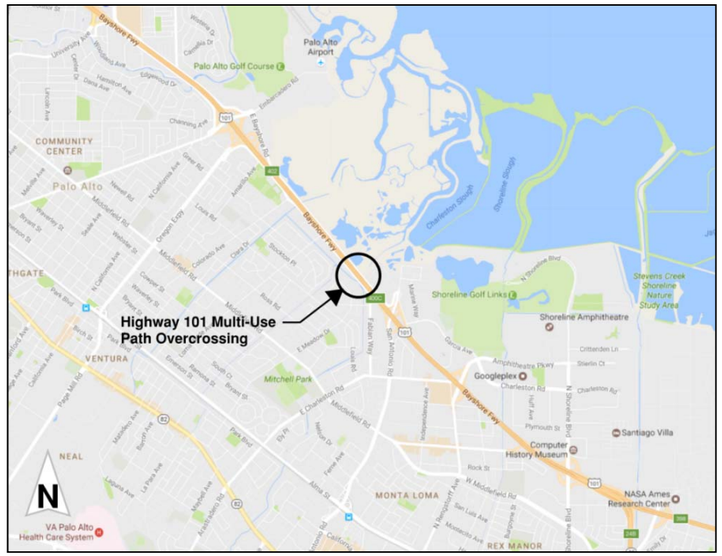
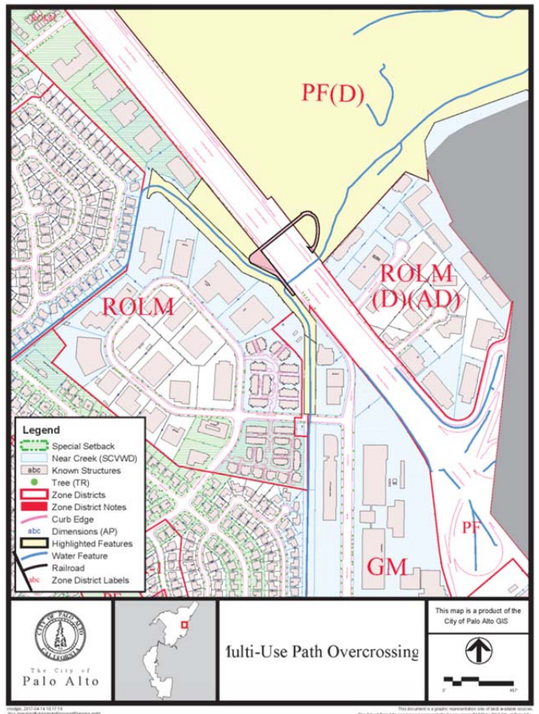
HIGHWAY 101 MULTI-USE OVERCROSSING AND ADOBE CREEK REACH TRAIL

SITE AND DESIGN REVIEW PACKAGE

CITY OF PALO ALTO · BCA · BkF Engineers / Surveyors / Planners · FMG Architects · Callander Associates Landscape Architecture, Inc. · LIGHTSWITCH®

LOCATION MAP





PROJECT DATA

Location:
Approximately 0.3 miles north of San Antonio Road

Lot Dimensions & Area:

- #008-05-005 (44,645,693 sf)
- #127-10-076 (89,941 sf)
- #127-10-100 (130,572 sf)
- #127-56-006 (36,258 sf)
- #127-56-007 (122,639 sf)

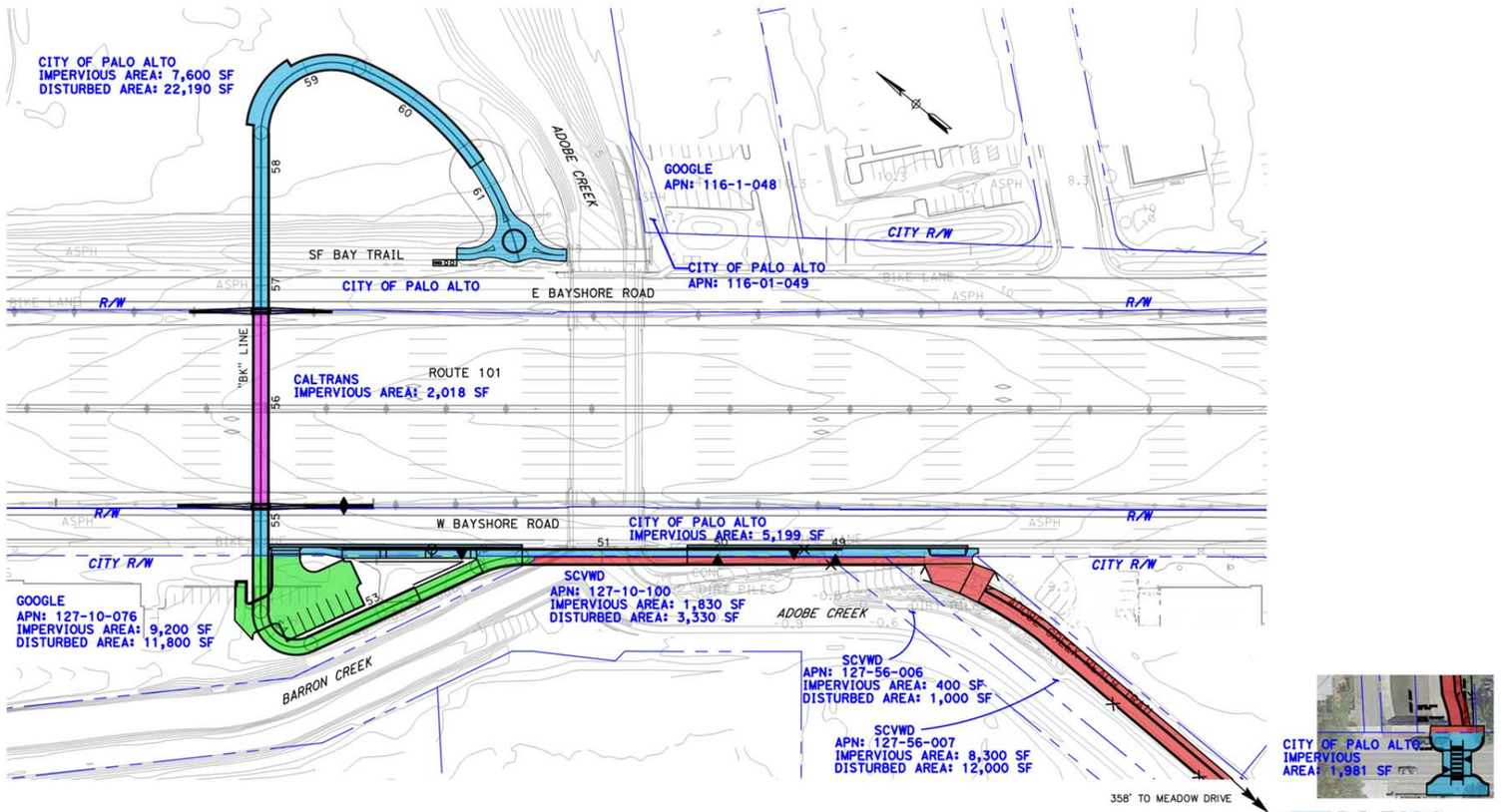
Adjacent Land Uses & Zoning:
North: Research Office, Caltrans right-of-way, and Publicly Owned Conservation land uses (ROLM and PF[D] Zone Districts)

West: Research Office land use and some multi-family residential land uses (ROLM Zone District)

East: Publicly Owned Conservation Land (Palo Alto Baylands) (PF[D] Zone District)

South: Office/manufacturing Uses (GM Zone) on the east side of Highway 101, Caltrans and City street right-of-way and Research office and Research office/City of Palo Alto Utilities Engineering offices on the west side of 101 (ROLM (D)(AD) Zone District)

Special Setback
There is a special setback requirement of 24 feet along West Bayshore Road.



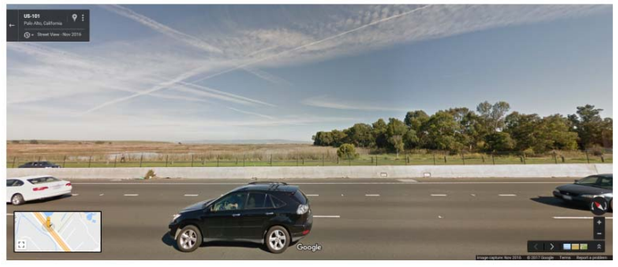
BkF 100+ YEARS
ENGINEERS . SURVEYORS . PLANNERS
JULY 25, 2017

PHOTOGRAPHIC DISPLAY / NEIGHBORHOOD CONTEXT

West Bayshore Road at Adobe Creek (Looking South)

Southbound Highway 101 (Looking South)

West Bayshore Road (Looking South)



Northbound Highway 101 at Proposed Overcrossing (Looking East)

Southbound Highway 101 at Proposed Overcrossing (Looking West)

East Meadow Drive at Adobe Creek (Looking North)

SITE PLAN – ABOVE-GRADE FACILITIES

NOTES:

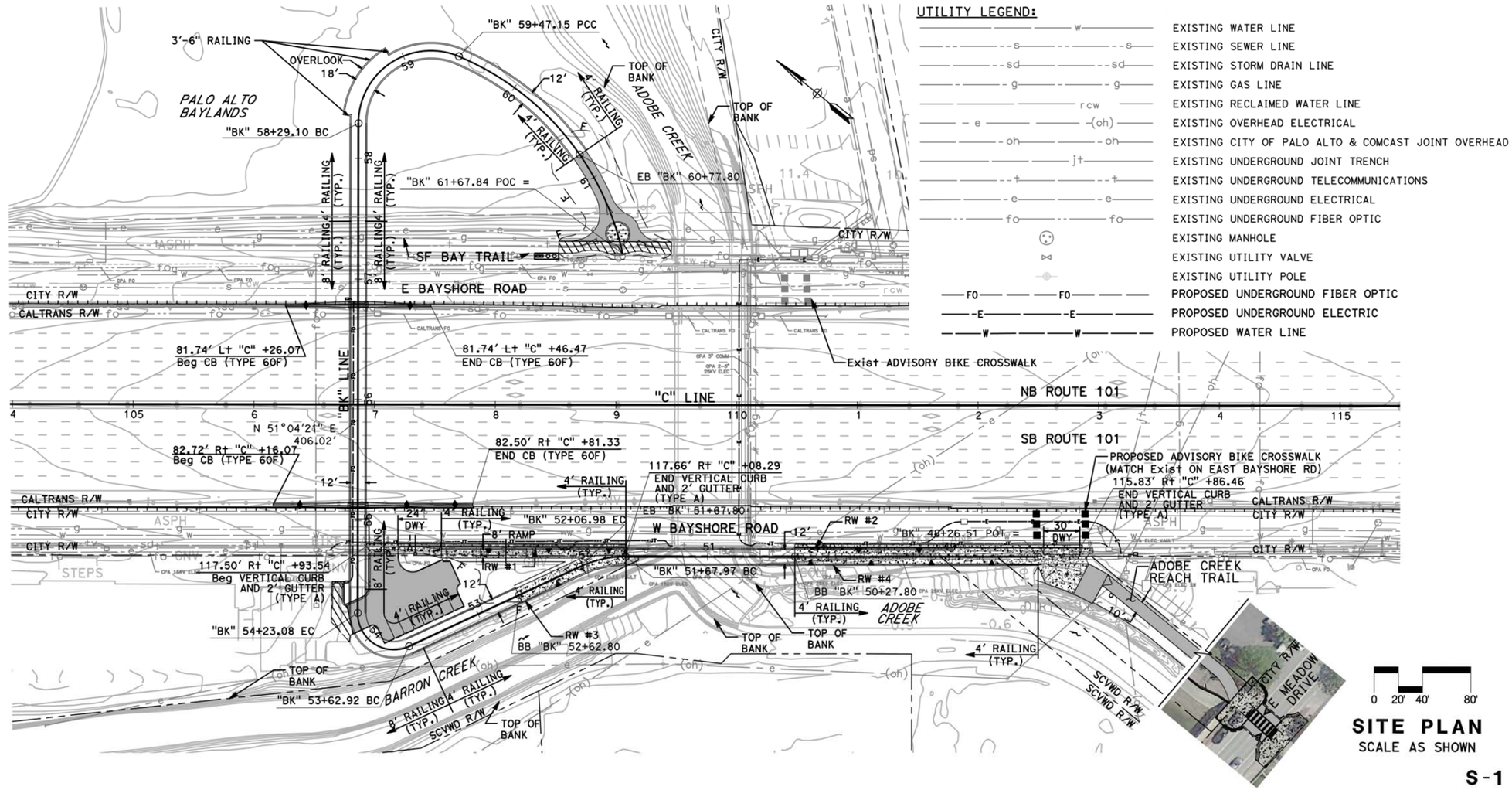
1. FOR GRADING DETAILS, SEE CONSTRUCTION DETAIL SHEETS.
2. FOR DRAINAGE IMPROVEMENTS, SEE CONSTRUCTION DETAIL SHEETS.
3. FOR BRIDGE DETAILS, SEE STRUCTURAL PLANS.
4. EXISTING EASEMENT RIGHTS ARE NOT ILLUSTRATED AS THESE RIGHTS AND BOUNDARIES ARE STILL BEING INVESTIGATED.

LEGEND:

- PCC SIDEWALK, PCC CR, AND PCC DRIVEWAY
- HMA OVERLAY (TYPE A)
- 1' HMA DEEP LIFT
- LANDSCAPE AREA
- DIRECTION OF FLOW
- CITY R/W
- CALTRANS R/W
- SCVWD R/W
- SAWCUT
- RETAINING WALL
- C | F — CUT AND FILL LINE
- 1 / C-1 — DETAIL NUMBER DESIGNATION, DETAIL 1 ON SHEET C-1
- EXISTING ROADSIDE SIGN
- PROPOSED ROADSIDE SIGN
- REMOVE EXISTING ROADSIDE SIGN
- EXISTING ROADSIDE SIGN TO REMAIN
- INSTALL NEW ROADSIDE SIGN

ABBREVIATIONS:

C&G	CURB & GUTTER
CR	CURB RAMP
Rem	REMOVE



UTILITY LEGEND:

- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING STORM DRAIN LINE
- EXISTING GAS LINE
- EXISTING RECLAIMED WATER LINE
- EXISTING OVERHEAD ELECTRICAL
- EXISTING CITY OF PALO ALTO & COMCAST JOINT OVERHEAD
- EXISTING UNDERGROUND JOINT TRENCH
- EXISTING UNDERGROUND TELECOMMUNICATIONS
- EXISTING UNDERGROUND ELECTRICAL
- EXISTING UNDERGROUND FIBER OPTIC
- EXISTING MANHOLE
- EXISTING UTILITY VALVE
- EXISTING UTILITY POLE
- PROPOSED UNDERGROUND FIBER OPTIC
- PROPOSED UNDERGROUND ELECTRIC
- PROPOSED WATER LINE

SITE PLAN
SCALE AS SHOWN

S-1

SITE PLAN – SIGNAGE AND AMENITIES

NOTES:

1. FOR GRADING DETAILS, SEE CONSTRUCTION DETAIL SHEETS.
2. FOR DRAINAGE IMPROVEMENTS, SEE CONSTRUCTION DETAIL SHEETS.
3. FOR BRIDGE DETAILS, SEE STRUCTURAL PLANS.
4. EXISTING EASEMENT RIGHTS ARE NOT ILLUSTRATED AS THESE RIGHTS AND BOUNDARIES ARE STILL BEING INVESTIGATED.

ABBREVIATIONS:

C&G	CURB & GUTTER
CR	CURB RAMP
Rem	REMOVE

LEGEND:

- PCC SIDEWALK, PCC CR, AND PCC DRIVEWAY
- HMA OVERLAY (TYPE A)
- 1' HMA DEEP LIFT
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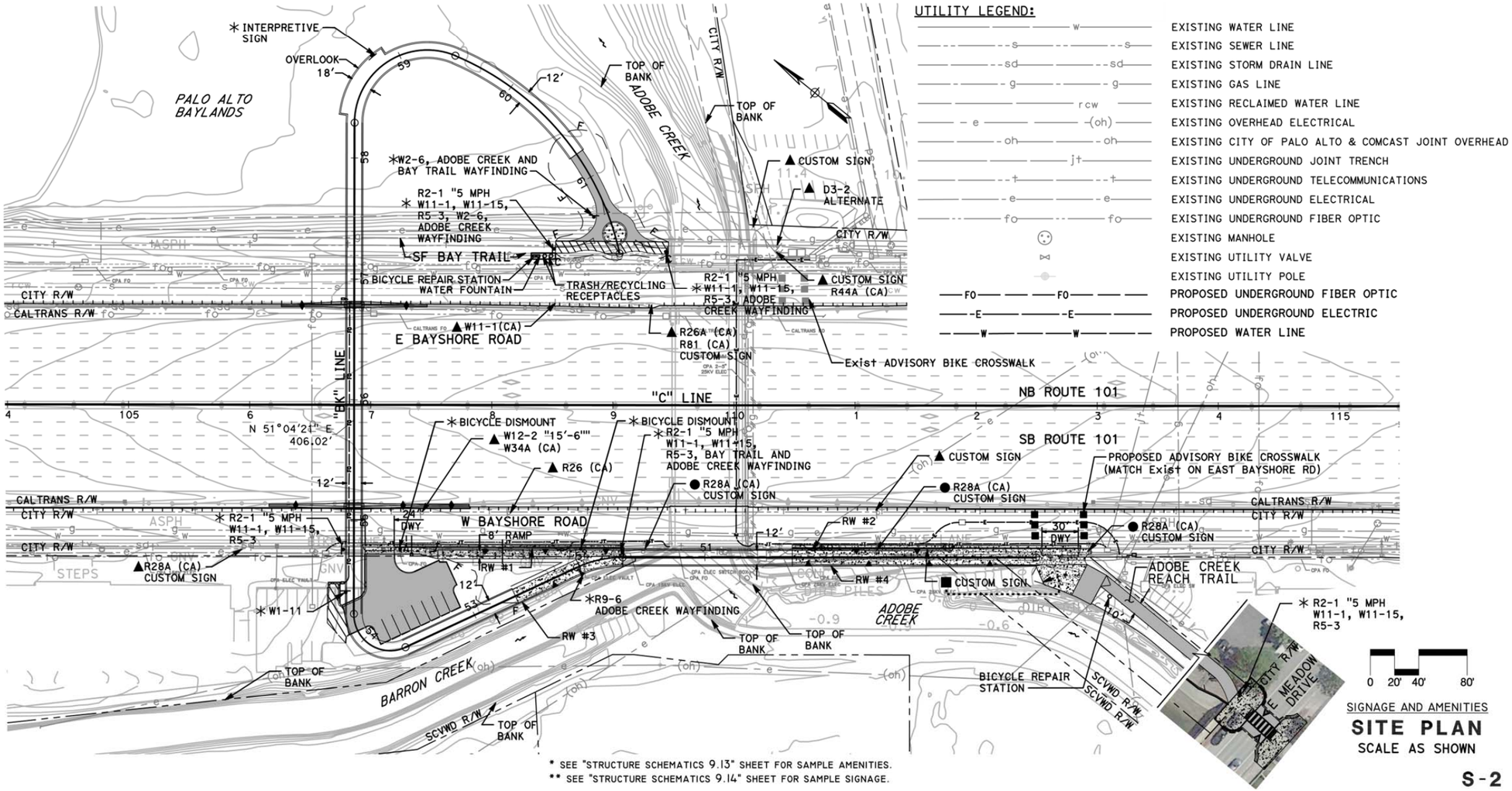
- EXISTING ROADSIDE SIGN
- PROPOSED ROADSIDE SIGN
- REMOVE EXISTING ROADSIDE SIGN
- EXISTING ROADSIDE SIGN TO REMAIN
- INSTALL NEW ROADSIDE SIGN
- RELOCATE EXISTING ROADSIDE SIGN

UTILITY LEGEND:

- EXISTING WATER LINE
- EXISTING SEWER LINE
- EXISTING STORM DRAIN LINE
- EXISTING GAS LINE
- EXISTING RECLAIMED WATER LINE
- EXISTING OVERHEAD ELECTRICAL
- EXISTING CITY OF PALO ALTO & COMCAST JOINT OVERHEAD
- EXISTING UNDERGROUND JOINT TRENCH
- EXISTING UNDERGROUND TELECOMMUNICATIONS
- EXISTING UNDERGROUND ELECTRICAL
- EXISTING UNDERGROUND FIBER OPTIC
- EXISTING MANHOLE
- EXISTING UTILITY VALVE
- EXISTING UTILITY POLE
- PROPOSED UNDERGROUND FIBER OPTIC
- PROPOSED UNDERGROUND ELECTRIC
- PROPOSED WATER LINE



* SEE "STRUCTURE SCHEMATICS 9.13" SHEET FOR SAMPLE AMENITIES.
** SEE "STRUCTURE SCHEMATICS 9.14" SHEET FOR SAMPLE SIGNAGE.

SIGNAGE AND AMENITIES

SITE PLAN

SCALE AS SHOWN

S-2

SITE PLAN – UTILITY PLAN (1 OF 2)

NOTES:

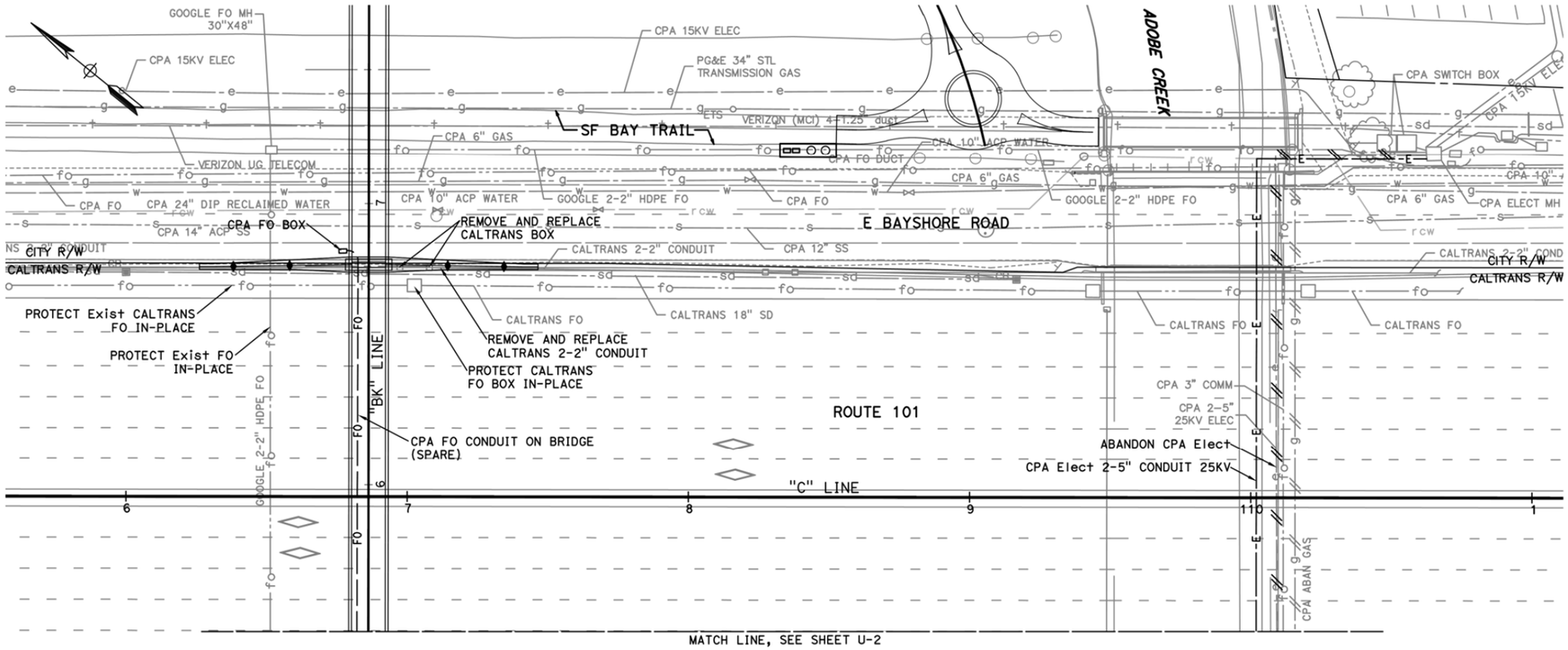
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. ALL UTILITIES SHOWN ON THESE PLANS ARE BASED UPON RECORD INFORMATION OBTAINED FROM UTILITY OWNERS, AND/OR FIELD SURVEYS OF THE EXISTING UTILITY SURFACE FEATURES.
3. LOCATION OF UTILITY FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL SCHEDULE CONSTRUCTION OPERATIONS SO THAT UTILITIES ARE KEPT IN SERVICE AT ALL TIMES.
4. CONTRACTOR SHALL VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO WORK AND SHALL BE HELP LIABLE FOR ALL DAMAGES INCURRED. CALL SERVICE ALERT (U.S.A) AT (800) 227-2600 48 HOURS PRIOR TO EXCAVATION.
5. FOR STREET LIGHT RELOCATION, SEE ELECTRICAL PLANS.
6. FOR STORM DRAIN IMPROVEMENTS, SEE CONSTRUCTION DETAILS.
7. CPA FO BOX SIZE SHALL BE 30" x 48".
8. ALL EXISTING WATER VALVES AND FIRE HYDRANTS REMOVED SHALL BE SALVAGED AND DELIVERED BY THE CONTRACTOR TO THE CITY CORPORATION YARD, WATER-GAS-WASTEWATER REPAIR SHOP LOCATED AT 3201 E. BAYSHORE ROAD.

LEGEND:

- PROPOSED UG JT
- PROPOSED UG ELECT
- PROPOSED UG WATER
- PROPOSED UG Tel
- PROPOSED FO
- ABANDON Exist UTILITY

ABBREVIATIONS:

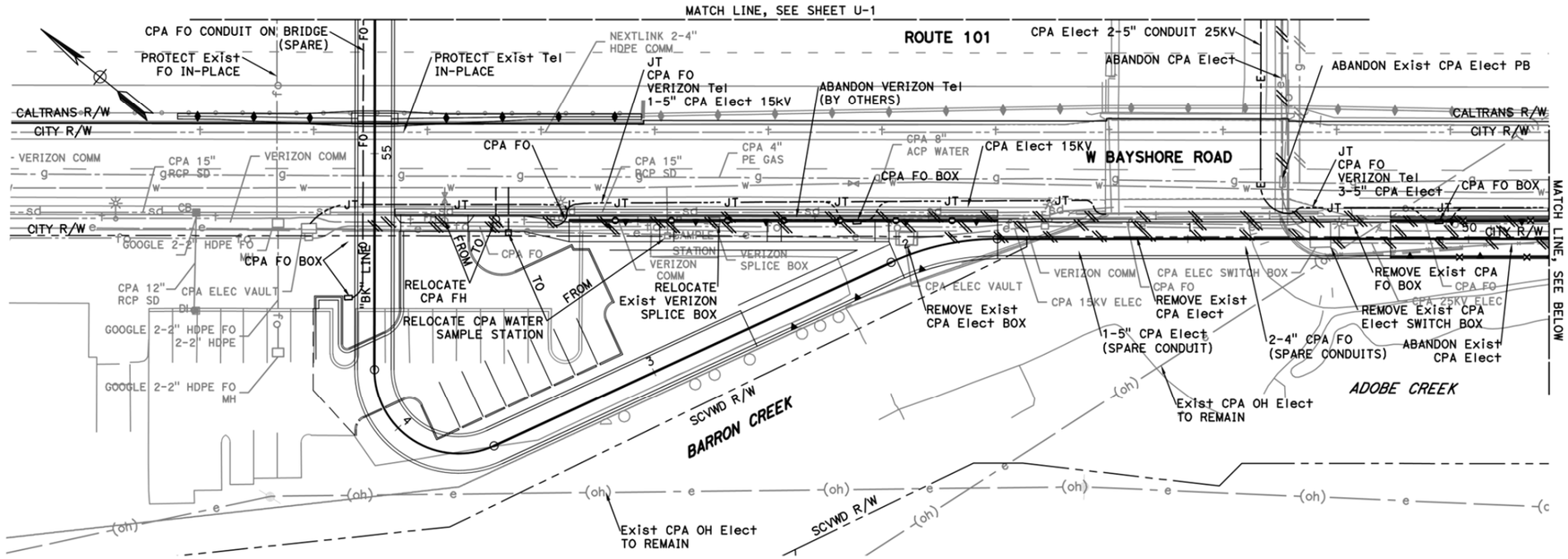
BWP	BAR WRAPPED PIPE
CIP	CAST IRON PIPE
Comm	COMMUNICATIONS
CPA	CITY OF PALO ALTO
Elect	ELECTRICAL
FO	FIPER OPTIC
HH	HANDHOLE
JT	JOINT TRENCH
KV	KILOVOLTS
SS	SANITARY SEWER
UG	UNDERGROUND
W	WATER



UTILITY PLAN
SCALE AS SHOWN
0 10' 20' 40'

APPROVED FOR UTILITY INFORMATION ONLY

U-1



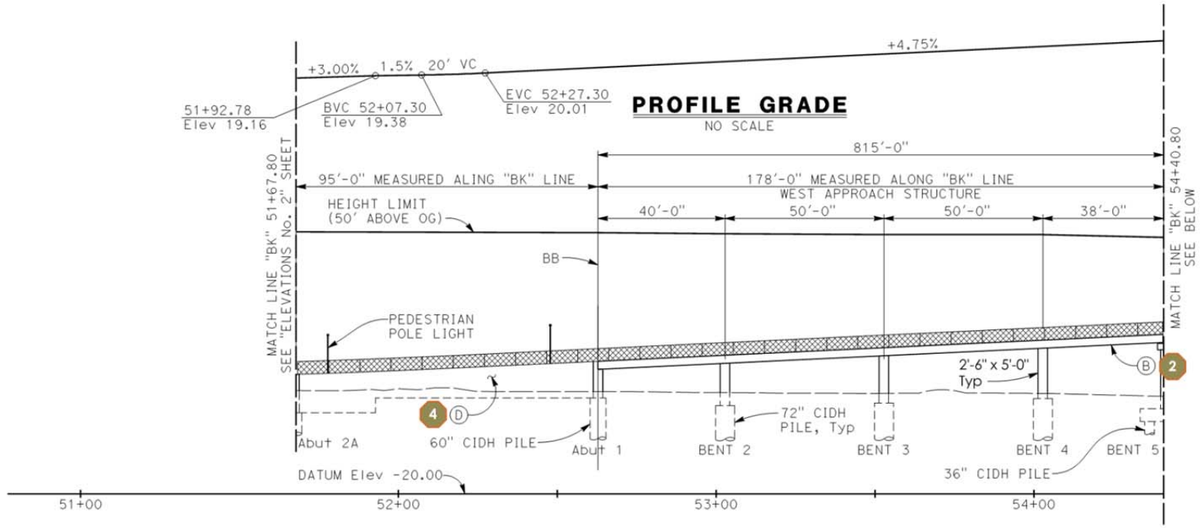
FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET U-1

APPROVED FOR UTILITY INFORMATION ONLY

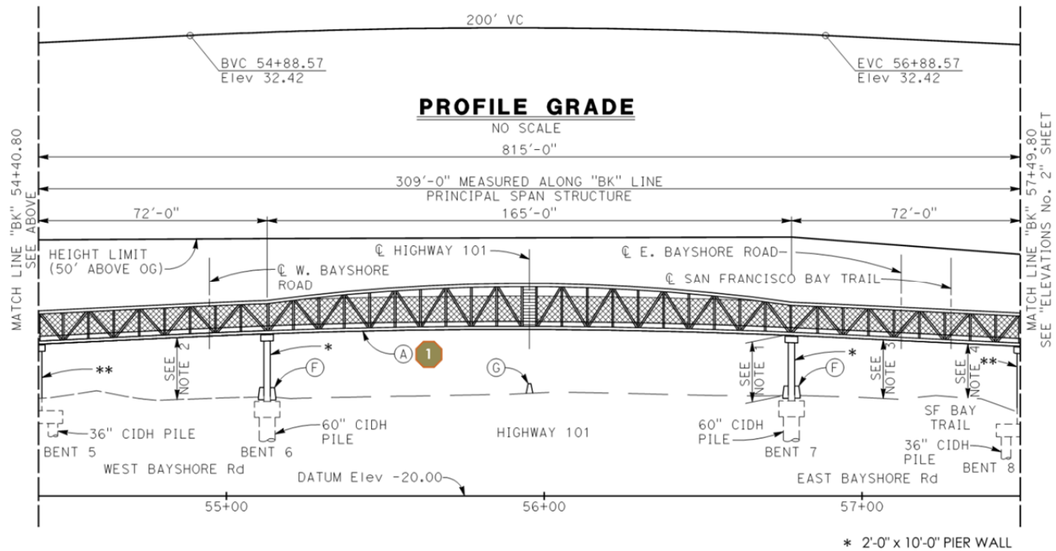
UTILITY PLAN
SCALE AS SHOWN
0 10' 20' 40'

U-2

DEVELOPED STRUCTURE ELEVATION (1 OF 2)



WEST APPROACH DEVELOPED ELEVATION
1" = 20'



* 2'-0" x 10'-0" PIER WALL
** 2'-6" x 10'-0" PIER WALL

PRINCIPAL SPAN DEVELOPED ELEVATION
1" = 20'

MATERIALS:

1. **Prefabricated Steel Truss** (See Sheet 9.2)
   - MAIN TRUSS – Self Weathering Steel ASTM A588/A606-4
   - DECKING – Cast-in-place (CIP) Concrete on Metal Decking; Color: Standard Concrete Grey
   - PANEL RAILINGS – Galvanized Metal Frame
   - FENCING – 77% Open Weaved Wire Mesh (1" min)
2. **Cast-in-Place Reinforced Concrete Slab** (See Sheet 9.7)
   - SUPERSTRUCTURE SLAB – CIP Concrete Reinforced Slab; Color: Standard Concrete Grey
   - TEXTURAL BANDING – Fractured Fin Surface
   - PANEL RAILINGS – Galvanized Metal Frame
   - FENCING – 74% Open Weaved Wire Mesh
   - BENTS – CIP Concrete with Form-lined Textural Banding; Color: Standard Concrete Grey
3. **Prefabricated Steel Truss** (See Sheet 9.8)
   - MAIN TRUSS – Self Weathering Prefabricated Steel Truss
   - DECKING – CIP Concrete on Metal Decking; Color: Standard Concrete Grey
   - PANEL RAILINGS – Self-weathering Integrated Metal Rails
4. **Retaining Wall** (See Sheet 9.9)
   - CONCRETE WALLS – CIP Concrete with Form-lined Textural Banding; Color: Standard Concrete Grey
   - TEXTURAL BANDING – Fractured Fin Surface
   - RAILINGS – Metal Post with Welded Wire Mesh Fence

LEGEND:

- (A) Prefabricated Steel Truss
- (B) Cast-in-Place Reinforced Concrete Slab
- (C) Retaining Wall (Type 1A)
- (D) Retaining Wall (Type 5)
- (E) Reconfigure Existing Parking Lot
- (F) Concrete Barrier (Type 60F)
- (G) Exist Concrete Median Barrier

NOTES:

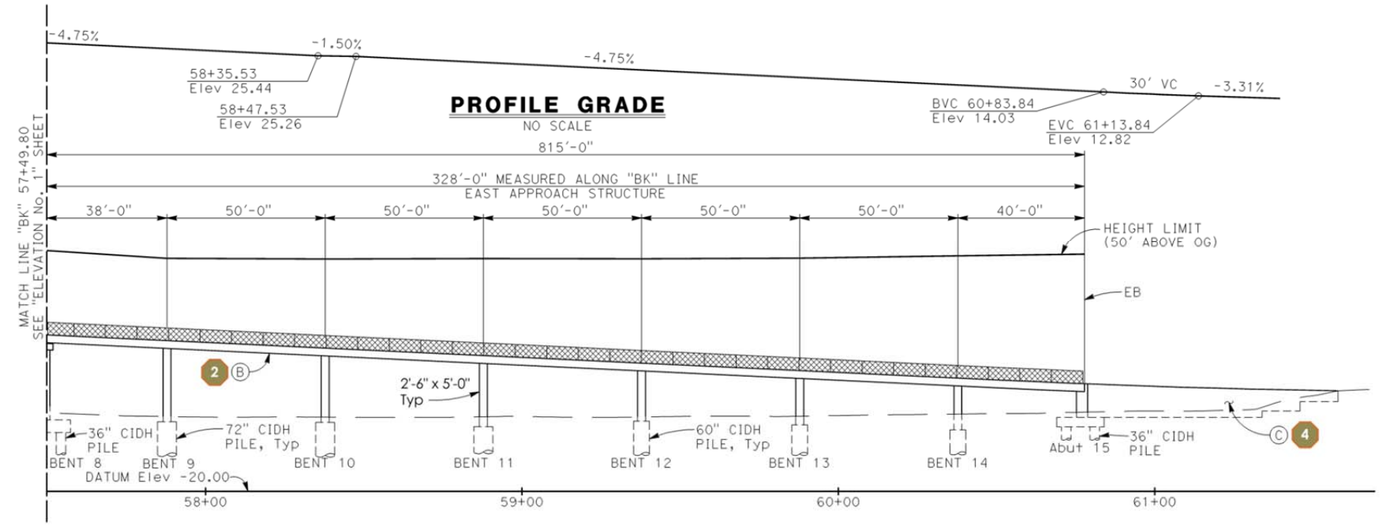
1. 18'-11"± Min vertical clearance over Highway 101. 18'-6" Min vertical clearance required.
2. 19'-1"± Min vertical clearance over West Bayshore Road. 17'-0" Min vertical clearance required.
3. 18'-2"± Min vertical clearance over East Bayshore Road. 17'-0" Min vertical clearance required.
4. 16'-3"± Min vertical clearance over San Francisco Bay Trail. 10'-0" Min vertical clearance required.
5. All elevations shown are NAVD 88.

