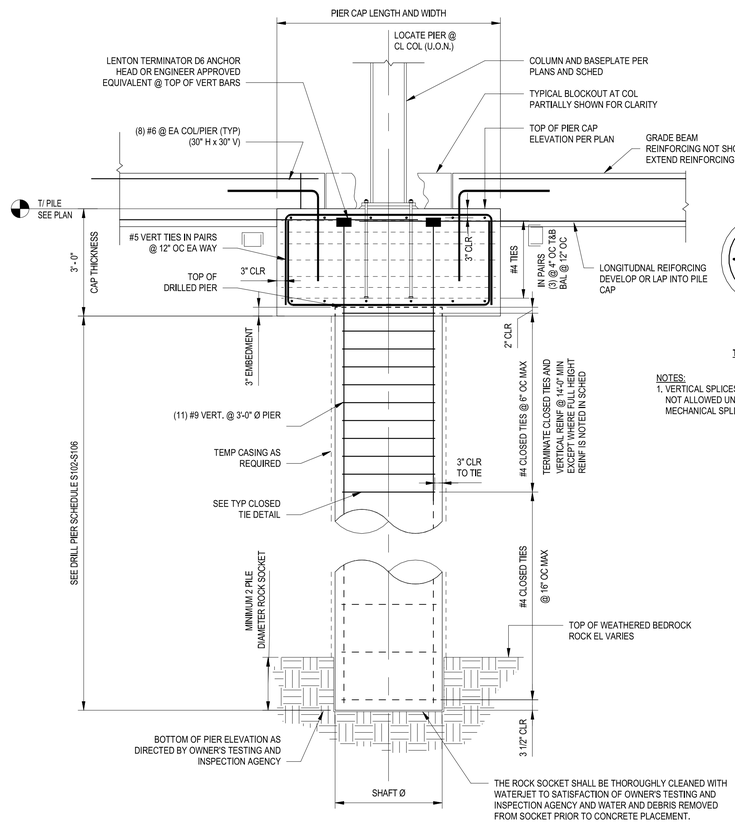


NOTES:
1. SEE ARCHITECTURAL DRAWINGS FOR PAD SIZE AND LOCATION.
2. PROVIDE INSERT AS REQUIRED BY ARCHITECTURAL AND MECHANICAL DRAWINGS.
3. 4" ≤ H ≤ 12"

2 TYP HOUSEKEEPING PAD DETAIL
1" = 1'-0"



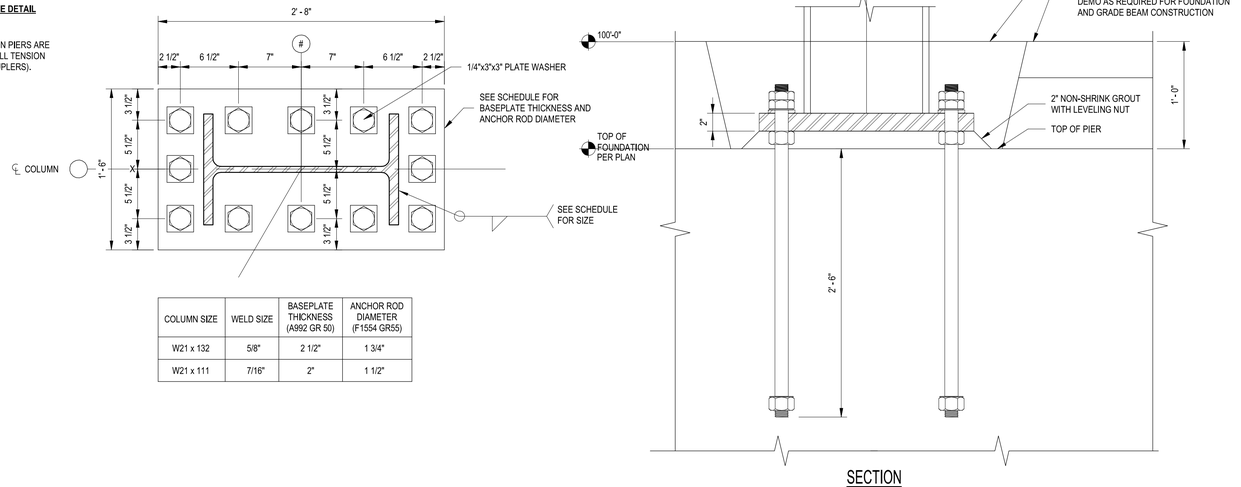
3 TIE BEAM SECTION
1" = 1'-0"



TYPICAL CLOSED TIE DETAIL

NOTES:
1. VERTICAL SPLICES IN REINFORCING IN PIERS ARE NOT ALLOWED UNLESS THEY ARE FULL TENSION MECHANICAL SPLICES (TENSION COUPLERS).

4 TYP DRILLED PIER DETAIL
1/2" = 1'-0"



COLUMN SIZE	WELD SIZE	BASEPLATE THICKNESS (A992 GR 50)	ANCHOR ROD DIAMETER (F1554 GR55)
W21 x 132	5/8"	2 1/2"	1 3/4"
W21 x 111	7/16"	2"	1 1/2"

5 TYP BASEPLATE CONNECTION
1 1/2" = 1'-0"

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STATE OF CALIFORNIA

PROJECT TITLE
BEB YARD IMPROVEMENTS

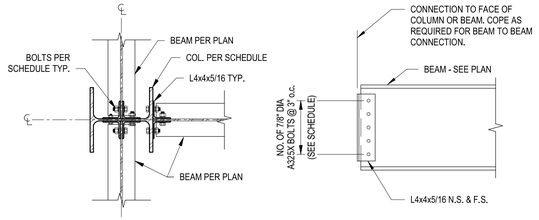
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DRAWING TITLE
TYPICAL CONCRETE DETAILS

S010

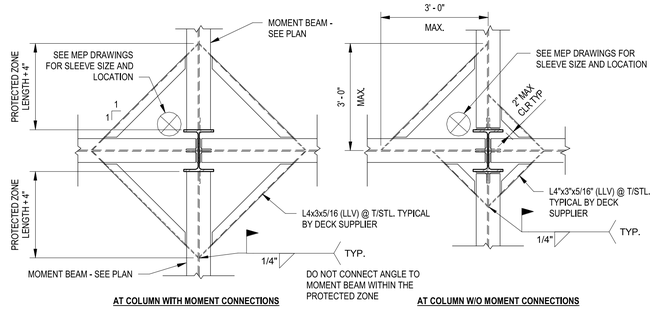
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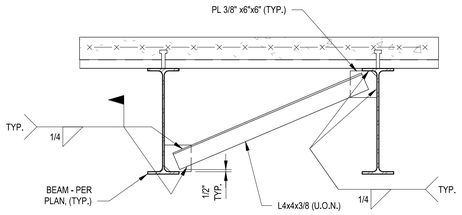
NOMINAL BEAM DEPTH (INCHES)	NO. OF BOLTS
8" TO 10"	2
12" TO 14"	3
16"	4
18"	5
21" & 24"	6
27"	7
30"	8
33" & 36	9

1 TYP SHEAR CONNECTION DETAIL
3/4" = 1'-0"

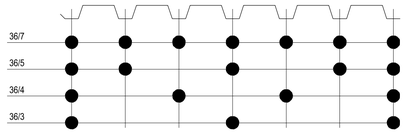


NOTES:
1. INTERIOR COLUMNS SHOWN, EXTERIOR COLUMNS ARE SIMILAR
2. CONTRACTOR SHALL COORDINATE ANGLE LOCATIONS WITH MEP DRAWINGS AND ACTUAL FIELD CONDITIONS.
3. SEE TYPICAL INTERMEDIATE MOMENT CONNECTION DETAIL FOR PROTECTED ZONE LENGTH.
4. WELD METAL DECK TO 4x3 ANGLE.

2 TYP ROOF OPENING AT BEAM / COLUMN CONNECTION
1/2" = 1'-0"

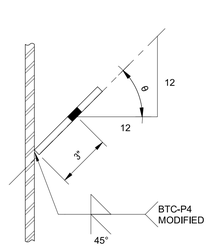


3 TYP DECK FASTENING PATTERN
3/4" = 1'-0"

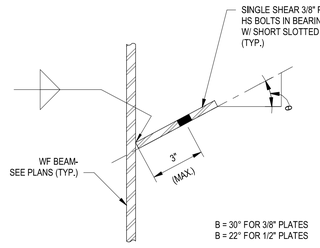


DECK FASTENING PATTERN

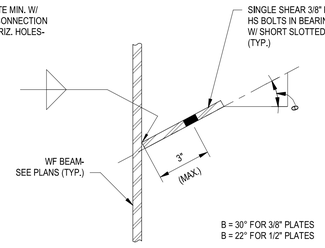
4 TYP BEAM DIAGONAL BRACING DETAIL
3/4" = 1'-0"



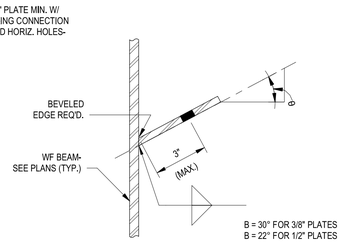
FOR θ = 45° FROM PERPENDICULAR



FOR θ < 17° FROM PERPENDICULAR



FOR 17° < θ < B FROM PERPENDICULAR

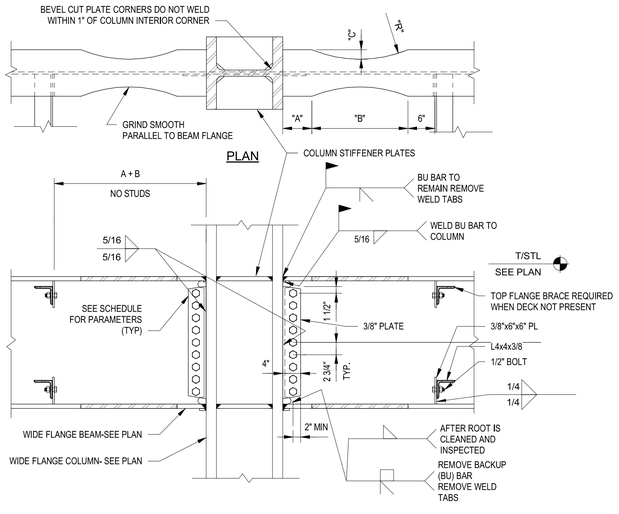


FOR B < θ < 45° FROM PERPENDICULAR

NOTES:
FOLLOW WELD REQUIREMENTS OF AISC TABLE 10-14C

5 TYP SKEWED FRAMED BEAM CONNECTIONS
3" = 1'-0"

RBS CONNECTION DIMENSION SCHEDULE					
BEAM SIZE	A	B	C	R	# BOLTS
W36x150	9"	30.5"	3"	365"	(9)
XXX					

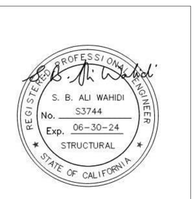


6 REDUCED BEAM SECTION CONNECTION DETAIL
3/4" = 1'-0"

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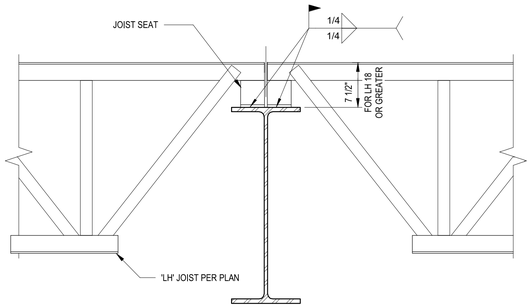
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TYPICAL STEEL DETAILS

S020

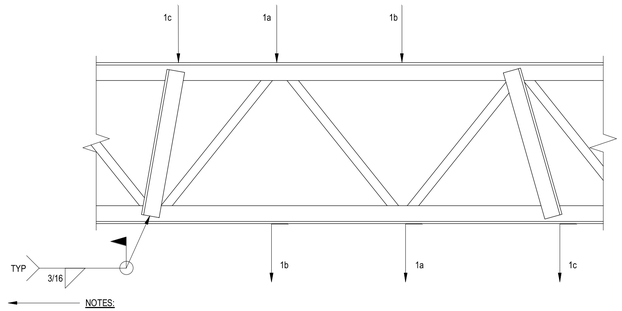
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WHERE 'LH' JOISTS ALIGN BOTH SIDES

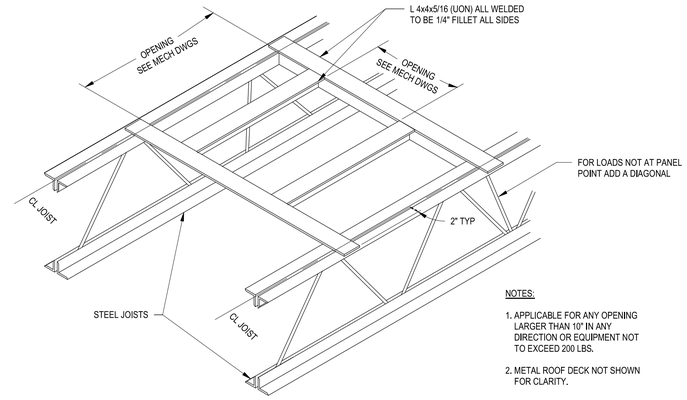
1 TYP JOIST TO BEAM CONNECTIONS
1" = 1'-0"



NOTES:

1. JOIST UNDER FULL LOADING (DISTRIBUTED AND POINT LOADS) MUST NOT EXCEED ALLOWABLE SHEAR AND BENDING FORCES ANYWHERE ALONG THE JOIST SPAN.
   A. LOAD MAY BE APPLIED AT PANEL JOINTS.
   B. MAXIMUM 100# POINT LOAD MAY BE ADDED ANYWHERE ALONG THE JOIST TOP OR BOTTOM CHORD WITHOUT ADDING ANGLE REINFORCING.
   C. WHERE APPLIED LOAD EXCEEDS 100# AND IS NOT LOCATED AT A JOIST CHORD PANEL POINT, REINFORCE JOIST CHORD WITH ANGLE EACH SIDE OF JOIST BETWEEN POINT LOAD AND OPPOSITE CHORD PANEL POINT.
      i. (2) L2X2X3/16 JOIST CHORD REINFORCEMENT FOR LENGTH = 6'-6" MAXIMUM
      ii. (2) L3X3X1/4 JOIST CHORD REINFORCEMENT FOR LENGTH = 9'-9" MAXIMUM
      iii. (2) L4X4X1/4 JOIST CHORD REINFORCEMENT FOR LENGTH = 13'-0" MAXIMUM
2. PARALLEL CHORD JOIST SHOWN, SIMILAR CONDITION AT SLOPED OR SPECIAL SHAPED JOISTS.
3. DO NOT NOTCH, CUT OR DRILL THROUGH ANY JOIST MEMBER.
4. THIS DETAIL APPLIES TO SUSPENDED SPRINKLER PIPES, HVAC DUCTS, MECHANICAL AND ELECTRICAL EQUIPMENT, ETC.

2 CONCENTRATED LOADS AT JOISTS
1 1/2" = 1'-0"



NOTES:

1. APPLICABLE FOR ANY OPENING LARGER THAN 10" IN ANY DIRECTION OR EQUIPMENT NOT TO EXCEED 200 LBS.
2. METAL ROOF DECK NOT SHOWN FOR CLARITY.

3 TYP FRAMING AT MECHANICAL EQUIPMENT
3/4" = 1'-0"

NOTES:
1) ANGLE AND CONNECTION SHALL BE CONSIDED AS WORK ASSOCIATED WITH ADD ALTERNATE 1. CONNECTION TO ANGLE SHALL BE PROVIDED BY SELECTED SOLAR PANEL MANUFACTUER. JOIST SHALL BE DESIGNED TO SUPPORT SOLAR PANEL LOADING REQUIREMENTS AS A PART OF THE BASE BID DESIGN.

4 SOLAR PANEL SUPPORT
1 1/2" = 1'-0"

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BEB YARD IMPROVEMENTS

PROJECT NO.	189247
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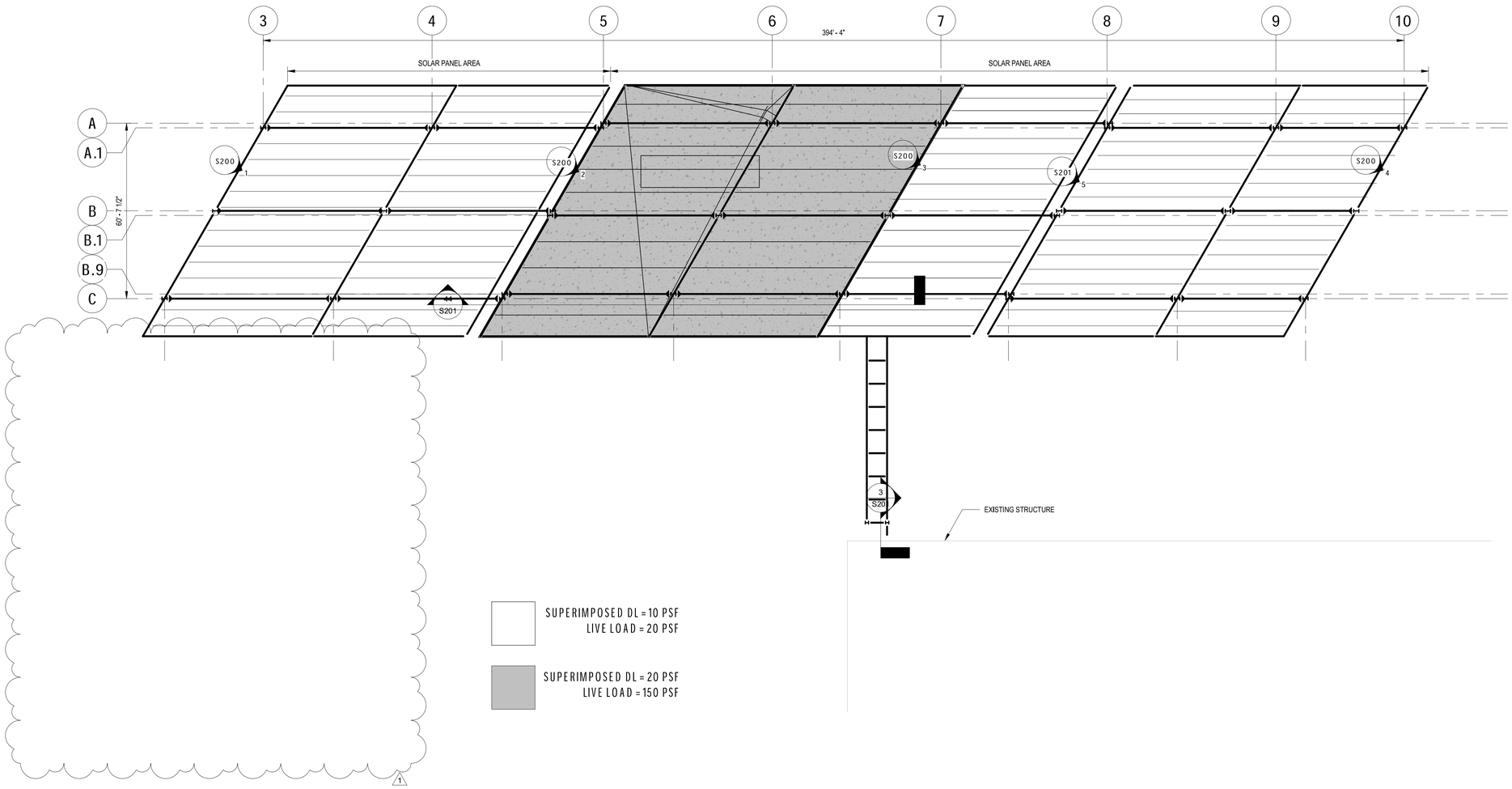
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TYPICAL STEEL DETAILS

S021

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1 FRAMING PLAN - LOAD MAP
1" = 20'-0"

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REGISTERED PROFESSIONAL ENGINEER
S. B. ALI WAHIDI
No. S3744
Exp. 06-30-24
STRUCTURAL
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

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DATE	10/18/22

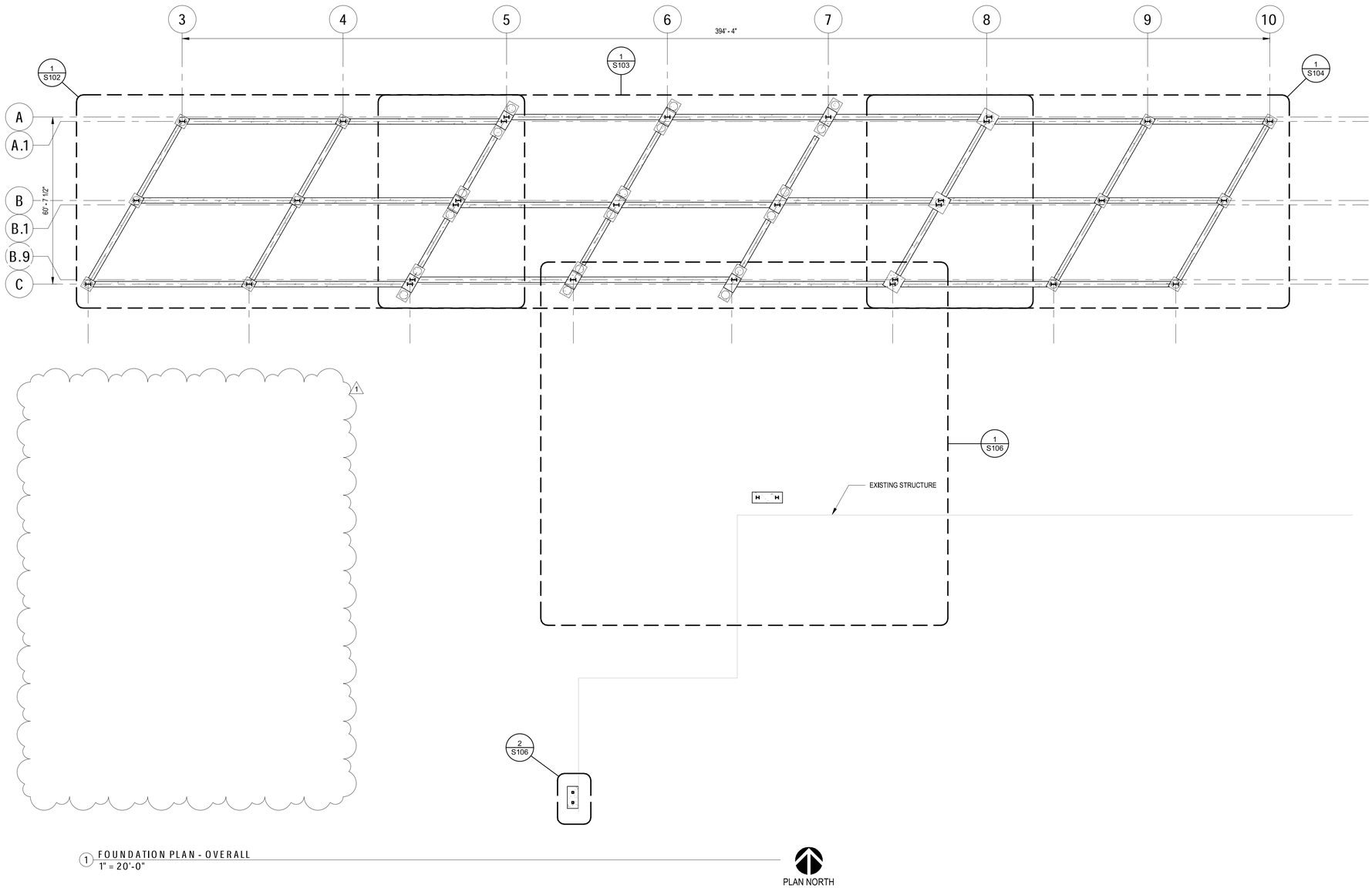
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LOAD MAP

S100

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1 FOUNDATION PLAN - OVERALL
1" = 20'-0"

PLAN NORTH

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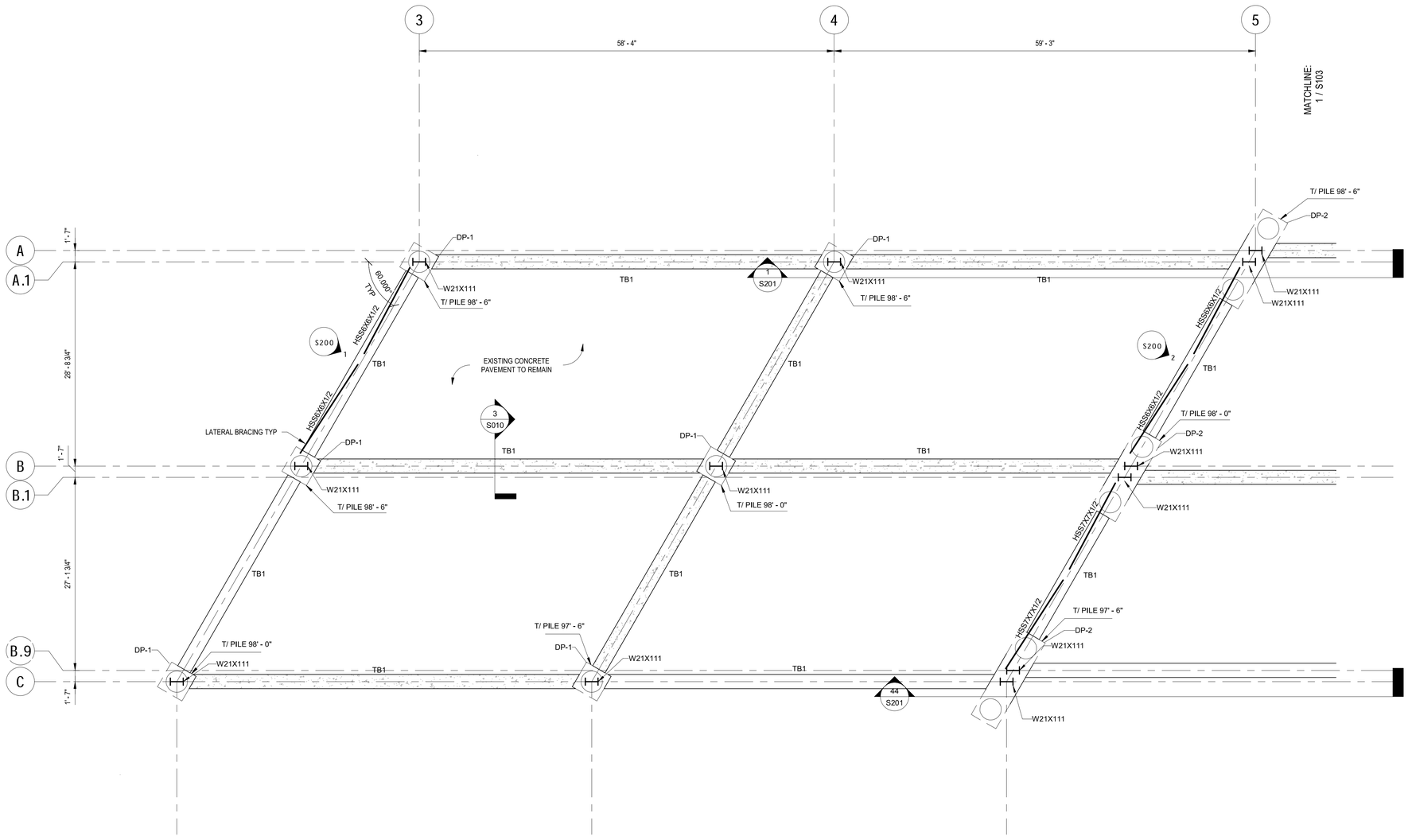
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FOUNDATION PLAN - OVERALL

S101

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MATCHLINE:
1 / S105

1 ENLARGED FOUNDATION PLAN - AREA A
1/8" = 1'-0"

PLAN NORTH

DRILLED PIER SCHEDULE				
TAG	CAP DIMENSIONS	PIER DIAMETER	PIER DEPTH	REINFORCING
DP-1	4'X4'X3'	36"	30'	SEE DETAIL 4/S010
DP-2	14'X4'X3'	36"	(2) @ 30'	SEE DETAIL 4/S010
DP-3	14'X4'X3'	36"	(2) @ 35'	SEE DETAIL 4/S010
DP-4	4'X4'X3'	36"	40'	SEE DETAIL 4/S010
DP-5	6'X6'X3'	36"	30'	SEE DETAIL 4/S010

TIE BEAM SCHEDULE				
TAG	WIDTH	DEPTH	LONGITUDINAL REINFORCING	TRANSVERSE REINFORCING
TB1	24"	18"	(4) #6	#4 @ 12" OC

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STATE OF CALIFORNIA

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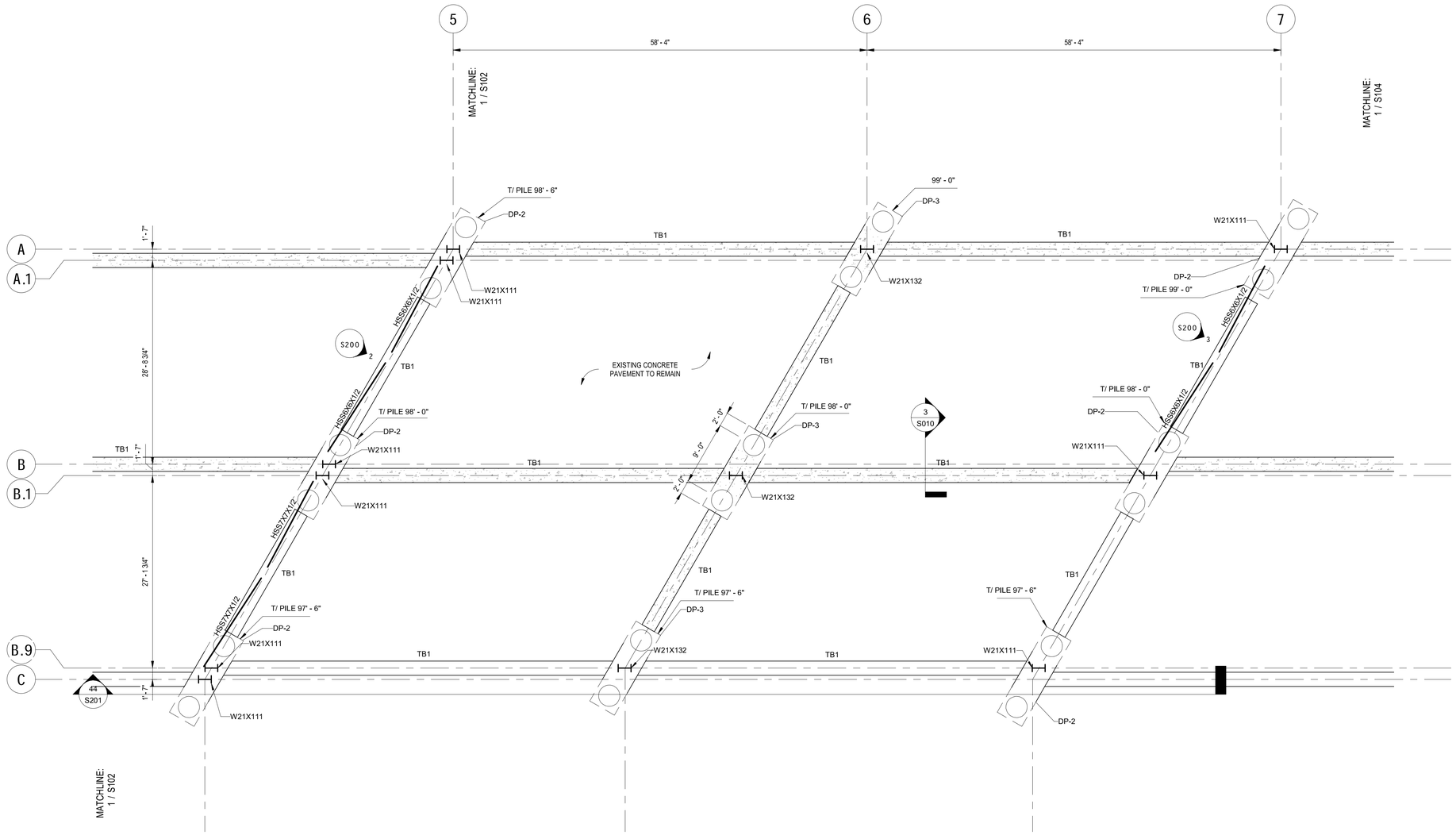
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ENLARGED FOUNDATION PLAN - AREA A

S102

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1 ENLARGED FOUNDATION PLAN - AREA B
1/8" = 1'-0"

PLAN NORTH

DRILLED PIER SCHEDULE				
TAG	CAP DIMENSIONS	PIER DIAMETER	PIER DEPTH	REINFORCING
DP-1	4'X4'X3'	36"	30'	SEE DETAIL 4/S010
DP-2	14'X4'X3'	36"	(2) @ 30'	SEE DETAIL 4/S010
DP-3	14'X4'X3'	36"	(2) @ 35'	SEE DETAIL 4/S010
DP-4	4'X4'X3'	36"	40'	SEE DETAIL 4/S010
DP-5	6'X6'X3'	36"	30'	SEE DETAIL 4/S010

TIE BEAM SCHEDULE				
TAG	WIDTH	DEPTH	LONGITUDINAL REINFORCING	TRANSVERSE REINFORCING
TB1	24"	18"	(4) #6	#4 @ 12" OC

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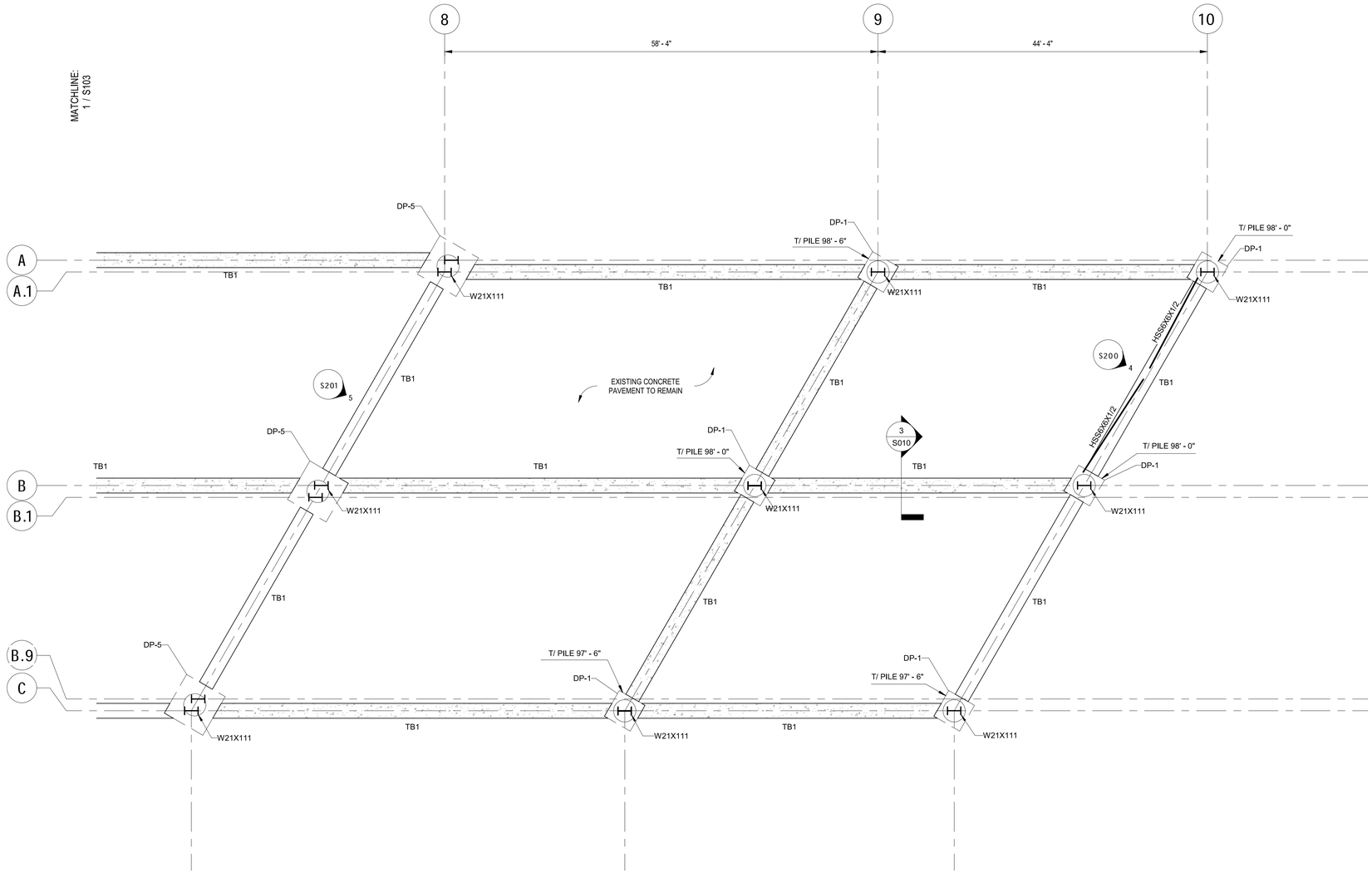
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ENLARGED FOUNDATION PLAN - AREA B

S103

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1 ENLARGED FOUNDATION PLAN - AREA C
1/8" = 1'-0"

PLAN NORTH

DRILLED PIER SCHEDULE				
TAG	CAP DIMENSIONS	PIER DIAMETER	PIER DEPTH	REINFORCING
DP-1	4'X4'X3'	36"	30'	SEE DETAIL 4/S010
DP-2	14'X4'X3'	36"	(2) @ 30'	SEE DETAIL 4/S010
DP-3	14'X4'X3'	36"	(2) @ 35'	SEE DETAIL 4/S010
DP-4	4'X4'X3'	36"	40'	SEE DETAIL 4/S010
DP-5	6'X6'X3'	36"	30'	SEE DETAIL 4/S010

TIE BEAM SCHEDULE				
TAG	WIDTH	DEPTH	LONGITUDINAL REINFORCING	TRANSVERSE REINFORCING
TB1	24"	18"	(4) #6	#4 @ 12" OC

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STATE OF CALIFORNIA

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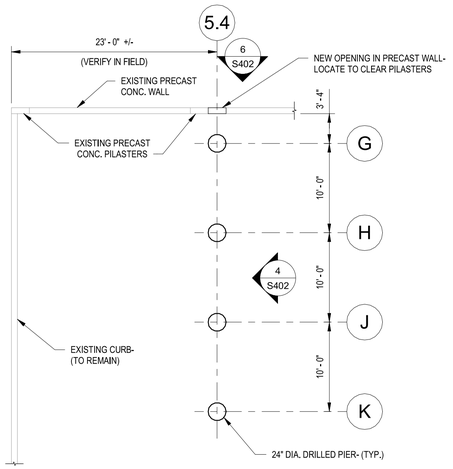
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ENLARGED FOUNDATION PLAN - AREA C

S104

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2 ENLARGED FOUNDATION PLAN - BUSDUCT
1/8" = 1'-0"

PLAN NORTH

1 ENLARGED FOUNDATION PLAN - AREA D
1/8" = 1'-0"

PLAN NORTH

DRILLED PIER SCHEDULE				
TAG	CAP DIMENSIONS	PIER DIAMETER	PIER DEPTH	REINFORCING
DP-1	4'X4'X3'	36"	30'	SEE DETAIL 4/S010
DP-2	14'X4'X3'	36"	(2) @ 30'	SEE DETAIL 4/S010
DP-3	14'X4'X3'	36"	(2) @ 35'	SEE DETAIL 4/S010
DP-4	4'X4'X3'	36"	40'	SEE DETAIL 4/S010
DP-5	6'X6'X3'	36"	30'	SEE DETAIL 4/S010

TIE BEAM SCHEDULE				
TAG	WIDTH	DEPTH	LONGITUDINAL REINFORCING	TRANSVERSE REINFORCING
TB1	24"	18"	(4) #6	#4 @ 12" OC

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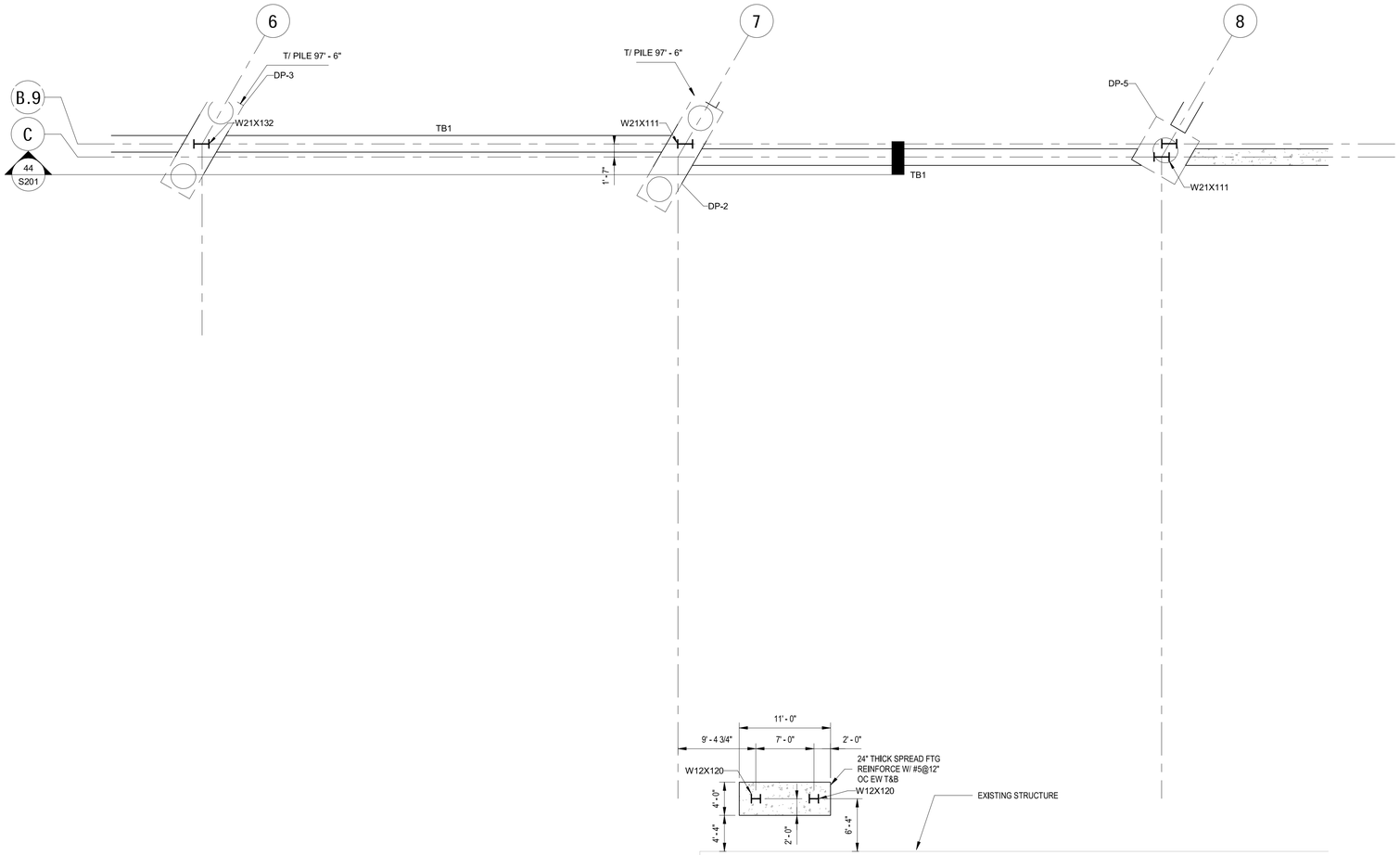
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ENLARGED FOUNDATION PLAN - AREA D

S105

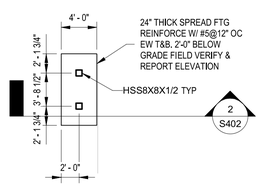
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1 ENLARGED FOUNDATION PLAN - AREA E
1/8" = 1'-0"

PLAN NORTH



2 ELECTRICAL CHASE
1/8" = 1'-0"

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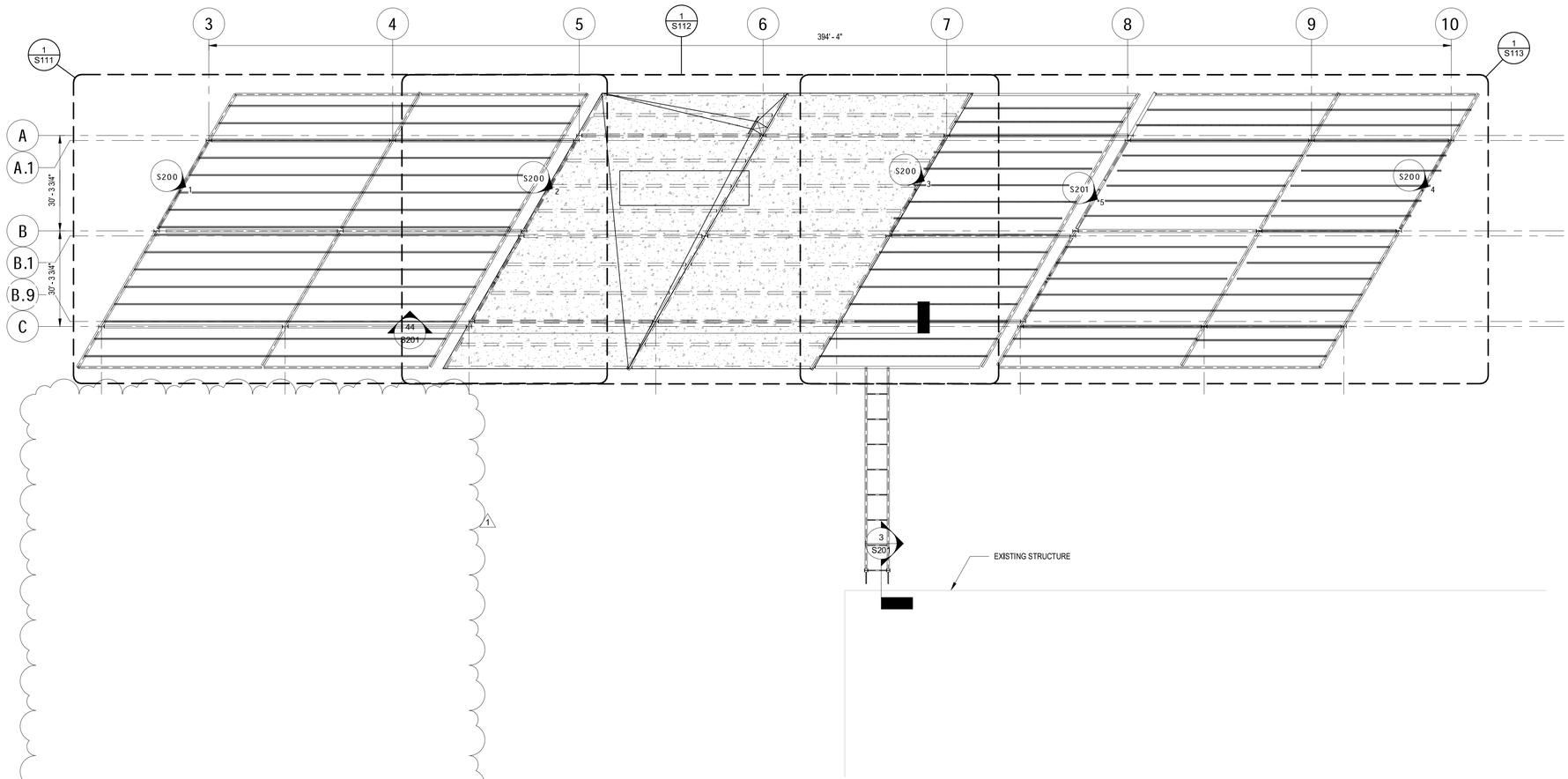
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ENLARGED FOUNDATION PLAN - AREA E

S106

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1 FRAMING PLAN - OVERALL
1" = 20'-0"

PLAN NORTH

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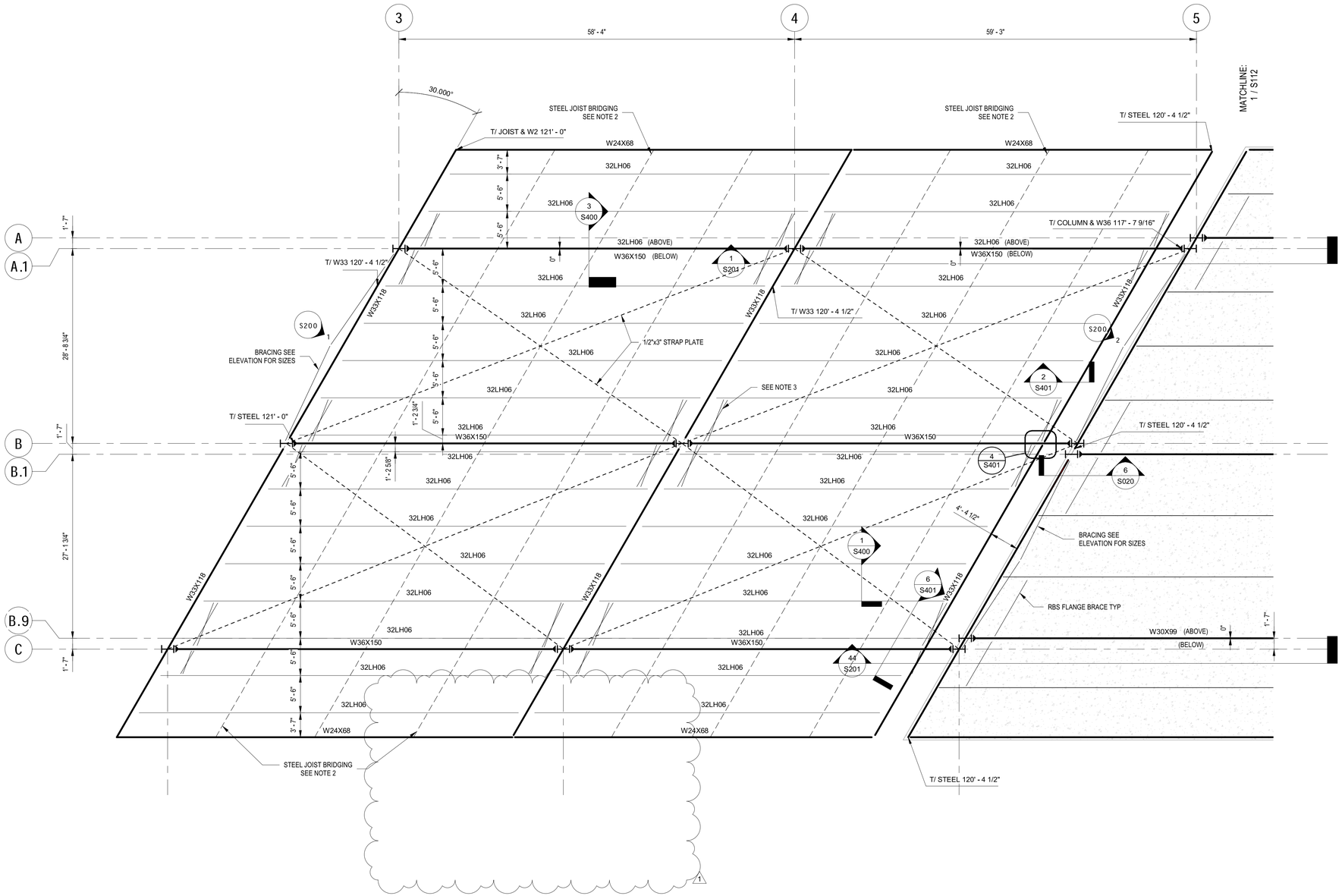
DRAWING TITLE

FRAMING PLAN - OVERALL

S110

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1 ENLARGED FRAMING PLAN - AREA A
1/8" = 1'-0"

PLAN NORTH

NOTES

1) RD-01 - 5" COMPOSITE DECK ON 3" x 20 GAUGE DECKING. REINFORCE SLAB WITH 6x6-W1.4xW1.4 WWF.

2) STEEL JOIST FABRICATOR SHALL PROVIDE BRIDGING PER SJI REQUIREMENTS. BRIDGING LINES SHOWN IN PLANS ARE MINIMUM REQUIRED BY LATERAL FORCE RESISTING SYSTEM.

3. ⟋⟍ INDICATED TOP AND BOTTOM FLANGE BRACING. SEE REDUCED BEAM CONNECTIOND DETAIL FOR BALANCE OF INFORMATION.

4. UNLESS NOTED OTHERWISE FRAMING AND HEADED STUD SHALL BE EQUALLY SPACED

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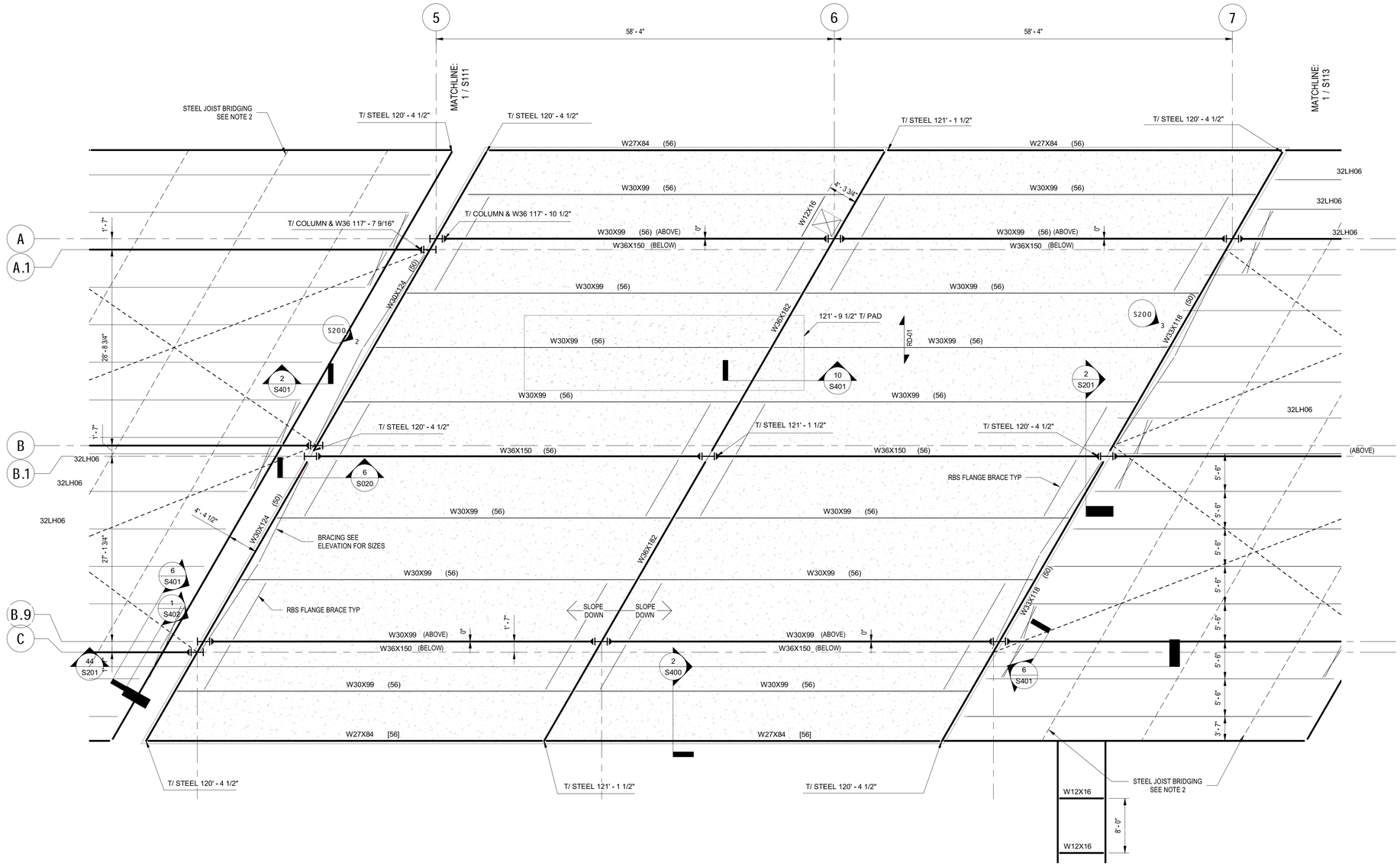
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ENLARGED FRAMING PLAN - AREA A

S111

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1 ENLARGED FRAMING PLAN - AREA B
1/8" = 1'-0"

PLAN NORTH

NOTES

1) RD-01 - 5" COMPOSITE DECK ON 3" x 20 GAUGE DECKING. REINFORCE SLAB WITH 6x6-W1.4xW1.4 WWF.

2) STEEL JOIST FABRICATOR SHALL PROVIDE BRIDGING PER SJI REQUIREMENTS. BRIDGING LINES SHOWN IN PLANS ARE MINIMUM REQUIRED BY LATERAL FORCE RESISTING SYSTEM.

3. ⟋⟍ INDICATED TOP AND BOTTOM FLANGE BRACING. SEE REDUCED BEAM CONNECTIOND DETAIL FOR BALANCE OF INFORMATION.

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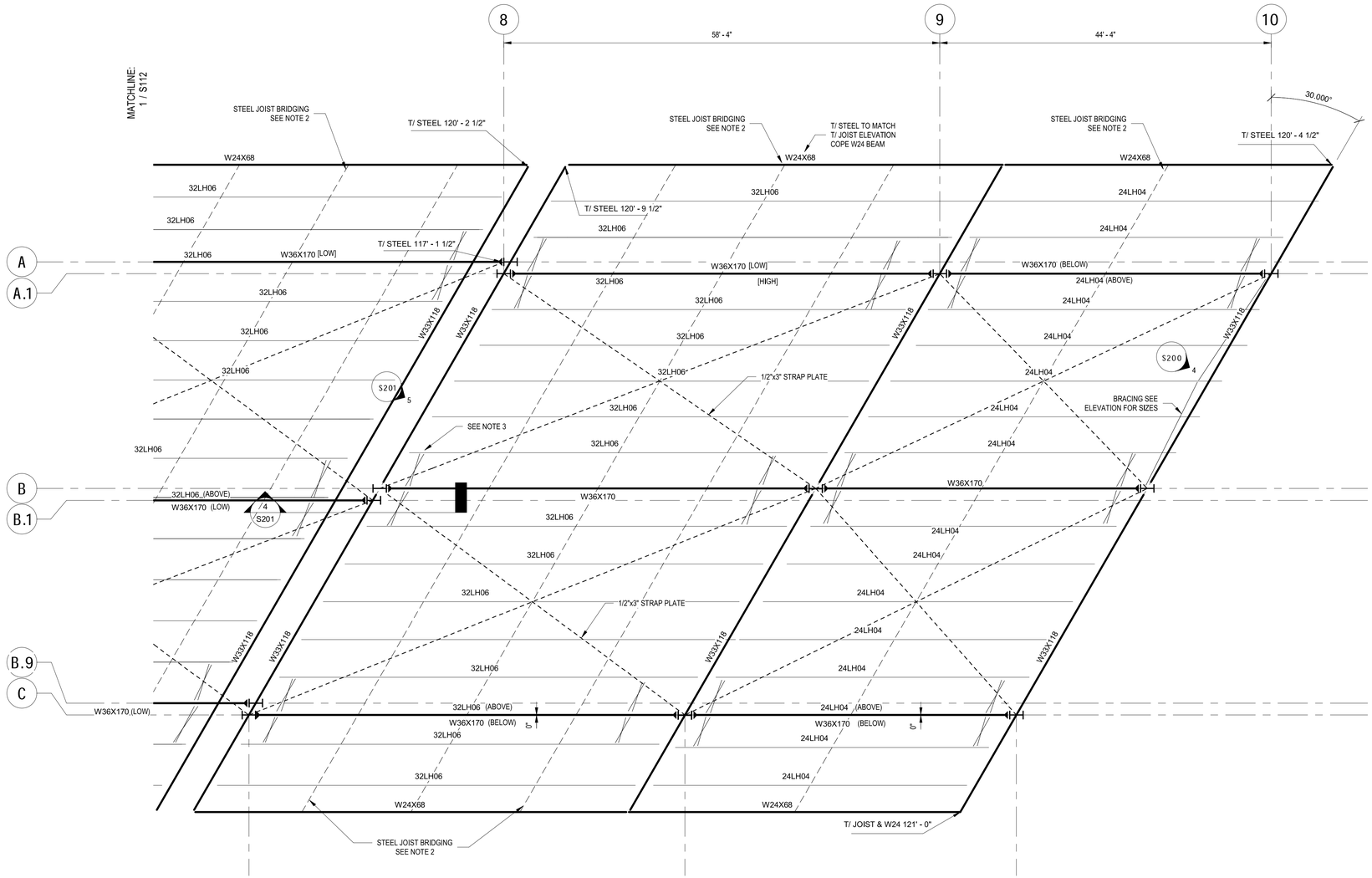
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ENLARGED FRAMING PLAN - AREA B

S112

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1 ENLARGED FRAMING PLAN - AREA C
1/8" = 1'-0"

PLAN NORTH

NOTES

1) RD-01 - 5" COMPOSITE DECK ON 3" x 20 GAUGE DECKING, REINFORCE SLAB WITH 6x6-W1.4xW1.4 WWF.

2) STEEL JOIST FABRICATOR SHALL PROVIDE BRIDGING PER SJI REQUIREMENTS. BRIDGING LINES SHOWN IN PLANS ARE MINIMUM REQUIRED BY LATERAL FORCE RESISTING SYSTEM.

3. ═══ INDICATED TOP AND BOTTOM FLANGE BRACING. SEE REDUCED BEAM CONNECTIOND DETAIL FOR BALANCE OF INFORMATION.

4. UNLESS NOTED OTHERWISE FRAMING AND HEADED STUD SHALL BE EQUALLY SPACED

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ENLARGED FRAMING PLAN - AREA C

S113

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1 ENLARGED FRAMING PLAN - AREA D
1/8" = 1'-0"

PLAN NORTH

NOTES

1) RD-01 - 5" COMPOSITE DECK ON 3" x 20 GAUGE DECKING. REINFORCE SLAB WITH 6x6-W1.4xW1.4 WWF.

