



Civic Design Review - Phase 3

BAY CORRIDOR TRANSMISSION & DISTRIBUTION (BCTD) ELECTRICAL SUBSTATION 398 QUINT STREET (DAVIDSON AVENUE near QUINT STREET)

February 8, 2021



Welcome Back!

(Previously seen during Phase 1 and 2 review - 8/2020)



BCTD Electrical Substation Project



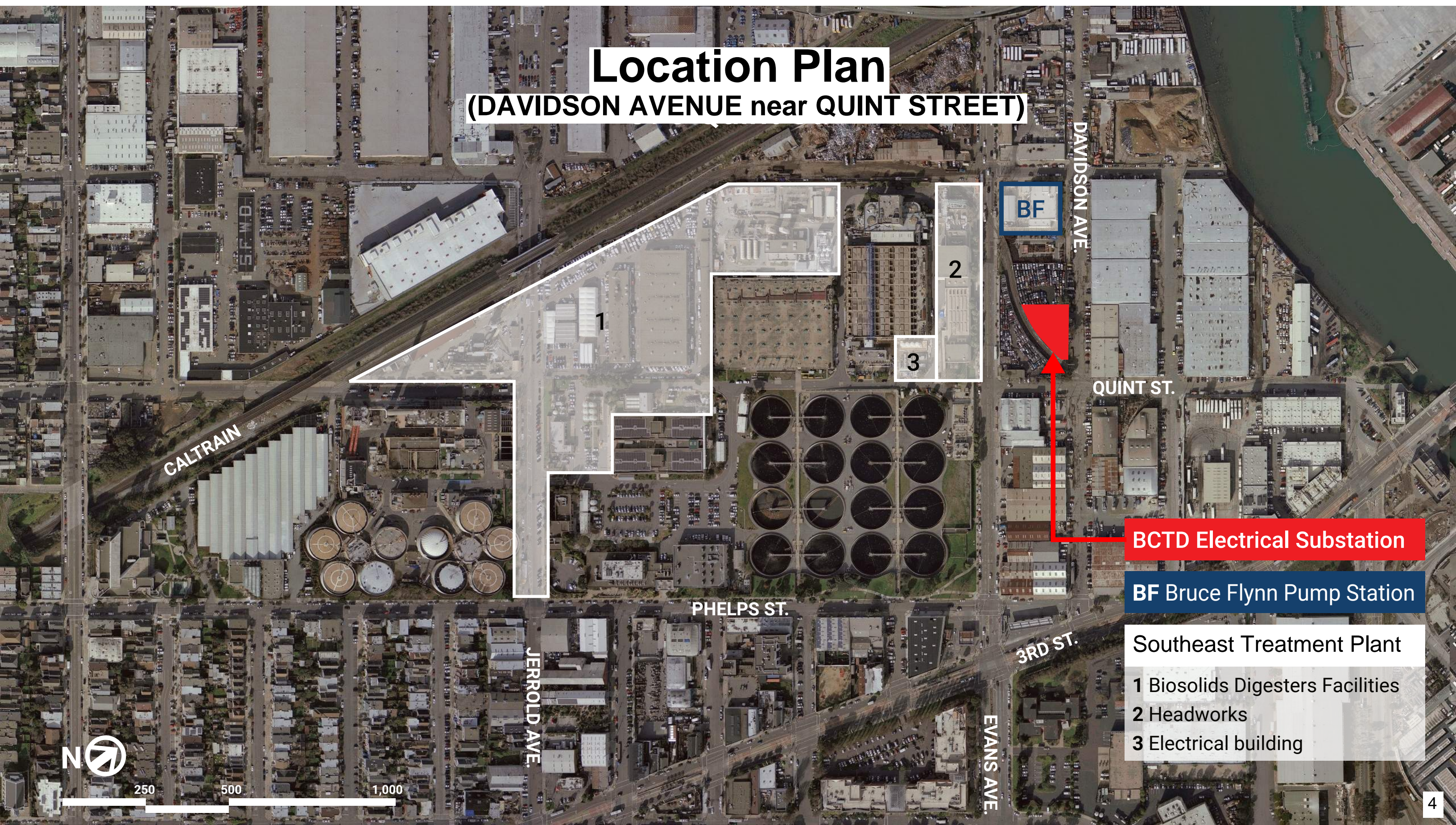
BAYVIEW/ HUNTERS POINT

CENTRAL WATERFRONT/ DOGPATCH

MISSION BAY

Location Plan

(DAVIDSON AVENUE near QUINT STREET)