TABLE A: STRUCTURE HEIGHT

	ORIGINAL GROUND (OG) ELEVATION	TOP OF DECK ELEVATION	TOP OF RAIL/TRUSS ELEVATION	DECK HEIGHT ABOVE OG	STRUCTURE HEIGHT ABOVE OG
ABUT 1	12.20	21.70	25.64	9.5	13.44
BENT 2	11.83	23.60	27.54	11.77	15.71
BENT 3	11.65	25.97	33.91	14.32	22.26
BENT 4	12.00	28.35	36.29	16.35	24.29
BENT 5	10.90	30.15	38.09	19.25	27.19
BENT 6	11.04	33.43	41.37	22.39	30.33
℄ Hwy 101	12.82	34.78	46.72	21.96	33.90
BENT 7	11.48	32.90	40.84	21.42	29.36
BENT 8	7.47	29.51	37.45	22.04	29.98

PLAN CHECK SET/NOT FOR CONSTRUCTION (7/25/17)

DEVELOPED STRUCTURE ELEVATION (2 OF 2)

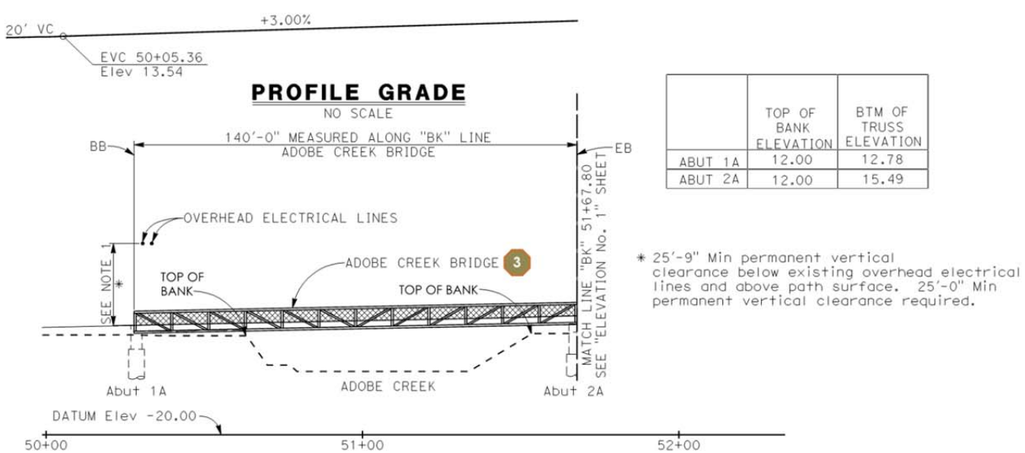


EAST APPROACH DEVELOPED ELEVATION
1" = 20'

Note:
For Materials and Legend, see Sheet 4.1

TABLE B: STRUCTURE HEIGHT

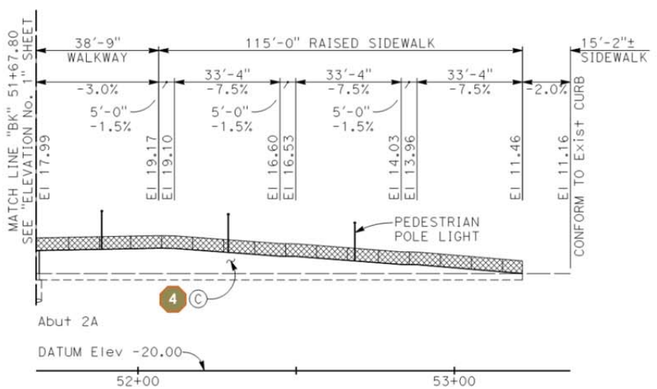
	ORIGINAL GROUND (OG) ELEVATION	TOP OF DECK ELEVATION	TOP OF RAIL/TRUSS ELEVATION	DECK HEIGHT ABOVE OG	STRUCTURE HEIGHT ABOVE OG
BENT 8	7.47	29.51	37.45	22.04	29.98
BENT 9	3.51	27.70	31.64	24.19	28.13
BENT 10	3.30	25.41	29.35	22.11	26.05
BENT 11	3.50	23.35	27.29	19.85	23.79
BENT 12	3.62	20.97	24.91	17.35	21.29
BENT 13	3.56	18.60	22.54	15.04	18.98
BENT 14	4.48	16.22	20.16	11.74	15.68
ABUT 15	5.20	14.32	18.26	9.12	13.06
ABUT 1A	11.50	14.21	18.62	2.71	7.12
ABUT 2A	12.00	18.41	22.82	6.41	10.82



	TOP OF BANK ELEVATION	BTM OF TRUSS ELEVATION
ABUT 1A	12.00	12.78
ABUT 2A	12.00	15.49

* 25'-9" Min permanent vertical clearance below existing overhead electrical lines and above path surface. 25'-0" Min permanent vertical clearance required.

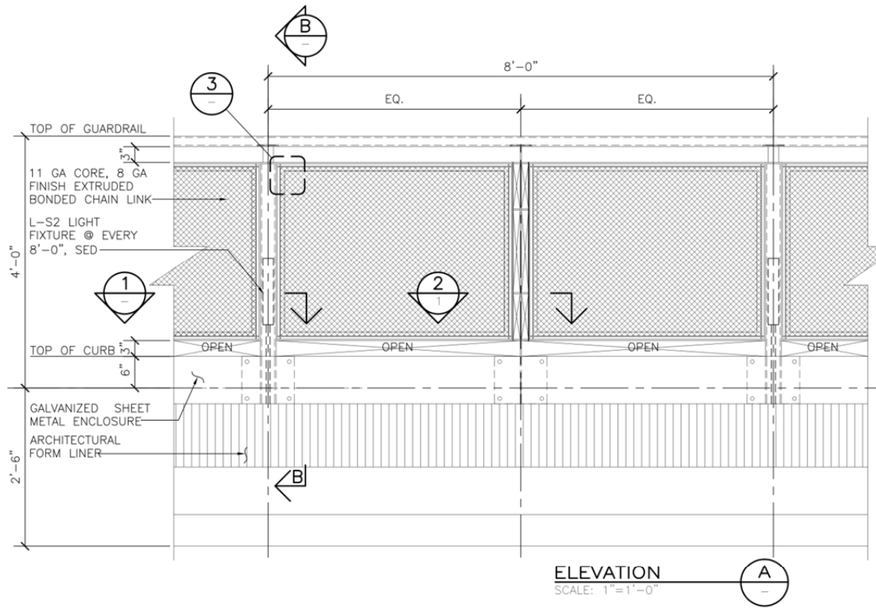
ADOBE CREEK BRIDGE ELEVATION
1" = 20'



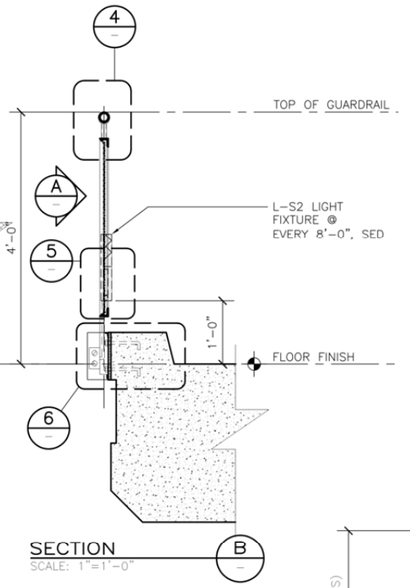
RAISED SIDEWALK ELEVATION
1" = 20'

PLAN CHECK SET/NOT FOR CONSTRUCTION (7/25/17)

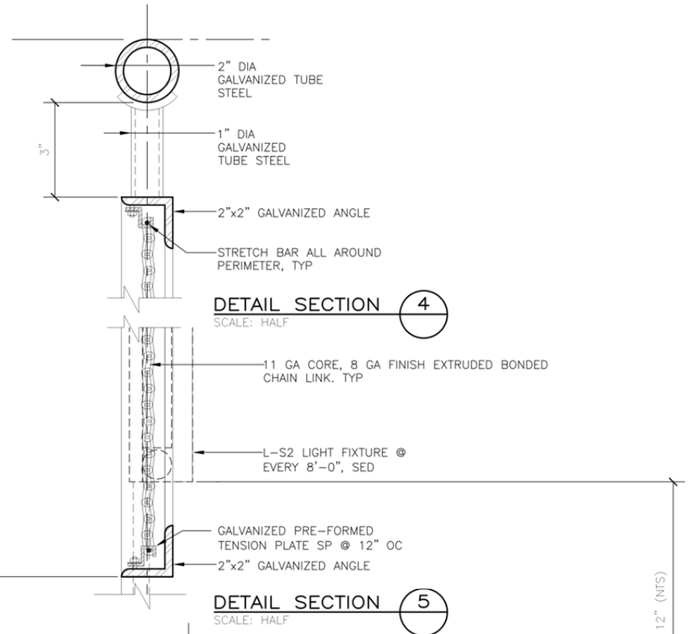
ARCHITECTURAL GUARDRAIL ELEVATION AND DETAILS



ELEVATION A
SCALE: 1"=1'–0"



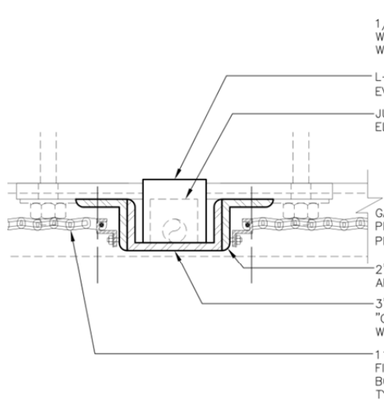
SECTION B
SCALE: 1"=1'–0"



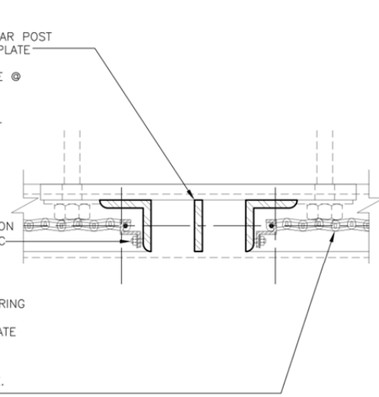
DETAIL SECTION 4
SCALE: HALF

DETAIL SECTION 5
SCALE: HALF

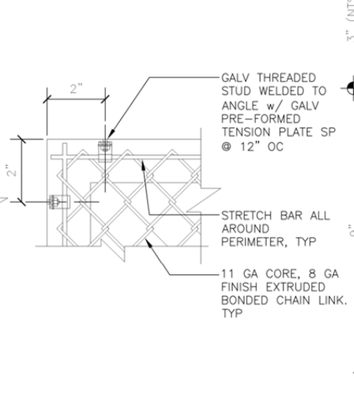
DETAIL SECTION 6
SCALE: HALF



POST – PLAN 1
SCALE: HALF



POST – PLAN 2
SCALE: HALF



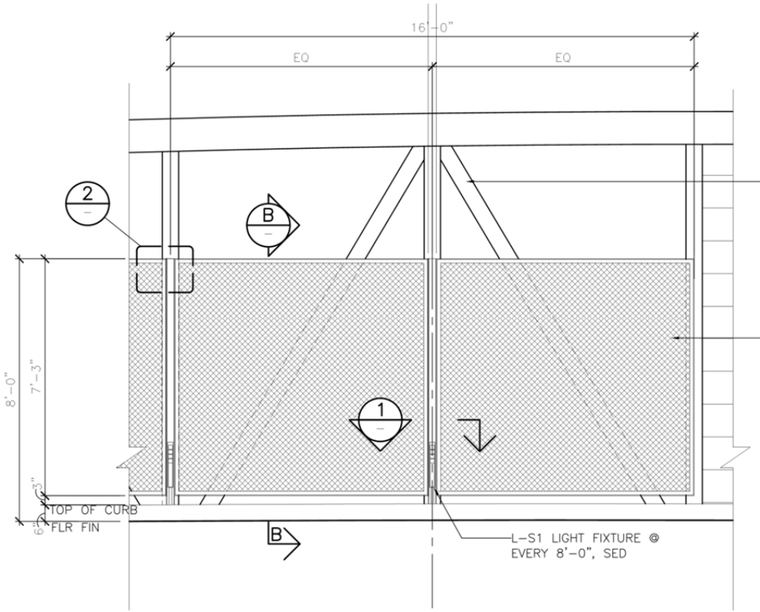
CHAIN LINK 3
SCALE: HALF

SIDE MOUNTED GUARDRAIL (EXTRUDED BOND/VINYL COATED CHAIN LINK)

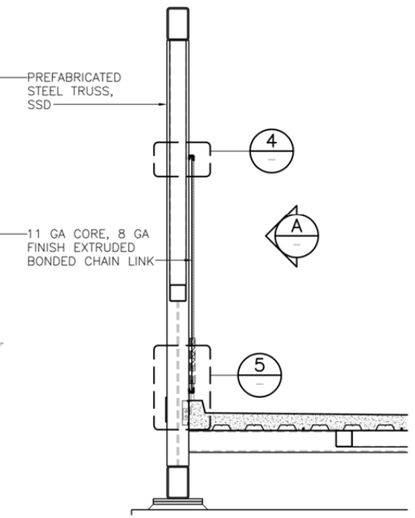
BASE LINE

PLAN CHECK SET/NOT FOR CONSTRUCTION (10/04/17)

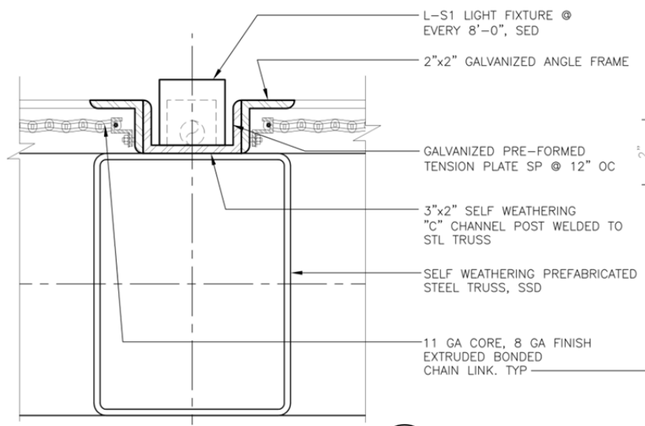
ARCHITECTURAL GUARDRAIL ELEVATION AND DETAILS



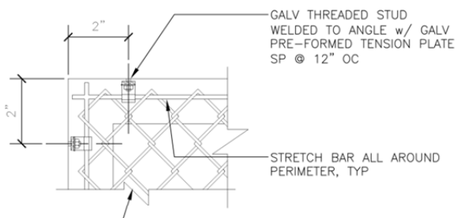
PARTIAL ELEVATION A
SCALE: 1/2"=1'-0"



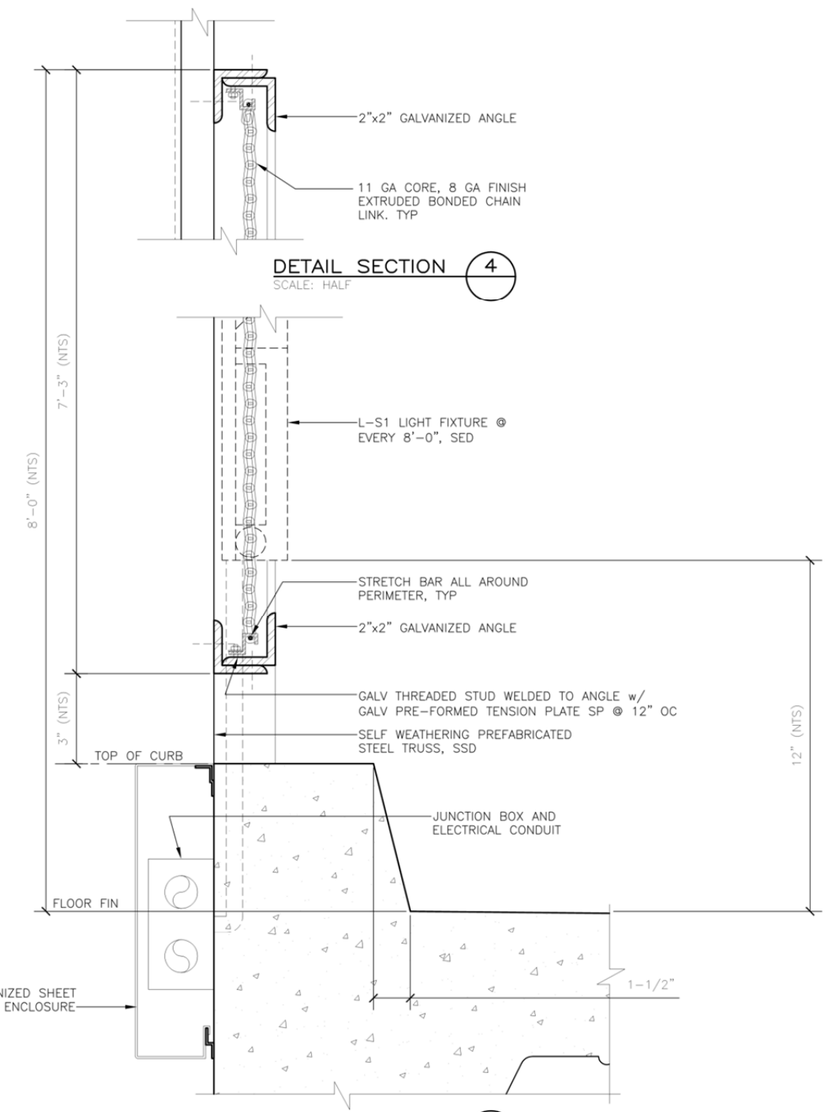
SECTION B
SCALE: 1/2"=1'-0"



DETAIL 1
SCALE: HALF



CHAIN LINK 2
SCALE: HALF



DETAIL SECTION 4
SCALE: HALF

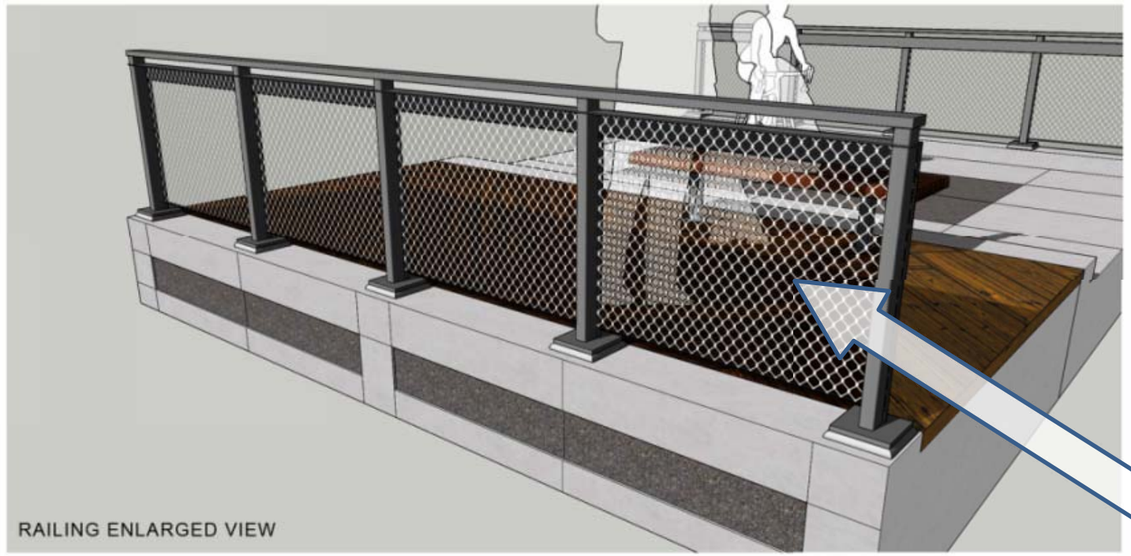
DETAIL SECTION 5
SCALE: HALF

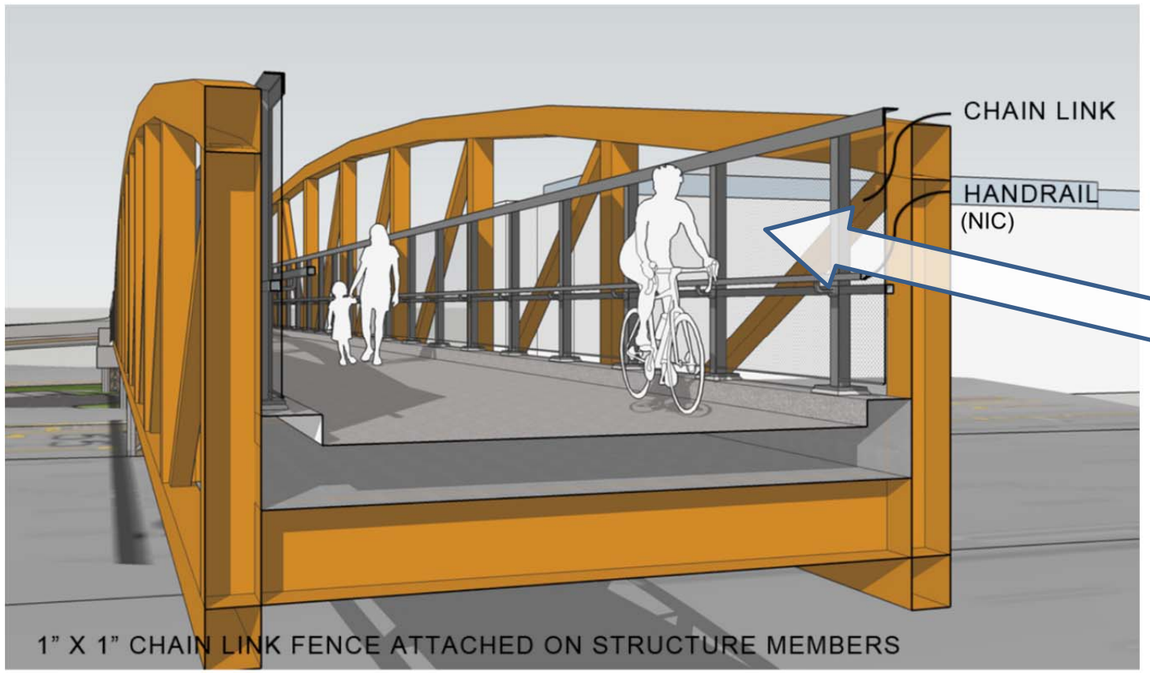
EXTRUDED BOND/VINYL COATED CHAIN LINK @ PRINCIPAL SPAN STRUCTURE

BASE LINE

PLAN CHECK SET/NOT FOR CONSTRUCTION (10/04/17)

POTENTIAL UPGRADES



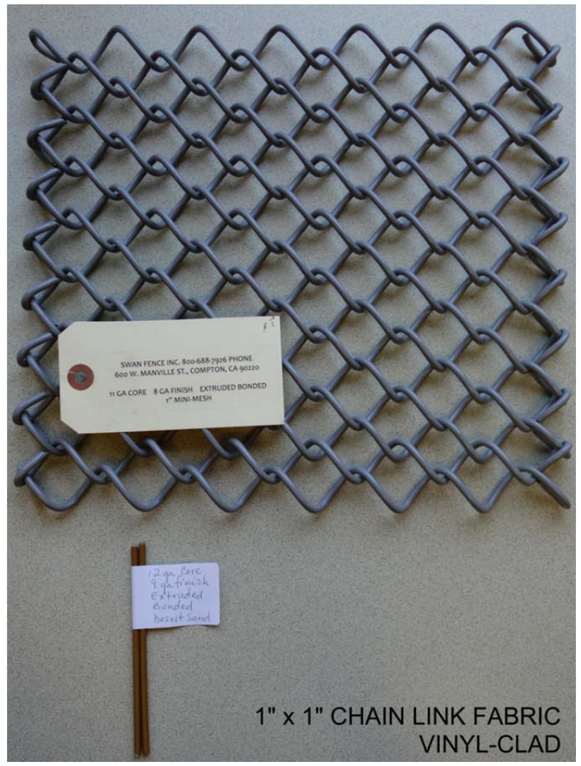


The design team has investigated various enhancements based on requests received at the various commission and board meetings and during design development. These enhancements are a change to the Council-approved baseline and have the potential to increase the project budget.

The baseline railing design elements shown on this page were approved by the Council. The base railings were revised from this image to side-mounted railings as shown elsewhere. The detail for the upgraded railing was developed to allow for revision of the railing fabric as desired. The texture options shown on Sheet 9.5 are considered baseline as well.

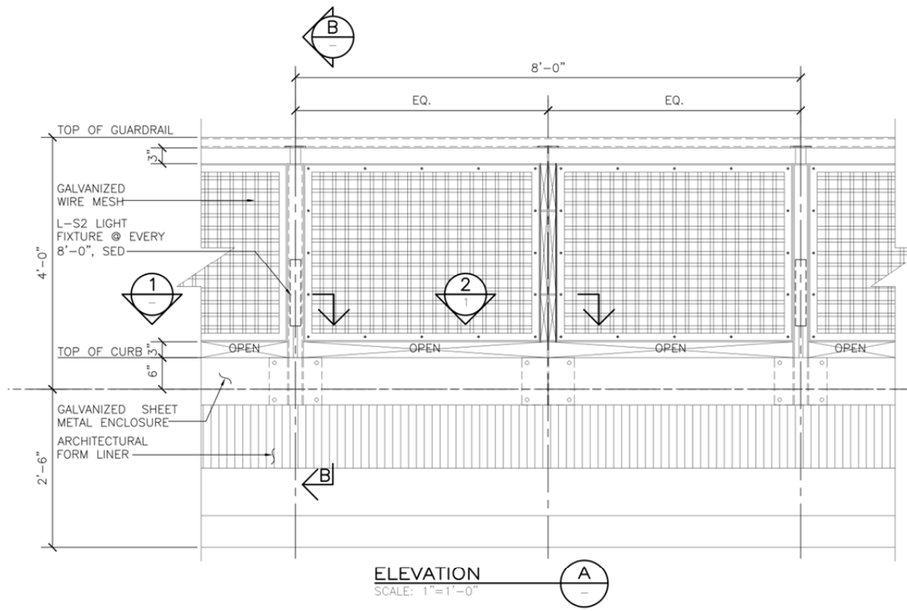
In general, the Site and Design Review Package shows potential upgrades that can be presented again to Council. Potential upgrades include:

- Railing fabric upgraded to woven wire fabric. Refer to Sheet 4.3D for concept and Sheets 9.5 and 9.6 for materials and schematics.
- Hand railing has been requested as a possible public convenience upgrade, though not included in the Council-approved baseline nor required by code.

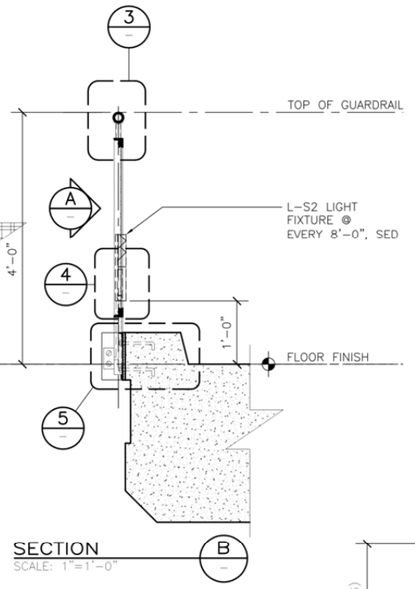


Note:
This sheet is reproduced again in Section 9, Structure Schematics, for ease of reference.

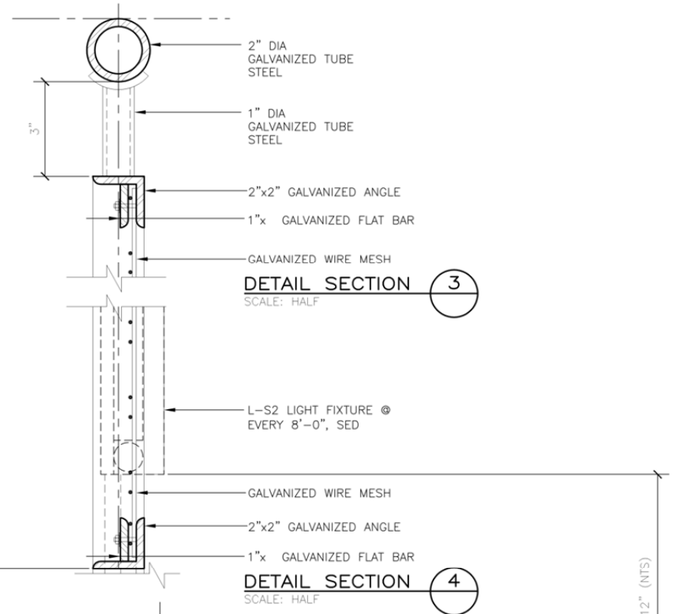
ARCHITECTURAL GUARDRAIL ELEVATION AND DETAILS



ELEVATION A
SCALE: 1"=1'-0"

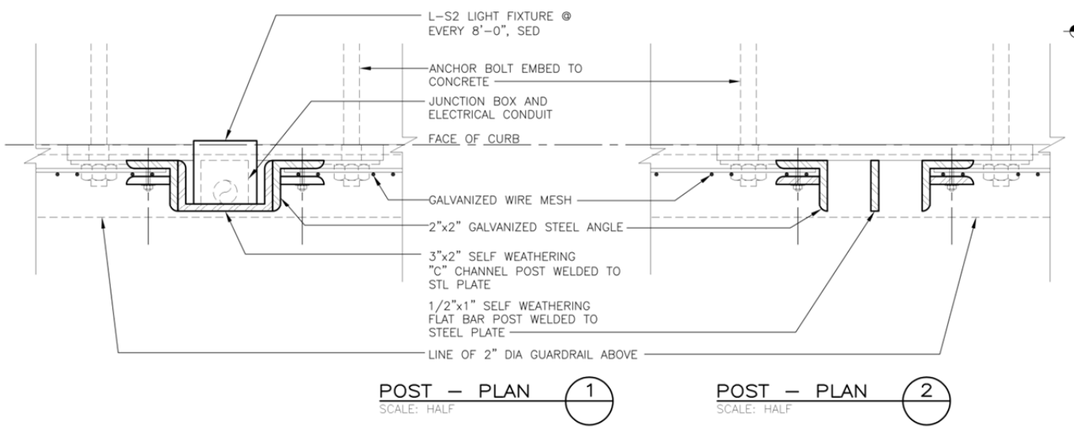


SECTION B
SCALE: 1"=1'-0"



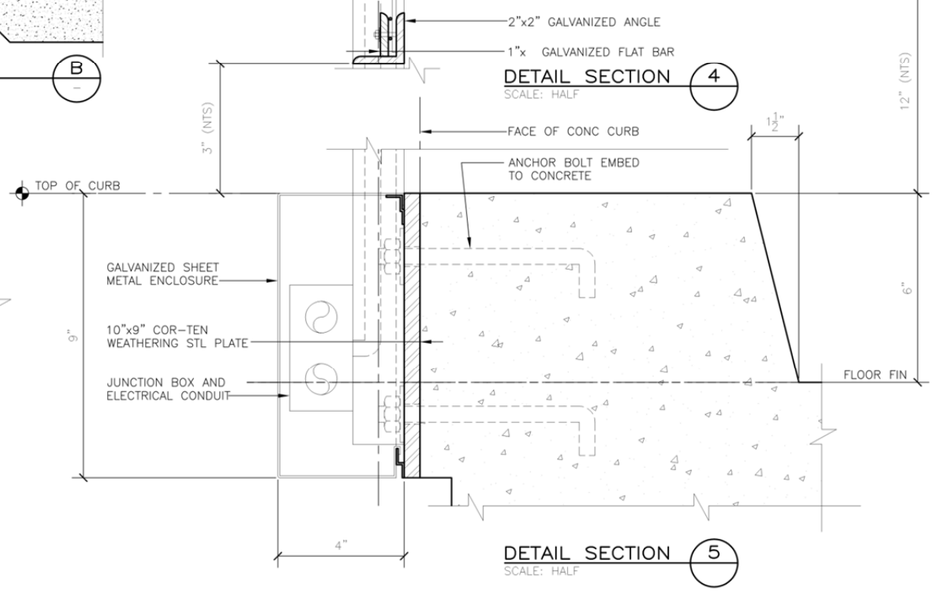
DETAIL SECTION 3
SCALE: HALF

DETAIL SECTION 4
SCALE: HALF



POST – PLAN 1
SCALE: HALF

POST – PLAN 2
SCALE: HALF



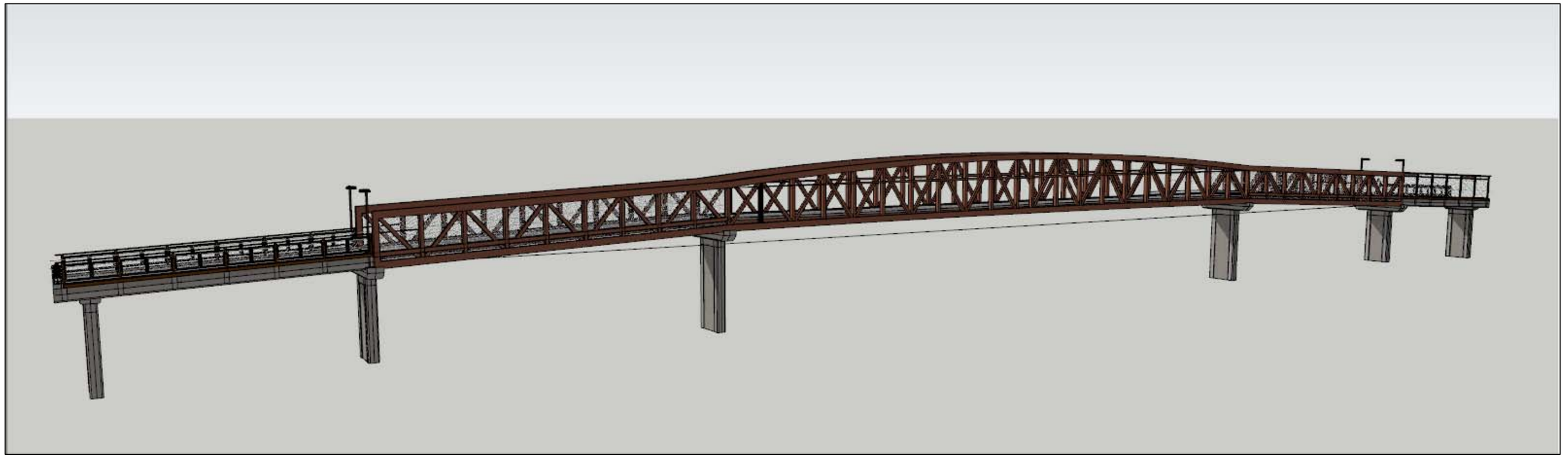
DETAIL SECTION 5
SCALE: HALF

SIDE MOUNTED GUARDRAIL (GALV DECORATIVE WIRE MESH)