2) STEEL JOIST FABRICATOR SHALL PROVIDE BRIDGING PER SJI REQUIREMENTS. BRIDGING LINES SHOWN IN PLANS ARE MINIMUM REQUIRED BY LATERAL FORCE RESISTING SYSTEM.

3. ═══ INDICATED TOP AND BOTTOM FLANGE BRACING. SEE REDUCED BEAM CONNECTIOND DETAIL FOR BALANCE OF INFORMATION.

4. UNLESS NOTED OTHERWISE FRAMING AND HEADED STUD SHALL BE EQUALLY SPACED

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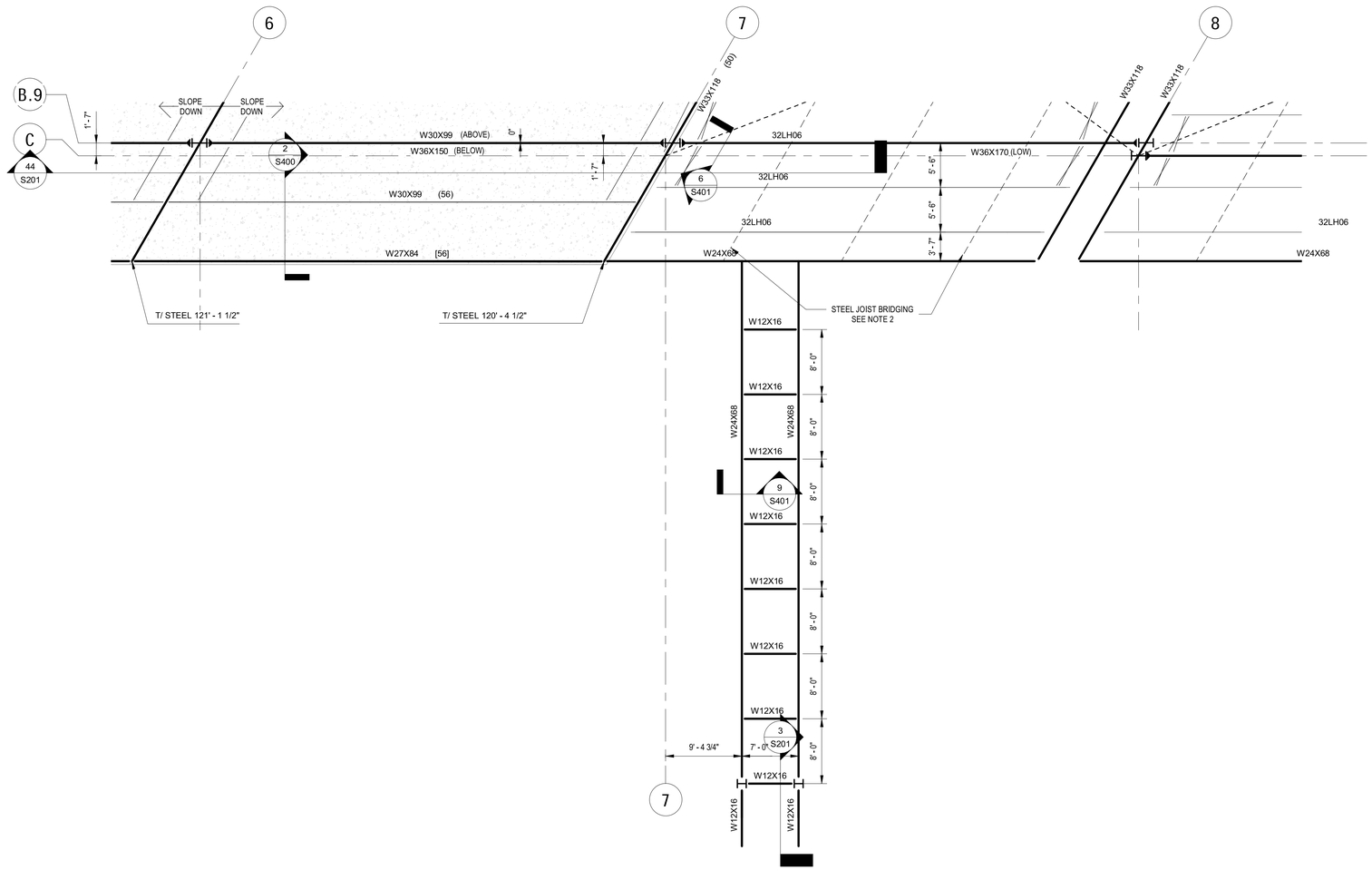
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ENLARGED FRAMING PLAN - AREA D

S114

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1 ENLARGED FRAMING PLAN - AREA E
1/8" = 1'-0"

PLAN NORTH

NOTES

1) RD-01 - 5" COMPOSITE DECK ON 3" x 20 GAUGE DECKING. REINFORCE SLAB WITH 6x6-W1.4xW1.4 WWF.

2) STEEL JOIST FABRICATOR SHALL PROVIDE BRIDGING PER SJI REQUIREMENTS. BRIDGING LINES SHOWN IN PLANS ARE MINIMUM REQUIRED BY LATERAL FORCE RESISTING SYSTEM.

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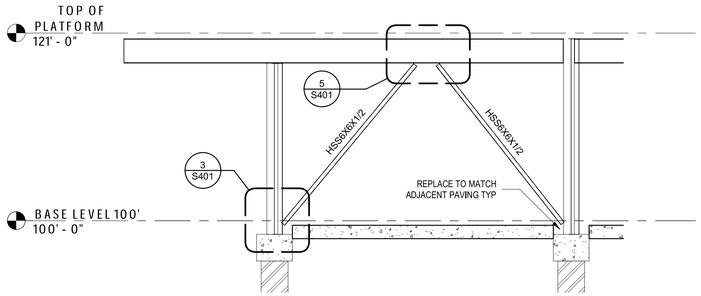
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ENLARGED FRAMING PLAN - AREA E

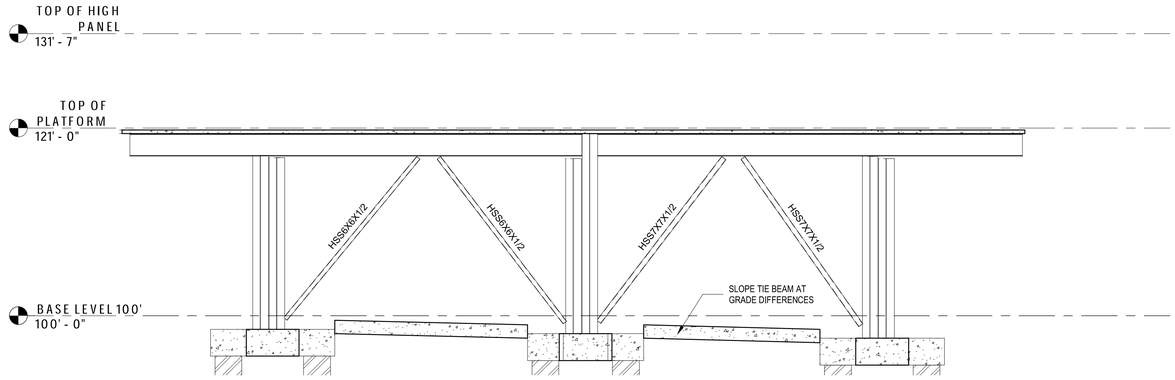
S115

BIM 360://HOU-I89249A - SolTrans BEB - R19/SolTrans Maint Facility - Struc.rvt

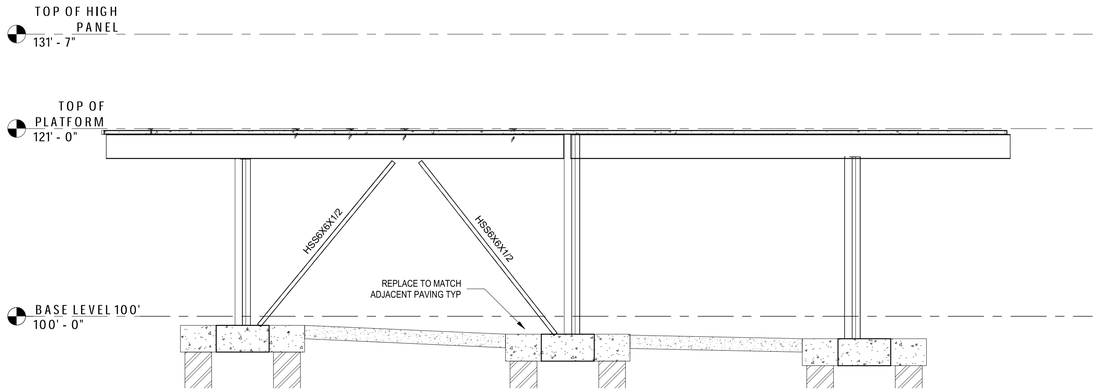
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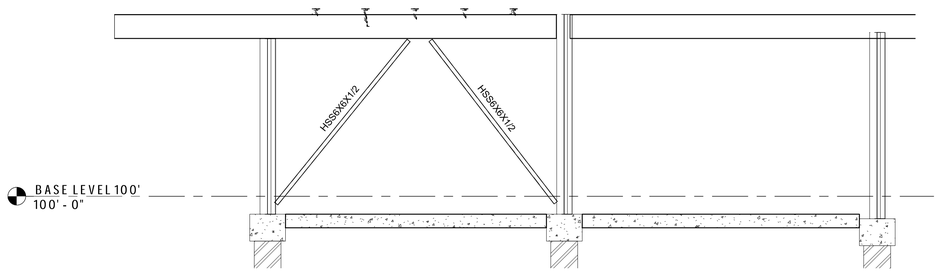
1 GRID 3 ELEVATION
1/8" = 1'-0"



2 GRID 5 ELEVATION
1/8" = 1'-0"



3 GRID 7 ELEVATION
1/8" = 1'-0"



4 GRID 10 ELEVATION
1/8" = 1'-0"

1

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REVISION LIST

NO.	DATE	REVISIONS
1	05/26/2023	CCO #001
1	05/26/2023	CCO #1
0	10-18-22	Issue for Bid

REGISTERED PROFESSIONAL ENGINEER
S. B. ALI WAHIDI
No. S3744
Exp. 06-30-24
STRUCTURAL
STATE OF CALIFORNIA

PROJECT TITLE
BEB YARD IMPROVEMENTS

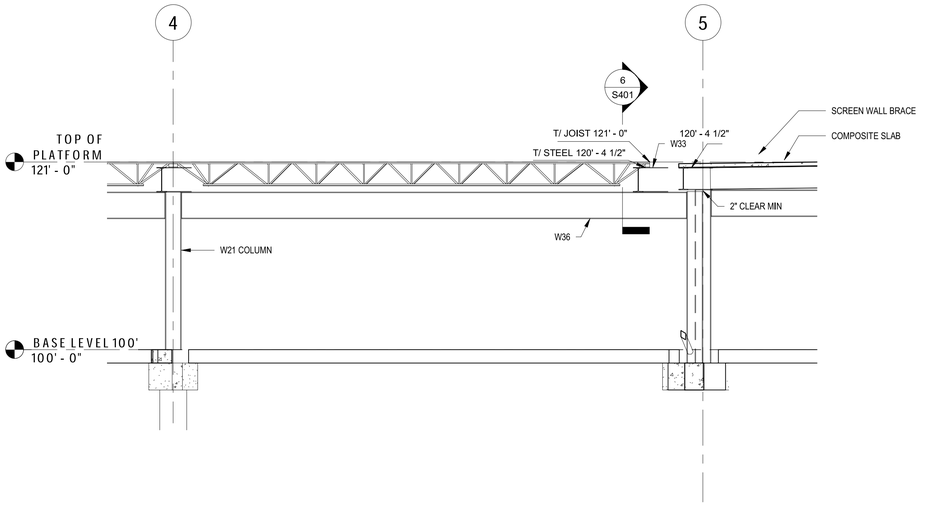
PROJECT NO.	189247
DRAWN BY	EKH
DATE	10/18/22

DRAWING TITLE
BRACE ELEVATIONS

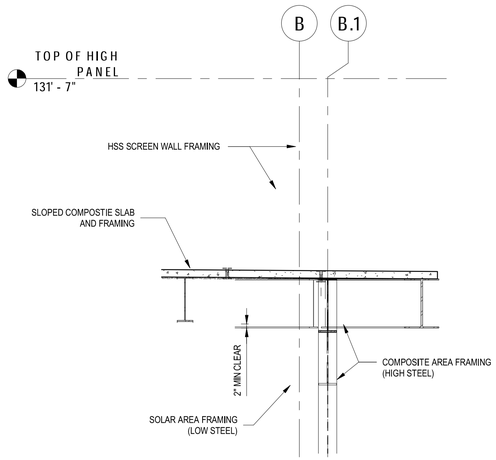
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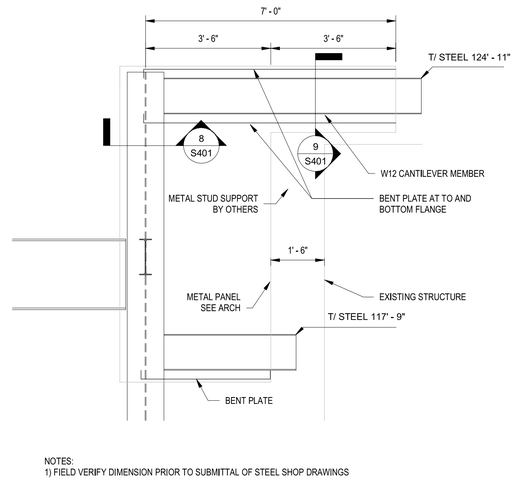
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1 BUILDING SECTION
1/8" = 1'-0"

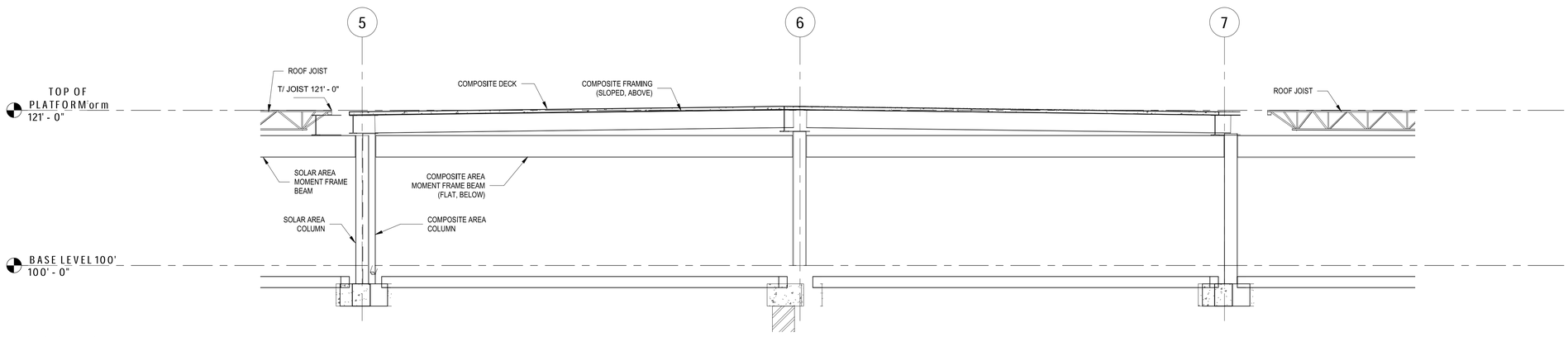


2 BUILDING SECTION
1/4" = 1'-0"

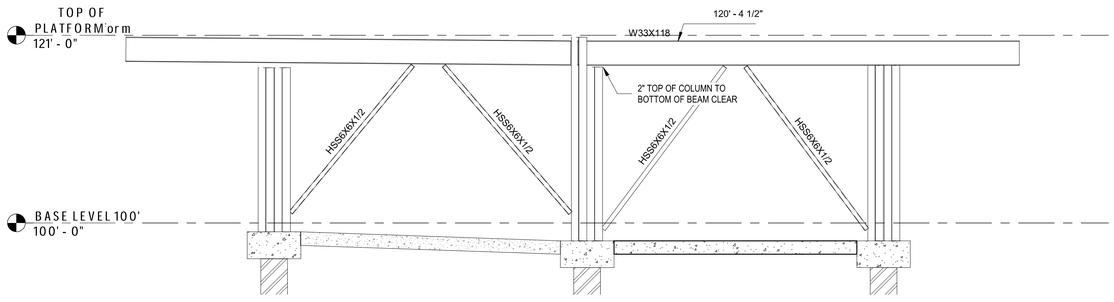


NOTES:
1) FIELD VERIFY DIMENSION PRIOR TO SUBMITTAL OF STEEL SHOP DRAWINGS

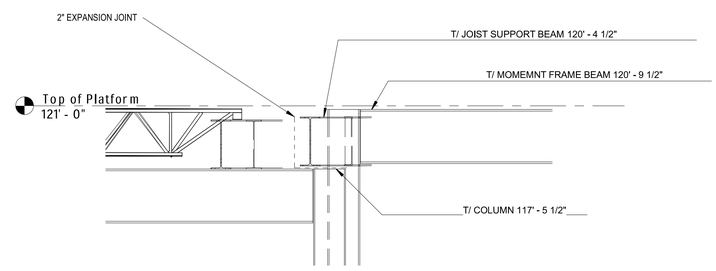
3 SECTION AT EXISTING BUILDING
1/2" = 1'-0"



44 BUILDING SECTION
1/8" = 1'-0"



5 GRID 8 ELEVATION
1/8" = 1'-0"



4 SECTION AT EXPANSION JOINT
1/4" = 1'-0"

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S. B. ALI WAHIDI
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Exp. 06-30-24
STRUCTURAL
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

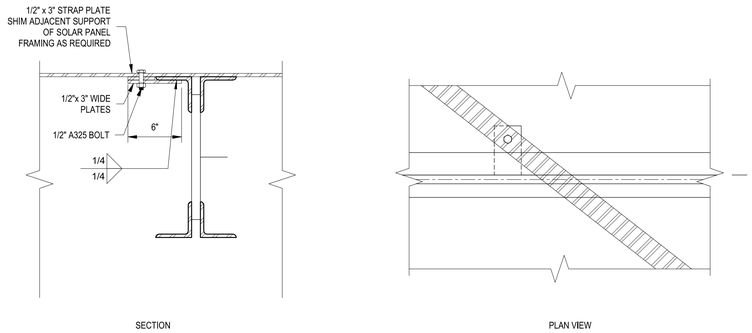
PROJECT NO.	189247
DRAWN BY	EKH
DATE	10/18/22

DRAWING TITLE
BUILDING SECTIONS

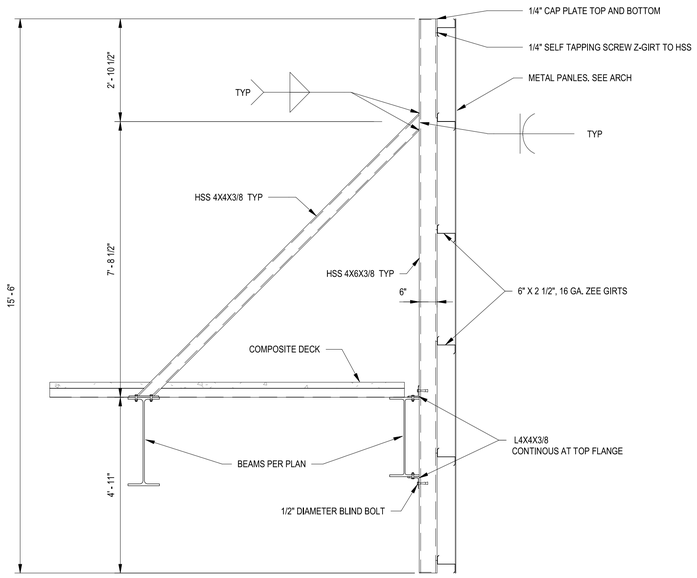
S201

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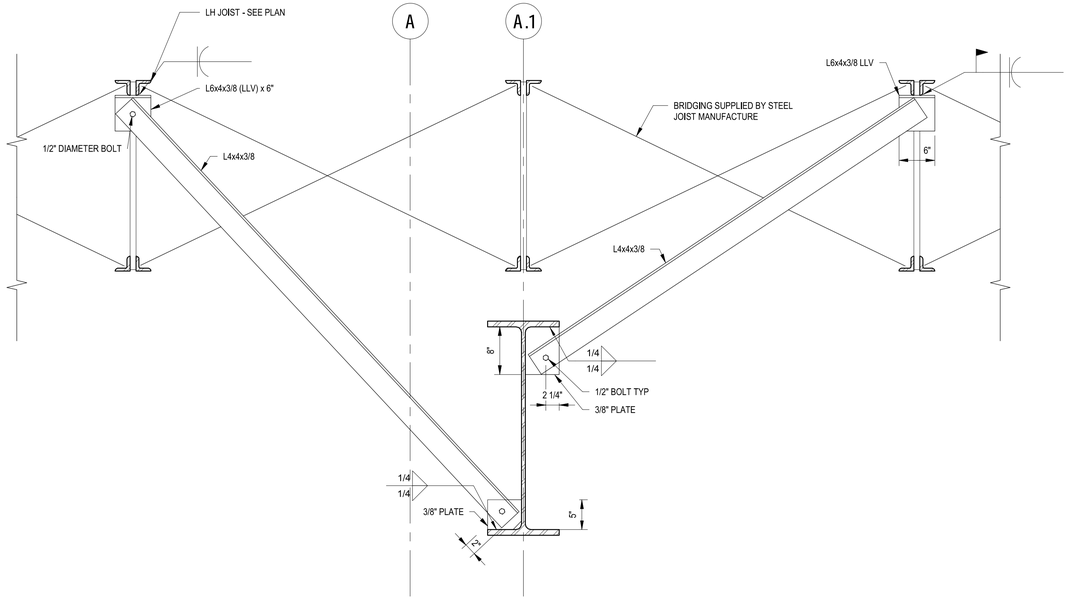
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1 HORIZONTAL BRACING ATTACHMENT
1 1/2" = 1'-0"



2 MECH SCREEN WALL FRAME SECTION
1/2" = 1'-0"



3 STEEL BRIDGING DETAIL
1" = 1'-0"

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STATE OF CALIFORNIA

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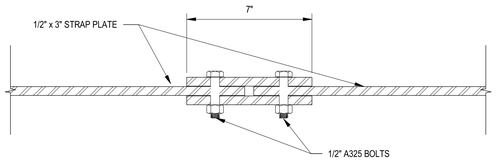
PROJECT NO.	189247
DRAWN BY	EKH
DATE	10/18/22

DRAWING TITLE
SUPERSTRUCTURE DETAILS

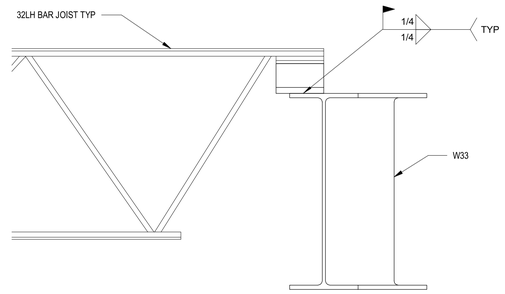
S400

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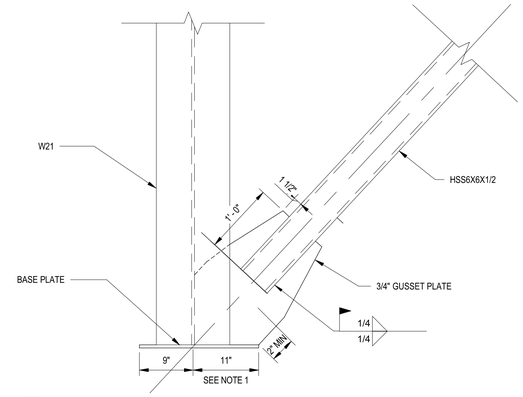
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1 BRACE SPLICE
3" = 1'-0"

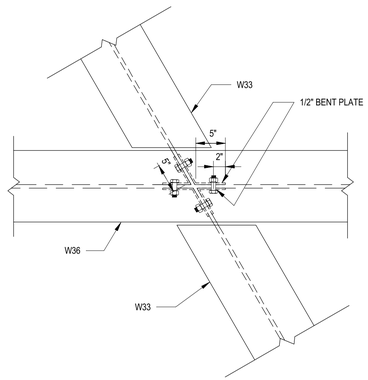


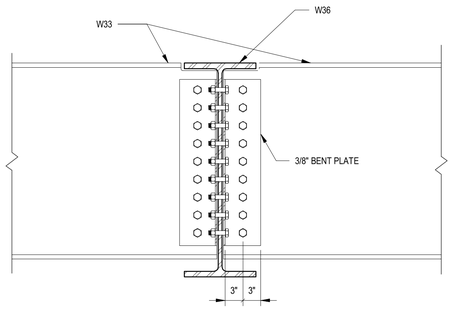
2 JOIST CONNECTION TO GIRDER
1" = 1'-0"



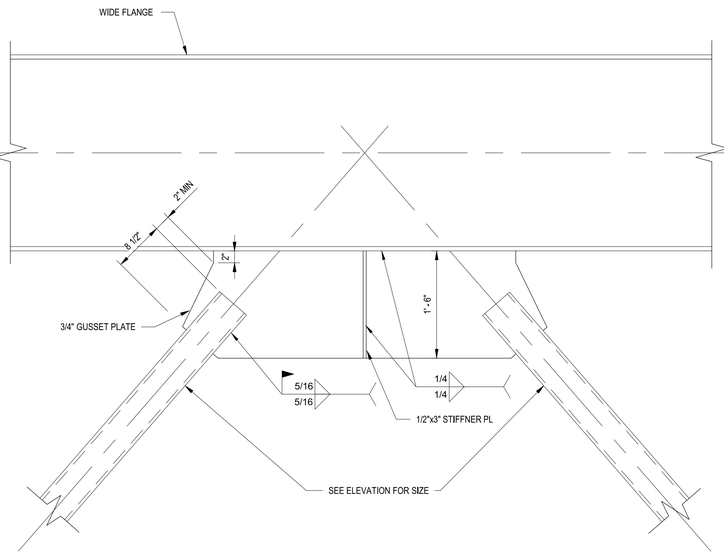
NOTES:
1) SEE TYP BASEPLATE CONNECTION FOR BALANCE OF INFORMATION. ELEMINATE ANCHOR BOLT WHERE CONFLICT OCCURS. DIMENSIONS SHOWN ON THIS DETAIL SHALL PREVAIL OVER TYP BASEPLATE CONNECTION.

3 GUSSET PLATE AT COLUMN BASE
1" = 1'-0"

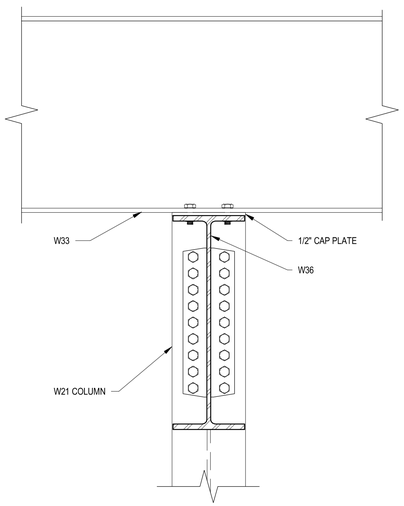




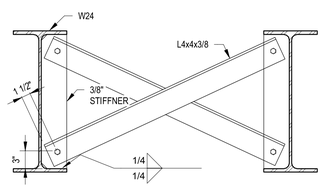
4 BEAM SPLICE
1" = 1'-0"



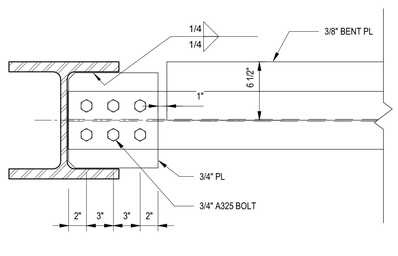
5 GUSSET PLATE AT BEAM MIDSPAN
1" = 1'-0"



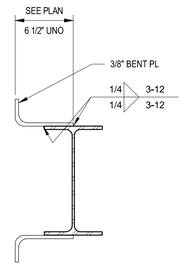
6 CANTILEVER BEAM CONNECTION
1" = 1'-0"



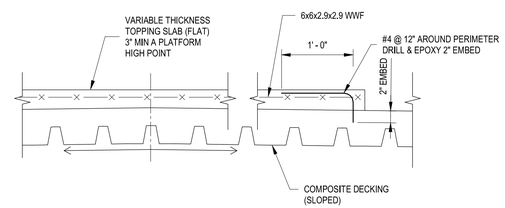
7 WIDE FLANGE TO WIDE FLANGE BRACING
1" = 1'-0"



8 CANTILEVER COLUMN CONNECTION
1 1/2" = 1'-0"



9 BENT PLATE DETAIL
1 1/2" = 1'-0"



10 EQUIPMENT PAD DETAIL
1" = 1'-0"

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0	10-18-22	Issue for Bid



PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189247
DRAWN BY	EKH
DATE	10/18/22

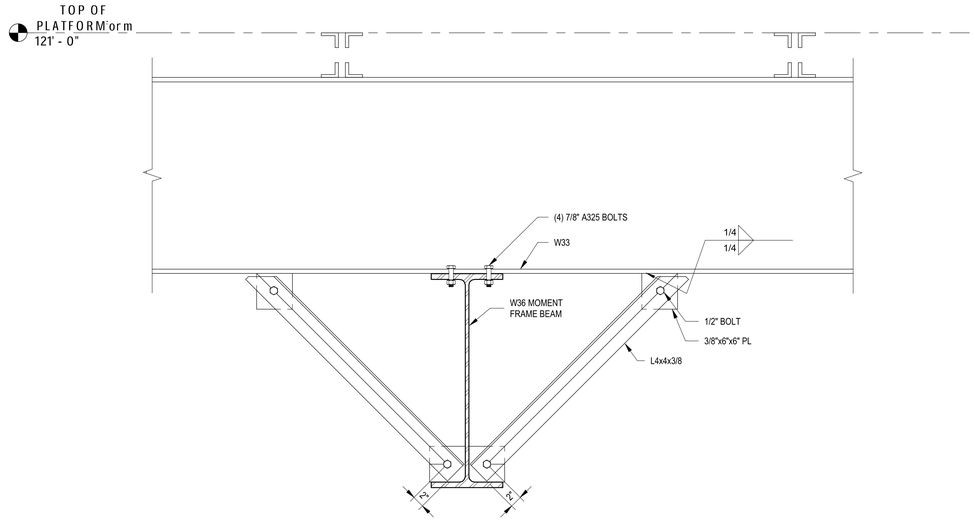
DRAWING TITLE

SUPERSTRUCTURE DETAILS

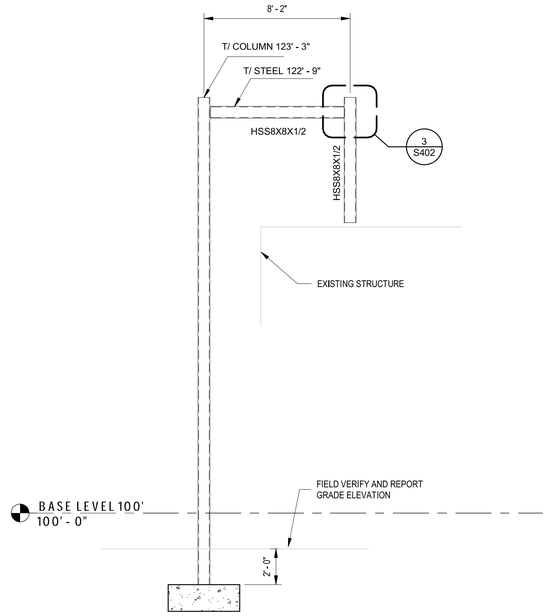
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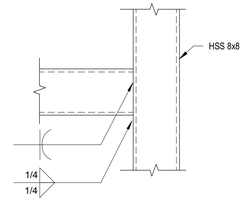
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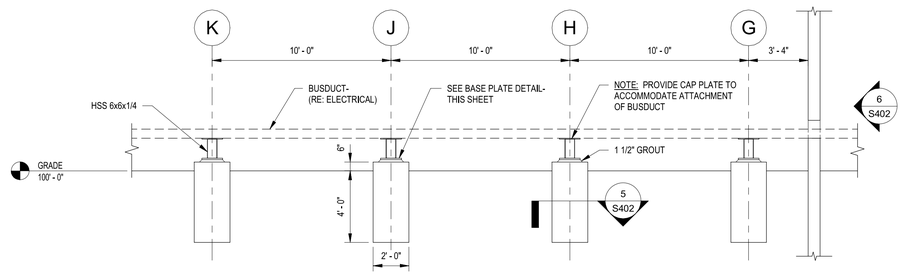
1 BEAM OVER MOMENT FRAME CONNECTION
1" = 1'-0"



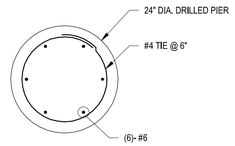
2 SECTION AT ELECTRICAL CHASE
1/4" = 1'-0"



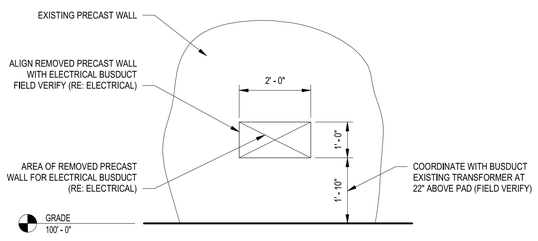
3 HSS TO HSS CONNECTION
1" = 1'-0"



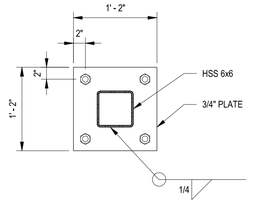
4 ELEVATION - BUSDUCT STRUCTURE
1/4" = 1'-0"



5 PIER SECTION
3/4" = 1'-0"



6 WALL OPENING DETAIL
1/2" = 1'-0"



7 BASE PLATE DETAIL
1" = 1'-0"

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REGISTERED PROFESSIONAL ENGINEER
S. B. ALI WAHIDI
No. S3744
Exp. 06-30-24
STRUCTURAL
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

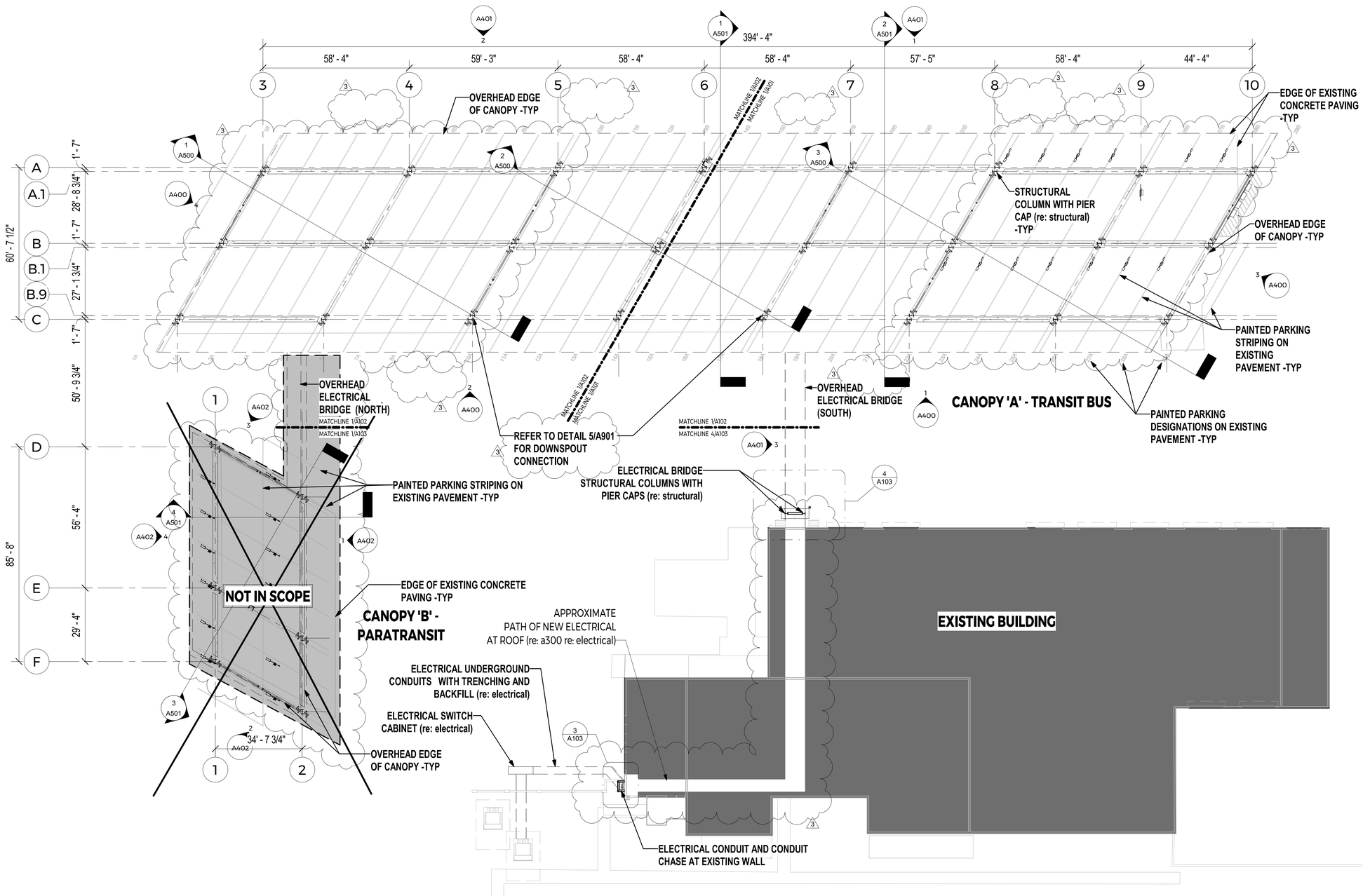
PROJECT NO.	189247
DRAWN BY	EKH
DATE	10/18/22

DRAWING TITLE
SUPERSTRUCTURE DETAILS

S402

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1 OVERALL FLOOR PLAN
1" = 20'-0"

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NO.	DATE	REVISIONS
3	05/26/2023	CCO #001
2	03/31/2023	CONFORM SET
1	10/18/2022	ISSUE FOR BID

REVISION LIST

LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
RENEWAL 08/31/2024
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	MAG
DATE	05/26/2023

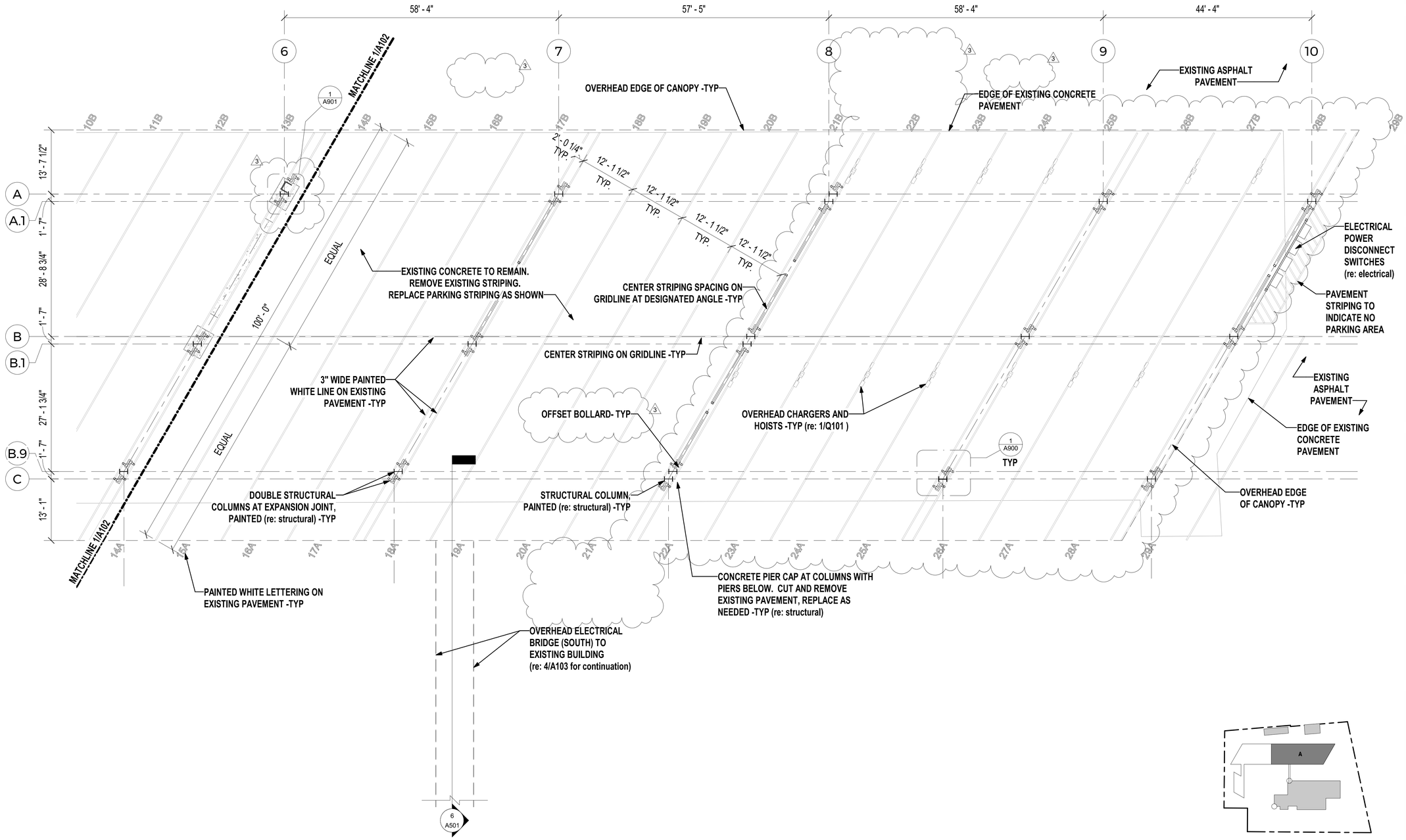
DRAWING TITLE

OVERALL FLOOR PLAN

A100

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5/26/2023 1:34:48 PM



1 PARTIAL FLOOR PLAN - CANOPY 'A' (SOUTH)
1" = 10'-0"

0" 5' - 0" 10' - 0" 20' - 0"
1" = 10'

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REGINALD D. KEYS
C-28841
RENEWAL 08/31/2024
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	ESR
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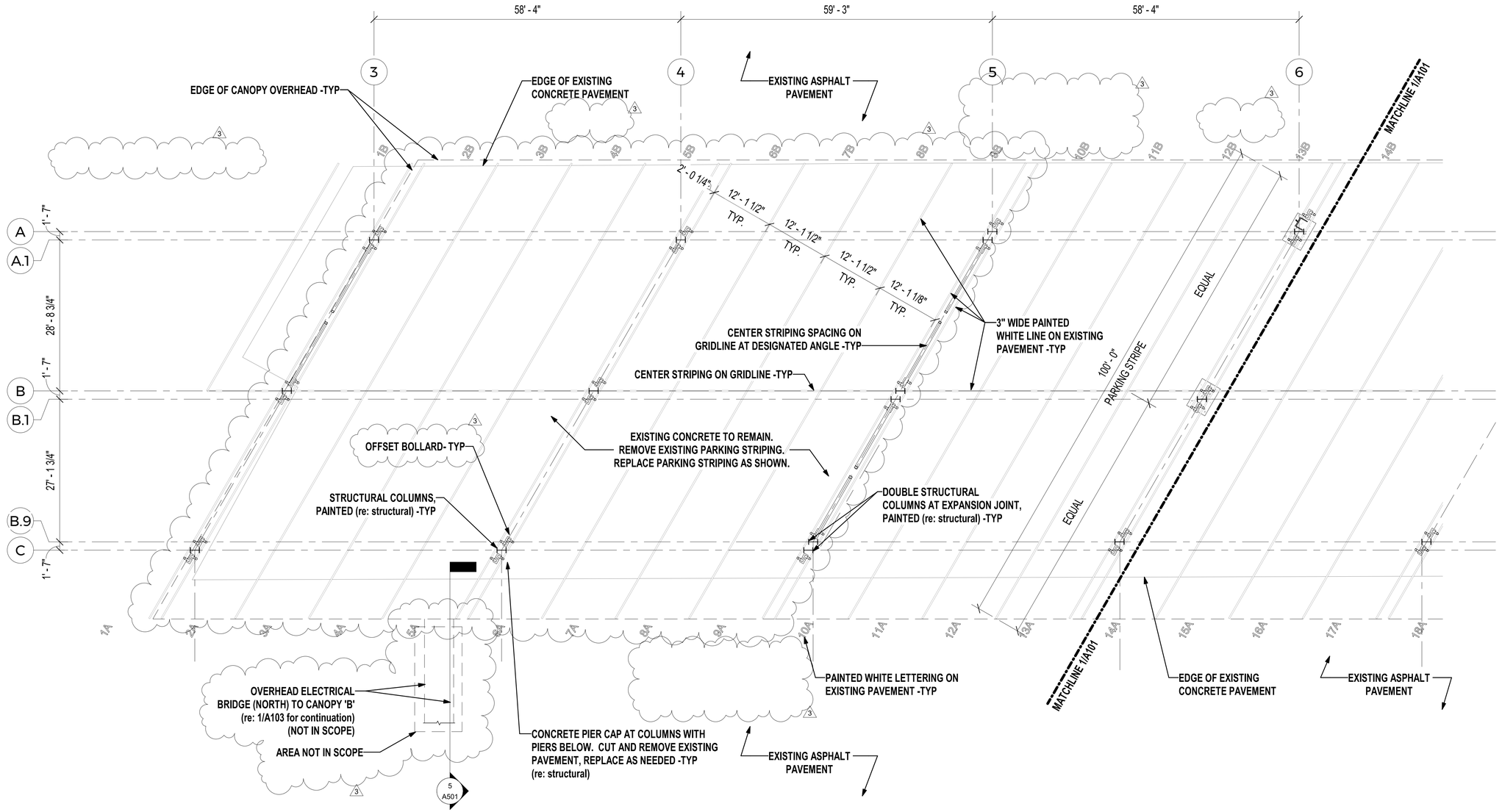
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PARTIAL FLOOR PLAN - CANOPY 'A' (SOUTH)

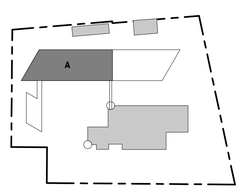
A101

5/26/2023 1:34:50 PM

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1 PARTIAL FLOOR PLAN - CANOPY 'A' (NORTH)
1" = 10'-0"



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C-28841
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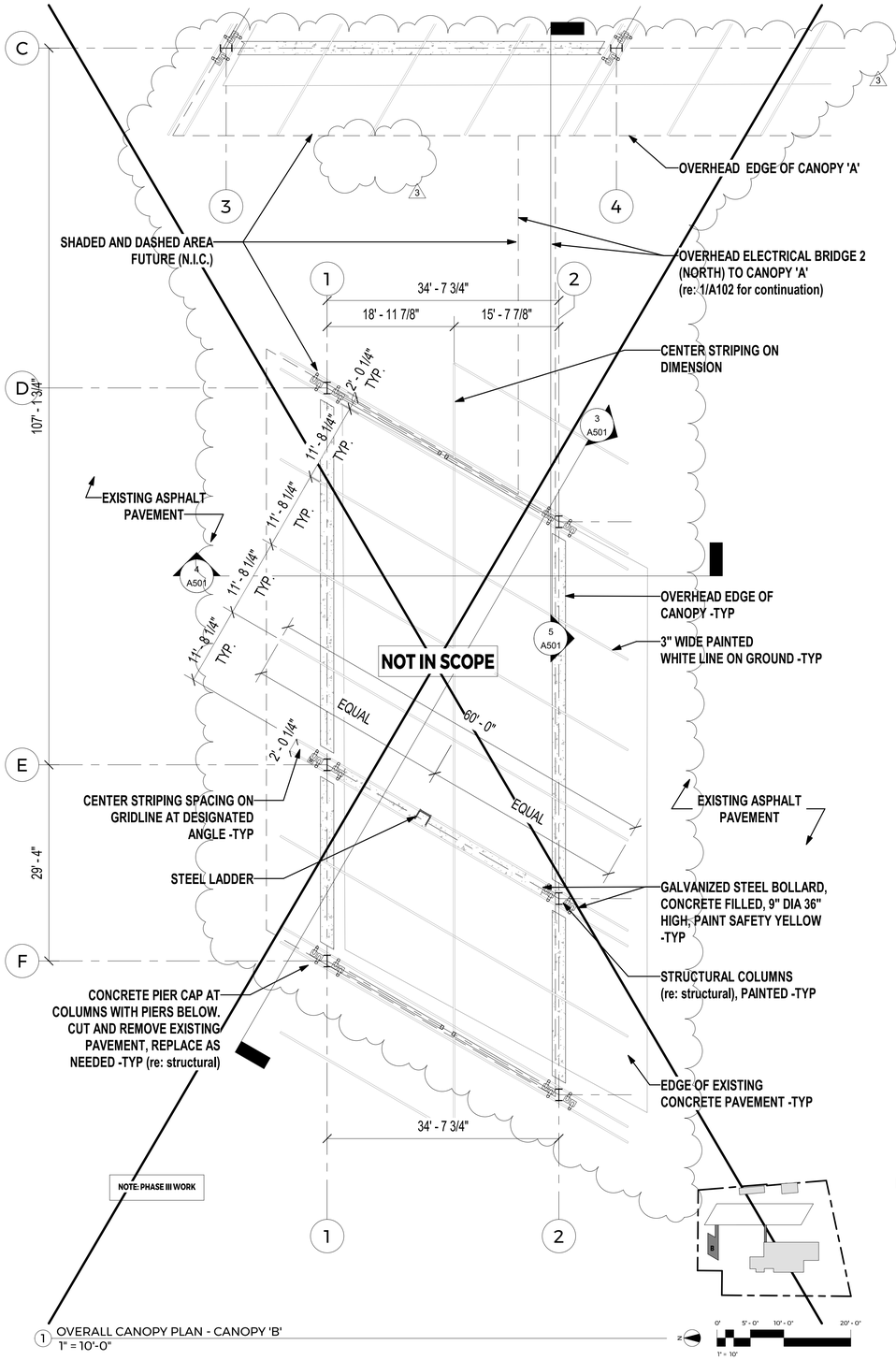
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PARTIAL FLOOR PLAN - CANOPY 'A' (NORTH)

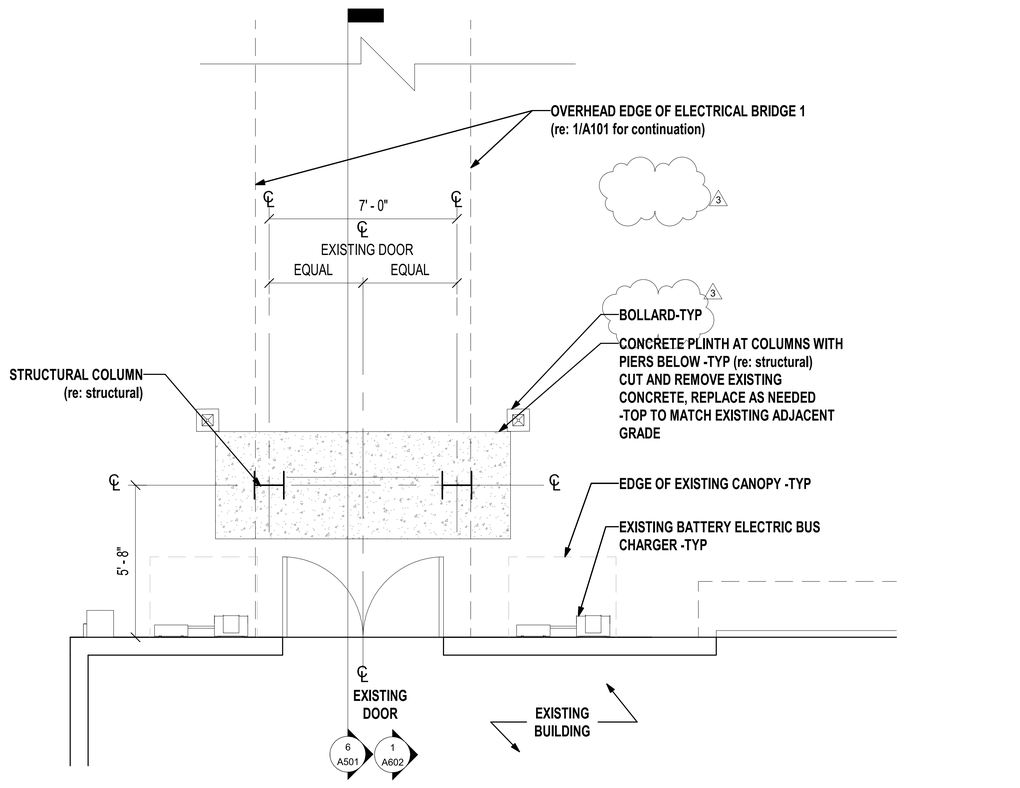
A102

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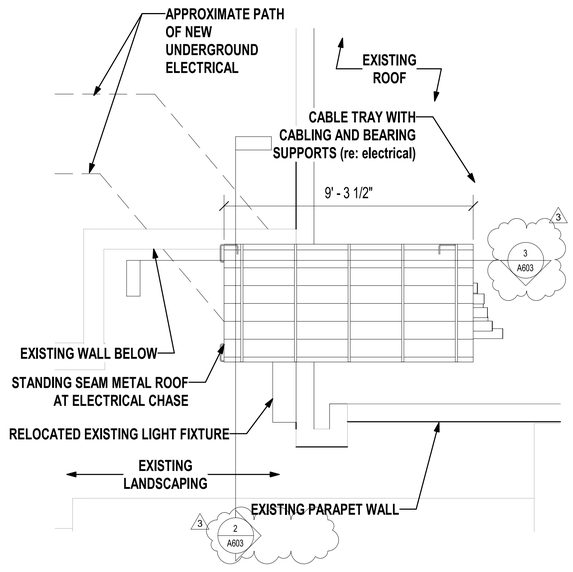
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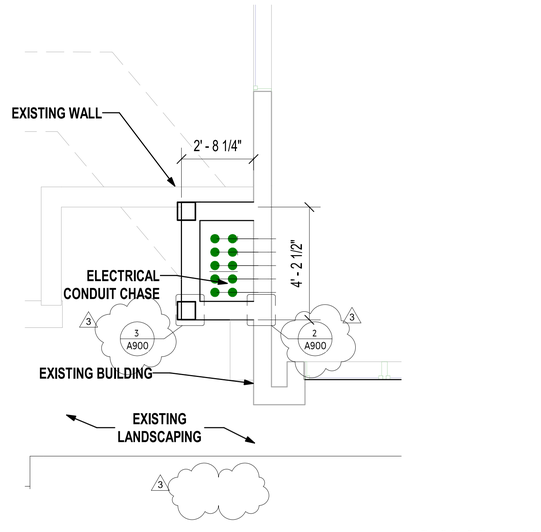
1 OVERALL CANOPY PLAN - CANOPY 'B'
1" = 10'-0"



4 PARTIAL PLAN - ELECTRICAL BRIDGE COLUMN AT EXISTING BUILDING
3/8" = 1'-0"



2 PARTIAL PLAN - ELECTRICAL CHASE AT EXISTING BUILDING
3/8" = 1'-0"



3 PARTIAL PLAN - ELECTRICAL CHASE AT EXISTING
3/8" = 1'-0"

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TEL: (916) 567-2500

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REVISION LIST

LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
RENEWAL DATE
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	ESR
DATE	05/26/2023

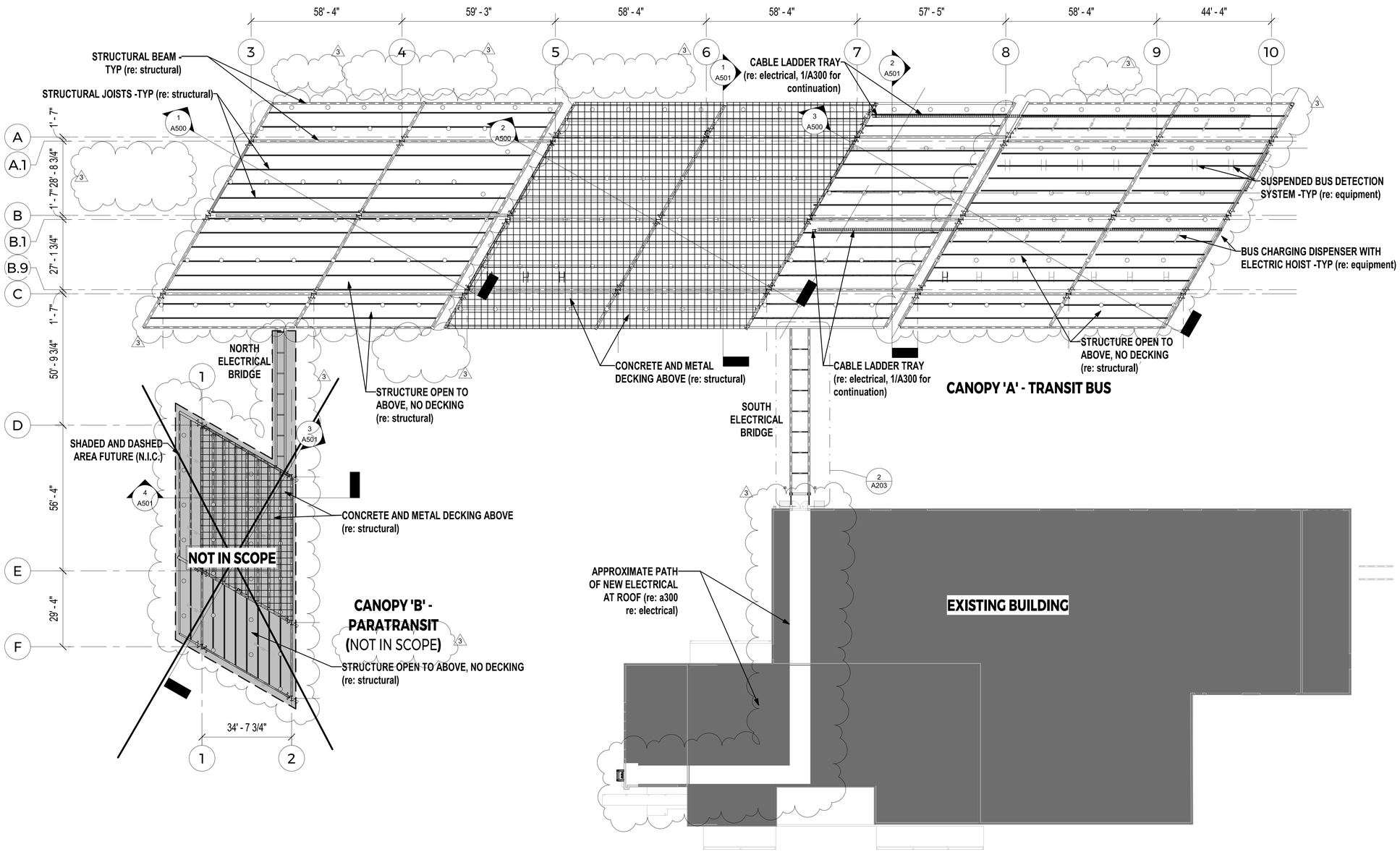
DRAWING TITLE

CANOPY 'B' PLAN & DETAIL PLANS

A103

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5/26/2023 1:34:54 PM



1 OVERALL REFLECTED CEILING PLAN
1" = 20'-0"

0' 10'-0" 20'-0" 40'-0"
1" = 20'

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LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
RENEWAL 08.31.2024
STATE OF CALIFORNIA

PROJECT TITLE
BEB YARD IMPROVEMENTS

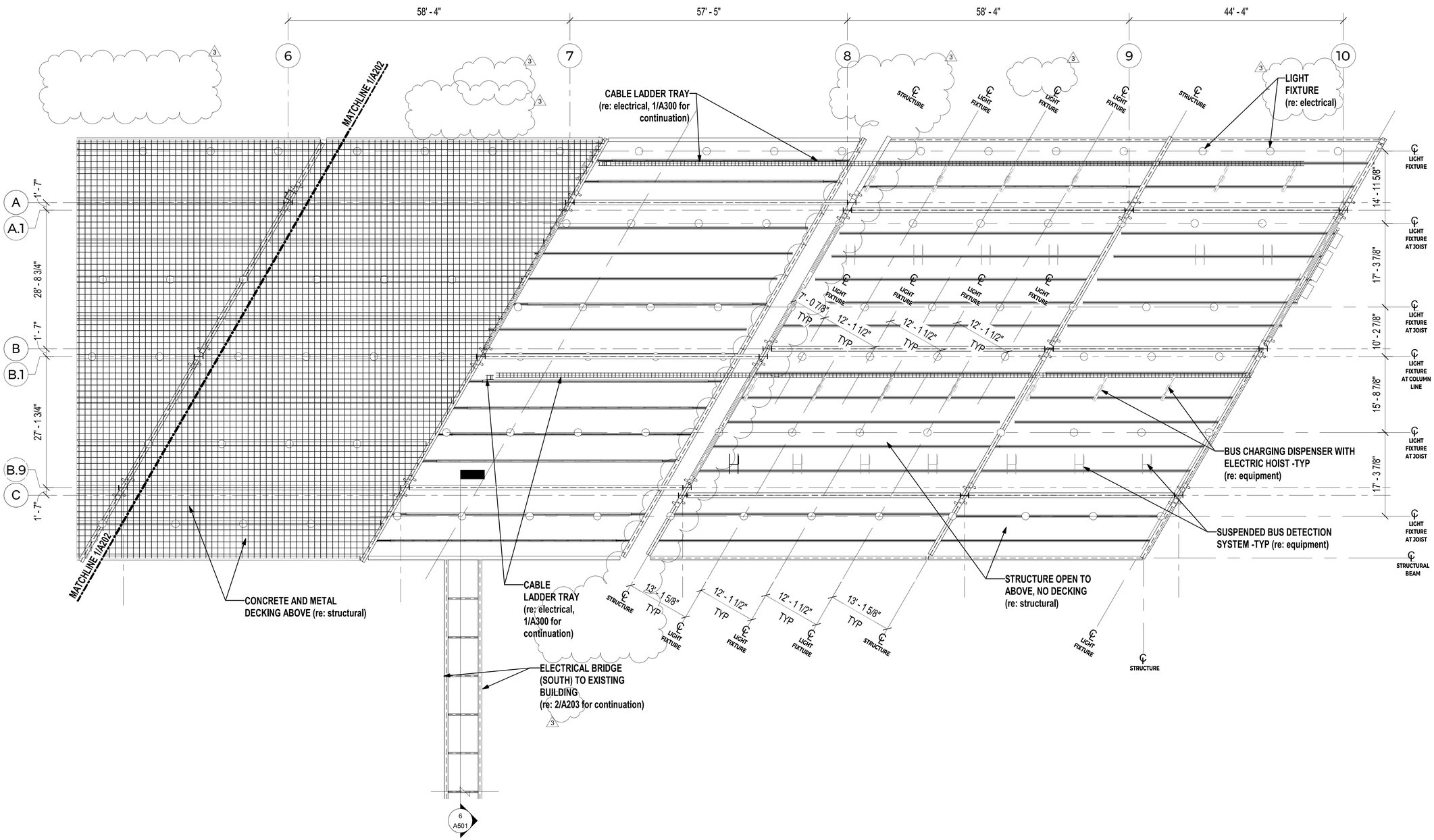
PROJECT NO.	189249
DRAWN BY	MAG
DATE	05/26/2023