BCTD Electrical Substation

BF Bruce Flynn Pump Station

Southeast Treatment Plant

- 1 Biosolids Digesters Facilities
- 2 Headworks
- 3 Electrical building

Project brief

Site

- Area approximately 13,000 sq ft.
- Industrial zoning PDR-2 (65'-J).
- Expected new address - 1535 Davidson Ave.

Equipment

- Outdoor electrical equipment only, no occupied spaces.
- 230kV transformers and gas insulated switchgear (GIS).

Project requirements

- Perimeter wall/ fire rated barrier.
- Vehicular and staff gates.
- Vehicular access ramp.
- 3 existing trees to be removed.
- Clear frontage along Davidson Ave. to allow for crane access into facility.

Sea level rise

Site raised approximately 3-ft, electrical equipment placed on concrete pads 6-in above raised site elevation.

Stormwater management

Accounting for allowed area exclusions, project will create and/or replace <5000 sq ft of impervious surface.

New concrete sidewalk

Allow for future equipment replacement with crane.



Gas Insulated Switchgear

Facility Access

There will be no public access to the facility. Facility access is limited to PUC employees, generally visited once per week for routine maintenance.

Project goals

- Meet electrical operational & security requirements.
- Consider proximity to nearby warehouses and light-industrial facilities.
- Create a relationship with other SFPUC projects (SEP Campus & Headworks).
- Create an elegant, understated facility that fits within the mostly single-story buildings along Davidson Avenue and the greater neighborhood.



Facilities facing project site on Davidson Avenue



I-280

BRUCE FLYNN
PUMP STATION

NEW HEADWORKS

RAIL TRACK

CONSTRUCTION
STAGING SFPUC

130 ft

SUBSTATION
SITE

170 ft

DAVIDSON AVENUE

TO ISLAIS CREEK

EVANS AVENUE

CONSTRUCTION
STAGING SFPUC

QUINT STREET

TO 3RD STREET

SEP CAMPUS

Google earth
Data LDEO-Columbia, NSF, NOAA
Image Landsat / Copernicus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

40 ft

I-280

HEADWORKS
ART WALL

CONSTRUCTION
STAGING SFPUC

130 ft

SUBSTATION
SITE

170 ft

DAVIDSON AVENUE

EVANS AVENUE

CONSTRUCTION
STAGING SFPUC

QUINT STREET

sight lines

SEP CAMPUS

Consider **visible intersections** and **sight lines**.

Google earth
Data LDEO-Columbia, NSF, NOAA
Image Landsat / Copernicus
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