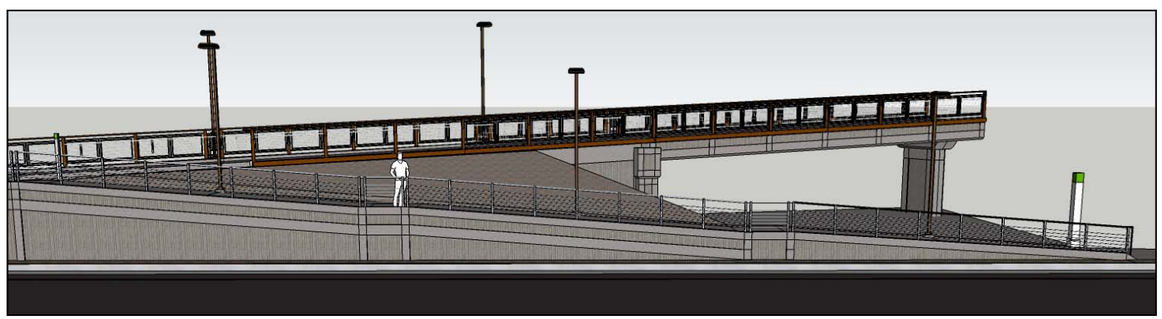
ADD ALTERNATE

PLAN CHECK SET/NOT FOR CONSTRUCTION (10/04/17)

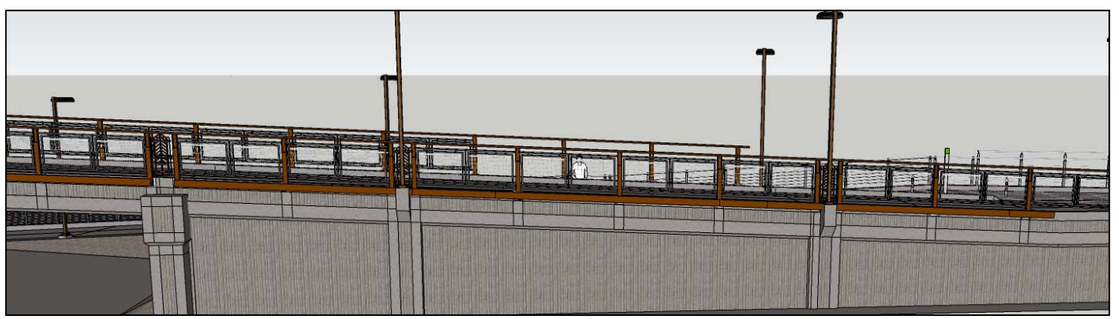
RENDERED ELEVATIONS



PRINCIPAL SPAN ELEVATION

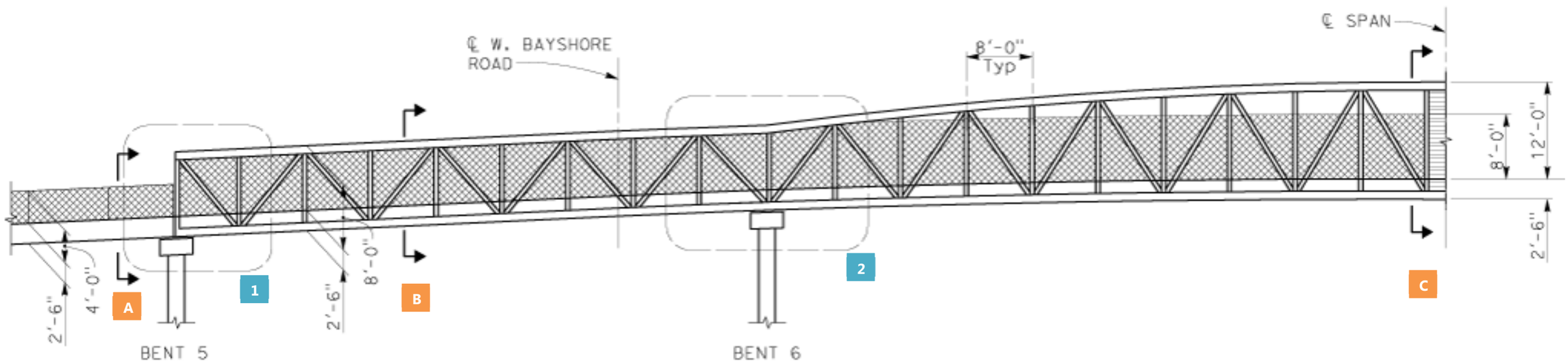


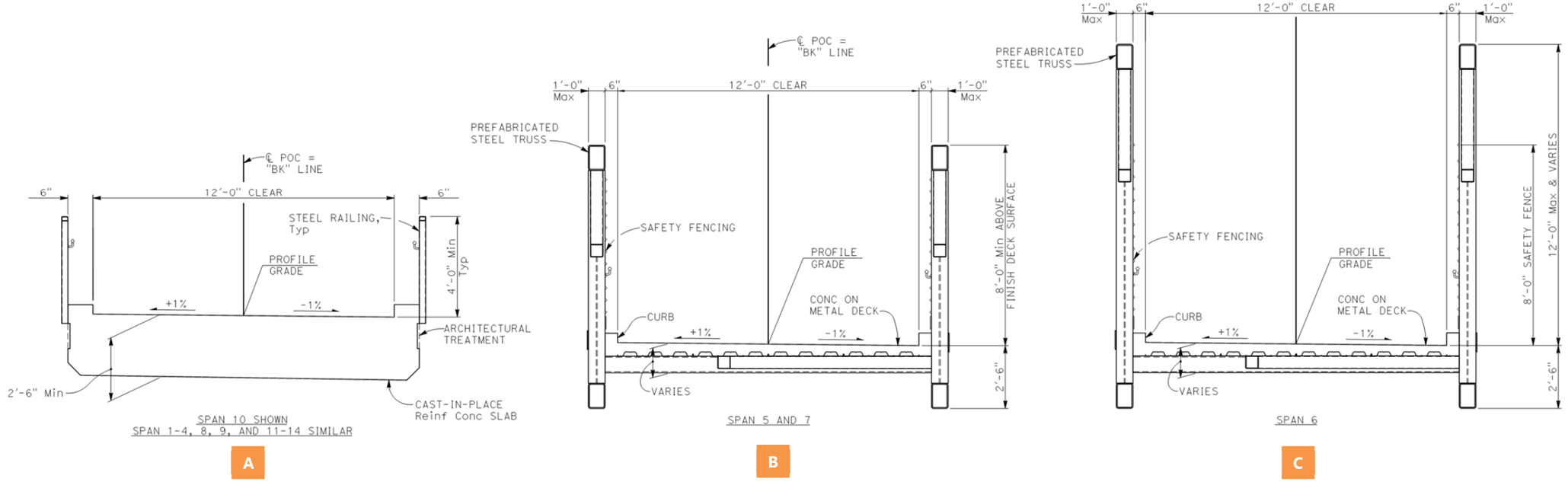
ACCESS RAMP WALL ELEVATION



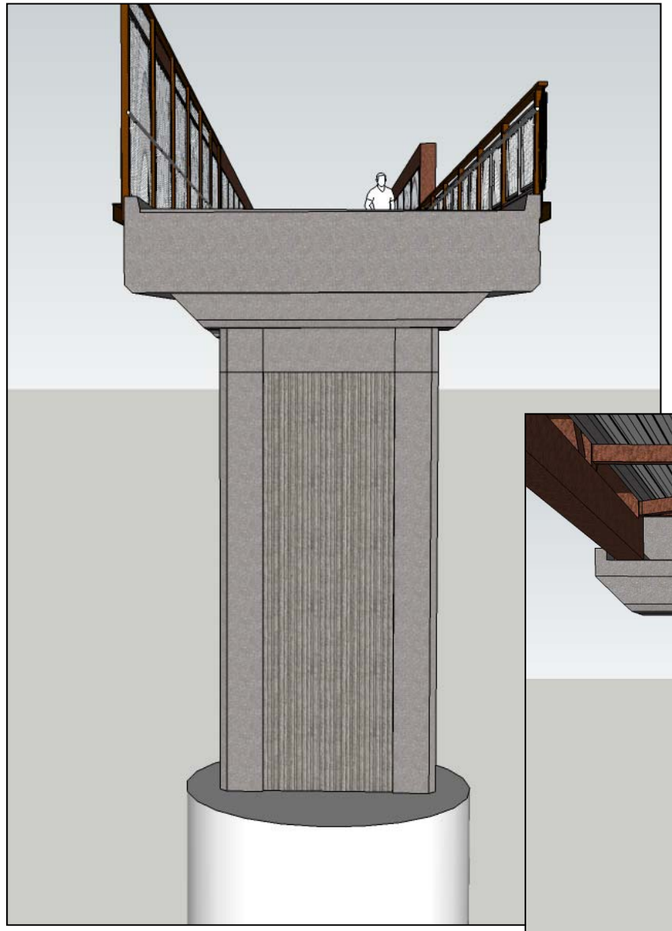
CREEK WALL ELEVATION

STRUCTURE SECTIONS

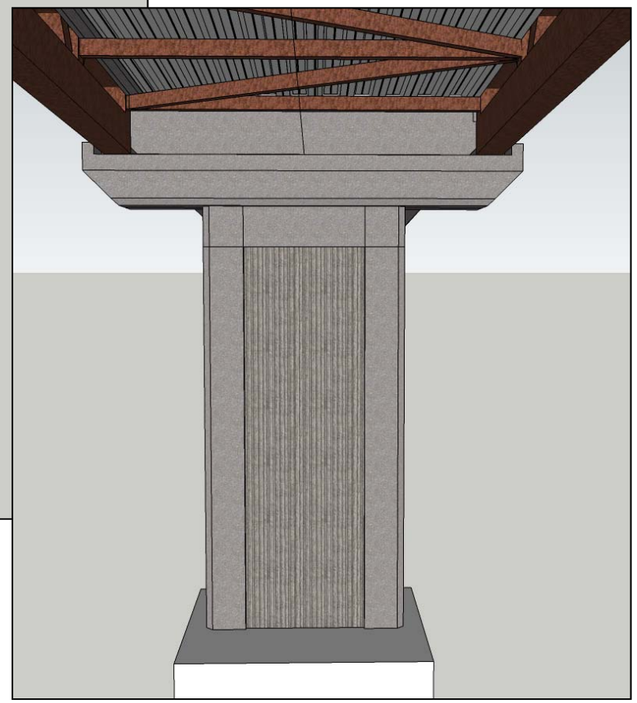




RENDERED SECTIONS

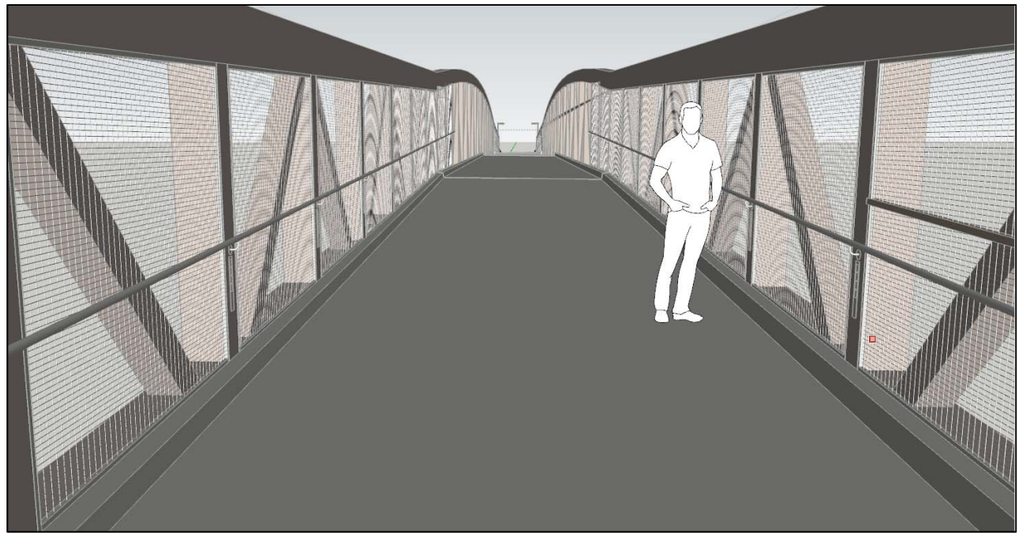


TYPICAL RAMP BENT (Bent 4 Shown, others similar)

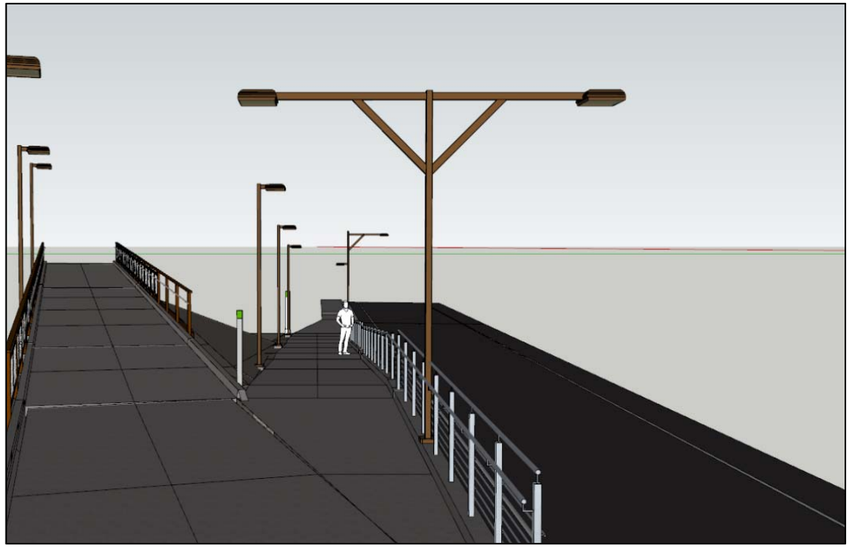


AT BENTS 5 TO 8

BENT SCHEMATICS



PRINCIPAL SPAN



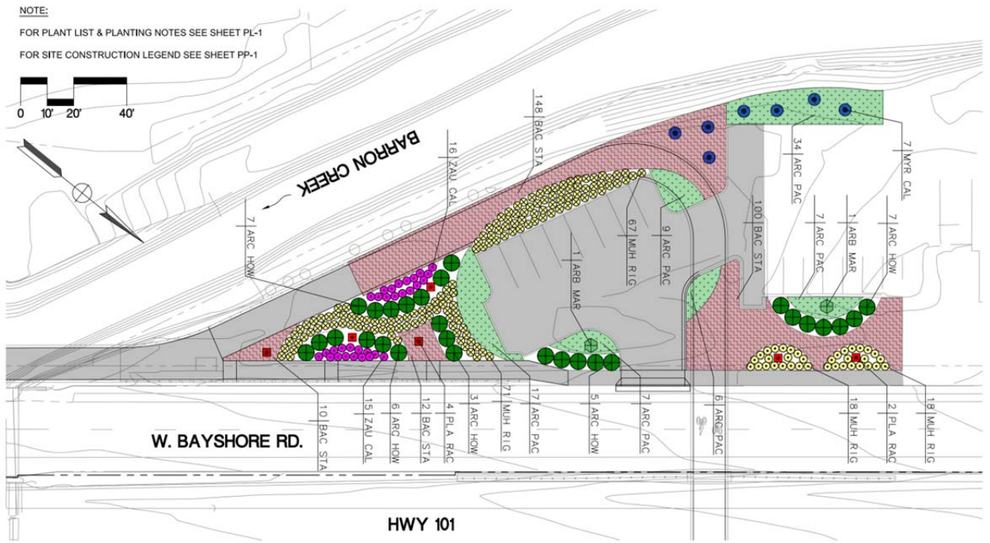
ACCESS RAMP

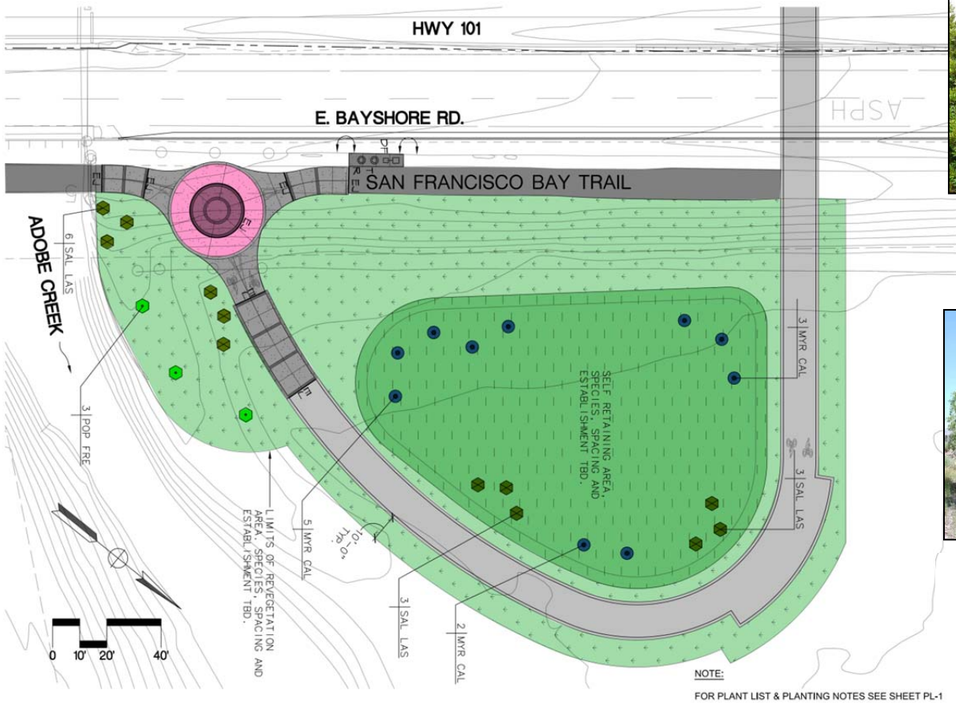
LANDSCAPING AND STORM WATER RETENTION

Landscaping is limited to restoration of areas disturbed by project. Primary areas for restoration include:

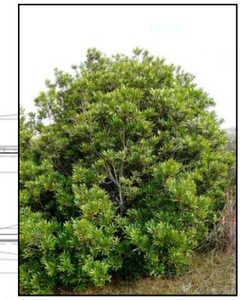
The portion of the Baylands under and adjacent to the Eastern Approach

1. Structure which will be restored with native grasses and planting as well as some hardscape and planting at the east plaza where the East Approach Structure joins the San Francisco Bay Trail. Trail head amenities in the form of trash and recycling receptacles as well as an optional drinking fountain and bottle filling station.
2. Disturbed areas of the Google Parking Lot under and adjacent to the Western Approach Structure will be landscape to provide screening to the structure and will include accommodation of a retention area, replacement of existing landscaping trees affected by construction and reconfiguration of the existing Google Parking lot resulting in no net loss of parking.
3. The west plaza at the Adobe Creek Reach Trail Head will include hardscaping at the plaza and existing aggregate base along the SCVWD maintenance road compatible with the regular SCVWD maintenance operations and materials, as well as proposed trail head amenities including trash and recycling receptacles and an optional drinking fountain and bottle filling station.
4. Storm water collection into retention systems will include native planting and drainage swales leading into retention basins to filter storm-water. These systems will be located in landscaping areas in the Baylands.





Platanus racemosa
California sycamore

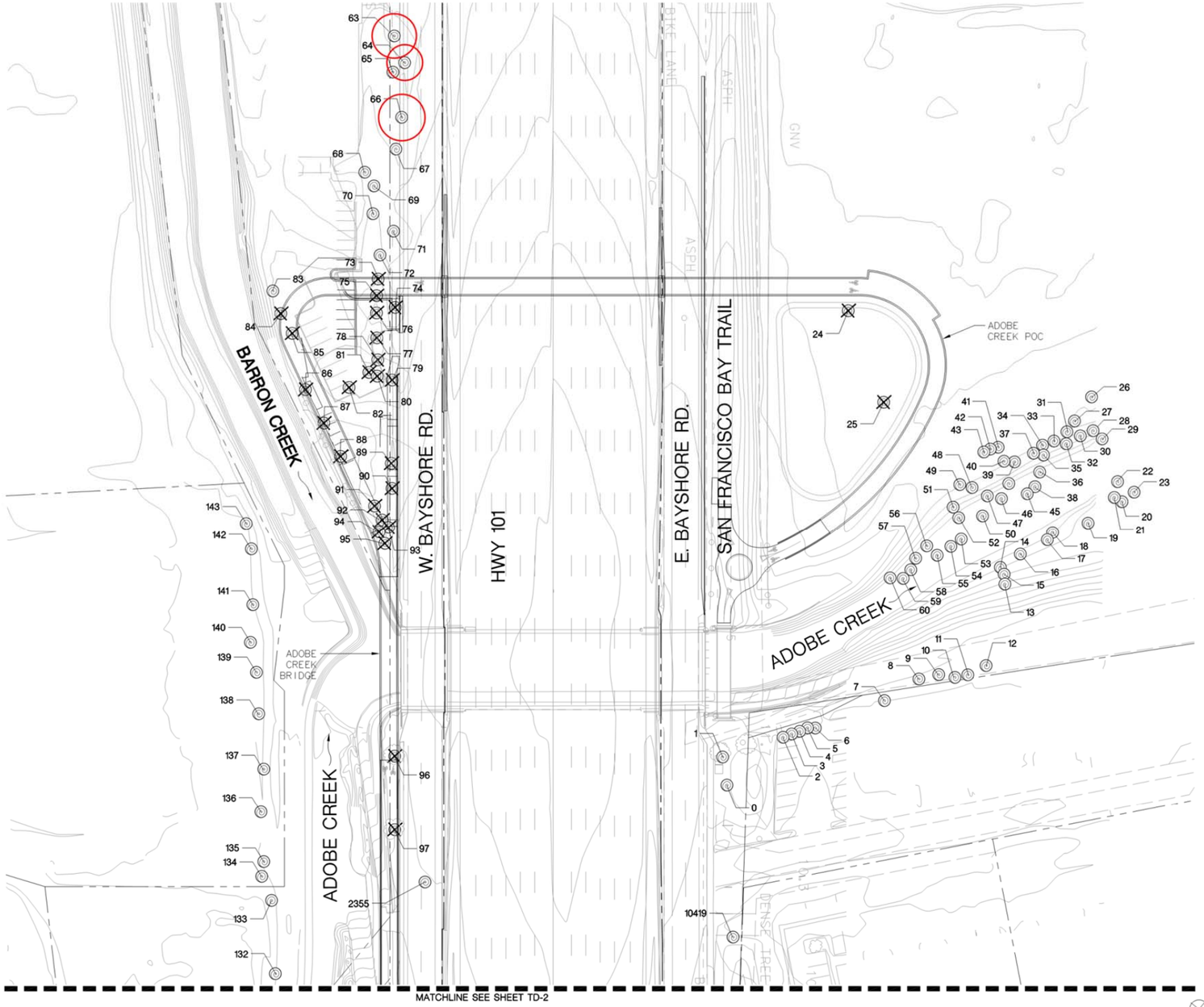


Myrica californica
Pacific Wax Myrtle

Salix lasiolepis
Arroyo Willow

Arbutus 'Marina'
Marina Strawberry Tree

Populus fremontii
Fremont's Cottonwood



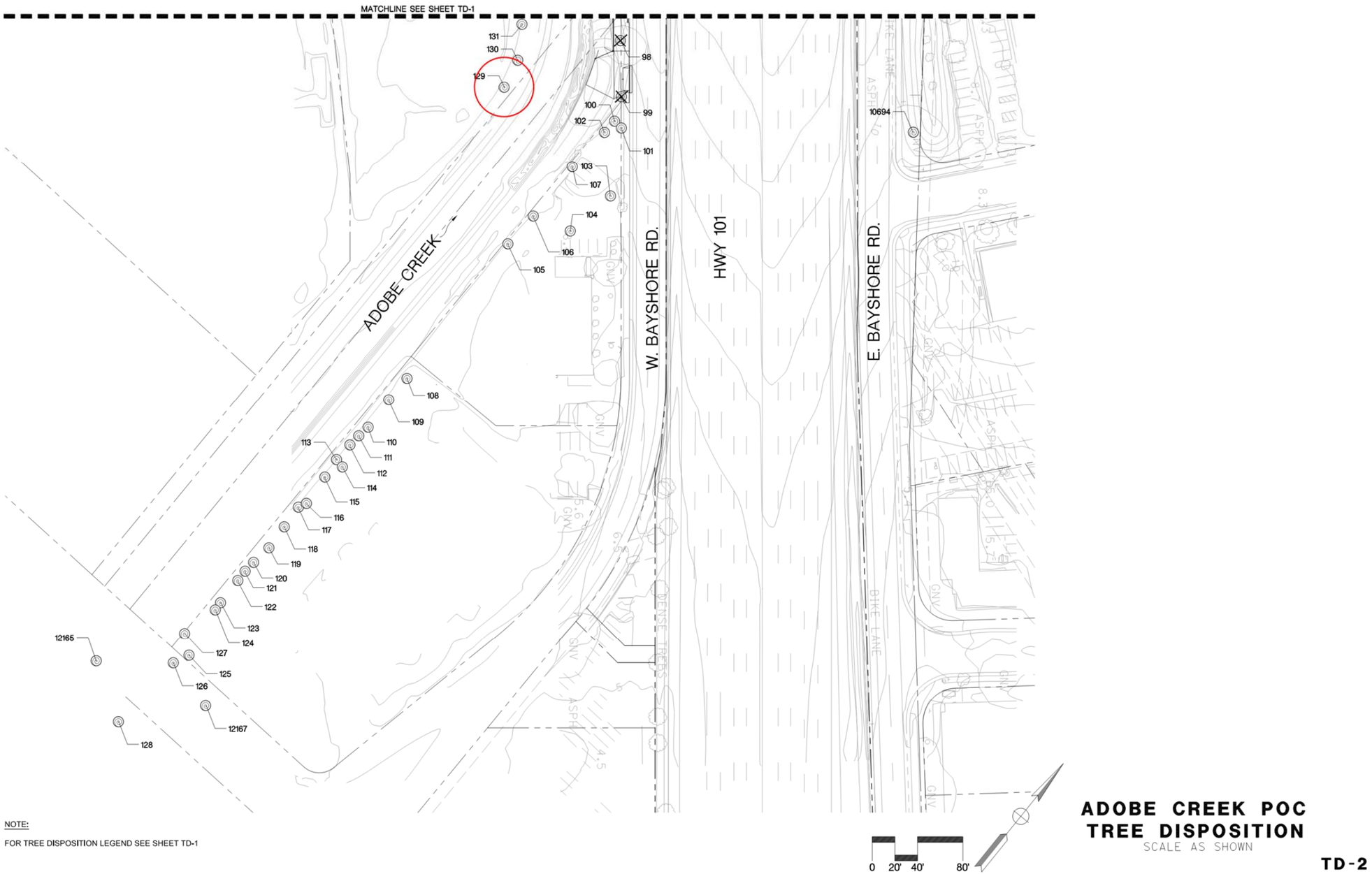
TREE DISPOSITION LEGEND

- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- TREE NUMBER
- PROTECTED TREE PROTECTION ZONE (RADIUS GREATER OF 10X DIAMETER OF TREE OR 10 FEET)

ADOBE CREEK POC TREE DISPOSITION

SCALE AS SHOWN

TD-1



NOTE:

FOR TREE DISPOSITION LEGEND SEE SHEET TD-1

ADOBE CREEK POC
TREE DISPOSITION
SCALE AS SHOWN

TD-2

Tree ID			Tree Size				Tree Condition		Characteristics			
Tree No.	Genus / Species	Common Name	DBH (in)	Trunk Count	Height (ft)	Canopy Width (ft)	Health	Structure	Protected	Private	Disposition	Comments
0	*Casuarina equisetifolia*	Beach sheoak	19	1	45-60	35	Good	Fair			Remain	
1	*Casuarina equisetifolia*	Beach sheoak	20	1	45-60	35	Good	Good			Remain	
2	*Melaleuca quinquenervia*	Punktree	10	2	15-30	12	Good	Good			Remain	
3	*Melaleuca quinquenervia*	Punktree	12	3	15-30	10	Good	Fair			Remain	
4	*Melaleuca quinquenervia*	Punktree	11	2	15-30	12	Good	Good			Remain	
5	*Melaleuca quinquenervia*	Punktree	13	1	15-30	20	Good	Good			Remain	
6	*Melaleuca quinquenervia*	Punktree	14	1	15-30	20	Good	Good			Remain	
7	*Casuarina equisetifolia*	Beach sheoak	21	1	45-60	25	Fair	Fair		Yes	Remain	Pruned one side
8	*Casuarina equisetifolia*	Beach sheoak	16	0	30-45	20	Fair	Fair			Remain	
9	*Casuarina equisetifolia*	Beach sheoak	10	1	15-30	20	Fair	Fair			Remain	
10	*Casuarina equisetifolia*	Beach sheoak	10	1	15-30	20	Fair	Fair			Remain	
11	*Casuarina equisetifolia*	Beach sheoak	9	1	15-30	10	Fair	Fair			Remain	
12	*Casuarina equisetifolia*	Beach sheoak	10	1	15-30	0	Fair	Fair			Remain	
13	*Salix species*	Willow	22	2	15-30	40	Good	Good			Remain	Next to creek
14	*Salix species*	Willow	13	3	15-30	20	Good	Good			Remain	Next to creek
15	*Salix species*	Willow	5	1	0-15	8	Good	Good			Remain	
16	*Eucalyptus species*	Eucalyptus	25	1	45-60	50	Fair	Fair			Remain	Next to creek, many branch failures
17	*Salix species*	Willow	15	3	15-30	35	Good	Good			Remain	On creek bank
18	*Eucalyptus species*	Eucalyptus	30	0	60-75	40	Good	Good			Remain	On creek bank
19	*Fraxinus uhdei*	Shamel ash	7	2	15-30	20	Good	Good			Remain	Next to creek
20	*Pistacia chinensis*	Chinese pistache	4	0	15-30	10	Fair	Fair			Remain	
21	*Eucalyptus species*	Eucalyptus	20	2	30-45	40	Fair	Fair			Remain	Broken branches
22	*Fraxinus uhdei*	Shamel ash	4	2	15-30	18	Good	Good			Remain	Near creek
23	*Fraxinus uhdei*	Shamel ash	3	1	15-30	10	Good	Good			Remain	Next to creek
24	*Acacia melanoxylon*	Black acacia	8	9	15-30	20	—	Good			Remove	
25	*Eucalyptus species*	Eucalyptus	9	1	15-30	20	—	Good			Remove	
26	*Eucalyptus species*	Eucalyptus	19	1	45-60	25	Fair	Fair			Remain	
27	*Eucalyptus species*	Eucalyptus	10	1	30-45	20	Poor	Poor			Remain	Half dead
28	*Eucalyptus species*	Eucalyptus	10	1	30-45	20	Good	Fair			Remain	
29	*Eucalyptus species*	Eucalyptus	16	1	45-60	35	Good	Good			Remain	

Tree ID			Tree Size				Tree Condition		Characteristics		Disposition	Comments
Tree No.	Genus / Species	Common Name	DBH (in)	Trunk Count	Height (ft)	Canopy Width (ft)	Health	Structure	Protected	Private		
30	*Eucalyptus species*	Eucalyptus	17	1	60-75	50	Good	Good			Remain	
31	*Eucalyptus species*	Eucalyptus	18	5	30-45	35	Good	Good			Remain	
32	*Eucalyptus species*	Eucalyptus	7	1	15-30	20	Good	Fair			Remain	Heavy lean
33	*Eucalyptus species*	Eucalyptus	5	1	15-30	20	Good	Good			Remain	
34	*Eucalyptus species*	Eucalyptus	9	1	45-60	20	Good	Good			Remain	
35	*Eucalyptus species*	Eucalyptus	14	1	45-60	35	Good	Good			Remain	
36	*Eucalyptus species*	Eucalyptus	13	1	45-60	35	Good	Good			Remain	
37	*Eucalyptus species*	Eucalyptus	11	1	30-45	25	Good	Good			Remain	
38	*Eucalyptus species*	Eucalyptus	8	1	30-45	20	Fair	Fair			Remain	Dead branches
39	*Eucalyptus species*	Eucalyptus	7	1	30-45	20	Good	Good			Remain	
40	*Eucalyptus species*	Eucalyptus	12	1	45-60	35	Good	Good			Remain	Low branches
41	*Eucalyptus species*	Eucalyptus	14	1	60-75	35	Good	Good			Remain	
42	*Eucalyptus species*	Eucalyptus	12	1	45-60	25	Good	Good			Remain	
43	*Eucalyptus species*	Eucalyptus	20	2	60-75	30	Good	Good			Remain	Heavy lean
44	*Eucalyptus species*	Eucalyptus	10	2	30-45	35	Good	Good			Remain	
45	*Eucalyptus species*	Eucalyptus	17	1	45-60	35	Fair	Fair			Remain	
46	*Eucalyptus species*	Eucalyptus	9	1	30-45	20	Poor	Poor			Remain	95% dead
47	*Eucalyptus species*	Eucalyptus	17	1	45-60	35	Good	Good			Remain	
48	*Eucalyptus species*	Eucalyptus	3	1	0-15	10	Good	Good			Remain	
49	*Eucalyptus species*	Eucalyptus	10	1	15-30	20	Fair	Fair			Remain	
50	*Eucalyptus species*	Eucalyptus	13	1	45-60	35	Good	Good			Remain	
51	*Eucalyptus species*	Eucalyptus	22	1	60-75	50	Good	Good			Remain	
52	*Eucalyptus species*	Eucalyptus	10	1	30-45	25	Good	Good			Remain	
53	*Eucalyptus species*	Eucalyptus	22	1	60-75	50	Good	Good			Remain	
54	*Eucalyptus species*	Eucalyptus	9	1	15-30	20	Poor	Poor			Remain	Broken branches
55	*Eucalyptus species*	Eucalyptus	15	1	45-60	35	Good	Good			Remain	
56	*Eucalyptus species*	Eucalyptus	15	2	30-45	25	Good	Good			Remain	
57	*Eucalyptus species*	Eucalyptus	17	4	15-30	25	Fair	Fair			Remain	Growing parallel with ground
58	*Eucalyptus species*	Eucalyptus	19	1	60-75	35	Good	Good			Remain	
59	*Eucalyptus species*	Eucalyptus	26	3	45-60	40	Good	Good			Remain	Forked at ground level
60	*Eucalyptus species*	Eucalyptus	17	1	45-60	35	Good	Good			Remain	Heavy lean

Tree ID			Tree Size				Tree Condition		Characteristics		Disposition	Comments
Tree No.	Genus / Species	Common Name	DBH (in)	Trunk Count	Height (ft)	Canopy Width (ft)	Health	Structure	Protected	Private		
63	*Quercus agrifolia*	Coast live oak	21	1	30-45	40	Good	Good	Yes		Remain	
64	*Quercus agrifolia*	Coast live oak	17	1	30-45	30	Good	Good	Yes		Remain	
65	*Platanus x acerifolia*	London planetree	17	1	30-45	30	Fair	Good			Remain	
66	*Quercus agrifolia*	Coast live oak	22	1	–	0	Good	Good	Yes		Remain	
67	*Platanus x acerifolia*	London planetree	16	1	–	0	Good	Good			Remain	
68	*Pyrus species*	Pear	13	1	30-45	30	Good	Good			Remain	
69	*Pyrus species*	Pear	13	1	15-30	30	Good	Good			Remain	
70	*Pyrus species*	Pear	11	1	0-15	30	Good	Good			Remain	
71	*Platanus x acerifolia*	London planetree	13	1	15-30	30	Fair	Fair			Remain	
72	*Pinus species*	Pine	16	2	15-30	25	Good	Good			Remain	
73	*Pinus species*	Pine	15	2	15-30	25	Good	Good			Remove	
74	*Platanus x acerifolia*	London planetree	17	3	0-15	25	Fair	Fair			Remove	Street tree
75	*Maytenus boaria*	Mayten	9	1	0-15	10	Good	Good			Remove	
76	*Maytenus boaria*	Mayten	7	1	0-15	10	Fair	Fair			Remove	
77	*Maytenus boaria*	Mayten	5	1	0-15	15	Fair	Fair			Remove	
78	*Maytenus boaria*	Mayten	7	1	0-15	10	Fair	Fair			Remove	
79	*Platanus x acerifolia*	London planetree	14	1	0-15	30	Fair	Fair			Remove	Street tree
80	*Pinus canariensis*	Canary Island pine	15	1	30-45	15	Good	Good			Remove	
81	*Pinus canariensis*	Canary Island pine	13	3	15-30	10	Good	Good			Remove	
82	*Pinus radiata*	Monterrey pine	30	1	30-45	40	Good	Good			Remove	
83	*Schinus terebinthifolius*	Brazilian peppertree	8	1	0-15	15	Fair	Fair			Remain	
84	*Schinus terebinthifolius*	Brazilian peppertree	8	1	0-15	20	Critical	Critical			Remove	50% dead
85	*Schinus terebinthifolius*	Brazilian peppertree	11	1	15-30	20	Good	Good			Remove	
86	*Lagerstroemia species*	Crapemyrtle	3	1	0-15	8	Good	Good			Remove	
87	*Lagerstroemia species*	Crapemyrtle	3	1	0-15	10	Good	Good			Remove	
88	*Lagerstroemia species*	Crapemyrtle	3	1	0-15	10	Good	Good			Remove	
89	*Platanus x acerifolia*	London planetree	24	1	30-45	40	Good	Good			Remove	Street tree
90	*Pinus caneriensis*	Canary Island pine	27	1	45-60	30	Good	Good			Remove	Street tree
91	*Fagus species*	Beech	2	1	0-15	5	Good	Good			Remove	
92	*Prunus species*	Plum or cherry	7	3	0-15	15	Good	Good			Remove	
93	*Lagerstroemia species*	Crapemyrtle	2	3	0-15	8	Good	Good			Remove	