DRAWING TITLE
OVERALL REFLECTED CEILING PLAN

A200

5/26/2023 1:35:04 PM

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1 REFLECTED CEILING PLAN - CANOPY 'A' (SOUTH)

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REGINALD D. KEYS
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STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
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DATE	05/26/2023

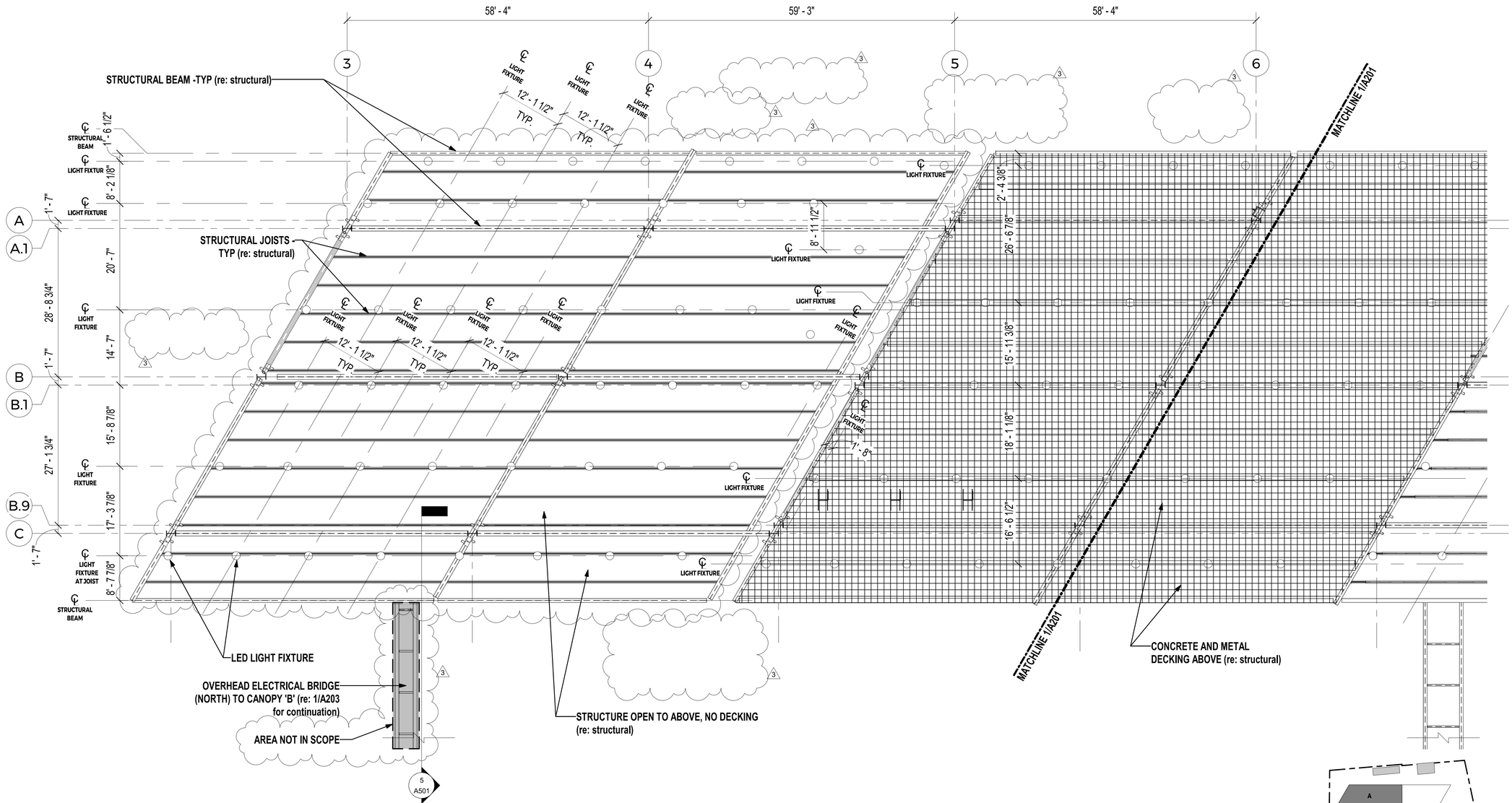
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REFLECTED CEILING PLAN CANOPY 'A' (SOUTH)

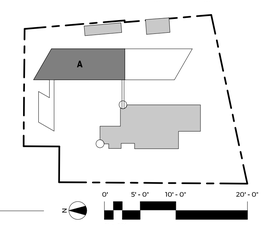
A201

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1 REFLECTED CEILING PLAN - CANOPY 'A' (NORTH)
1" = 10'-0"



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REGINALD D. KEYS
C-28841
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PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
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DATE	05/26/2023

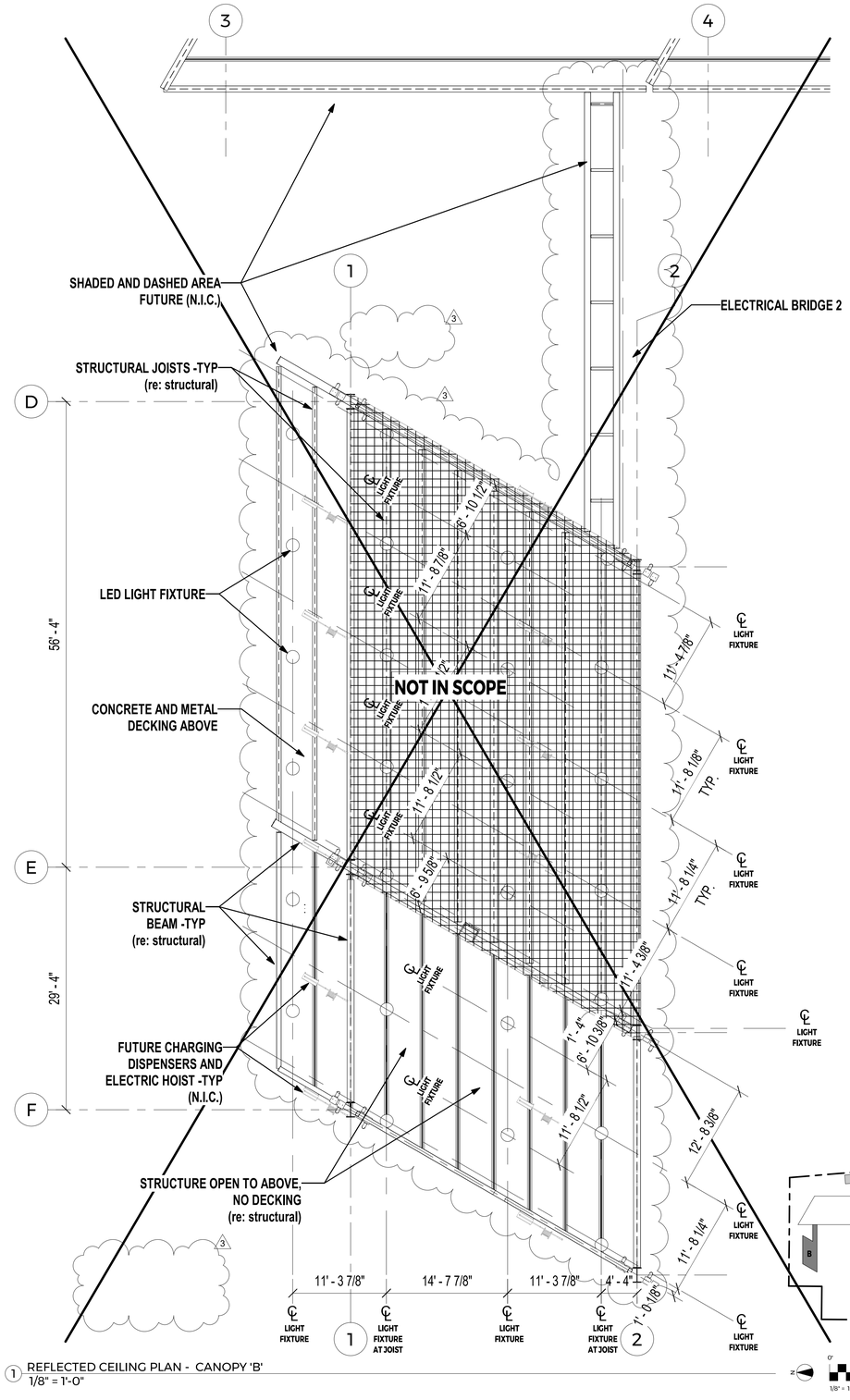
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REFELCTED CEILING PLAN - CANOPY 'A' (NORTH)

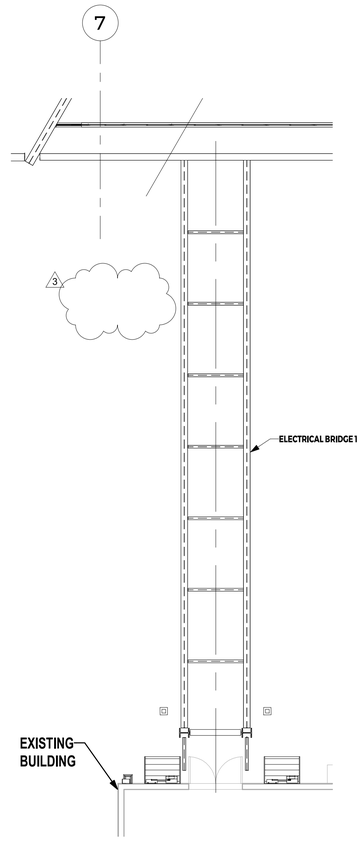
A202

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5/26/2023 1:35:10 PM



1 REFLECTED CEILING PLAN - CANOPY 'B'
1/8" = 1'-0"



2 REFLECTED CEILING PLAN - ELECTRICAL BRIDGE
1/8" = 1'-0"

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SUITE 400
SACRAMENTO, CA 95833
TEL: (916) 567-2500

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REGINALD D. KEYS
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PROJECT TITLE

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PROJECT NO.	189249
DRAWN BY	ESR
DATE	05/26/2023

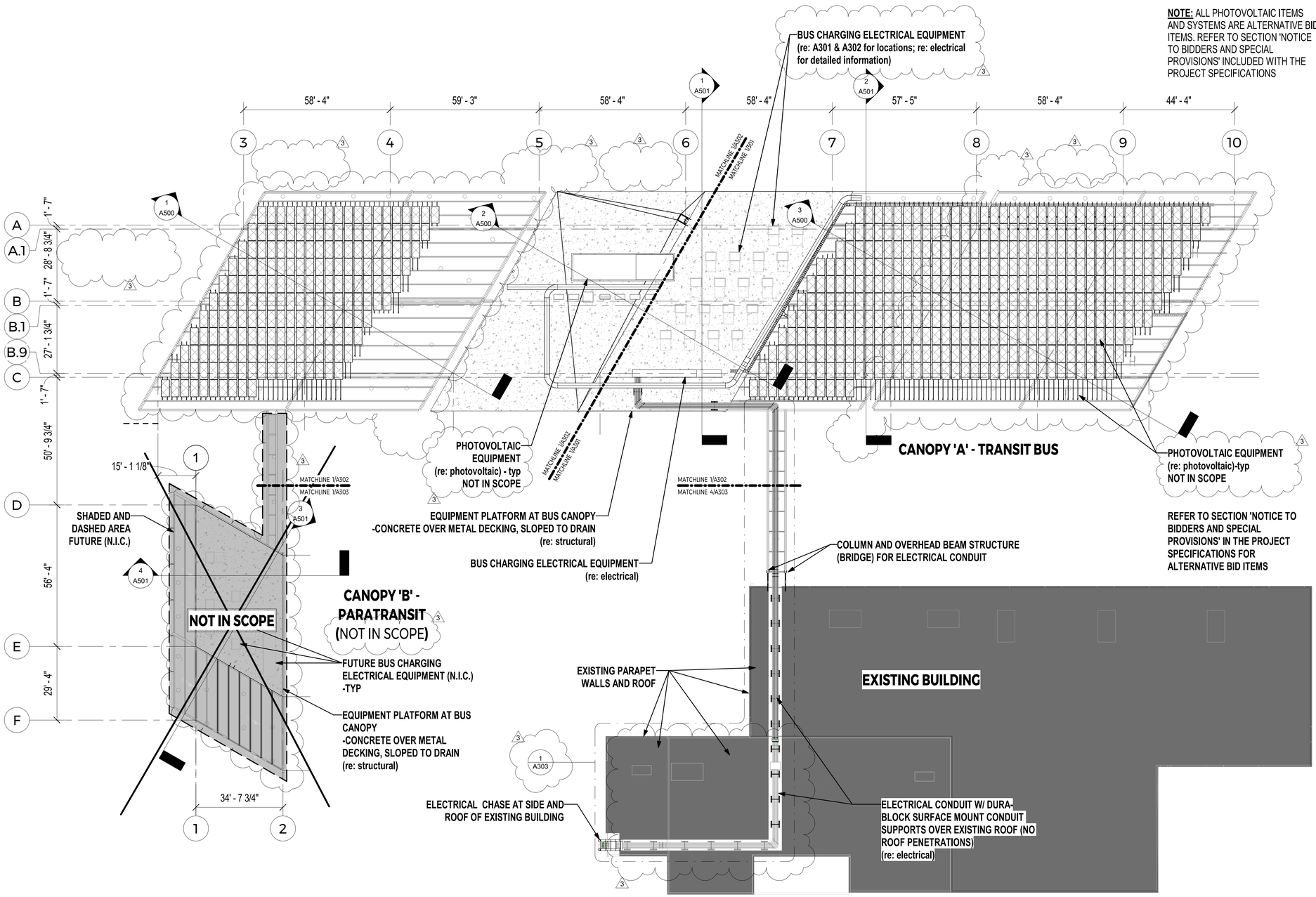
DRAWING TITLE

PARTIAL REFELCTED CEILING PLANS

A203

5/26/2023 1:35:11 PM

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1 OVERALL ROOF PLAN
1" = 20'-0"

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SUITE 400
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REVISION LIST

LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
STATE OF CALIFORNIA

PROJECT TITLE
BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	MAG
DATE	05/26/2023

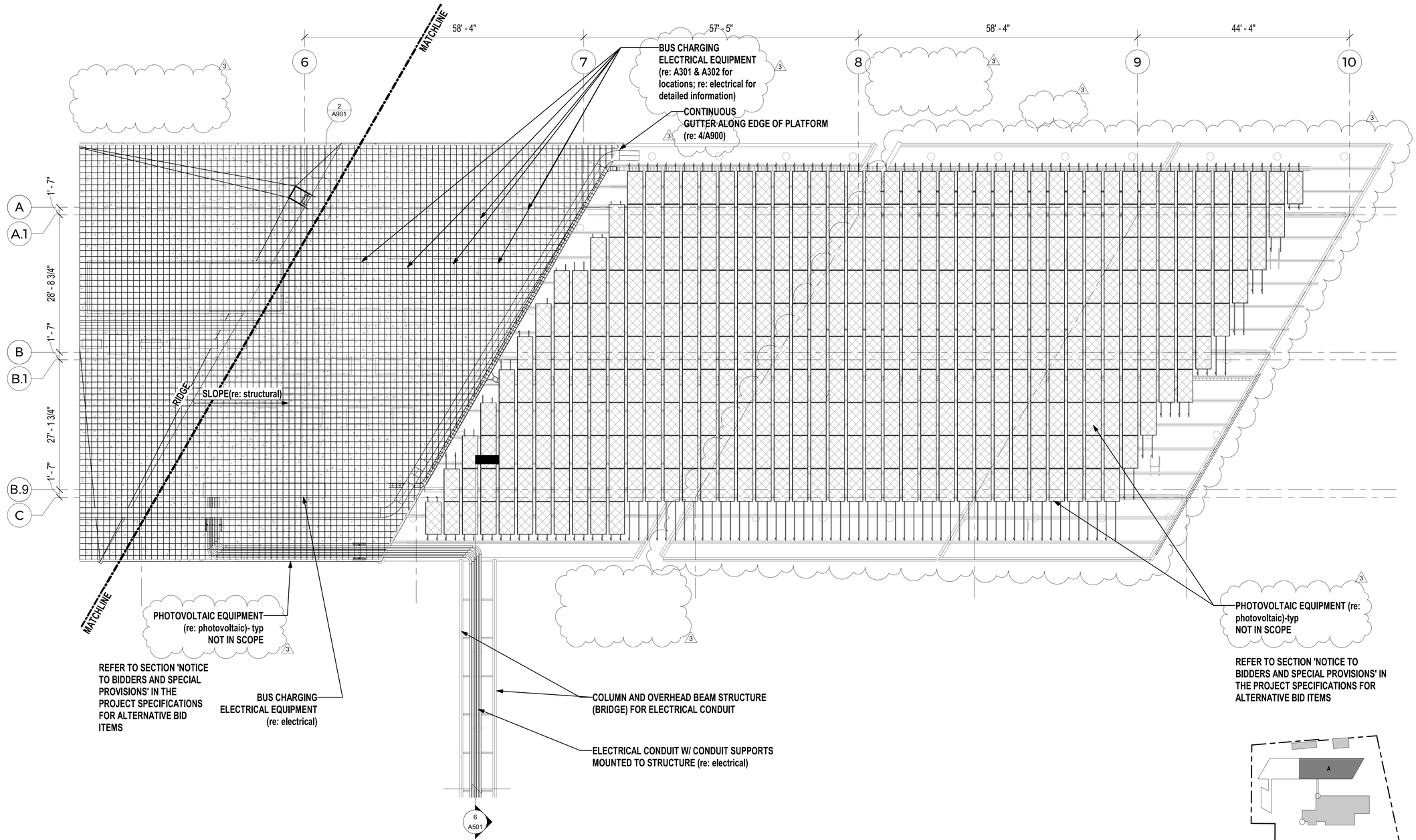
DRAWING TITLE
OVERALL ROOF PLAN

A300

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5/26/2023 1:35:21 PM

NOTE: ALL PHOTOVOLTAIC ITEMS AND SYSTEMS ARE ALTERNATIVE BID ITEMS. REFER TO SECTION 'NOTICE TO BIDDERS AND SPECIAL PROVISIONS' INCLUDED WITH THE PROJECT SPECIFICATIONS



1 PARTIAL ROOF PLAN - CANOPY 'A' (SOUTH)
1" = 10'-0"

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SUITE 400
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TEL: (916) 567-2500

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LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
05-31-2023
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STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
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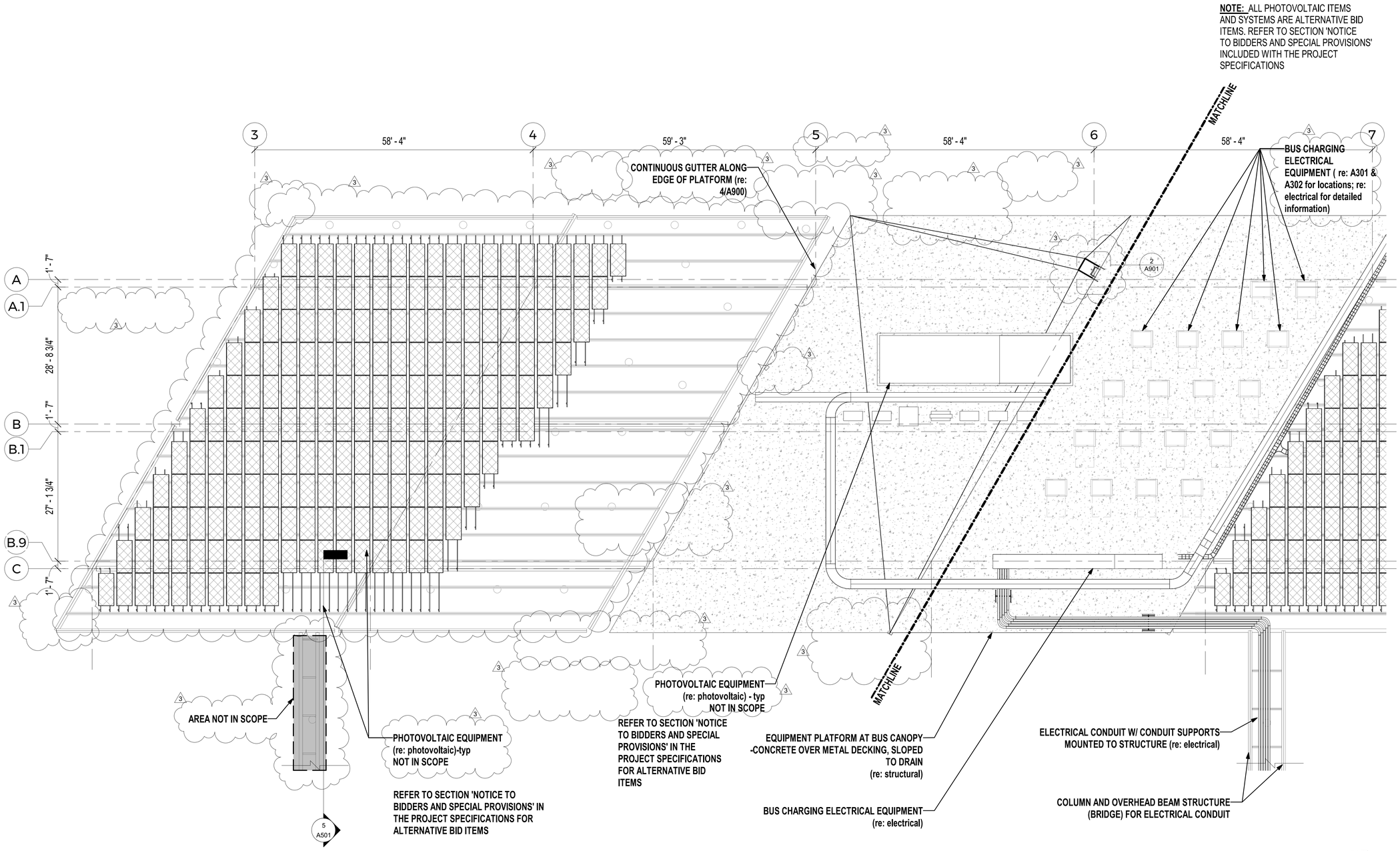
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PARTIAL ROOF PLAN - CANOPY 'A' (SOUTH)

A301

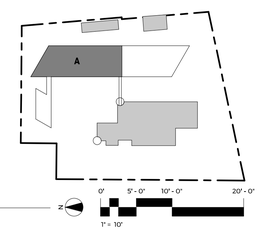
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NOTE: ALL PHOTOVOLTAIC ITEMS AND SYSTEMS ARE ALTERNATIVE BID ITEMS. REFER TO SECTION 'NOTICE TO BIDDERS AND SPECIAL PROVISIONS' INCLUDED WITH THE PROJECT SPECIFICATIONS

1 PARTIAL ROOF PLAN - CANOPY 'A' (NORTH)
1" = 10'-0"



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SolTrans

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2	03/31/2023	CONFORM SET
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LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
03-31-2023
RENEW
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	ESR
DATE	05/26/2023

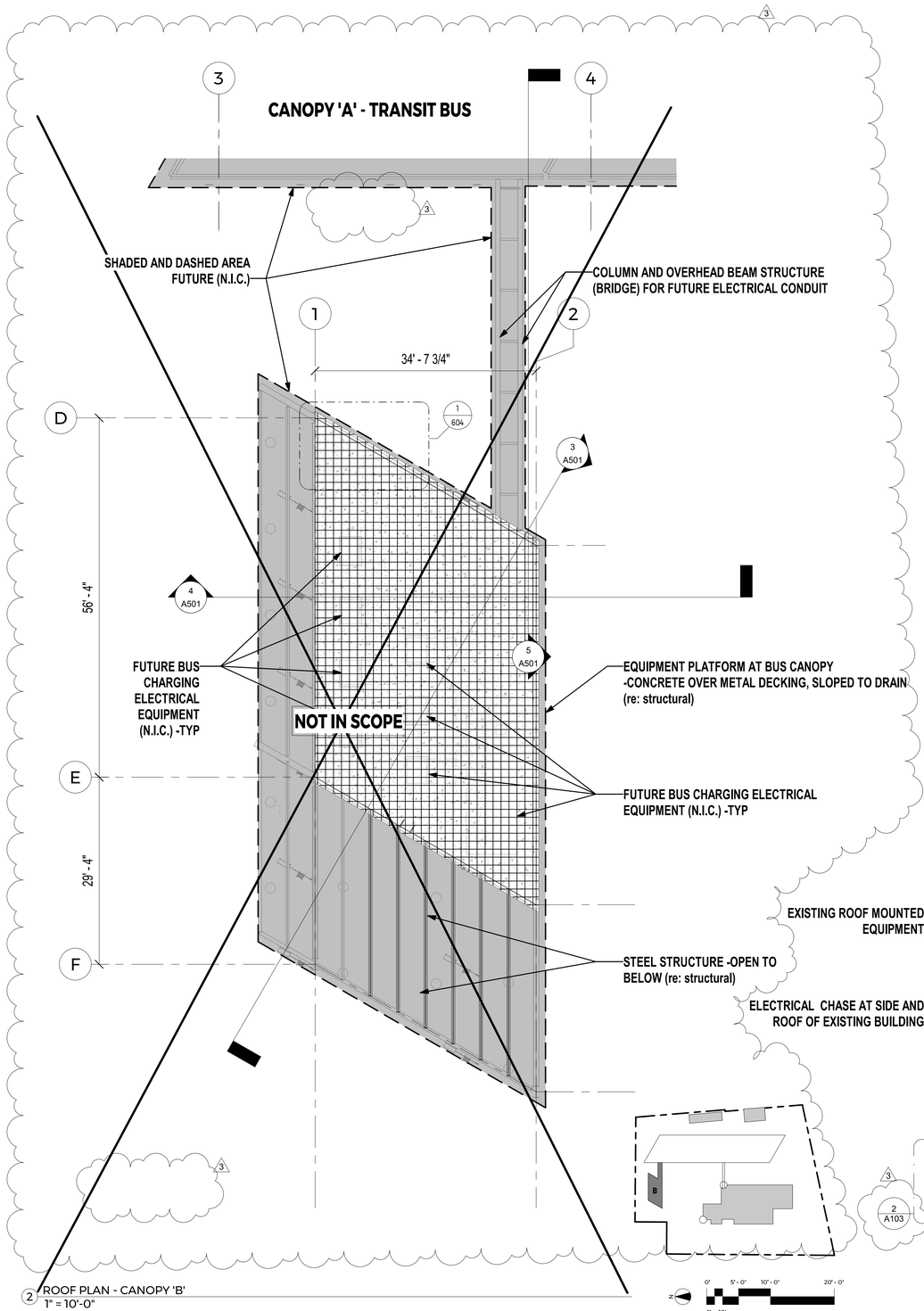
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PARTIAL ROOF PLAN - CANOPY 'A' (NORTH)

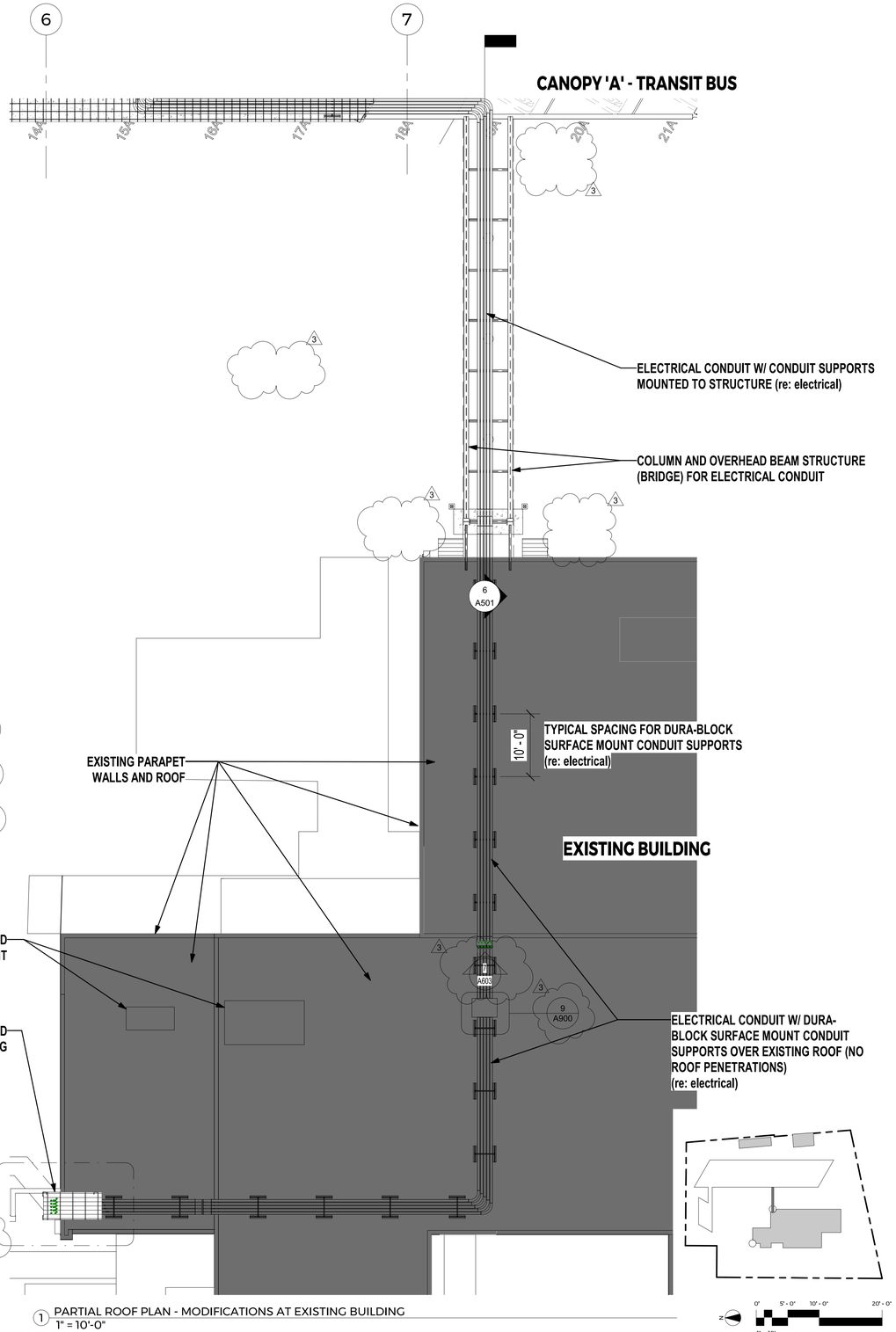
A302

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2 ROOF PLAN - CANOPY 'B'
1" = 10'-0"



1 PARTIAL ROOF PLAN - MODIFICATIONS AT EXISTING BUILDING
1" = 10'-0"

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SACRAMENTO, CA 95833
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C-28841
STATE OF CALIFORNIA

PROJECT TITLE

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PROJECT NO.	189249
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DATE	05/26/2023

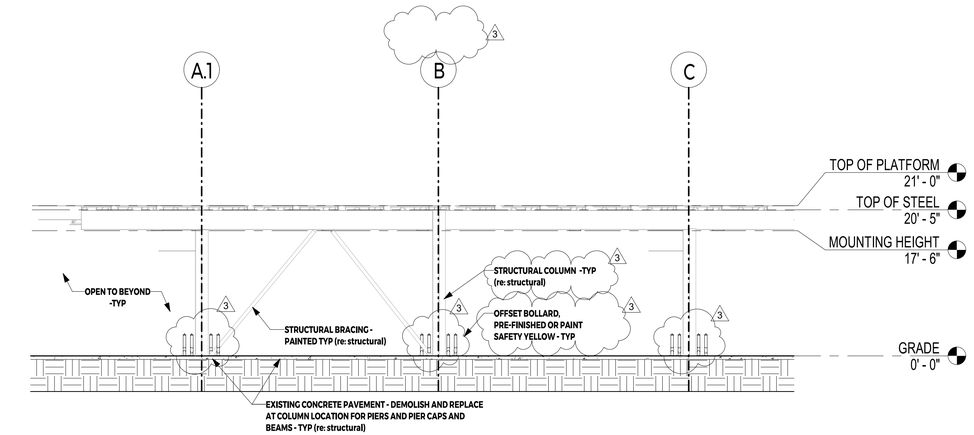
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PARTIAL ROOF PLANS

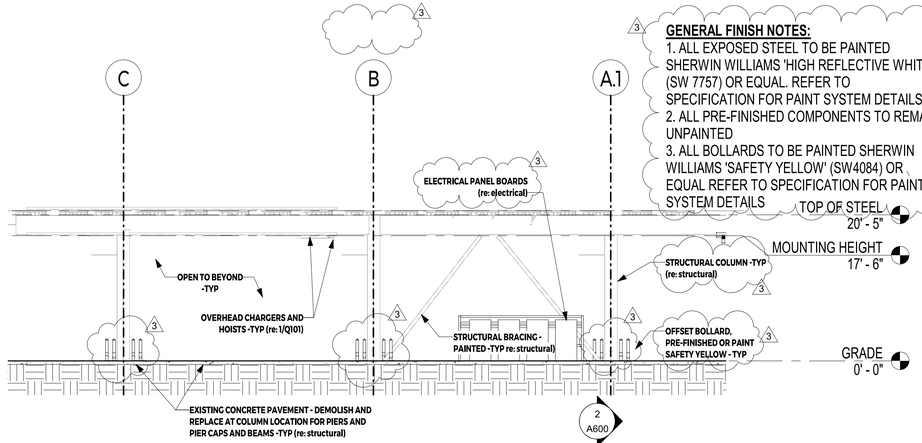
A303

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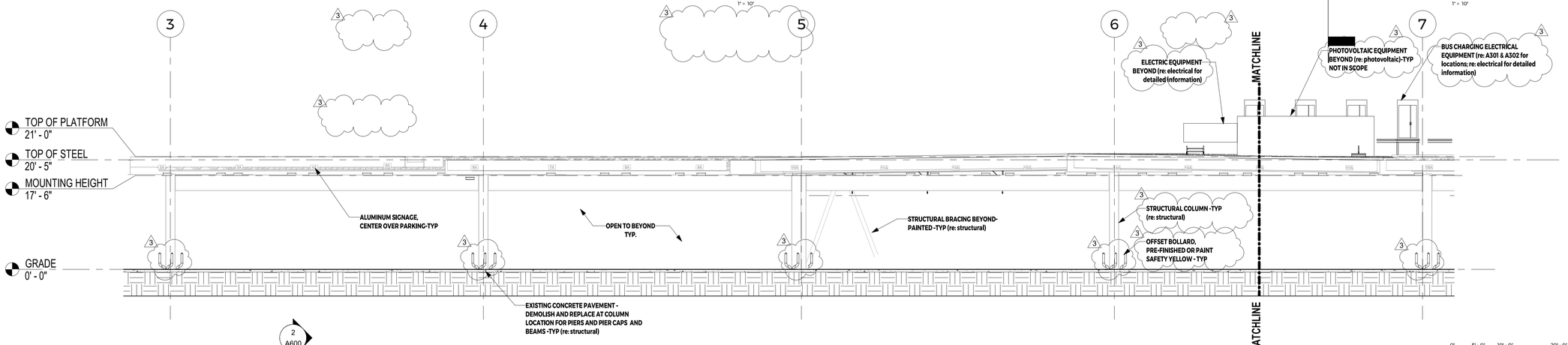
4 CANOPY A - NORTH ELEVATION
1" = 10'-0"



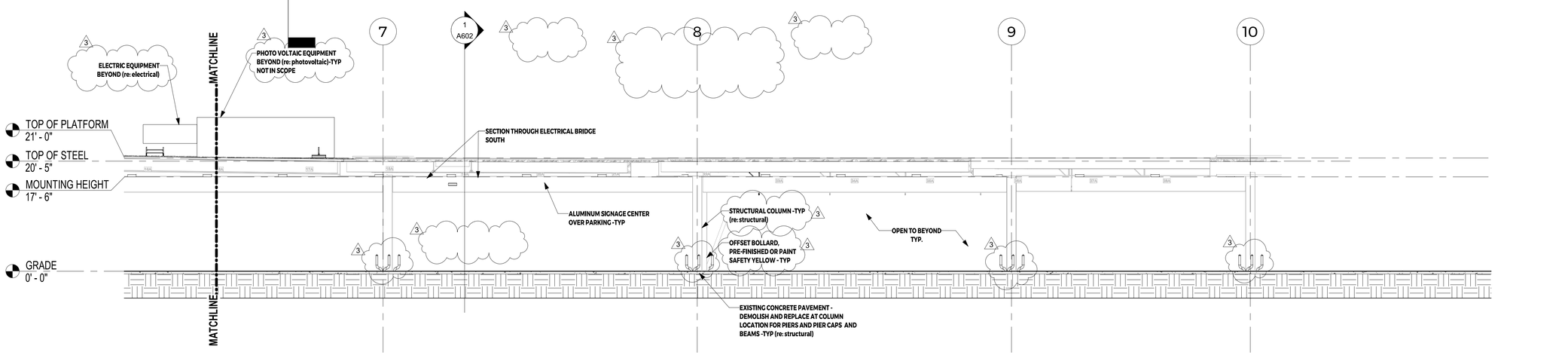
3 CANOPY A - SOUTH ELEVATION
1" = 10'-0"

GENERAL FINISH NOTES:

1. ALL EXPOSED STEEL TO BE PAINTED SHERWIN WILLIAMS 'HIGH REFLECTIVE WHITE' (SW 7757) OR EQUAL. REFER TO SPECIFICATION FOR PAINT SYSTEM DETAILS
2. ALL PRE-FINISHED COMPONENTS TO REMAIN UNPAINTED
3. ALL BOLLARDS TO BE PAINTED SHERWIN WILLIAMS 'SAFETY YELLOW' (SW4084) OR EQUAL REFER TO SPECIFICATION FOR PAINT SYSTEM DETAILS



2 CANOPY A - PARTIAL WEST ELEVATION (NORTH)
1" = 10'-0"



1 CANOPY A - PARTIAL WEST ELEVATION (SOUTH)
1" = 10'-0"

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3	05/26/2023	CCO #001
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C-28841
RENEWAL DATE
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
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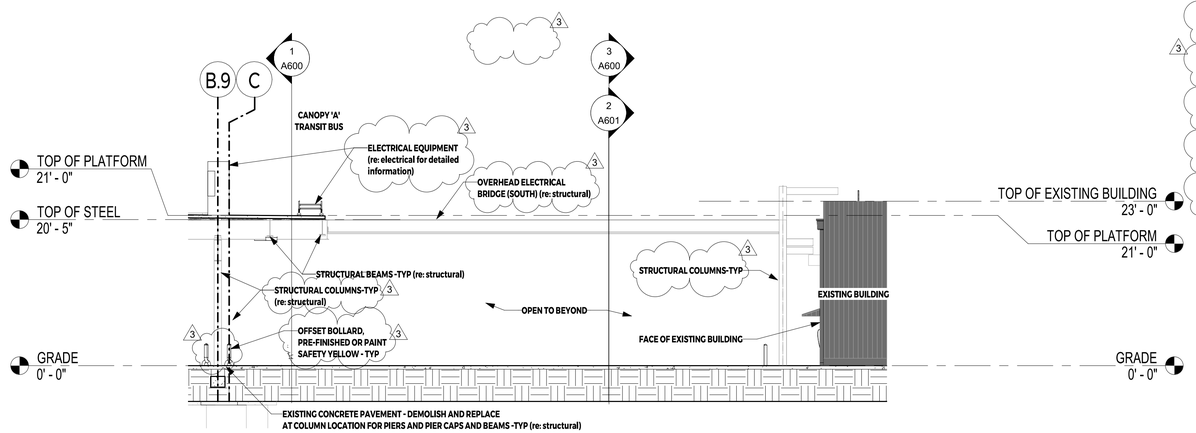
DRAWING TITLE

OVERALL ELEVATIONS

A400

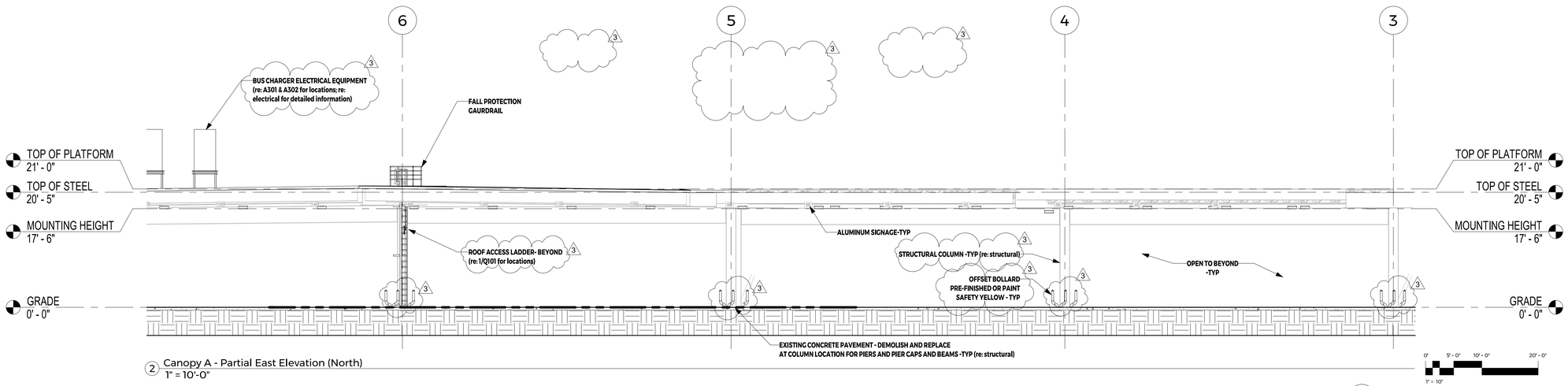
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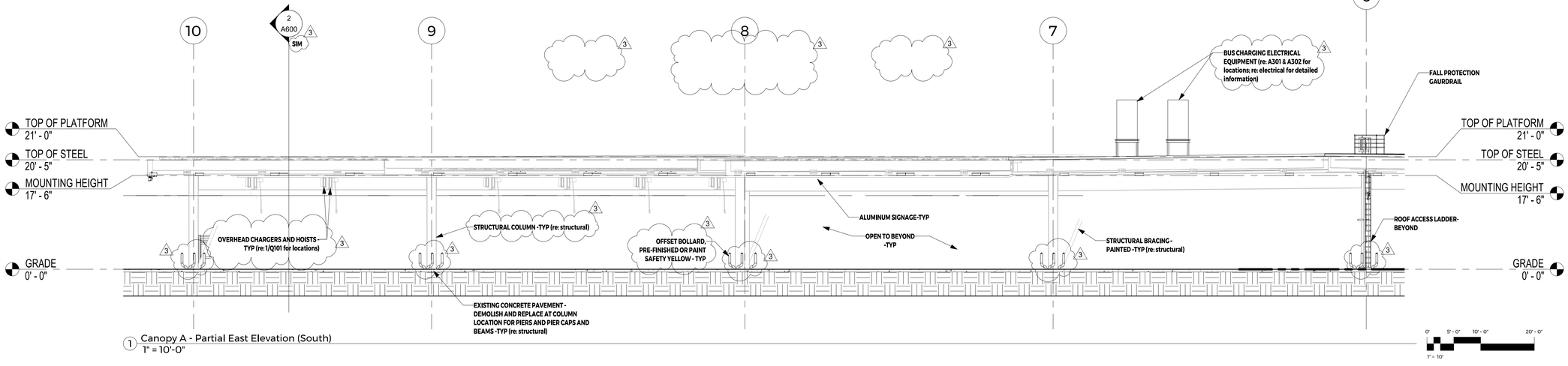
3 Electrical Bridge 1 - North Elevation (South Elevation Sim.)
1" = 10'-0"

0" 5' - 0" 10' - 0" 20' - 0"
1" = 10"



2 Canopy A - Partial East Elevation (North)
1" = 10'-0"

0" 5' - 0" 10' - 0" 20' - 0"
1" = 10"



1 Canopy A - Partial East Elevation (South)
1" = 10'-0"

0" 5' - 0" 10' - 0" 20' - 0"
1" = 10"

GENERAL FINISH NOTES:
1. ALL EXPOSED STEEL TO BE PAINTED SHERWIN WILLIAMS 'HIGH REFLECTIVE WHITE' (SW 7757) OR EQUAL REFER TO SPECIFICATION FOR PAINT SYSTEM DETAILS
2. ALL PRE-FINISHED COMPONENTS TO REMAIN UNPAINTED
3. ALL BOLLARDS TO BE PAINTED SHERWIN WILLIAMS 'SAFETY YELLOW' (SW4084) OR EQUAL REFER TO SPECIFICATION FOR PAINT SYSTEM DETAILS

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C-28841
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BEB YARD IMPROVEMENTS

PROJECT NO.	189249
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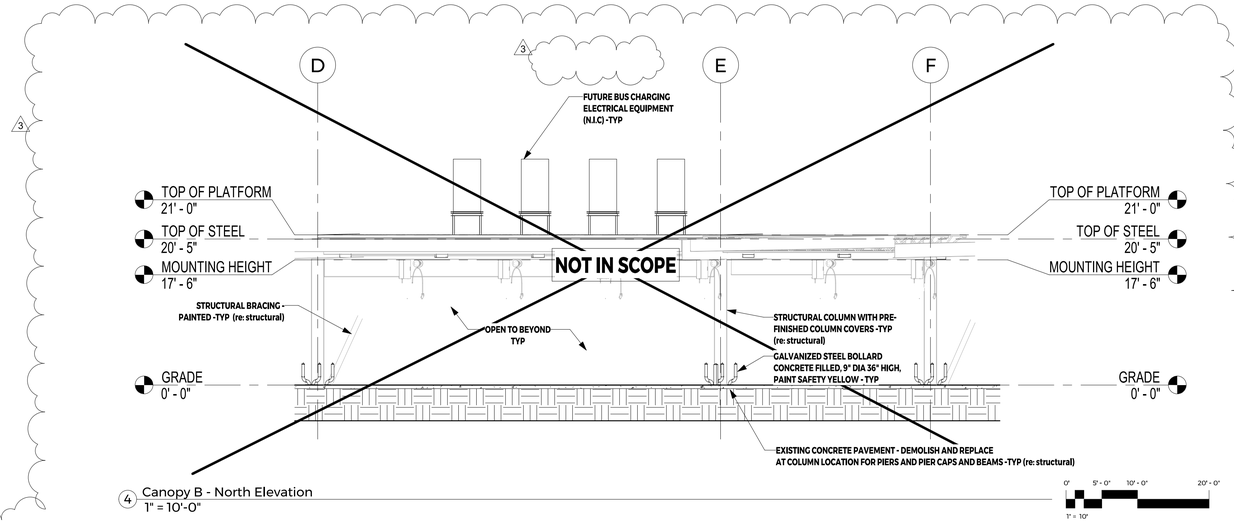
DRAWING TITLE

OVERALL ELEVATIONS

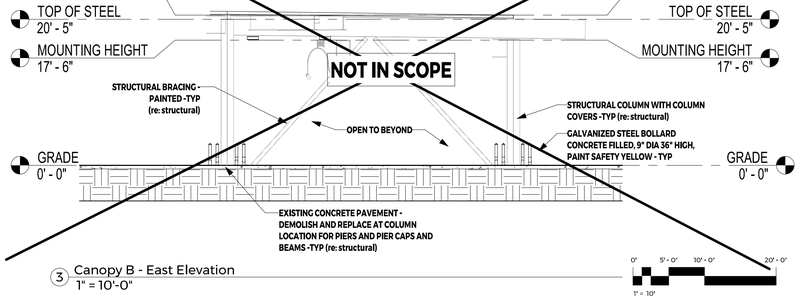
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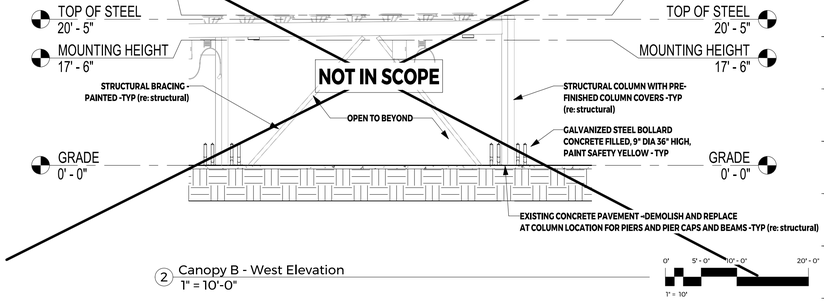
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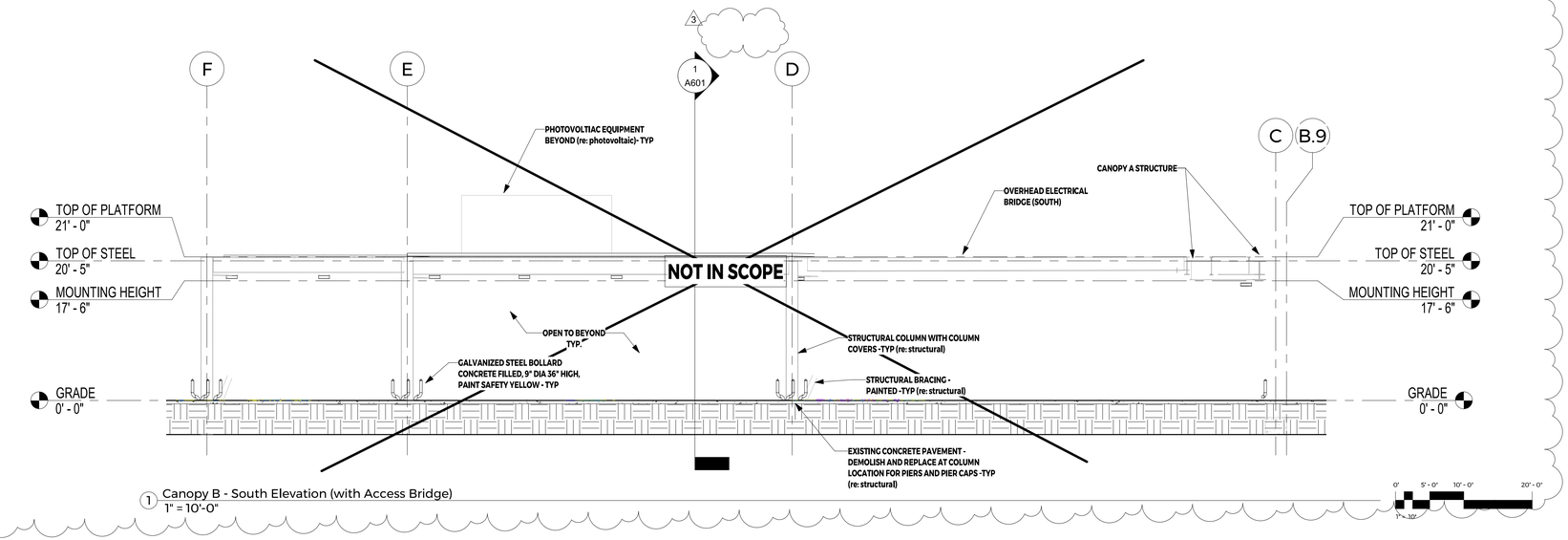
4 Canopy B - North Elevation
1" = 10'-0"



3 Canopy B - East Elevation
1" = 10'-0"



2 Canopy B - West Elevation
1" = 10'-0"



1 Canopy B - South Elevation (with Access Bridge)
1" = 10'-0"

GENERAL FINISH NOTES:

1. ALL EXPOSED STEEL TO BE PAINTED SHERWIN WILLIAMS 'HIGH REFLECTIVE WHITE' (SW 7757) OR EQUAL. REFER TO SPECIFICATION FOR PAINT SYSTEM DETAILS
2. ALL PRE-FINISHED COMPONENTS TO REMAIN UNPAINTED
3. ALL BOLLARDS TO BE PAINTED SHERWIN WILLIAMS 'SAFETY YELLOW' (SW4084) OR EQUAL. REFER TO SPECIFICATION FOR PAINT SYSTEM DETAILS

WSP USA Inc.
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TEL: (916) 567-2500

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C-28841
STATE OF CALIFORNIA

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BEB YARD IMPROVEMENTS

PROJECT NO.	189249
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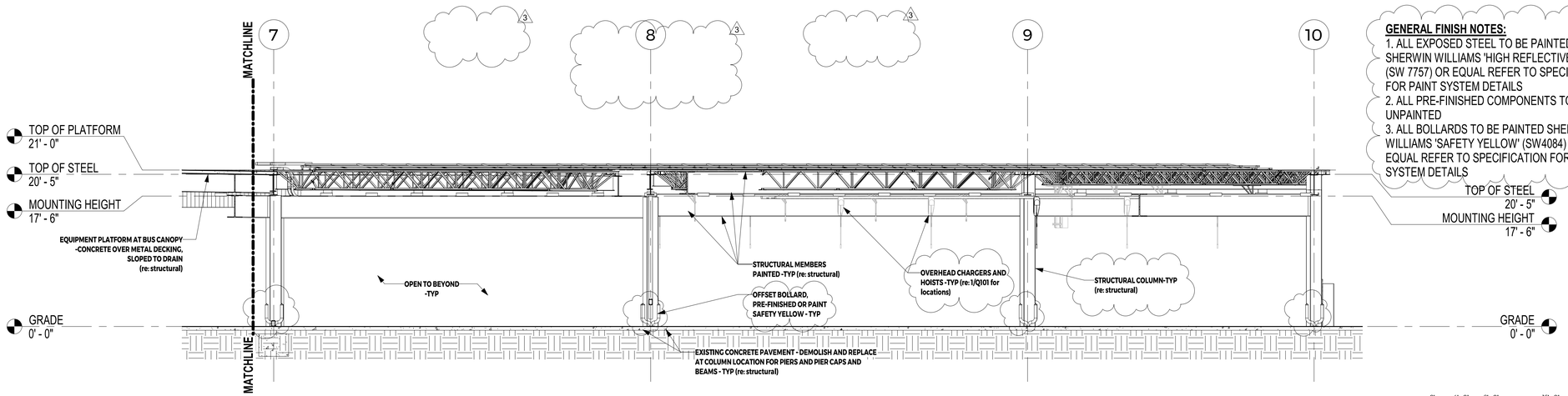
DRAWING TITLE

OVERALL ELEVATIONS

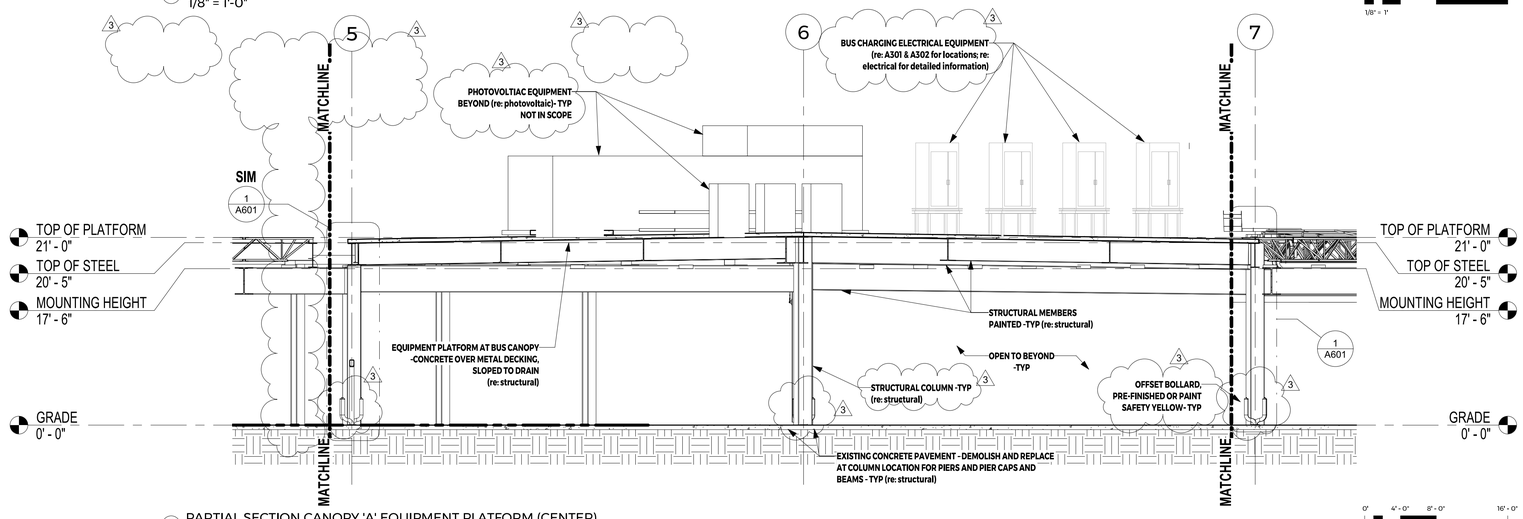
A402

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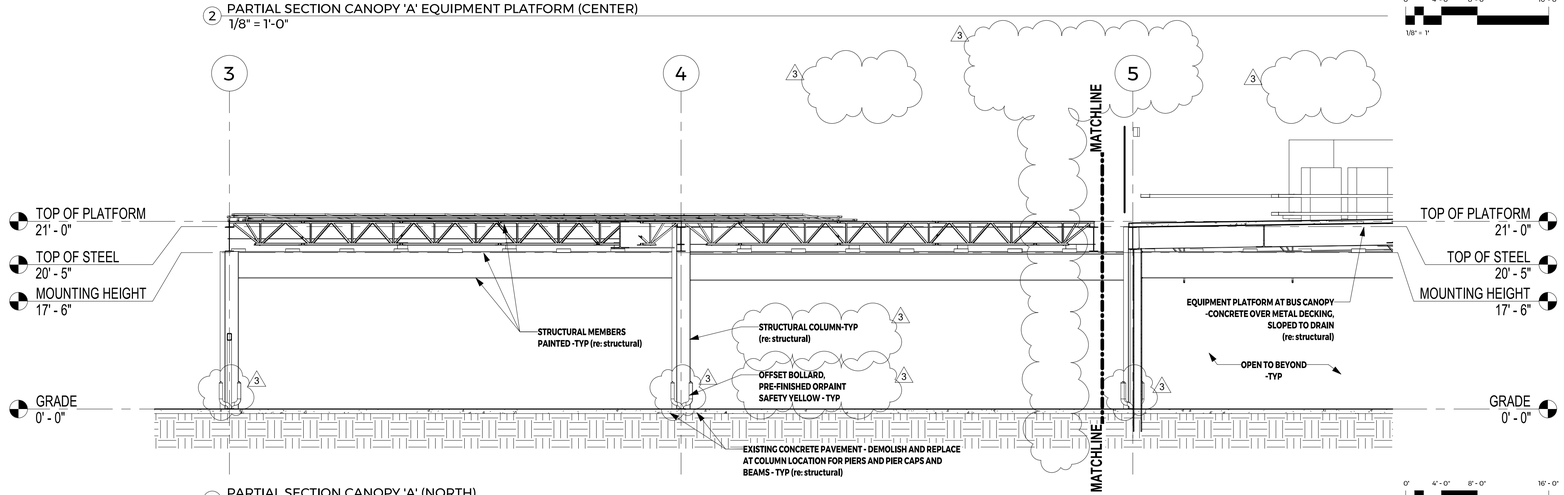
5/26/2023 1:36:00 PM



3 PARTIAL SECTION CANOPY 'A' (SOUTH)
1/8" = 1'-0"



2 PARTIAL SECTION CANOPY 'A' EQUIPMENT PLATFORM (CENTER)
1/8" = 1'-0"



1 PARTIAL SECTION CANOPY 'A' (NORTH)
1/8" = 1'-0"

GENERAL FINISH NOTES:
1. ALL EXPOSED STEEL TO BE PAINTED SHERWIN WILLIAMS 'HIGH REFLECTIVE WHITE' (SW 7757) OR EQUAL REFER TO SPECIFICATION FOR PAINT SYSTEM DETAILS
2. ALL PRE-FINISHED COMPONENTS TO REMAIN UNPAINTED
3. ALL BOLLARDS TO BE PAINTED SHERWIN WILLIAMS 'SAFETY YELLOW' (SW4084) OR EQUAL REFER TO SPECIFICATION FOR PAINT SYSTEM DETAILS

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SUITE 400
SACRAMENTO, CA 95833
TEL: (916) 567-2500

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LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
STATE OF CALIFORNIA