40 ft



SEP CAMPUS

**NEW HEADWORKS
ART WALL**

BCTD SUBSTATION SITE

**(3) EXIST. TREES
HAVE BEEN
REMOVED**

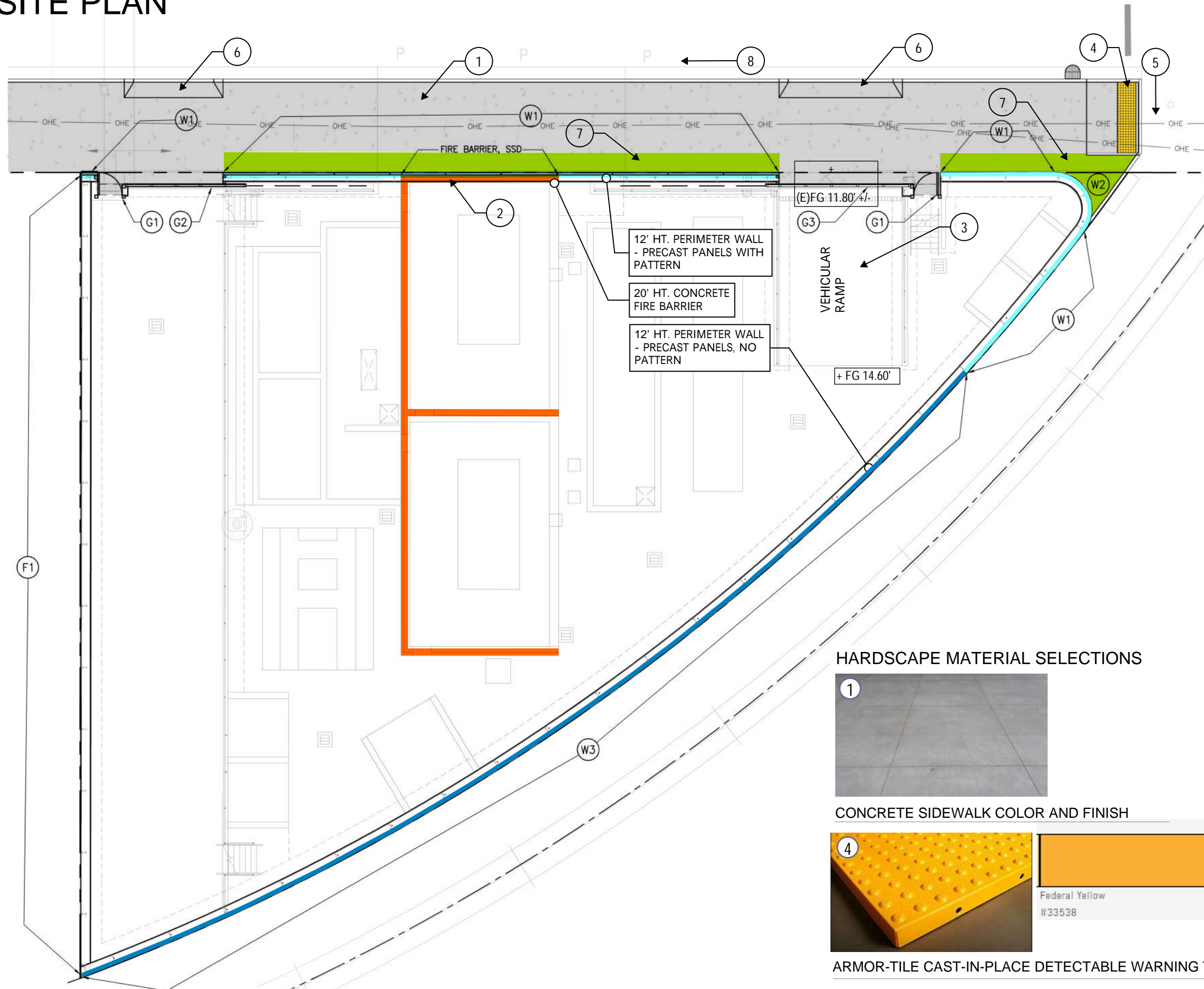
NEW PERIMETER

NEW SIDEWALK

**DAVIDSON AVENUE
TO 3RD ST.**

**QUINT STREET
TO CARGO WAY &
ISLAIS CREEK**

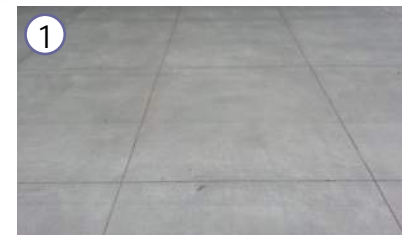
SITE PLAN



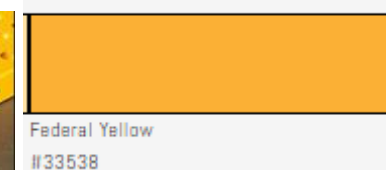
LEGEND:

- W1. PERIMETER WALL - 12' HT x 10' WIDE ARCHITECTURAL PRECAST PANELS WITH CUSTOM PATTERN FROM GRAPHIC CONCRETE.
- W2. PERIMETER WALL - 12' HT. x 7' WIDE ARCHITECTURAL PRECAST PANELS WITH CUSTOM PATTERN FROM GRAPHIC CONCRETE.
- W3. PERIMETER WALL - 12' HT x 10' WIDE ARCHITECTURAL PRECAST PANELS WITH STANDARD FORM FINISH.
- F1. WEST FENCE - 12' HT. PREFABRICATED ALUMINUM FENCE PANEL, POWDERCOAT COLOR TO MATCH "STEEL" FROM LANDSCAPE FORMS. PANELS SUPPLIED BY BOK MODERN
- G1. PEDESTRIAN/STAFF ENTRY GATE - 8' HT ARCHITECTURAL ALUMINUM PANEL. COORDINATED PANEL SURROUNDS TO 12' HT. NON-DIRECTIONAL BRUSHED FINISH
- G2. WEST VEHICULAR GATE - 12' HT x 16' WIDE (OPEN) ARCHITECTURAL ALUMINUM PANEL ATTACHED TO STEEL FRAME. NON-DIRECTIONAL BRUSHED FINISH
- G3. EAST VEHICULAR GATE - 12' HT x 21' WIDE (OPEN) ARCHITECTURAL ALUMINUM PANEL ATTACHED TO STEEL FRAME. NON-DIRECTIONAL BRUSHED FINISH
- 1. NEW CONCRETE SIDEWALK. FINISH TO CITY STANDARDS.
- 2. CONCRETE FIRE BARRIER. NATURAL GRAY, STANDARD FORM FINISH.
- 3. REINFORCED CONCRETE VEHICULAR RAMP, CONCRETE TO MATCH SIDEWALK.
- 4. CONCRETE ADA COMPLIANT TACTILE PAVERS PER CITY STANDARDS.
- 5. PEDESTRIAN CROSSING. FUTURE UPGRADES BY OTHERS.
- 6. REINFORCED CONCRETE DRIVEWAY PER SFDPW STANDARDS, CONCRETE TO MATCH SIDEWALK.
- 7. PLANTING AREA WITH AN AUTOMATIC IRRIGATION SYSTEM.
- 8. STREET PARKING.

HARDSCAPE MATERIAL SELECTIONS



CONCRETE SIDEWALK COLOR AND FINISH



ARMOR-TILE CAST-IN-PLACE DETECTABLE WARNING TILE

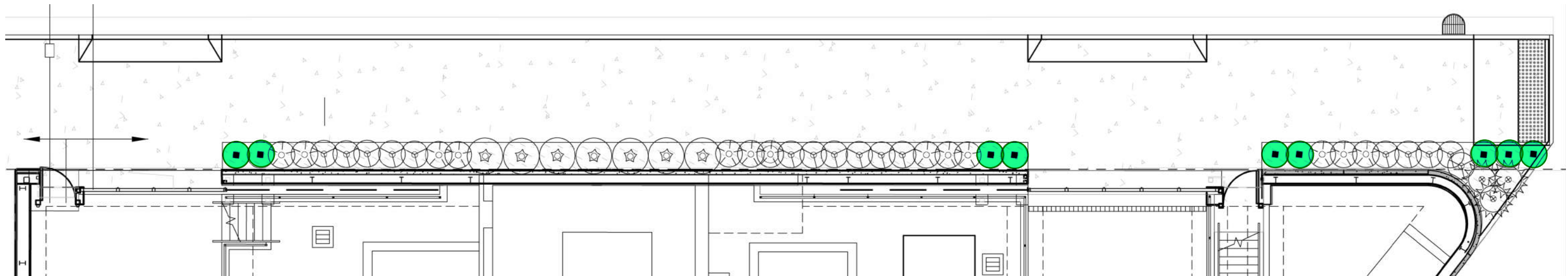
CIVIC DESIGN REVIEW (CDR), PHASE 1 AND PHASE 2 REVIEW COMMENTS (8.17.2020)

AGAVE ATTENUATA ALTERNATIVE

The Committee expressed concern given that it will be in a Northeast exposure.