Tree ID			Tree Size				Tree Condition		Characteristics			
Tree No.	Genus / Species	Common Name	DBH (in)	Trunk Count	Height (ft)	Canopy Width (ft)	Health	Structure	Protected	Private	Disposition	Comments
94	*Prunus species*	Plum or cherry	2	1	0-15	5	Good	Good			Remove	
95	*Pyrus species*	Pear	4	1	0-15	8	Good	Good			Remove	
96	*Ligustrum lucidum*	Privet	13	1	15-30	15	Good	Good			Remove	Street tree
97	*Ligustrum lucidum*	Privet	9	1	15-30	10	Fair	Fair			Remove	Street tree
98	*Platanus x acerifolia*	London planetree	16	1	30-45	30	Good	Good			Remove	Street tree
99	*Platanus x acerifolia*	London planetree	10	1	30-45	25	Good	Good			Remove	Street tree
100	*Platanus x acerifolia*	London planetree	3	1	15-30	10	Good	Good			Remain	
101	*Pinus canariensis*	Canary Island pine	4	1	0-15	8	Good	Good			Remain	
102	*Cotinus species*	Japanese smoke tree	2	4	0-15	6	Good	Good			Remain	
103	*Platanus x acerifolia*	London planetree	3	1	0-15	6	Good	Good			Remain	
104	*Platanus x acerifolia*	London planetree	3	1	0-15	6	Good	Good			Remain	
105	*Platanus x acerifolia*	London planetree	3	1	0-15	6	Good	Good			Remain	
106	*Platanus x acerifolia*	London planetree	3	1	0-15	9	Good	Good			Remain	
107	*Quercus agrifolia*	Coast live oak	3	4	0-15	10	Good	Good	No		Remain	
108	*Ligustrum lucidum*	Privet	5	1	0-15	7	Good	Good			Remain	
109	*Fraxinus species*	Ash	4	1	0-15	10	Good	Good			Remain	
110	*Fraxinus species*	Ash	4	1	0-15	100	Good	Good			Remain	
111	*Fraxinus species*	Ash	11	2	15-30	20	Good	Good			Remain	
112	*Fraxinus species*	Ash	3	2	15-30	10	Good	Good			Remain	
113	*Fraxinus species*	Ash	4	1	15-30	8	Good	Good			Remain	
114	*Fraxinus species*	Ash	23	1	30-45	30	Good	Good			Remain	
115	*Fraxinus species*	Ash	4	1	15-30	10	Good	Good			Remain	
116	*Fraxinus species*	Ash	11	2	15-30	20	Good	Good			Remain	
117	*Ligustrum lucidum*	Privet	7	3	15-30	20	Good	Good			Remain	
118	*Fraxinus species*	Ash	4	1	15-30	10	Good	Good			Remain	
119	*Ligustrum lucidum*	Privet	8	2	15-30	25	Good	Good			Remain	
120	*Ligustrum lucidum*	Privet	6	2	15-30	20	Good	Good			Remain	
121	*Fraxinus species*	Ash	11	1	15-30	30	Good	Good			Remain	
122	*Ligustrum lucidum*	Privet	5	1	0-15	7	Good	Good			Remain	
123	*Fraxinus species*	Ash	4	1	15-30	7	Good	Good			Remain	
124	*Fraxinus species*	Ash	13	2	15-30	30	Good	Good			Remain	

Tree ID			Tree Size				Tree Condition		Characteristics		Disposition	Comments
Tree No.	Genus / Species	Common Name	DBH (in)	Trunk Count	Height (ft)	Canopy Width (ft)	Health	Structure	Protected	Private		
125	*Fraxinus species*	Ash	22	1	30-45	30	Good	Good			Remain	
126	*Fraxinus species*	Ash	11	1	15-30	20	Fair	Fair			Remain	
127	*Fraxinus species*	Ash	3	1	15-30	5	Good	Good			Remain	
128	*Pinus species*	Pine	21	1	15-30	30	Good	Good			Remain	
129	*Quercus agrifolia*	Coast live oak	32	1	30-45	30	Good	Good	Yes		Remain	
130	*Quercus species*	Oak	10	5	0-15	30	Good	Good	No		Remain	Cluster
131	*Quercus ilex*	Holly oak	6	1	15-30	10	Good	Good			Remain	
132	*Quercus agrifolia*	Coast live oak	7	2	15-30	15	Good	Good	No		Remain	
133	*Eucalyptus polyanthemos*	Silver dollar gum	10	6	15-30	25	Good	Good			Remain	
134	*Sequoia sempervirens*	Redwood	12	1	15-30	10	Good	Good	No		Remain	
135	*Sequoia sempervirens*	Redwood	13	1	0-15	10	Fair	Fair	No		Remain	
136	*Eucalyptus sideroxylon*	Red ironbark	18	1	15-30	30	Good	Good			Remain	
137	*Eucalyptus sideroxylon*	Red ironbark	11	0	15-30	20	Good	Good			Remain	
138	*Eucalyptus sideroxylon*	Red ironbark	11	1	15-30	25	Good	Good			Remain	
139	*Eucalyptus sideroxylon*	Red ironbark	23	1	15-30	30	Good	Good			Remain	
140	*Eucalyptus sideroxylon*	Red ironbark	16	1	15-30	25	Good	Good			Remain	
141	*Eucalyptus sideroxylon*	Red ironbark	15	1	15-30	25	Good	Good			Remain	
142	*Eucalyptus sideroxylon*	Red ironbark	17	1	15-30	25	Good	Good			Remain	
143	*Eucalyptus sideroxylon*	Red ironbark	14	1	15-30	20	Good	Good			Remain	
2355	*Unknown*	Unknown	–	–	–	–	–	–			–	No data
10419	*Unknown*	Small tree	–	–	–	–	–	–		Yes	Remain	
10694	*Ulmus parvifolia*	Chinese elm	15	1	40-45	–	Good	Fair			Remain	
12165	*Fraxinus uhdei*	Shamel ash	11	1	25-30	–	Good	Fair			Remain	
12167	*Fraxinus uhdei*	Shamel ash	15	1	35-40	–	Fair	Fair			Remain	

TOTAL TREES REMOVED = 28	TOTAL TREES PLANTED = 40

Abbreviations

AMEND - Amendment
DIA - Diameter
EA - Each
ft - Foot
ft² - Square feet
ft³ - Cubic feet
MIN - Minimum
No. - Number
PLT ESTB - Plant establishment
PVMT - Pavement
R/W - Right of way
TAB - Tablet(s)
TRVD - Traveled way

APPLICABLE WHEN CIRCLED:

① Quantities shown are "per plant" unless shown as SQFT OR SQYD application rates.
② Sufficient to receive root ball.
③ Does not apply to mulch areas.
4 As shown on plans.
5 Unless otherwise shown on plans.
⑥ See detail
7 See Special Provisions.
8 See specifications
⑨ Basin area equivalent to (3 ft.) in diameter.
10 Mulch shall be installed to three feet from edge of paving/AC dike.
11 Quantities shown are per 300 ft² application rates.

PLANT LIST AND PLANTING SPECIFICATIONS

PLANT GROUP	PLANT NO.	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY EACH	HOLE SIZE		BASIN TYPE	IRON SULFATE	SOIL AMEND ①	COMMERCIAL FERTILIZER ①		BASIN MULCH ③	STAKING	PLANTING LIMITS MINIMUM DISTANCE FROM			REMARKS	
							DIA	DEPTH				PLANTING	PLT ESTB			PVMT	WALL	ON CENTER		
A	* 1		Arctostaphylos 'Pacific Mist'	MANZANITA	NO.1	X	②	②	II	–	1.5 CF/SQYD	0.2 LB/SQYD	–	2 CF	–	2'–6"	2'–6"	5'–0"	GROUNDCOVER	SEE X/X FOR DETAIL
	* 2		Festuca californica	CALIFORNIA FESCUE		X	②	②	II	–	1.5 CF/SQYD	0.2 LB/SQYD	–	2 CF	–	1'–0"	1'–0"	2'–0"	SHRUB	SEE X/X FOR DETAIL
B	* 3	⊕	Arctostaphylos 'Howard McMinn'	MANZANITA	NO.5	X	②	②	II	–	1.5 CF/SQYD	0.2 LB/SQYD	–	2 CF	–	3'–0"	3'–0"	6'–0"	SHRUB	SEE X/X & X/X FOR DETAIL
	4		Baccharis 'Starn'	STARN COYOTE BRUSH		X	②	②	II	–	1.5 CF/SQYD	0.2 LB/SQYD	–	2 CF	–	2'–0"	2'–0"	4'–0"	SHRUB	
	5	⊗	Muhlenbergia rigens	DEER GRASS		X	②	②	II	–	1.5 CF/SQYD	0.2 LB/SQYD	–	2 CF	–	1'–6"	1'–6"	3'–0"	SHRUB	
	6	⊙	Zauschneria californica	CALIFORNIA FUCHSIA		X	②	②	II	–	1.5 CF/SQYD	0.2 LB/SQYD	–	2 CF		1'–6"	1'–6"	3'–0"	SHRUB	
K	7	⊕	Arbutus 'Marina'	MARINA STRAWBERRY TREE	24" BOX	X	②	②	II⑨	–	1.5 CF/SQYD	0.2 LB/SQYD	–	2 CF	⑥	–	6'–0"	35'–0"	TREE, SEE X/X FOR DETAIL	
	* 8	⊙	Myrica californica	PACIFIC WAX MYRTLE		X	②	②	II⑨	–	1.5 CF/SQYD	0.2 LB/SQYD	–	2 CF	⑥	–	6'–0"	15'–0"		
	9	⊡	Platanus racemosa	CALIFORNIA SYCAMORE		X	②	②	II⑨	–	1.5 CF/SQYD	0.2 LB/SQYD	–	2 CF	⑥	–	6'–0"	25'–0"		
	10	⊙	Populus fremontii	FREMONT'S COTTONWOOD		X	②	②	II⑨	–	1.5 CF/SQYD	0.2 LB/SQYD	–	2 CF	⑥	–	6'–0"	35'–0"		
U	* 11	⊗	Salix lasiolepis	ARROYO WILLOW	NO.15	X	②	②	II⑨	–	1.5 CF/SQYD	0.2 LB/SQYD	–	2 CF	⑥	–	6'–0"	10'–0"		

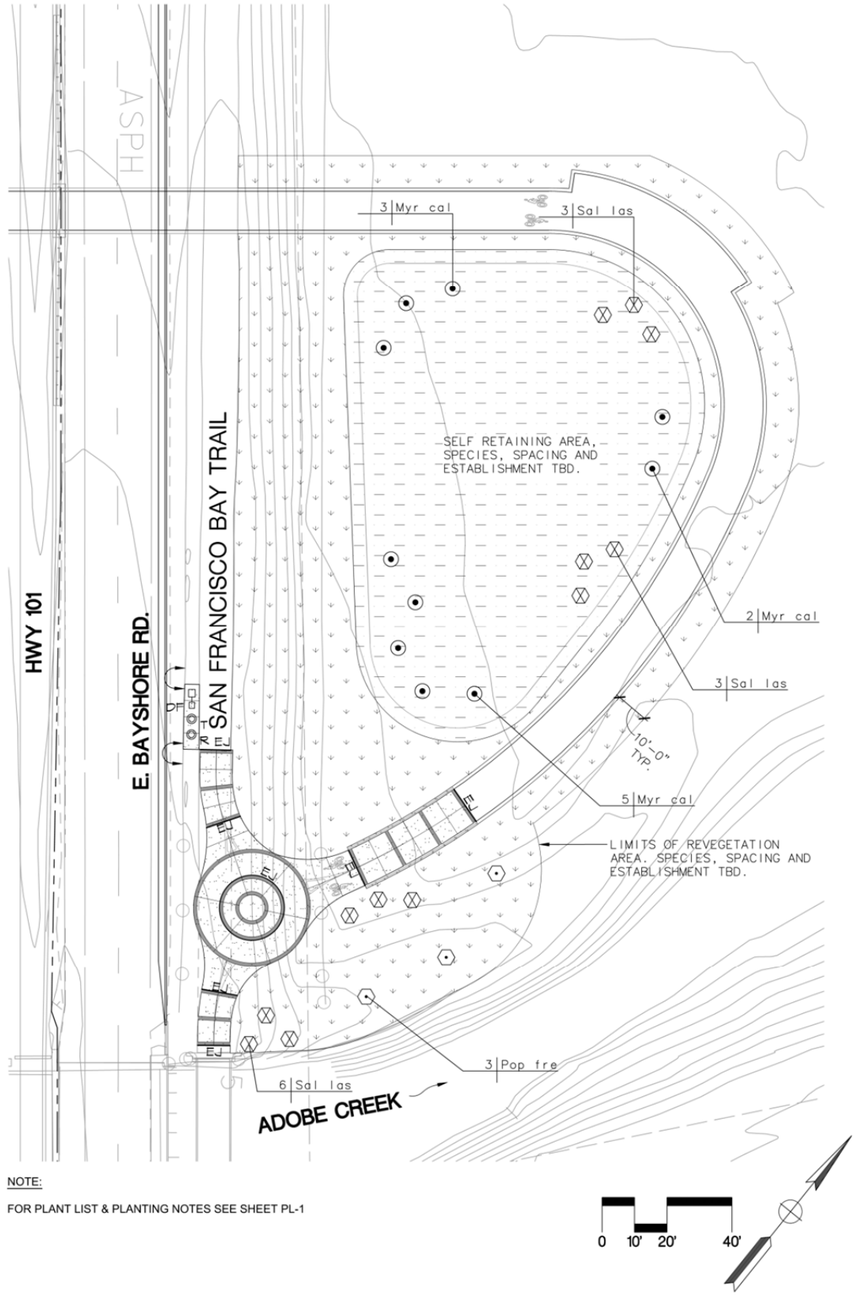
* STORMWATER PLANTS

PLANTING NOTES

1. **MULCH**: INSTALL A UNIFORM THREE INCH COVERING OF SMALL DECORATIVE "WALK ON" MULCH, ¼ INCH TO ¾ INCH PARTICLE SIZE IN ALL PLANTING AREAS.
2. **GROUNDCOVER**: PROVIDE GROUNDCOVER AT INDICATED ON–CENTER SPACING THROUGHOUT ALL PLANTING AREAS. GROUNDCOVER MUST BE PROVIDED UP TO THE WATERING BASIN OF ALL TREES AND SHRUBS.
3. **TOPSOIL**: 6" OF IMPORT/NATIVE TOPSOIL TO BE PLACED IN ALL PLANTING AREAS.
4. **SOIL PREPARATION:** CULTIVATE TO LIMITS OF CLEAR AND GRUB AREAS.
5. **SWALES:** DO NOT PLACE MULCH WITHIN 4' OF DRAINAGE FLOW LINES, INCLUDING WITHIN SHRUB BEDS.
6. **PLANT LOCATIONS:** FINAL LOCATIONS OF PLANT MATERIALS TO BE APPROVED IN FIELD BY CITY MAINTENANCE STAFF.
7. **COMMERCIAL FERTILIZER** MUST BE SLOW OR CONTROLLED RELEASE.

ADOBE CREEK POC
PLANT LIST AND LEGEND
SCALE AS SHOWN

PL-1



NOTE:

FOR PLANT LIST & PLANTING NOTES SEE SHEET PL-1

0 10' 20' 40'

SITE CONSTRUCTION LEGEND

- CONCRETE PAVING
- EXPANSION JOINT, TYP.
- SCORE JOINT, TYP.
- BAND,INTEGRAL COLOR TBD AND LIGHT SANDBLAST

T — TRASH RECEPTACLE, DUMOR MODEL # 148-32SH-FTO WITH LID

R — RECYCLING RECEPTACLE, DUMOR MODEL #148-32RC-0254 SLATS WITH RECYCLING LOGO

DF — DRINKING FOUNTAIN, ELKAY EZH2O W/ BOTTLE FILLING, FOUNTAIN AND PET FOUNTAIN

ALIGN

BR — BIKE REPAIR STAND - DERO FIXIT

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCl	101	50.6		X

REGISTERED LANDSCAPE ARCHITECT DATE

PLANS APPROVAL DATE

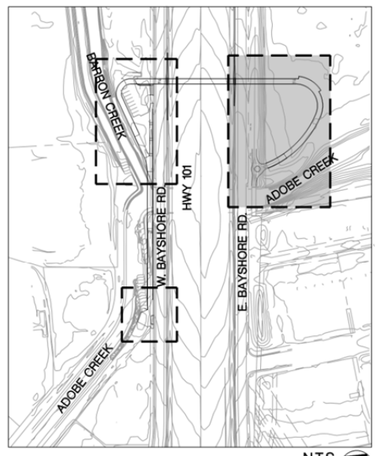
LICENSED LANDSCAPE ARCHITECT — GEORGE FLETCHER No. 6071 — Signature — Jul. 31, 2018 Renewal Date — Date — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

CALLANDER ASSOCIATES INC.
300 S. FIRST ST, STE.232
SAN JOSE, CA 95113

CITY OF PALO ALTO
250 HAMILTON AVENUE
PALO ALTO, CA 94301

KEYMAP

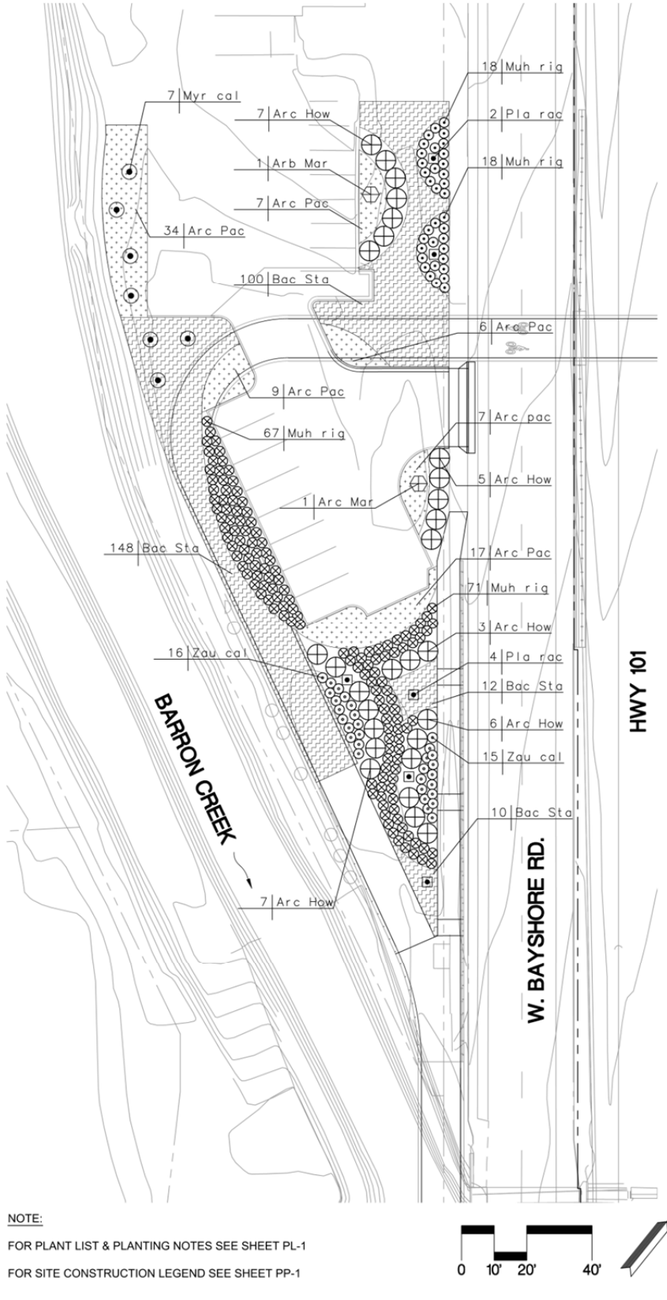


N.T.S.

ADOBE CREEK POC PLANTING PLAN

SCALE AS SHOWN

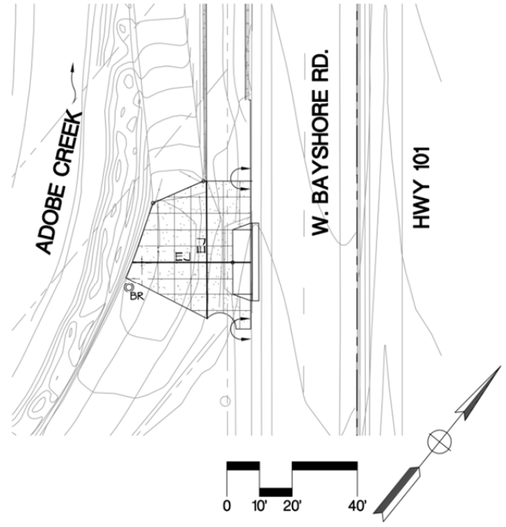
PP-1



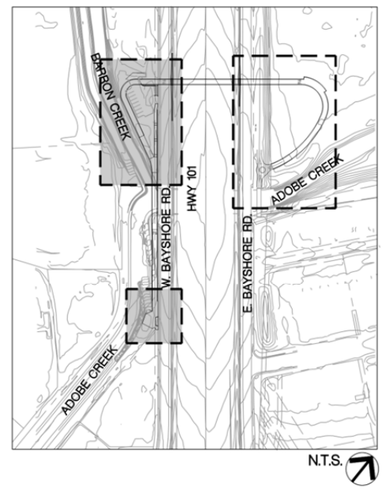
NOTE:

FOR PLANT LIST & PLANTING NOTES SEE SHEET PL-1

FOR SITE CONSTRUCTION LEGEND SEE SHEET PP-1



KEYMAP

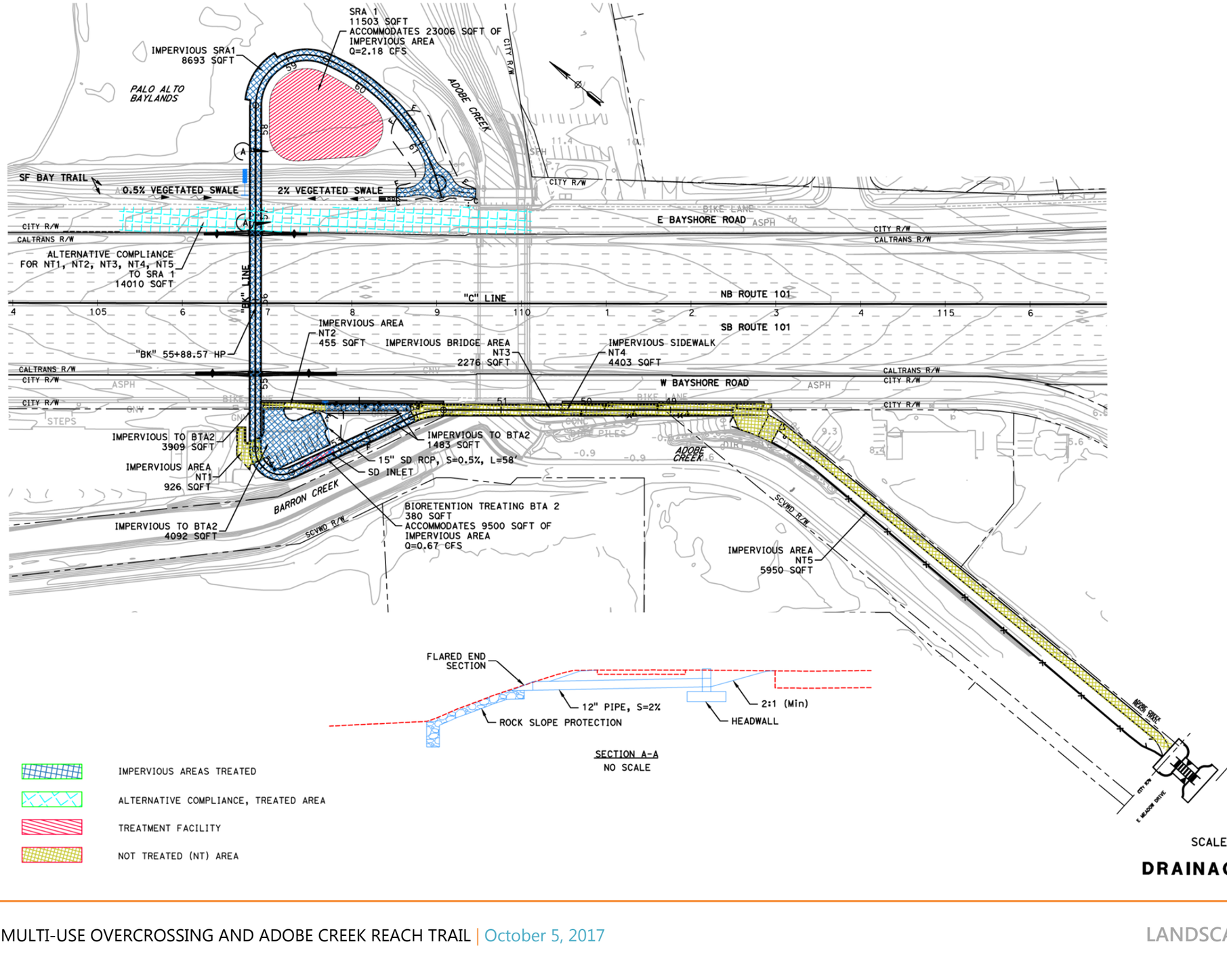


ADOBE CREEK POC PLANTING PLAN

SCALE AS SHOWN

PP-2

DRAINAGE PLAN

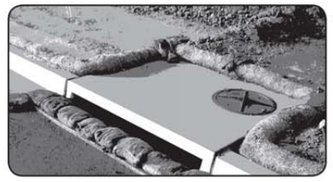


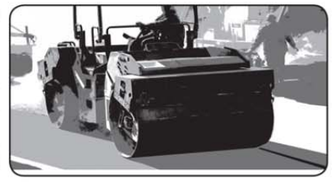
POLLUTION PREVENTION — IT'S PART OF THE PLAN

Construction projects are required to implement year-round stormwater BMPs, as they apply to your project.

Runoff from streets and other paved areas is a major source of pollution to San Francisco Bay. Construction activities can directly affect the health of the Bay unless contractors and crews plan ahead to keep construction dirt, debris, and other pollutants out of storm drains and local creeks. Following these guidelines will ensure your compliance with City of Palo Alto Ordinance requirements.








MATERIALS & WASTE MANAGEMENT

Non-Hazardous Materials

- ☐ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or when they are not in use.
- ☐ Use (but don't overuse) reclaimed water for dust control.
- ☐ Ensure dust control water doesn't leave site or discharge to storm drains.

Hazardous Materials

- ☐ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ☐ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ☐ Follow manufacturer's application instructions for hazardous materials and do not use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ☐ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ☐ Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. A plastic liner is recommended to prevent leaks. Never clean out a dumpster by hosing it down on the construction site.
- ☐ Place portable toilets away from storm drains. Make sure they are in good working order. Check frequently for leaks.
- ☐ Dispose of all wastes and demolition debris properly. Recycle materials and wastes that can be recycled, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation.
- ☐ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.
- ☐ Keep site clear of litter (e.g. lunch items, cigarette butts).
- ☐ Prevent litter from uncovered loads by covering loads that are being transported to and from site.

Construction Entrances and Perimeter

- ☐ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ☐ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

EQUIPMENT MANAGEMENT & SPILL CONTROL

Maintenance and Parking

- ☐ Designate an area of the construction site, well away from streams or storm drain inlets and fitted with appropriate BMPs, for auto and equipment parking, and storage.
- ☐ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ☐ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ☐ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ☐ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment, and do not use diesel oil to lubricate equipment or parts onsite.

Spill Prevention and Control

- ☐ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ☐ Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks. Use drip pans to catch leaks until repairs are made.
- ☐ Clean up leaks, drips and other spills immediately and dispose of cleanup materials properly.
- ☐ Use dry cleanup methods whenever possible (absorbent materials, cat litter and/or rags).
- ☐ Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water, or bury them.
- ☐ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ☐ Report any hazardous materials spills immediately! Call City of Palo Alto Communications, **(650) 329-2413**. If the spill poses a significant hazard to human health and safety, property or the environment, you must report it to the State Office of Emergency Services. **(800) 852-7550 (24 hours).**

EARTHMOVING

Grading and Earthwork

- ☐ Schedule grading and excavation work during dry weather.
- ☐ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ☐ Remove existing vegetation only when absolutely necessary, plant temporary vegetation for erosion control on slopes or where construction is not immediately planned.
- ☐ Prevent sediment from migrating offsite and protect storm drain inlets, drainage courses and streams by installing and maintaining appropriate BMPs (e.g., silt fences, gravel bags, fiber rolls, temporary swales, etc.).
- ☐ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ☐ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells.
  - Buried barrels, debris, or trash.
- ☐ If the above conditions are observed, document any signs of potential contamination and clearly mark them so they are not distrurbed by construction activities.

Landscaping

- ☐ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ☐ Stack bagged material on pallets and under cover.
- ☐ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

CONCRETE MANAGEMENT & DEWATERING

Concrete Management

- ☐ Store both dry and wet materials under cover, protected from rainfall and runoff and away from storm drains or waterways. Store materials off the ground, on pallets. Protect dry materials from wind.
- ☐ Wash down exposed aggregate concrete only when the wash water can (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) block any storm drain inlets and vacuum washwater from the gutter. If possible, sweep first.
- ☐ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will fl ow into a temporary waste pit, and make sure wash water does not leach into the underlying soil. (See CASQA Construction BMP Handbook for properly designed concrete washouts.)

Dewatering

- ☐ Reuse water for dust control, irrigation or another on-site purpose to the greatest extent possible.
- ☐ Be sure to obtain a Permit for Construction in the Public Street from Public Works Engineering before discharging water to a street, gutter, or storm drain. Call the Regional Water Quality Control Plant (RWQCP) at **(650) 329-2598** for an inspection prior to commencing discharge. Use filtration or diversion through a basin, tank, or sediment trap as required by the approved dewatering plan. Dewatering is not permitted from October to April.
- ☐ In areas of known contamination, testing is required prior to reuse or discharge of groundwater. Consult with the City inspector to determine what testing to do and to interpret results. Contaminated groundwater must be treated or hauled off-site for proper disposal.

PAVING/ASPHALT WORK

Paving

- ☐ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ☐ Cover storm drain inlets and manholes when applying seal coat, slurry seal, fog seal, or similar materials.
- ☐ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.

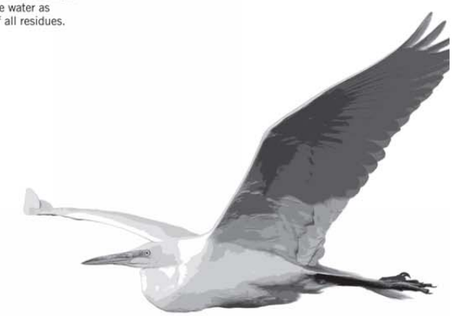
Sawcutting & Asphalt/Concrete Removal

- ☐ Protect storm drain inlets during saw cutting.
- ☐ If saw cut slurry enters a catch basin, clean it up immediately.
- ☐ Shovel or vacuum saw cut slurry deposits and remove from the site. When making saw cuts, use as little water as possible. Sweep up, and properly dispose of all residues.

PAINTING & PAINT REMOVAL

Painting Cleanup and Removal

- ☐ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ☐ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ☐ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ☐ Sweep up or collect paint chips and dust from non-hazardous dry stripping and sand blasting into plastic drop cloths and dispose of as trash.
- ☐ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state certified contractor.