PROJECT TITLE
BEB YARD IMPROVEMENTS

PROJECT NO.	189249
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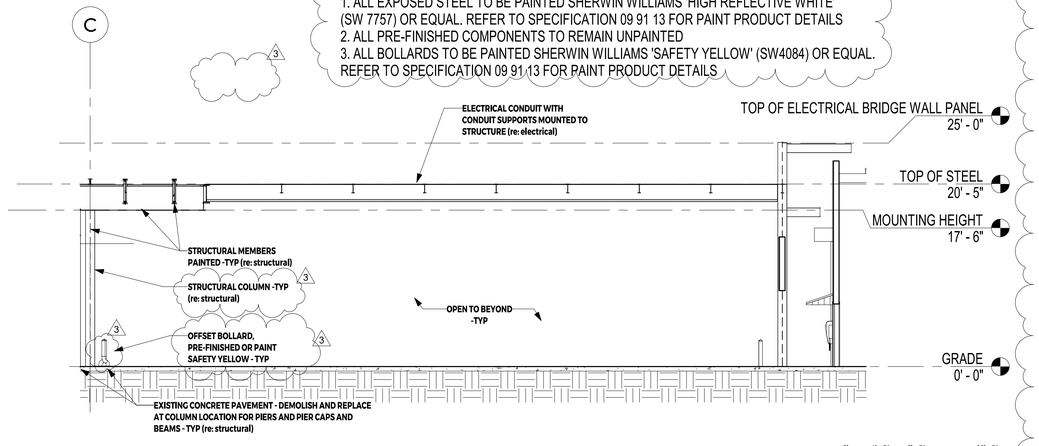
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OVERALL SECTIONS

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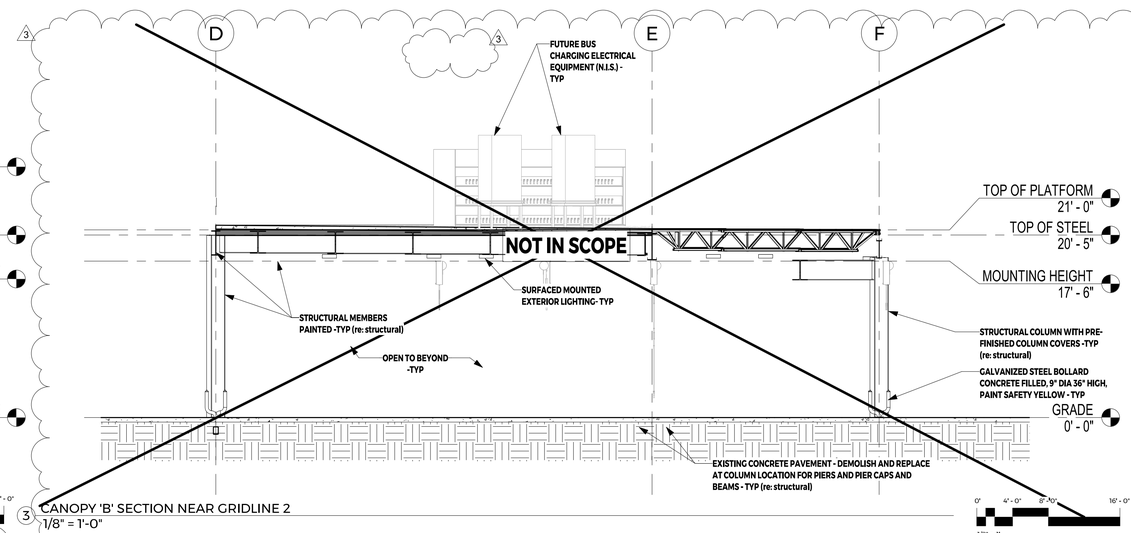
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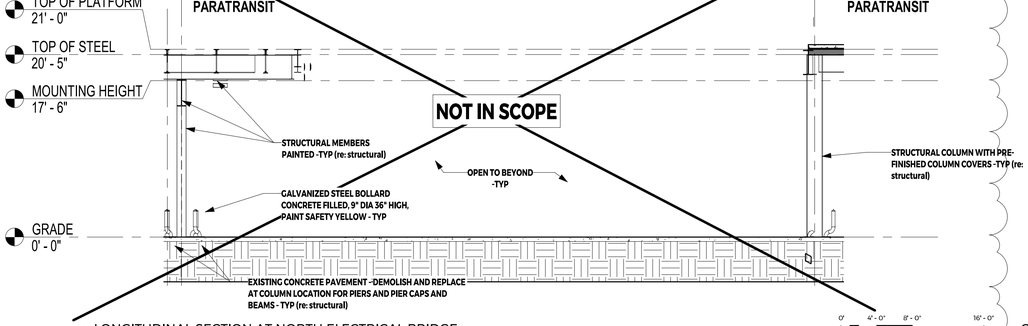
GENERAL FINISH NOTES:
1. ALL EXPOSED STEEL TO BE PAINTED SHERWIN WILLIAMS 'HIGH REFLECTIVE WHITE' (SW 7757) OR EQUAL. REFER TO SPECIFICATION 09 91 13 FOR PAINT PRODUCT DETAILS
2. ALL PRE-FINISHED COMPONENTS TO REMAIN UNPAINTED
3. ALL BOLLARDS TO BE PAINTED SHERWIN WILLIAMS 'SAFETY YELLOW' (SW4084) OR EQUAL. REFER TO SPECIFICATION 09 91 13 FOR PAINT PRODUCT DETAILS



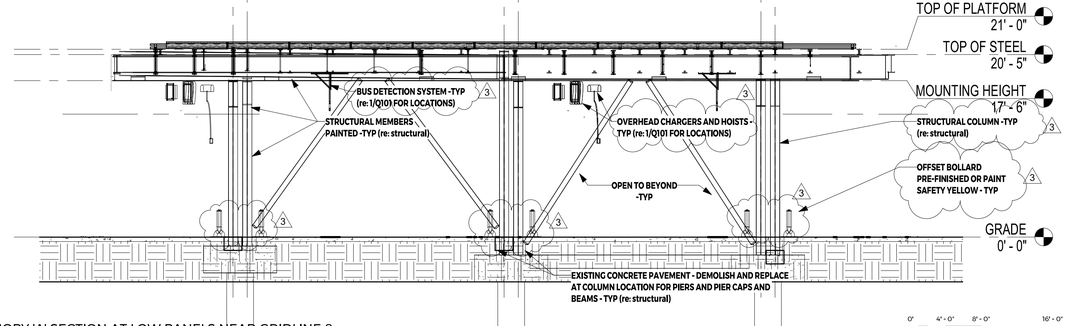
6 LONGITUDINAL SECTION AT SOUTH ELECTRICAL BRIDGE
1/8" = 1'-0"



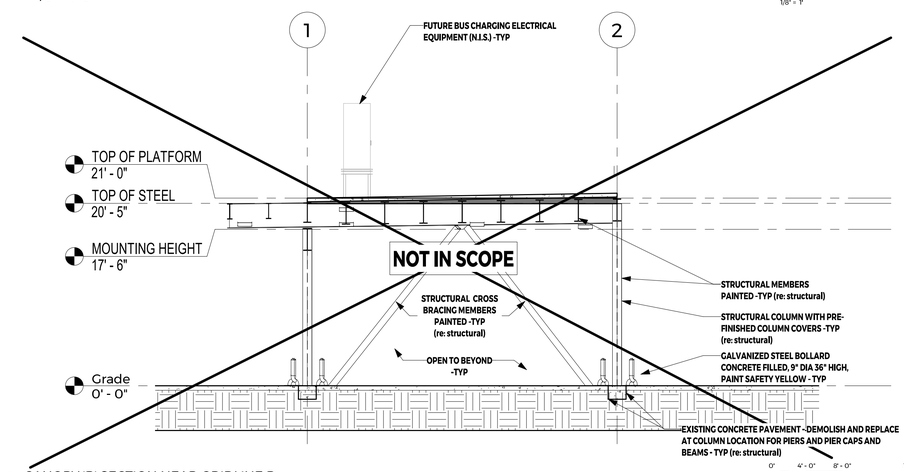
3 CANOPY 'B' SECTION NEAR GRIDLINE 2
1/8" = 1'-0"



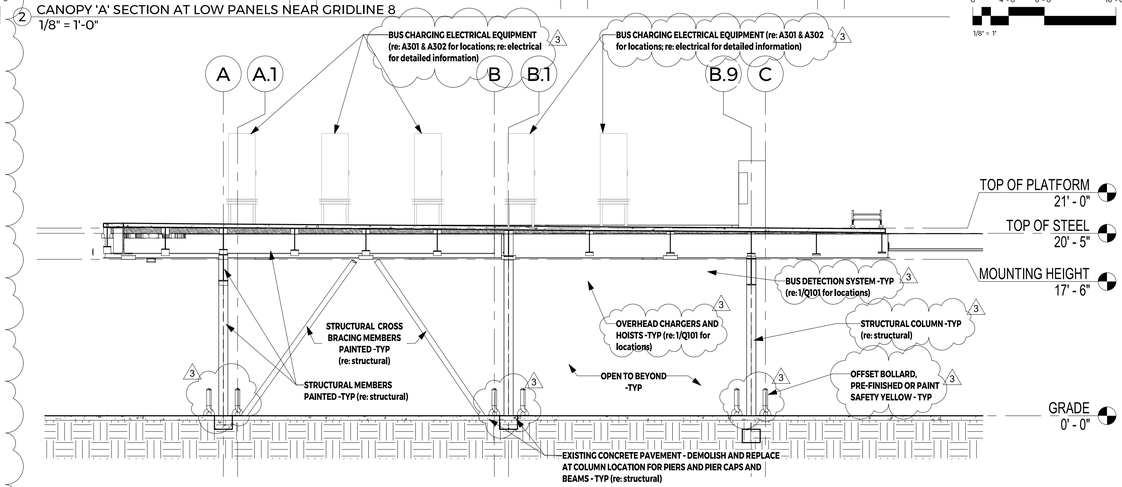
5 LONGITUDINAL SECTION AT NORTH ELECTRICAL BRIDGE
1/8" = 1'-0"



2 CANOPY 'A' SECTION AT LOW PANELS NEAR GRIDLINE 8
1/8" = 1'-0"



4 CANOPY 'B' SECTION NEAR GRIDLINE D
1/8" = 1'-0"



1 CANOPY 'A' SECTION AT EQUIPMENT PLATFORM NEAR GRIDLINE 6
1/8" = 1'-0"

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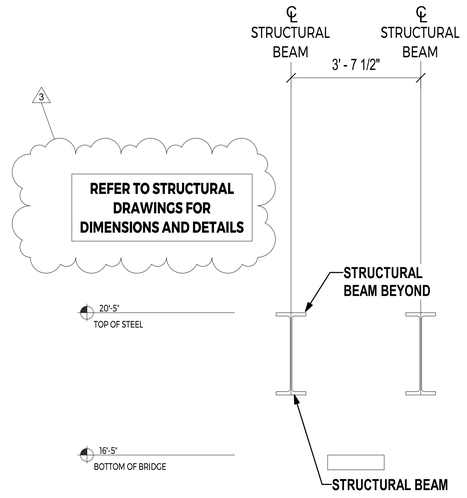
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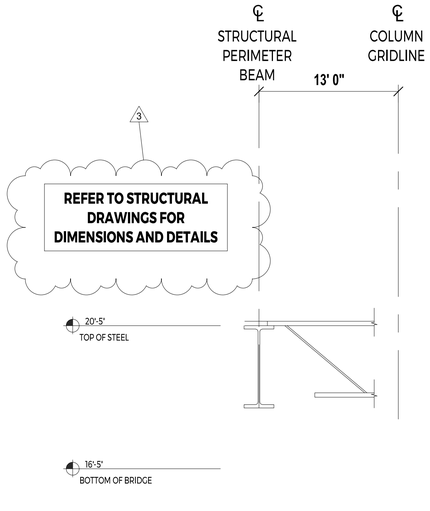
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OVERALL SECTIONS

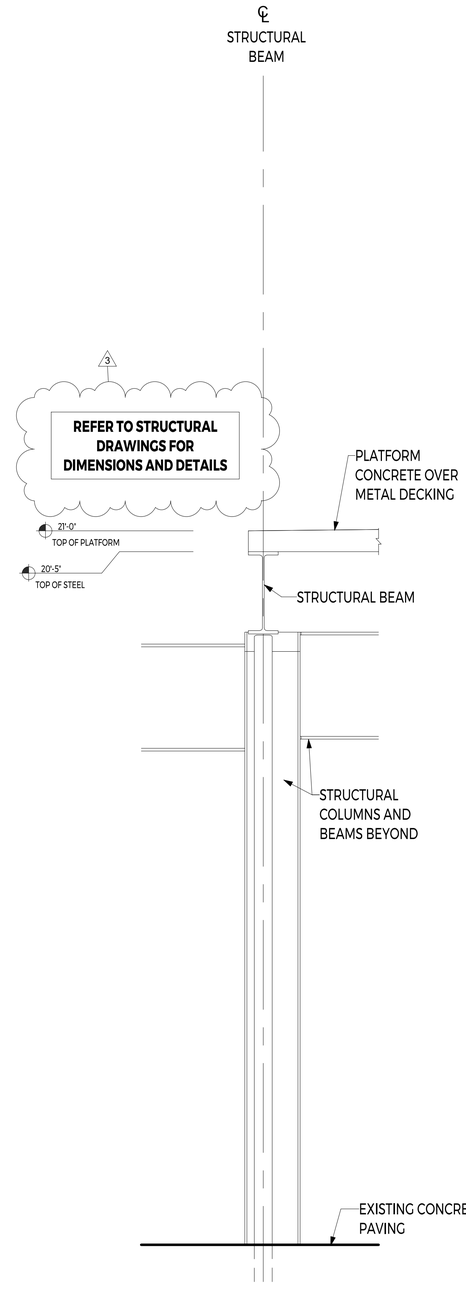
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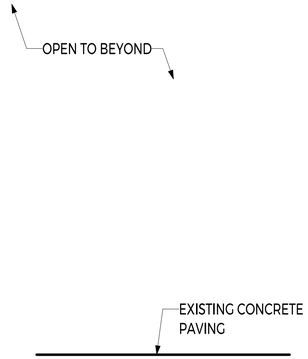
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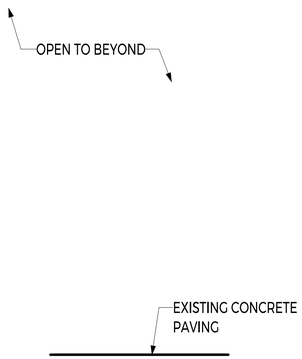
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3 CANOPY A NORTH FACE- BRIDGE
1/2" = 1'-0"

2 CANOPY A NORTH FACE- SHORT PANEL
1/2" = 1'-0"

1 CANOPY A NORTH FACE- TALL PANEL
1/2" = 1'-0"

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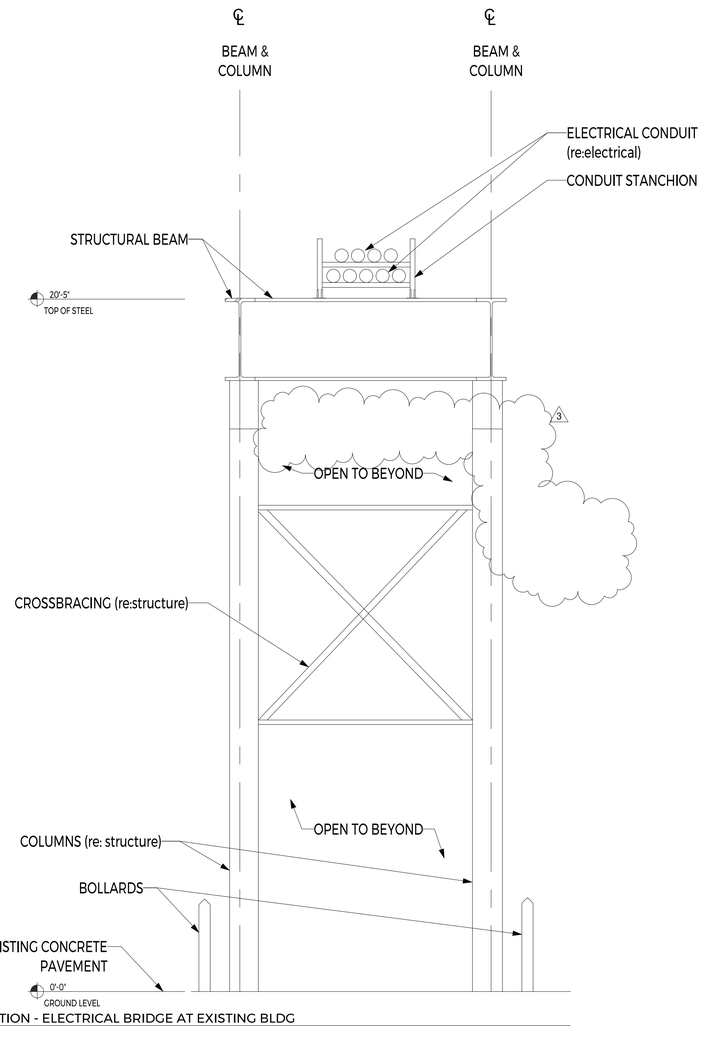
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WALL SECTIONS

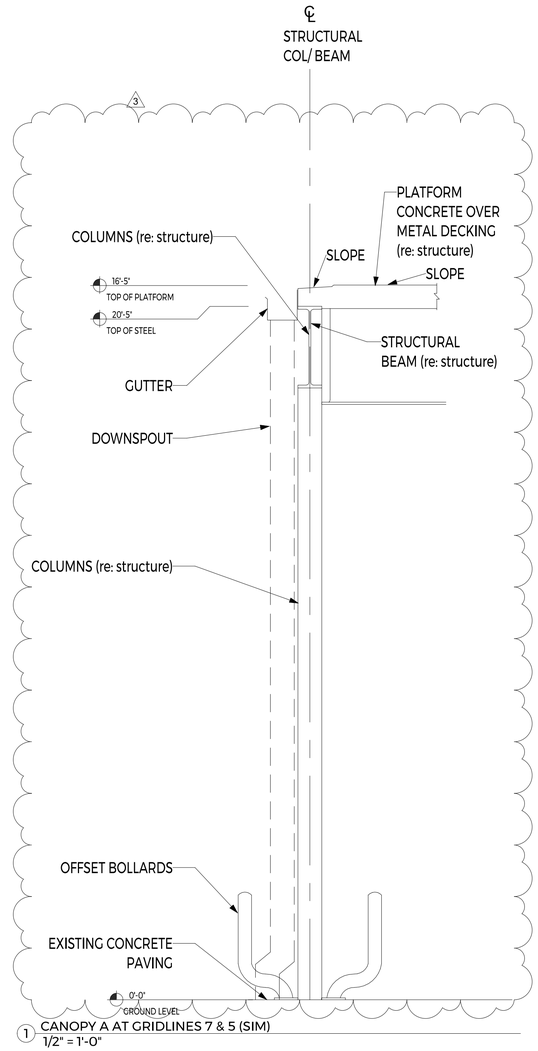
A600

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2 WALL SECTION - ELECTRICAL BRIDGE AT EXISTING BLDG
1/2" = 1'-0"



1 CANOPY A AT GRIDLINES 7 & 5 (SIM)
1/2" = 1'-0"

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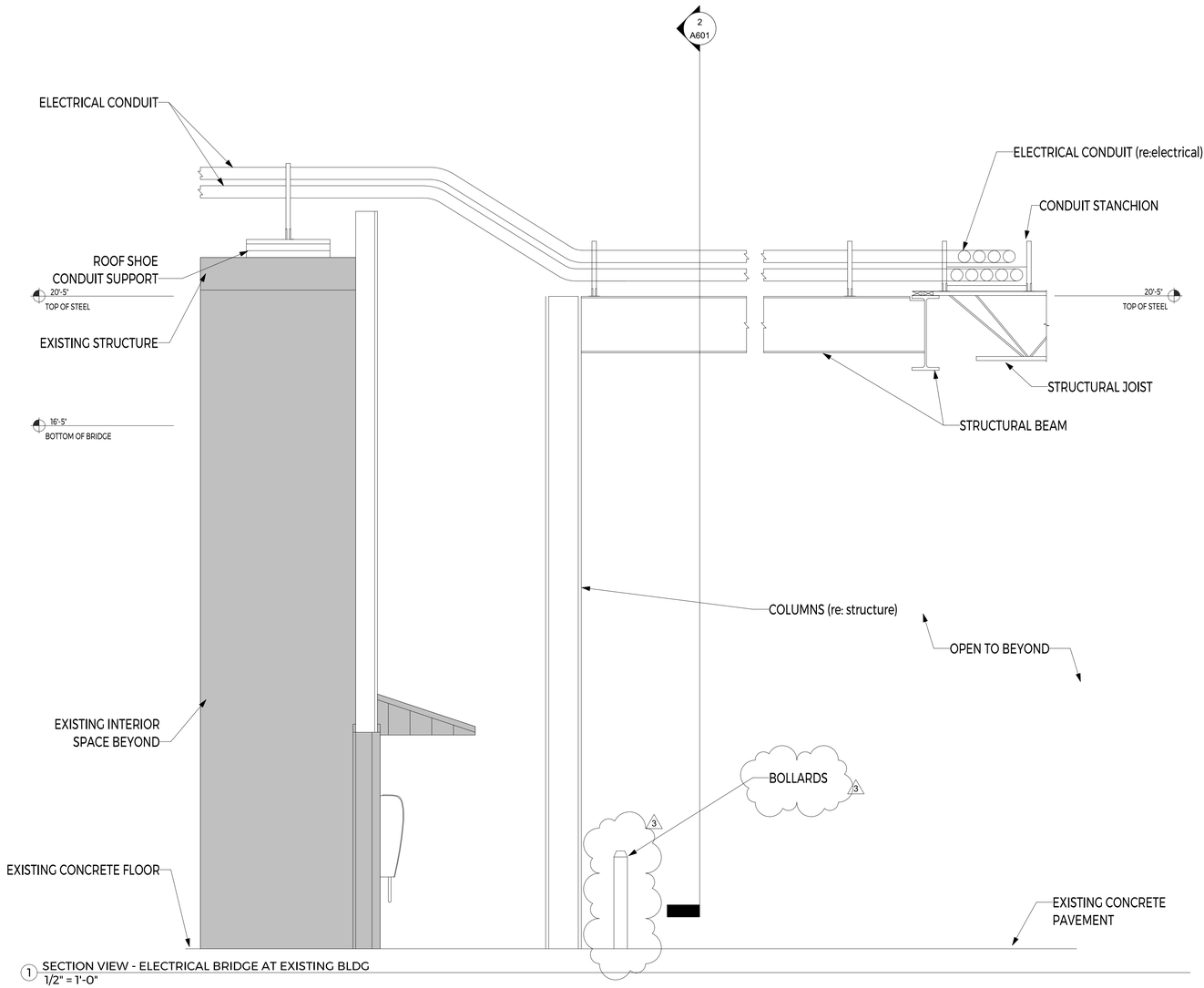
WALL SECTIONS

A601

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CANOPY 'A'
TRANSIT BUS



1 SECTION VIEW - ELECTRICAL BRIDGE AT EXISTING BLDG
1/2" = 1'-0"

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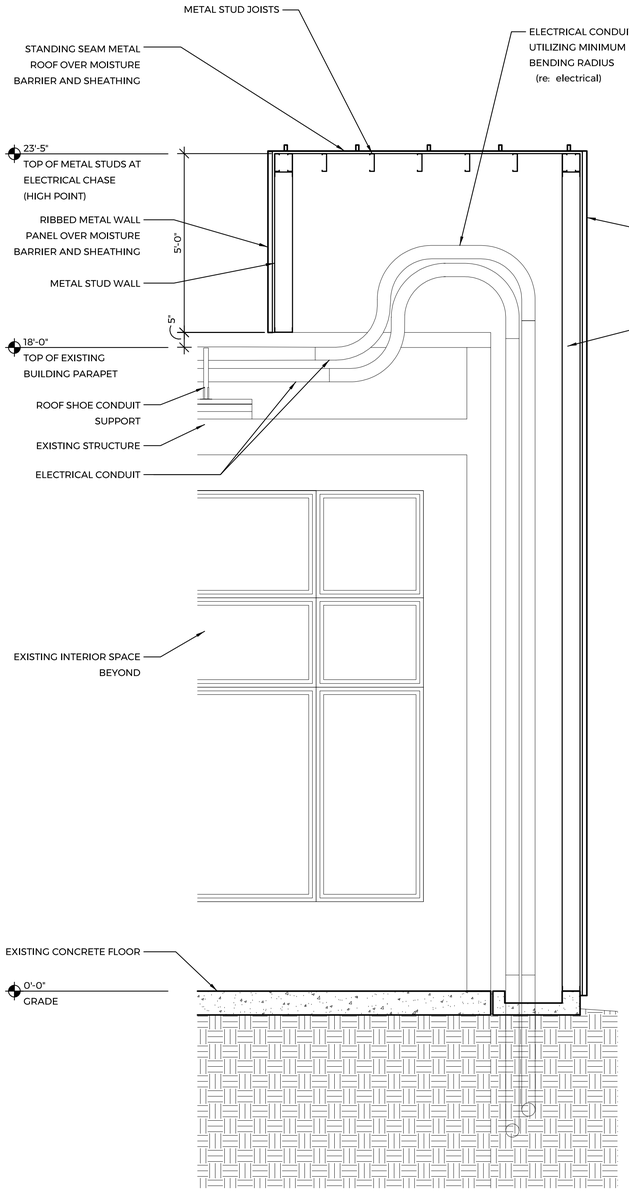
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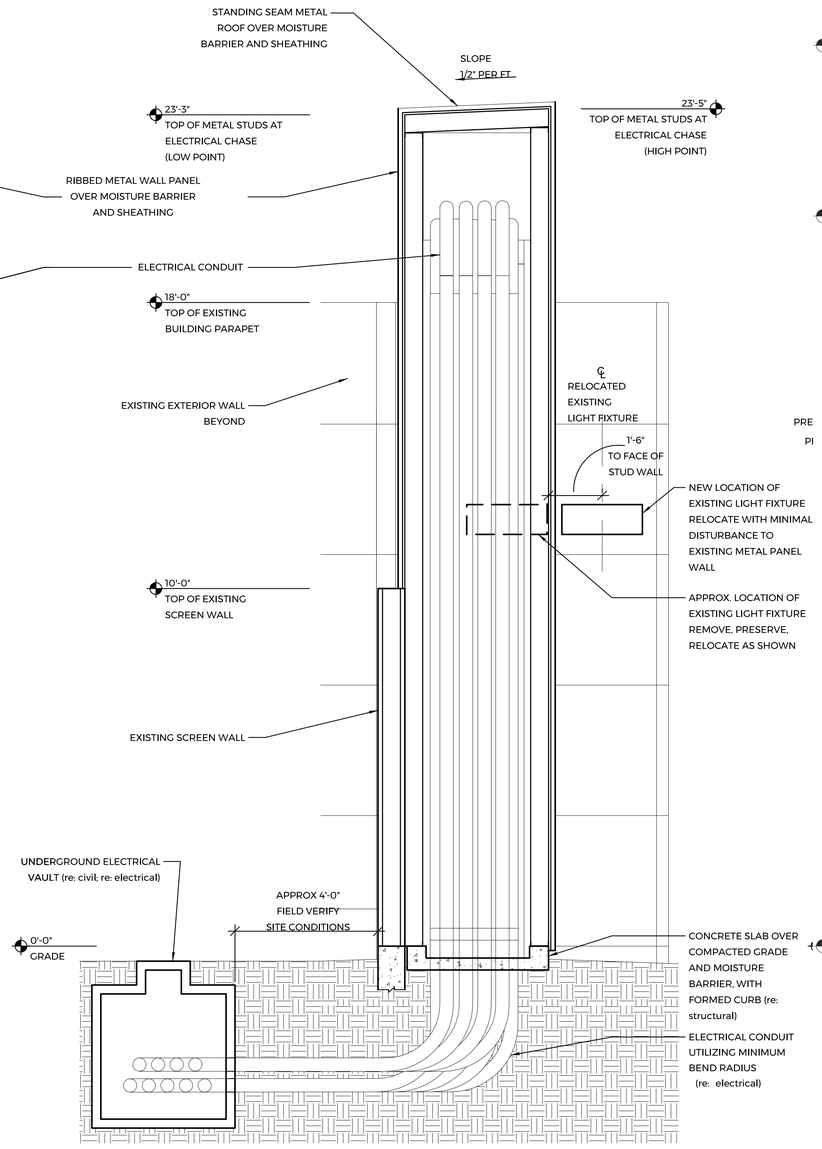
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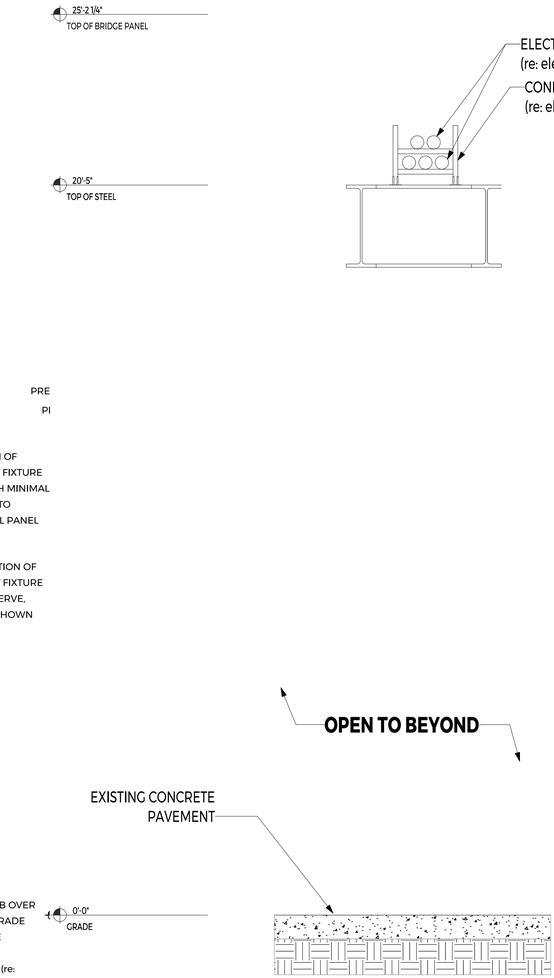
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3 CANOPY A NORTH FACE- TALL PANEL
1/2" = 1'-0"



2 SECTION 2 - ELECTRICAL CHASE AT EXISTING BLDG
1/2" = 1'-0"



1 SECTION - ELECTRICAL BRIDGE AT SMALL CANOPY
1/2" = 1'-0"

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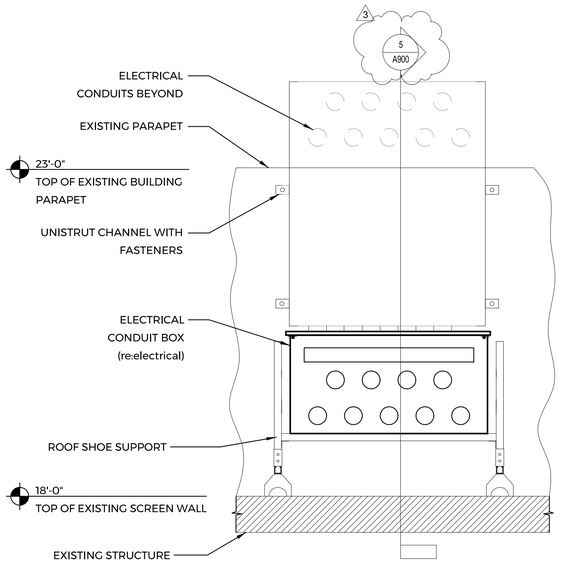
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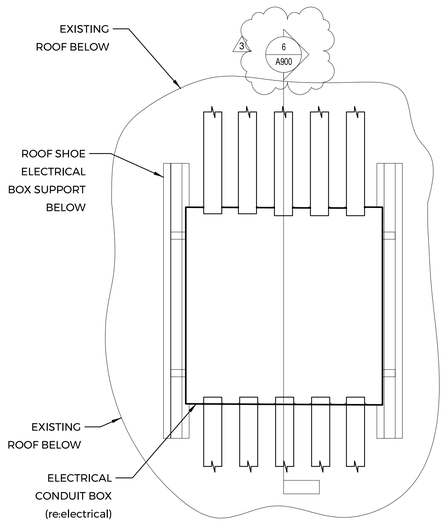
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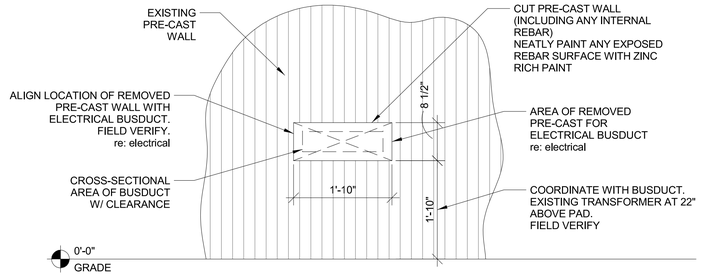
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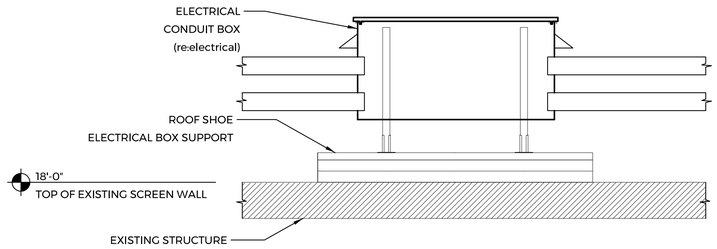
7 ELEVATION OF VERTICAL CONDUIT TRANSITION
3/4" = 1'-0"



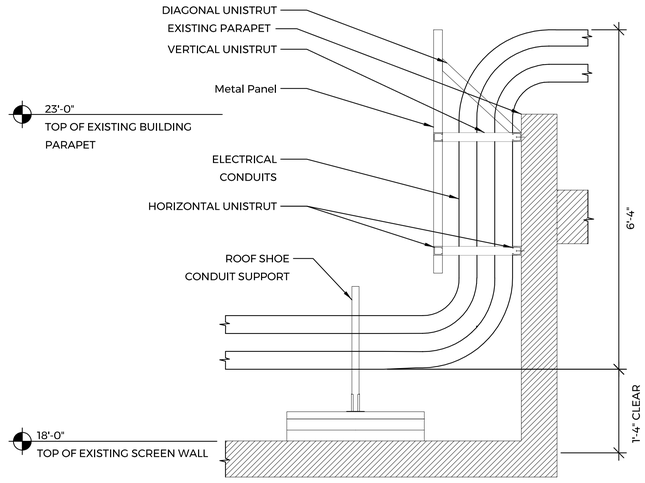
9 ELECTRICAL CONDUIT JUNCTION BOX PLAN
3/4" = 1'-0"



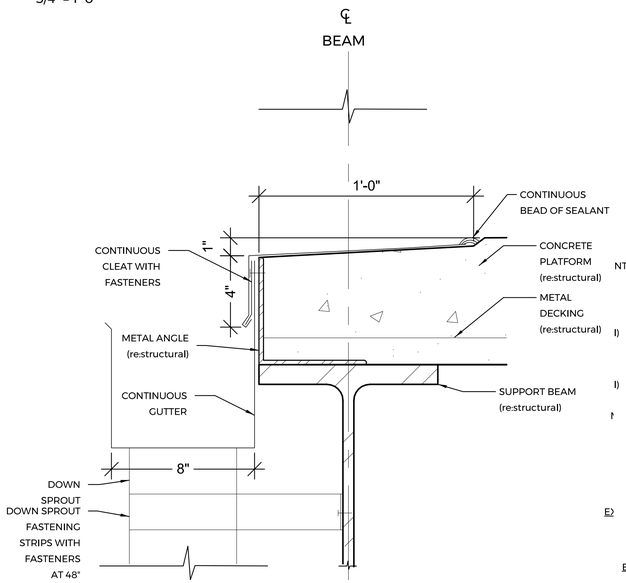
8 BUSDUCT DETAIL AT MASONRY WALL
3/4" = 1'-0"



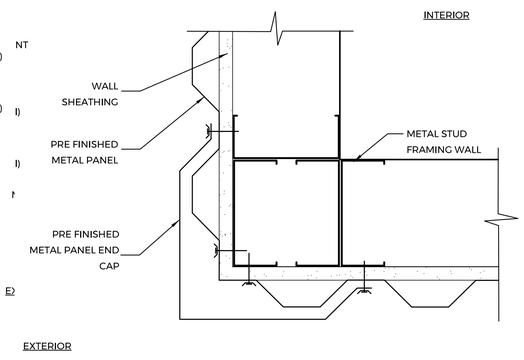
6 SECTION AT CONDUIT JUNCTION BOX
3/4" = 1'-0"



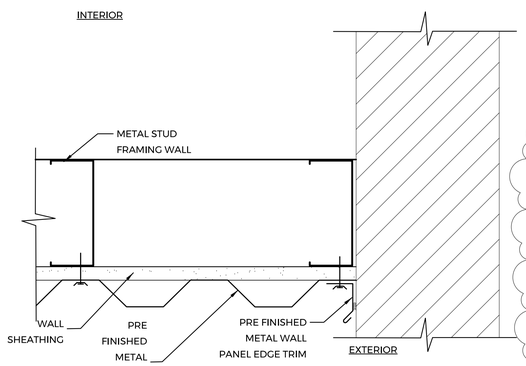
5 SECTION AT VERTICAL CONDUIT TRANSITION
3/4" = 1'-0"



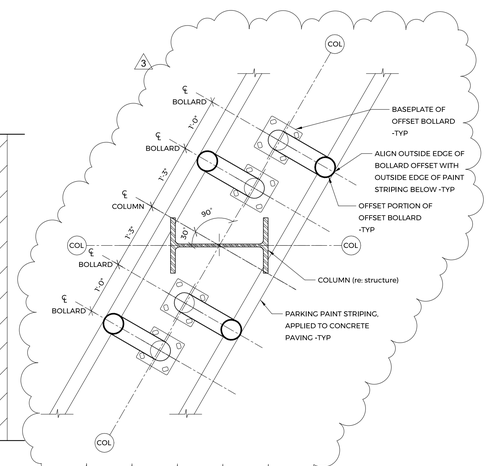
4 TYPICAL GUTTER AT PLATFORM EDGE
3" = 1'-0"



3 OUTSIDE CORNER AT ELECTRICAL CONDUIT CHASE
3" = 1'-0"



2 CONDUIT CHASE WALL AT EXISTING BUILDING
3" = 1'-0"



1 COLUMN DETAIL (TYP.)
3/4" = 1'-0"

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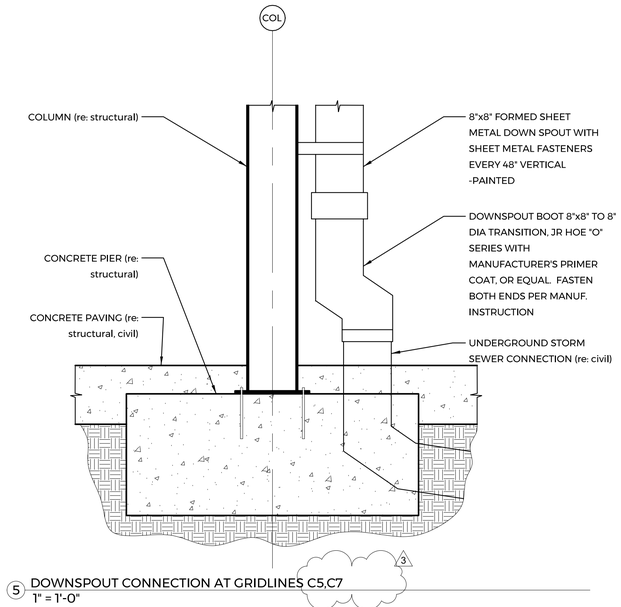
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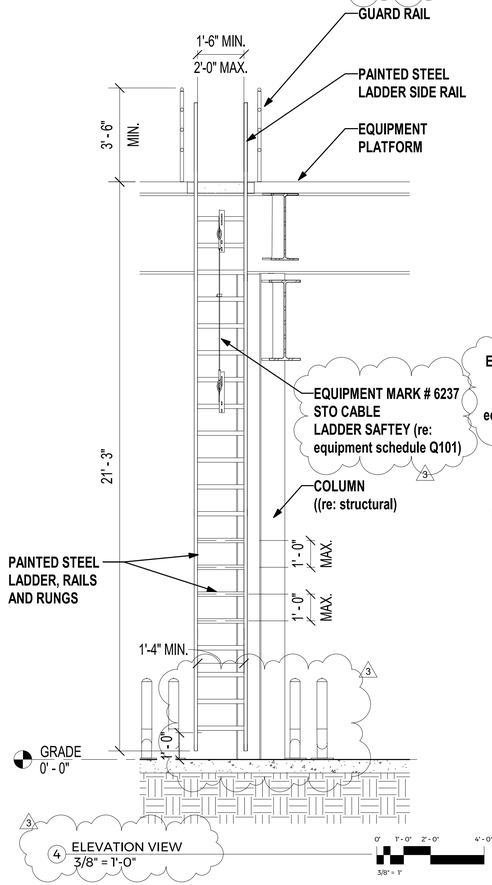
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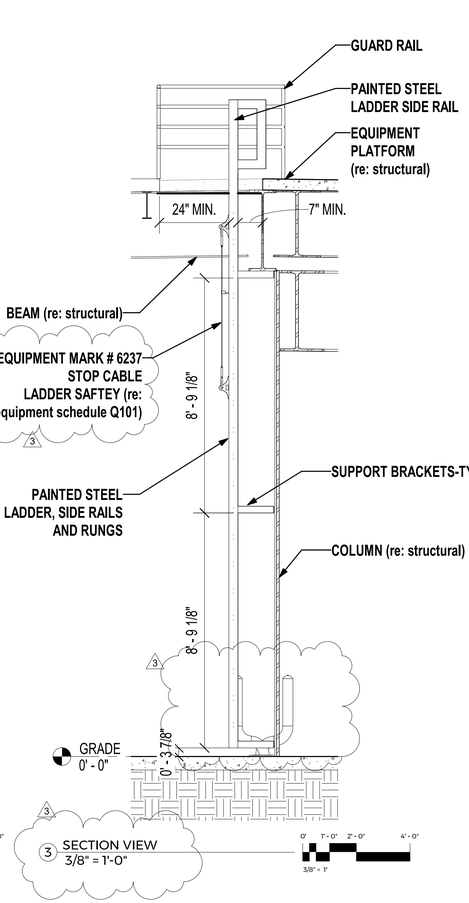
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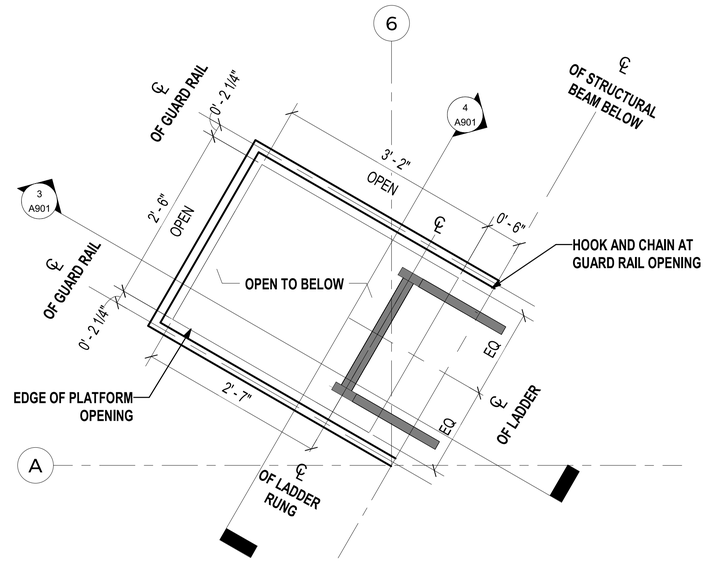
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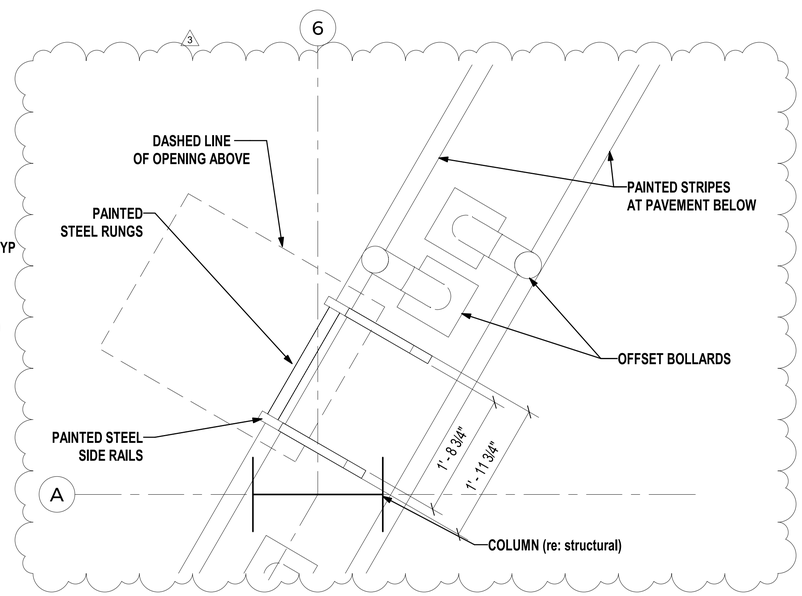
5 DOWNSPOUT CONNECTION AT GRIDLINES C5,C7
1" = 1'-0"







2 LADDER HATCH PLAN AT EQUIPMENT PLATFORM
1" = 1'-0"
0' 0'-6" 1'-0" 2'-0"
1" = 1'



1 LADDER PLAN AT GRADE
1" = 1'-0"
0' 0'-6" 1'-0" 2'-0"
1" = 1'

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LEGEND

SYMBOL	DESCRIPTION
T	TRANSFORMER, XFMR
ATS-X 400A	AUTOMATIC TRANSFER SWITCH, 4 POLE, UON: • ATS-X – DEVICE DESIGNATION • 400A – AMPERE RATING • MTS – MANUAL TRANSFER SWITCH
AC-DSF-X 200AS 125AF	LOW VOLTAGE, 3 POLE, FUSED SWITCH RATING AS SHOWN: • 200AS – SWITCH RATING (AMP) • 125AF – FUSE RATING (AMP)
100	UNFUSED DISCONNECT SWITCH: • UPPER NUMERAL INDICATES SWITCH RATING. • LOWER NUMERAL INDICATES FUSE RATING.
100 60	FUSED DISCONNECT SWITCH: • UPPER NUMERAL INDICATES SWITCH RATING. • LOWER NUMERAL INDICATES FUSE RATING.
	COMBINATION MOTOR STARTER/DISCONNECT SWITCH, FURNISHED BY MECHANICAL CONTRACTOR & INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE REQUIRED.
	GROUND
	GROUND ROD – 3/4" x 8' LONG COPPER ROD WITH CONNECTION TO BUILDING STEEL COLUMN
	PULL BOX
	METER
CB 20A	CIRCUIT BREAKER: NUMERAL INDICATES TRIP RATING
20A	LOW VOLTAGE MOLDED CASE CIRCUIT BREAKER: 20A – AMPERE RATING
	• DRAW-OUT SERVICE
200AS 150AF	SWITCH AND FUSE RATING AS SHOWN: • 200AS – SWITCH RATING (AMP) • 150AF – FUSE RATING (AMP)
1200/5 (3) MR	CURRENT TRANSFORMER:: • (3) INDICATES TRANSFORMER QUANTITY • 1200/5 – INDICATES CURRENT RATIO • MR – INDICATES MULTI RATIO
	WIRE TROUGH
	EXISTING EQUIPMENT
	NEW EQUIPMENT
	SPLICE
	CONDUIT TURNING UP
	CONDUIT TURNING DOWN
	CONDUIT & REQUIRED WIRING RUN CONCEALED IN WALLS FLOORS OR HUNG CEILINGS.
	TEMPORARY FEEDER
15	MOTOR '15' – INDICATES HORSE POWER RATING

ABBREVIATIONS

A	– AMPS
AC	– ALTERNATING CURRENT
AF	– AMP FRAME
AFCI	– ARC FAULT INTERRUPT
AFF	– ABOVE FINISHED FLOOR
AP	– ACCESS PANEL
ARCH	– ARCHITECTURAL
AS	– AMP SWITCH
AT	– AMP TRIP
AUTO	– AUTOMATIC
BLDG	– BUILDING
C_OND	– CONDUIT
CAB	– CABINET
CAT	– CATALOGUE
CB	– CIRCUIT BREAKER
CL	– CENTER LINE
CKT	– CIRCUIT
CLG	– CEILING
COL	– COLUMN
CONV	– CONVENIENCE
CT	– CURRENT TRANSFORMER
DC	– DIRECT CURRENT
DCFC	– DC FAST CHARGER
DLO	– DIESEL LOCOMOTIVE CABLE
DN	– DOWN
DP	– DISTRIBUTION PANEL
DWG	– DRAWING
EC	– EMPTY CONDUIT
ELEV	– ELEVATOR
EM	– EMERGENCY
EVITP	– ELECTRIC VEHICLE INFRASTRUCTURE TRAINING PROGRAM
EVSE	– ELECTRIC VEHICLE SUPPLY EQUIPMENT
EXIST, E	– EXISTING
FA	– FIRE ALARM
FL	– FLOOR
FT	– FEET
G	– GROUND
GFI	– GROUND FAULT INTERRUPT
GFP	– GROUND FAULT PROTECTION
HP	– HORSEPOWER
HT	– HEIGHT
HVAC	– HEATING VENTILATING AND AIR CONDITIONING
IG	– ISOLATED GROUND
JB	– JUNCTION BOX
KVA	– KILOVOLT AMPERES
KW	– KILOWATT
LP	– LIGHTING PANEL
LTG	– LIGHTING
MCC	– MOTOR CONTROL CENTER
MCM	– THOUSAND CIRCULAR MILS
MDB	– MAIN DISTRIBUTION BOARD
MECH	– MECHANICAL
MISC	– MISCELLANEOUS
MTD	– MOUNTED
N	– NEUTRAL
NEC	– NATIONAL ELECTRIC CODE
NEMA	– NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
N.I.C.	– NOT IN CONTRACT
NC	– NORMALLY CLOSED
NO	– NORMALLY OPEN
No.	– NUMBER
NTS	– NOT TO SCALE
PB	– PULL BOX
PH, ø	– PHASE
PNL	– PANEL
PP	– POWER PANEL
PWR	– POWER
REC	– RECEPTACLE
SP	– SPARE
SPECS	– SPECIFICATIONS
SW	– SWITCH
SWBD	– SWITCHBOARD
TYP	– TYPICAL
V	– VOLTS
W	– WATTS
WP	– WEATHERPROOF
XFMR	– TRANSFORMER

GENERAL NOTES:

1. WORK SHALL COMPLY WITH THE LATEST VERSION OF NATIONAL ELECTRICAL CODE, 2020 EDITION, THE REQUIREMENTS OF UNDERWRITERS LABORATORIES (UL), SOLTRANS, STATE OF CALIFORNIA BUILDING CODES REQUIREMENTS AND REQUIREMENTS OF ALL AGENCIES HAVING JURISDICTION.
2. INSTALLATION SHALL MEET ALL REQUIREMENTS OF THE 2020 NEC ARTICLE 625 ELECTRIC VEHICLE CHARGING SYSTEM INCLUDING SIGNS AT EACH SERVICE–ENTRANCE EQUIPMENT.
3. WORK SHALL INCLUDE ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND NECESSARY SERVICES TO FURNISH AND INSTALL ALL ELECTRICAL WORK AS INDICATED ON THE DRAWINGS AND THE SPECIFICATIONS. THE WORD "PROVIDE", SHALL MEAN FURNISHING AND INSTALLATION OF THE ITEMS INDICATED. ALL ITEMS SHOWN SHALL BE PROVIDED AS NEW UNLESS OTHERWISE NOTED. THE PROJECTS WILL BE A SINGLE PRIME ELECTRICAL CONTRACT. THE ELECTRICAL PRIME CONTRACTOR WILL SUBCONTRACT NON–ELECTRICAL WORK NOT PERFORMED BY THEM TO INCLUDE THE GENERAL CONSTRUCTION. THE PRIME CONTRACTOR AND ALL SUB–CONTRACTORS SHALL BE LICENSED IN THE LOCAL JURISDICTIONS, WITH THE AUTHORITIES HAVING JURISDICTIONS, IN THEIR RESPECTIVE TRADE OF WORK.
4. ELECTRICAL CONTRACTOR AND CONTRACTOR'S SUB–CONTRACTORS SHALL VISIT THE SITE PRIOR SUBMITTING THEIR BID AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS THAT MAY AFFECT THE CONTRACTOR OR SUB–CONTRACTORS WORK AND SHALL NOT BE ENTITLED TO ANY ADDITIONAL COMPENSATION FOR HIS OR SUB–CONTRACTORS FAILURE TO DO SO. ALL SITE VISITS SHALL BE COORDINATED THROUGH SOLTRANS.
5. CONTRACTOR SHALL, IN A WORKMANLIKE MANNER, PROVIDE A COMPLETE AND PROPERLY OPERATIONAL OPERABLE SYSTEM.
6. MINIMUM SIZE OF RACEWAY FOR POWER CIRCUITS SHALL BE 3/4" CONDUIT, U.O.N. PROVIDE FLEXIBLE SEALTIGHT CONDUITS FOR FINAL CONNECTIONS TO GENERATORS.
7. MINIMUM WIRE SIZE FOR POWER CIRCUITS SHALL BE #12 AWG, TYPE THWN/THHN/THWN–2, U.O.N.
8. UNLESS OTHERWISE NOTED, PULL AND JUNCTION BOXES WHERE INDICATED ON DRAWINGS, SHALL BE CONSIDERED SHOWN AT THEIR APPROXIMATE LOCATION. THE CONTRACTOR SHALL LOCATE THEM AS FIELD CONDITIONS DICTATE. ADDITIONAL PULL AND JUNCTION BOXES NOT SHOWN ON DRAWINGS SHALL BE PROVIDED WHERE REQUIRED BY APPLICABLE CODE PROVISIONS OR FIELD CONDITIONS.
9. CONTRACTOR TO PROVIDE PULLBOXES FOR ALL CONDUIT RUNS EXCEEDING 270 DEGREES IN BENDS PER NEC AND AS REQUIRED SO AS NOT TO EXCEED THE MANUFACTURER'S CABLE PULLING TENSION WHETHER OR NOT INDICATED ON DRAWINGS.
10. EXPOSED NON–CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT & RACEWAYS SHALL BE GROUNDED. THE CONTRACTOR SHALL ENSURE CONTINUITY OF THE GROUNDING CIRCUIT THROUGH THIS GROUNDING CONDUCTOR FROM THE SUPPLYING PANELBOARD GROUNDING BUS TO THE LOAD GROUND TERMINAL. THE ELECTRICAL SYSTEM SHALL BE GROUNDED IN ACCORDANCE WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
11. ARCHITECTURAL FEATURES AS WELL AS MECHANICAL EQUIPMENT SHOWN ON ELECTRICAL DRAWINGS ARE FOR BACKGROUND INFORMATION ONLY.
12. ALL WORK SHOWN ON THE DRAWINGS NOT SPECIFICALLY CALLED OUT AS EXISTING SHALL BE CONSIDERED WORK TO BE PERFORMED UNDER THIS CONTRACT.
13. ALL CONDUIT RUNS IN THIS CONTRACT ARE DIAGRAMMATIC. LOCATION OF EQUIPMENT AND RUNS MAY VARY DUE TO PHYSICAL CONDITIONS. THE WORK SHALL INCLUDE ALL REQUIRED PULL & JUNCTION BOXES TO COMPLETE THE CONDUIT INSTALLATION. CONTRACTOR SHALL INSTALL EQUIPMENT AND CONDUITS IN A MANNER TO MINIMIZE ANY INTERFERENCE WITH OTHER CONTRACTS OR TRADES.
14. CONDUIT ROUTING SHOWN IS SCHEMATIC. CONTRACTOR SHALL ADJUST ROUTING TO SUIT FIELD CONDITIONS. ANY CHANGES TO PROPOSED ROUTING LOCATIONS SHALL BE INDICATED IN PROVIDED SHOP DRAWINGS BY CONTRACTOR FOR REVIEW AND APPROVAL.
15. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK INCLUDED. SUBCONTRACTOR SHALL PROVIDE ALL MATERIALS NECESSARY TO INSURE A COMPLETE INSTALLATION INCLUDING, BUT NOT LIMITED TO RACEWAYS, BENDS, FITTINGS, BOXES, TRENCHING, ETC. WHERE AN ELECTRICAL DEVICE IS REQUIRED BY CODE BUT NOT SHOWN, IT SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
16. CONTRACTOR IS RESPONSIBLE FOR ALL LUG KITS/COPPER BUS DETAILS AS REQUIRED FOR OVER SIZED FEEDERS. LUGS SHALL BE COPPER–PRESSURE PLATE TYPE, UP TO NO. 6 & COMPRESSION TYPE FOR LARGER SIZE CONDUCTOR.
17. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH SUB–CONTRACTORS AND OTHER TRADES.
18. SECURE PERMITS AND INSPECTION CERTIFICATES AND TRANSMIT SAME TO THE OWNER AT THE COMPLETION OF THE WORK.
19. CONTRACTOR SHALL BE RESPONSIBLE FOR FILING ALL DOCUMENTS WITH ALL LOCAL AGENCIES AND COORDINATION WITH THE LOCAL UTILITY. PATCH AND REPAIR ALL SURFACES DAMAGED BY TRENCHING TO MATCH EXISTING.
20. PATCH AND REPAIR ALL SURFACES DAMAGED BY TRENCHING TO MATCH EXISTING.
21. PROVIDE SIGNAGE AND LABELING AS REQUIRED BY NEC OR REQUESTED BY ENGINEER ALL SIGNS SHALL BE ENGRAVED LAMINATED PLASTIC WITH MINIMUM 1/2" HIGH LETTERS.
22. ALL PENETRATIONS SHALL BE SEALED TO REMAIN RAIN–TIGHT.
23. REFER TO THE ONE–LINE WIRING SCHEMATIC FOR CONDUCTOR SIZES BETWEEN MAJOR POWER COMPONENTS OF THE ELECTRICAL SYSTEM.
24. SUBCONTRACTOR SHALL LAY OUT RUNS TO SUIT FIELD CONDITIONS AND THE COORDINATION REQUIREMENTS OF OTHER TRADES. SUB–CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS OF DEVIATIONS TO DESIGNED ROUTING OF NEW CONDUITS FOR REVIEW AND APPROVAL.
25. ALL CONDUIT RUNS SHALL BE SECURELY FASTENED AT INTERVALS OF 10 FT. MIN. AND 3 FT. MIN. FROM EQUIPMENT OR STRUCTURE PENETRATIONS PER NEC 358.30.
26. ALL RGS CONDUIT RUNS SHALL BE SECURELY FASTENED WITHIN 3 FT. OF TERMINATIONS PER NEC 344.30 AND SUPPORTED AT 10 FT. MAX INTERVALS OR IN ACCORDANCE WITH NEC TABLE 344.30.
27. CONDUIT ENTRY/CONNECTION TO ELECTRICAL ENCLOSURES SHALL BE SUITABLE FOR GROUNDING AND SHALL BE SEALED AGAINST ENVIRONMENT, SUCH AS WATER, INSECTS AND RODENTS. CONDUIT SHALL NOT ENTER FROM TOP OF ELECTRICAL EQUIPMENT IN OUTDOOR LOCATIONS WITHOUT SITE–SPECIFIC APPROVAL FROM ENGINEER VIA RFI PROCESS. IF GRANTED APPROVAL FOR TOP ENTRY, ONLY RIGID CONDUIT TO OUTDOOR EQUIPMENT WITH MEYERS HUBS TO BE USED.
28. ALL NEW EQUIPMENT TO HAVE AN AIC RATING GREATER THAN OR EQUAL TO THAT OF THE EXISTING EQUIPMENT UNLESS OTHERWISE NOTED.
29. UNDERGROUND CONDUITS SHALL BE SCH 40 PVC CONDUITS (PVC) AND ABOVE GROUND OUTDOOR EXPOSED CONDUITS SHALL BE RIGID GALVANIZED STEEL CONDUITS (RGS), U.O.N. ON PLANS. PROVIDE RGS CONDUIT COUPLING FOR TRANSITION FROM UNDERGROUND TO ABOVEGROUND CONDUIT RUNS. INDOOR CONDUITS MAY BE RGS OR EMT, U.O.N ON PLANS.
30. CONTRACTOR MUST VERIFY EXISTING CIRCUITS AND BREAKER SIZES IN THE FIELD AND SUBMIT THEM TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
31. PROVIDE ALL REQUIRED JUNCTION BOXES, PULL BOXES, FASTENERS, HANGERS SUPPORTS, BRACKETS OR OTHER ACCESSORIES REQUIRED AND NECESSARY FOR PROPER SUPPORT OF ELECTRICAL CONDUIT AND EQUIPMENT.
32. ALL CONTRACTORS AND SUBCONTRACTORS SHALL NOTIFY IMMEDIATELY IF SUSPECT MOLD GROWTH IS DISCOVERED ON SURFACES TO BE IMPACTED DURING THE PROJECT. NO DISTURBANCE TO THESE SURFACES SHALL OCCUR UNTIL SOLTRANS ADDRESSES THE SITUATION AND DETERMINES THE PROPER COURSE OF ACTION TO TAKE.
33. PROVIDE FIRE STOPPING FOR ALL FLOORS AND WALLS PENETRATION.
34. ALL SWITCHBOARDS, DISTRIBUTION BOARDS, PANELBOARDS (WHERE WORK IS PERFORMED) SHALL BE PROVIDED WITH ENGRAVED, LAMINATED ACRYLIC LABEL ALL EXISTING CIRCUITS TO REMAIN SHALL BE TRACED OUT AND IDENTIFIED WITH CORRESPONDING PANELBOARD CIRCUIT BREAKERS AND LABELED ACCORDINGLY.
35. ALL NEW EQUIPMENT TO HAVE AN AIC RATING GREATER THAN OR EQUAL TO THAT OF THE EXISTING EQUIPMENT UNLESS OTHERWISE NOTED.
36. CONDUIT ENTRY/CONNECTION TO ELECTRICAL ENCLOSURES SHALL BE SUITABLE FOR GROUNDING (PER NEC 250.97) AND SHALL BE SEALED AGAINST ENVIRONMENT.
37. ELECTRICAL CONTRACTOR SHALL COORDINATE IN FIELD FOR LOCATION OF ALL FEEDERS AND ROUTING OF CONDUIT. ALL FEEDERS INDICATED ARE COPPER CONDUCTORS IN CONDUIT. CONTRACTOR TO COORDINATE WITH BUILDING OWNER/REPRESENTATIVE (SOLTRANS) FOR ALL CONDUIT AND EQUIPMENT INSTALLATION REQUIREMENTS.
38. CONTRACTOR TO COORDINATE WITH ENGINEER AND CHARGING STATION EQUIPMENT VENDOR FOR FINAL LOCATION, FINAL POWER REQUIREMENTS, DISCONNECT SWITCHES AND INSTALLATION REQUIREMENTS PRIOR ANY WORK. PROVIDE ALL REQUIRED ELECTRICAL CONNECTION FOR A COMPLETE OPERATING MECHANICAL SYSTEM. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LINE VOLTAGE COMPONENTS REQUIRED FOR PROPER CONNECTION AND OPERATION OF MECHANICAL EQUIPMENT.
39. CONDUIT SHALL BE SUPPORTED FROM BUILDING STRUCTURE ONLY. CONDUIT SHALL NOT BE SUPPORTED FROM PLUMBING PIPING OR HVAC EQUIPMENT OR DUCTWORK. CONDUIT SHALL BE SECURELY FASTENED ACCORDING TO NOTE 26 EACH RUN BETWEEN TERMINATION POINTS SHALL BE SECURELY FASTENED ACCORDING TO NOTE 26 AND PER NEC.
40. PROVIDE CORE DRILLING THRU BRICK/MASONRY STRUCTURE. PROVIDE WALL SLEEVE THROUGH WALL. RESTORE MASONRY TO ITS ORIGINAL CONDITION.
41. CONDUIT ROUTING INSIDE AND OUTSIDE THE BUILDING MUST BE APPROVED BY THE OWNER/REPRESENTATIVE PRIOR ANY INSTALLATION.
42. PROVIDE KINDORF OR EQUAL CHANNEL SYSTEM TO SUPPORT ELECTRICAL EQUIPMENT AND CONDUIT.
43. ELECTRICAL CONTRACTOR TO FIELD CONFIRM ALL EXISTING CONDITIONS AND DIMENSIONS (CEILING HEIGHTS, WALL SPACE, ETC.) TO ACCOMMODATE EQUIPMENT PRIOR ANY EQUIPMENT AND CONDUIT INSTALLATION. FIELD ADJUST EQUIPMENT LOCATION AS REQ'D.
44. ELECTRICAL CONTRACTOR THAT INSTALLS EV CHARGING EQUIPMENT SHALL BE EVITP CERTIFIED AND SHALL SUBMIT DOCUMENTATION FOR GRANT COMPLIANCE. 6

ELECTRIC SERVICE NOTE:

1. CONTRACTOR MUST INCLUDE ALL SITE WORK IN HIS BID AND HIRE THE SITE CONTRACTOR TO PROVIDE ALL SITE WORK.
2. COORDINATE INSTALLATION OF NEW ELECTRIC SERVICE WITH PG&E PRIOR ANY WORK. ELECTRIC SERVICE SHALL BE INSTALLED IN ACCORDANCE WITH UTILITY SPECIFICATIONS. PROVIDE ALL DOCUMENTATION AND COORDINATION WITH THE UTILITY PER UTILITY STANDARDS.
3. PROVIDE TRENCHING AND BACKFILLING. RESTORE SIDEWALK TO ITS ORIGINAL CONDITION. COORDINATE WORK AND CONDUIT/CABLE REQUIREMENTS WITH THE UTILITY COMPANY. ELECTRICAL CONTRACTOR MUST CONSULT WITH THE UTILITY COMPANY BEFORE STARTING WORK FOR UNDERGROUND SERVICE TO THE BUILDING. COORDINATE THE EXACT LOCATION OF THE POINT OF SERVICE CONNECTION FROM EXISTING UTILITY COMPANY SYSTEM TO THE PROPERTY AND THE POINT OF SERVICE CONNECTION TO THE BUILDING.
4. PG&E WILL PROVIDE NEW ELECTRIC SERVICE AS INDICATED IN POWER RISER DIAGRAM. PG&E SHALL PROVIDE NEW ELECTRIC SERVICE INCLUDING BUT NOT LIMITED TO: SIDEWALK VAULT PER UTILITY SPECS, ELECTRIC SECONDARY VIA TRENCHING, AND ALL EQUIPMENT INCLUDING ON DRAWINGS, ALL PER PG&E SPECIFICATIONS. PG&E WILL INSTALL THE TRANSFORMER AND PROVIDE THE ELECTRICAL METER TO BE INSTALLED IN THE SWITCHGEAR INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION, CONDUIT, BACKFILLING, PATCHING, ASPHALT & STRIPING ASSOCIATED WITH ELECTRICAL DISTRIBUTION BETWEEN THE SERVICE SECTION PROVIDED BY THE UTILITY AND THE REMAINDER OF THE INSTALLATION.
5. CONTRACTOR SHALL APPLY AND PAY FOR ALL PERMITS ASSOCIATED WITH ELECTRICAL SERVICE WORK. ANY FEES/CHARGES IMPOSED BY THE UTILITY TO INSTALL NEW SERVICE AND THE GENERATOR ARE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL CARRY COST WITHIN HIS BID FOR A COMPLETE NEW ELECTRIC SERVICE INCLUDING SITE WORK.
6. PROVIDE STEEL PLATES AS REQUIRED WHEN NOT WORKING TO ALLOW FOR THE NORMAL FLOW OF PEDESTRIAN AND VEHICULAR TRAFFIC.