RESPONSE:

After discussion with some nursery plant specialists, we're confident the plant will tolerate the shade given from the wall. This agave typically does well around San Francisco, and in this case, benefits include providing well-drained soil and some reflected light from the perimeter wall.



CIVIC DESIGN REVIEW (CDR), PHASE 1 AND 2 REVIEW COMMENTS (8.17.2020)

BACKLIT LEXAN PANEL QUALITY

The Committee suggested that the team ensure that the illumination/light box for the graphic be high quality.

RESPONSE:

The backlit lexan panel address number proposed is from RESNO, industry leader in slim-line illuminated architectural letters.

Introducing RESNO by BITRO.

RESNO = Cutting Edge Technology and Superb Craftsmanship Lettering System.

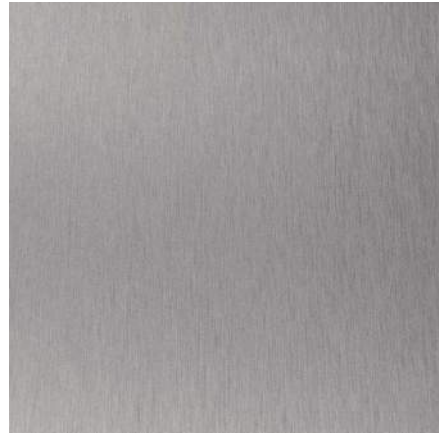
Resno offers exquisit jewel like illuminated letters that maximize brands and enhance product advertising like no other.