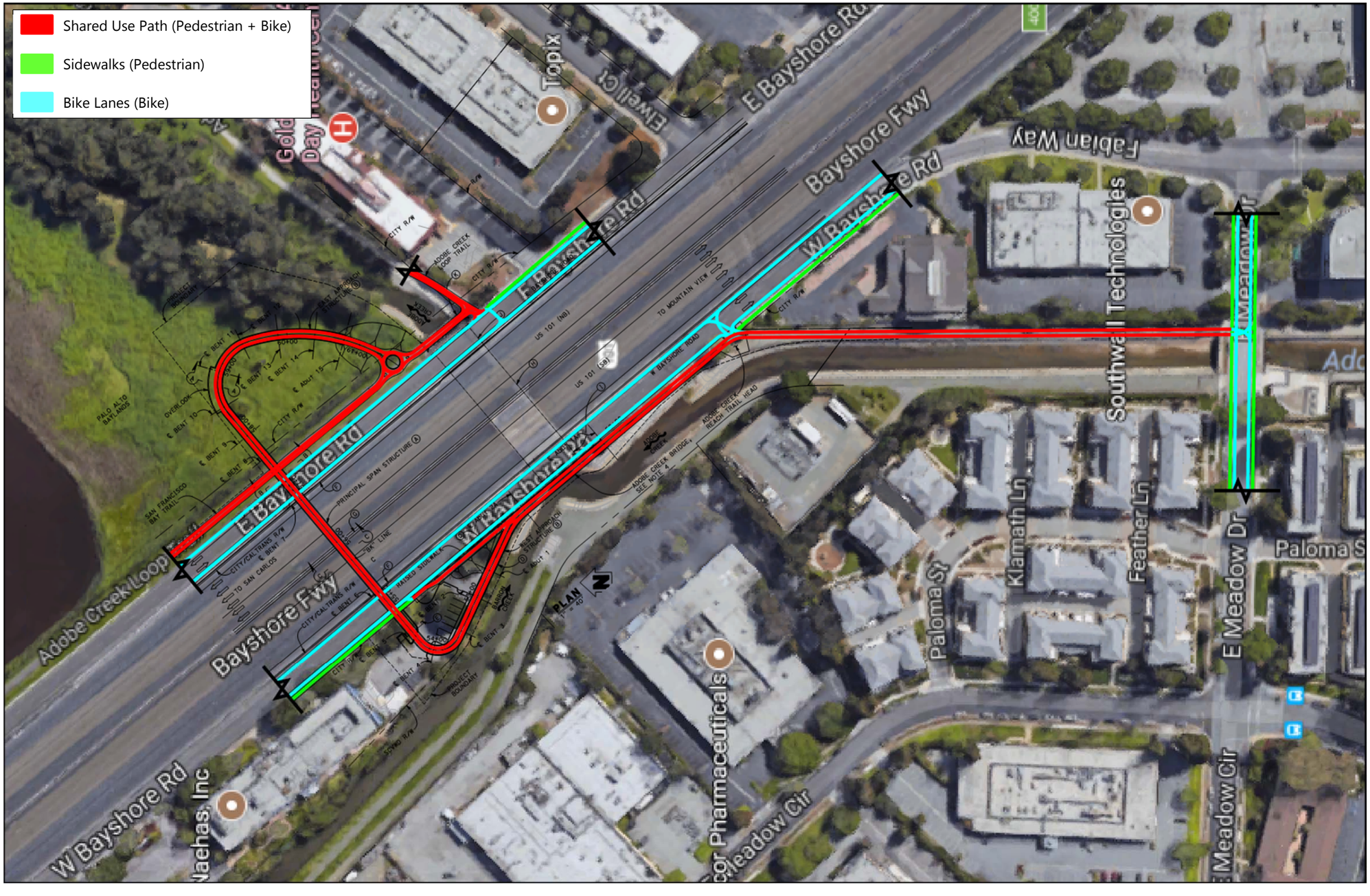



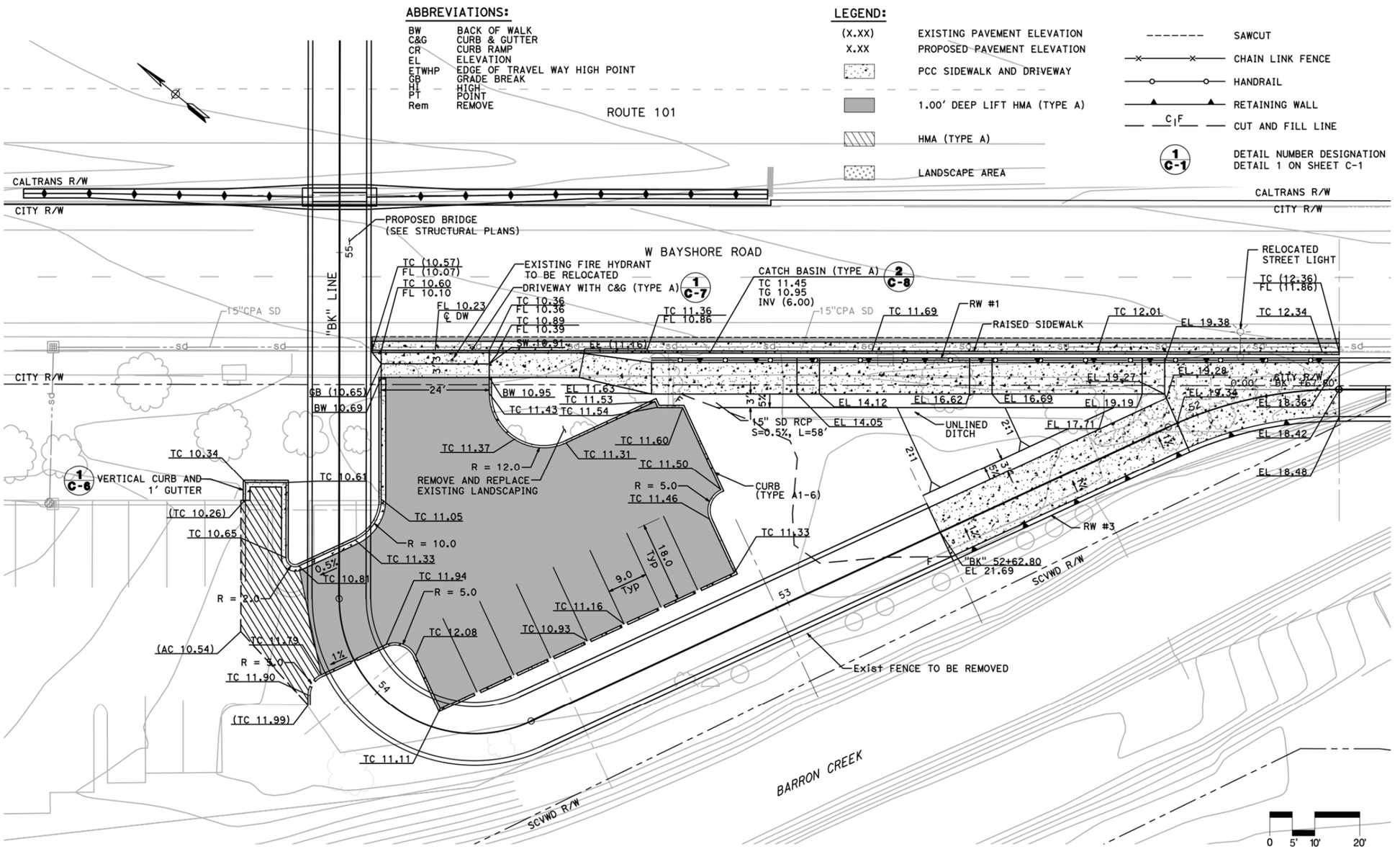
STORM DRAIN POLLUTERS MAY BE LIABLE FOR FINES OF UP TO $10,000 PER DAY!

250 Hamilton Avenue
Palo Alto, CA 94301
650.329.2211
cityofpaloalto.org

CITY OF PALO ALTO

CIRCULATION





GOOGLE PARKING LOT IMPROVEMENTS
SCALE AS SHOWN

APPROVED FOR PAVEMENT ELEVATION WORK ONLY

GOOGLE PARKING LOT - DEMOLITION

NOTES:

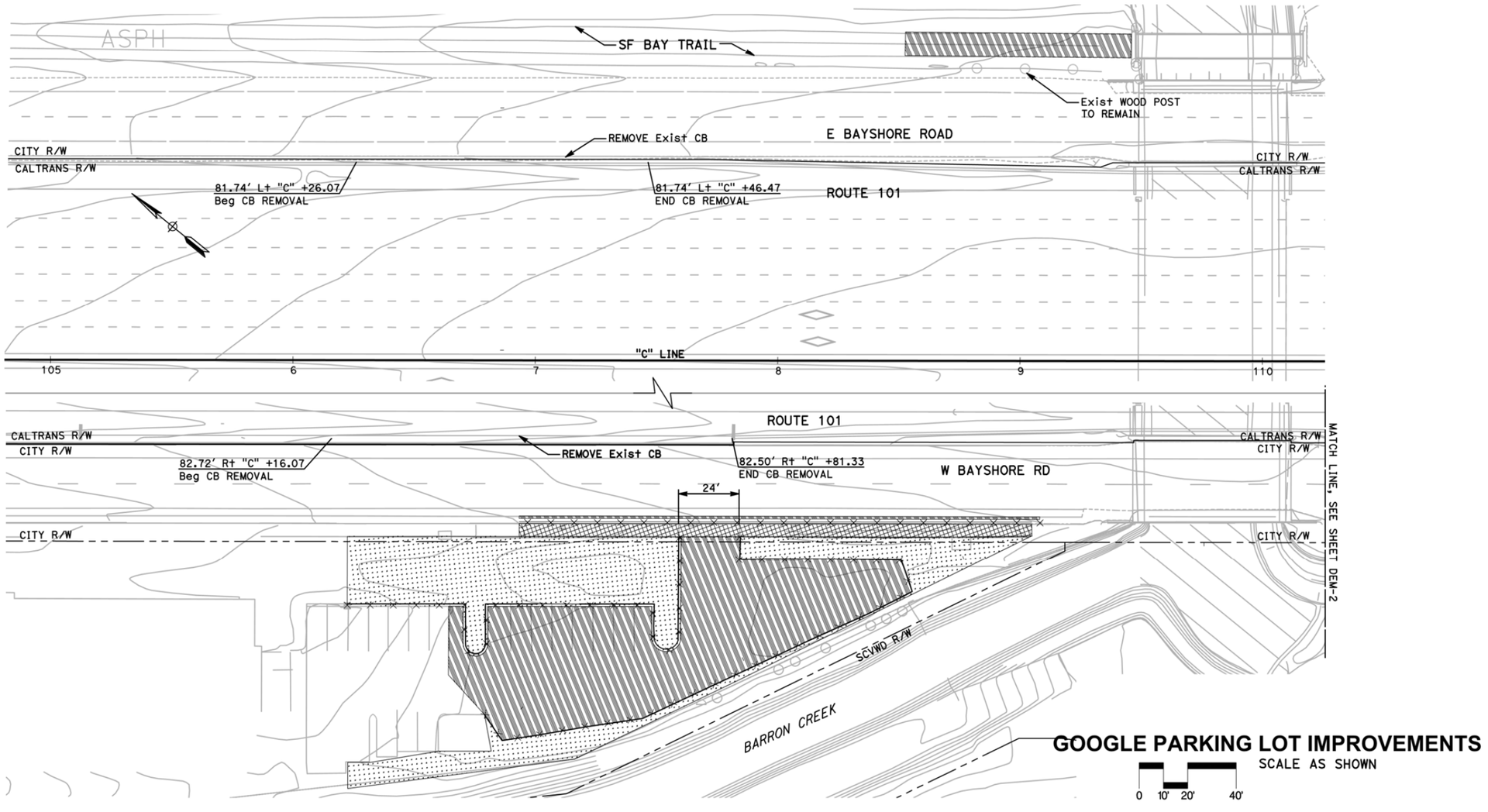
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. FOR DEMOLITION LIMITS, SEE LAYOUT PLANS.
3. SAWCUT EXISTING PAVEMENT TO A NEAT LINE.
4. FOR TREE REMOVAL, SEE LANDSCAPE PLANS.
5. FOR EXISTING UTILITY INFORMATION, SEE UTILITY PLANS.
6. FOR REMOVAL/RELOCATION OF TRAFFIC SIGNS, SEE PAVEMENT DELINEATION PLANS.
7. FOR REMOVAL/RELOCATION OF ELECTROLIERS, SEE ELECTRICAL PLANS.

LEGEND:

- REMOVE EXISTING Conc C&G AND Conc CURB
- REMOVE EXISTING AC PAVEMENT
- REMOVE EXISTING Conc SIDEWALK, Conc Driveway,
- EXISTING LANDSCAPE AREA TO BE CLEARED AND GRUBBED

ABBREVIATIONS:

C&G	CURB & GUTTER
CR	CURB RAMP
LG	LIP OF GUTTER
Pvmt	PAVEMENT
Rem	REMOVE



GOOGLE PARKING LOT IMPROVEMENTS

SCALE AS SHOWN

0 10' 20' 40'

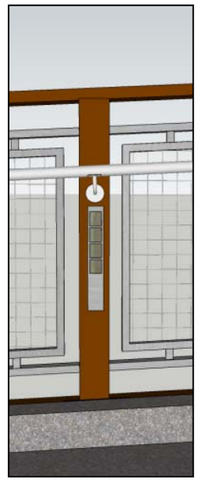
STRUCTURE LIGHTING

Lighting design will be provided for the Overcrossing that contributes to the project goals of providing connectivity while addressing environmental concerns. The Overcrossing paths are to be illuminated during night hours to support pedestrian and bicycling activates, with lighting levels reflecting the transition from higher illuminated urban areas on the western side of Highway 101 to the lower lighting of the Baylands to the east. Photometric levels will conform to standards set by the Illuminating Engineering Society.

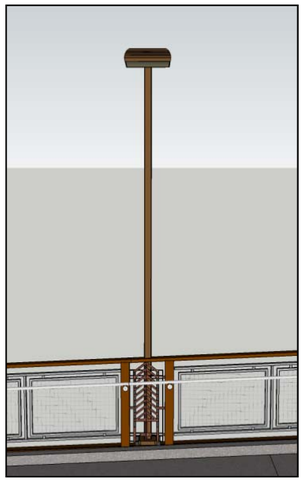
The Western Approach Structure will require higher lighting levels for better uniformity ratios to the surrounding environment. Pole mounted luminaires will provide uniform illumination along the pathway and at landscaping areas leading to the Overcrossing. At the Principal Span Structure, lighting will be integrated into the guardrail where possible to create a consistently illuminated pathway. Direct view of any light source is to be shielded from adjacent vehicular vantage points to reduce glare and distraction for drivers. Lighting at the Eastern Approach Structure and Eastern Approach Overlook will be integrated into the urban infrastructure components, such as railings and benches, in order to reduce visual interferences of the Baylands.

Careful consideration will be given to providing appropriate illumination at environmentally sensitive areas such as areas adjacent to Adobe and Barron Creek and the Baylands. Lighting on the Eastern Approach Structure will be minimal in order to reduce potential glare and distraction for wildlife with the Baylands. Step lights will be utilized, meeting photometric requirements, to provide low levels of functional lighting along the pathway. Warm color lighting techniques will be used to reduce lighting effects to migratory birds and other wildlife.

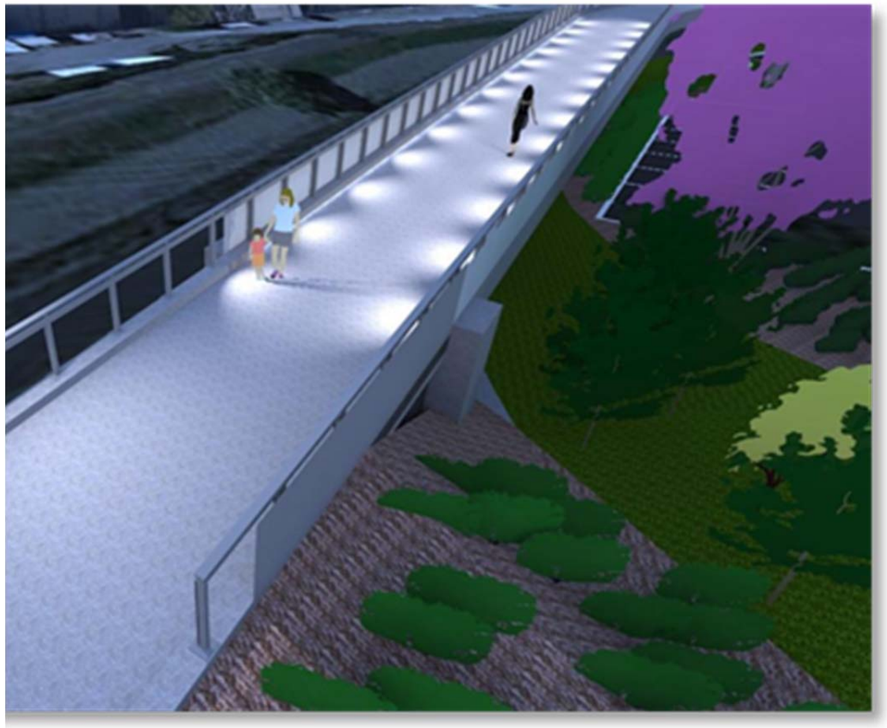
The lighting system will be designed to be mindful of the surrounding environment. Lighting poles with full-cutoff capability will be used in order to reduce light emitted above the 90° plane, limiting contribution to light pollution. Lighting controls will be utilized to reduce light output during hours with limited activity. Light levels dim down on a set time schedule synced with the astronomical clock. As people approach, sensors detect their presence, allowing the lighting to change in response to pedestrian and bicycle activity.



RAIL LIGHT



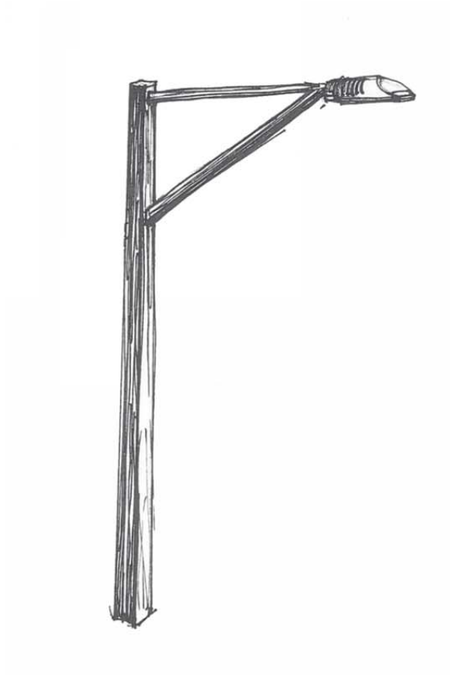
REVISED POLE LIGHT



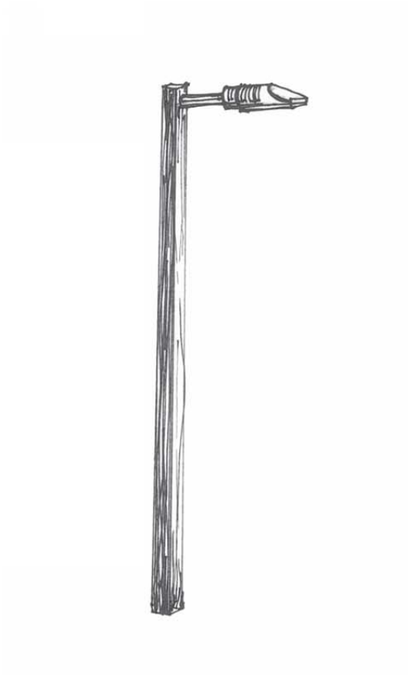
AERIAL VIEW

note: refer to structural package for updated bridge trussing and detail. renderings for lighting intent only.

POLE STYLES



any relocated roadway poles can utilize a cantilever arm style that reflects the truss shape of the bridge overcrossing.



Pedestrian scale poles with adjustable led modules and field installable cutoff provides lighting at Western Approach of pathway.

Pedestrian scale poles with full cutoff provides lighting at Western Approach of pathway

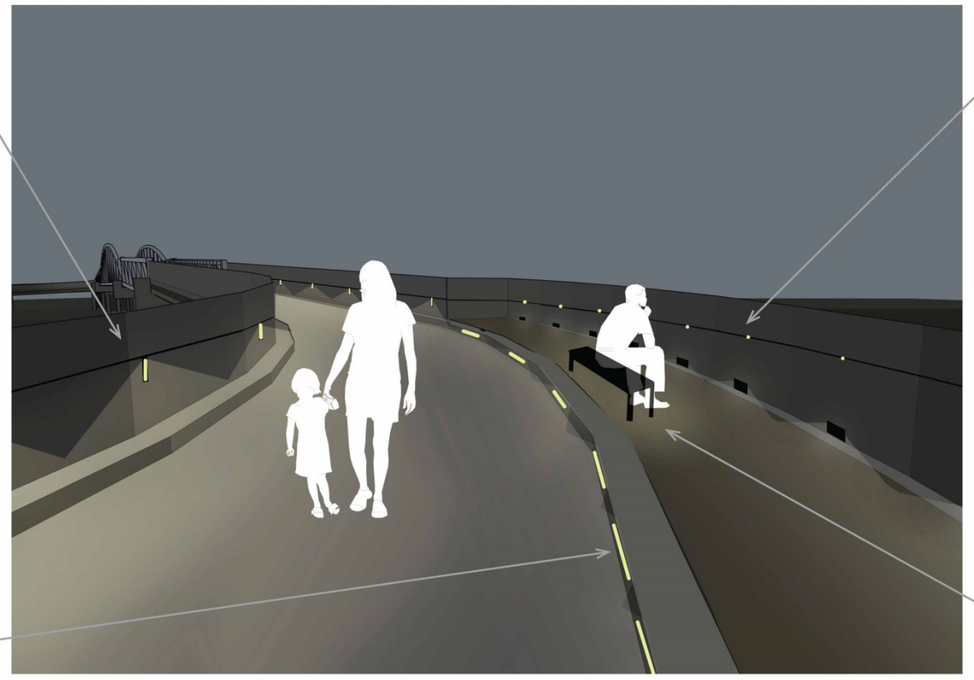
WESTERN APPROACH

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH®

note: refer to structural package for updated bridge trussing and detail. renderings for lighting intent only.

Lighting integrated into handrail provides main illumination on pathway



Lighting elements Integrated into railing at overlook to reduce visual interference to marshlands

Additional fixtures recessed into curb face to fill in illumination at pathway and help to delineate the transition from pathway to overlook

Benches utilized for additional illumination

EASTERN APPROACH

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH®

(L-P1) PEDESTRIAN POLE LIGHT AT WESTERN APPROACH

- 12’ pedestrian pole with field adjustable modules
- Full cutoff of light output above the 90° plane to reduce light pollution with no backlight to reduce light at river.
- Neighbor friendly optics (not shown in calcilations) will be added to further reduce backlight.
- Marine grade rated for Wet Location.

(L-S1,L-S2) INTEGRATED RAIL LIGHT THROUGHOUT PATHWAY

- L-S1: higher mounting height at principal span
- L-S2: lower mounting height at other locations
- Vertically mounted fixtures will be integrated at vertical posts on each side of pedestrian pathway approximately 8’ on center.
- Marine grade rated for Wet Location.
- Fixtures must be field accessible, including remote ballasts or drivers.

(L-R01) RAIL MOUNTED STEPLIGHT AT OVERLOOK

- Lighting will be integrated into railing at overlook, to be located approximately 6’ on center.
- Marine grade rated for Wet Location.
- Fixtures must be field accessible, including remote ballasts or drivers.

(L-C01) STEP LIGHT IN CURB AT OVERLOOK

- In-ground step lights will be used to define the edge of the curb at the eastern approach overlook.
- Marine grade rated for Wet Location.
- Fixtures must be field accessible, including remote ballasts or drivers.

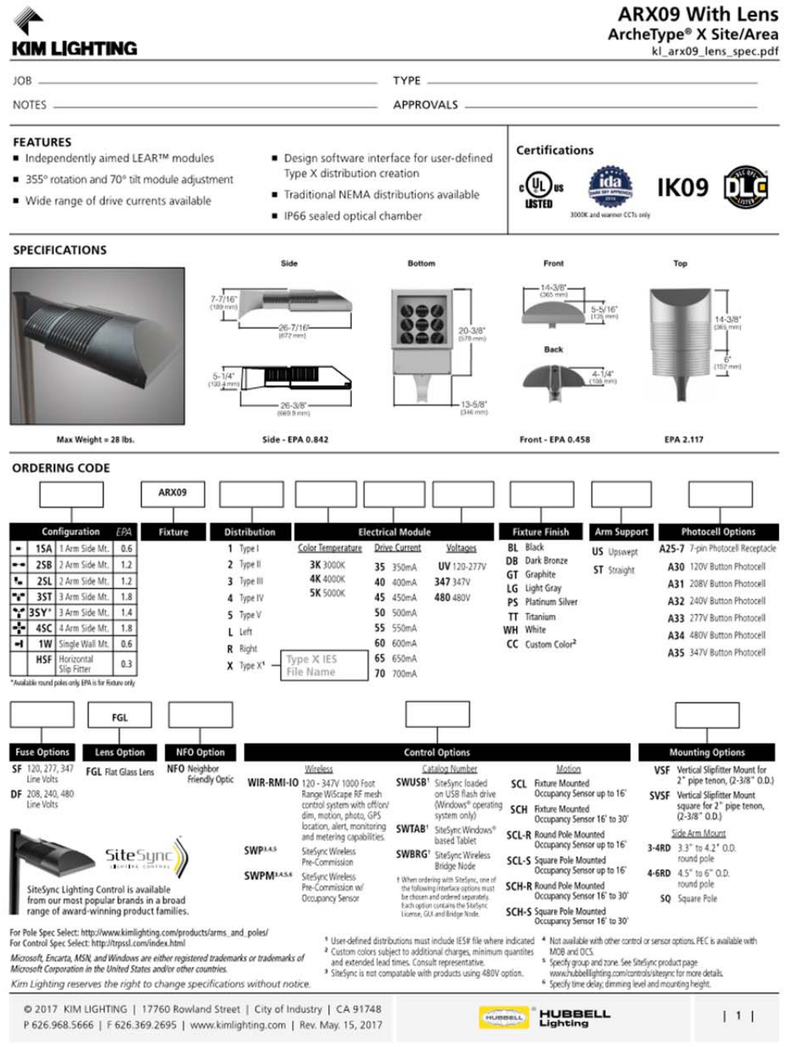
(L-B01) LINEAR LED UNDER BENCH AT OVERLOOK

- Linear LED tape will be mounted under benches to provide additional illumination at overlook walkway.
- Marine grade rated for Wet Location.
- Fixtures must be field accessible, including remote ballasts or drivers.
- Not included in Lighting layout and photometrics. sizing and location to be determined by bench size and location.

L-P1

(L-P1) PEDESTRIAN POLE LIGHT AT WESTERN APPROACH

- 12’ pedestrian pole with field adjustable modules
- Full cutoff of light output above the 90° plane to reduce light pollution with no backlight to reduce light at river.
- Neighbor friendly optics (not shown in calcilations) will be added to further reduce backlight.
- Marine grade rated for Wet Location.



KIM LIGHTING

ARX09 With Lens
ArcheType® X Site/Area
kl_arx09_lens_spec.pdf

JOB _____ TYPE _____
NOTES _____ APPROVALS _____

FEATURES
- Independently aimed LEAR™ modules
- 355° rotation and 70° tilt module adjustment
- Wide range of drive currents available
- Design software interface for user-defined Type X distribution creation
- Traditional NEMA distributions available
- IP66 sealed optical chamber

Certifications
cULus LISTED · IDA · IK09 · DLC
3000K and warmer CCTs only

SPECIFICATIONS
Side · Bottom · Front · Top
Max Weight = 28 lbs.
Side - EPA 0.842
Front - EPA 0.458
EPA 2.117

ORDERING CODE

ARX09

Configuration		EPA
1SA	1 Arm Side Mt.	0.6
2SB	2 Arm Side Mt.	1.2
2SL	2 Arm Side Mt.	1.2
3ST	3 Arm Side Mt.	1.8
3SY*	3 Arm Side Mt.	1.4
4SC	4 Arm Side Mt.	1.8
1W	Single Wall Mt.	0.6
HSF	Horizontal Slip Fitter	0.3

*Available round poles only. EPA is for fixture only

Fixture

Distribution: 1 Type I · 2 Type II · 3 Type III · 4 Type IV · 5 Type V · L Left · R Right · X Type X[1] (Type X IES File Name)

Electrical Module
Color Temperature: 3K 3000K · 4K 4000K · 5K 5000K
Drive Current: 35 350mA · 40 400mA · 45 450mA · 50 500mA · 55 550mA · 60 600mA · 65 650mA · 70 700mA
Voltages: UV 120-277V · 347 347V · 480 480V

Fixture Finish: BL Black · DB Dark Bronze · GT Graphite · LG Light Gray · PS Platinum Silver · TT Titanium · WH White · CC Custom Color[2]

Arm Support: US Upswept · ST Straight

Photocell Options: A25-7 7-pin Photocell Receptacle · A30 120V Button Photocell · A31 208V Button Photocell · A32 240V Button Photocell · A33 277V Button Photocell · A34 480V Button Photocell · A35 347V Button Photocell

FGL

Fuse Options: SF 120, 277, 347 Line Volts · DF 208, 240, 480 Line Volts

Lens Option: FGL Flat Glass Lens

NFO Option: NFO Neighbor Friendly Optic

Control Options
Wireless: WIR-RMI-IO 120 - 347V 1000 Foot Range WiScape RF mesh control system with off/on/dim, motion, photo, GPS location, alert, monitoring and metering capabilities. SiteSync Wireless Pre-Commission · SWP[3,4,5] · SWPM[3,4,5,6] SiteSync Wireless Pre-Commission w/ Occupancy Sensor
Catalog Number: SWUSB[1] SiteSync loaded on USB flash drive (Windows® operating system only) · SWTAB[1] SiteSync Windows® based Tablet · SWBRG[1] SiteSync Wireless Bridge Node
† When ordering with SiteSync, one of the following interface options must be chosen and ordered separately. Each option contains the SiteSync License, GUI and Bridge Node.
Motion: SCL Fixture Mounted Occupancy Sensor up to 16' · SCH Fixture Mounted Occupancy Sensor 16' to 30' · SCL-R Round Pole Mounted Occupancy Sensor up to 16' · SCL-S Square Pole Mounted Occupancy Sensor up to 16' · SCH-R Round Pole Mounted Occupancy Sensor 16' to 30' · SCH-S Square Pole Mounted Occupancy Sensor 16' to 30'

SiteSync Lighting Control is available from our most popular brands in a broad range of award-winning product families.

Mounting Options: VSF Vertical Slipfitter Mount for 2" pipe tenon, (2-3/8" O.D.) · SVSF Vertical Slipfitter Mount square for 2" pipe tenon, (2-3/8" O.D.)
Side Arm Mount: 3-4RD 3.3" to 4.2" O.D. round pole · 4-6RD 4.5" to 6" O.D. round pole · SQ Square Pole

For Pole Spec Select: http://www.kimlighting.com/products/arms_and_poles/
For Control Spec Select: http://trpssl.com/index.html

Microsoft, Encarta, MSN, and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

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[1] User-defined distributions must include IES# file where indicated
[2] Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative.
[3] SiteSync is not compatable with products using 480V option.
[4] Not available with other control or sensor options. PEC is available with MOB and DCS.
[5] Specify group and zone. See SiteSync product page www.hubbelllighting.com/controls/sitesync for more details.
[6] Specify time delay, dimming level and mounting height.

HUBBELL Lighting

| 1 |

L-P1

KIM LIGHTING

ARX09 With Lens
ArcheType® X Site/Area
kl_arx09_lens_spec.pdf

ARX LEAR™ 3X3 Site/Area

Distribution Type	Photometrics (3000K)															
Field Angle - 10% max	Drive Current															
	350 mA		400 mA		450 mA		500 mA		550 mA		600 mA		650 mA		700 mA	
	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G
Type 1	5645	B2 U0 G2	6309	B2 U0 G2	6965	B3 U0 G3	7341	B3 U0 G3	7896	B3 U0 G3	8447	B3 U0 G3	8958	B3 U0 G3	9530	B3 U0 G3
Type 2	5344	B1 U0 G1	5971	B2 U0 G2	6592	B2 U0 G2	6949	B2 U0 G2	7474	B2 U0 G2	7996	B2 U0 G2	8479	B2 U0 G2	9020	B2 U0 G2
Type 3	5381	B1 U0 G2	6013	B1 U0 G2	6639	B1 U0 G2	7262	B1 U0 G2	7526	B1 U0 G2	8052	B2 U0 G2	8539	B2 U0 G2	9089	B2 U0 G2
Type 4	5147	B1 U0 G1	5974	B1 U0 G2	6596	B1 U0 G2	6952	B1 U0 G2	7478	B1 U0 G2	8000	B1 U0 G2	8483	B1 U0 G2	9025	B1 U0 G2
Type 5	5992	B3 U0 G3	6697	B3 U0 G3	7393	B3 U0 G3	7792	B3 U0 G3	8698	B3 U0 G3	9305	B3 U0 G3	9868	B3 U0 G3	10116	B3 U0 G3

Distribution Type	Photometrics (4000K)															
Field Angle - 10% max	Drive Current															
	350 mA		400 mA		450 mA		500 mA		550 mA		600 mA		650 mA		700 mA	
	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G
Type 1	6249	B2 U0 G2	6983	B3 U0 G3	7709	B3 U0 G3	8414	B3 U0 G3	9050	B3 U0 G3	9682	B3 U0 G3	10267	B3 U0 G3	10902	B3 U0 G3
Type 2	5915	B2 U0 G2	6610	B2 U0 G2	7297	B2 U0 G2	7964	B2 U0 G2	8568	B2 U0 G2	9164	B2 U0 G2	9718	B2 U0 G2	10319	B2 U0 G2
Type 3	5956	B1 U0 G2	6656	B1 U0 G2	7348	B1 U0 G2	8020	B1 U0 G2	8626	B2 U0 G2	9228	B2 U0 G2	9786	B2 U0 G2	10392	B2 U0 G2
Type 4	5917	B1 U0 G2	6613	B1 U0 G2	7300	B1 U0 G2	7968	B1 U0 G2	8570	B1 U0 G2	9169	B1 U0 G2	9723	B1 U0 G2	10324	B1 U0 G2
Type 5	6633	B3 U0 G3	7412	B3 U0 G3	8183	B3 U0 G3	8930	B3 U0 G3	9605	B3 U0 G3	10275	B3 U0 G3	10897	B3 U0 G3	11572	B3 U0 G3

Distribution Type	Photometrics (5000K)															
Field Angle - 10% max	Drive Current															
	350 mA		400 mA		450 mA		500 mA		550 mA		600 mA		650 mA		700 mA	
	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G	Lumens	B-U-G
Type 1	6491	B2 U0 G2	7254	B3 U0 G3	8008	B3 U0 G3	8732	B3 U0 G3	9392	B3 U0 G3	10047	B3 U0 G3	10655	B3 U0 G3	11268	B3 U0 G3
Type 2	6144	B2 U0 G2	6866	B2 U0 G2	7580	B2 U0 G2	8265	B2 U0 G2	8890	B2 U0 G2	9510	B2 U0 G2	10085	B2 U0 G2	10666	B2 U0 G2
Type 3	6187	B1 U0 G2	6914	B1 U0 G2	7633	B1 U0 G2	8323	B1 U0 G2	8952	B2 U0 G2	9577	B2 U0 G2	10156	B2 U0 G2	10741	B2 U0 G2
Type 4	6147	B1 U0 G2	6869	B1 U0 G2	7584	B1 U0 G2	8269	B1 U0 G2	8894	B1 U0 G2	9515	B1 U0 G2	10090	B1 U0 G2	10671	B1 U0 G2
Type 5	6890	B3 U0 G3	7700	B3 U0 G3	8500	B3 U0 G3	9268	B3 U0 G3	9968	B3 U0 G3	10665	B3 U0 G3	11310	B3 U0 G3	11961	B3 U0 G3

Electrical Characteristics												Dimming				
Current	System Watts	Line Voltage		Amps AC						Min. Power Factor	Max THD (%)	Dimming Range	Source current out of 0-10V purple wire		Absolute voltage range on 0-10V (+) purple wire	
		VAC	Hz	120	208	240	277	347	480				Min	Max	Min	Max
350 mA	62	120-480	50/60	0.51	0.33	0.26	0.22	0.18	0.13	>0.9	20	10% to 100%	0mA	1mA	0V	10V
400 mA	70			0.58	0.33	0.29	0.25	0.20	0.15							
450 mA	78			0.65	0.37	0.32	0.28	0.22	0.16							
500 mA	86			0.71	0.41	0.36	0.31	0.25	0.18							
550 mA	94			0.78	0.45	0.39	0.34	0.27	0.20							
600 mA	101			0.84	0.49	0.42	0.37	0.29	0.21							
650 mA	110			0.91	0.53	0.46	0.40	0.32	0.23							
700 mA	118			0.99	0.57	0.48	0.43	0.34	0.25							

TM-21 LIFETIME CALCULATION

Optical System	Ordering Code	Ambient Environment °C	Projected Lumen Maintenance				Reported L70
			16	26	TM-21 60	103	
LEAR™	ARX09	15°	98	97	95	93	>60Khrs
		25°	96	95	92	89	
		40°	96	95	92	89	

LED COLOR

	Spectroradiometric		
	3K	4K	5K
Designation	3000K	4000K	5000K
CRI Minimum	≥72	≥72	≥72
S/P Ratio	1.33	1.66	1.78

Consult factory for Amber, Turtle Friendly, Gulf Coast and Observatory applications.

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HUBBELL Lighting

KIM LIGHTING

ARX09 With Lens
ArcheType® X Site/Area
kl_arx09_lens_spec.pdf

SPECIFICATIONS

Housing:
- Low copper aluminum alloy die-casting is designed as one-piece and has external cooling ribs.
- Solid, cast aluminum, wall creates a thermal barrier between the optical and electrical compartments.
- A molded silicone gasket throughout insures the sealing between the two compartments and provides ingress protection.
- Housing is designed with integral LED module "turrets" utilized for both thermal transfer and for securing the location of each LEAR™ Optical Module. The turrets are spaced in rows of 3 X 3 and are designed to optimize photometric performance for standard and Type X user-defined distributions.
- IP66 certified to protect the optical chamber from dust and water ingress.
- IK09 rated enclosure protects electrical equipment against external mechanical impacts.

Lens Frame:
- One-piece low copper aluminum alloy die-cast is secured to housing with two toolless latches.

Neighbor Friendly Optic
- Optional integrated Neighbor Friendly Optic on each LED module to completely control unwanted backlight. Most effective with Type III and IV distibutions.

Lens
- One-piece flat glass lens slips into reveal. Extra silicone gasketing is provided to retain a clear optical compartment. CAUTION: Use only when vandalism is anticipated to be high.

Type X LEAR™ Optical Module:
- Turret alignment and thermal transfer design allows for freedom of adjustability and precise aiming of the LEAR LED array.
- Optimized standard distribution or user-defined beam patterns.
- 3000K, 4000K, 5000K standard CCT. Amber and other custom color temperatures available.
- Factory adjusted distributions created from user-defined IES files.
- Toolless 355° rotation adjustment and 70° tilt adjustment with tamper resistant fastener.
- Type X LEAR modules are IP66 rated and utilize six high output LEDs positioned beneath a precise, high purity molded acrylic prism.
- Targeted optics minimize pixilation concerns and provide outstanding performance, uniformity and glare control.

Electrical Components:
- Standard programmable driver allows for programmable drive current settings ranging from 350mA to 700mA.
- Electrical components are stategically located in the driver gear compartment with a molded silicon grommet seal to provide separation from the optical chamber.
- Maximum lightning surge current 20KA with thermally protected varistor technology. Surge suppression is series circuited preventing total fixture failure.
- Open circuit fault will turn off the luminaire in order to protect the sensitive electronics and acts as a signal for maintenance.
- Programmable Driver is rated for -40°C starting.
- "Thermal Shield", primary side, thermister provides protection for the sustainable life of LEAR modules and electronic components.