CHARGING STATION EQUIPMENT NOTE:

1. CONSULT CHARGING STATION EQUIPMENT INSTALLATION GUIDE FOR WIRING METHODS AND OPERATING PROCEDURES.
2. PROVIDE ALL REQUIRED CHARGING STATION CONTROL WIRING, COMMUNICATION WIRING, CONDUIT, POWER AND INSTALLATION FOR CONVENIENCE RECEPTACLE, LIGHTS, GENERATOR JACKET HEATER, ETC. PROVIDE ALL NECESSARY ACCESSORIES FOR A COMPLETE OPERATING ELECTRICAL SYSTEM. COORDINATE WORK AND REQUIREMENTS WITH MANUFACTURER. COORDINATE INSTALLATION REQUIREMENTS WITH MANUFACTURER PRIOR ANY WORK.

GENERAL SITE WORK NOTES :

1. CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING UNDERGROUND UTILITIES (MARKUP) IN AREAS TO BE TRENCHED. VERIFY EXACT ROUTING IN FIELD PRIOR TO ANY EXCAVATION WORK. HAND EXCAVATION MAY BE REQUIRED DUE TO EXISTING UNDERGROUND UTILITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INVESTIGATING AND VERIFYING THE ACTUAL LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND FACILITIES IN ADVANCE OF THE PERFORMANCE OF ANY WORK. ANY EXISTING UTILITIES THAT ARE DAMAGED BY THE CONTRACTOR'S WORK SHALL BE REPAIRED AT CONTRACTOR'S COST WHETHER OR NOT UTILITIES ARE INDICATED ON PLANS.
3. RESTORE ANY PAVEMENT AND SIDEWALK EXCAVATED TO ORIGINAL CONDITION. THE EXTENT OF RESTORATION IS NOT LIMITED TO WHAT IS SHOWN ON PLANS. RESTORE ALL SURFACES DISTURBED DURING EXCAVATION TO ORIGINAL CONDITION.
4. CONTRACTOR MUST HIRE AND PAY FOR AN INDEPENDENT UNDERGROUND UTILITY MARKUP COMPANY FOR IDENTIFICATION OF ALL EXISTING UNDERGROUND UTILITIES, CONDUITS, PIPING, SANITARY WELLS, ETC. IN THE PROPERTY AND STREET AS REQUIRED, BEFORE ANY EXCAVATION AND TRENCHING WORK. IN ADDITION CONTRACTOR MUST CALL DIG SAFELY FOR IDENTIFICATION OF ALL UNDERGROUND PUBLIC UTILITIES AS REQUIRED. SUBMIT RESULTS FOR EACH SITE TO SOLTRANS AND ENGINEER FOR REVIEW. PRIOR TO BEGINNING WORK, THE ELECTRICAL CONTRACTOR SHALL CONDUCT A FULL TONE–OUT & MARK–OUT.

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SEAL:

LICENSED PROFESSIONAL ENGINEER
ANDREW KC MILLAN
E 23171
ELECTRICAL
STATE OF CALIFORNIA
5/26/2023

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189247
DRAWN BY	ESR
DATE	10/18/2022

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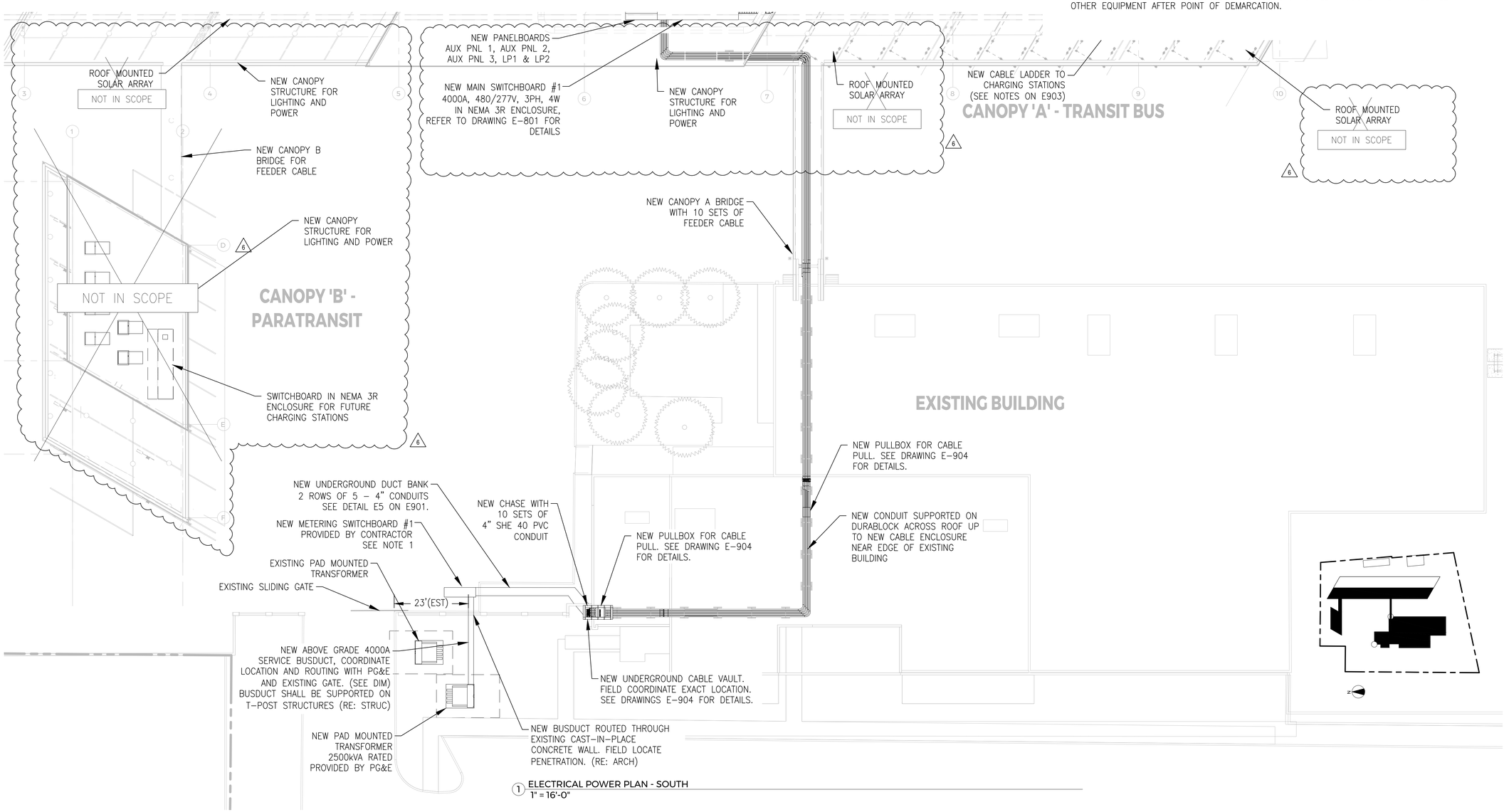
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ELECTRICAL NOTES

E001

NOTES:

1. 2500kVA NEW PAD MOUNTED TRANSFORMER OWNED BY PG&E FEEDS NEW METERING SWITCHBOARD #1 THROUGH 4000A ABOVE GRADE BUSDUCT. NEW METERING SWITCHBOARD FEEDS NEW MAIN SWITCHBOARD #1 LOCATED ON BUS CANOPY. FEEDER CABLES ARE ROUTED UNDERGROUND VIA CONCRETE ENCASED DUCTBANK, SEE DETAIL E5 ON E901.
2. CONDUITS ARE ENCLOSED WITHIN NEW CHASE ALONG BUILDING.
3. CONDUITS ARE ROUTED ACROSS BUILDING AS SHOWN IN TWO ROWS OF FIVE (5) 4" CONDUITS.
4. NEAR CHANGE IN ELEVATION, CONDUITS SHALL ENTER NEMA3R PULLBOX. MYERS HUBS SHALL BE USED TO ENSURE THAT WATER INGRESS IS PREVENTED AT THE CONDUIT CONNECTION POINTS.
5. EACH AUXILIARY PANEL AUX PNL 1, AUX PNL 2, AUX PNL 3, AUX PNL 4 ARE 100A RATED, 120/208V, 3ø, 4W, 22kAIC. NEW AUX PNLS ARE IN LINE UP WITH MAIN SWITCHBOARD #1.
6. POINT OF DEMARCATION IS AT THE TERMINATION CABINET UPSTREAM OF THE METER AND CIRCUIT BREAKER IN METERING SWITCHBOARD #1. CONTRACTOR SHALL PROVIDE BUS DUCT FROM METERING SWITCHBOARD #1 TO BUS DUCT TERMINATION ASSEMBLY MOUNTED TO TRANSFORMER. PG&E SHALL PROVIDE TERMINATION ASSEMBLE AND SHALL TERMINATE SECONDARY CONDUCTORS TO BUS DUCT. CONTRACTOR SHALL PROCURE AND INSTALL ALL OTHER EQUIPMENT AFTER POINT OF DEMARCATION.



1 ELECTRICAL POWER PLAN - SOUTH
1" = 16'-0"

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ELECTRICAL POWER PLAN - SOUTH

E101

KEYED NOTES:

1. CONTRACTOR SHALL RE–INSTALL EXISTING AC CHARGING STATIONS FURNISHED BY OWNER AND INTEGRATE DISPENSING CABLE WITH CORD MANAGEMENT SYSTEM ON Q DRAWINGS. COORDINATE EXACT LOCATION WITH BUS CHARGE PORT POSITION AND CORD MANAGEMENT SYSTEM.
2. CONTRACTOR SHALL INSTALL DC FAST CHARGER POWER CABINET FURNISHED BY OWNER ACCORDING TO MANUFACTURERS REQUIREMENTS.
3. CONTRACTOR SHALL INSTALL DC FAST CHARGER DISPENSING UNIT FURNISHED BY OWNER ACCORDING TO MANUFACTURERS REQUIREMENTS AND INTEGRATE DISPENSING CABLE WITH CORD MANAGEMENT SYSTEM ON Q DRAWINGS. COORDINATE EXACT LOCATION WITH BUS CHARGE PORT POSITION AND CORD MANAGEMENT SYSTEM.

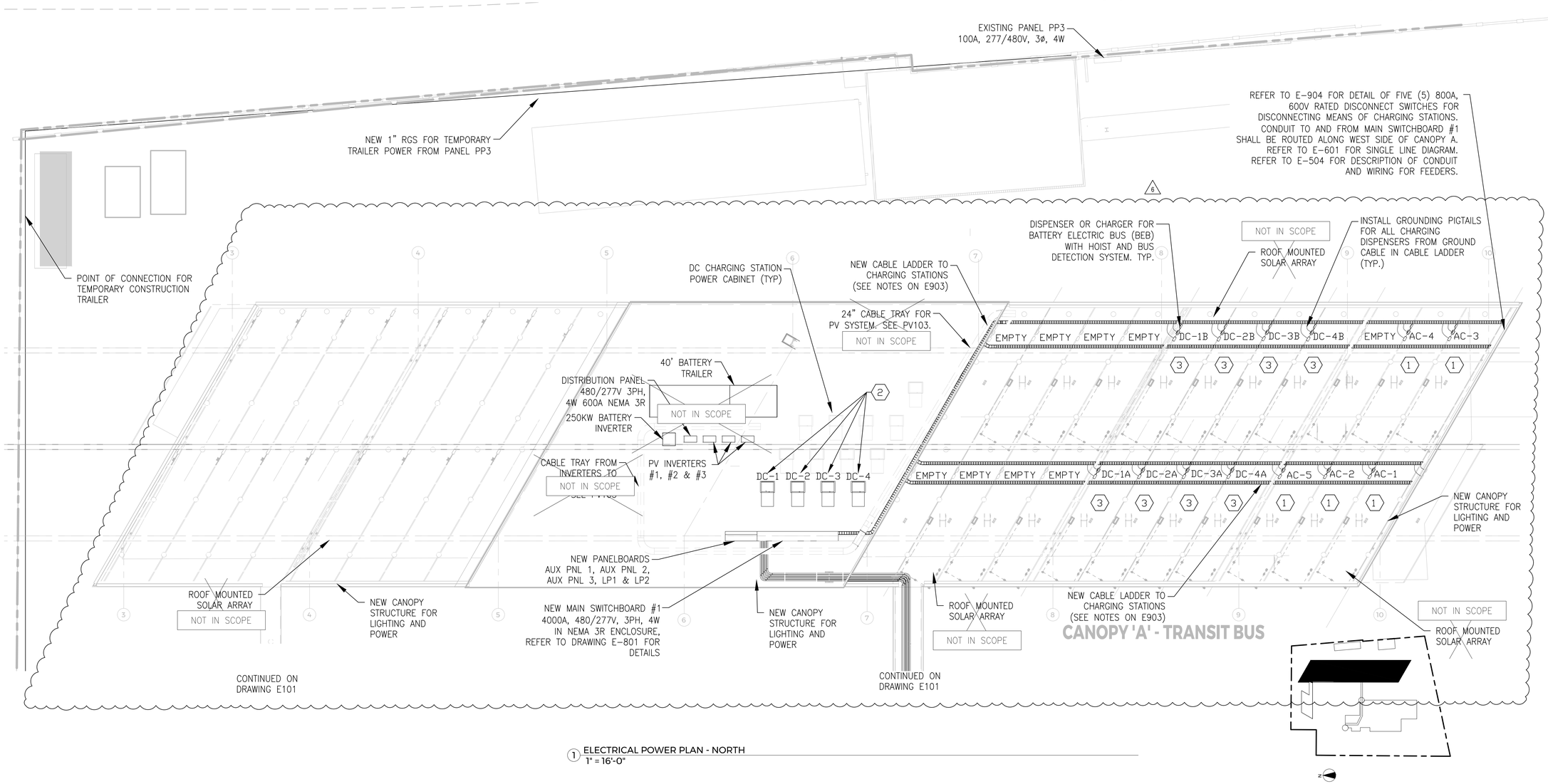
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NOTES:

1. NEW MAIN SWITCHBOARD #1 LOCATED ON BUS CANOPY IS FED FROM NEW METERING CABINET. FEEDER CABLES ARE ROUTED UNDERGROUND AND ACROSS BUILDING AS SHOWN IN TWO ROWS OF FIVE (5) 4" CONDUITS. CONDUITS ARE INSTALLED ON ROOF BETWEEN NEW PULLBOX ON DRAWING AS SHOWN. NEW CONDUITS ENTER AND EXIT PULLBOXES VIA KNOCKOUTS PROVIDED.
2. NEW PANELS AC PNL 1, AC PNL 2, AC PNL 3, LP1 & LP2 ARE PART OF THE SWITCHGEAR LINE UP AND FEED NEW CHARGING STATIONS INSTALLED AT CEILING LEVEL. REFER TO REFLECTED CEILING PLAN FOR CONDUIT ROUTING FOR CHARGING STATIONS. REFER TO SINGLE LINE DIAGRAM FOR TYPICAL WIRING FOR EACH CHARGING STATION.
3. EACH AUXILIARY PANEL AUX PNL 1, AUX PNL 2, AUX PNL 3, LP1 & LP2 ARE 100A RATED, 120./208V, 3ø, 4W, 22kAIC. NEW AUX PNLS ARE ADJACENT TO MAIN SWITCHBOARD #1 LINEUP.
4. CABLE LADDER TO NEW CHARGING STATIONS SHALL BE 24" ALUMINUM CABLE LADDER.
5. TEMPORARY POWER SHALL BE INSTALLED FOR CONTRACTOR'S CONSTRUCTION TRAILER. CONTRACTOR SHALL VERIFY EXISTING LOAD ON PANEL PP3 PRIOR TO INSTALLATION TO ENSURE AVAILABLE CAPACITY FOR THIS TEMPORARY LOAD. TEMPORARY FEEDER SHALL BE SUPPORTED ALONG EXISTING CMU WALL BETWEEN PP3 AND POINT OF CONNECTION FOR THE TEMPORARY TRAILER.
6. CONTRACTOR SHALL INSTALL EVSE CHARGING EQUIPMENT FURNISHED BY OWNER CONSISTING OF QTY 1– 200 KW BYD AC CHARGER, QTY 4 – 60 BYD AC CHARGER, QTY 4 – 200 KW CHARGEPOINT EXPRESS PLUS DCFC POWER CABINETS, QTY 8 200 KW CHARGEPOINT SINGLE PORT DEPOT DCFC DISPENSERS.

4

6



1 ELECTRICAL POWER PLAN - NORTH
1" = 16'-0"

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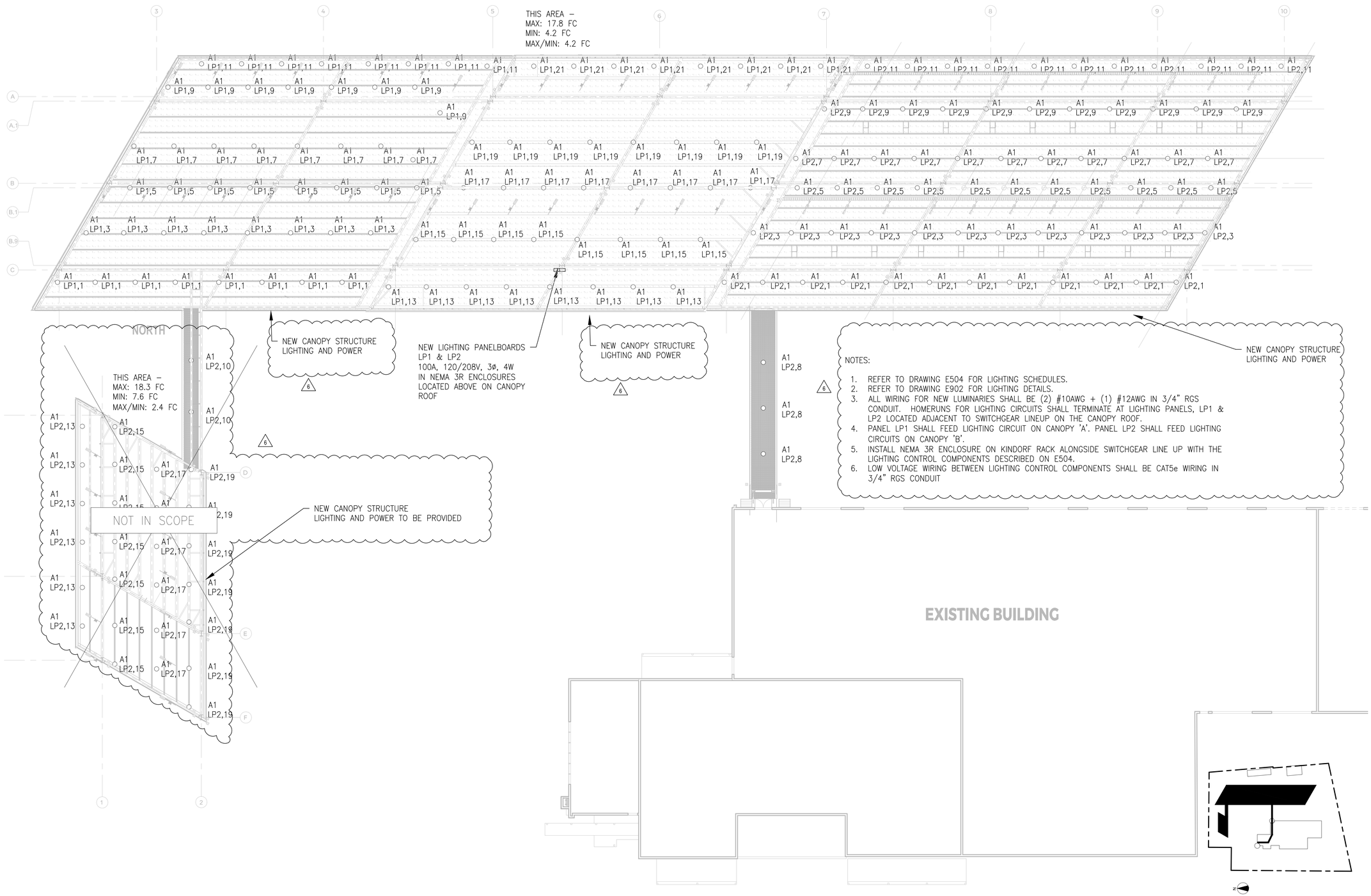
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ELECTRICAL POWER PLAN - NORTH

E102



1 ELECTRICAL LIGHTING PLAN
1/32"= 1'-0"

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PROJECT TITLE

BEB YARD IMPROVEMENTS

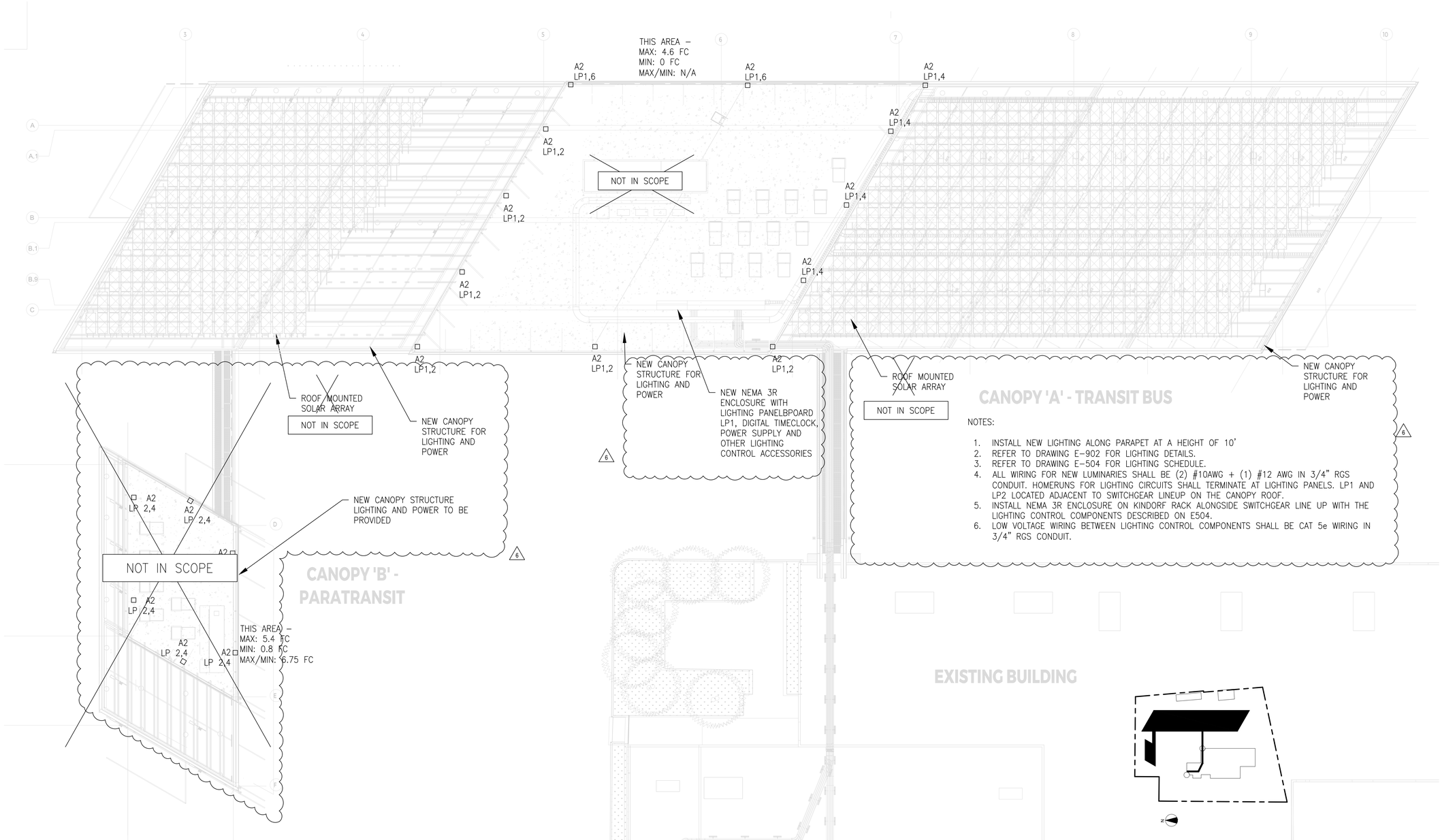
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LIGHTING PLAN 1 - UNDER CANOPY

E201



NOTES:

1. INSTALL NEW LIGHTING ALONG PARAPET AT A HEIGHT OF 10'
2. REFER TO DRAWING E–902 FOR LIGHTING DETAILS.
3. REFER TO DRAWING E–504 FOR LIGHTING SCHEDULE.
4. ALL WIRING FOR NEW LUMINARIES SHALL BE (2) #10AWG + (1) #12 AWG IN 3/4" RGS CONDUIT. HOMERUNS FOR LIGHTING CIRCUITS SHALL TERMINATE AT LIGHTING PANELS. LP1 AND LP2 LOCATED ADJACENT TO SWITCHGEAR LINEUP ON THE CANOPY ROOF.
5. INSTALL NEMA 3R ENCLOSURE ON KINDORF RACK ALONGSIDE SWITCHGEAR LINE UP WITH THE LIGHTING CONTROL COMPONENTS DESCRIBED ON E504.
6. LOW VOLTAGE WIRING BETWEEN LIGHTING CONTROL COMPONENTS SHALL BE CAT 5e WIRING IN 3/4" RGS CONDUIT.

1 ELECTRICAL LIGHTING PLAN
1/32"= 1'-0"

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5	10/18/2022	BID ADDENDUM

REVISION LIST

SEAL:

LICENSED PROFESSIONAL ENGINEER
ANDREW KC MILLIAN
E 23171
ELECTRICAL
STATE OF CALIFORNIA
5/26/2023

PROJECT TITLE

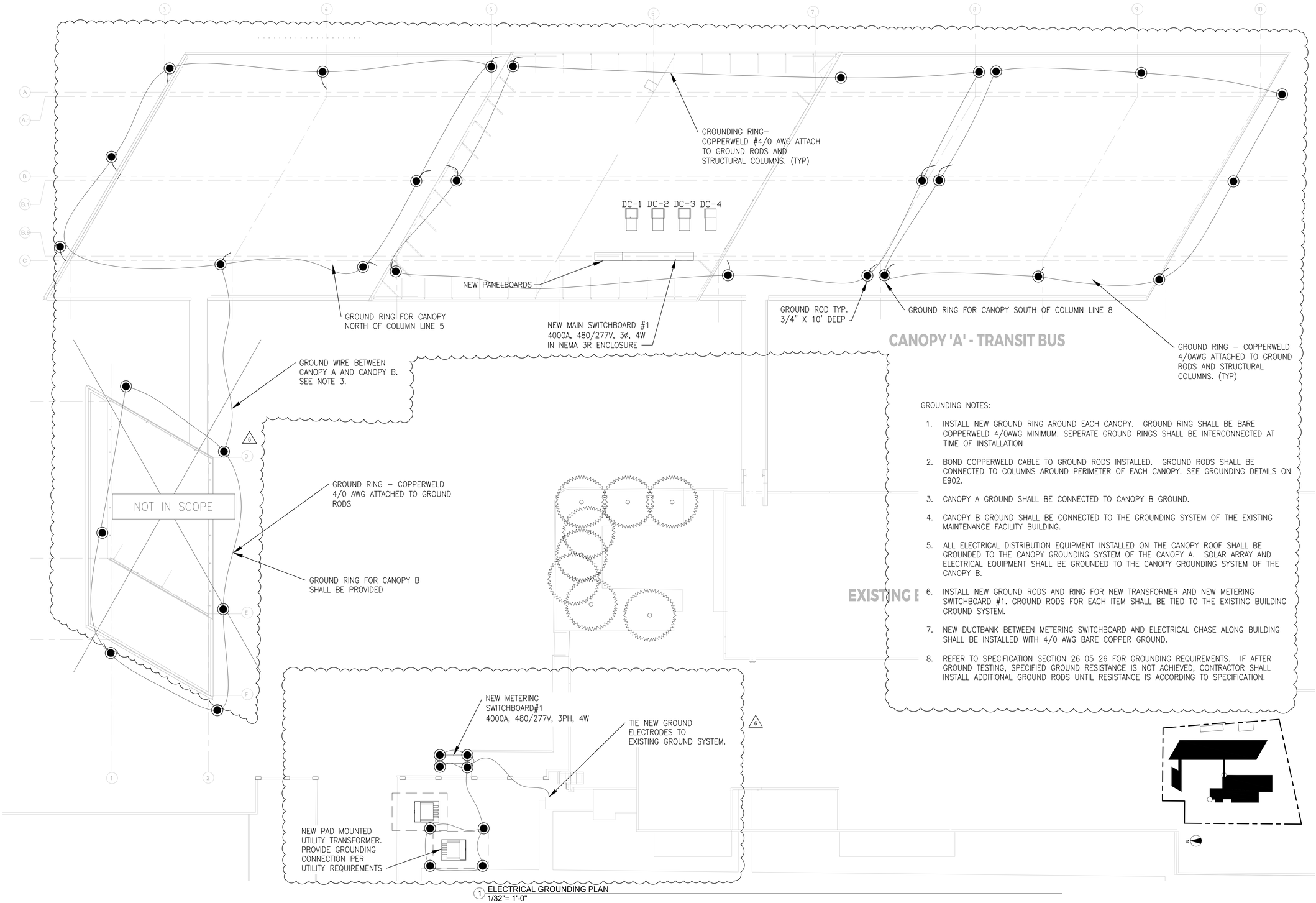
BEB YARD IMPROVEMENTS

PROJECT NO.	189247
DRAWN BY	ESR
DATE	10/18/2022
ISSUED FOR BID	

DRAWING TITLE

LIGHTING PLAN 2 - ROOFTOP

E202



1 ELECTRICAL GROUNDING PLAN
1/32"= 1'-0"

GROUNDING NOTES:

1. INSTALL NEW GROUND RING AROUND EACH CANOPY. GROUND RING SHALL BE BARE COPPERWELD 4/0AWG MINIMUM. SEPERATE GROUND RINGS SHALL BE INTERCONNECTED AT TIME OF INSTALLATION
2. BOND COPPERWELD CABLE TO GROUND RODS INSTALLED. GROUND RODS SHALL BE CONNECTED TO COLUMNS AROUND PERIMETER OF EACH CANOPY. SEE GROUNDING DETAILS ON E902.
3. CANOPY A GROUND SHALL BE CONNECTED TO CANOPY B GROUND.
4. CANOPY B GROUND SHALL BE CONNECTED TO THE GROUNDING SYSTEM OF THE EXISTING MAINTENANCE FACILITY BUILDING.
5. ALL ELECTRICAL DISTRIBUTION EQUIPMENT INSTALLED ON THE CANOPY ROOF SHALL BE GROUNDED TO THE CANOPY GROUNDING SYSTEM OF THE CANOPY A. SOLAR ARRAY AND ELECTRICAL EQUIPMENT SHALL BE GROUNDED TO THE CANOPY GROUNDING SYSTEM OF THE CANOPY B.
6. INSTALL NEW GROUND RODS AND RING FOR NEW TRANSFORMER AND NEW METERING SWITCHBOARD #1. GROUND RODS FOR EACH ITEM SHALL BE TIED TO THE EXISTING BUILDING GROUND SYSTEM.
7. NEW DUCTBANK BETWEEN METERING SWITCHBOARD AND ELECTRICAL CHASE ALONG BUILDING SHALL BE INSTALLED WITH 4/0 AWG BARE COPPER GROUND.
8. REFER TO SPECIFICATION SECTION 26 05 26 FOR GROUNDING REQUIREMENTS. IF AFTER GROUND TESTING, SPECIFIED GROUND RESISTANCE IS NOT ACHIEVED, CONTRACTOR SHALL INSTALL ADDITIONAL GROUND RODS UNTIL RESISTANCE IS ACCORDING TO SPECIFICATION.

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GROUNDING PLAN

E301

SWITCHBOARD "MAIN SWITCHBOARD #1"

DESIGNED BASED MANUFACTURER	LOCATION	FED FROM	BUS SIZE	MAIN TYPE	VOLTAGE CHARACTERISTICS
ABB OR EQUAL	CANOPY AREA	PG&E SWITCH	4000 AMPS	4000A CB	277/480V 3 PH 4 W WITH 100% RATED NEUTRAL WITH EQUIP. CU GROUND BUS

MOUNTING	FDR ENTRANCE	INCOMING FEEDER	MIN. SCR	FULL RATING
FLOOR	FROM BELOW	10 SETS [(4)600kcmil + (1)#350kcmil GND - 4" PVC]	100,000 AMPS	YES

CIR. NO.	DESCRIPTION	PH	TRIP SIZE	FRAME SIZE	BRANCH WIRING	PVC CONDUIT	A	B	C	REMARKS
1	AC PNL 1	3	800	800	3 SETS - (3)#350kcmil & (1)#1/0AWG GRD	4"	197	197	197	
2	AC PNL 2	3	800	800	3 SETS - (3)#350kcmil & (1)#1/0AWG GRD	4"	224	224	224	
3	AC PNL 3	3	800	800	3 SETS - (3)#350kcmil & (1)#1/0AWG GRD	4"	216	216	216	
4	AC PNL 4	3	800	800	3 SETS - (3)#350kcmil & (1)#1/0AWG GRD	4"	216	216	216	
5	AC PNL 5	3	800	800	3 SETS - (3)#350kcmil & (1)#1/0AWG GRD	4"	216	216	216	
6	AUX TRANSFORMER	3	225	225	(3)#250KCMIL & (1)#4AWG GRD	2.5"	33	33	33	
7	SOLAR POWER INPUT	3	600	600	2 SETS - (4)#350kcmil & (1)#1AWG GRD	3"	-	-	-	
8	BATTERY POWER INPUT	3	600	600	2 SETS - (4)#350kcmil & (1)#1AWG GRD	3"	-	-	-	
9	GEN. POWER INPUT	3	600	600	2 SETS - (4)#350kcmil & (1)#1AWG GRD	3"	-	-	-	
10	SPARE	3	400	400	----					
11	SPARE	3	400	400	----					
12	SPARE	3	400	400	----					
13	SPARE	3	400	400	----					
14	SPARE	3	400	400	----					
15	SPARE	3	400	400	----					
					TOTALS kVA APPROX. (PER PHASE)		1102	1102	1102	
					TOTALS kVA CONNECTED			3306		
					TOTALS AMPS CONNECTED			3,981*		

NOTE: CHARGE MANAGEMENT SYSTEM PROVIDED BY OWNER SHALL MAINTAIN OPERATING LOAD AT OR BELOW 2.5MVA IN ACCORDANCE WITH NEC 625.42.

SWITCHBOARD "METERING SWITCHBOARD #1"

DESIGNED BASED MANUFACTURER	LOCATION	FED FROM	BUS SIZE	MAIN TYPE	VOLTAGE CHARACTERISTICS
ABB OR EQUAL	GROUND LEVEL	PG&E UTILITY TRANSFORMER	4000 AMPS	4000A CB	277/480V 3 PH 4 W WITH 100% RATED NEUTRAL WITH EQUIP. CU GROUND BUS

MOUNTING	FDR ENTRANCE	INCOMING FEEDER	MIN. SCR	FULL RATING
FLOOR	FROM SIDE	4000A SERVICE BUS DUCT	100,000 AMPS	YES

CIR. NO.	DESCRIPTION	PH	TRIP SIZE	FRAME SIZE	BRANCH WIRING	PVC CONDUIT	A	B	C	REMARKS
1	TRANSITION CABINET	-	-	-	----	-	-	-	-	
2	METERING AND DISONNECT	3	4000	4000	10 SETS - (4)#600kcmil & (1)#350kCMIL GND	4"	1102	1102	1102	
3	TRANSITION CABINET	-	-	-	----	-	-	-	-	
					TOTALS kVA APPROX. (PER PHASE)		1102	1102	1102	
					TOTALS kVA CONNECTED			3306		
					TOTALS AMPS CONNECTED			3,981		

NOTES
1. EXISTING PANELBOARD PP3 CIRCUIT IS PROVIDED FOR CONTRACTOR TEMPORARY CONSTRUCTION TRAILER. THE CONTRACTOR MUST ASSESS THE CIRCUITS THAT ARE CURRENTLY IN OPERATION BEFORE ATTEMPTING TO CONNECT NEW TEMPORARY LOADS AT THIS PANELBOARD.
2. REFER TO E-101 FOR LOCATION OF EQUIPMENT ON GROUND LEVEL.
3. REFER TO E-102 FOR LOCATION OF EQUIPMENT ON CANOPY ROOF.

NOT IN SCOPE

SOLAR ARRAY PANEL 1 (NEW PANEL)

TYPE..... NEMA 3R
SERVICE..... 277/480 VOLTS, 3-PHASE, 4-WIRE
MAIN BUS..... 400 A
MAINS..... MAIN CIRCUIT BREAKER (400A)

MOUNTING..... SURFACE MOUNTED ON RACK
FED BY..... LV SWITCHBOARD
LOCATION..... CANOPY AREA
REF. DWG. NO. E301
INTER. RATING (KAIC)..... 22

SERVICE	VOLT-AMPERES Ph-A	Ph-B	Ph-C	TRIP	CKT NO.	SN	CKT NO.	TRIP	VOLT-AMPERES Ph-A	Ph-B	Ph-C	SERVICE
SOLAR ARRAY #1	-			100	1		2		-			
		-			3		4	100		-		SOLAR ARRAY #3
			-		5		6				-	
SOLAR ARRAY #2	-			100	7		8		-			
		-			9		10	100		-		SPARE
			-		11		12				-	
SPARE	-			20	13		14	20	-			SPARE
SPARE		-		20	15		16	20		-		SPARE
SPARE			-	20	17		18	20			-	SPARE
SPARE	-			20	19		20	20	-			SPARE
SPARE		-		20	21		22	20		-		SPARE
SPARE			-	20	23		24	20			-	SPARE
SPARE	-			20	25		26	20	-			
SPARE		-		20	27		28	20		-		SURGE PROTECTION CVX-100-208Y OR APPROVED EQUAL
SPARE			-	20	29		30	20			-	
SUB-TOTAL CONNECTED LOAD [AMPS]	6000	5700	6000			GND. BUS			1020	660	1280	SUB-TOTAL CONNECTED LOAD [AMPS]
SUB-TOTAL DEMAND LOAD												SUB-TOTAL DEMAND LOAD
					CONNECTED VA AØ				7020			
					CONNECTED VA BØ				6360			
					CONNECTED VA CØ				7280			
					TOTAL CONNECTED VA				20660			
					TOTAL AMPS [A]				57.3			

PANEL PP3 (EXISTING PANEL)

TYPE..... NEMA 3R
SERVICE..... 277/480 VOLTS, 3-PHASE, 4-WIRE
MAIN BUS..... 100 A
MAINS..... MAIN CIRCUIT BREAKER (100A)

MOUNTING..... SURFACE MOUNTED ON CMU WALL
FED BY..... EXISTING LP1 TRANSFER SW
LOCATION..... MAINTENANCE CANOPY AREA
REF. DWG. NO. E301
INTER. RATING (KAIC)..... 22

SERVICE	VOLT-AMPERES Ph-A	Ph-B	Ph-C	TRIP	CKT NO.	SN	CKT NO.	TRIP	VOLT-AMPERES Ph-A	Ph-B	Ph-C	SERVICE
FLOOR SWEEPER (E)	5000			100	1		2	100	5000			
		5000			3		4			5000		SCISSOR PLATFORM (E)
			5000		5		6				5000	
DIESEL PUMP (E)	900			100	7		8	100	900			
		900			9		10			900		DIESEL PUMP (E)
			900		11		12				900	
COMPRESSOR (E)	3900			20	13		14	20	2100			
		3900		20	15		16	20		2100		VACUUM (E)
			3900	20	17		18	20			2100	
TRANSFORMER T-2 (E)	700			20	19		20	20	1900			SERVICE ISL LTG (E)
		700		20	21		22	20		900		SERVICE CANOPY LTG (E)
			700	20	23		24	20			-	SPACE
TEMPORARY TRAILER (N)	8300			20	25		26	20	-			SPACE
		8300		20	27		28	20		-		SPACE
			8300	20	29		30	20			-	SPACE
SUB-TOTAL CONNECTED LOAD [AMPS]	18800	18800	18800			GND. BUS			9900	8900	8000	SUB-TOTAL CONNECTED LOAD [AMPS]
SUB-TOTAL DEMAND LOAD												SUB-TOTAL DEMAND LOAD
					CONNECTED VA AØ				20400			
					CONNECTED VA BØ				19400			
					CONNECTED VA CØ				18500			
					TOTAL CONNECTED VA				83200			
					TOTAL AMPS [A]				100.0			

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PANEL SCHEDULES 1

E501

AC PANEL 1 (NEW PANEL)

TYPE..... NEMA 3R
SERVICE..... 277/480 VOLTS, 3-PHASE, 4-WIRE
MAIN BUS..... 800 A
MAINS..... MAIN CIRCUIT BREAKER (800A)

MOUNTING..... SUFRFACE MOUNTED ON RACK
FED BY..... MAIN SWITCHBOARD #1
LOCATION..... CANOPY AREA
REF. DWG. NO. E601
INTER. RATING (KAIC)..... 100

SERVICE	VOLT-AMPERES Ph-A	Ph-B	Ph-C	TRIP	CKT NO.	SN	CKT NO.	TRIP	VOLT-AMPERES Ph-A	Ph-B	Ph-C	SERVICE
AC BUS CHARGING STATION #1	26667				1		2		72000			
		26667		125	3		4	350		72000		CHARGEPOINT BUS CHARGING STATION #10 (FUTURE)
			26667		5		6				72000	
AC BUS CHARGING STATION #2	26667				7		8		72000			
		26667		125	9		10	350		72000		CHARGEPOINT BUS CHARGING STATION #11 (FUTURE)
			26667		11		12				72000	
SPARE	-			20	13		14	20	-			
		-		20	15		16	20		-		SPARE
			-	20	17		18	20			-	
SPARE	-			20	19		20	20	-			
		-		20	21		22	20		-		SPARE
			-	20	23		24	20			-	
SPARE	-			20	25		26	20	-			
		-		20	27		28	20		-		SPARE
			-	20	29		30	20			-	
SPARE	-			20	31		32	20	-			
		-		20	33		34	20		-		SPARE
			-	20	35		36	20			-	
SPARE	-			20	37		38	-	-			
		-		20	39		40	-		-		SURGE PROTECTION CVX-100-208Y OR APPROVED EQUAL
			-	20	41		42	-			-	
SUB-TOTAL CONNECTED LOAD [VA]	53334	53334	53334			GND. BUS			144000	144000	144000	SUB-TOTAL CONNECTED LOAD [AMPS]
CONNECTED VA AØ	197334			CALCULATION VA AØ					177152			
CONNECTED VA BØ	197334			CALCULATION VA BØ					177152			
CONNECTED VA CØ	197334			CONNECTION VA CØ					177152			
TOTAL CONNECTED VA	592002			TOTAL CALCULATED VA					531456			
TOTAL AMPS [A]	712.9*			TOTAL CALCULATED AMPS [A]					640			

NOTE: CHARGE MANAGEMENT SYSTEM PROVIDED BY OWNER SHALL MAINTAIN OPERATING LOAD AT OR BELOW 640A IN ACCORDANCE WITH NEC 625.42.

AC PANEL 2 (NEW PANEL)

TYPE..... NEMA 3R
SERVICE..... 277/480 VOLTS, 3-PHASE, 4-WIRE
MAIN BUS..... 800 A
MAINS..... MAIN CIRCUIT BREAKER (800A)

MOUNTING..... SURFACE MOUNTED ON RACK
FED BY..... MAIN SWITCHBOARD #1
LOCATION..... CANOPY AREA
REF. DWG. NO. E601
INTER. RATING (KAIC)..... 100

SERVICE	VOLT-AMPERES Ph-A	Ph-B	Ph-C	TRIP	CKT NO.	SN	CKT NO.	TRIP	VOLT-AMPERES Ph-A	Ph-B	Ph-C	SERVICE
AC BUS CHARGING STATION #3	26667				1		2		72000			
		26667		125	3		4	350		72000		CHARGEPOINT BUS CHARGING STATION #12 (FUTURE)
			26667		5		6				72000	
AC BUS CHARGING STATION #4	26667				7		8		72000			
		26667		125	9		10	350		72000		CHARGEPOINT BUS CHARGING STATION #13 (FUTURE) 6
			26667		11		12				72000	
AC BUS CHARGING STATION #5	26667				13		14	20	-			
		26667		350	15		16	20		-		SPARE
			26667		17		18	20			-	
SPARE	-			20	19		20	20	-			
		-		20	21		22	20		-		SPARE
			-	20	23		24	20			-	
SPARE	-			20	25		26	20	-			
		-		20	27		28	20		-		SPARE
			-	20	29		30	20			-	
SPARE	-			20	31		32	20	-			
		-		20	33		34	20		-		SPARE
			-	20	35		36	20			-	
SPARE	-			20	37		38	-	-			
		-		20	39		40	-		-		SURGE PROTECTION CVX-100-208Y OR APPROVED EQUAL
			-	20	41		42	-			-	
SUB-TOTAL CONNECTED LOAD [VA]	80000	80000	80000			GND. BUS			144000	144000	144000	SUB-TOTAL CONNECTED LOAD [AMPS]
CONNECTED VA AØ	224000			CALCULATION VA AØ					177152			
CONNECTED VA BØ	224000			CALCULATION VA BØ					177152			
CONNECTED VA CØ	224000			CONNECTION VA CØ					177152			
TOTAL CONNECTED VA	672000			TOTAL CALCULATED VA					531456			
TOTAL AMPS [A]	809.2*			TOTAL CALCULATED AMPS [A]					640			

NOTE: CHARGE MANAGEMENT SYSTEM PROVIDED BY OWNER SHALL MAINTAIN OPERATING LOAD AT OR BELOW 640A IN ACCORDANCE WITH NEC 625.42.

AC PANEL 3 (NEW PANEL)

TYPE..... NEMA 3R
SERVICE..... 277/480 VOLTS, 3-PHASE, 4-WIRE
MAIN BUS..... 800 A
MAINS..... MAIN CIRCUIT BREAKER (800A)

MOUNTING..... SURFACE MOUNTED ON RACK
FED BY..... MAIN SWITCHBOARD #1
LOCATION..... CANOPY AREA
REF. DWG. NO. E601
INTER. RATING (KAIC)..... 100

SERVICE	VOLT-AMPERES Ph-A	Ph-B	Ph-C	TRIP	CKT NO.	SN	CKT NO.	TRIP	VOLT-AMPERES Ph-A	Ph-B	Ph-C	SERVICE
CHARGEPOINT BUS CHARGING STATION #1	72000				1		2		72000			
		72000		350	3		4	350		72000		CHARGEPOINT BUS CHARGING STATION #2
			72000		5		6				72000	
CHARGEPOINT BUS CHARGING STATION #3	72000				7		8	20	-			
		72000		350	9		10	20		-		SPARE
			72000		11		12	20			-	
SPARE	-			20	13		14	20	-			
		-		20	15		16	20		-		SPARE
			-	20	17		18	20			-	
SPARE	-			20	19		20	20	-			
		-		20	21		22	20		-		SPARE
			-	20	23		24	20			-	
SPARE	-			20	25		26	20	-			
		-		20	27		28	20		-		SPARE
			-	20	29		30	20			-	
SPARE	-			20	31		32	20	-			
		-		20	33		34	20		-		SPARE
			-	20	35		36	20			-	
SPARE	-			20	37		38	-	-			
		-		20	39		40	-		-		SURGE PROTECTION CVX-100-208Y OR APPROVED EQUAL
			-	20	41		42	-			-	
SUB-TOTAL CONNECTED LOAD [VA]	144000	144000	144000			GND. BUS			72000	72000	72000	SUB-TOTAL CONNECTED LOAD [AMPS]
CONNECTED VA AØ	216000			CALCULATION VA AØ					177152			
CONNECTED VA BØ	216000			CALCULATION VA BØ					177152			
CONNECTED VA CØ	216000			CONNECTION VA CØ					177152			
TOTAL CONNECTED VA	648000			TOTAL CALCULATED VA					531456			
TOTAL AMPS [A]	780.3*			TOTAL CALCULATED AMPS [A]					640			

NOTE: CHARGE MANAGEMENT SYSTEM PROVIDED BY OWNER SHALL MAINTAIN OPERATING LOAD AT OR BELOW 640A IN ACCORDANCE WITH NEC 625.42.

AC PANEL 4 (NEW PANEL)

TYPE..... NEMA 3R
SERVICE..... 277/480 VOLTS, 3-PHASE, 4-WIRE
MAIN BUS..... 800 A
MAINS..... MAIN CIRCUIT BREAKER (800A)

MOUNTING..... SURFACE MOUNTED ON RACK
FED BY..... MAIN SWITCHBOARD #1
LOCATION..... CANOPY AREA
REF. DWG. NO. E601
INTER. RATING (KAIC)..... 100

SERVICE	VOLT-AMPERES Ph-A	Ph-B	Ph-C	TRIP	CKT NO.	SN	CKT NO.	TRIP	VOLT-AMPERES Ph-A	Ph-B	Ph-C	SERVICE
CHARGEPOINT BUS CHARGING STATION #4	72000				1		2		72000			
		72000		350	3		4	350		72000		CHARGEPOINT BUS CHARGING STATION #5 (FUTURE) 6
			72000		5		6				72000	
6 CHARGEPOINT BUS CHARGING STATION #6 (FUTURE)	72000				7		8	20	-			
		72000		350	9		10	20		-		SPARE
			72000		11		12	20			-	
SPARE	-			20	13		14	20	-			
		-		20	15		16	20		-		SPARE
			-	20	17		18	20			-	
SPARE	-			20	19		20	20	-			
		-		20	21		22	20		-		SPARE
			-	20	23		24	20			-	
SPARE	-			20	25		26	20	-			
		-		20	27		28	20		-		SPARE
			-	20	29		30	20			-	
SPARE	-			20	31		32	20	-			
		-		20	33		34	20		-		SPARE
			-	20	35		36	20			-	
SPARE	-			20	37		38	-	-			
		-		20	39		40	-		-		SURGE PROTECTION CVX-100-208Y OR APPROVED EQUAL
			-	20	41		42	-			-	
SUB-TOTAL CONNECTED LOAD [VA]	144000	144000	144000			GND. BUS			72000	72000	72000	SUB-TOTAL CONNECTED LOAD [AMPS]
CONNECTED VA AØ	216000			CALCULATION VA AØ					177152			
CONNECTED VA BØ	216000			CALCULATION VA BØ					177152			
CONNECTED VA CØ	216000			CONNECTION VA CØ					177152			
TOTAL CONNECTED VA	648000			TOTAL CALCULATED VA					531456			
TOTAL AMPS [A]	780.3*			TOTAL CALCULATED AMPS [A]					640			

NOTE: CHARGE MANAGEMENT SYSTEM PROVIDED BY OWNER SHALL MAINTAIN OPERATING LOAD AT OR BELOW 640A IN ACCORDANCE WITH NEC 625.42.

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DRAWING TITLE

PANEL SCHEDULES 2

E502

AC PANEL 5 (NEW PANEL)

TYPE..... NEMA 3R
SERVICE..... 277/480 VOLTS, 3-PHASE, 4-WIRE
MAIN BUS..... 800 A
MAINS..... MAIN CIRCUIT BREAKER (800A)

MOUNTING..... SURFACE MOUNTED ON RACK
FED BY..... MAIN SWITCHBOARD #1
LOCATION..... CANOPY AREA
REF. DWG. NO. E601
INTER. RATING (KAIC)..... 100

SERVICE	VOLT-AMPERES Ph-A	Ph-B	Ph-C	TRIP	CKT NO.	SN	CKT NO.	TRIP	VOLT-AMPERES Ph-A	Ph-B	Ph-C	SERVICE
CHARGEPOINT BUS CHARGING STATION #7 (FUTURE)	72000			350	1		2		72000			
		72000			3		4	350		72000		CHARGEPOINT BUS CHARGING STATION #8 (FUTURE)
			72000		5		6				72000	
CHARGEPOINT BUS CHARGING STATION #9 (FUTURE) △6	72000				7		8	20	-			△6
		72000		350	9		10	20		-		
			72000		11		12	20			-	
	-			20	13		14	20	-			
		-		20	15		16	20		-		
			-	20	17		18	20			-	
SPARE	-			20	19		20	20	-			
		-		20	21		22	20		-		SPARE
			-	20	23		24	20			-	
SPARE	-			20	25		26	20	-			
		-		20	27		28	20		-		SPARE
			-	20	29		30	20			-	
SPARE	-			20	31		32	20	-			
		-		20	33		34	20		-		SPARE
			-	20	35		36	20			-	
SPARE	-			20	37		38	-	-			
		-		20	39		40	-		-		SURGE PROTECTION CVX-100-208Y OR APPROVED EQUAL
			-	20	41		42	-			-	
SUB-TOTAL CONNECTED LOAD [VA]	144000	144000	144000			GND. BUS			72000	72000	72000	SUB-TOTAL CONNECTED LOAD [AMPS]
CONNECTED VA AØ	216000			CALCULATION VA AØ					177152			
CONNECTED VA BØ	216000			CALCULATION VA BØ					177152			
CONNECTED VA CØ	216000			CONNECTION VA CØ					177152			
TOTAL CONNECTED VA	648000			TOTAL CALCULATED VA					531456			
TOTAL AMPS [A]	780.3*			TOTAL CALCULATED AMPS [A]					640			

NOTE: CHARGE MANAGEMENT SYSTEM PROVIDED BY OWNER SHALL MAINTAIN OPERATING LOAD AT OR BELOW 640A IN ACCORDANCE WITH NEC 625.42.