Resno Series No. RS-AC-S2

Halo Lit & Partial Side Lit

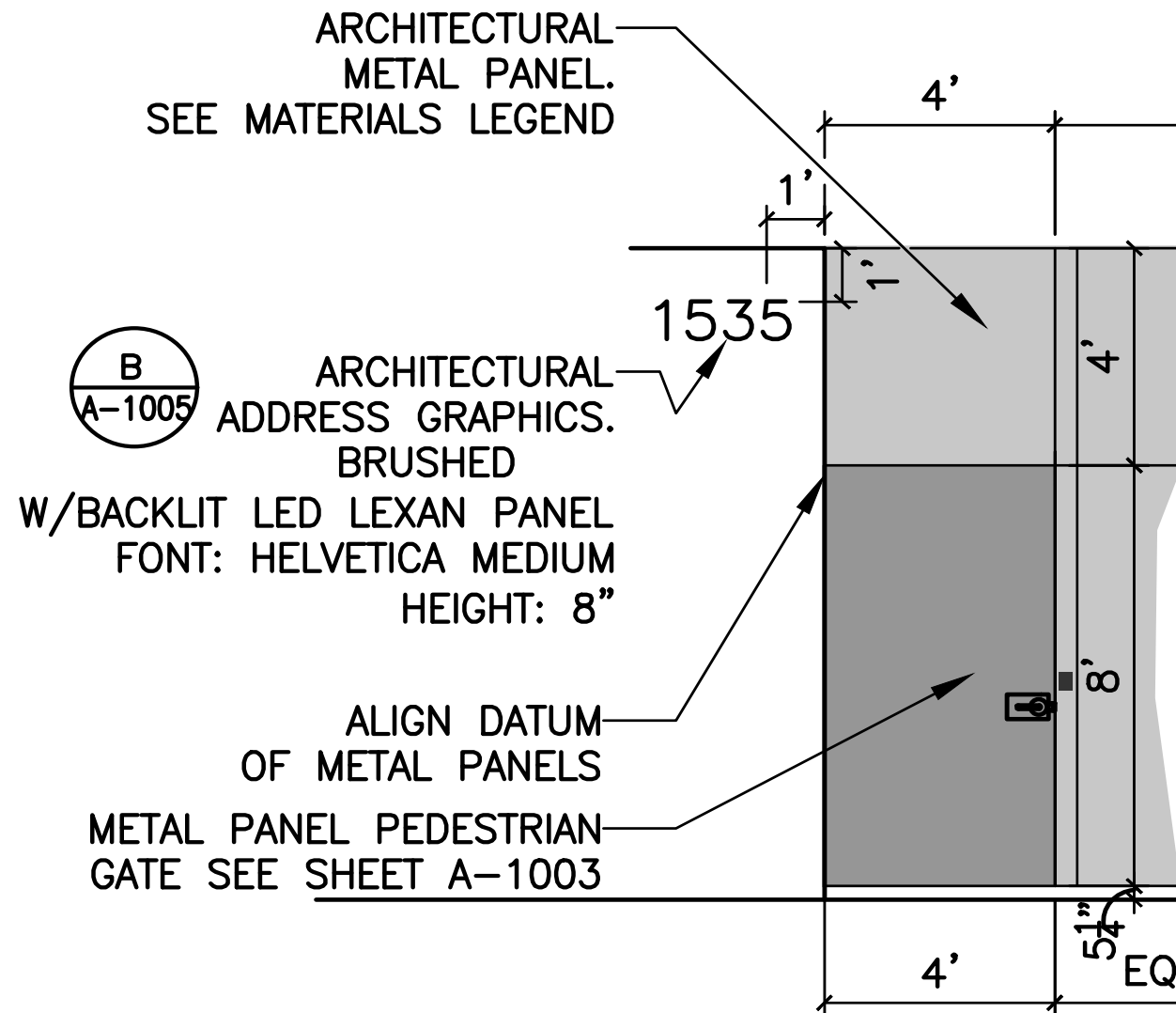


EXTERIOR SIGNAGE AND GRAPHICS

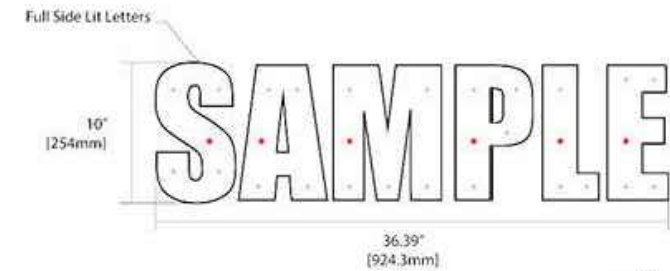


NON-DIRECTIONAL BRUSH FINISH

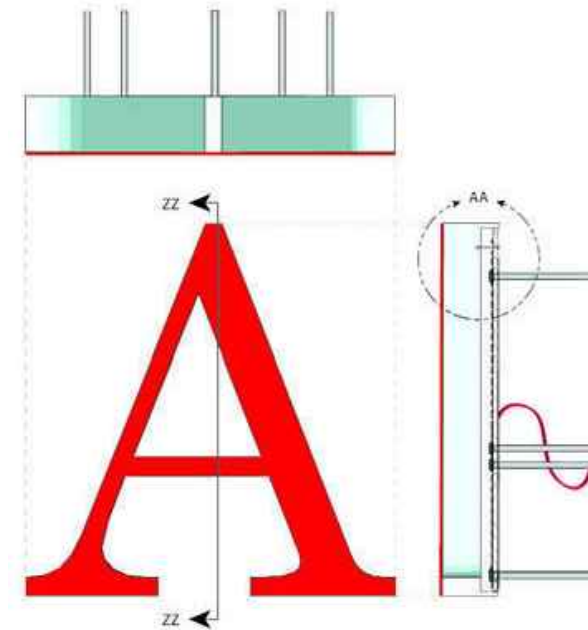
ARCHITECTURAL METAL LETTER FINISH.