Dimming:
- Dimming range from 10% to 100% through the use of the standard 0-10V interface on the programmable driver.
- Modular wiring harness in the service area provides user access to the dimming circuitry.
- Dimming circuitry compatible with 0-10V, user-defined, control devices.
- Optional factory programmed dimming profile.

Support Arm:
- Die-cast, low copper aluminum alloy, with splice access cover.
- Die-cast pole adaptor and an internal reinforcing plate are provided with a wire strain relief.
- The arm adapter is square or circular cut for specified pole size and shape.
- For toolless wire connections, a terminal block is mounted in the arm cavity and accessible behind the splice access cover. The block accepts #14 to #8 wire sizes and is factory prewired to the electrical module's quick-disconnect plug inside the electrical compartment.

Optional Slip-Fitter:
- Internally accessible slip-fitter attaches to a 1-1/4" to 2-3/8" tenon and allows hands-free wiring and maintenance.

Optional Wall Mount:
- Optional, cast aluminum mounting plate attaches to a wall over a junction box and the speed mount is bolted to the cover plate. To complete the wiring, the luminaire assembly slides over the mounting plate.

Fusing:

SF for 120, 277, and 347 Line volts
DF for 208, 240, and 480 Line volts
- Hight temperature fuse holders factory installed inside the fixture housing. Fuse is included.

Finish:
- Fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat.
- Standard colors include (BL) Black, (DB) Dark Bronze, (GT) Graphite, (PS) Platinum Silver, (LG) Light Gray, (TT) Titanium, (WH) White, and (CC) Custom Color (Include RAL#).

Certifications and Listings:
- UL 1598 Standard for Luminaires.
- UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products.
- CSA C22.2#250.0 Luminaires.
- ANSI C136.31-2010 4G Vibration tested and compliant.
- RoHS compliant.
- IP66 certified.
- IEC 66262 Mechanical Impact Code IK09.
- IDA approved, 3000K and warmer CCTs only.

CAUTION:
- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

WARRANTY:
- For full warranty see: http://www.hubbelllighting.com/resources/warranty

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P 626.968.5666 | F 626.369.2695 | www.kimlighting.com | Rev. May. 15, 2017

HUBBELL Lighting

LIGHTING FIXTURES

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH®

L-P1

KIM LIGHTING

ARX09 With Lens

ArcheType® X Site/Area

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Controls

Photocell Receptacle

A25-7

Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others.

Standard customer operation modes:

1. Traditional on/off photoelectric control.
2. 5-pin wireless photoelectric control for added dimming feature.
3. 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use.

Button Photocell

A30 for 120V, **A31** for 208V, **A32** for 240V, **A33** for 277V, **A35** for 347V, **A34** for 480V,

Photocell is factory installed inside the housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others.

Wireless Controls

wiSCAPE™

Hubbell Control Solution's wiSCAPE™ In-Fixture Module is a bi-directional wireless RF device that allows an individual fixture to be managed, monitored and metered. The wiSCAPE In-Fixture Module communicates wirelessly over a robust 2.4GHz ISM (Industrial, Scientific and Medical) certified meshed radio signal. The wiSCAPE Fixture Module drastically simplifies control and automation of projects, especially in retrofit environments, and challenges the legacy world of wired-systems. wiSCAPE wireless control technology easily adapts to complex automation situations for quick, simple and economical commissioning. The On-Fixture Module is compatible with A-25-7H option.

WIR-RMI-IO

120 - 347V 1000 Foot Range WiScape RF mesh control system with off/on/dim, motion, photo, GPS location, alert, monitoring and metering capabilities.

SiteSync™[1]

SiteSync™ wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7. See ordering information or visit www.hubbelllighting.com/products/sitesync for more details.

Fixture-Mounted

Fixture-Mounted Occupancy Sensor up to 16'

SCL

Fixture-Mounted Occupancy Sensor up to 16' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White.

Ordering Example: SCL/277[2]/BL[3]

Fixture-Mounted Occupancy Sensor 16' to 30'

SCH

Fixture-Mounted Occupancy Sensor 16' to 30'- an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White.

Ordering Example: SCH/277[2]/BL[3]

Pole Mounted

Round Pole-Mounted Occupancy Sensor up to 16'

SCL-R

Round Pole-Mounted Occupancy Sensor up to 16' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCL-R4[4]/277[2]/BL[3]

Square Pole-Mounted Occupancy Sensor up to 16'

SCL-S

Square Pole-Mounted Occupancy Sensor up to 16' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for square pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCL-L/277[2]/BL[3]

Round Pole-Mounted Occupancy Sensor 16' to 30'

SCH-R

Round Pole-Mounted Occupancy Sensor: 16' to 30' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCH-R4[4]/277[2]/BL[3]

Square Pole-Mounted Occupancy Sensor 16' to 30'

SCH-S

Square Pole-Mounted Occupancy Sensor: 16 to 30' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

Ordering Example: SCH-S/277[2]/BL[3]

SCP

The SCP is a photo-control with motion sensing accessory thats mounts to the side of any new or existing 3"-5" round or square straight pole. The SCP enables any pole mounted luminaire in excess of 75 watts, to meet California Title 24 requirements with integral 20KV/10KA surge protection for added reliability and serviceability.

For more detail:

http://www.aal.net/products/sensor_control_programmable

[1]PRECOMMISSIONED SITESYNC ORDERING INFORMATION: When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit www.HubbellLighting.com/products/sitesync or contact Hubbell Lighting tech support at (800) 345-4928.

SiteSync fixtures with occupancy sensor (SWPM) require the mounting height of the fixture for selection of the lens.

Examples:

SiteSync only : ARX25/1/3K35U/VPS/US/SWP

SiteSync with Motion Control: ARX25/1/3K35U/VPS/US/SWPM-20F

MOB ORDERING INFORMATION: When ordering a fixture with a dimming occupancy sensor option (MOB), please specify the appropriate information. These settings are specified in the ordering as shown in the example below.

ARX25/1/3K35U/VPS/US/MOB - 1 to 30 min - 33%or 50% - 7? / DBT

High to Dim Delay — Low Level — Mounting Height (ft.)

[2]Voltage, [3]Color, [4]Pole Diameter,

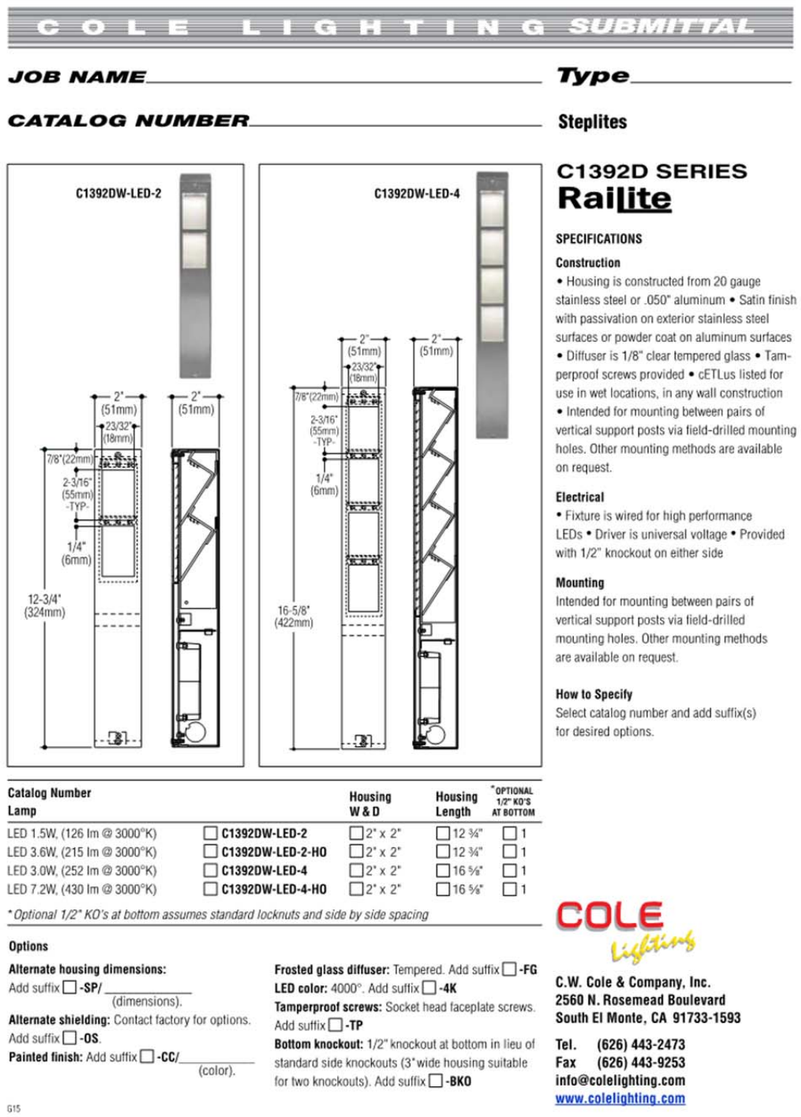
Kim Lighting reserves the right to change specifications without notice.

HUBBELL Lighting

L-S1, LS2

(L-S1,L-S2) INTEGRATED RAIL LIGHT THROUGHOUT PATHWAY

- L-S1: higher mounting height at principal span
- L-S2: lower mounting height at other locations
- Vertically mounted fixtures will be integrated at vertical posts on each side of pedestrian pathway approximately 8’ on center.
- Marine grade rated for Wet Location.
- Fixtures must be field accessible, including remote ballasts or drivers.



COLE LIGHTING SUBMITTAL

JOB NAME _____ **Type** _____

CATALOG NUMBER _____ **Steplites**

C1392DW-LED-2

C1392DW-LED-4

C1392D SERIES
Railite

SPECIFICATIONS

Construction
• Housing is constructed from 20 gauge stainless steel or .050" aluminum • Satin finish with passivation on exterior stainless steel surfaces or powder coat on aluminum surfaces • Diffuser is 1/8" clear tempered glass • Tamperproof screws provided • cETLus listed for use in wet locations, in any wall construction • Intended for mounting between pairs of vertical support posts via field-drilled mounting holes. Other mounting methods are available on request.

Electrical
• Fixture is wired for high performance LEDs • Driver is universal voltage • Provided with 1/2" knockout on either side

Mounting
Intended for mounting between pairs of vertical support posts via field-drilled mounting holes. Other mounting methods are available on request.

How to Specify
Select catalog number and add suffix(s) for desired options.

Catalog Number / Lamp		Housing W & D	Housing Length	*OPTIONAL 1/2" KO'S AT BOTTOM
LED 1.5W, (126 lm @ 3000°K)	☐ C1392DW-LED-2	☐ 2" x 2"	☐ 12 ¾"	☐ 1
LED 3.6W, (215 lm @ 3000°K)	☐ C1392DW-LED-2-HO	☐ 2" x 2"	☐ 12 ¾"	☐ 1
LED 3.0W, (252 lm @ 3000°K)	☐ C1392DW-LED-4	☐ 2" x 2"	☐ 16 ⅝"	☐ 1
LED 7.2W, (430 lm @ 3000°K)	☐ C1392DW-LED-4-HO	☐ 2" x 2"	☐ 16 ⅝"	☐ 1

*Optional 1/2" KO's at bottom assumes standard locknuts and side by side spacing

Options

Alternate housing dimensions: Add suffix ☐ **-SP/** _____ (dimensions).

Alternate shielding: Contact factory for options. Add suffix ☐ **-OS**.

Painted finish: Add suffix ☐ **-CC/** _____ (color).

Frosted glass diffuser: Tempered. Add suffix ☐ **-FG**

LED color: 4000°. Add suffix ☐ **-4K**

Tamperproof screws: Socket head faceplate screws. Add suffix ☐ **-TP**

Bottom knockout: 1/2" knockout at bottom in lieu of standard side knockouts (3" wide housing suitable for two knockouts). Add suffix ☐ **-BKO**

G15

COLE Lighting

C.W. Cole & Company, Inc.
2560 N. Rosemead Boulevard
South El Monte, CA 91733-1593

Tel. (626) 443-2473
Fax (626) 443-9253
info@colelighting.com
www.colelighting.com

L-R01

(L-R01) RAIL MOUNTED STEPLIGHT AT OVERLOOK

- Lighting will be integrated into railing at overlook, to be located approximately 6’ on center.
- Marine grade rated for Wet Location.
- Fixtures must be field accessible, including remote ballasts or drivers.

LIGHTING FIXTURES

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH®

L-R01

LUMENPOD®

PROJECT NAME: _____

REP AGENCY: _____

APPROX. QUANTITY: _____

SCAN QR CODE
for technical information, downloads, instructions, and system configuration guides

LUMENPOD® ANOTHER LUMENRAIL® COMPONENT FOR LIFE SAFETY AND LIGHT.

PART NUMBER BUILDER

LULF40K703	LULF				
EXAMPLE	FIXTURE TYPE	COLOR TEMP	OPTIC	DRIVE CURRENT

* Indicates stock, other options may require additional lead-time.

LULF - Lumenpod

27K - 2700° K **BLU** - Blue
***30K** - 3000° K **GRN** - Green
***40K** - 4000° K **RED** - Red
50K - 5000° K **AMB** - Wildlife Amber

16 - 16° beam
23 - 23° beam
46 - 46° beam
***70** - 70° beam
94 - 94° beam

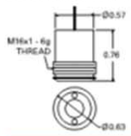
***5** - 500 mA
***3** - 350 mA
Extended life 100,000HR version requires 250 mA

ELECTRICAL SPECIFICATIONS

All electrical connections to be made by a qualified electrician in accordance with all national, state and local electrical codes.

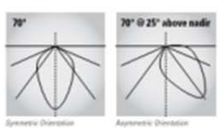
24VDC	ETL LISTED WET, IK, IP67, CE	0-10V INPUT	-40°F TO +120°F
INPUT VOLTAGE	CERTIFICATIONS	DIMMING	OPERATING TEMP
CLASS 2 REQUIRED	**5 YEARS**	**UP TO 116 LM/W LED**	**80+**
DRIVER	WARRANTY	EFFICIENCY	CRI

CONSTRUCTION



The Lumenpod's threaded stainless steel body dissipates heat directly into the mounting material. A machined shoulder positions it nearly flush with any diameter hand rail, as well as flat or square stock.

PHOTOMETRICS



Asymmetric performance can be fine tuned on fabricated systems by rotating the fixture around the rail diameter. A 25° angle provides superb illumination results in most applications. IES reports to view or download are available by scanning the QR code or visiting our website.

LUMENGEAR™ - LED DRIVER & NEMA ENCLOSURE OPTIONS

Wagner offers multiple ETL listed options for both 24VDC power supplies and NEMA enclosures. Quantities and types will be configured based on your specifications and design. Additional specification options are available by request. Not all options apply to all products, please verify compatibility with the factory.

CLASS II DRIVERS:
- *STD 100W Non Dim
- 0-10V
- Multiple Wattages

NEMA ENCLOSURES:
4X, 6

LUMENPOST™:
Integral 100W, 0-10V DIM

WAGNER ARCHITECTURAL SYSTEMS
888.243.6914 // SYSTEMS@MAILWAGNER.COM
10600 West Brown Deer Road // Milwaukee, WI 53224, USA

WAGNERARCHITECTURAL.COM
LULF SUBM R2

L-C01

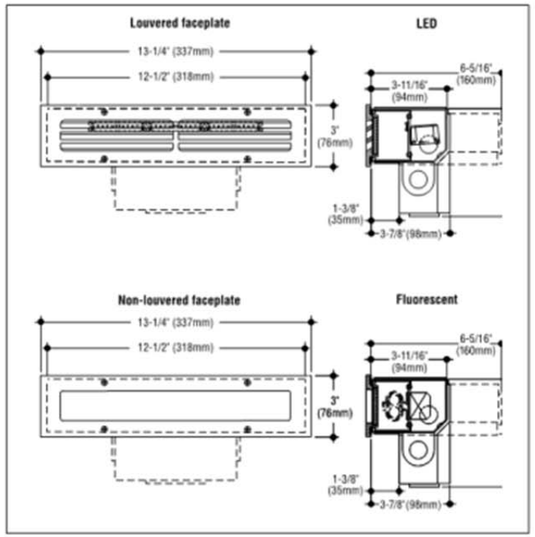
(L-C01) STEP LIGHT IN CURB AT OVERLOOK

- In-ground step lights will be used to define the edge of the curb at the eastern approach overlook.
- Marine grade rated for Wet Location.
- Fixtures must be field accessible, including remote ballasts or drivers.

COLE LIGHTING SUBMITTAL

JOB NAME _____ **Type** _____

CATALOG NUMBER _____ **Steplites**



2158 SERIES

SPECIFICATIONS

Construction

• Fixture housing is constructed from die-formed 16 gauge electro-galvanized steel finished with a white polyester coating • Faceplate is cast aluminum with metallic aluminum polyester coating or 3/16" stainless steel with brushed finish• Faceplate is retained by stainless steel screws • Diffuser is frosted tempered glass set in silicone sealant • Reflector is constructed of white die-formed aluminum • Optional junction box is cast aluminum with polyester coating • cETLus listed, suitable for wet locations in any wall construction.

Electrical

• Fixture is wired with high performance LEDs or compact fluorescent lamps. Drivers and electronic ballast are universal voltage • Housing provided with 1/2" conduit knockout on each side, suitable for 4 wire thru-wiring, 2 in 2 out • Optional junction box allows 8 wire thru-wiring, 4 in 4 out. Provided with two 1/2" tapped conduit entrances in the bottom and one 1/2" tapped conduit entrance in each side.

Mounting

Housing has flange with holes for mounting.

Catalog Numbers	Faceplate			
Lamps	**Alum. Louver**	**Alum. Non-Louver**	**S.S. Louver**	**S.S. Non-Louver**
LED 4.5W, (377 lm @ 3000°K)	☐ L2158W	☐ L2158GW	☐ L2158W-N	☐ L2158GW-N
LED 10.8W, (645 lm @ 3000°K)	☐ L2158W-HO	☐ L2158GW-HO	☐ L2158W-N-HO	☐ L2158GW-N-HO
One 9W, (CFT9W/2G7) compact fluorescent	☐ F2158W-9	☐ F2158GW-9	☐ F2158W-N-9	☐ F2158GW-N-9
One 13W, (CFT13W/2GX7) compact fluorescent	☐ F2158W-13	☐ F2158GW-13	☐ F2158W-N-13	☐ F2158GW-N-13
One 18W, (FT18W/2G11) compact fluorescent	☐ F2158W-18	☐ F2158GW-18	☐ F2158W-N-18	☐ F2158GW-N-18

Options

Junction box: Bottom or back mounted as required for feed-thru. Add suffix ☐ **-J**.
Tamperproof screws: Socket head faceplate screws. Add suffix ☐ **-TP**.
Dimming: Universal voltage 0-10V driver. Add suffix ☐ **-DIM**.
LED colors: 4000°K (438 lm), -HO (747 lm). Add suffix ☐ **-4K**.
Amber. Add suffix ☐ **-AMB**.
Blue. Add suffix ☐ **-BLU**.
Voltage: 277 ballast. Add suffix ☐ **-277**.

Alternate faceplate color: Black or white. Add suffix ☐ **-BLK** or ☐ **-WHT**.
Bronze faceplate: Satin finished, clear coated faceplate. Add suffix ☐ **-B**
Opal glass diffuser: Tempered. Add suffix ☐ **-OPL**.

How to Specify

1. Select catalog number with desired features.
2. Add suffixes for options required to meet job conditions.

G15

COLE Lighting

C.W. Cole & Company, Inc.
2560 N. Rosemead Boulevard
South El Monte, CA 91733-1593

Tel. (626) 443-2473
Fax (626) 443-9253
info@colelighting.com
www.colelighting.com

L-B01

(L-B01) LINEAR LED UNDER BENCH AT OVERLOOK

- Linear LED tape will be mounted under benches to provide additional illumination at overlook walkway.
- Marine grade rated for Wet Location.
- Fixtures must be field accessible, including remote ballasts or drivers.
- Not included in Lighting layout and photometrics. sizing and location to be determined by bench size and location.

WP WA 3528 Single Row LED Strip Light 120/m 10mm wide 5m Reel

Environmental Lights.com™

SEARCH...

CALL 888-880-1880 | 7AM-5PM M-F (PT)

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HOME / LED STRIP LIGHTS / WATERPROOF WHITE ADJUSTABLE LED STRIP LIGHTS / WATERPROOF WHITE ADJUSTABLE LED STRIP LIGHTING / WATERPROOF WHITE ADJUSTABLE 3528 SINGLE ROW LED STRIP LIGHT, 120/M, 10MM WIDE, BY THE 5M REEL

PHOTOS | VIDEOS

Waterproof White Adjustable 3528 Single Row LED Strip Light, 120/m, 10mm wide, by the 5m Reel

Product No.: wp-ct3528-120-10-reel

AVAILABILITY: IN STOCK

SHIPS IN: 1 day, typically

SPECIFICATIONS (READ MORE)

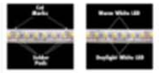
Light Color	White Adjustable
Color Temperature	2,400-6,500°K
Light Color Detail	White Adjustable
Color Rendering Index	90+
Type	Single Row

Reels	Price Per Reel
1 - 4	$229.50

https://www.environmentallights.com/15045-wp-ct3528-120-10-reel.html[7/19/2017 3:01:08 PM]

L-B01

WP WA 3528 Single Row LED Strip Light 120/m 10mm wide 5m Reel



5 - 14	$218.50
15+	$211.50

QTY: 1

Required: Requires a color tuning (2-channel) dimmer and 24 volt DC driver.

waterproof · Environmental Lights.com · cULus LISTED · Dimmable · RoHS Compliant

PRODUCT FEATURES APPLICATIONS SPECIFICATIONS DOCUMENTATION PHOTOS & VIDEOS REVIEWS ACCESSORIES

Application	Waterproof
Average Lifetime	50,000 hours
Beam Angle	120°
Brightness	635/753 lumens/meter
Efficacy	82.6 lumens/watt
Brightness 2	2464/2893 mW/meter
Efficacy 2	318.9 mWatt/watt
Color Rendering Index	90+
Color Temperature	2,400-6,500°K
Height (English)	0.16 in
Height (Metric)	4 mm
Input Current	3500 mA
Input Voltage	24 DC

https://www.environmentallights.com/15045-wp-ct3528-120-10-reel.html[7/19/2017 3:01:08 PM]

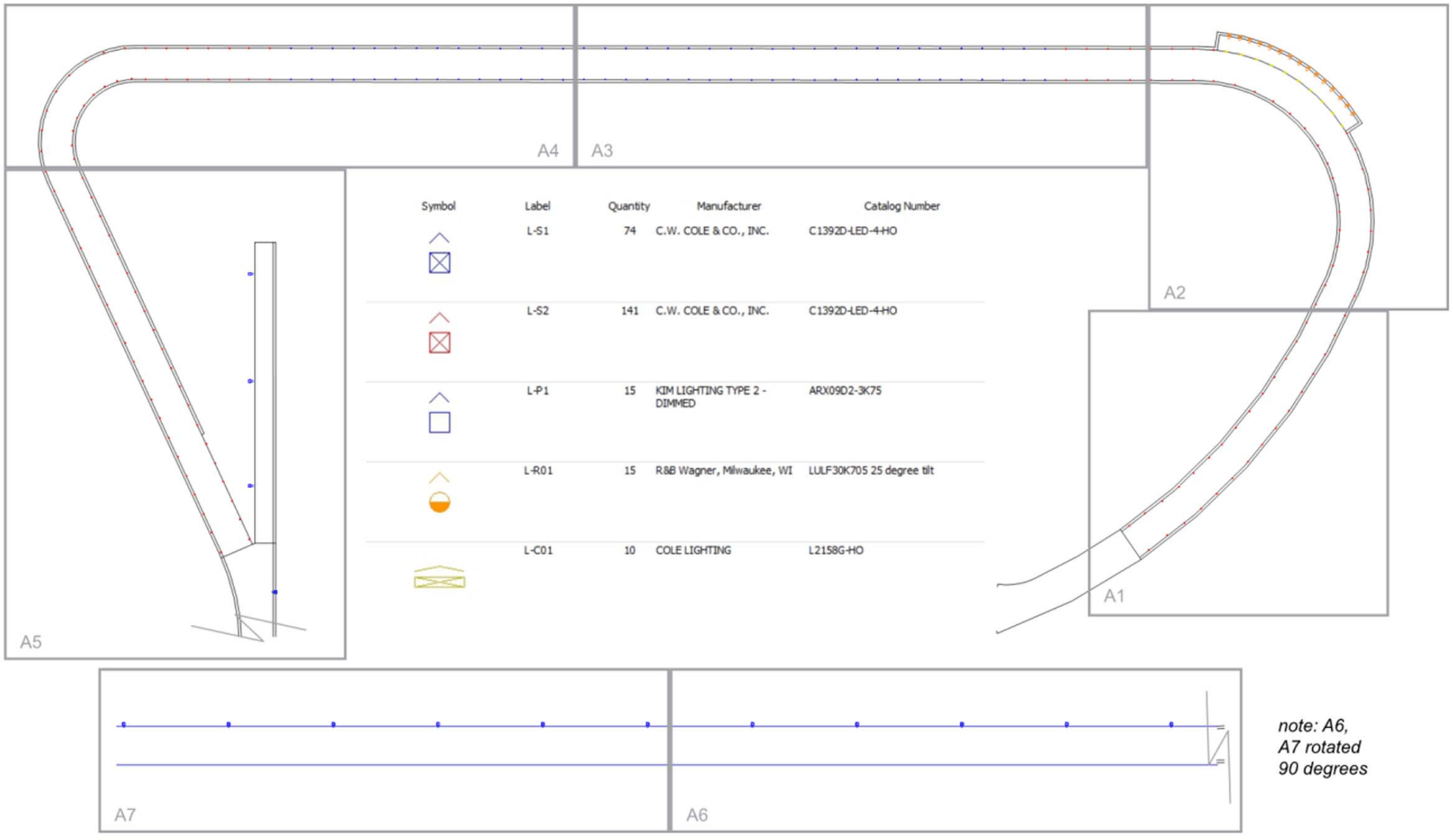
WP WA 3528 Single Row LED Strip Light 120/m 10mm wide 5m Reel

LED Node Size	3528
LED Spacing (English)	0.33 in
LED Spacing (Metric)	8.3 mm
Length (English)	16.4 ft
Length (Metric)	5 m
Light Color	White Adjustable
Light Color Detail	White Adjustable
Manufacturer	EnvironmentalLights
Min. Cutting Increment (English)	1.97 in
Min. Cutting Increment (Metric)	50 mm
Number of LEDs	120/meter
Power (Watts)	84
Power (Watts/ft)	5.00
Power (Watts/m)	16.80
Rating	UL, RoHS
Strip Width	12.5 mm
Type	Single Row
Warranty	3 years limited
Width (English)	0.49 in
Width (Metric)	12.5 mm

SIGN UP TODAY

Sign up to receive news and new product email updates from EnvironmentalLights.com.

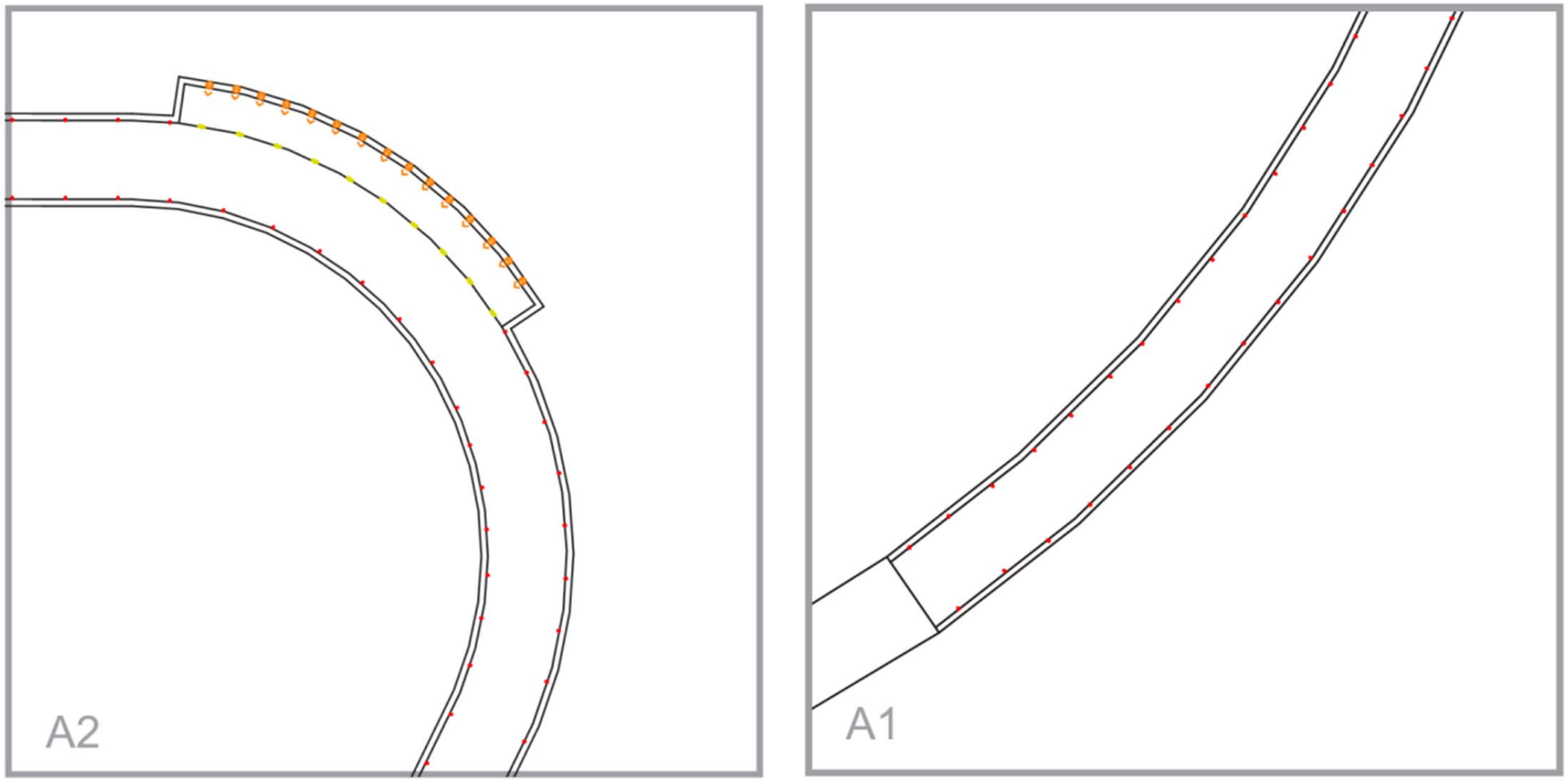
https://www.environmentallights.com/15045-wp-ct3528-120-10-reel.html[7/19/2017 3:01:08 PM]