AUX PANEL 1 (NEW PANEL)

TYPE..... NEMA 3R
SERVICE..... 120/208 VOLTS, 3-PHASE, 4-WIRE
MAIN BUS..... 100 A
MAINS..... MAIN CIRCUIT BREAKER (100A)

MOUNTING..... SURFACE MOUNTED ON RACK
FED BY..... MAIN SWITCHBOARD #1
LOCATION..... CANOPY AREA
REF. DWG. NO. E601
INTER. RATING (KAIC)..... 22

SERVICE	VOLT-AMPERES Ph-A	Ph-B	Ph-C	TRIP	CKT NO.	SN	CKT NO.	TRIP	VOLT-AMPERES Ph-A	Ph-B	Ph-C	SERVICE
CHARGER DISPENSER PANEL 1	300			20	1		2	20	300			CHARGER DISPENSER PANEL 6
ELECTRIC HOIST RETRACTOR 1		1700		20	3		4	20		1700		ELECTRIC HOIST RETRACTOR 6
ANTENNA CONTROLLER 1			100	20	5		6	20			100	ANTENNA CONTROLLER 6
CONTROLLER JUNCTION BOX 1	100			20	7		8	20	100			CONTROLLER JUNCTION BOX 6
CHARGER DISPENSER PANEL 2		300		20	9		10	20		300		CHARGER DISPENSER PANEL 7
ELECTRIC HOIST RETRACTOR 2			1700	20	11		12	20			1700	ELECTRIC HOIST RETRACTOR 7
ANTENNA CONTROLLER 2	100			20	13		14	20	100			ANTENNA CONTROLLER 7
CONTROLLER JUNCTION BOX 2		100		20	15		16	20		100		CONTROLLER JUNCTION BOX 7
CHARGER DISPENSER PANEL 3			300	20	17		18	20			300	CHARGER DISPENSER PANEL 8
ELECTRIC HOIST RETRACTOR 3	1700			20	19		20	20	1700			ELECTRIC HOIST RETRACTOR 8
ANTENNA CONTROLLER 3		100		20	21		22	20		100		ANTENNA CONTROLLER 8
CONTROLLER JUNCTION BOX 3			100	20	23		24	20			100	CONTROLLER JUNCTION BOX 8
CHARGER DISPENSER PANEL 4	300			20	25		26	20	300			CHARGER DISPENSER PANEL 9
ELECTRIC HOIST RETRACTOR 4		1700		20	27		28	20		1700		ELECTRIC HOIST RETRACTOR 9
ANTENNA CONTROLLER 4			100	20	29		30	20			100	ANTENNA CONTROLLER 9
CONTROLLER JUNCTION BOX 4	100			20	31		32	20	100			CONTROLLER JUNCTION BOX 9
CHARGER DISPENSER PANEL 5		300		20	33		34	20		-		SPARE
ELECTRIC HOIST RETRACTOR 5			1700	20	35		36	20			-	SPARE
ANTENNA CONTROLLER 5	100			20	37		38	-	-			
CONTROLLER JUNCTION BOX 5		100		20	39		40	-		-		SURGE PROTECTION CVX-100-208Y OR APPROVED EQUAL
SPARE			-	20	41		42	-			-	
SUB-TOTAL CONNECTED LOAD [VA]	2700	4300	4000			GND. BUS			2600	3900	2300	SUB-TOTAL CONNECTED LOAD [VA]
SUB-TOTAL DEMAND LOAD												SUB-TOTAL DEMAND LOAD
				CONNECTED VA AØ					5300			
				CONNECTED VA BØ					8200			
				CONNECTED VA CØ					6300			
				TOTAL CONNECTED VA					19800			
				TOTAL AMPS [A]					55.0			

AUX PANEL 2 (NEW PANEL)

TYPE..... NEMA 3R
SERVICE..... 120/208 VOLTS, 3-PHASE, 4-WIRE
MAIN BUS..... 100 A
MAINS..... MAIN CIRCUIT BREAKER (100A)

MOUNTING..... SURFACE MOUNTED ON RACK
FED BY..... MAIN SWITCHBOARD #1
LOCATION..... CANOPY AREA
REF. DWG. NO. E601
INTER. RATING (KAIC)..... 22

SERVICE	VOLT-AMPERES Ph-A	Ph-B	Ph-C	TRIP	CKT NO.	SN	CKT NO.	TRIP	VOLT-AMPERES Ph-A	Ph-B	Ph-C	SERVICE
CHARGER DISPENSER PANEL 10	300			20	1		2	20	300			CHARGER DISPENSER PANEL 15 (F)
ELECTRIC HOIST RETRACTOR 10		1700		20	3		4	20		1700		ELECTRIC HOIST RETRACTOR 15 (F)
ANTENNA CONTROLLER 10			100	20	5		6	20			100	ANTENNA CONTROLLER 15 (F)
CONTROLLER JUNCTION BOX 10	100			20	7		8	20	100			CONTROLLER JUNCTION BOX 15 (F)
CHARGER DISPENSER PANEL 11		300		20	9		10	20		300		CHARGER DISPENSER PANEL 16 (F)
ELECTRIC HOIST RETRACTOR 11			1700	20	11		12	20			1700	ELECTRIC HOIST RETRACTOR 16 (F)
ANTENNA CONTROLLER 11	100			20	13		14	20	100			ANTENNA CONTROLLER 16 (F)
CONTROLLER JUNCTION BOX 11		100		20	15		16	20		100		CONTROLLER JUNCTION BOX 16 (F)
CHARGER DISPENSER PANEL 12			300	20	17		18	20			300	CHARGER DISPENSER PANEL 17 (F)
ELECTRIC HOIST RETRACTOR 12	1700			20	19		20	20	1700			ELECTRIC HOIST RETRACTOR 17 (F)
ANTENNA CONTROLLER 12		100		20	21		22	20		100		ANTENNA CONTROLLER 17 (F)
CONTROLLER JUNCTION BOX 12			100	20	23		24	20			100	CONTROLLER JUNCTION BOX 17 (F)
CHARGER DISPENSER PANEL 13	300			20	25		26	20	300			CHARGER DISPENSER PANEL 18 (F)
ELECTRIC HOIST RETRACTOR 13		1700		20	27		28	20		1700		ELECTRIC HOIST RETRACTOR 18 (F)
ANTENNA CONTROLLER 13			100	20	29		30	20			100	ANTENNA CONTROLLER 18 (F)
CONTROLLER JUNCTION BOX 13	100			20	31		32	20	100			CONTROLLER JUNCTION BOX 18 (F)
CHARGER DISPENSER PANEL 14 (F) △6		300		20	33		34	20		-		SPARE
ELECTRIC HOIST RETRACTOR 14 (F) △6			1700	20	35		36	20			-	SPARE
ANTENNA CONTROLLER 14 (F) △6	100			20	37		38	-	-			
CONTROLLER JUNCTION BOX 14 (F) △6		100		20	39		40	-		-		SURGE PROTECTION CVX-100-208Y OR APPROVED EQUAL
SPARE			-	20	41		42	-			-	
SUB-TOTAL CONNECTED LOAD [VA]	2700	4300	4000			GND. BUS			2600	3900	2300	SUB-TOTAL CONNECTED LOAD [VA]
SUB-TOTAL DEMAND LOAD												SUB-TOTAL DEMAND LOAD
				CONNECTED VA AØ					5300			
				CONNECTED VA BØ					8200			
				CONNECTED VA CØ					6300			
				TOTAL CONNECTED VA					19800			
				TOTAL AMPS [A]					55.0			

AUX PANEL 3 (NEW PANEL)

TYPE..... NEMA 3R
SERVICE..... 120/208 VOLTS, 3-PHASE, 4-WIRE
MAIN BUS..... 100 A
MAINS..... MAIN CIRCUIT BREAKER (100A)

MOUNTING..... SURFACE MOUNTED ON RACK
FED BY..... MAIN SWITCHBOARD #1
LOCATION..... CANOPY AREA
REF. DWG. NO. E601
INTER. RATING (KAIC)..... 22

SERVICE	VOLT-AMPERES Ph-A	Ph-B	Ph-C	TRIP	CKT NO.	SN	CKT NO.	TRIP	VOLT-AMPERES Ph-A	Ph-B	Ph-C	SERVICE
CHARGER DISPENSER PANEL 19 (F)	300			20	1		2	20	300			HEATER MAIN SWBD 1 - CABINET #1
ELECTRIC HOIST RETRACTOR 19 (F)		1700		20	3		4	20		300		HEATER MAIN SWBD 1 - CABINET #2
ANTENNA CONTROLLER 19 (F)			100	20	5		6	20			300	HEATER MAIN SWBD 1 - CABINET #3
WIRELESS BUS SENSOR 19 (F)	100			20	7		8	20	300			HEATER MAIN SWBD 1 - CABINET #4
CHARGER DISPENSER PANEL 20 (F)		300		20	9		10	20		300		HEATER MAIN SWBD 1 - CABINET #5
ELECTRIC HOIST RETRACTOR 20 (F) △6			1700	20	11		12	20			300	HEATER MAIN SWBD 1 - CABINET #6
ANTENNA CONTROLLER 20 (F)	100			20	13		14	20	300			HEATER MAIN SWBD 1 - CABINET #7
WIRELESS BUS SENSOR 20 (F)		100		20	15		16	20		300		HEATER MAIN SWBD 1 - CABINET #8
CHARGER DISPENSER PANEL 21 (F)			300	20	17		18	20			100	THERMOSTAT MAIN SWBD 1 - CAB. #1
ELECTRIC HOIST RETRACTOR 21 (F)	1700			20	19		20	20	100			THERMOSTAT MAIN SWBD 1 - CAB. #2
ANTENNA CONTROLLER 21 (F)		100		20	21		22	20		100		THERMOSTAT MAIN SWBD 1 - CAB. #3
WIRELESS BUS SENSOR 21 (F)			100	20	23		24	20			100	THERMOSTAT MAIN SWBD 1 - CAB. #4
HOIST RETRACTOR OVERRIDE CTRL 01	100			20	25		26	20	100			THERMOSTAT MAIN SWBD 1 - CAB. #5
HOIST RETRACTOR OVERRIDE CTRL 02		100		20	27		28	20		100		THERMOSTAT MAIN SWBD 1 - CAB. #6
HOIST RETRACTOR OVERRIDE CTRL 03			100	20	29		30	20			100	THERMOSTAT MAIN SWBD 1 - CAB. #7
HOIST RETRACTOR OVERRIDE CTRL 04	100			20	31		32	20	100			THERMOSTAT MAIN SWBD 1 - CAB. #8
HOIST RETRACTOR OVERRIDE CTRL 05		100		20	33		34	20		1080		ROOFTOP RECEPTACLE CIRCUIT
HOIST RETRACTOR OVERRIDE CTRL 06			100	20	35		36	20			1080	ROOFTOP RECEPTACLE CIRCUIT
HOIST RETRACTOR OVERRIDE CTRL 07	100			20	37		38	-	-			
HOIST RETRACTOR OVERRIDE CTRL 08		100		20	39		40	-		-		SURGE PROTECTION CVX-100-208Y OR APPROVED EQUAL
HOIST RETRACTOR OVERRIDE CTRL 09			100	20	41		42	-			-	
SUB-TOTAL CONNECTED LOAD [VA]	2500	2500	2500			GND. BUS			1200	2180	1980	SUB-TOTAL CONNECTED LOAD [VA]
SUB-TOTAL DEMAND LOAD												SUB-TOTAL DEMAND LOAD
				CONNECTED VA AØ					3700			
				CONNECTED VA BØ					4680			
				CONNECTED VA CØ					4480			
				TOTAL CONNECTED VA					12680			
				TOTAL AMPS [A]					35.2			

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LICENSED PROFESSIONAL ENGINEER
ANDREW KC MILLAN
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ELECTRICAL
STATE OF CALIFORNIA
5/26/2023

PROJECT TITLE

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PROJECT NO.	189247
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DRAWING TITLE

PANEL SCHEDULES 3

E503

LIGHTING PANEL LP-1 (NEW PANEL) 6

TYPE..... NEMA 3R
SERVICE..... 120/208 VOLTS, 3-PHASE, 4-WIRE
MAIN BUS..... 125 A
MAINS..... MAIN CIRCUIT BREAKER (100A)

MOUNTING..... SURFACE MOUNTED ON RACK
FED BY..... AC AUX PANEL
LOCATION..... CANOPY A
REF. DWG. NO. E601
INTER. RATING (KAIC)..... 22

SERVICE	VOLT-AMPERES Ph-A	Ph-B	Ph-C	TRIP	CKT NO.	SN	CKT NO.	TRIP	VOLT-AMPERES Ph-A	Ph-B	Ph-C	SERVICE
LIGHTING CIRCUIT 1	319			20	1		2	20	225			ROOF LIGHTING CIRCUIT
LIGHTING CIRCUIT 2		319		20	3		4	20		225		ROOF LIGHTING CIRCUIT
LIGHTING CIRCUIT 3			293	20	5		6	20			80	BRIDGE LIGHTING CIRCUIT
LIGHTING CIRCUIT 4	293			20	7		8	20	100			LIGHTING CIRCUIT - BATTERY BACKUP
LIGHTING CIRCUIT 5		293		20	9		10	20		100		LIGHTING CIRCUIT - BATTERY BACKUP
LIGHTING CIRCUIT 6			293	20	11		12	20			100	SPARE
LIGHTING CIRCUIT 7	410			20	13		14	20	-			SPARE
LIGHTING CIRCUIT 8		410		20	15		16	20		-		SPARE
LIGHTING CIRCUIT 9			213	20	17		18	20			-	SPARE
LIGHTING CIRCUIT 10	213			20	19		20	20	-			SPARE
LIGHTING CIRCUIT 11		213		20	21		22	20		-		SPARE
DIGITAL TIME CLOCK			250	20	23		24	20			-	SPARE
CONTROL DEVICE POWER SUPPLY	250			20	25		26	20	-			SURGE PROTECTION CVX-100-208Y OR APPROVED EQUAL
BRIDGE LIGHTING CIRCUIT		-		20	27		28	20		-		
ROOF RECEPTACLE CIRCUIT			-	20	29		30	20			-	
SUB-TOTAL CONNECTED LOAD [VA]	1485	1235	1049			GND. BUS			575	575	575	SUB-TOTAL CONNECTED LOAD [VA]
SUB-TOTAL DEMAND LOAD												SUB-TOTAL DEMAND LOAD
				CONNECTED VA AØ					3115			
				CONNECTED VA BØ					2935			
				CONNECTED VA CØ					3200			
				TOTAL CONNECTED VA					9250			
				TOTAL AMPS [A]					25.7			

LIGHTING PANEL LP-2 (FUTURE)

TYPE..... NEMA 3R
SERVICE..... 120/208 VOLTS, 3-PHASE, 4-WIRE
MAIN BUS..... 125 A
MAINS..... MAIN CIRCUIT BREAKER (100A)

MOUNTING..... SURFACE MOUNTED ON RACK
FED BY..... AC AUX PANEL
LOCATION..... CANOPY AREA
REF. DWG. NO. E601
INTER. RATING (KAIC)..... 22

SERVICE	VOLT-AMPERES Ph-A	Ph-B	Ph-C	TRIP	CKT NO.	SN	CKT NO.	TRIP	VOLT-AMPERES Ph-A	Ph-B	Ph-C	SERVICE
LIGHTING CIRCUIT 12	213			20	1		2	20	80			ROOF LIGHTING CIRCUIT
LIGHTING CIRCUIT 13		213		20	3		4	20		720		ROOF RECEPTACLE CIRCUIT
LIGHTING CIRCUIT 14			213	20	5		6	20			155	ROOF LIGHTING CIRCUIT
LIGHTING CIRCUIT 15	213			20	7		8	20	-			SPARE
LIGHTING CIRCUIT 16		213		20	9		10	20		52		BRIDGE LIGHTING CIRCUIT
LIGHTING CIRCUIT 17			213	20	11		12	20			100	LIGHTING CIRCUIT - BATTERY BACKUP
SPARE	160			20	13		14	20	100			LIGHTING CIRCUIT - BATTERY BACKUP
SPARE		185		20	15		16	20		720		ROOF RECEPTACLE CIRCUIT
SPARE			160	20	17		18	20			-	SPARE
SPARE	185			20	19		20	20	-			DIGITAL TIME CLOCK (FUTURE)
SPARE		-		20	21		22	20		-		CONTROL DEVICE POWER (FUTURE)
SPARE			-	20	23		24	20			-	SPARE
SPARE	-			20	25		26	20	-			SURGE PROTECTION CVX-100-208Y OR APPROVED EQUAL
SPARE		-		20	27		28	20		-		
SPARE			-	20	29		30	20			-	
SUB-TOTAL CONNECTED LOAD [VA]	1610	1860	1610			GND. BUS			410	1595	255	SUB-TOTAL CONNECTED LOAD [VA]
SUB-TOTAL DEMAND LOAD												SUB-TOTAL DEMAND LOAD
				CONNECTED VA AØ					2020			
				CONNECTED VA BØ					3455			
				CONNECTED VA CØ					1865			
				TOTAL CONNECTED VA					7340			
				TOTAL AMPS [A]					20.4			

NOTES
1. BASIS OF LIGHTING CONTROL SYSTEM IS SENSOR SWITCH NLIGHT. NEW LIGHTING CONTROL SYSTEM SHALL BE NLIGHT OR EQUIVALENT. NEW LUMINAIRES SHALL BE NLIGHT ENCABLED, TO ACCEPT NLIGHT LIGHTING CONTROL SYSTEM, OR EQUIVALENT.
2. CAT 5e CABLE CONNECTS ALL LIGHTING CONTROL DEVICES TOGETHER.
3. LIGHTING CONTROL DEVICES ON TOP OF CANOPY SHALL BE INSTALLED WITHIN A NEMA 3R ENCLOSURE.
4. LIGHTING CONTROL SCHEME:
   CANOPY LIGHTING
   DIGITAL TIMER TURNS OFF LIGHTING DURING DAYLIGHT HOURS AND REDUCES LIGHTING DURING NON-DAYLIGHT HOURS.
   LIGHTING CAN BE TURNED OFF FULLY FROM LIGHT SWITCH IN LIGHTING CONTROL \ ENCLOSURE
   ROOF LIGHTING
   LIGHTING IS NORMALLY OFF UNTIL MAINTENANCE STAFF TURNS ON LIGHTING FROM LIGHT SWITCH WITH WEATHERPROOF COVER. THE LIGHTING WILL REMAIN ON FOR A SET PERIOD OF TIME. AFTER THAN PERIOD, THE LIGHTS WILL INDICATE THAT THEY ARE ABOUT TO TURN OFF. THE MAINTENANCE PERSONNEL ON THE ROOF WILL HAVE TO ACTIVATE THE LIGHTING TO ENSURE IT DOES NOT TURN OFF.

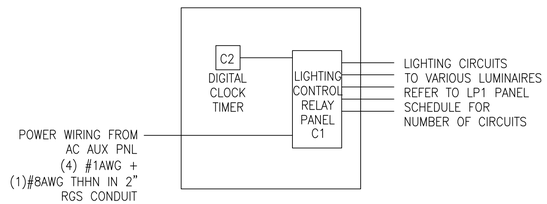
LIGHTING SCHEDULE

ITEM	DESCRIPTION	MANUFACTURER	PART NUMBER	WATTS	VOLTS	LUMINAIRE TYPE	MOUNTING
A1	PARKING LOT LIGHITNG	LITHONIA LIGHTING	VCPG-LED-P1-40K-80CRI-T5M-MVOLT-DNAXD-NLTAIR2-PIRH924	27	PARKING LOT LIGHITNG	LITHONIA LIGHTING	VCPG-LED-P1-40K80-T5M-MVOLT
A2	WALL WASH LIGHTING	LITHONIA LIGHTING	WDGE2-P3-40K-90CRI-VW-MVOLT-PE-DNAXD-NLTAIR2-PIRH924	10	WALL WASH LIGHTING	LITHONIA LIGHTING	WDGE2-P3-40K-90CRI-VW-MVOLT

LIGHTING CONTROL SCHEDULE

ITEM	DESCRIPTION	MANUFACTURER	PART NUMBER	QUANTITY	LOCATION	MOUNTING
C1	LIGHTING CONTROL PANEL	SENSOR SWITCH	ARP INTENC16NLT 16FCR MVOLT 1VB SC SM	1	TOP OF CANOPY	WITHIN NEMA 3R ENCLOSURE
C2	TIMER CONTROLS	SENSOR SWITCH	NDTC-WH	1	TOP OF CANOPY	WITHIN NEMA 3R ENCLOSURE
C3	POWER SUPPLY	SENSOR SWITCH	PS 150	1	TOP OF CANOPY	WITHIN NEMA 3R ENCLOSURE
C4	LIGHTING SWITCH	SENSOR SWITCH	NPODM	1	TOP OF CANOPY	WITHIN NEMA 3R ENCLOSURE

LIGHTING CONTROLS IN NEMA 3R ENCLOSURE ON TOP OF CANOPY



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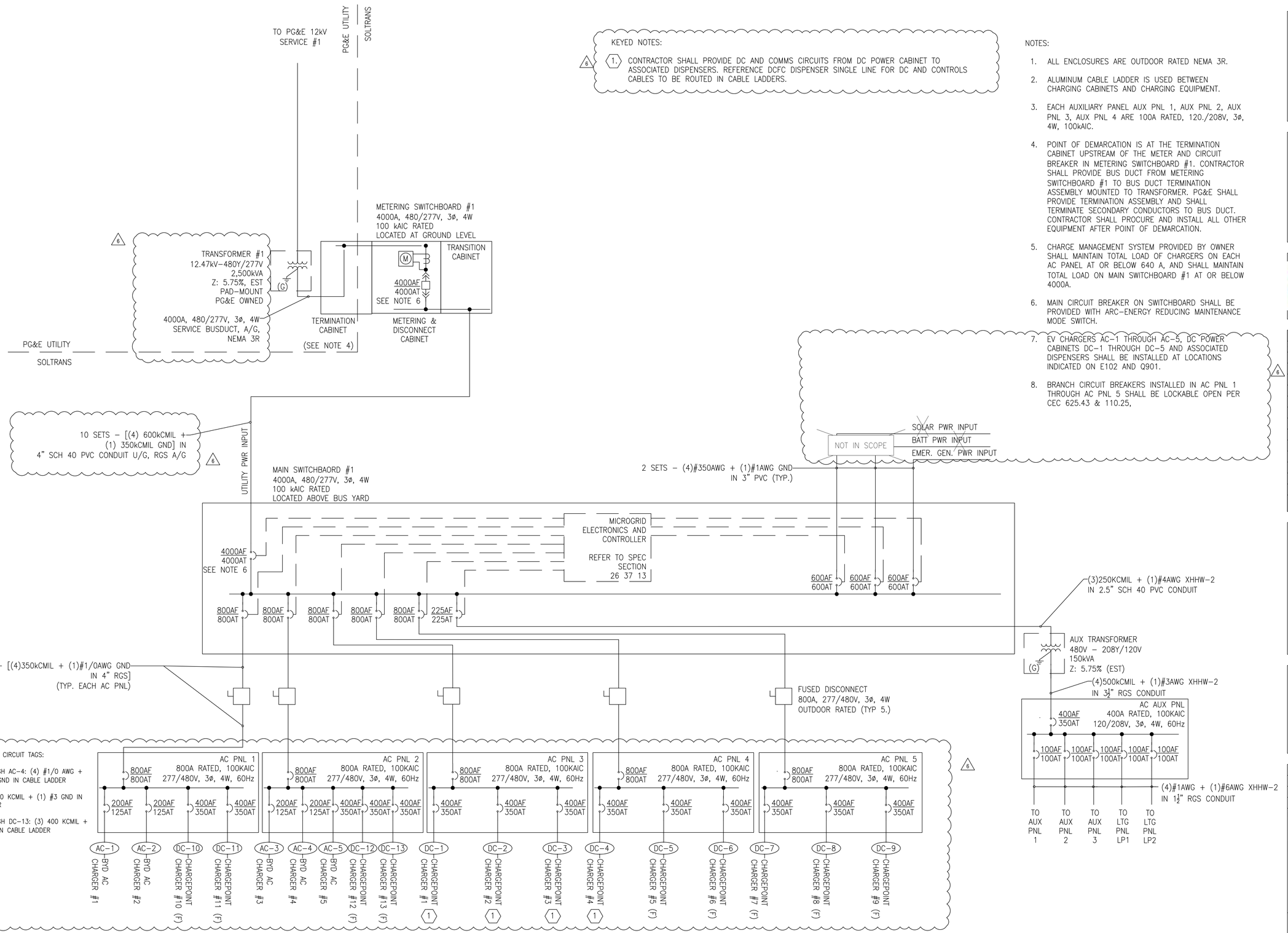
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PANEL SCHEDULES 4 AND LIGHTING SCHEDULES

E504



KEYED NOTES:

6 1. CONTRACTOR SHALL PROVIDE DC AND COMMS CIRCUITS FROM DC POWER CABINET TO ASSOCIATED DISPENSERS. REFERENCE DCFC DISPENSER SINGLE LINE FOR DC AND CONTROLS CABLES TO BE ROUTED IN CABLE LADDERS.

NOTES:

1. ALL ENCLOSURES ARE OUTDOOR RATED NEMA 3R.
2. ALUMINUM CABLE LADDER IS USED BETWEEN CHARGING CABINETS AND CHARGING EQUIPMENT.
3. EACH AUXILIARY PANEL AUX PNL 1, AUX PNL 2, AUX PNL 3, AUX PNL 4 ARE 100A RATED, 120./208V, 3ø, 4W, 100kAIC.
4. POINT OF DEMARCATION IS AT THE TERMINATION CABINET UPSTREAM OF THE METER AND CIRCUIT BREAKER IN METERING SWITCHBOARD #1. CONTRACTOR SHALL PROVIDE BUS DUCT FROM METERING SWITCHBOARD #1 TO BUS DUCT TERMINATION ASSEMBLY MOUNTED TO TRANSFORMER. PG&E SHALL PROVIDE TERMINATION ASSEMBLY AND SHALL TERMINATE SECONDARY CONDUCTORS TO BUS DUCT. CONTRACTOR SHALL PROCURE AND INSTALL ALL OTHER EQUIPMENT AFTER POINT OF DEMARCATION.
5. CHARGE MANAGEMENT SYSTEM PROVIDED BY OWNER SHALL MAINTAIN TOTAL LOAD OF CHARGERS ON EACH AC PANEL AT OR BELOW 640 A, AND SHALL MAINTAIN TOTAL LOAD ON MAIN SWITCHBOARD #1 AT OR BELOW 4000A.
6. MAIN CIRCUIT BREAKER ON SWITCHBOARD SHALL BE PROVIDED WITH ARC–ENERGY REDUCING MAINTENANCE MODE SWITCH.
7. EV CHARGERS AC–1 THROUGH AC–5, DC POWER CABINETS DC–1 THROUGH DC–5 AND ASSOCIATED DISPENSERS SHALL BE INSTALLED AT LOCATIONS INDICATED ON E102 AND Q901.
8. BRANCH CIRCUIT BREAKERS INSTALLED IN AC PNL 1 THROUGH AC PNL 5 SHALL BE LOCKABLE OPEN PER CEC 625.43 & 110.25,

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STATE OF CALIFORNIA
5/26/2023

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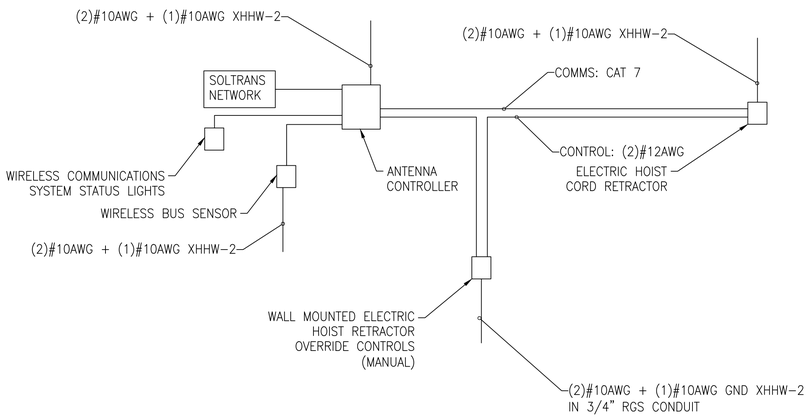
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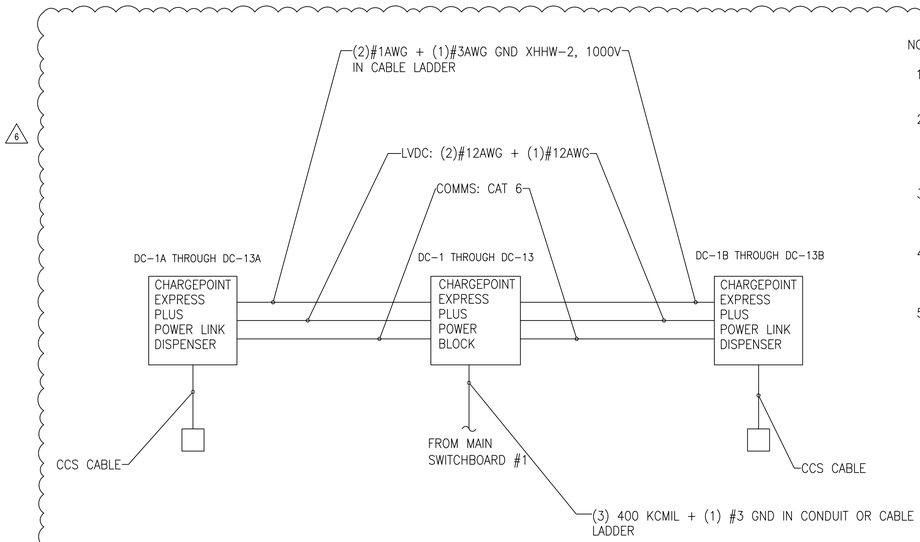
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SINGLE LINE DIAGRAM - 1

E601



RETRACTOR CONTROL SYSTEM ONE LINE DIAGRAM



DC FAST CHARGER DISPENSER ONE LINE DIAGRAM

NOTES:

1. REFER TO Q902 FOR DESCRIPTION OF OPERATION FOR CHARGING STATION.
2. ALUMINUM CABLE LADDER IS USED FOR ROUTING CABLES ON TOP OF THE CANOPY PLATFORM AND FROM EQUIPMENT ON THE PLATFORM TO SUSPENDED EQUIPMENT.
3. CABLES BETWEEN CABLE LADDER AND DISPENSERS OR AC CHARGERS SHALL NOT BE LONGER THAN 6 FEET AND MUST BE SUPPORTED AND SECURED
4. RGS CONDUIT IS USED BETWEEN CHARGING CABINETS AND ANCILLARY CHARGING EQUIPMENT FOR COMMUNICATIONS WIRING.
5. CHARGING STATION ONE LINE DIAGRAM APPLIES ONLY TO CHARGERS DC-1 THROUGH DC-13 AS SHOWN IN Q901

CABLE & CONDUIT SCHEDULE

ITEM	CABLE	CONDUIT	FROM	TO
A	(4)#1AWG + (1)#3AWG GND - XHHW	1 1/2" RGS	AC PANEL (TYPICAL)	CHARGING CABINET
B	CAT 7 - COMMUNICATIONS	3/4" RGS	ANTENNA CONTROLLER	ELECTRIC HOIST CORD RETRACTOR
C	(2)#10AWG + (1)#10AWG GND - XHHW	3/4" RGS	AUX PANEL (TYPICAL)	ELECTRIC HOIST CORD RETRACTOR
D	(2)#12AWG + (1) #12AWG GND - XHHW	3/4" RGS	AUX PANEL (TYPICAL)	ELECTRIC HOIST CORD RERACTOR CONTROL
E	(2)#12AWG + (1) #12AWG GND - XHHW	3/4" RGS	AUX PANEL (TYPICAL)	ANTENNA CONTROLLER
F	(2)#12AWG + (1) #12AWG GND - XHHW	3/4" RGS	AUX PANEL (TYPICAL)	WIRELESS BUS SENSOR
G	CAT 7 - COMMUNICATIONS	3/4" RGS	ANTENNA CONTROLLER	ELECTRIC HOIST CORD RERACTOR CONTROL
H	CAT 7 - COMMUNICATIONS	3/4" RGS	ANTENNA CONTROLLER	WIRELESS BUS SENSOR
I	CAT 7 - COMMUNICATIONS	3/4" RGS	ANTENNA CONTROLLER	WIRELESS COMMS SYSTEM STATUS PANEL
J	CAT 7 - COMMUNICATIONS	3/4" RGS	ANTENNA CONTROLLER	SOLTRANS NETWORK HUB

WSP USA Inc.
2150 RIVER PLAZA DR
SUITE 400
SACRAMENTO, CA 95833
TEL: (916) 567-2500

CONSULTANT LOGO

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6	5/26/2023	CCO #001
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PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189247
DRAWN BY	ESR
DATE	10/18/22

ISSUED FOR BID

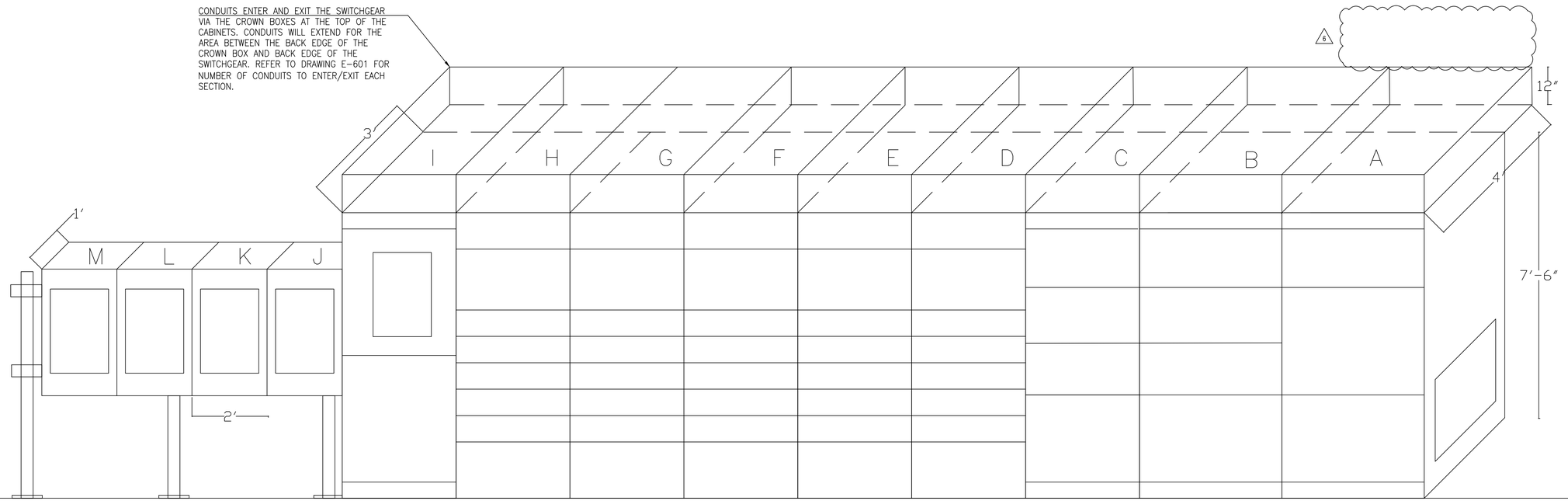
DRAWING TITLE

SINGLE LINE DIAGRAM - 2

E602

NOTES
1. REFER TO DRAWING E-101 FOR SITE LAYOUT. ELEVATION CORRESPONDS WITH SWITCHGEAR ON THE ROOF OF THE NEW CANOPY CONSTRUCTED UNDER THIS PROJECT.
2. AUX PNLs AND LTG PNLs SHALL BE MOUNTED ON KINDORF SUPPORTS ADJACENT TO SWITCHGEAR CABINET LINEUP.

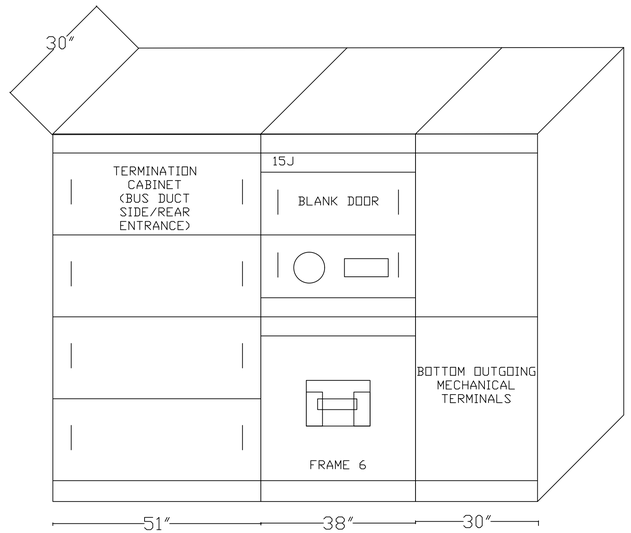
CONDUITS ENTER AND EXIT THE SWITCHGEAR VIA THE CROWN BOXES AT THE TOP OF THE CABINETS. CONDUITS WILL EXTEND FOR THE AREA BETWEEN THE BACK EDGE OF THE CROWN BOX AND BACK EDGE OF THE SWITCHGEAR. REFER TO DRAWING E-601 FOR NUMBER OF CONDUITS TO ENTER/EXIT EACH SECTION.



CONDUITS ENTER THE SWITCHGEAR LINEUP AT THE MAIN CIRCUIT BREAKER ENCLOSURE

E 1 - MAIN SWITCHBOARD #1
NOT TO SCALE

EQUIPMENT DESCRIPTION
A. MAIN CIRCUIT BREAKER (4000AF/4000AT)
B. SOLAR ARRAY BREAKER (600AF/600AT) & BATTERY POWER BREAKER (600AF/600AT)
C. GENERATOR INPUT BREAKER (600AF/600AT)
D. AC CHARGER PANEL #1 (800AF/800AT)
E. AC CHARGER PANEL #2 (800AF/800AT)
F. AC CHARGER PANEL #3 (800AF/800AT)
G. AC CHARGER PANEL #4 (800AF/800AT)
H. AC CHARGER PANEL #5 (800AF/800AT)
I. AUXILIARY PANELBOARD (225AF/200AT) AND TRANSFORMER (150kVA RATED, 480-120/208V)
J. AUX PNL 1 (100A RATED, 120/208V, 3ø, 4W, 60Hz)
K. AUX PNL 2 (100A RATED, 120/208V, 3ø, 4W, 60Hz)
L. AUX PNL 3 (100A RATED, 120/208V, 3ø, 4W, 60Hz)
M. NEMA 3R ENCLOSURE WITH LIGHTING CONTROL PANEL LTG PNL 1 (100A RATED, 120/208V, 3ø, 4W, 60Hz) AND ACCESSORIES



E 2 - METERING CABINET
NOT TO SCALE

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2150 RIVER PLAZA DR
SUITE 400
SACRAMENTO, CA 95833
TEL: (916) 567-2500

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ANDREW KC MILLAN
E 23171
ELECTRICAL
STATE OF CALIFORNIA
5/26/2023

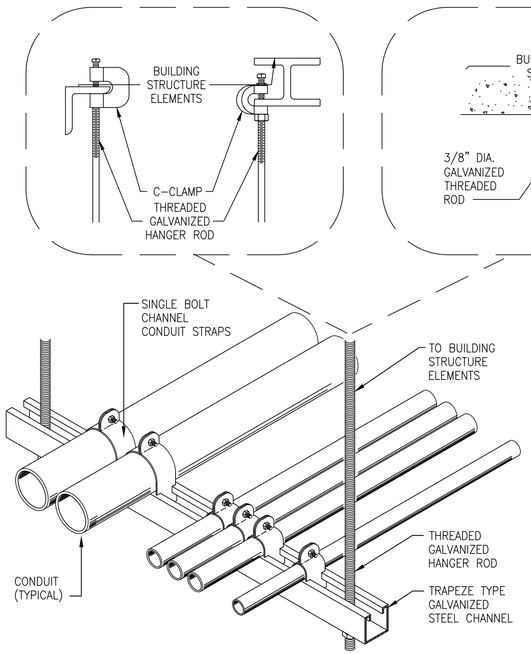
PROJECT TITLE
BEB YARD IMPROVEMENTS

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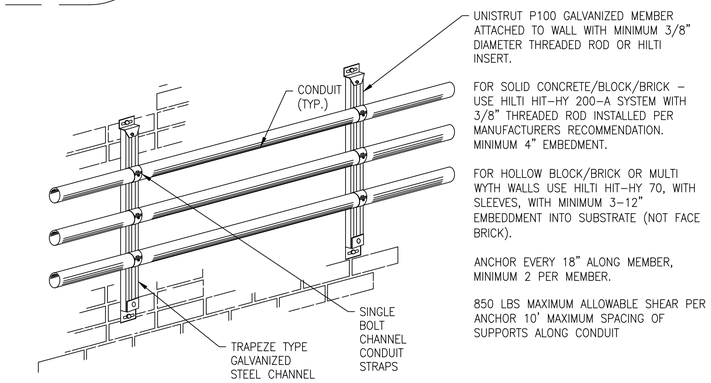
DRAWING TITLE
ELEVATION VIEWS - ELECTRICAL EQUIPMENT

E801



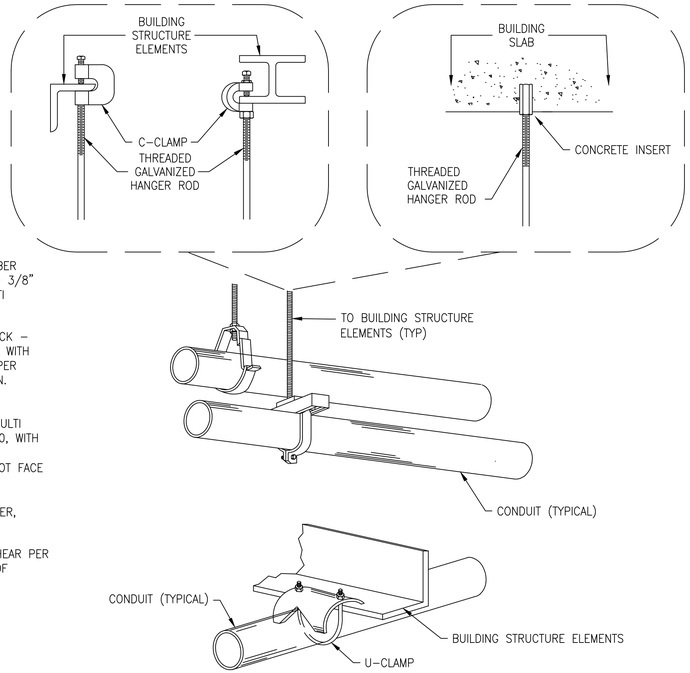
E 1 / - CONDUIT SUPPORT DETAILS SUSPENDED - MULTIPLE CONDUITS

NOT TO SCALE



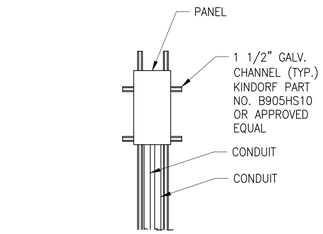
E 2 / - CONDUIT SUPPORT DETAILS WALL SURFACE - MULTIPLE CONDUITS

NOT TO SCALE



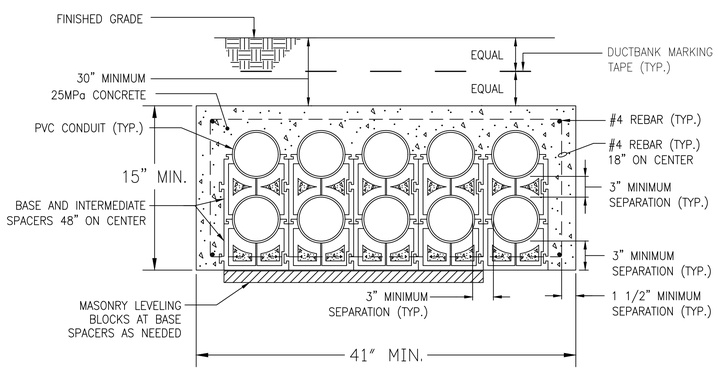
E 3 / - CONDUIT SUPPORT DETAILS SUSPENDED - SINGLE CONDUIT

NOT TO SCALE



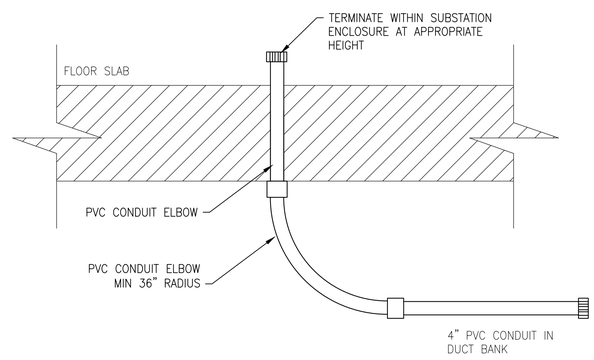
E 4 / - EQUIPMENT INSTALLATION DETAIL

NOT TO SCALE



E 5 / - DUCT BANK DETAILS

NOT TO SCALE



E 6 / - CONDUIT PENETRATION DETAIL

NOT TO SCALE

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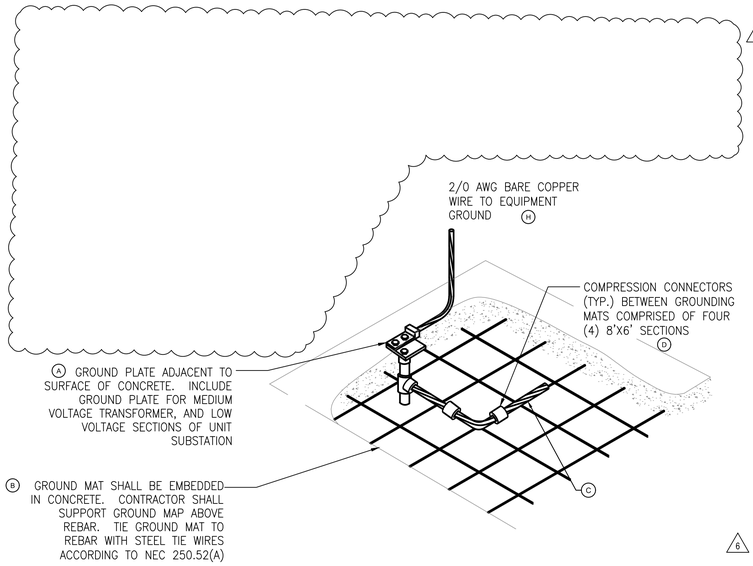
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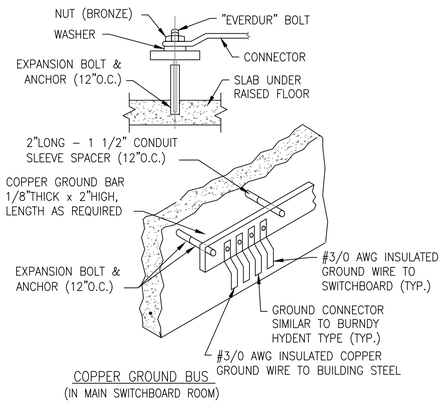
GENERAL DETAILS 1

E901

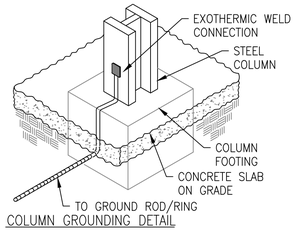


BILL OF MATERIAL - GROUNDING			
ITEM	DESCRIPTION	MANUFACTURER	PART NUMBER
A	GROUND PLATE	ERICO	GP250500-2
B	GROUND MAT	ERICO	MT-2-F-72-B-96-D
C	BARE COPPER WIRE	SOUTHWIRE	BARE COPPER 350 KCMIL
D	COMPRESSION GROUND GRID CONNECTORS	ABB (E-Z GROUND)	54900L
E	I-BEAM GROUND CLAMP	BLACKBURN	IBG20-40
F	GROUND ROD (3/4"x10')	ABB (E-Z GROUND)	613400
G	GROUND ROD CLAMP	BLACKBURN	GG
H	BARE COPPER WIRE	SOUTHWIRE	BARE COPPER 2/0 AWG
I	CONDUCTOR TERMINATION COMPOUND	ABB (T&B)	CP8-TB

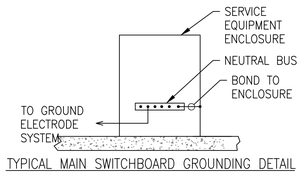
E 7 - GROUNDING MAT DETAILS
NOT TO SCALE



COPPER GROUND BUS
(IN MAIN SWITCHBOARD ROOM)

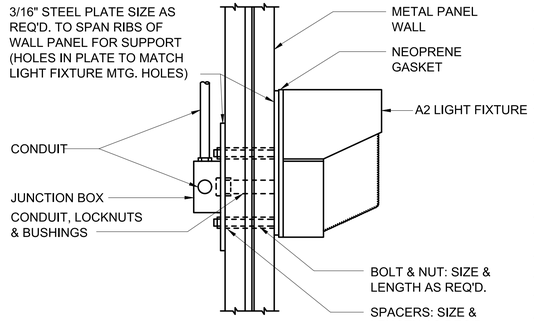


COLUMN GROUNDING DETAIL



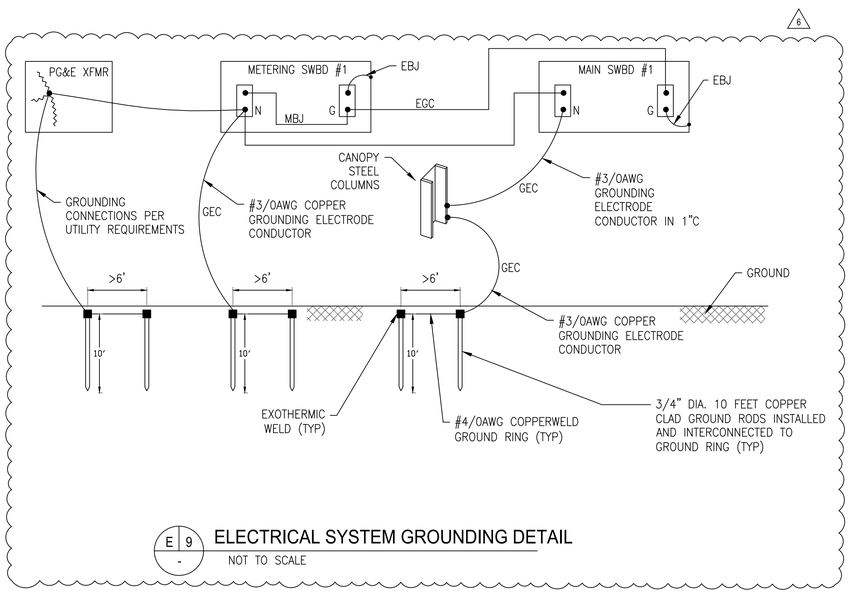
TYPICAL MAIN SWITCHBOARD GROUNDING DETAIL

E 8 - GROUNDING DETAILS - EQUIPMENT
NOT TO SCALE

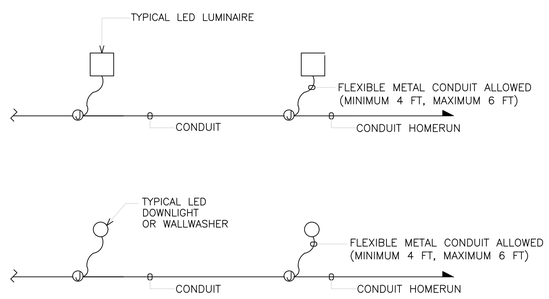


WALL MOUNTED
LIGHT FIXTURE DETAIL

E 16 - WALL MOUNT LIGHT FIXTURE DETAIL
NOT TO SCALE

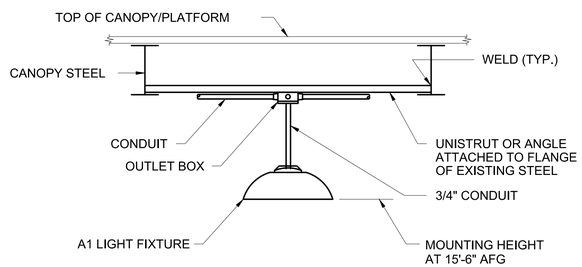


E 9 - ELECTRICAL SYSTEM GROUNDING DETAIL
NOT TO SCALE



TYPICAL LIGHTING FIXTURE CIRCUITING DETAIL
N.T.S.

E 10 - LIGHTING CIRCUITS DETAILS
NOT TO SCALE



E 17 - PENDANT MOUNTED LIGHT FIXTURE DETAIL
NOT TO SCALE

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E 23171
ELECTRICAL
STATE OF CALIFORNIA
5/26/2023

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189247
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GENERAL DETAILS 2

E902

DETAIL NOT USED

CABLE TRAY NOTES:

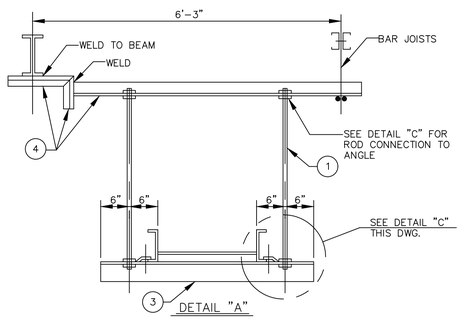
1. GROUND WIRING SHALL BE BUNDLED WITH THE ASSOCIATED POWER CIRCUITS
2. ALL CABLE SETS SHALL BE CLAMPED DOWN TO THE CABLE LADDER WITH CABLE CLAMPS.
3. ANY CONDUIT IN CABLE LADDER SHALL BE CLAMPED DOWN TO CABLE LADDER AND GROUNDED.
4. EAST CABLE LADDER #1 WILL CONTAIN POWER CONDUCTORS FOR 4 SETS OF DC FEEDERS (DC-1B, DC-2B, DC-3B, AND DC-4B) AND 3 SETS OF AC FEEDERS (AC-1, AC-3, AND AC-5).
5. EAST CABLE LADDER #2 CONTAINS CONTROLS CABLES FOR DC DISPENSERS (DC-1B, DC-2B, DC-3B, AND DC-4B) AND TWO ¾" RGS CONDUITS FOR ACCESSORY CIRCUITS FOR EACH DISPENSER POSITION, SEE NOTE 6.
4. EAST CABLE LADDER #1 WILL CONTAIN POWER CONDUCTORS FOR 4 SETS OF DC FEEDERS (DC-1A, DC-2A, DC-3A, AND DC-4A) AND 2 SETS OF AC FEEDERS (AC-2, AND AC-4).
5. EAST CABLE LADDER #2 CONTAINS CONTROLS CABLES FOR DC DISPENSERS (DC-1A, DC-2A, DC-3A, AND DC-4A) AND TWO ¾" RGS CONDUITS FOR ACCESSORY CIRCUITS FOR EACH DISPENSER POSITION, SEE NOTE 6.
6. ACCESSORY CIRCUITS INCLUDE THE FOLLOWING:
   6.1. CHARGER DISPENSER
   6.2. ANTENNA CONTROLLER
   6.3. WIRELESS BUS SENSOR
   6.4. ELECTRIC HOIST RETRACTOR
   6.5. HOIST RETRACTOR OVERRIDE
   CHARGER DISPENSER, ANTENNA CONTROLLER, AND WIRELESS BUS SENSOR CIRCUITS SHALL BE LOCATED IN THE SAME CONDUIT. ELECTRIC HOIST RETRACTOR AND HOIST RETRACTOR OVERRIDE SHALL BE IN THE SAME CONDUIT.
7. CABLE MAY BE ROUTED OUTSIDE OF CONDUIT AND CABLE LADDER FOR A LENGTH OF 6 FEET.
8. ALL SECTIONS OF CABLE LADDER INCLUDING FITTINGS SHALL BE GROUNDED.
9. CONNECT CABLE LADDER GROUND TO CANOPY GROUND APPROXIMATELY EVERY 100 FEET.
10. CONDUIT AND ENCLOSURES MUST BE TIED TO CABLE LADDER TO PROVIDE CONTINUOUS ELECTRICAL PATH TO GROUND AS PER NEC.

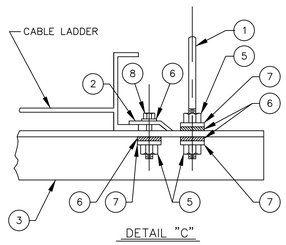
E 11 / - CABLE LADDER DETAILS - ELEVATION

NOT TO SCALE

△6

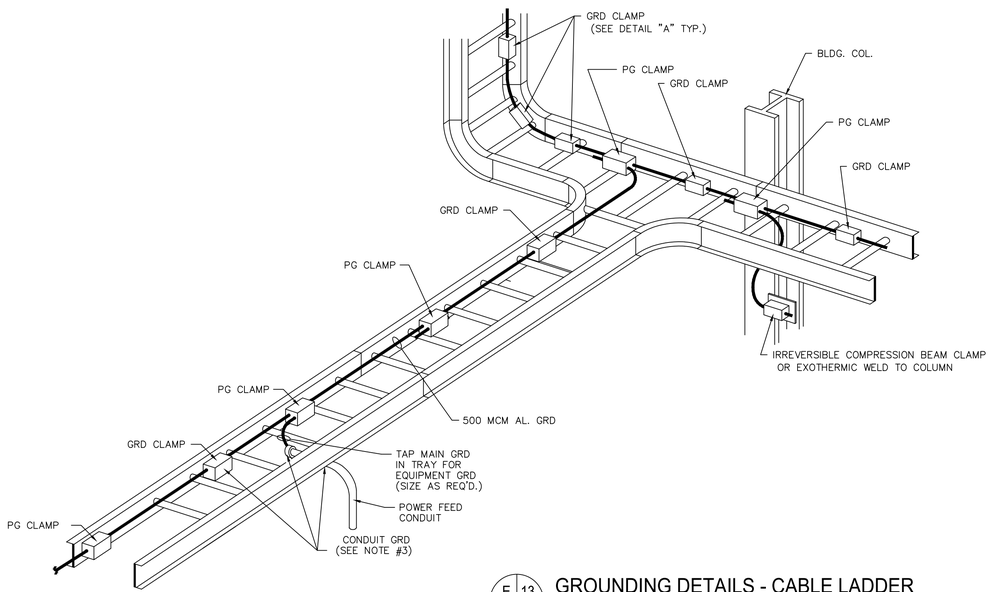
BILL OF MATERIAL			
ITEM NO.	NO. REQD. A	NO. REQD. B	DESCRIPTION
1	AS REQD.	AS REQD.	1/2" DIA. THREADED ROD, GALV. STEEL-LENGTH AS REQD.
2	2	2	CABLE LADDER HOLD-DOWN CLAMP
3	1	1	ANGLE 3"x3"x1/4" STEEL-LENGTH AS REQD.
4	3	1	ANGLE 2"x2"x1/4" STEEL-LENGTH AS REQD.
5	10	10	1/2" NUT, GALV. STEEL
6	12	12	1/2" FLAT WASHER, GALV. STEEL
7	10	10	1/2" LOCK WASHER, GALV. STEEL
8	2	2	1/2" HEX HEAD BOLT x 1 3/4" LG. GALV. STEEL





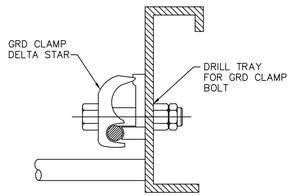
E 12 / - MOUNTING DETAILS - CABLE LADDER

NOT TO SCALE



E 13 / - GROUNDING DETAILS - CABLE LADDER

NOT TO SCALE



DETAIL "A" (TYP.)

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2150 RIVER PLAZA DR
SUITE 400
SACRAMENTO, CA 95833
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ELECTRICAL
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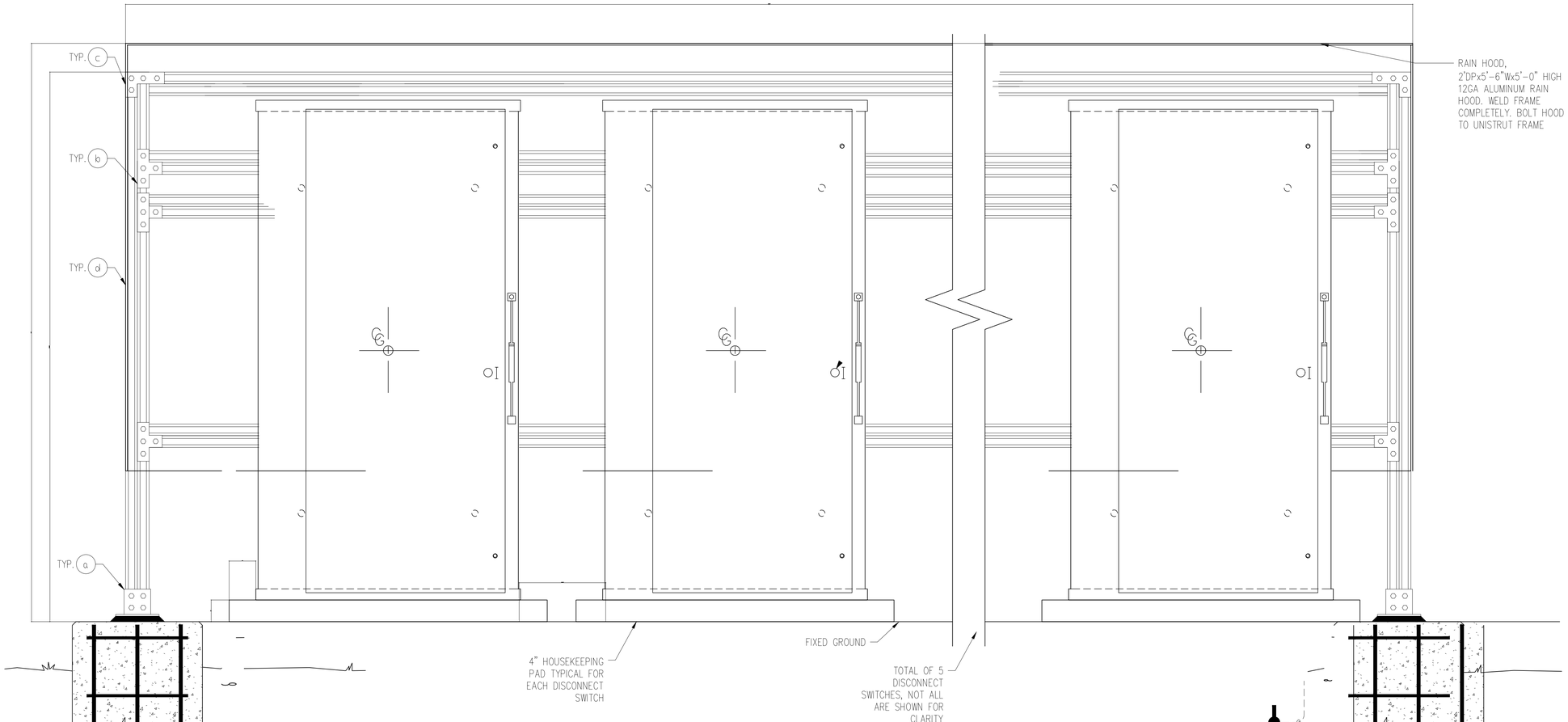
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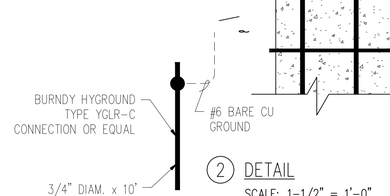
ELECTRICAL DETAILS - CABLE LADDER

E903



E 14 / - ELECTRICAL POWER DISCONNECT SWITCHES

NOT TO SCALE



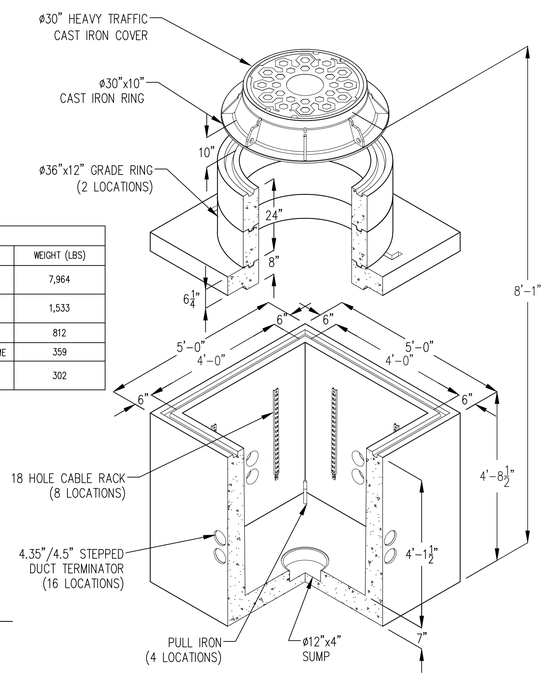
2 DETAIL

SCALE: 1-1/2" = 1'-0"

EQUIPMENT SUPPORT FRAME - MPZ

NOTES:

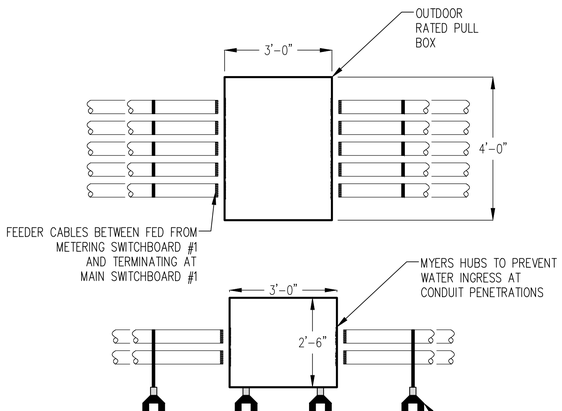
1. FOR ELECTRICAL POWER DISCONNECT SWITCHES, REFER TO DRAWING E101 FOR LAYOUT OF SWITCH ARRANGEMENT AND TO E401 FOR SINGLE LINE DIAGRAM.
2. FOR ELECTRICAL VAULT, REFER TO DRAWING E101 FOR LOCATION OF VAULT.