SCALE - NTS



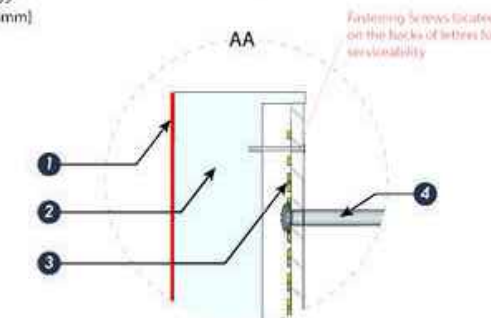
A1 Sign Elevation



B1 Section Elevation

- Notes:
- Mounting pattern and accessories supplied with letters
 - Class II 5A ASU-60-12U variable primary with 12VDC secondary power supplies
 - Electrical connections by customer
 - Permitting if applicable by customer
 - Installation by customer

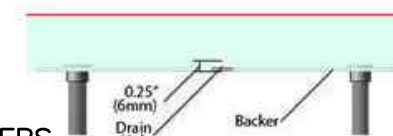
NOTE:
MANUFACTURER: RESNO ARCHITECTURAL LETTERS
MODEL: RS-AC-S1 CONTACT: 201-641-1004
/RESNO@BITROGROUP.COM



B1.1 Typical Section Elevation



B2 Isometric Elevation



* Drain hole may be visible from the bottom

C1 Drain hole Location - Bottom View

- Reference -



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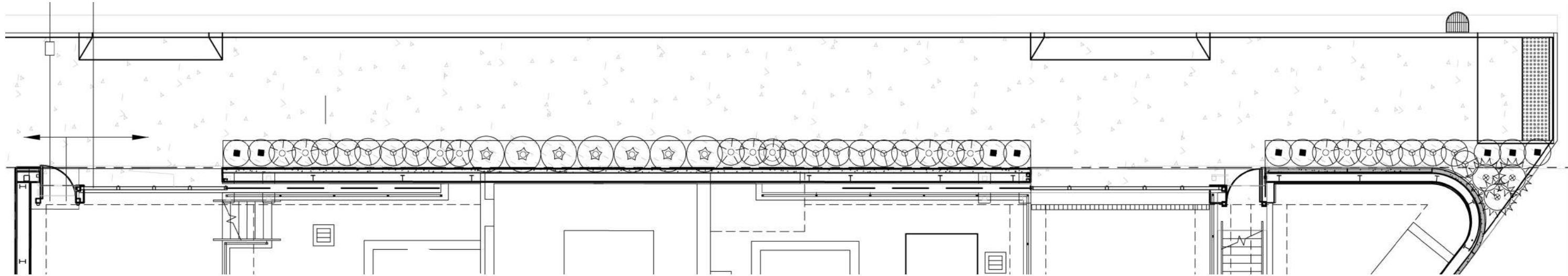


< RS-AC-S1 On / Off >

B SIGNAGE LETTERS

SCALE: NTS

PLANTING PLAN AND PLANT SELECTIONS



PLANT LEGEND

SYMBOL	LATIN NAME	COMMON NAME	QTY	PLANT SIZE (H X W)	CONTAINER SIZE	WATER USE	NOTES
SHRUB AND PERENNIALS							
	LEYMUS CONDENSATUS 'CANYON PRINCE'	CANYON PRINCE WILD RYE	16	3' X 3'	5 GAL	LOW	
	CHONDROPETALUM ELEPHANTINUM	LARGE CAPE RUSH	7	4' X 6'	5 GAL	LOW	
	JUNCUS PATENS 'ELK BLUE'	CALIFORNIA GRAY RUSH	13	3' X 3'	5 GAL	LOW	
	SALVIA LEUCOPHYLLA	PURPLE SAGE	5	3' X 3'	5' GAL	LOW	
	AGAVE ATTENUATA	FOX TAIL AGAVE	9	4' X 5'	3 GAL	LOW	
TURF & MULCH							
	3" DEPTH MULCH						