FIXTURE LAYOUT KEYPLAN

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

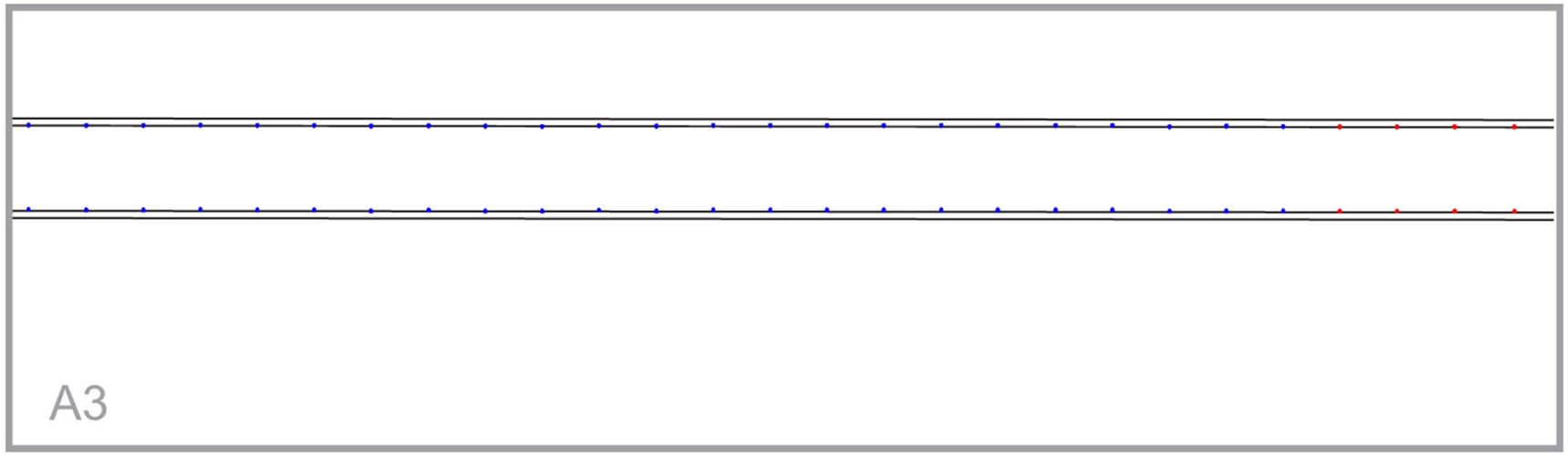
LIGHTSWITCH®

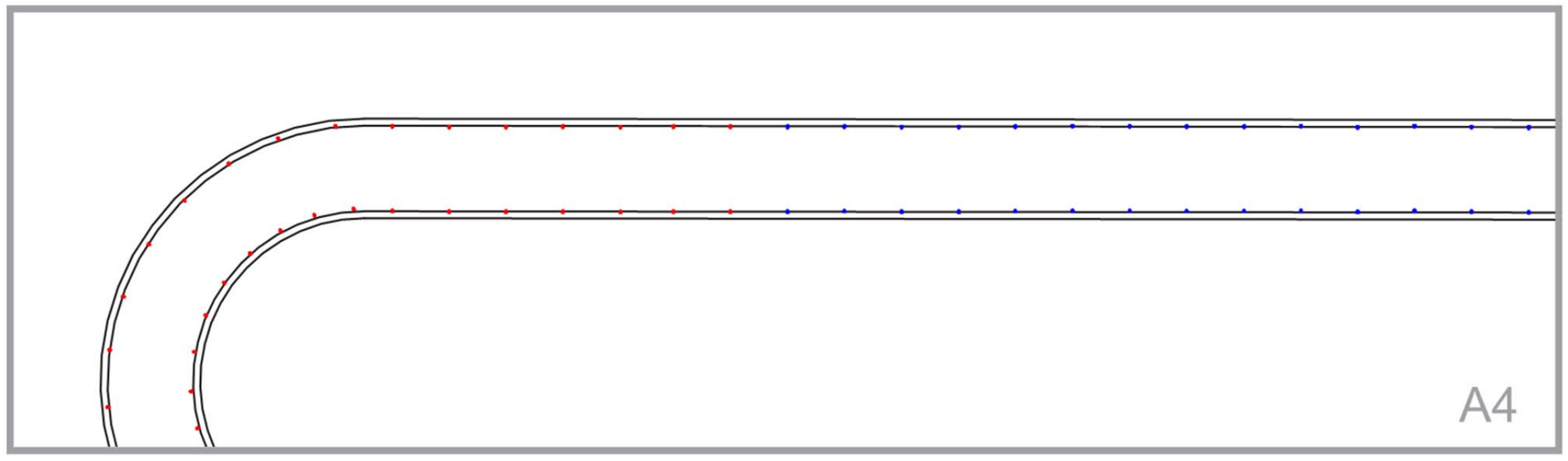


FIXTURE LAYOUT - A1,A2

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH®

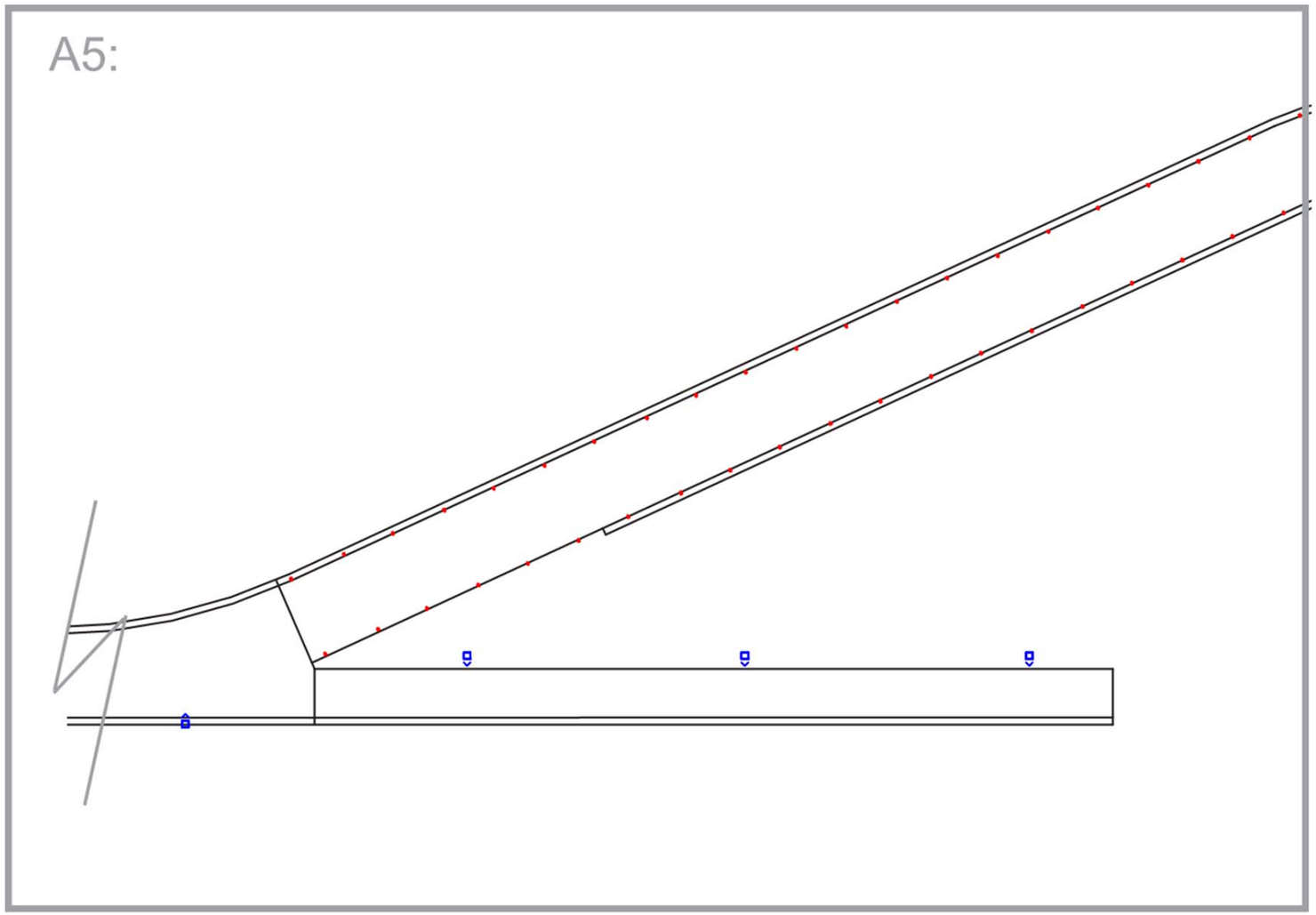




FIXTURE LAYOUT - A3,A4

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH®

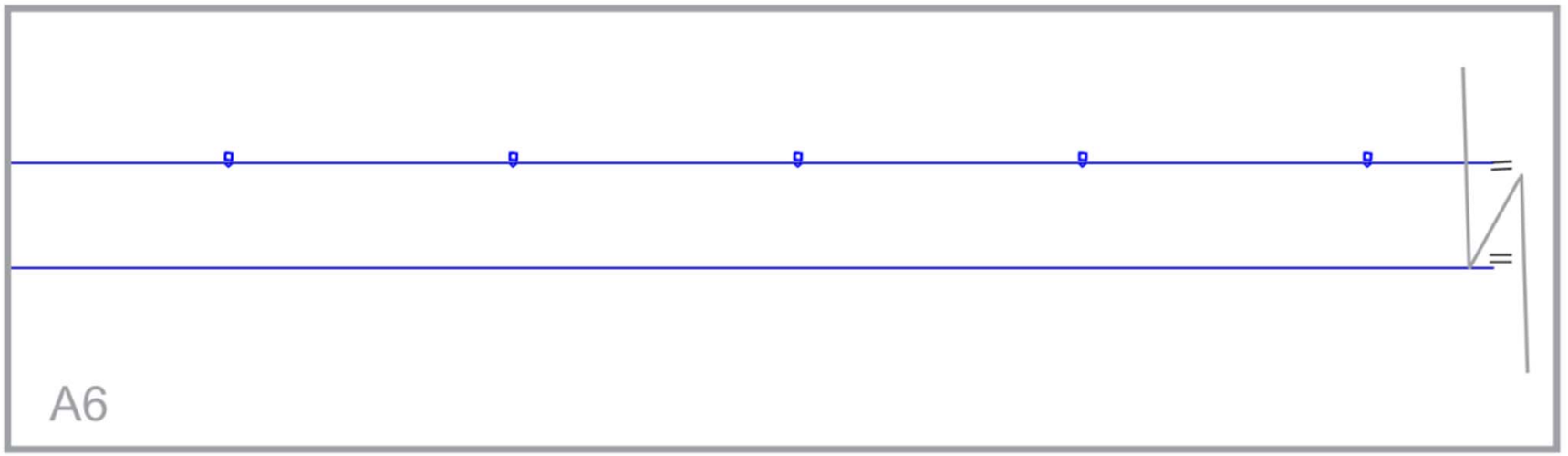


note: A5 rotated 90 degrees

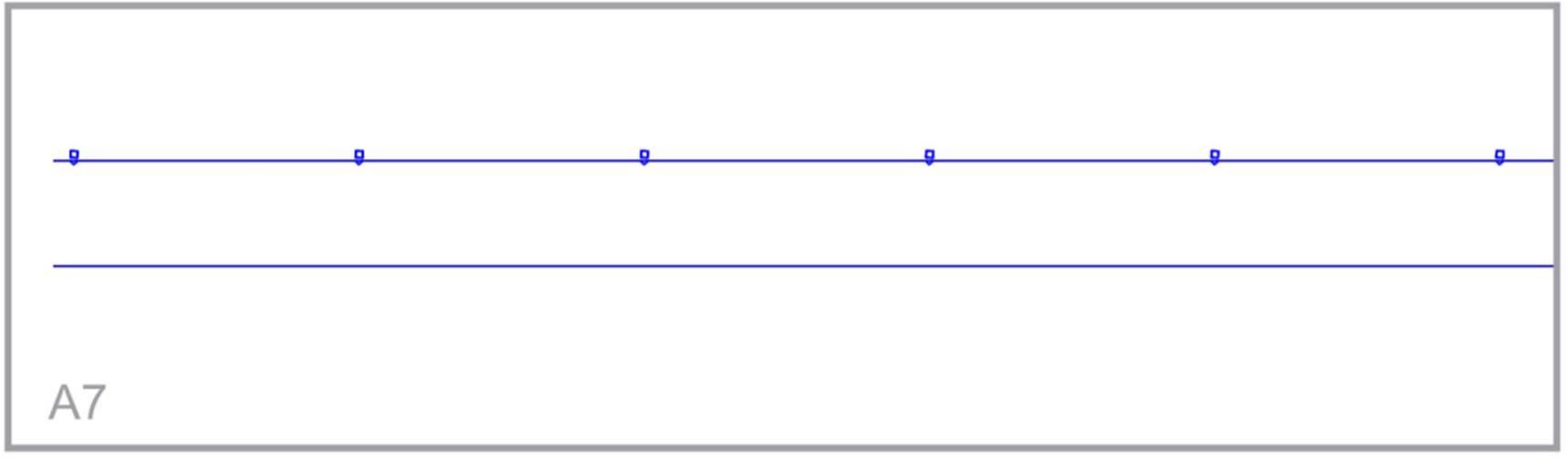
FIXTURE LAYOUT - A5

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH®



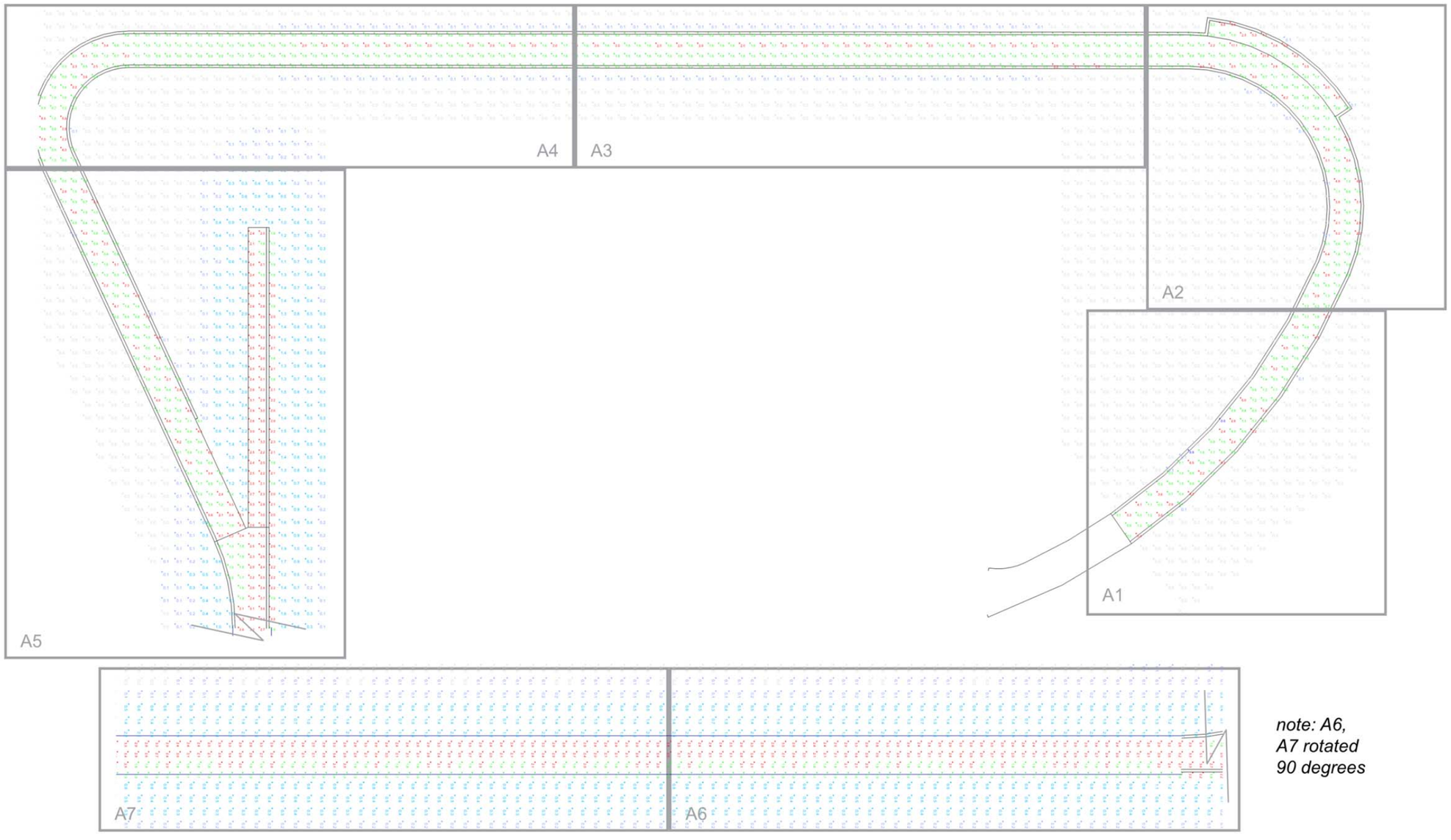
note: A5 rotated 90 degrees



FIXTURE LAYOUT - A6,A7

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH

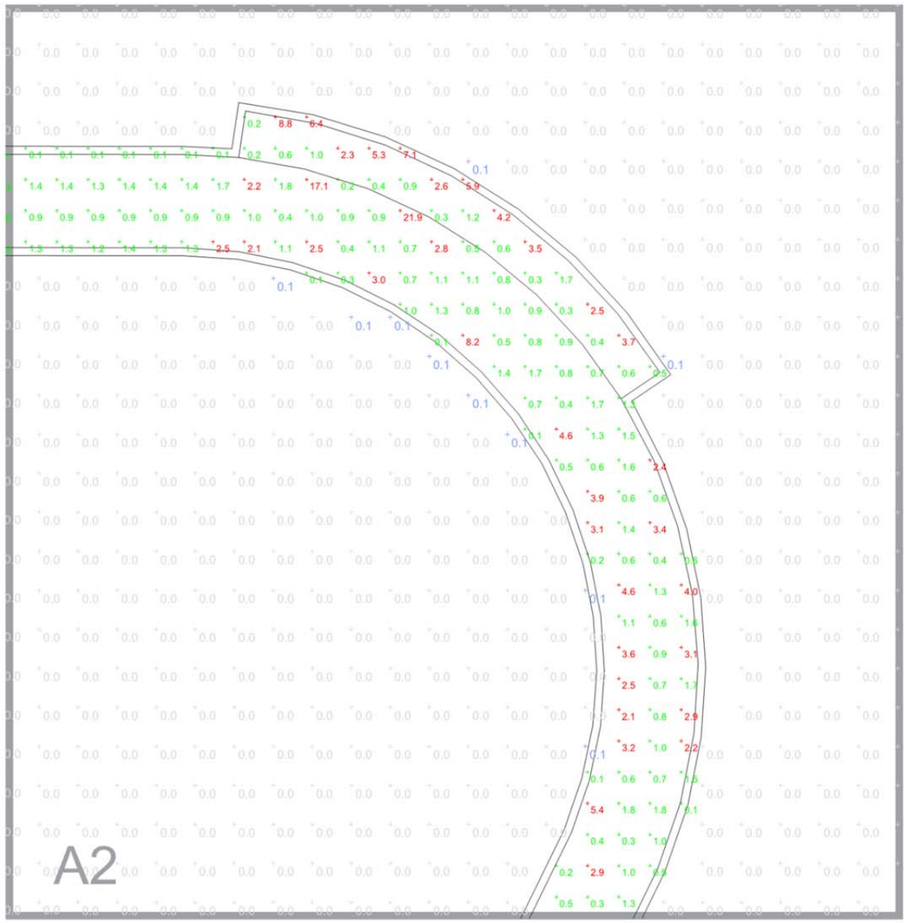


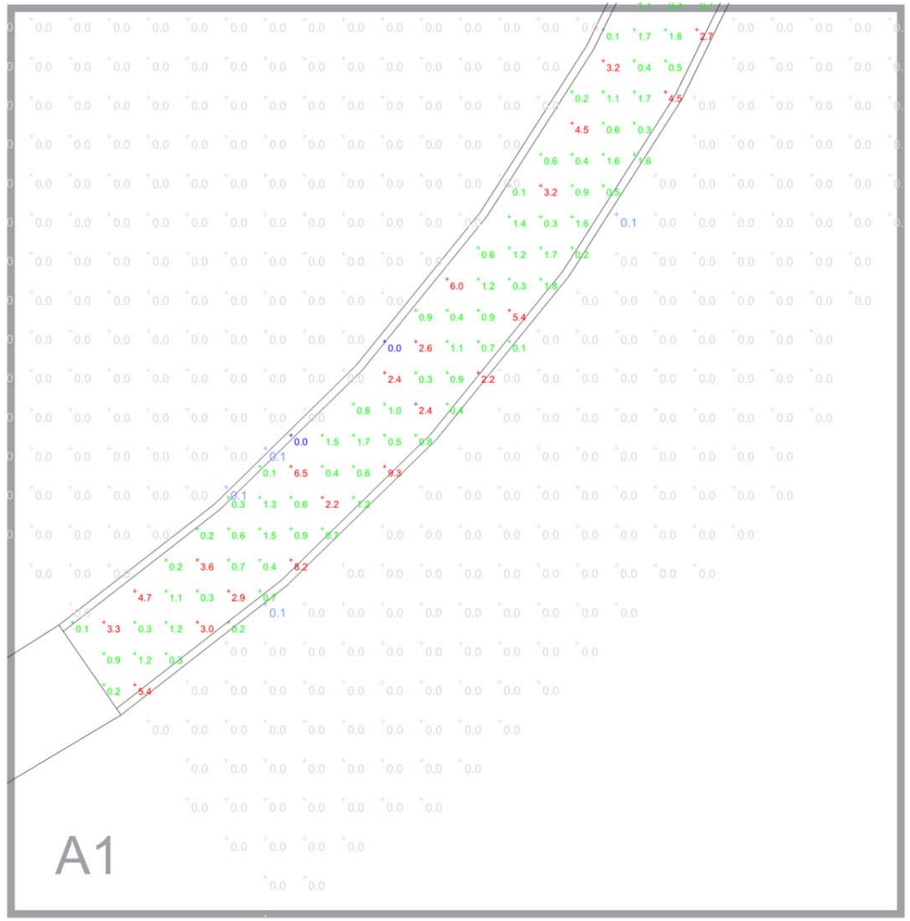
note: A6, A7 rotated 90 degrees

LIGHTING PHOTOMETRICS KEY-PLAN - A1

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH®

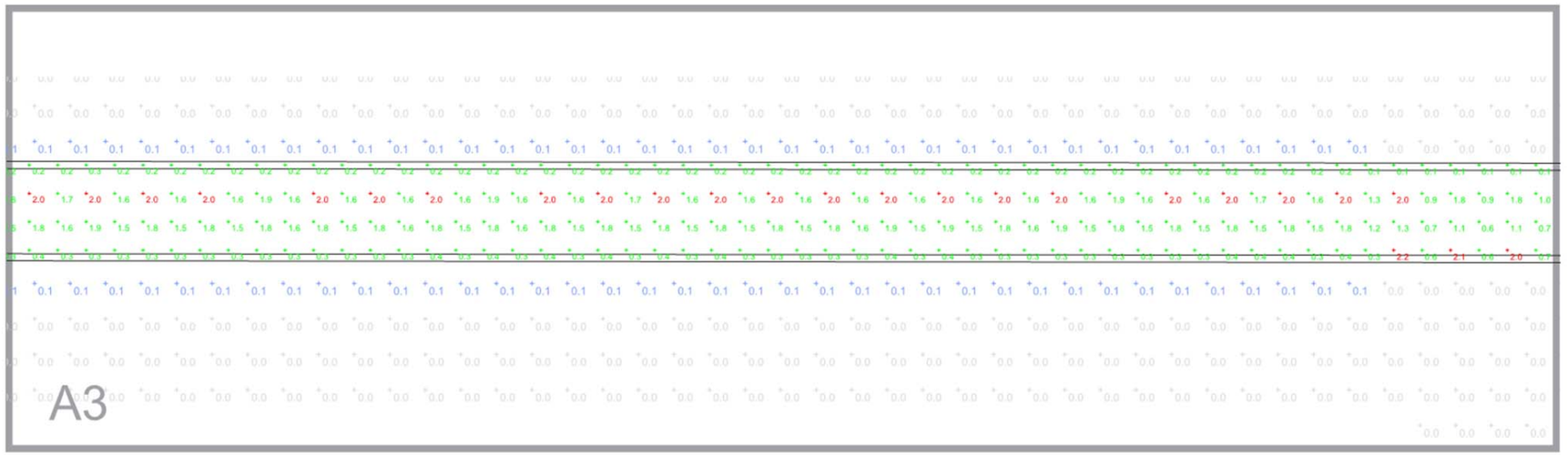


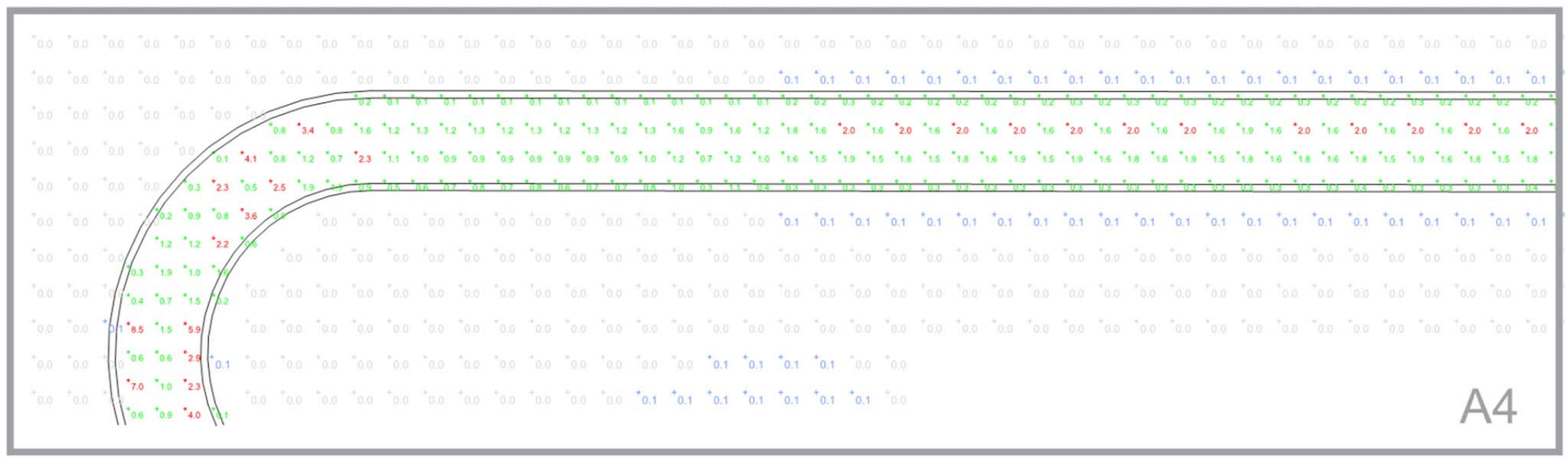


LIGHTING PHOTOMETRICS - A1,A2

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH®



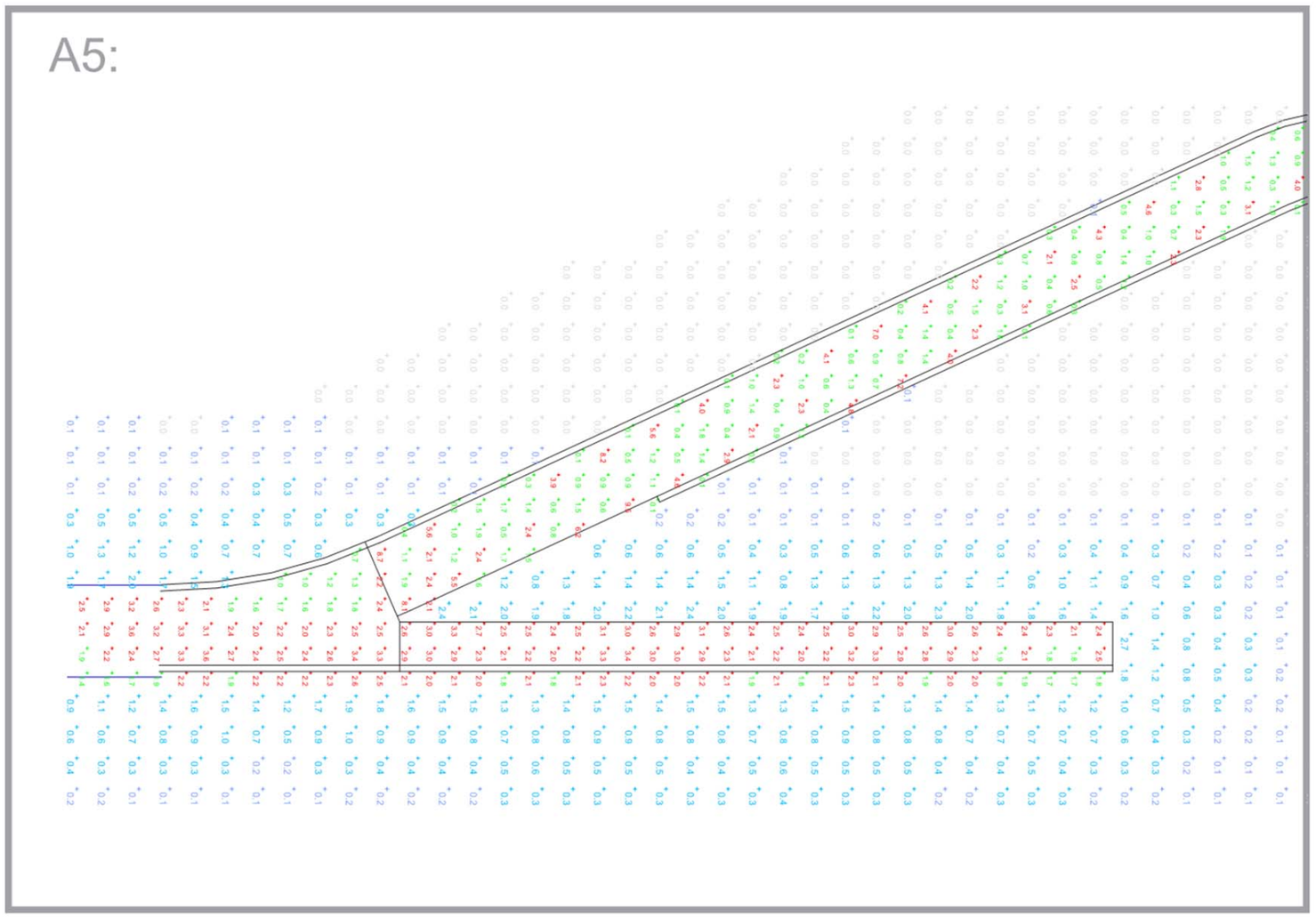


LIGHTING PHOTOMETRICS - A3,A4

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH®

A5:

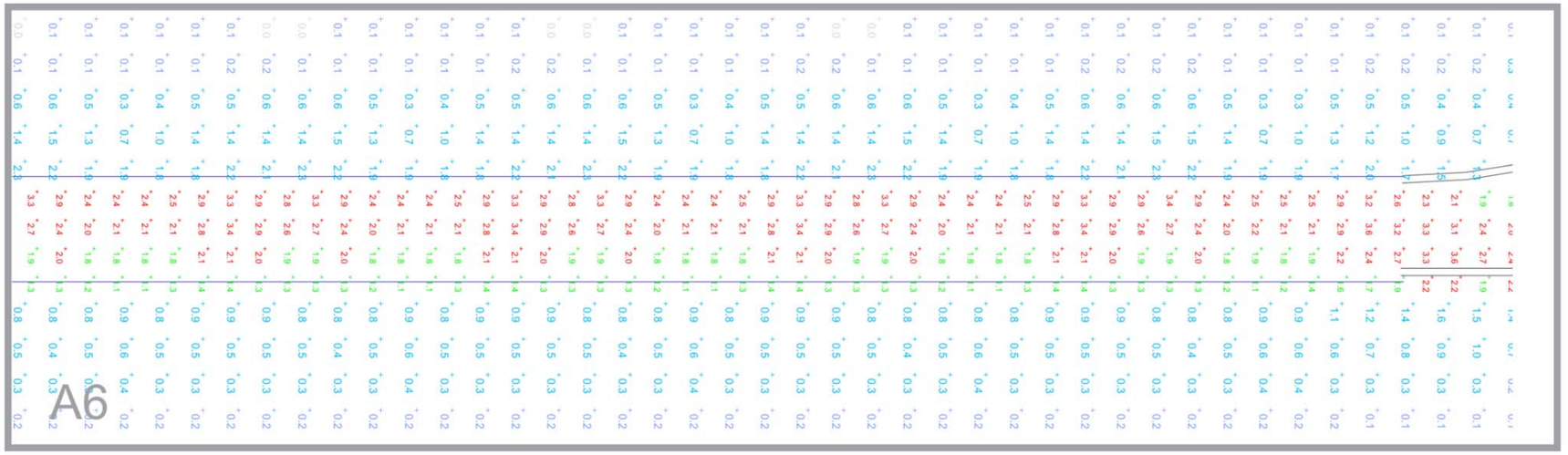


note: A5 rotated 90 degrees

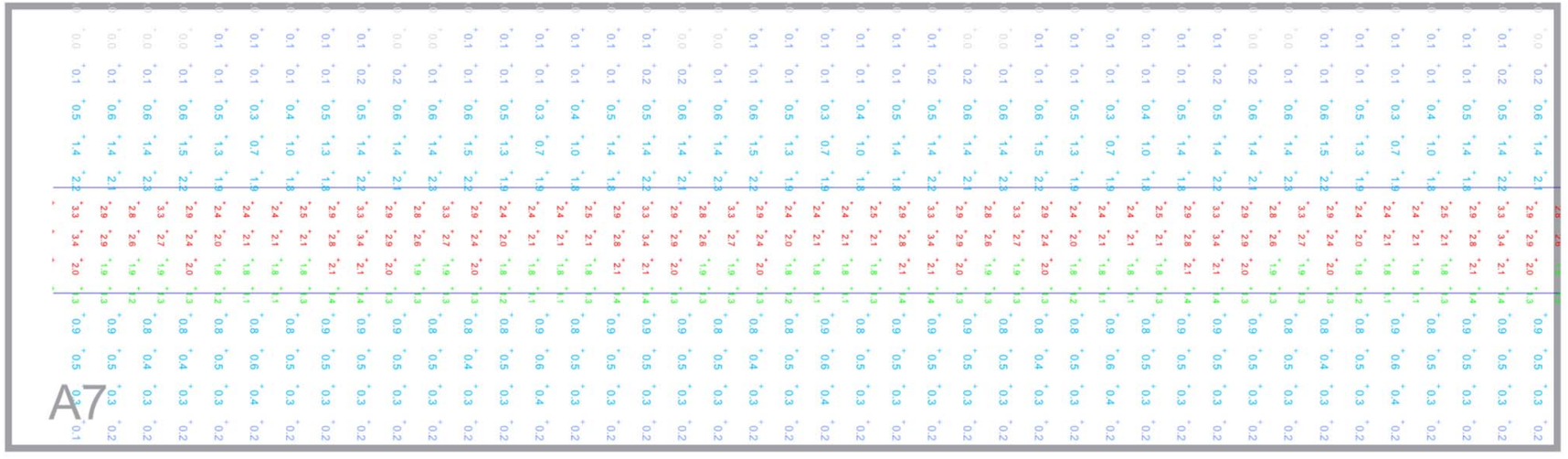
LIGHTING PHOTOMETRICS - A5

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH®



note: A5 rotated 90 degrees



LIGHTING PHOTOMETRICS - A6,A7

PALO ALTO PEDESTRIAN OVERCROSSING
SCHEMATIC LIGHTING DESIGN PACKAGE

LIGHTSWITCH®

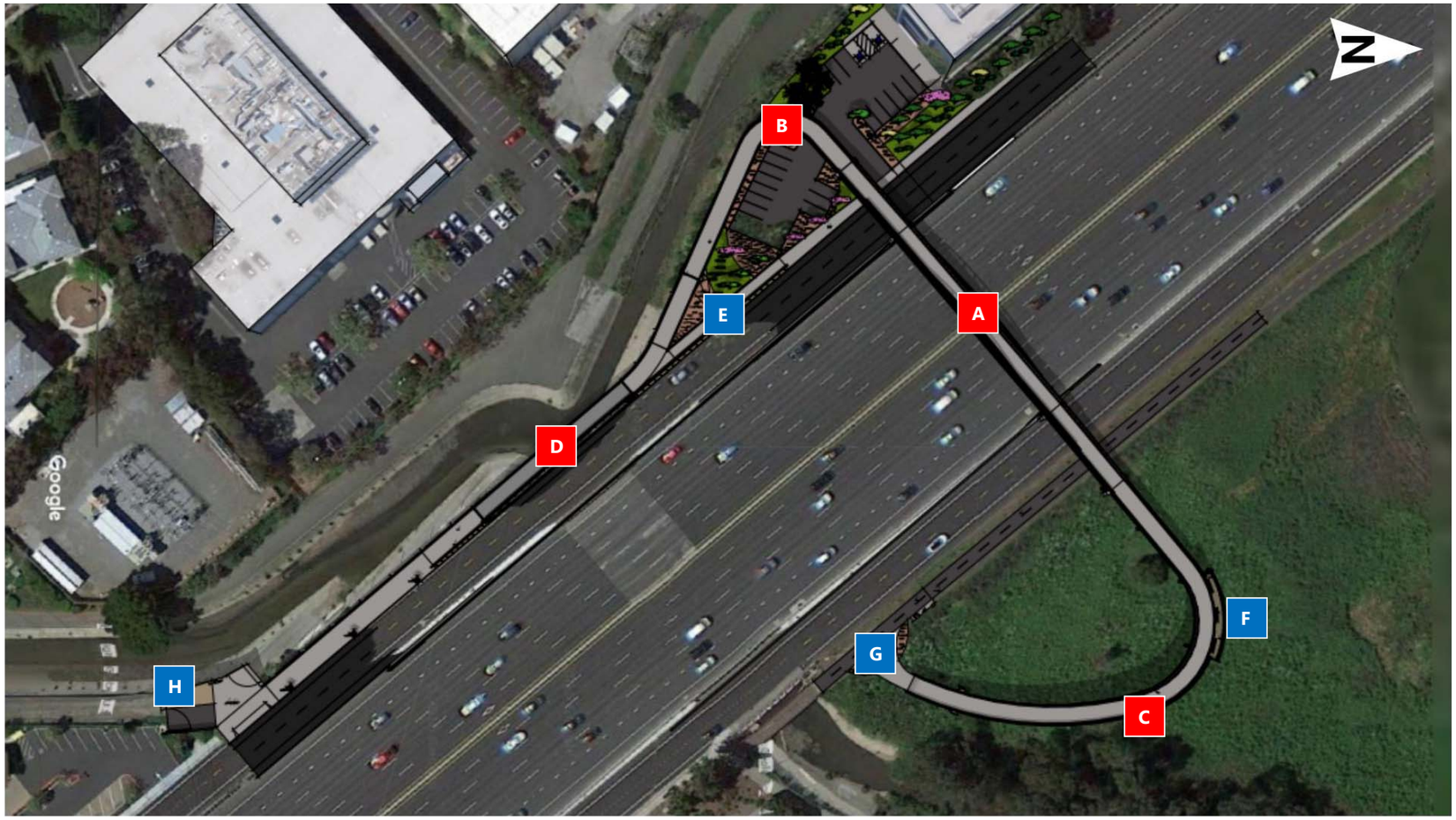
PROJECT DESCRIPTION

The proposed Highway 101 Multi-Use Path Overcrossing (Overcrossing) is located in the City of Palo Alto in Santa Clara County, between the East Oregon Expressway and San Antonio Road overpasses of Highway 101, and will replace the existing seasonal Benjamin Lefkowitz Underpass of Highway 101 located within the Adobe Creek corridor. The grade-separated crossing will provide year-round connectivity from residential and commercial areas west of Highway 101 to the Palo Alto Baylands Nature Preserve (Baylands), East Bayshore Business Park area, and the regional Bay Trail network of multi-use trails east of Highway 101. The project will include a new bridge structure over Highway 101 and West and East Bayshore Roads, a trail connection along Adobe Creek to East Meadow Drive, sidewalk improvements along West Bayshore Road, and landscaping and habitat restoration within the Baylands and along the Adobe Creek riparian corridor. The project lies primarily within City and Caltrans rights-of-way, although the south/west project area includes Santa Clara Valley Water District property and private property owned by Google.

The proposed Overcrossing will consist of multiple structure types in order to maximize the benefits of the different structure types for the various constraints present in the project. The Overcrossing structure is divided into the following major project elements (■ signifies the major structural components and ■ the elements of connection and congregation)

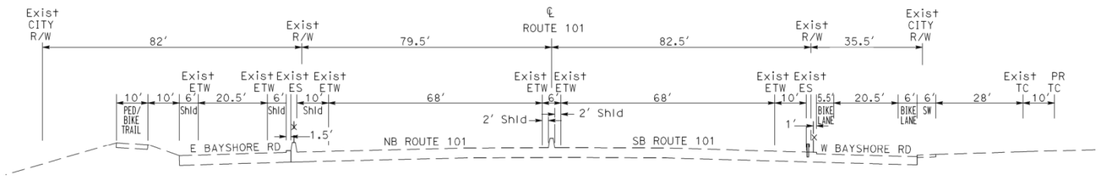
MAJOR PROJECT ELEMENTS

- **A** PRINCIPAL SPAN STRUCTURES
- **B** WEST APPROACH STRUCTURE
- **C** EAST APPROACH STRUCTURE
- **D** ADOBE CREEK BRIDGE
- **E** WESTERN ACCESS RAMP
- **F** BAYLANDS OVERLOOK
- **G** BAYTRAIL CONNECTION
- **H** ADOBE CREEK TRAIL



A PRINCIPAL SPAN STRUCTURES

The Principal Span Structure is set to a straight alignment that is essentially perpendicular to the Highway 101 and Bayshore Road alignments. It consists of three simply-supported steel truss spans spanning across West Bayshore Road, Highway 101, and East Bayshore Road. At this location, Highway 101 is a 12-lane highway with a 162-foot wide right-of-way (See Figure below). East Bayshore Road consists of two travel lanes with a 20.5-foot wide traveled way and two 6-foot shoulders. West Bayshore Road consists of two travel lanes with an approximately 20.5-foot wide traveled way and a 5.5-foot shoulder and 6-foot bicycle lane.