MATERIAL LIST	
DESCRIPTION	WEIGHT (LBS)
4'-0" x 4'-0" x 4'-0" BASE SECTION RACKED AND PAINTED	7,964
4'-0" x 4'-0" x 8" TOP SLAB WITH 36" OPENING	1,533
36" x 12" GRADE RINGS (2 QTY)	812
30"x10" HEAVY TRAFFIC CAST IRON FRAME	359
30" HEAVY TRAFFIC CAST IRON COVER - ATT	302

E 15 / - ELECTRICAL VAULT

NOT TO SCALE



E 15 / - ROOFTOP PULL BOX

NOT TO SCALE

SUPPORT FRAME BILL OF MATERIAL

ITEM NO.	QTY.	DESCRIPTION	MAN'F	CAT. NO.
a	4	POST BASE - GALVANIZED	B-LINE	B281SQ
b	12	FOUR HOLE TEE PLATE - GALVANIZED	B-LINE	B133
c	4	FOUR HOLE CORNER PLATE - GALVANIZED	B-LINE	B143
d	AS REQ'D	COMBINATION UNISTRUT - GALV - 10' LONG	B-LINE	B22B
-	AS REQ'D	SPRING NUTS	B-LINE	-
-	AS REQ'D	MISC. HARDWARE	-	-

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ELECTRICAL DETAILS

E904

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — NRCC-LTG-E

This document is used to demonstrate compliance with requirements in 110.9, 130.0, 130.2, 140.7, and 141.0(b)2L for outdoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e)6, 180.1(a) and 180.2(b)4Bv for outdoor lighting scopes using the prescriptive path for multifamily and mixed-use occupancies. Multifamily includes dormitory and senior living facilities.

Project Name: Soltrans BEB Yard Improvements	Report Page: (Page 1 of 7)
Project Address:	Date Prepared: 2023-05-22T19:41:21-04:00

A. GENERAL INFORMATION

01 Project Location (city)	Vallejo	04 Total Illuminated Hardscape Area (ft2)	55709
02 Climate Zone	3		

03 Outdoor Lighting Zone per Title 24 Part 1 10.114 or as designated by Authority Having Jurisdiction (AHJ):

☐ LZ-0: Very Low - Undeveloped Parkland ☒ LZ-2: Moderate - Urban Clusters ☐ LZ-4: High - Must be reviewed by CA Energy Commission for Approval

☐ LZ-1: Low - Rural Areas ☒ LZ-3: Moderately High - Urban Areas

05 Occupancy Types within Project

● Commercial Industrial ● Parking Garage

B. PROJECT SCOPE

This table includes outdoor lighting systems that are within the scope ofthe permit application and are demonstrating compliance using the prescriptive path outlined in 140.7 / 170.2(e)6 or 141.0(b)2L /180.2(b)4Bv for alterations.

My Project Consists of:

01	02
☒ New Lighting System	Must Comply with Allowances from 140.7 / 170.2(e)6
☐ Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)? ○ Yes ○ No

03	04	05
% of Existing Luminaires Being Altered1	Sum Total of Luminaires Being Added or Altered	Calculation Method
☐ < 10% ☐ >= 10% and < 50% ☐ >= 50%		

Please proceed to Table F. Outdoor Lighting Fixture Schedule to define the project's luminaires.

1 FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total ofLuminaires Being Added or Altered / Existing Luminaires within the Scope ofthe Permit Application) x 100.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE — NRCC-LTG-E

Project Name: Soltrans BEB Yard Improvements	Report Page: (Page 3 of 7)
	Date Prepared: 2023-05-22T19:41:21-04:00

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

For new or altered lighting systems demonstrating compliance with 140.7 /170.2(e)6 all new luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application are included in the Table below. For altered lighting systems using the Existing Power method per 141.0(b)2L only new luminaires being installed and replacement luminaires being installed as part ofthe project scope are included (ie, existing luminaires remaining or existing luminaires being moved are not included). Outdoor lighting attached to multifamily buildings and controlled from the inside ofa dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

Designed Wattage:

01 Name or Item Tag	02 Complete Luminaire Description		03 Watts per luminaire1, 2	04 How is Wattage determined	05 Total Number Luminaires 2	06 Luminaire Status3	07 Excluded per 140.7(a) / 170.2(e)6A	08 Design Watts	09 Cutoff Req. > 6,200 initial lumen output 130.2(b) / 160.5(c)14	10 Field Inspector Pass	10 Field Inspector Fail
A1	Parking Lot Lighting	☐ Linear	27	Mfr. Spec	186	New	☐	5,022	NA: < 6200 lumens	☐	☐
A2	Wall Wash Lighting	☐ Linear	10	Mfr. Spec	18	New	☐	180	NA: < 6200 lumens	☐	☐
							Total Design Watts:	5202			

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.
EX: Luminaire is lighting a statue; EXCEPTION 2 to 130.2(b)

1FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b)

2 For linear luminaires, wattage should be indicated as W/lf instead ofWatts/luminaire. Total linear feet should be indicated in column 05 instead ofnumber of luminaires.

3 Select "New" for new luminaires in a new outdoor lighting project, or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of the project scope.

4 Compliance with mandatory shielding requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by 130.2(b)/ 160.5(c)

G. SHIELDING REQUIREMENTS (BUG)

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE — NRCC-LTG-E

Project Name: Soltrans BEB Yard Improvements	Report Page: (Page 2 of 7)
	Date Prepared: 2023-05-22T19:41:21-04:00

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through N. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

Calculations of Total Allowed Lighting Power (Watts) 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv													Compliance Results		
01 General Hardscape Allowance 140.7(d)1 / 170.2(e)6 (See Table I)	+	02 Per Application 140.7(d)2 / 170.2(e)6 (See Table J)	+	03 Sales Frontage 140.7(d)2 (See Table K)	+	04 Ornamental 140.7(d)2 / 170.2(e)6 (See Table L)	+	05 Per Specific Area 140.7(d)2 / 170.2(e)6 (See Table M)	OR	06 Existing Power Allowance 141.0(b)2L / 180.2(b)4Bv (See Table N)	=	07 Total Allowed (Watts)	≥	08 Total Actual (Watts)	09 07 must be >= 08
0	+	---	+	---	+	---	+	5,364	OR	---	=	5,364	≥	5,202	COMPLIES
Shielding Compliance (See Table G for Details)															N/A
Controls Compliance (See Table H for Details)															COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE — NRCC-LTG-E

Project Name: Soltrans BEB Yard Improvements	Report Page: (Page 4 of 7)
	Date Prepared: 2023-05-22T19:41:21-04:00

H. OUTDOOR LIGHTING CONTROLS

This table demonstrates compliance with controls requirements for all new or altered luminaires installed as part ofthe permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.
Outdoor lighting for nonresidential buildings, parking garages and common service areas in multifamily buildings must be documented separately from outdoor lighting attached to multifamily buildings and controlled from the inside ofa dwelling unit

Mandatory Controls for Nonresidential Occupancies, Parking Garages & Common Areas in Multifamily Buildings

01 Area Description	02 Shut-Off 130.2(c)1 / 160.5(c)	03 Auto-Schedule 130.2(c)2 / 160.5(c)	04 Motion Sensor 130.2(c)3 / 160.5(c)	05 Field Inspector Pass	05 Field Inspector Fail
BEB Charging Under Canopy: "A1"	Astronomical Timer	Provided	NA: Industrial Sites Lighting	☐	☐
BEB Charging Above Canopy: "A2"	Astronomical Timer	Provided	NA: Industrial Sites Lighting	☐	☐

1FOOTNOTE: Text has been abbreviated, please refer to Table 160.5-A to confirm compliance with the specific light source technologies listed.

2Authority having jurisdiction may ask for cutsheets or other documentation to confirm compliance of light source.

3Recessed luminaires marked for use in fire-rated installations, and recessed luminaires installed in non-insulated ceilings are excepted from ii and iii.

I. LIGHTING POWER ALLOWANCE (per 140.7 / 170.2(e))

This table includes areas using allowance calculations per 140.7 / 170.2(e). General Hardscape Allowance is per Table 140.7-A/Table 170.2-R while "Use it or lose it" Allowances are per Table 140.7-B /Table 170.2-S. Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one ofthe "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance. Outdoor lighting attached to multifamily buildings and controlled from the inside ofa dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

01 "Use it or lose it" Allowance (select all that apply) (select all that apply)				
☐ General Hardscape Allowance Table I (below)	☐ Per Application Table J	☐ Sales Frontage Table K	☐ Ornamental Table L	☒ Per Specific Area Table M

J. LIGHTING ALLOWANCE: PER APPLICATION

This section does not apply to this project.

WSP USA Inc.
2150 RIVER PLAZA DR
SUITE 400
SACRAMENTO, CA 95833
TEL: (916) 567-2500

CONSULTANT LOGO

CLIENT LOGO

SolTrans

NO.	DATE	REVISIONS
6	5/26/2023	CCO #001

REVISION LIST

SEAL:

LICENSED PROFESSIONAL ENGINEER — ANDREW KC MILLAN — E 23171 — ELECTRICAL — STATE OF CALIFORNIA

5/26/2023

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189247
DRAWN BY	AG
DATE	05/22/2023

ISSUED FOR BID

DRAWING TITLE

OUTDOOR LIGHTING COMPLIANCE FORM T-24

E905

K. LIGHTING ALLOWANCE: SALES FRONTAGE

This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL

This section does not apply to this project.

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA

This table includes areas using the wattage allowance per specific area from Table 140.7-B /Table 170.2-S. More than one specific area allowance may be taken in a single project, if applicable. However, multiple specific area allowances may not be taken for the exact same area on the site.

01	02	03	04	05	06	07	08	09	10
		CALCULATED ALLOWANCE (Watts)			DESIGN WATTS				
Area Description	Specific Area Type per Table 140.7-B	Specific Area (ft2)1	Allowed Density (W/ft2)	Extra Allowance (Watts)	Luminaire Name or Item Tag	Watts per Luminaire	# of Luminaires	Design Watts	Additional Allowance (Watts)
BEB Charging Under Canopy	ServiceStationCanopy	39710	0.57	23031.8	A1	27	192	5,184	5184
							Total Design Watts for this Area:	5184	
BEB Charging Above Canopy	ServiceStationCanopy	15999	0.57	9279.42	A2	10	18	180	180
							Total Design Watts for this Area:	180	
							Total Allowance (Watts) All Areas:		5364

1 FOOTNOTES: See Table 140.7-B /Table 170.2-S for rules for calculating the specific areas (ft2 for these additional lighting allowances.

2 For luminaires indicated in Table F as linear, wattage in column 07 is W/lf instead ofWatts/luminaire. Total linear feet should be indicated in column 08 instead ofnumber of luminaires.

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

This section does not apply to this project.

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-LTO-E - Must be submitted for all buildings

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.	BEB Charging Under Canopy: "A1"; BEB Charging Above Canopy: "A2"

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Apple Gong	Documentation Author Signature:
Company:	Signature Date:
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Responsible Designer Signature:
Company:	Date Signed:
Address:	License:
City/State/Zip:	Phone:

WSP USA Inc.
2150 RIVER PLAZA DR
SUITE 400
SACRAMENTO, CA 95833
TEL: (916) 567-2500

CONSULTANT LOGO

CLIENT LOGO

SolTrans

NO.	DATE	REVISIONS
6	5/26/2023	CCO #001

REVISION LIST

SEAL:



PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189247
DRAWN BY	AG
DATE	05/22/2023

ISSUED FOR BID

DRAWING TITLE

OUTDOOR LIGHTING COMPLIANCE FORM T-24

E906

MARK	DESCRIPTION	PROCUREMENT	SPECIFICATION	SUBMITTALS
5360	HOIST, ELECTRIC	CF / CI	41 22 00	PD, OM, SD, T, TR
6237	PERSONAL FALL PROTECTION UNIT, LADDER	CF / CI	11 96 00	PD, OM, SD
8011	CHARGING DISPENSER, DC POWER, PLUG-IN	OF / CI	26 60 10	--
8022	CHARGING DISPENSER, AC POWER, PLUG-IN, 200kW	OF / CI	26 60 10	--
8026	CHARGING DISPENSER, AC POWER, PLUG-IN, 60kW	OF / CI	26 60 10	--
9990	BUS DETECTION SYSTEM	CF / CI	27 53 18	PD, OM, SD, T, TR
9990A	JUNCTION BOX, CONTROLLER, SYSTEM	CF / CI	27 53 18	PD, OM, SD, T, TR
9990B	LIGHT, SYSTEM STATUS, IDENTIFICATION, WIRELESS	CF / CI	27 53 18	PD, OM, SD, T, TR
9990C	MODULE, VEHICLE ANCHOR	CF / CI	27 53 18	PD, OM, SD, T, TR
9990D	RECEIVER, FIXED	CF / CI	27 53 18	PD, OM, SD, T, TR

Equipment Schedule

GENERAL NOTES:

4 DIGIT MARK NUMBERS WITH AND WITHOUT ALPHA EXTENSION REPRESENT NEW EQUIPMENT TO BE FURNISHED AND INSTALLED AS INDICATED IN THE EQUIPMENT SCHEDULE.

ALL EQUIPMENT ITEMS SHOWN IN THESE DRAWINGS ARE BASED ON SPECIFIED MANUFACTURER. ANY MODIFICATIONS AND/OR SUBSTITUTIONS OF SAID EQUPMENT MUST BE COORDINATED BY THE CONTRACTOR, INCLUDING ALL CONNECTIONS, SERVICES, OPENING SIZES, AND ANY OTHER CONSTRUCTION RELATED REQUIREMENTS.

VERIFY AND COORDINATE ALL STRUCTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING REQUIREMENTS OF EQUIPMENT WITH MANUFACTURER PRIOR TO INSTALLATION.

FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY OWNER AND DESIGN TEAM OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DESIGN DOCUMENTS.

REFER TO SHEET Q-101 FOR EQUIPMENT SCHEDULE.

REFER TO SHEET Q-901 FOR EQUIPMENT DETAILS.

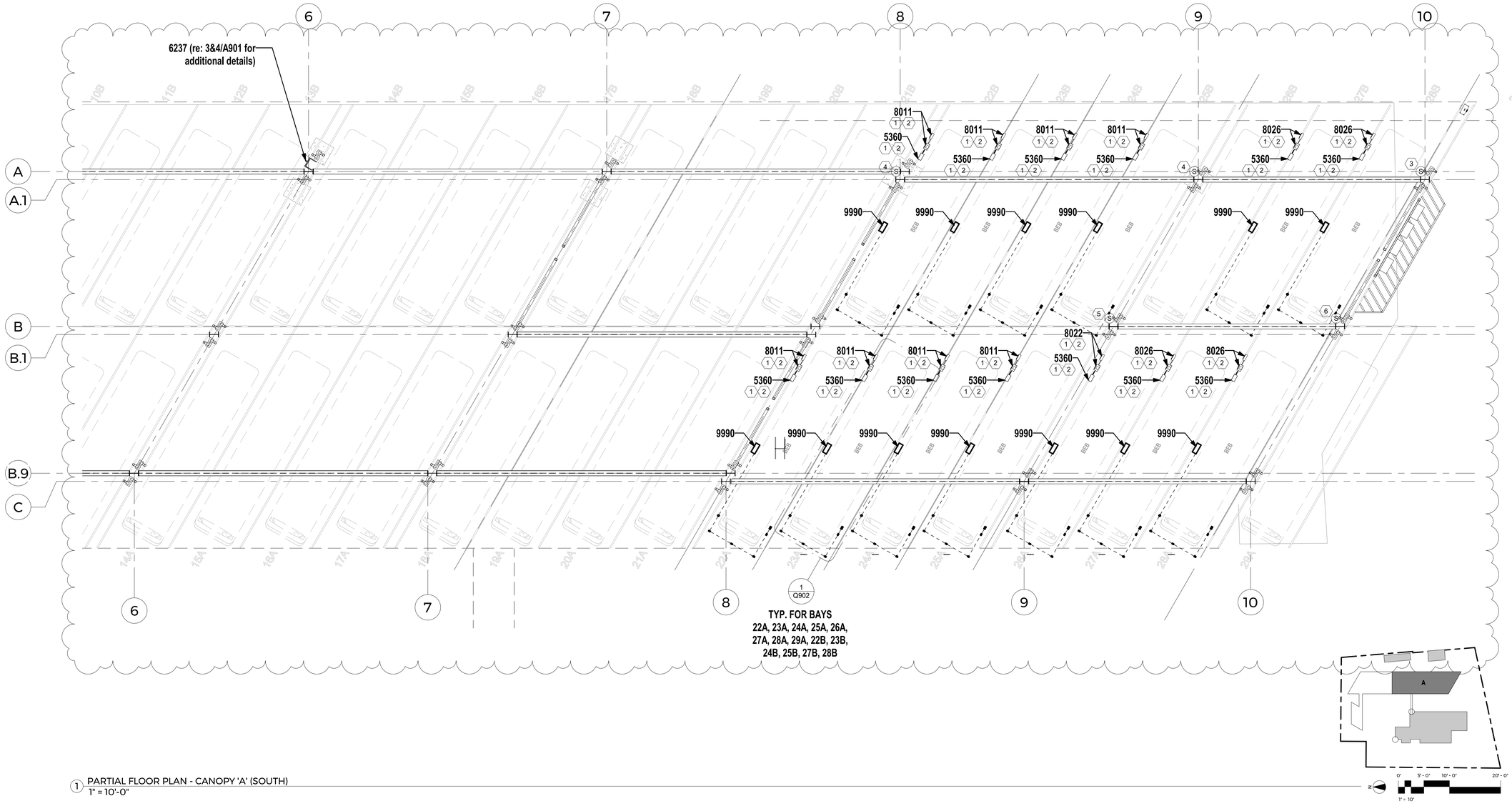
REFER TO SHEET Q-902 FOR EQUIPMENT SCHEMATIC AND CONCEPT DIAGRAMS.

REFER TO SPECIFICATIONS FOR INITIAL MOCK-UP AND APPROVAL REQUIREMENTS FOR EQUIPMENT

(S) ELECTRICAL SWITCH FOR MANUAL OVERRIDE OF ELECTRIC HOIST

NUMBERED NOTES:

1. SUSPENDED FROM OVERHEAD STRUCTURE. REFER TO Q-201 FOR ADDITIONAL INFORMATION.
2. EQUIPMENT ASSEMBLY CENTERLINE TO ALIGN WITH PARKING STRIPPING CENTERLINE BELOW.
3. COLUMN MOUNTED MANUAL OVERRIDE SWITCHES (2) FOR ELECTRIC HOIST CORD RETRACTOR FOR REMOTE OVERHEAD CHARGING DISPENSER IN BAYS 27B AND 28B. (MOUNT SWITCHES AT 52 INCHES AFF)
4. COLUMN MOUNTED MANUAL OVERRIDE SWITCHES (4) FOR ELECTRIC HOIST CORD RETRACTOR FOR REMOTE OVERHEAD CHARGING DISPENSER IN 22B, 23B, 24B, AND 25B. (MOUNT SWITCHES AT 52 INCHES AFF)
5. COLUMN MOUNTED MANUAL OVERRIDE SWITCHES (4) FOR ELECTRIC HOIST CORD RETRACTOR FOR REMOTE OVERHEAD CHARGING DISPENSER IN BAYS 22A, 23A, 24A, AND 25A. (MOUNT SWITCHES AT 52 INCHES AFF)
6. COLUMN MOUNTED MANUAL OVERRIDE SWITCHES (3) FOR ELECTRIC HOIST CORD RETRACTOR FOR REMOTE OVERHEAD CHARGING DISPENSER IN BAYS 26A, 27A, AND 28A. (MOUNT SWITCHES AT 52 INCHES AFF)



1 PARTIAL FLOOR PLAN - CANOPY 'A' (SOUTH)
1" = 10'-0"

WSP USA Inc.
2150 RIVER PLAZA DR
SUITE 400
SACRAMENTO, CA 95833
TEL: (916) 567-2500

NO.	DATE	REVISIONS
3	05/26/2023	CCO #001
2	03/31/2023	CONFORM SET
1	10/18/2022	ISSUE FOR BID

REVISION LIST

LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	MAG
DATE	05/26/2023

DRAWING TITLE

PARTIAL FLOOR PLAN - CANOPY 'A' (SOUTH)

Q101

BIM 360://HOU-189249A - SolTrans BEB - R19/SolTrans Maint Facility CDs - Arch.rvt

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GENERAL NOTES:

4 DIGIT MARK NUMBERS WITH AND WITHOUT ALPHA EXTENSION REPRESENT NEW EQUIPMENT TO BE FURNISHED AND INSTALLED AS INDICATED IN THE EQUIPMENT SCHEDULE.

ALL EQUIPMENT ITEMS SHOWN IN THESE DRAWINGS ARE BASED ON SPECIFIED MANUFACTURER. ANY MODIFICATIONS AND/OR SUBSTITUTIONS OF SAID EQUPMENT MUST BE COORDINATED BY THE CONTRACTOR, INCLUDING ALL CONNECTIONS, SERVICES, OPENING SIZES, AND ANY OTHER CONSTRUCTION RELATED REQUIREMENTS.

VERIFY AND COORDINATE ALL STRUCTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING REQUIREMENTS OF EQUIPMENT WITH MANUFACTURER PRIOR TO INSTALLATION.

FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY OWNER AND DESIGN TEAM OF ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND DESIGN DOCUMENTS.

REFER TO SHEET Q-101 FOR EQUIPMENT SCHEDULE.

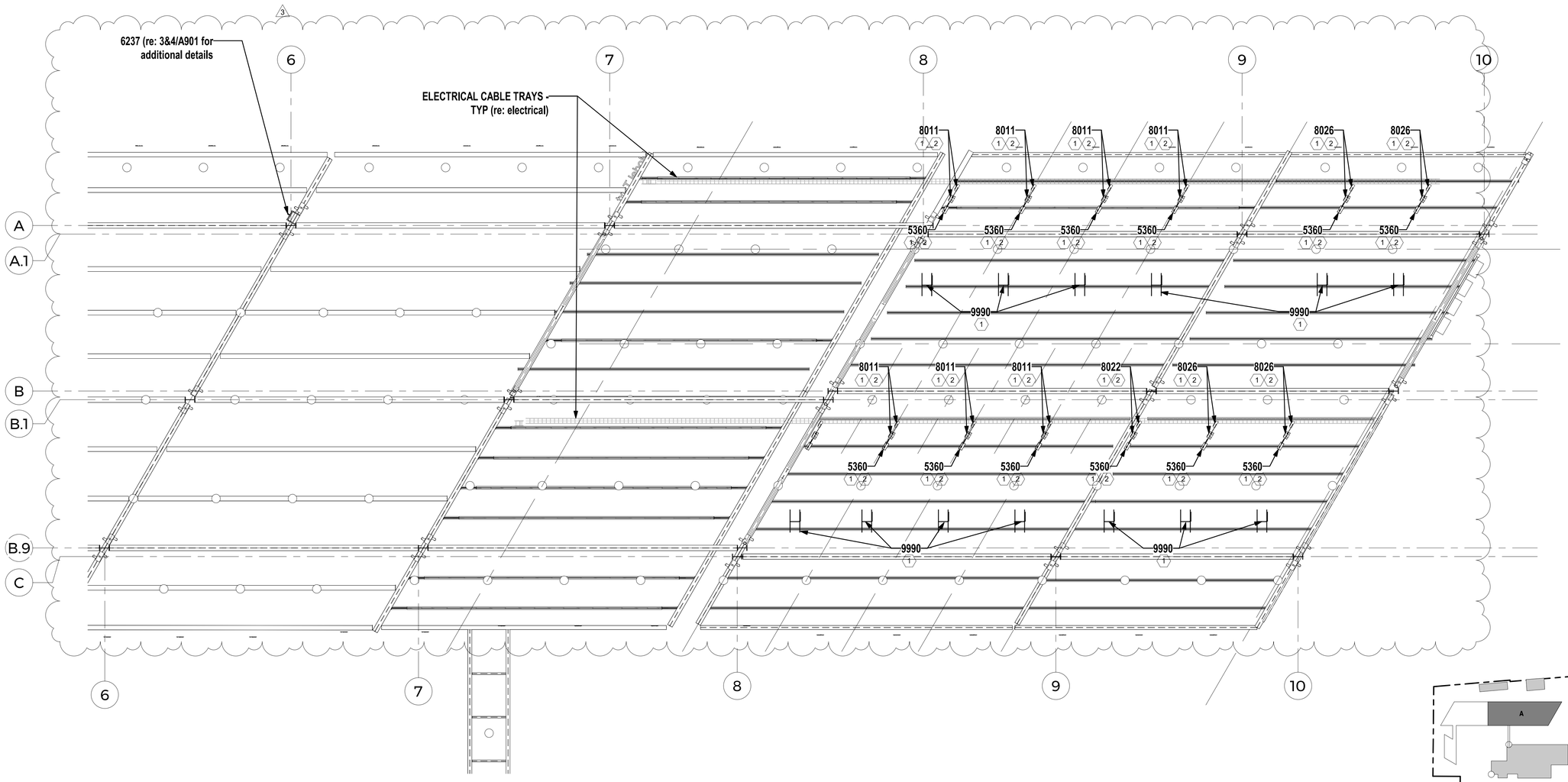
REFER TO SHEET Q-901 FOR EQUIPMENT DETAILS.

REFER TO SHEET Q-902 FOR EQUIPMENT SCHEMATIC AND CONCEPT DIAGRAMS.

REFER TO SPECIFICATIONS FOR INITIAL MOCK-UP AND APPROVAL REQUIREMENTS FOR EQUIPMENT

NUMBERED NOTES:

1. SUSPENDED FROM OVERHEAD STRUCTURE.
2. EQUIPMENT ASSEMBLY CENTERLINE TO ALIGN WITH PARKING STRIPPING CENTERLINE BELOW. REFER TO Q101 FOR ADDITIONAL INFORMATION.



1 EQUIP REFLECTED CEILING PLAN - CANOPY 'A' (SOUTH)
1" = 10'-0"

WSP USA Inc.
2150 RIVER PLAZA DR
SUITE 400
SACRAMENTO, CA 95833
TEL: (916) 567-2500

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REVISION LIST

LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
09-30-2024
RENEWAL DATE
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	MAG
DATE	05/26/2023

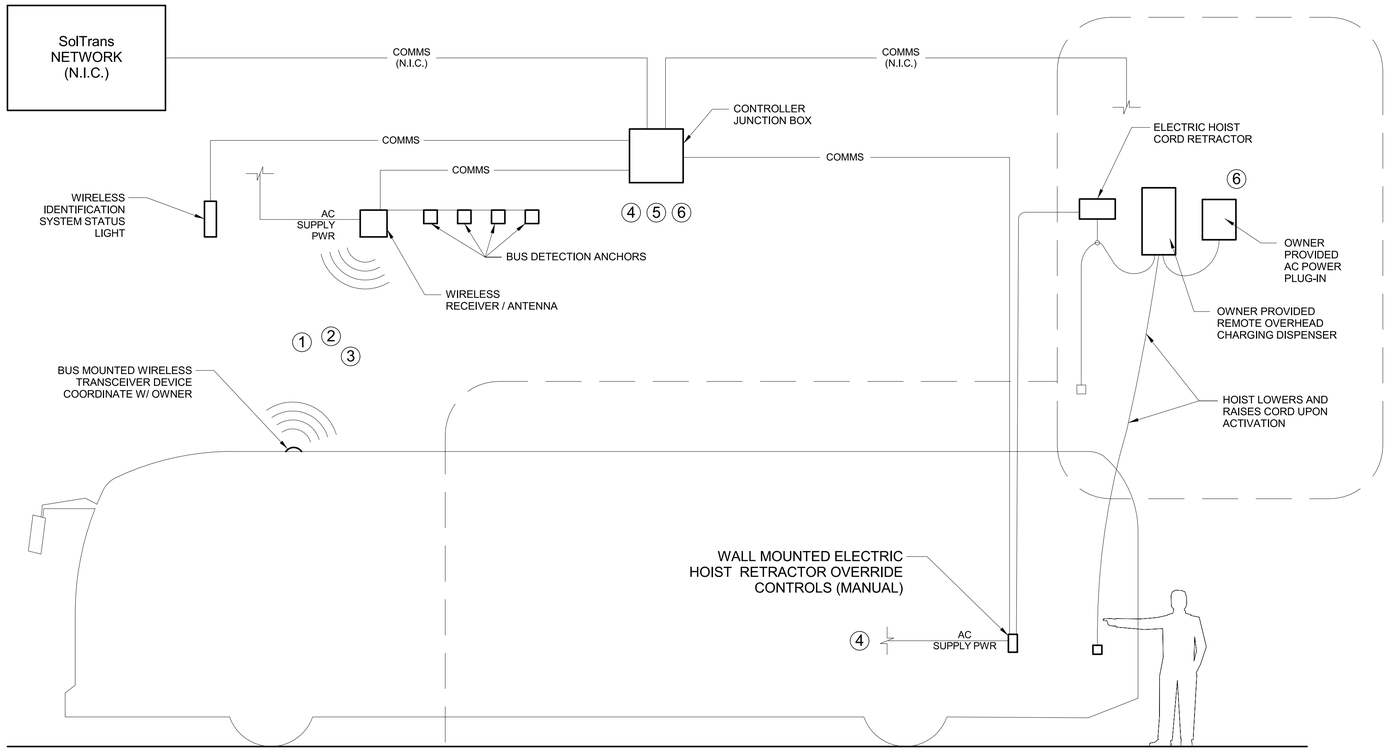
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REFLECTED CEILING PLAN - CANOPY 'A' (SOUTH)

Q201

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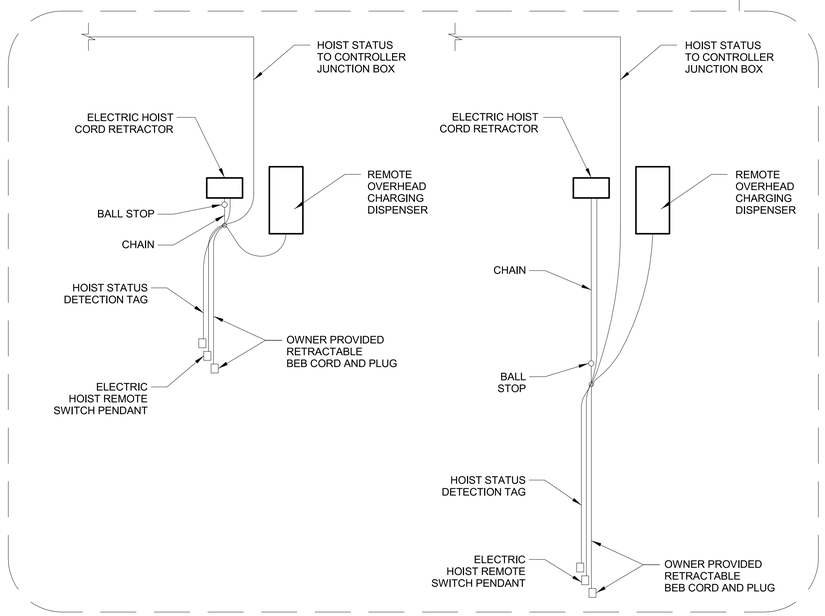
3 Charging Details and Notes
1/4" = 1'-0"

0' 2' - 0" 4' - 0" 8' - 0"
1/4" = 1"

DESCRIPTION OF OPERATION :

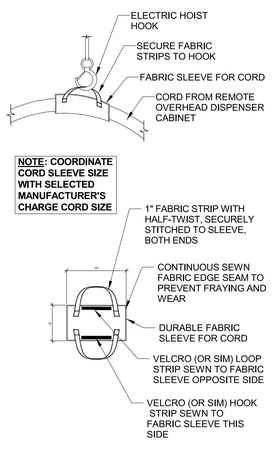
NOTE: REFER TO SPEC SECTION 27 53 18 FOR ADDITIONAL DETAILS

1. RECEIVER / ANTENNA DETECTS BUS MOUNTED TRANSPONDER, CONTROLLER CALCULATES TRANSPONDER DISTANCE. UPON CONFIRMATION OF AN ACCEPTABLE DISTANCE FROM MULTIPLE DETECTIONS, "HANDSHAKE" COMMUNICATION PROTOCOL IS INITIATED BETWEEN INDIVIDUAL BUS AND NOW PAIRED INDIVIDUAL ANTENNA CONTROLLER
2. UPON ESTABLISHING "HANDSHAKE" FOR WIRELESS COMMUNICATION, INDIVIDUAL ANTENNA CONTROLLER WILL ONLY COMMUNICATE WITH PAIRED INDIVIDUAL BUS, IGNORING OTHER NEARBY WIRELESS COMMUNICATIONS WITH OTHER BUSES
3. RECEIVER / ANTENNA CONTROLLER WILL PERIODICALLY PING BUS AND WIRELESSLY READ STATUS INFORMATION FROM THE BUS, INCLUDING:
   A) BUS ID NUMBER
   B) PARKING BRAKE STATUS: SET OR NOT SET
   C) CHARGING PLUG STATUS: CONNECTED OR NOT CONNECTED
4. CONTROLLER WILL WIRELESSLY ACCEPT STATUS INFORMATION FROM THE BUS AND AUTOMATICALLY LOWER CHARGE CORD.
5. CONTROLLER WILL ALLOW OR DISALLOW AUTOMATIC CHARGE CORD LOWERING BASED ON PREVIOUSLY READ STATUS INFORMATION FROM THE BUS. CHARGE CORD LOWERING WILL ONLY BE ALLOWED IF PARKING BRAKE STATUS IS 'SET'
6. DISALLOWED COMMAND REQUESTS WILL RESULT IN ACTIVATION OF ERROR LIGHTS ON THE WIRELESS COMMUNICATION SYSTEM STATUS LIGHTS.
   A) RED LIGHT ACTIVATION: BUS PARKING BRAKE NOT SET
   B) YELLOW LIGHT ACTIVATION: CHARGE CORD CONNECTED TO BUS
7. RAISING OF CHARGE CORD WILL BE MANUALLY ACTIVATED BY USER BY MEANS OF A BUTTON LOCATED ON THE CHARGER PLUG. RECEIVER AND CONTROLLER SHALL BE CAPABLE OF DETECTING POSITION OF CHARGER PLUG BY MEANS OF ATTACHED WIRELESS TAG AND MODIFY ALLOWED AND DISALLOWED ACTIONS ACORDLINGLY.



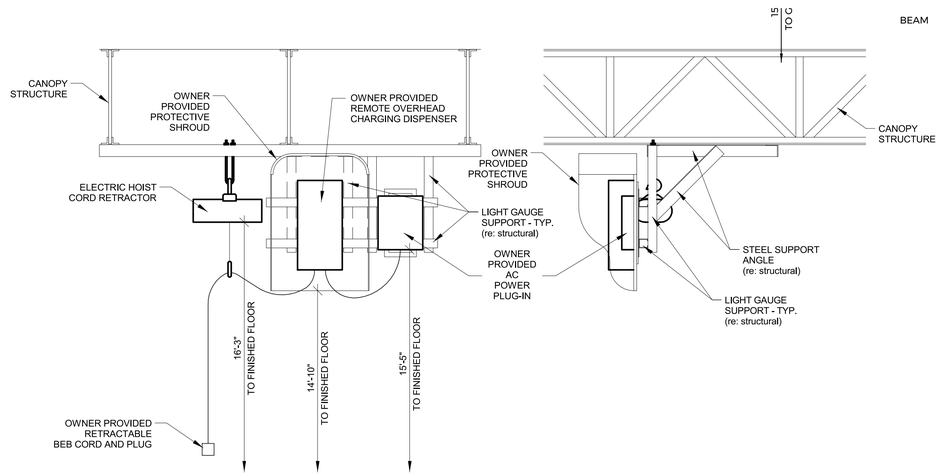
4 HOIST AND CHARGING DETAIL
1/4" = 1'-0"

0' 2' - 0" 4' - 0" 8' - 0"
1/4" = 1'



2 CORD SLEEVE
1" = 1'-0"

0' 0' - 6" 1' - 0" 2' - 0"
1" = 1'



1 CANOPY A NORTH FACE- TALL PANEL
1/2" = 1'-0"

0' 1' - 0" 2' - 0" 4' - 0"
1/2" = 1'

WSP USA Inc.
2150 RIVER PLAZA DR
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SolTrans

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REVISION LIST

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STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	MAG
DATE	05/26/2023

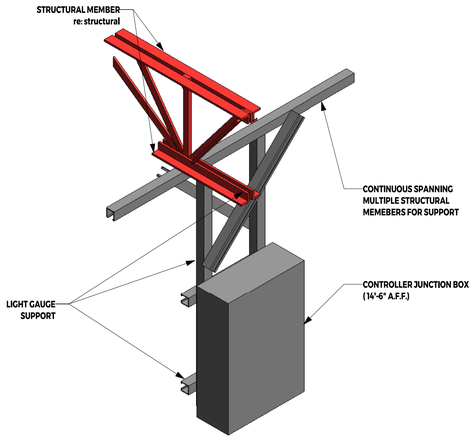
DRAWING TITLE

EQUIPMENT DETAILS

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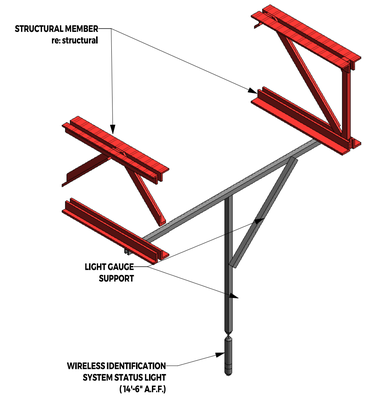
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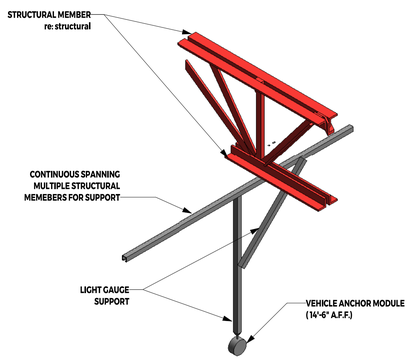
5 9990A - CONTROLLER JUNCTION BOX (TYP.)

0' 0'-6" 1'-0" 2'-0"
3/4" = 1'



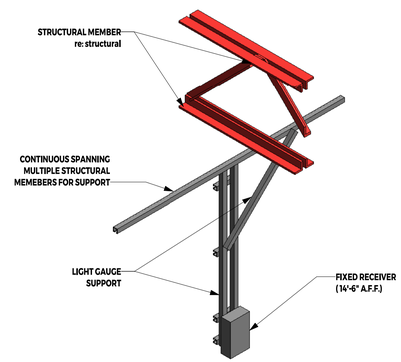
2 9990B - Wireless Identification System Status Light (TYP.)

0' 0'-6" 1'-0" 2'-0"
3/4" = 1'



3 9990C - Vehicle Anchor Module (TYP.)

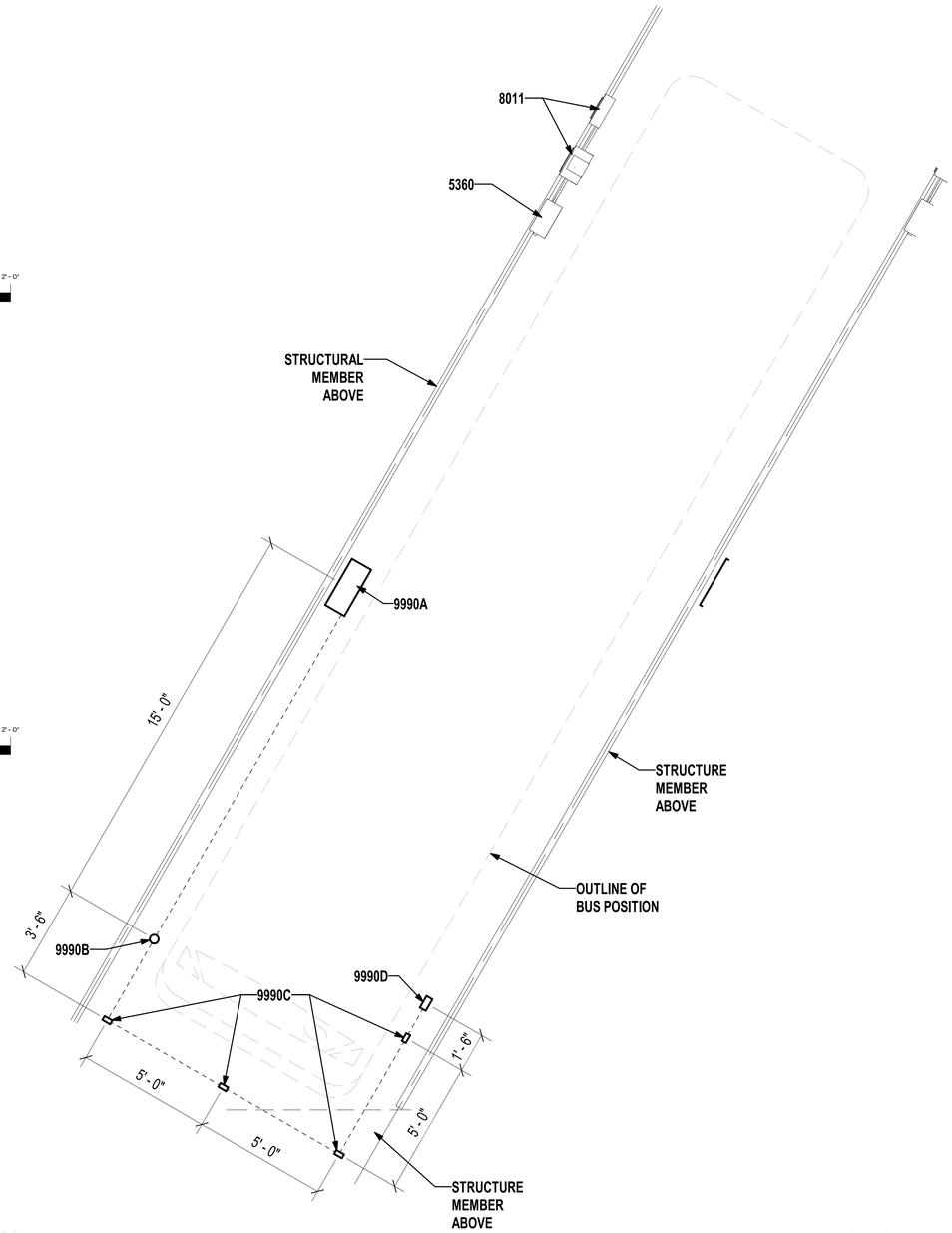
0' 0'-6" 1'-0" 2'-0"
3/4" = 1'



4 9990D - Fixed Receiver (TYP.)

0' 0'-6" 1'-0" 2'-0"
3/4" = 1'

NOTE: CONTRACTOR TO FIELD VERIFY CONDITIONS AND MODIFY AS NECESSARY.



1 PARTIAL EQUIP PLAN - BUS DETECTION SYSTEM
3/8" = 1'-0"

0' 1'-0" 2'-0" 4'-0"
1/2" = 1'

WSP USA Inc.
2150 RIVER PLAZA DR
SUITE 400
SACRAMENTO, CA 95833
TEL: (916) 567-2500

3	05/26/2023	CCO #001
2	03/31/2023	CONFORM SET
1	10/18/2022	ISSUE FOR BID
NO.	DATE	REVISIONS

REVISION LIST

LICENSED ARCHITECT
REGINALD D. KEYS
C-28841
STATE OF CALIFORNIA

PROJECT TITLE

BEB YARD IMPROVEMENTS

PROJECT NO.	189249
DRAWN BY	MAG
DATE	05/26/2023

DRAWING TITLE

EQUIPMENT DETAILS - BUS DETECTION SYSTEM

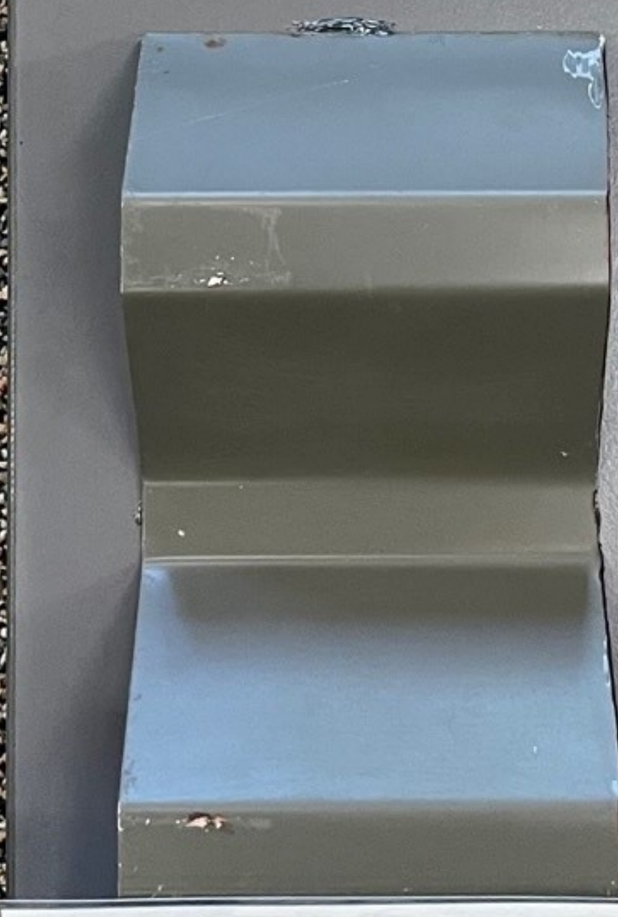
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SCREENING FOR ELECTRICAL
CONDUIT BRIDGE





RIBBED METAL HIGH PANEL
FOR
SCREENING CHARGING EQUIPMENT



STAFF REPORT
CITY OF VALLEJO
DESIGN REVIEW BOARD

I. PROJECT INFORMATION

Item No. 11C

DATE OF MEETING:	October 12, 2023
PROJECT NUMBER:	Major Use Permit (UP22-0005) Parcel Map (PM22-0004) Development Review (DVR22-0013) Design Review (DR22-0007) Landscape Review (LR22-0003)
PREPARED BY:	John Dacey, Senior Planner
PROJECT LOCATION:	Vacant Property located between Sonoma Blvd/Broadway St, south of Mini Dr/ APN: 0067-140-200
APPLICABLE ZONING CODE SECTION(S):	Major Use Permit (Vallejo Municipal Code (VMC) Chapter 16.606) Parcel Maps (VMC Chapter 15.14) Development Review (VMC Chapter 16.605) Design Review (VMC Chapter 16.604) Landscape Review (VMC Chapter 16.504)
PROJECT SUMMARY:	The project consists of a Major Use Permit, a Parcel Map, Design Review, Development Review and Landscape Review for a new 4,947 square-foot restaurant with a drive-through for Chick-Fil-A. The project will have an overall building footprint of 9,909 square feet including the two canopies proposed over the service area. In addition, the project will include site improvements for a three-lane drive through, new surface parking, a trash enclosure and new landscaping. Days and hours of operation are proposed as Monday through Saturday, 6 a.m. to 11 p.m. The Design Review Board only has purview over the Design Review and Landscape Review.
RECOMMENDATION:	Staff recommend that the Design Review Board adopt Resolution No. DRB23- to Recommend

	Approval to the Planning Commission for DR22-0007 and LR22-0003.

PROJECT DATA SUMMARY

APPLICANT:	LRG Investors JSR, LLC ATTN: Ryan Nickelson 2099 Mt. Diablo Blvd., Suite 206 Walnut Creek, CA 94596
PROPERTY OWNER:	Sonoma Gateway, LLC 2908 Dumbarton Street NW Washington, DC 20007
GENERAL PLAN DESIGNATION:	District – North Gateway (D-NG)
ZONING DISTRICT:	Residential Medium Density (RMD)
EXISTING LAND USE:	Central Corridor Commercial (CC)
SURROUNDING LAND USE:	North – Medical Office South – Vacant land East – Broadway St / California Northern Railroad West – SR 29 / Single-Family Residential
PROJECT AREA:	4,947 square feet for a quick service restaurant, 5,592 square feet service area canopies / 0.13 FAR
TOTAL LOT AREA:	78,393.55 square feet (1.80 Acres)

II. PROJECT DESCRIPTION

A. Background

On April 25, 2022, LRG Investors JSR, LLC, the applicant, applied for a Major Use Permit, Design Review, Development Review and Landscape Review for new 4,947 square-foot restaurant with a drive-through for Chick-Fil-A. On September 29, 2022, the applicant applied for Parcel Map to create the proposed lot for the project. The project includes site improvements for a three-lane drive through, new surface parking, a trash enclosure and new landscaping. The project plans were routed to various agencies for their review and the application was determined to be complete by the City on February 24, 2023.

Location and Land Use Context

The project site is located on a vacant lot with frontages along Sonoma Boulevard (SR 29) and Broadway Street. The site is surrounded by an existing medical use to the north, residential uses to the east and west and with vacant, undeveloped land to the south:

Table 1 – Surrounding Uses	
Direction	**Land Uses**
North	Medical Office
East	Broadway Street California Northern Railroad Single-Family Residential
South	Vacant Land
West	Sonoma Blvd (SR 29) Single-Family Residential

The Napa County Line is approximately 0.25 miles to the north, Highway 37 is approximately 0.67 miles to the south and Six Flags Discovery Kingdom is approximately 1 mile to the southeast. The immediate vicinity of the project site is characterized by existing commercial, residential, and vacant land uses. The site's General Plan 2040 Land Use Designation is District – North Gateway (D-NG) with a Zoning District of Central Corridor Commercial (CC). VMC Table 16.201-A: Zoning District and General Plan Land Use Designation states, the Zoning District of CC is consistent and implements the General Plan Land Use Designation of D-NG.

Figure 1 – Vicinity Map



B. Project Description

The proposed project consists of a Major Use Permit, a Parcel Map, Design Review, Development Review and Landscape Review to construct a new 4,947 square-foot restaurant with three drive-through lanes for Chick-Fil-A. The new building will have an overall footprint of 9,909 square feet including the two canopies over the drive-through service areas, a height of approximately 21 feet and will be oriented primarily towards Sonoma Blvd. A parcel map is proposed to subdivide the 1.80-acre project site from the existing larger 12.66-acre parcel.

The exterior is proposed to incorporate stucco and be painted SW 7566 “Westhighland White”, SW 6172 “Hardware”, and SW CFA Custom “Urban Night”. The proposed canopy metal fascia is proposed with a Dark Bronze finish and the parapet wall coping is finished Midnight Bronze. The trash enclosure will have a stucco exterior and be painted SW 6172 “Hardware”, while the doors, post caps and hinges will be SW 2807 “Rockwood Medium Brown”. SW 6172 “Hardware” will also be incorporated on the exterior walls and columns for the canopy facing Sonoma Boulevard. The building’s exterior has been designed with recessed walls and small vertical reveals to not have blank walls more than 20 feet in length (see Figure 2).

Figure 2 – Proposed Elevations

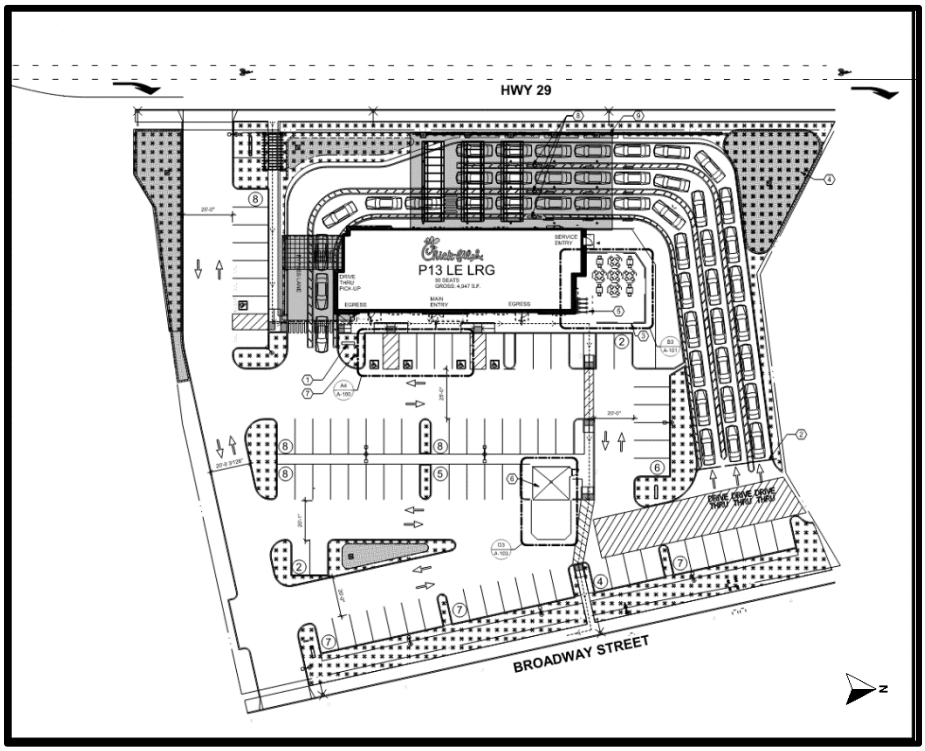


The project proposes to operate Monday through Saturday from 6 a.m. to 11 p.m., while being closed on Sundays. The restaurant would employ approximately 50-75 full- and part-time employees, with between 4 to 15 employees on site at a time.

The proposed restaurant will be accessible for pedestrians with walkways from both Sonoma Boulevard and Broadway Street. Vehicular access to the project site includes a full driveway off Broadway Street and a right-in, right-out driveway off Sonoma Boulevard. Drive-through operations will include a three-at-a-time service section under a canopy providing sun and weather protection for customers and employees. During normal operations, customers will merge to a single lane as they proceed through the queue, picking up their order at the window on the southern elevation, which will also be located under a canopy. During busier periods, customers will remain in the two-lane configuration as employees will deliver food directly to customers in the outside lane. The outside lane will also be utilized at times as a by-pass lane to move customers more efficiently through the operation.

Site and frontage improvements are being proposed throughout the site, including 16,331 square feet of new landscaping, a new trash enclosure, new lighting throughout the site, American Disabilities Act (ADA) paths from the parking lot, six short-term bicycle parking racks, four long-term bicycle parking storage spaces and a total of 81 off-street parking spaces. The new trash enclosure will have a total area of approximately 240 square feet with an overall height of 8 feet and eight inches. The trash enclosure will be constructed with CMU block, a metal roof and corrugated metal gates, with a stucco exterior. (see Figure 3).

Figure 3 – Proposed Site Plan



III. STAFF ANALYSIS

Required Permits

The project requires the following approval under the Vallejo Municipal Code (VMC):

Table 2 – Required Permits

Permit Type	Description	VMC Chapter	Review Authority
Major Use Permit	Restaurant with Drive-Through	16.606	Planning Commission Action
Parcel Map	Creation of two new parcels	15.14	Planning Commission Action
Development Review	Construction of a new commercial building	16.605	Planning Commission Action.
Design Review	New Non-Residential Project	16.604	Design Review Board Recommendation to Planning Commission
Landscape Review	Installation of new landscaping exceeding 500 square feet.	16.504	Design Review Board Recommendation to Planning Commission

As mentioned before, the Planning Commission will act on the Major Use Permit, Parcel Map, Development Review, Design Review and Landscape Review, with the recommendation of the Design Review Board.

In addition to these entitlements, this project will also require a building permit(s) from the City of Vallejo.

General Plan Consistency

The General Plan 2040 Land Use Designation for the subject property is District – North Gateway (D-NG). The General Plan characterizes this designation as follows:

The D-NG designation applies to the northern portion of the area north of Highway 37 between Sonoma Boulevard and Broadway Street, a highly-visible area that serves as a gateway to Napa Valley from Highway 37 (heading north) and to Vallejo from American Canyon (heading south). It is intended to foster an integrated, pedestrian-oriented place with a mix of uses, such as retail, dining, entertainment, and lodging, that cater to both motorists passing through and surrounding neighborhoods. It also incorporates higher-density residential development that supports nearby services and activates the area. The maximum permitted FAR in the D-NG designation is 2.0, with a minimum residential density of 30 dwelling units per acre up to 50 dwelling units per acre.

The project is consistent with the D-NG land use designation in that it includes construction of a new restaurant with a drive-through for local residents as well as consumers and visitors from a wider region. Additionally, the project is also consistent with applicable General Plan 2040 policies and actions. Key policies and actions relevant to the project are shown in **bold**, followed by staff's analysis in *italic*:

Table 3 - General Plan 2040 Policies and Actions

Policies and Actions	Staff's Analysis
Policy NBE-1.8: Urban Forest. Encourage planting of street trees and landscaping to beautify the city, encourage walking and biking and create a stronger sense of identity.	*A total of 16,331 square feet of landscaping is proposed, including 157 trees (including 23 street trees), shrubs and ground cover, which will beautify a vacant site and help create a sense of identity.*
Policy NBE-2.2: Inviting Gateways. Establish gateways that proudly announce entry to Vallejo with high-quality, similarly themed design and/or landscaping.	*The new development is located near the northern city limits along a major highway and will provide for an attractive gateway into the City of Vallejo with its high-quality design and materials, as well as extensive landscaping and street trees.*
Policy NBE-2.3: Inviting, Compatible Design. Promote attractive development that is compatible with surrounding uses.	*The new development will create an inviting and compatible design on a vacant site. The proposed project as conditioned will continue a sidewalk and underground utilities along the Broadway Street frontage, provide trees along both property lines and street frontage and be designed with attractive colors and materials, which will fit with the overall surrounding neighborhood and adjacent commercial structures.*

Policy NBE-2.8: Infill Development. Promote infill development targets vacant and underutilized sites for community-desired and enhancing uses that is compatible with surrounding uses.	*The project will be constructed on a vacant site, surrounded by existing residential and commercial development along a major highway. Adding a new business serving both residents and visitors on an underutilized site.*

Vallejo Municipal Code Compliance

The project site is zoned Central Corridor Commercial (CC). The Zoning Code provides the following description for the CC Zoning District:

> *The CC Zoning District is intended to create and establish regulations for community serving mixed-use areas along the Sonoma Boulevard Central Corridor and areas subject to the Sonoma Boulevard Specific Plan. Land uses include mixed-use with housing, medium and high density residential or non-residential uses at street level, subject to design and development standards to promote a mixed-use and pedestrian orientation.*

VMC Table 16.102-A: Zoning Districts states, the CC Zoning District implements the D-NG General Plan Land Use Designation. VMC Table 16.301 – A: Land Use Regulations states, a "Restaurant with a Drive-Through" uses are permitted after obtaining a Major Use Permit

The project is consistent with the applicable standards in the CC zoning district as demonstrated in the Table, below:

Table 4 – Regional Commercial Development Standards (VMC Chapter 16.204)			
Code Section	**Development Standard**	**Proposal**	**Compliant**
Table 16.204-A: Minimum Lot Size (sq. ft.)	5,000 sq. ft.	78,408 sq. ft.	Yes
Table 16.204-A: Minimum Lot Width	50 ft.	Approx. 300 ft.	Yes
Table 16.204-A: Maximum Non-Residential Floor Area Ratio	3.0	0.13	Yes

Table 16.204-A: Setbacks, Commercial Development	Street Frontages: 0 – 10 where abutting R District Interior Side: 5/10 ft, where abutting R District Rear: 5/10 ft, where abutting R District	Street Frontage: 0 ft. from Sonoma Blvd and 70 ft. from Broadway Street Interior Side: 60, 87 ft. Rear: 70 ft	Yes
Table 16.204-A: Building Maximum Height (Stories)	8	1	Yes
Table 16.204-A: Building Minimum Height (ft.)	N/A	21 ft.	Yes
Table 16.204-A: Ground Floor non-residential Use	15 ft.	21 ft.	Yes
Table 16.204-A: Ground Floor Ceiling Height, Non-Residential Uses	12 ft.	15 ft.	Yes
Table 16.204-A: Street Trees (ft. frontage)	1 per 30 ft. of frontage. Minimum of 22 street trees per 356 of frontage along Sonoma Blvd and 305 ft. of frontage along Broadway St	23 street trees	Yes

The project as proposed and with the conditions of approval included in this report, follows the applicable development standards of the CC District.

Discussion

The following comments provide a summary of the staff analysis of the project. They are separated by subject theme to facilitate the review by the Design Review Board. The information provided is referenced in IV, the Findings section at the end of the report.