GENERAL PLANTING NOTES

- ALL LANDSCAPING SHALL BE INSTALLED IN ACCORDANCE WITH THE CITY OF SAN FRANCISCO REQUIREMENTS AND STANDARDS. ALL PLANT MATERIAL SHALL CONFORM TO ANSI Z601 "STANDARD FOR NURSERY STOCK". NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES
- ALL PLANTING AREAS SHALL HAVE NEW IMPORT TOPSOIL TO A 24" DEPTH
- CONTRACTOR TO VERIFY ALL SITE CONDITIONS AND UTILITY LOCATIONS.
- PLANT COUNT IS FOR THE CONVENIENCE OF THE CONTRACTOR. IN CASE OF DISCREPANCIES, THE PLAN SHALL GOVERN. NOTIFY RESIDENT ENGINEER IMMEDIATELY FOR FURTHER DIRECTION WHEN DISCREPANCIES ARE NOTICED.
- CONTRACTOR SHALL CONTACT THE OWNER'S REPRESENTATIVE FOR OBSERVATIONS OF LANDSCAPE AND IRRIGATION.
- ALL PLANTING AREAS SHALL BE TOP-DRESSED WITH 3 INCH LAYER OF MULCH. TOP OF MULCH SHALL BE MAXIMUM 1" BELOW ADJACENT PAVING ELEVATION.
- CONTRACTOR SHALL ARRANGE & PAY FOR SOIL TESTING OF PLANTING SOIL BY AN ACCREDITED SOILS LABORATORY APPROVED BY THE CITY. REQUEST THAT THE LABORATORY MAKE RECOMMENDATIONS FOR AMENDING PLANTING AREAS & FOR BACKFILL MIX USING BAY FRIENDLY APPROVED METHODS. CONTRACTOR TO FOLLOW RECOMMENDATIONS OF SOILS LAB.
- ORGANIC COMPOST AND MULCH SHALL CONTAIN NO VISIBLE GLASS, METAL OR PLASTIC. PAPER SHALL BE NO MORE THAN 0.5% BY WEIGHT OR VOLUME. MUNICIPAL COMPOST SHALL NOT BE USED. CONTRACTOR SHALL SUBMIT A CURRENT LAB ANALYSIS PERFORMED BY A STA CERTIFIED LABORATORY FOLLOWING THE SEAL OF TESTING ASSURANCE PROGRAM & CONFIRMING THAT COMPOST IS STABLE, MATURE & FREE OF NOXIOUS ELEMENTS & HAVE NO OBJECTIONABLE ODORS INDICATING ANAEROBIC CONDITIONS.
- ALL ROCK AND DEBRIS 1-1/2" AND LARGER SHALL BE REMOVED FROM PLANTING SOIL AND PLANTING AREAS.
- PLANTING SHALL BE PERFORMED BY A LICENSED CONTRACTOR AND IN ACCORDANCE WITH SPECIFICATIONS.
- ALL PLANTING SHALL BE INSTALLED SEASONALLY TO COINCIDE WITH THE REGION'S RAINY SEASON.
- NOTIFY PROJECT MANAGER 48 HOURS PRIOR TO PLANT DELIVERY. ALL PLANTS TO BE REVIEWED AND ACCEPTED PRIOR TO PLANTING.
- FOR PLANT VIABILITY, NEW PLANTS ARE TO BE HAND-WATERED AS NEEDED BY THE CONTRACTOR TO MAINTAIN TREE GROWTH AND HEALTH.
- SEE CIVIL DRAWINGS, ELECTRICAL DRAWINGS, AND LANDSCAPE DRAWINGS FOR APPROXIMATE LOCATION OF UTILITIES.

THANK YOU!
QUESTIONS + ANSWERS
DISCUSSION