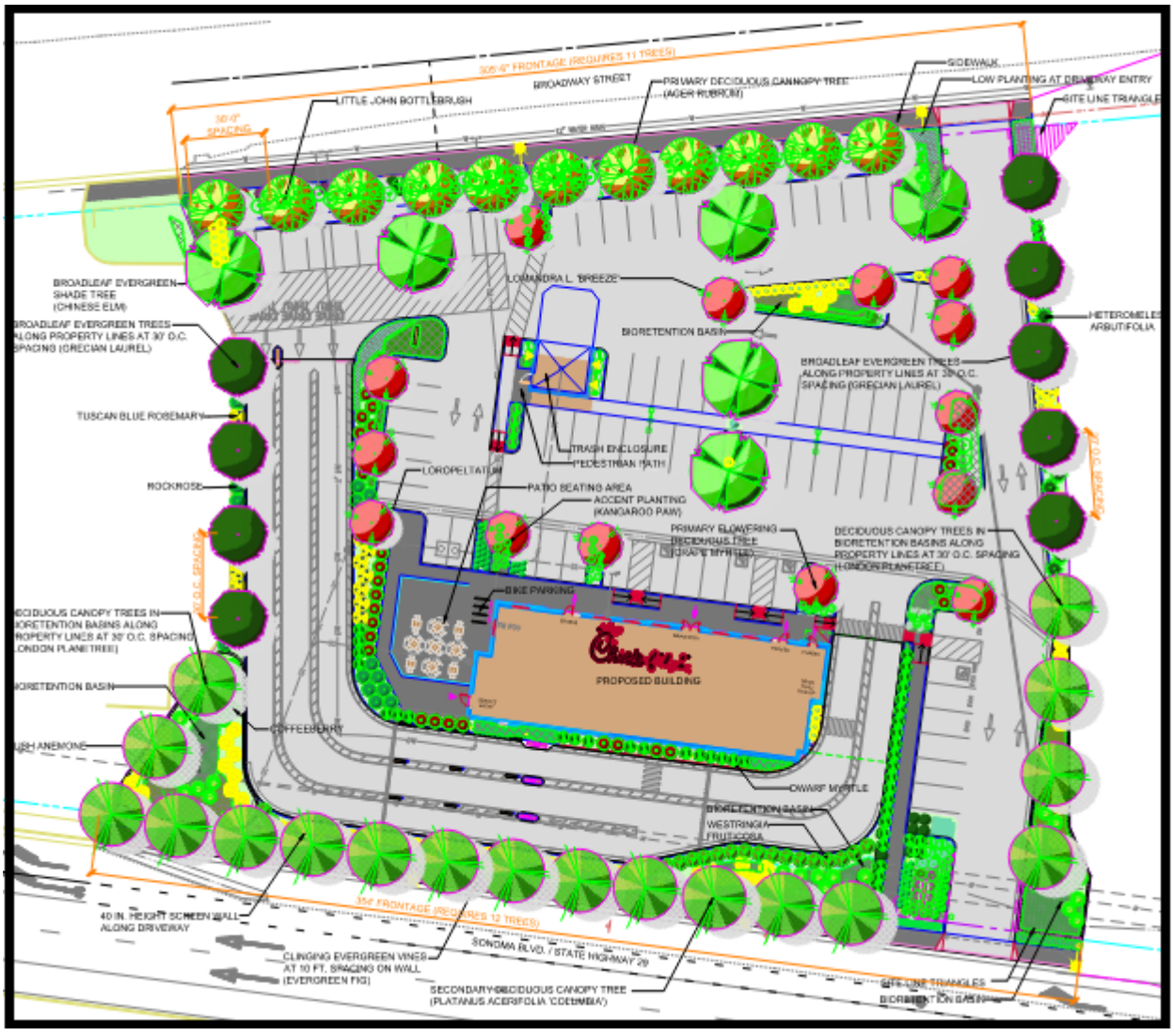
Architecture

The proposed building is visually interesting and will be constructed with a variety of high-quality building materials and painted with simple, complementary colors. Vertical and horizontal façade breaks, building massing, and modulation have all been incorporated into the design of the building. Canopy awnings are provided over all entrances and service areas, including two 3,728 and 1,234-square-feet in size, which will provide weather protection for employees and customers. The building features modulation in the roof lines, wall articulation, and building materials that are aesthetically pleasing and compatible with other newer developments in the surrounding area.

Landscaping

A total of 15,682 square feet of new landscaping will be installed throughout the site. Along both street frontages, a total of 23 street trees, as well as shrubs and ground cover will be planted to enhance the public realm. Additionally, 16 trees are proposed along the northern and southern property lines, along with shrubs and ground cover to screen the parking lots and proposed trash enclosure from the public right of way. The new landscaping will beautify the site and create a sense of place on an underutilized site. (see Figure 4)

Figure 4 – Proposed Landscape Plan



Lighting

New exterior lighting will be proposed on the building, under the service area canopies and throughout the site. On the building, 10 wall-mounted LED Luminaire lights will be installed at 9 feet from the finished grade, providing a downward beam of light. The light will be installed around the entire structure.

Under the proposed service area canopies, a total of 20 lights will be provided. Additionally, a total of 14 light poles, with an overall height of 20 feet, will be provided within the interior of the site. Two of the light poles will have two lights and the other 12 will only have one light. As proposed, the lighting fixtures are consistent with VMC Chapter 16.506, including their overall height and installation that will direct light downward and prevent glare from spilling on to adjacent properties.

IV. FINDINGS

Design Review Findings

VMC Section 16.604.03 (B), requires the Design Review Board to make a recommendation to the Planning Commission for final design review approval (the findings are in bold, and staff's determination follows in italics):

A. Is consistent with the purposes of this chapter, the design policies of the general plan and any applicable specific plan, any adopted applicable design guidelines.

Purposes of the Chapter

1. **Establish regulations for an objective process that applies urban design principles to ensure that new construction supports the best of the city's architectural traditions.**

   As proposed, the project meets the objective design standards called out in VMC Chapter 16.204 – Commercial Districts, as discussed in detail below.

2. **Encourage new structures that show creativity and imagination, add distinction, interest, and variety to the community, and are environmentally sustainable.**

   The proposed building is visually interesting and will be constructed with a variety of high-quality building materials and painted with simple, complementary colors. The building features modulation in the roof lines, wall articulation, and building materials that are aesthetically pleasing and compatible with other newer developments in the surrounding area. Additionally, the project will be designed to meet the California Building Code Title 24 (energy efficiency standards) and the Green Building Standards.

3. **Promote architectural and design excellence in new construction and discourage poor quality development.**

   The proposed building will be comprised of a stucco finish with the coping, fascia and canopies made of metal. The building will be painted with the variety of Sherwin-Williams colors, including Hardware, Urban Night and Rockwood Medium Brown. The proposed metal coping and fascia will be finished in a Midnight Bronze color. The project details, colors, materials, and landscaping are integrated with one and another that create a visually consistent proposal. Overall, the project uses high-quality, long-lasting material resulting in quality development.

4. **Ensure that future development should:**
   a. **Reflect the values of the community.**
   b. **Enhance the surrounding environment.**
   c. **Visually harmonize with its surroundings and not unnecessarily obstruct scenic views; and**
   d. **Avoid nostalgic misrepresentations that may confuse the relationships among structures over time.**

   The project reflects the promotion of infill development that targets underutilized sites, which is a policy identified in the General Plan. The new project will enhance the surrounding

environment by enhancing a city gateway and adding a new commercial business to serve local residents and visitors alike. Due to its location, the project will not obstruct scenic views and due to its nature and design, nor will it confuse the relationships among structures over time.

5. **Ensure that decisions on housing development projects are based on objective design standards as required by the State Housing Accountability Act (Government Code Section 65589.5).**

   Not applicable; the proposed project is non-residential and therefore not subject to the State Housing Accountability Act.

6. **Provide for new landscaping to create a visually pleasing setting for structures on the site.**

   A total of 15,682 square feet square feet of new landscaping will be installed throughout the site. A total of 39 new trees, shrubs and ground cover will be planted to enhance the public realm within the subject site. The new landscaping will create a visually pleasing settling for structures on the site.

7. **Promote the protection and retention of landmark, native, and specimen trees and if feasible mature canopy trees and other significant landscaping of aesthetic and environmental value.**

   Not applicable; no existing mature trees are present at the location.

8. **Ensure that the design, quality, and location of signs are consistent with the character and scale of the structures to which they are attached and are visually harmonious with surrounding development.**

   Not applicable; the applicant has requested signage be reviewed at a later date under a separate Zoning Compliance Review application.

9. **Promote the conservation, enhancement, preservation, and protection of historic resources.**

   Not applicable; there are no historic resources near this project's location.

Design policies of the General Plan

The project site is designated as District – North Gateway (D-NG) on the General Plan Land Use Map. The General Plan 2040 D-NG designation intended to foster an integrated, pedestrian-oriented place with a mix of uses, such as retail, dining, entertainment, and lodging, that cater to both motorists passing through and surrounding neighborhoods. It also incorporates higher-density residential development that supports nearby services and activates the area. As proposed, the project is consistent with the D-NG land use designation in that it incorporates a quick-service restaurant use that caters to both motorists passing through and residents of surrounding neighborhoods. Additionally, the project is also consistent with applicable General Plan 2040 policies and actions.

Adopted applicable design guidelines.

The subject site is not within an adopted specific plan and design guidelines have not been adopted for this location.

B. Is consistent with any planning or zoning approvals by the director or the planning commission.

Staff finds that the project is consistent with the CC zoning district in that it is a proposal of a new Restaurant with Drive-Through that meets all appropriate development standards of the Vallejo Municipal Code. The final authority of this action is the Planning Commission.

C. Complies with any other relevant city policies or regulations.

Not applicable; there are no additional city policies or regulations that are applicable to the project.

V. NOTICING AND PUBLIC COMMENTS

On September 28, 2023, pursuant to VMC Section 16.602.08(A), notice of this hearing was published in the Times Herald and mailed to all active neighborhood groups and property owners within 500 feet of the subject property and electronically mailed to the members of the Design Review Board and the applicant.

Staff have not received any comments or questions from the public on the application as of writing this staff report.

VI. CONCLUSION / STAFF RECOMMENDATION

Based on the analysis contained in this staff report, staff recommends that the Design Review Board make a recommendation to the Planning Commission to APPROVE Design Review (DR) 22-0007 and Landscape Review (LR) 22-0003 based on the findings and provided in the attached Resolution.

VII. ATTACHMENTS

1. Resolution No. DRB 23-04
2. Project Plans
3. Landscape Plans
4. Material Sample Board

CITY OF VALLEJO DESIGN REVIEW BOARD

RESOLUTION NO. DRB 23-04

A RESOLUTION RECOMMENDING APPROVAL TO THE PLANNING COMMISSION FOR DESIGN REVIEW (DR22-0007), AND LANDSCAPE REVIEW (LR23-0003) FOR A NEW DRIVE-THROUGH RESTAURANT AT A VACANT LOT BETWEEN SONOMA BOULEVARD AND BROADWAY STREET, SOUTH OF MINI DRIVE (APN: 0067-140-200)

* *

I. GENERAL FINDINGS

WHEREAS, on August 29, 2017, the City Council adopted General Plan 2040; and

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

WHEREAS, on April 25, 2022, LRG Investors JSR, LLC. submitted an application seeking a Major Use Permit, Development Review, Design Review, and Landscape Review for the construction of for new 4,947 square-foot restaurant with a drive-through ("Project") located on a vacant lot between Sonoma Boulevard and Broadway Street, south of Mini Drive (the property); and

WHEREAS, the property has a General Plan 2040 land use designation of District – North Gateway; and

WHEREAS, the property is located in the Central Corridor Commercial Zoning District; and

WHEREAS, on February 24, 2023, the application for the Project was determined to be complete for processing; and

WHEREAS, on September 28, 2023, pursuant to Vallejo Municipal Code Section 16.602.08(A), notice of this hearing was published in the Times Herald and mailed to all active neighborhood groups and property owners within 500 feet of the subject property and electronically mailed to the members of the Design Review Board and to the applicant; and

WHEREAS, on October 12, 2023 at 7p.m., the City of Vallejo Design Review Board, after giving all public notices required by State law and the City of Vallejo Municipal Code, conducted a duly noticed public hearing; and

WHEREAS, the Design Review Board considered testimony and evidence, both written and oral, provided at the public hearing, as well as other documents contained in the record of proceedings relating to the Project, which are maintained in the offices of the City of Vallejo Planning Division; and

WHEREAS, based on evidence received in the staff report and at the public hearing, the Design Review Board makes the following factual findings:

III. FINDINGS RELEVANT TO THE APPROVAL OF THE DESIGN REVIEW PERMIT (VMC Section 16.604.03.B)

A. Is consistent with the purposes of this chapter, the design policies of the general plan and any applicable specific plan, any adopted applicable design guidelines.

Purposes of the Chapter

1. **Establish regulations for an objective process that applies urban design principles to ensure that new construction supports the best of the city's architectural traditions.**

   As proposed, the project meets the objective design standards called out in VMC Chapter 16.204 – Commercial Districts, as discussed in detail below.

2. **Encourage new structures that show creativity and imagination, add distinction, interest, and variety to the community, and are environmentally sustainable.**

   The proposed building is visually interesting and will be constructed with a variety of high-quality building materials and painted with simple, complementary colors. The building features modulation in the roof lines, wall articulation, and building materials that are aesthetically pleasing and compatible with other newer developments in the surrounding area. Additionally, the project will be designed to meet the California Building Code Title 24 (energy efficiency standards) and the Green Building Standards.

3. **Promote architectural and design excellence in new construction and discourage poor quality development.**

   The proposed building will be comprised of a stucco finish with the coping, fascia and canopies made of metal. The building will be painted with the variety of Sherwin-Williams colors, including Hardware, Urban Night and Rockwood Medium Brown. The proposed metal coping and fascia will be finished in a Midnight Bronze color. The project details, colors, materials, and landscaping are integrated with one and another that create a visually consistent proposal. Overall, the project uses high-quality, long-lasting material resulting in quality development.

4. **Ensure that future development should:**
   a. **Reflect the values of the community.**
   b. **Enhance the surrounding environment.**
   c. **Visually harmonize with its surroundings and not unnecessarily obstruct scenic views; and**
   d. **Avoid nostalgic misrepresentations that may confuse the relationships among structures over time.**

   The project reflects the promotion of infill development that targets underutilized sites, which is a policy identified in the General Plan. The new project will enhance the surrounding environment by enhancing a city gateway and adding a new commercial business to serve local residents and visitors alike. Due to its location, the project will not obstruct scenic views and due to its nature and design, nor will it confuse the relationships among structures over time.

5. **Ensure that decisions on housing development projects are based on objective design standards as required by the State Housing Accountability Act (Government Code Section 65589.5).**

   Not applicable; the proposed project is non-residential and therefore not subject to the State Housing Accountability Act.

6. **Provide for new landscaping to create a visually pleasing setting for structures on the site.**

   A total of 15,682 square feet square feet of new landscaping will be installed throughout the site. A total of 39 new trees, shrubs and ground cover will be planted to enhance the public realm within the subject site. The new landscaping will create a visually pleasing settling for structures on the site.

7. **Promote the protection and retention of landmark, native, and specimen trees and if feasible mature canopy trees and other significant landscaping of aesthetic and environmental value.**

   Not applicable; no existing mature trees are present at the location.

8. **Ensure that the design, quality, and location of signs are consistent with the character and scale of the structures to which they are attached and are visually harmonious with surrounding development.**

   Not applicable; the applicant has requested signage be reviewed at a later date under a separate Zoning Compliance Review application.

9. **Promote the conservation, enhancement, preservation, and protection of historic resources.**

   Not applicable; there are no historic resources near this project's location.

Design policies of the General Plan

The project site is designated as District – North Gateway (D-NG) on the General Plan Land Use Map. The General Plan 2040 D-NG designation intended to foster an integrated, pedestrian-oriented place with a mix of uses, such as retail, dining, entertainment, and lodging, that cater to both motorists passing through and surrounding neighborhoods. It also incorporates higher-density residential development that supports nearby services and activates the area. As proposed, the project is consistent with the D-NG land use designation in that it incorporates a quick-service restaurant use that caters to both motorists passing through and residents of surrounding neighborhoods. Additionally, the project is also consistent with applicable General Plan 2040 policies and actions.

Adopted applicable design guidelines.

The subject site is not within an adopted specific plan and design guidelines have not been adopted for this location.

B. Is consistent with any planning are zoning approvals by the director or the planning commission.

Staff finds that the project is consistent with the CC zoning district in that it is a proposal of a new Restaurant with Drive-Through that meets all appropriate development standards of the Vallejo Municipal Code. The final authority of this action is the Planning Commission. Vallejo Municipal Code Section 16.604.01(K.2.b), states non-residential projects with structures or buildings more than 5,000 sf in size require a Design Review Board recommendation to the Planning Commission. The final authority of this action is the Planning Commission.

C. Complies with any other relevant city policies or regulations.

Not applicable; there are no additional city policies or regulations that are applicable to the project.

NOW, THEREFORE, LET IT BE RESOLVED that the Design Review Board hereby recommends that the Planning Commission **APPROVE** Design Review (DR) 22-0007 and Landscape Review (LR) 22-0003 based on the above findings.

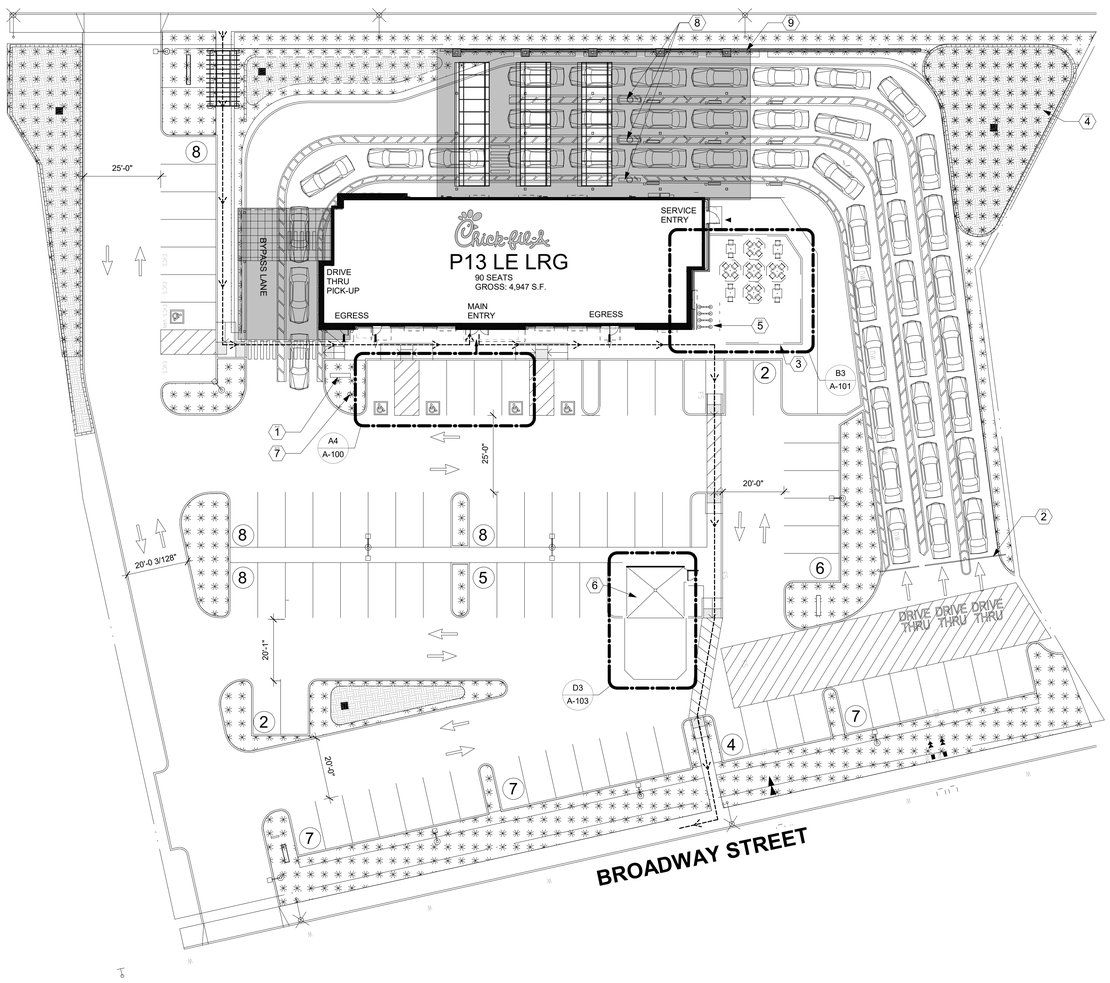
PASSED AND ADOPTED at a regular meeting of the Design Review Board of the City of Vallejo, State of California, on the 12th day of October 2023 by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Matthew Kennedy, CHAIRPERSON
City of Vallejo Design Review Board

Attest:

_____
MARGARET KAVANAUGH-LYNCH, SECRETARY
City of Vallejo Design Review Board



B2 SITE PLAN
1" = 20'-0"

NORTH

GENERAL NOTES:

GENERAL NOTES BODY

SITE PLAN KEYNOTES

1	SIGNAGE PER SIGNAGE PACKAGE. TYP.
2	CLEARANCE BAR PER SIGNAGE PACKAGE.
3	LOW SCREEN WALL FENCING.
4	BIORETENTION. RE: CIVIL.
5	SHORT-TERM BIKE PARKING.
6	LOCATION OF LONG-TERM BIKE STORAGE.
7	FLAG POLE.
8	DRIVE-THRU MENU BOARDS
9	LANDSCAPE WALL. HEIGHT 3'-6", WIDTH 5", PAINT SC-2.

PROJECT DATA

SITE AREA	1.80 AC	
GROSS:	78,406 SF	
BUILDING FOOTPRINT:		
CHICK-FIL-A	4,947 SF	
CANOPY@PICKUP WINDOW	1,234 SF	
CANOPY@ORDER POINT	3,728 SF	
TOTAL FOOTPRINT:	9,909 SF	
COVERAGE:		
GROSS:	6 %	
PARKING REQUIRED:		
RESTAURANT	1/100 SF	49 STALLS
PARKING PROVIDED:		81 STALLS
AUTO:		@17.18/1000 SF
REQ. ACCESSIBLE		4 STALLS
DT CAR STACK	52 CARS	
ORDER POINT:	10TH CAR AT INNER LANE	
DEVELOPMENT STANDARDS:		
ZONING:	CR	
MAX. HEIGHT:	8 STORIES	
BUILDING SETBACKS:		
FRONT:	0 FT	
SIDE:	5 FT	
REAR:	5 FT	
LANDSCAPE SETBACKS:		
FRONT:	5 FT	
SIDE:	5 FT	
REAR:	5 FT	
LANDSCAPE REQ:	10%	
OFF-STREET PARKING:		
STANDARD:	9x18	
COMPACT:	TBD	
COMPACT %:	TBD	
DRIVE AISLE:	24 FT	
OVERHANG:	TBD	
REQ. PARKING RATIO BY USE:		
RESTAURANT:	3/1000 SF	

NOTES:

1. TYPE A, FOR PARKING AREAS LESS THAN 50,000 SF-5% OTHERWISE 8%.
2. 10 FT WHEN ABUTTING RESIDENTIAL DISTRICTS.
3. 2 SPACES FOR THE FIRST 2,500 SF OF GPA THEN 1 PER 1,000 SF OF GFA ABOVE 2,500 SF.
4. 3% OF TOTAL PARKING SPACES SHALL BE DEDICATED TO EV CHARGING STALLS. IN ADDITION, THERE SHALL BE 1 LANDSCAPED I SLAND FOR EVER 8 PARKING STALLS.
5. PARKING SHOULD NOT BE INCLUDED IN THE FRONT SETBACK TO ALLOW FOR STREETSIDE/N.A.K ACCESS FOR PEDESTRIANS. HOWEVER, NO SETBACK VALUE IS GIVEN FOR FRONT YARD SO INFORMATION PROVIDED IS BASED ON SIDE AND REAR SETBACK REQUIREMENTS.
6. TO BE DETERMINED BY CITY.

PARKING CALCULATION:

ACCESSIBLE STALL REQUIRED	
PER CBC 11B 208.2	4
ACCESSIBLE STALLS PROVIDED	4
SHORT TERM BIKE STORAGE REQUIRED	4.05
SHORT TERM BIKE STORAGE PROVIDED	6
LONG TERM BIKE STORAGE REQUIRED	4
LONG TERM BIKE STORAGE PROVIDED	4

SITE PLAN LEGEND

LANDSCAPE

PROPERTY LINE

BUILDING LINE

NEW 6" CURB

NEW SIDEWALK

NEW CURBS AND SIDEWALKS

OUTDOOR SEATING

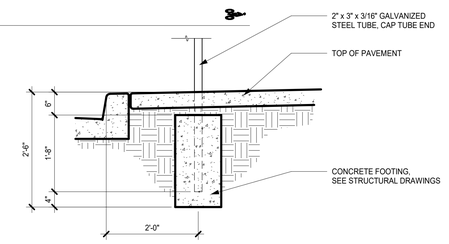
ACCESSIBLE ROUTE 2% MAX SLOPE

4" WIDE DIAGONAL STRIPPING

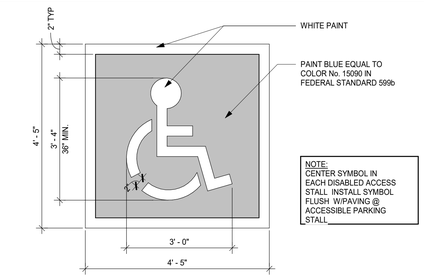
PARKING LIGHT FIXTURE (SEE ELECTRICAL DRAWING)

EASEMENT LINE

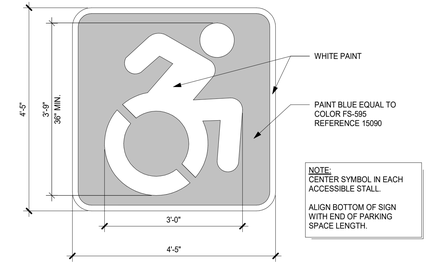
VEHICLE (20'-0" LENGTH TYP.)



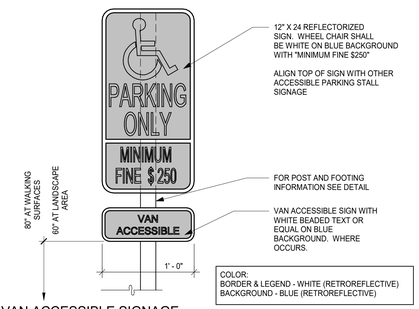
E1 TYPICAL SIGN FOUNDATION
3/4" = 1'-0"



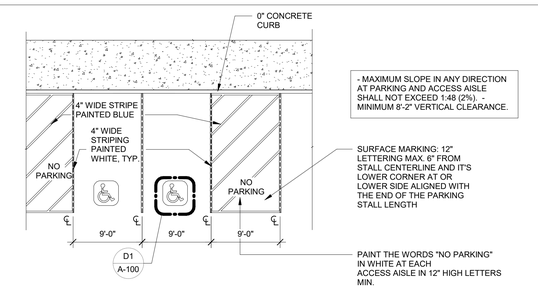
D1 ACCESSIBLE STALL SYMBOL
1" = 1'-0"



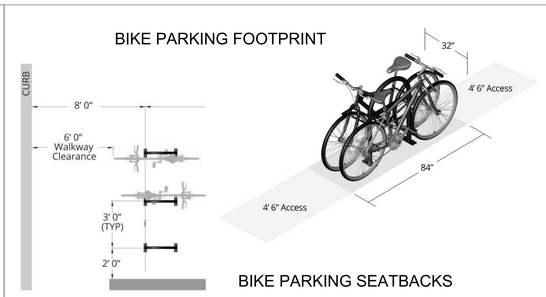
C1 SYMBOL OF ACCESSIBILITY
3/4" = 1'-0"



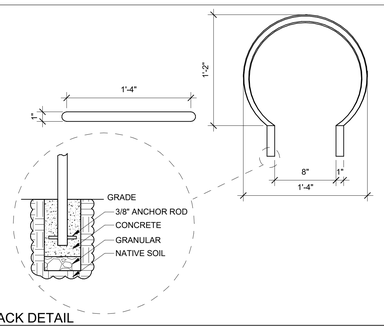
B1 VAN ACCESSIBLE SIGNAGE
1 1/2" = 1'-0"



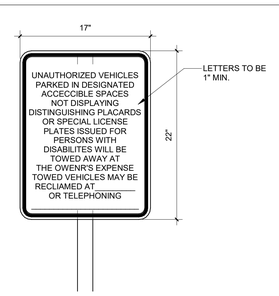
A4 ACCESSIBLE PARKING SPACES DETAIL
1/8" = 1'-0"



A3 BIKE RACK
1/2" = 1'-0"



A2 BIKE RACK DETAIL
1 1/2" = 1'-0"



A1 EV PARKING SPACES DETAIL
1 1/2" = 1'-0"

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CHICK-FIL-A
HWY 29 & MINI

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VALLEJO, CALIFORNIA 94589

FSR#05211

BUILDING TYPE / SIZE: P13 LE LRG
RELEASE: 22.05
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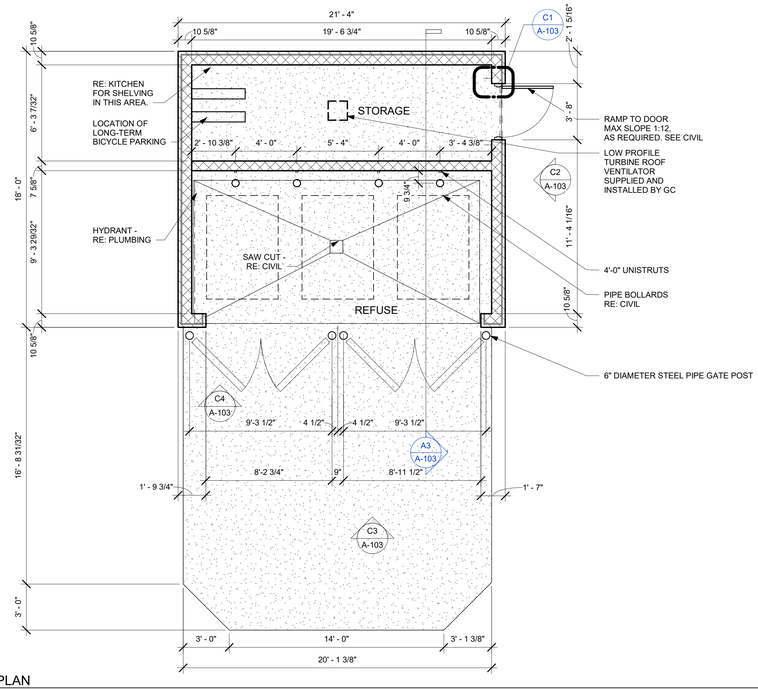
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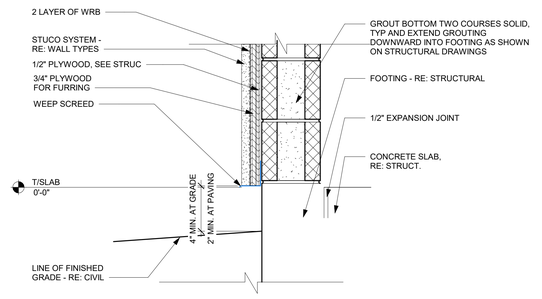
SHEET
SITE PLAN

SHEET NUMBER
A-100

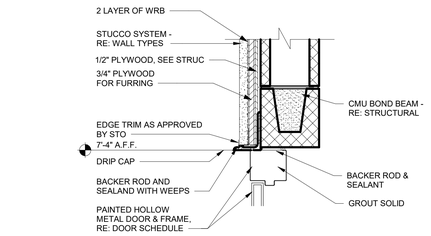
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10-LE-05211-A-100-SITE PLAN



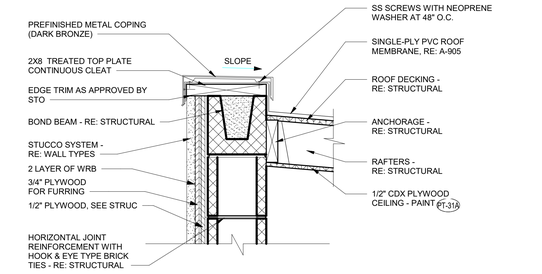
D3 REFUSE ENCLOSURE PLAN
1/4" = 1'-0"



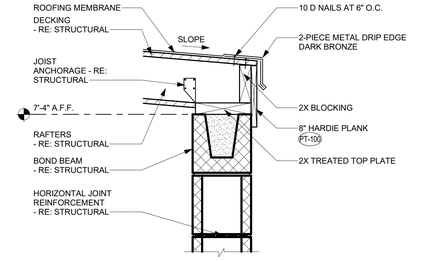
E2 REFUSE ENCLOSURE BASE DETAIL
1 1/2" = 1'-0"



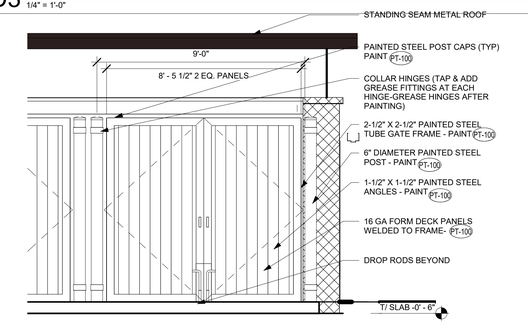
E1 REFUSE ENCLOSURE DOOR HEAD DETAIL
1 1/2" = 1'-0"



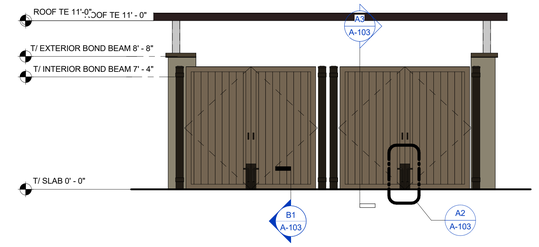
D2 REFUSE ENCLOSURE ROOF EDGE DETAIL
1 1/2" = 1'-0"



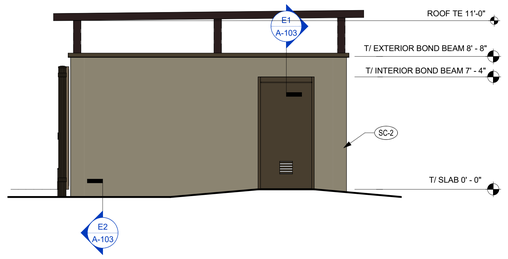
D1 REFUSE ENCLOSURE DRIP EDGE
1 1/2" = 1'-0"



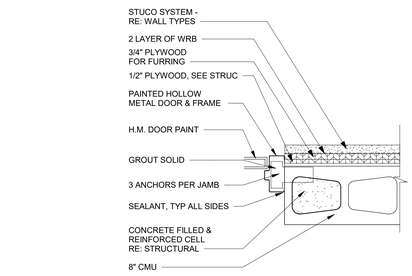
C4 REFUSE ENCLOSURE GATE REAR ELEVATION
3/8" = 1'-0"



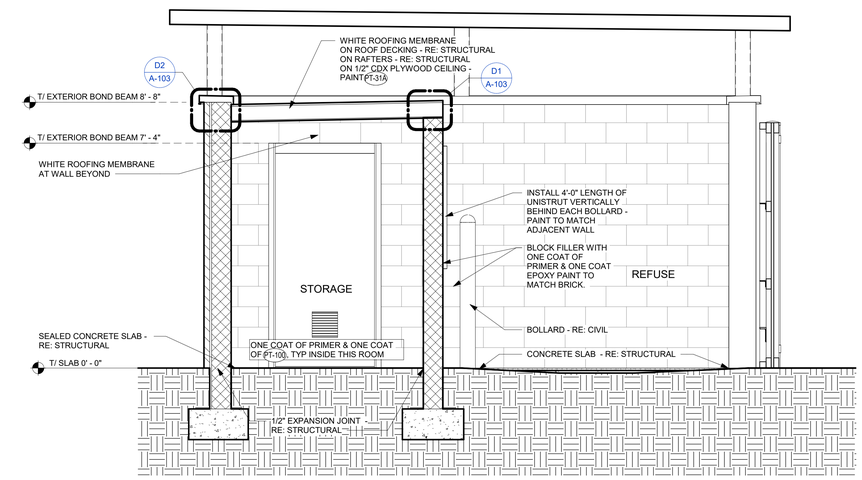
C3 REFUSE ENCLOSURE ELEVATION
1/4" = 1'-0"



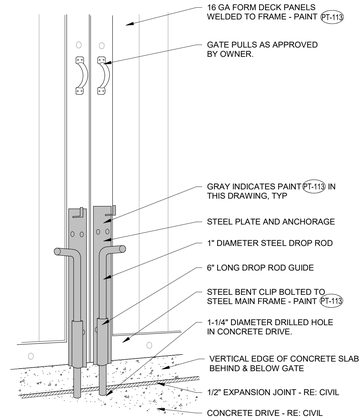
C2 REFUSE ENCLOSURE ELEVATION
1/4" = 1'-0"



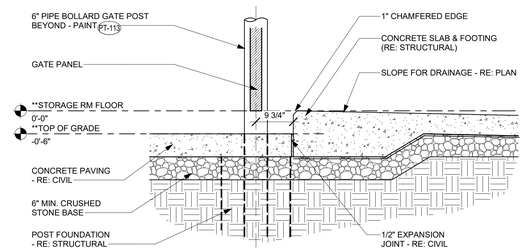
C1 REFUSE ENCLOSURE DOOR JAMB DETAIL
1 1/2" = 1'-0"



A3 REFUSE ENCLOSURE SECTION
1/2" = 1'-0"



A2 REFUSE ENCOSURE DROP ROD 3-D DECK PANEL DETAIL
1/2" = 1'-0"



B1 REFUSE PAD AT CONCRETE PAVING DETAIL
3/4" = 1'-0"

REFUSE ENCLOSURE NOTES

1. ** IN THE ARCHITECTURAL DRAWINGS, REFUSE ENCLOSURE AND MAIN BUILDING ARE BOTH NOTED WITH FINISH SLAB AT 0'-0". ACTUAL FINISH SLAB HEIGHTS WILL VARY BETWEEN MAIN BUILDING AND REFUSE ENCLOSURE. REFER TO CIVIL FOR ALL FINISH SLAB HEIGHTS.

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FSR#05211

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SHEET
REFUSE ENCLOSURE

SHEET NUMBER
A-103

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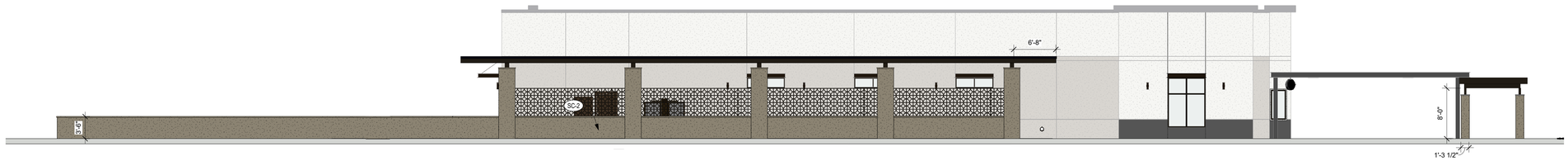








2 EXTERIOR ELEVATION
1/8" = 1'-0"



1 EXTERIOR ELEVATION
1/8" = 1'-0"

7/7/2023 1:22:28 PM Autodesk Docs://CA_05211_Hwy 29 & Mini_2022.7_FSR05211_Hwy 29 & Mini_ARC.rvt
10-LE-05211-A-301a-ORDER POINT CANOPY ELEVATIONS

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FSR#05211

BUILDING TYPE / SIZE: P13 LE LRG
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REVISION SCHEDULE

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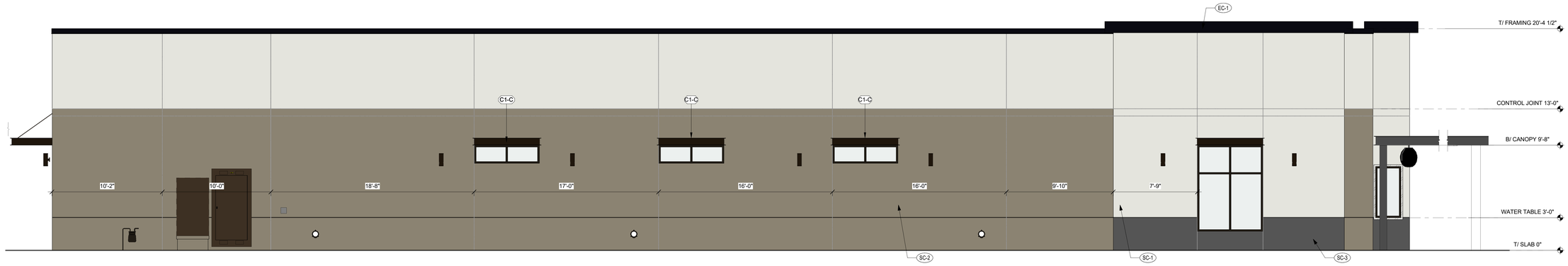
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CONSULTANT PROJECT # DEN22-0109-00
DATE 06/23/2023
DRAWN BY Author

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SHEET
ORDER POINT CANOPY ELEVATIONS

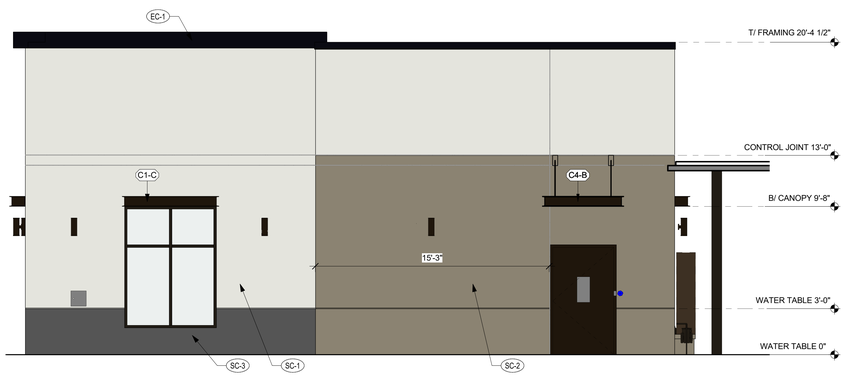
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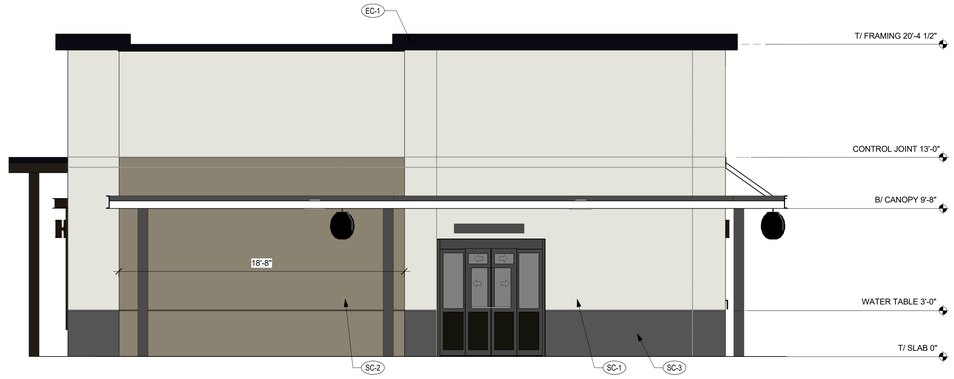
D1 WEST EXTERIOR ELEVATION
1/4" = 1'-0"



C1 EAST EXTERIOR ELEVATION
1/4" = 1'-0"



B3 NORTH EXTERIOR ELEVATION
1/4" = 1'-0"



B1 SOUTH EXTERIOR ELEVATION
1/4" = 1'-0"

FINISH SCHEDULE - EXTERIOR

MARK	DESCRIPTION	MANUFACTURER	MODEL NAME	MODEL NUMBER	COLOR	NOTE
CP-1	CANOPY METAL FASCIA		DURA COAT	DC19ST-2703	DARK BRONZE	OIL RUBBED BRONZE METALLIC TEXTURE PVD
CP-2	CANOPY METAL DECK				WHITE	SMOOTH WHITE, HIGH GLOSS
EC-1	PARAPET WALL COPING	DUROLAST / EXCEPTIONAL METALS			MIDNIGHT BRONZE	
PT-100	EXTERIOR PAINT	SHERWIN WILLIAMS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350	SW 2807	ROOKWOOD	REFUSE ENCLOSURE. FINISH: SEMI-GLOSS ON DOOR FRAMES, SATIN ON WALLS
PT-113	EXTERIOR PAINT	SHERWIN WILLIAMS	SHER-CRYL HIGH PERFORMANCE ACRYLIC #B66-350		DARK BRONZE	FINISH: SEMI-GLOSS
SC-1	STUCCO	SHERWIN WILLIAMS	POWERWALL	SW7566	WESTHIGHLAND WHITE	FINISH: SAND MEDIUM
SC-2	STUCCO	SHERWIN WILLIAMS	POWERWALL	SW6172	HARDWARE	FINISH: SAND MEDIUM
SC-3	STUCCO	SHERWIN WILLIAMS	POWERWALL	CFA CUSTOM	URBAN NIGHT	FINISH: SAND MEDIUM
ST-1	STOREFRONT	YKK	YES 45		DARK BRONZE (MATTE)	

ATTACHED CANOPY SCHEDULE

Mark	Description	Count	Overall Width	Overall Depth	Tie Back Mounting (Offset From Top)	Integral Lighting
C1-C	Exterior Canopy	10	6'-4"	1'-0"	0"	No
C1-K	Exterior Canopy	1	6'-4"	1'-0"	0"	Yes
C4-B	Exterior Canopy	2	5'-4"	4'-0"	2'-4"	Yes
C4-L	Exterior Canopy	1	17'-10 1/2"	4'-0"	2'-4"	Yes
Grand total		14				

GENERAL NOTES
1. ALL SIGNAGE PROVIDED BY OTHERS
2. REF FLOOR PLAN AND WINDOW LEGEND FOR STOREFRONT INFORMATION

CANOPY NOTES:

BUILDING MOUNTED CANOPIES
- 8" THICK CANOPY
- KYNAR FINISH OF STRUCTURE, FASCIA, & DECKING TO MATCH CP-1

COLUMN MOUNTED CANOPIES
- 10" THICK CANOPY
- FINISH OF STRUCTURE TO BE CP-1
- FINISH OF DECKING TO BE CP-2

LEGEND

- SC-1 PAINT SHERWIN WILLIAMS #SW7566 "WESTHIGHLAND WHITE"
- SC-2 PAINT SHERWIN WILLIAMS #SW6172 "HARDWARE"
- SC-3 PAINT SHERWIN WILLIAMS CFA CUSTOM "URBAN NIGHT"
- EC-1 PREFINISHED METAL COPING COLOR: DARK BRONZE
- EXPANSION JOINT, SEALANT COLOR TO MATCH MORTAR COLOR
- CARD READER BY SECURITY VENDOR - RE: ELEC
- MDP - PT-113 RE: ELECTRICAL
- OIL EXTRACTION PORT ACCESS BOX
- CO2 FILL BOX - RE: KITCHEN
- LIGHT FIXTURE - RE: ELECTRICAL
- CT CABINET - PT-113 RE: ELECTRICAL
- OVERFLOW FOR INTERNAL DRAINAGE

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PLANNING BRANDING
INTERIORS BUILDING MEASUREMENT
900 S Broadway, Suite #320
Denver, COLORADO, 80209
P 720.488.2626

CHICK-FIL-A
HWY 29 & MINI

SONOMA BOULEVARD
VALLEJO, CALIFORNIA 94589

FSR#05211

BUILDING TYPE / SIZE: P13 LE LRG
RELEASE: 22.05
PRINTED FOR
SD SET

REVISION SCHEDULE

NO.	DATE	DESCRIPTION

SD SET

CONSULTANT PROJECT # DEN22-0109-00
DATE 06/23/2023
DRAWN BY V.Z.

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SHEET
EXTERIOR ELEVATIONS

SHEET NUMBER
A-301

7/7/2023 3:42:54 PM Autodesk Docs://CA_05211_Hwy 29 & Mini_2022.7_FSR/05211_Hwy 29 & Mini_ARC.rvt
10-LE-05211-A-301-EXTERIOR ELEVATIONS



PLANT LIST:

SYMBOL / BOTANICAL NAME	COMMON NAME	SIZE	WATER USE
TREES:			
ACER RUBRUM	RED MAPLE	24" BOX	MED
LAGERSTROEMIA 'TUSCARORA'	CRAPE MYRTLE	15 GA	LOW
LAURUS NOBLIS 'SARATOGA'	GRECIAN LAUREL	24" BOX	MED
PLATANUS ACERIFOLIA 'COLUMBIA'	PLANE TREE	24" BOX	LOW
ULMUS PARVIFOLIA	CHINESE ELM	24" BOX	MED
SHRUBS:			
CALLISTEMON V. 'LITTLE JOHN'	LITTLE JOHN BOTTLEBRUSH	5 GA	LOW
CISTUS PURPUREUS	ROCKROSE	5 GA	LOW
CARPENTERIA CALIFORNICA	BUSH ANEMONE	5 GA	LOW
FRANGULA CALIFORNICA 'EVE CASE'	COFFEEBERRY	5 GA	LOW
HETEROMELES ARBUTIFOLIA	TOYON	5 GA	LOW
LOMANDRA LONGIFOLIA 'BREEZE'	DWARF MAT RUSH	5 GA	LOW
LOROPELTATUM CHIN. 'JAZZ HANDS'	LOROPETATUM	5 GA	LOW
MYRTUS COMMUNIS 'COMPACTA'	DWARF MYRTLE	5 GA	LOW
PENNISETUM 'BUNNY TAILS'	BUNNY TAIL GRASS	5 GA	LOW
ROSMARINUS O. 'TUSCAN BLUE'	TUSCAN BLUE ROSEMARY	5 GA	LOW
WESTRINGIA FRUTICOSA	COAST ROSEMARY	5 GA	LOW
VINES:			
FICUS PUMILA	CREEPING EVERGREEN FIG	5 GA	MED
PERENNIALS:			
ANIGOZANTHOS 'BUSH BABY'	KANGAROO PAW	1 GA	LOW
GROUNDCOVERS:			
C COPROSMA 'KIRKII'	CREEPING MIRROR PLANT	1 GA @36" O.C.	LOW
J JUNCUS PATENS	CALIFORNIA GRAY RUSH	1 GA@ 24" O.C.	LOW
M MUHLENBERGIA RIGENS	DEERGRASS	5 GA@ 24" O.C.	LOW
P MYOPORUM PARVIFOLIUM	MYOPORUM	1 GA @36" O.C.	LOW
R ROSMARINUS PROSTRATUS	PROSTRATE ROSEMARY	1 GA @36" O.C.	LOW

GENERAL NOTES:

1. ALL PLANTING SHALL BE WATERED BY FULLY AUTOMATIC, WATER-CONSERVING IRRIGATION SYSTEM.
2. ALL PLANTING AREAS SHALL RECEIVE A 3" LAYER OF FIRBARK MULCH DRESSING.

CERTIFICATION STATEMENT:

I CERTIFY THAT THE LANDSCAPE AND IRRIGATION PLANS COMPLY WITH THE LANDSCAPE DESIGN STANDARDS AND REQUIREMENTS FOR THE STATE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE.

RICK STOVER
RW STOVER AND ASSOCIATES, INC.
LANDSCAPE ARCHITECT

SIGNATURE- LANDSCAPE ARCHITECT — 8-16-22 DATE

#3017
STATE LICENSE NUMBER

REFER TO SHEET L2 FOR PLANT IMAGES

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

REVISIONS
- Planning Comments 08-16-22
- Planning Comments 09-12-22
- Revisions 10-17-22
- Revisions 10-31-22

RW Stover & Associates, Inc.
Landscape Architecture
1420 North Main Street, Suite 4
Walnut Creek, CA 94596
Ph: 925.933.2283

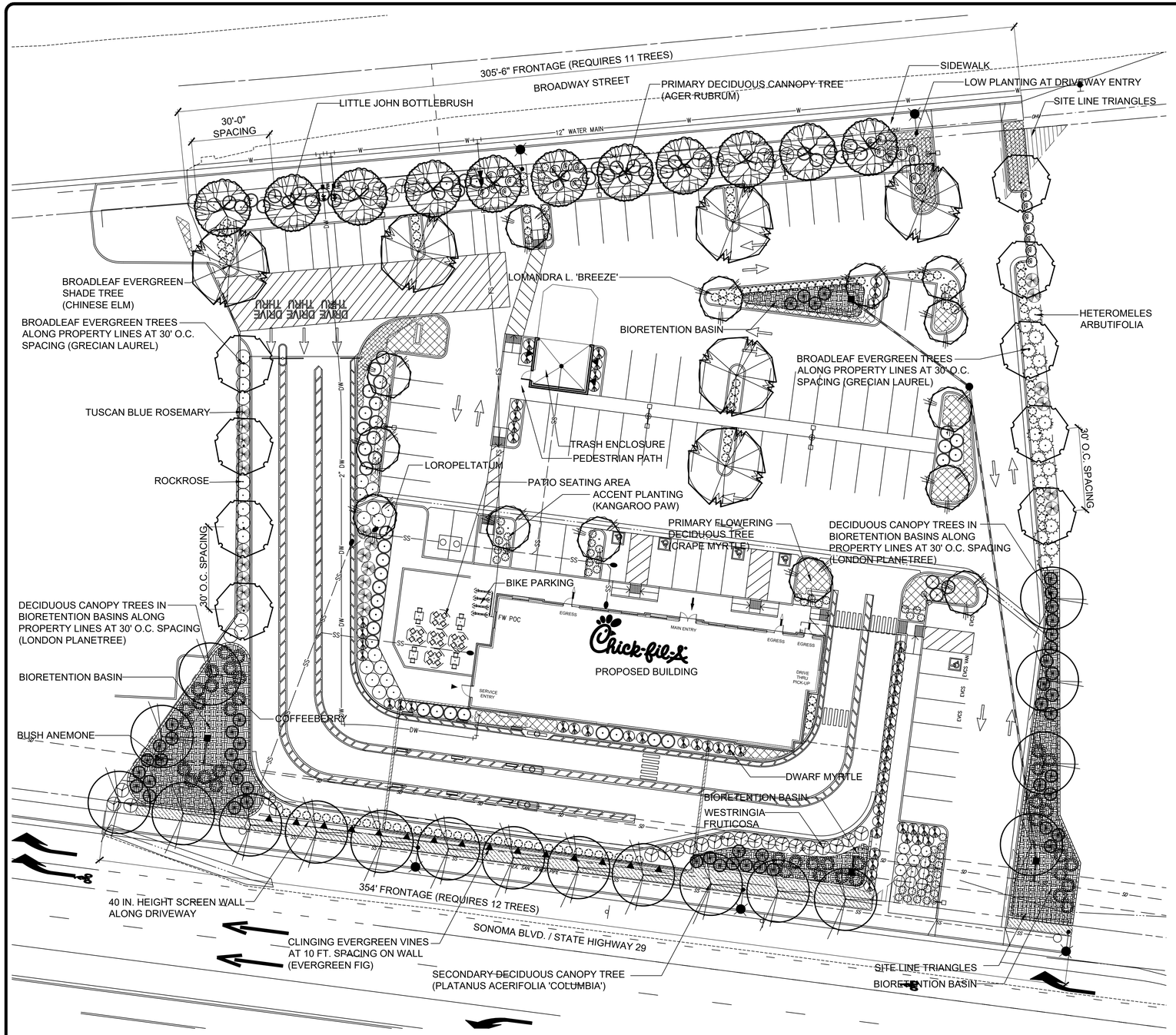
RICK STOVER LANDSCAPE ARCHITECT 3017 REGISTERED STATE OF CALIFORNIA

CHICK FIL-A
BROADWAY STREET
VALLEJO, CALIFORNIA

LANDSCAPE PLAN RENDERING

DESIGNED: DRAWN:
CHECKED: JOB NO:
DATE 04-15-22
SCALE

SHEET L1a
OF SHEETS



PLANT LIST:

SYMBOL / BOTANICAL NAME	COMMON NAME	SIZE	WATER USE
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ACER RUBRUM	RED MAPLE	24" BOX	MED
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FRANGULA CALIFORNICA 'EVE CASE'	COFFEEBERRY	5 GA	LOW
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LOROPELTATUM CHIN. 'JAZZ HANDS'	LOROPETATUM	5 GA	LOW
MYRTUS COMMUNIS 'COMPACTA'	DWARF MYRTLE	5 GA	LOW
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R ROSMARINUS PROSTRATUS	PROSTRATE ROSEMARY	1 GA @36" O.C.	LOW

WATER EFFICIENT LANDSCAPE WORKSHEET

REFERENCE EVAPOTRANSPIRATION (ETo): 40.3

HYDROZONE / PLANTING DESCRIPTION	PLANT FACTOR (PF)	IRRIGATION METHOD	IRRIGATION EFFICIENCY (IE)	ETAF (PF / IE)	LANDSCAPE AREA (sq. ft.)	ETAF x AREA	ESTIMATED TOTAL WATER USE (ETWU)
REGULAR LANDSCAPE AREAS:							
LOW WATER USE	0.3	DRIP	0.81	0.3703703	15944	5905.184063	147546.9
MEDIUM WATER USE	0.5	BUBBLER	0.81	0.6172839	387	238.8888693	5968.9
				TOTALS:	16331	6144	
SPECIAL LANDSCAPE AREAS:							
REC. AREA				0	0	0	0
WATER FEATURE 1				0	0	0	0
WATER FEATURE 2				0	0	0	0
				TOTALS:	0	0	
						ETWU TOTAL:	153,516
						MAXIMUM ALLOWED WATER ALLOWANCE (MAWA):	183,621

ETAF CALCULATIONS:

REGULAR LANDSCAPE AREAS:

TOTAL ETAF x AREA	6,144
TOTAL LANDSCAPE AREA	16,331
AVERAGE ETAF	0.38

NOTE: AVERAGE ETAF FOR REGULAR LANDSCAPE AREAS MUST BE 0.55 OR BELOW FOR RESIDENTIAL AREAS, AND 0.45 OR BELOW FOR NON-RESIDENTIAL AREAS.

ALL LANDSCAPE AREAS:

TOTAL ETAF x AREA	6,144
TOTAL LANDSCAPE AREA	16,331
SITEWIDE ETAF	0.38

GENERAL NOTES:

1. ALL PLANTING SHALL BE WATERED BY FULLY AUTOMATIC, WATER-CONSERVING IRRIGATION SYSTEM.
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RICK STOVER
RW STOVER AND ASSOCIATES, INC.
LANDSCAPE ARCHITECT

SIGNATURE- LANDSCAPE ARCHITECT — 8-16-22 DATE

#3017
STATE LICENSE NUMBER

REFER TO SHEET L2 FOR PLANT IMAGES

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

REVISIONS

1	Planning Comments 08-16-22
2	Planning Comments 09-22-22
3	Resubmittal 01-26-23
4	Resubmittal 07-17-23
5	
6	
7	

RW Stover & Associates, Inc.
Landscape Architecture
1420 North Main Street, Suite 4
Walnut Creek, CA 94596
Ph: 925.933.2383

RICK STOVER #3017 REGISTERED LANDSCAPE ARCHITECT STATE OF CALIFORNIA
Signature
Renewal 08/31/2024

CHICK FIL-A
BROADWAY STREET
VALLEJO, CALIFORNIA

PRELIMINARY LANDSCAPE PLAN

DESIGNED: | DRAWN:
CHECKED: | JOB NO:
DATE 04-15-22
SCALE

SHEET L1b
OF SHEETS

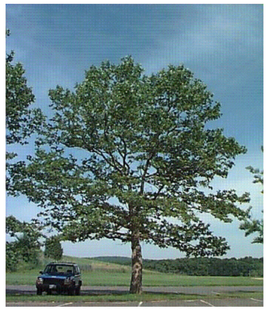
TREES:


ACER RUBRUM


LAGERSTROEMIA 'TUSCARORA' (STD.)



LAURUS NOBLIS 'SARATOGA'


PLATANUS ACERIFOLIA 'COLUMBIA'


ULMUS PARVIFOLIA

SHRUBS:


CALLISTEMON VIMINALIS 'LITTLE JOHN'


CISTUS PURPUREUS


CARPENTERIA CALIFORNICA


FRANGULA CALIFORNICA 'EVE CASE'


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ROSMARINUS OFFICINALIS 'TUSCAN BLUE'


WESTRINGIA FRUTICOSA

CLINGING VINES:


FICUS PUMILA

CLINGING VINES:


ANIGOZANTHOS 'BUSH BABY'

GROUNDCOVER:


COPROSMA 'KIRKII'


JUNCUS PATENS


MUHLENBERGIA RIGENS


MYOPORUM PARVIFOLIUM


ROSMARINUS PROSTRATUS

REVISIONS

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Ph: 925.933.2283

REGISTERED LANDSCAPE ARCHITECT RICHARD WILLIAM STOVER 3017 STATE OF CALIFORNIA
Signature
Date 04-15-22

CHICK FIL-A
BROADWAY STREET
VALLEJO, CALIFORNIA

PLANT IMAGES

DESIGNED:	DRAWN:
CHECKED:	JOB NO:
DATE 04-15-22	
SCALE	

SHEET
L2
OF SHEETS



1 SW 7566 WESTHIGHLAND WHITE
STUCCO SYSTEM (STC-1)



2 SW “DARK BRONZE”
EXTERIOR PAINT



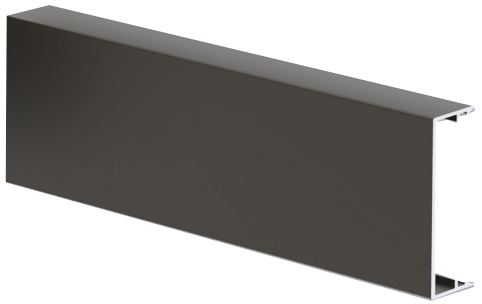
3 SW 6172 HARDWARE
STUCCO SYSTEM (STC-2)



4 SW CFA CUSTOM “URBAN NIGHT”
STUCCO SYSTEM (STC-3)



5 SW 2807 ROOKWOOD MEDIUM BROWN
EXTERIOR PAINT



6 YKK YES 45 DARK BRONZE
STORE FRONT