The span over Highway 101 will consist of a 165-foot long, prefabricated steel bowed truss. The bowed truss is able to achieve the long clear span while keeping the profile depth from the top of deck to bridge soffit to a minimum. The adjacent side spans spanning over East and West Bayshore Roads will consist of 72'-0" long prefabricated steel trusses continuous with the Highway 101 span. All spans will accommodate a 12-foot clear width pathway.

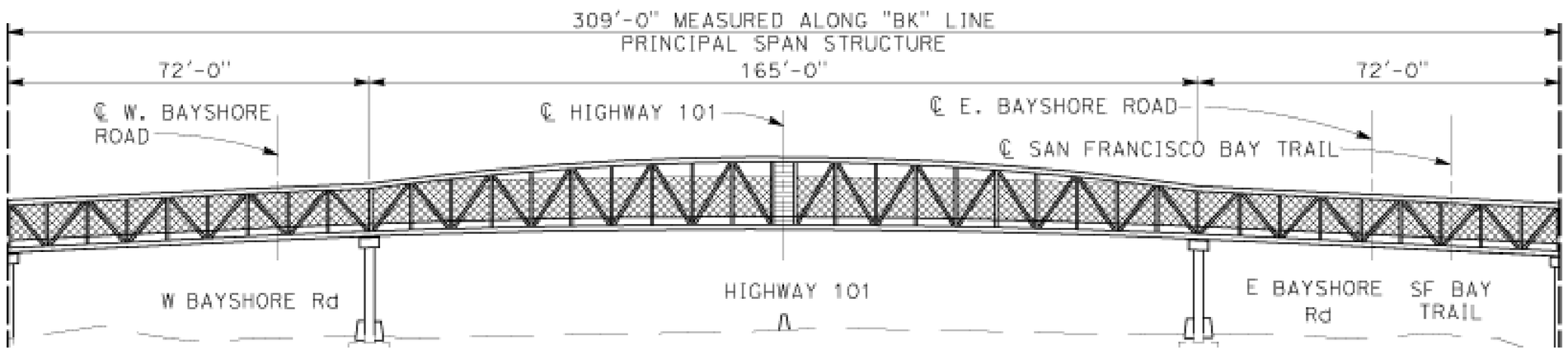
Bents under the Principal Structure spans will consist of 2-foot thick non-skewed concrete pier walls on cast-in-drilled-hole (CIDH) pile foundations. In order to reduce traffic control requirements within Highway 101, the pier walls adjacent to Highway 101 (Bents 6 and 7) will be founded on a concrete pile cap supported by CIDH piles located within the medians between Highway 101 and East and West Bayshore Roads. The concrete pier walls supporting the other ends of the steel Pratt trusses (Bents 5 and 8) will be founded on a concrete pile cap which is supported by CIDH piles. Pier walls at Bents 5 and 8 will support both the steel trusses of the Principal Span Structure and the end of the West and East Approach concrete slab spans.

Safety railings will be provided the full length of the Principal Span Structure. The railings will consist of 8-foot tall galvanized welded wire safety fencing.

MATERIALS

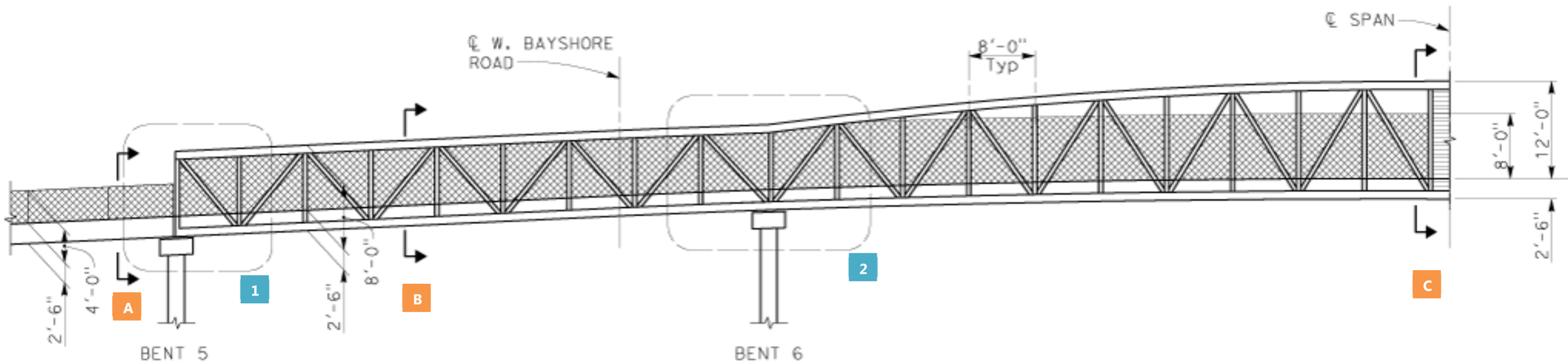
MAIN TRUSS – Self Weathering Steel ASTM A588/A606-4
DECKING – Cast-in-place (CIP) Concrete on Metal Decking
PANEL RAILINGS – Galvanized Metal Frame
FENCING – 77% Open Weaved Wire Mesh (1" min)*

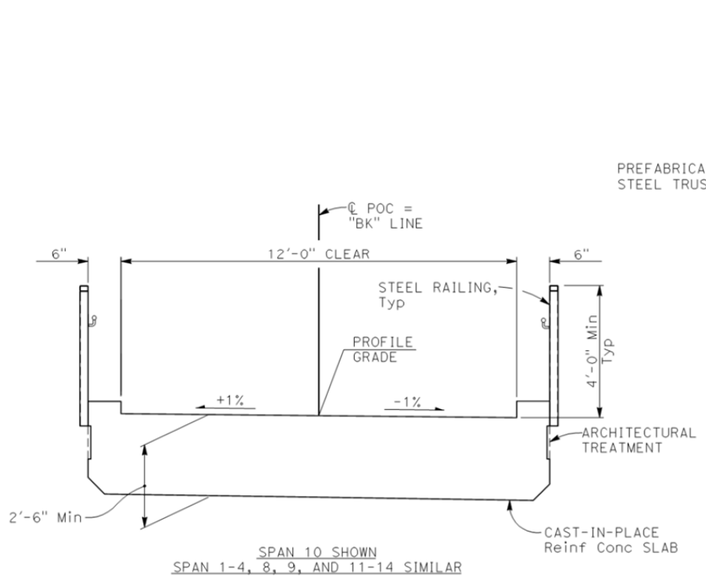
* Requested upgrade, typ.
Baseline is vinyl-clad fabric, typ. on all sheets.

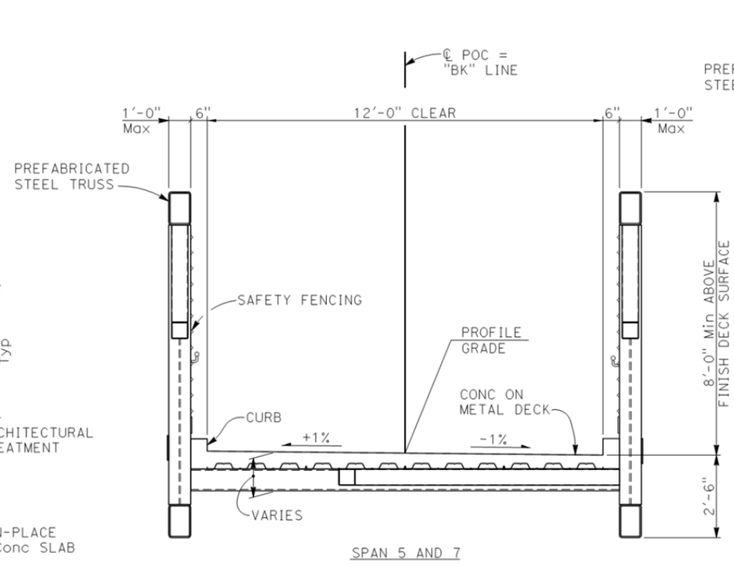


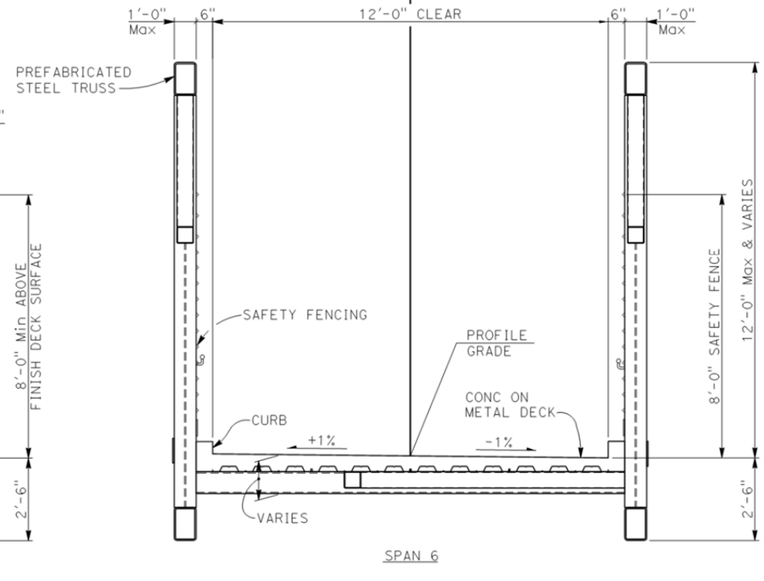
TRUSS ELEVATION

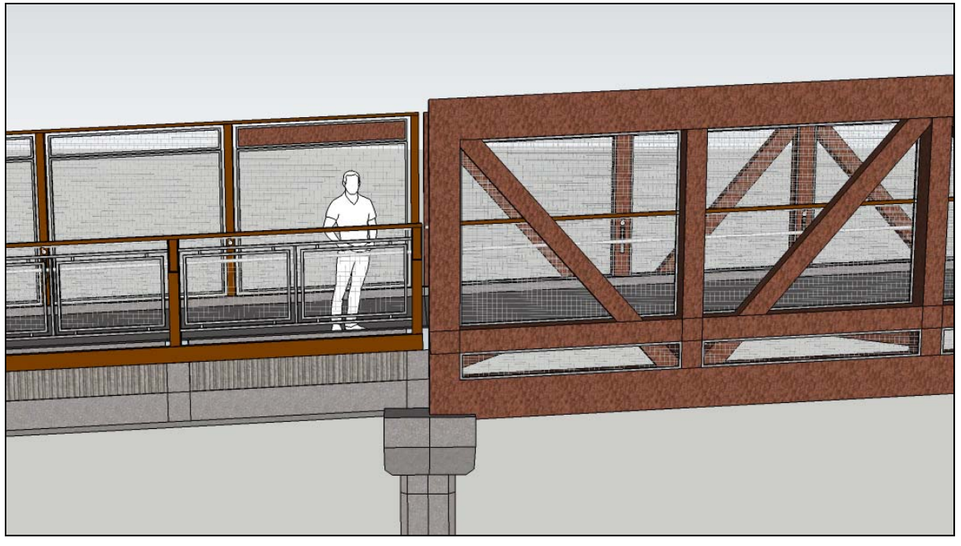
TRUSS LAYOUT



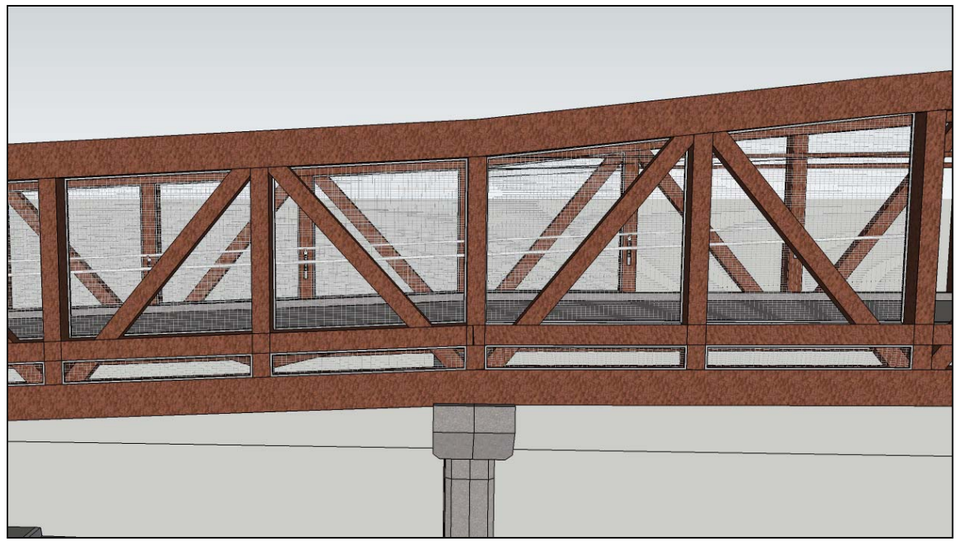




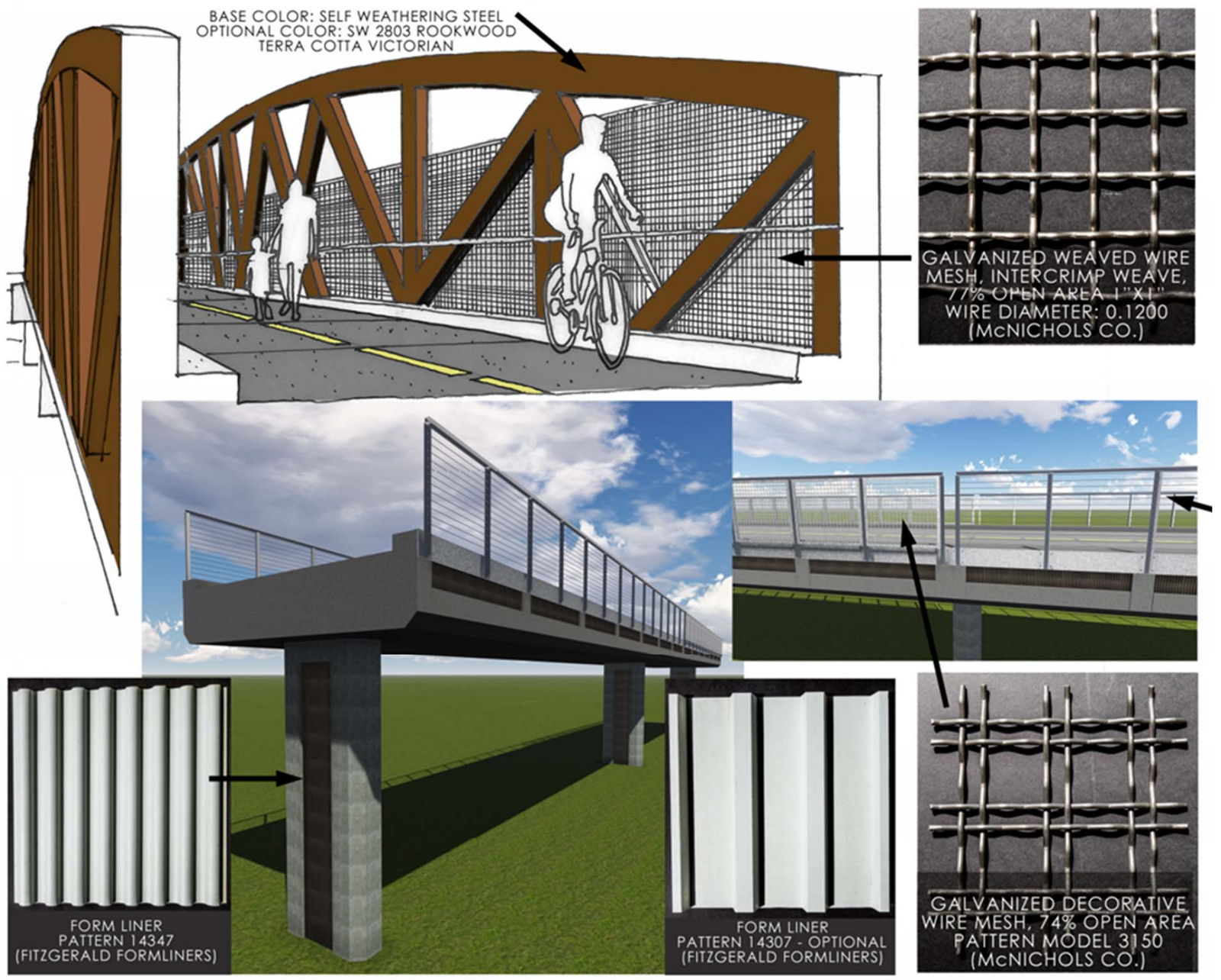


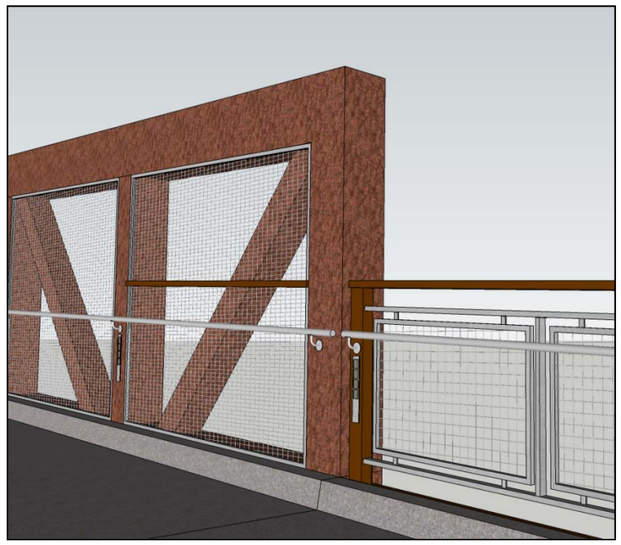


TRANSITION 1



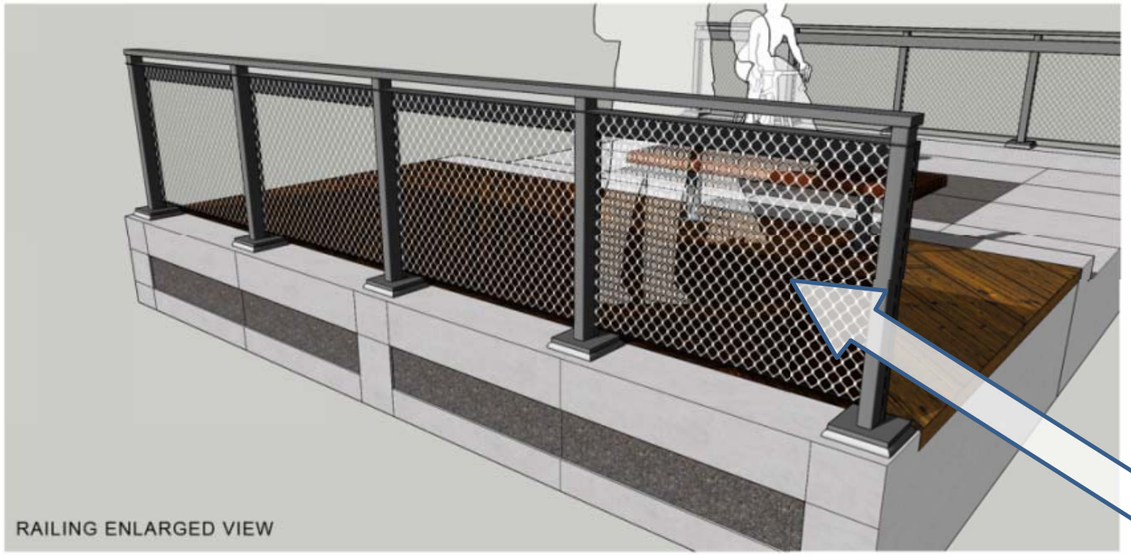
TRANSITION 2

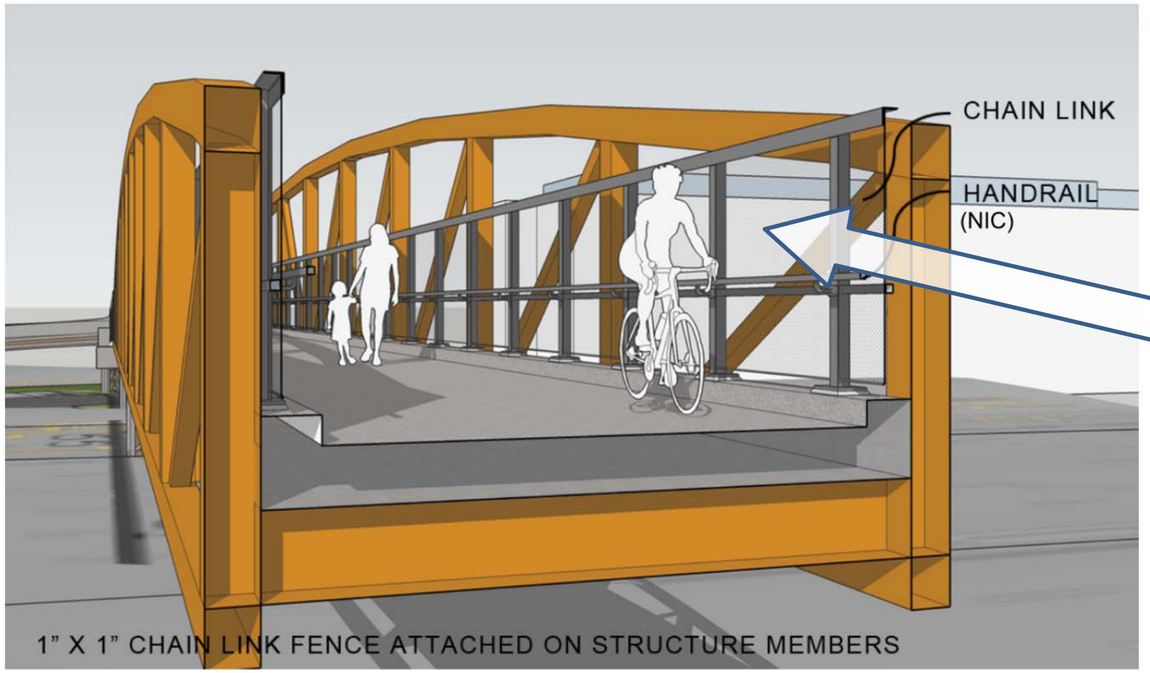




BASE ARCHITECTURE + TRUSS FENCE SCHEMATIC

POTENTIAL UPGRADES



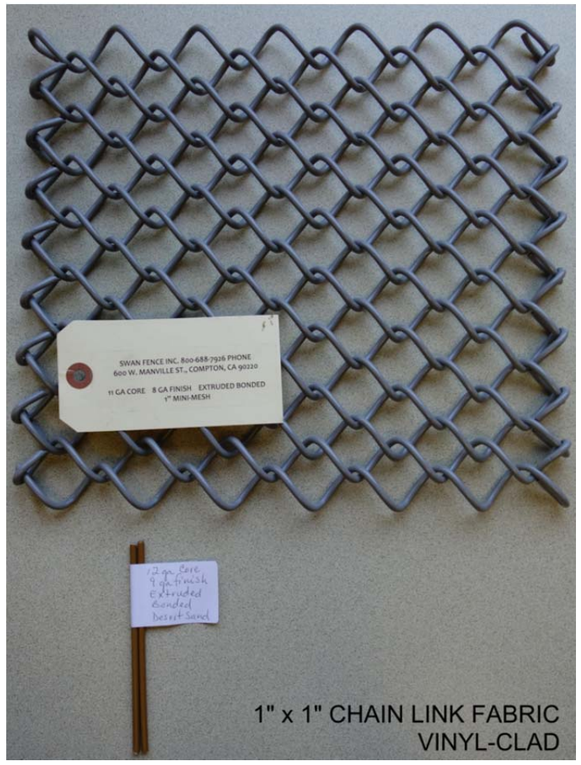


The design team has investigated various enhancements based on requests received at the various commission and board meetings and during design development. These enhancements are a change to the Council-approved baseline and have the potential to increase the project budget.

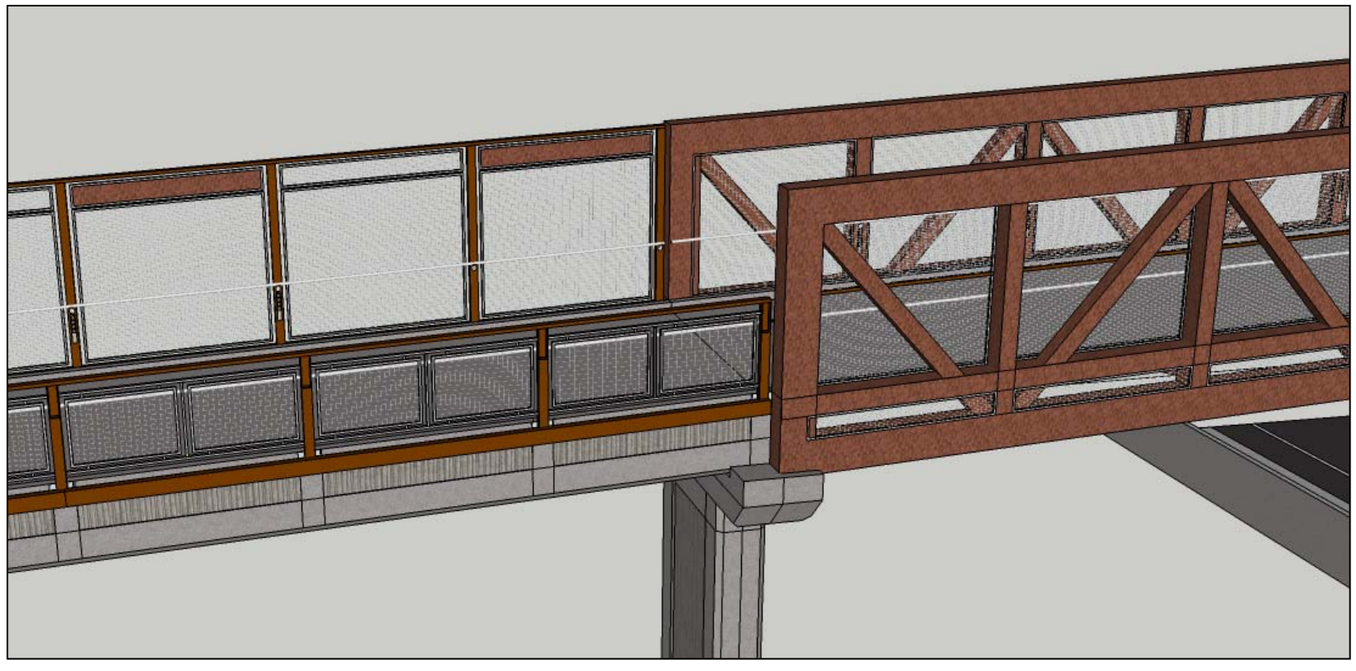
The baseline railing design elements shown on this page were approved by the Council. The base railings were revised from this image to side-mounted railings as shown elsewhere. The detail for the upgraded railing was developed to allow for revision of the railing fabric as desired. The texture options shown on Sheet 9.5 are considered baseline as well.

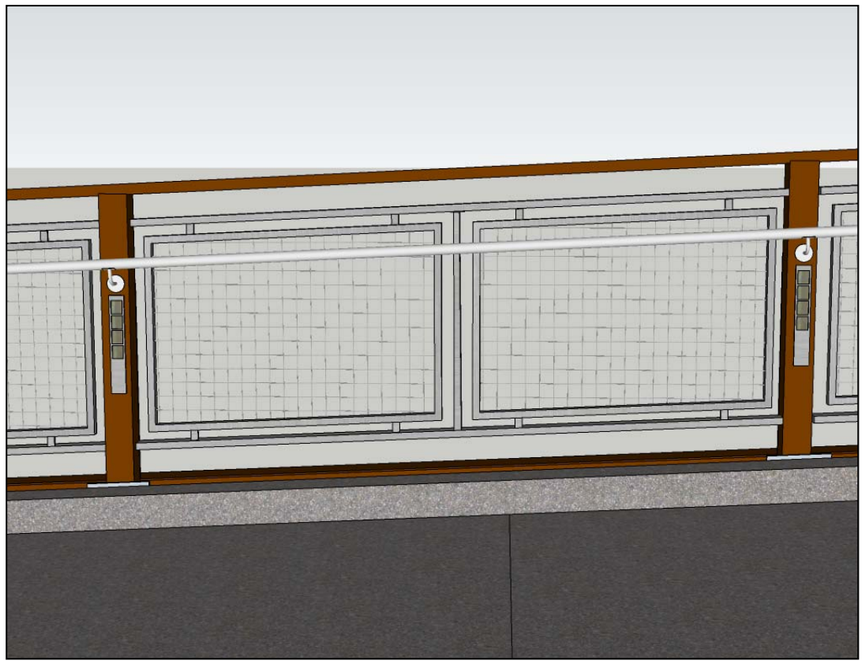
In general, the Site and Design Review Package shows potential upgrades that can be presented again to Council. Potential upgrades include:

- Railing fabric upgraded to woven wire fabric. Refer to Sheet 4.3D for concept and Sheets 9.5 and 9.6 for materials and schematics.
- Hand railing has been requested as a possible public convenience upgrade, though not included in the Council-approved baseline nor required by code.



Note:
This sheet is reproduced again in Section 4, Structure Elevations, for ease of reference.





FENCING SCHEMATICS

B C WEST/EAST APPROACH STRUCTURES

The alignment of the West Approach Structure consists of an approximately 115 degree curve that directs pedestrian/bicycle traffic from along West Bayshore Road, over the Google parking lot, and to the Principal Span Structure over Highway 101. The alignment closely abuts the adjacent Barron Creek to enable retention of parking spaces with in the Google parking lot and to provide the maximum elevation gain between the adjoining Principal Span Structure and the Adobe Creek Bridge crossing.

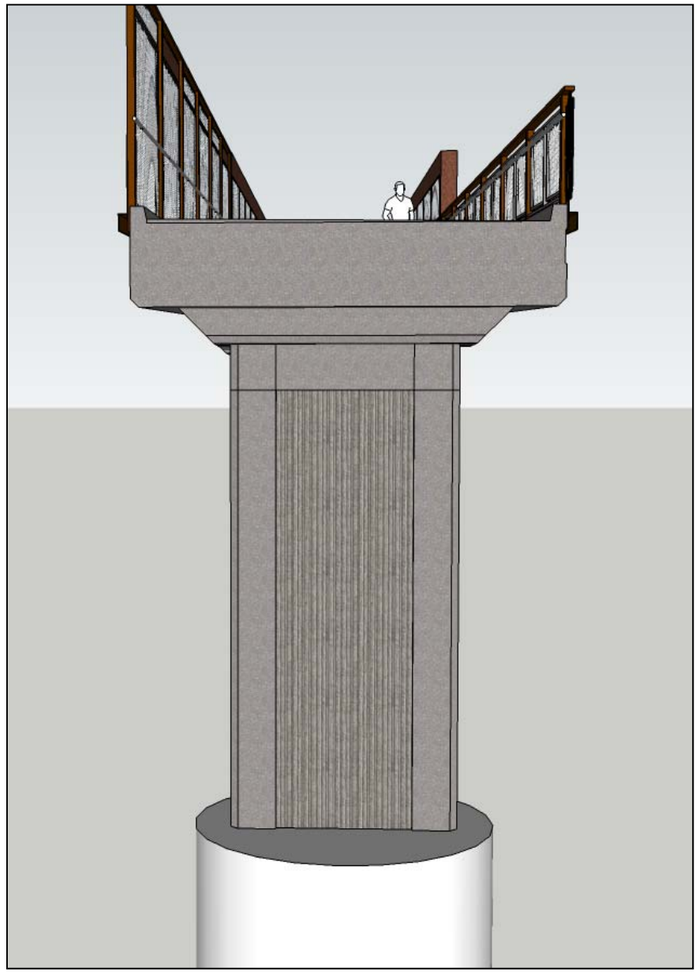
The alignment of the East Approach Structure consists of an approximate 168-degree compound curve that directs pedestrian/bicycle traffic from the Principal Span Structure, over the Baylands, and back around to conform at the San Francisco Bay Trail.

The West/East Approach Structures consist of a four/seven span, 2'-6" deep rectangular columns supported on large diameter Type II CIDH pile shafts. The span lengths will vary from 40 to 50 feet long, resulting in a minimum span-to-depth ratio of approximately 0.050. The columns will have textural banding. The abutment will consist of a reinforced concrete seat-type abutment supported by a large diameter CIDH pile. All spans will accommodate a 12-foot clear width pathway.

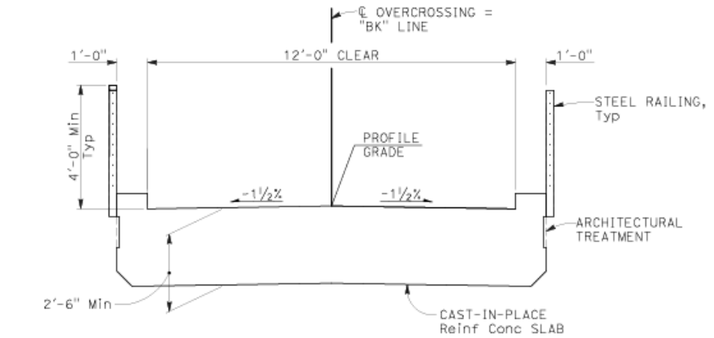
Architecturally enhanced safety railings will be provided the full length of the West Approach Structure. The railings consist of 4-foot to 8-foot tall effective safety fencing.

MATERIALS

SUPERSTRUCTURE SLAB – CIP Concrete Reinforced Slab
TEXTURAL BANDING – Fractured Fin Surface
PANEL RAILINGS – Galvanized Metal Frame
FENCING – 74% Open Weaved Wire Mesh
BENTS – CIP Concrete with Form-lined Textural Banding



TYPICAL RAMP BENT (Bent 4 Shown, others similar)



RAMP CROSS SECTION

AT BENTS 5 TO 8

BENT SCHEMATICS

D ADOBE CREEK BRIDGE

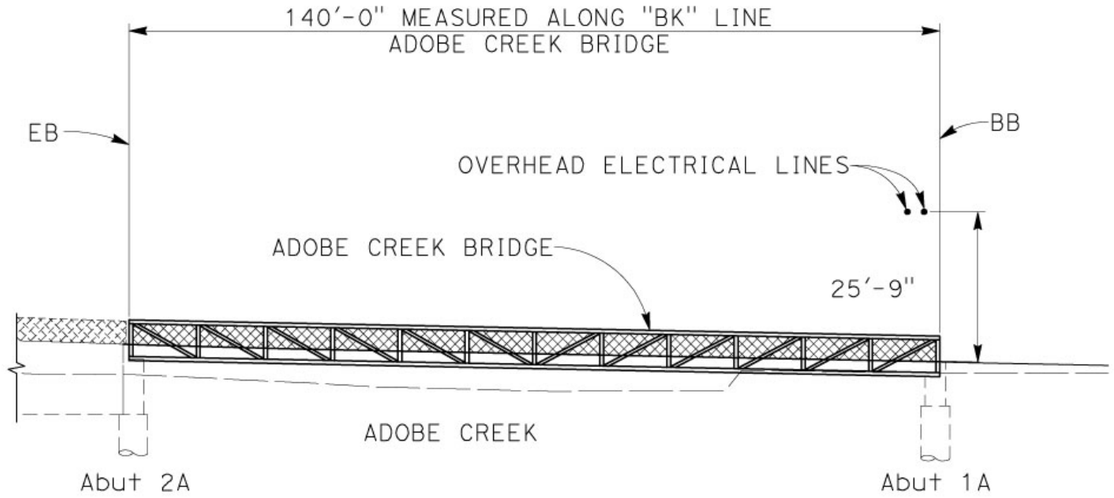
The Adobe Creek Bridge consists of a 140-foot long prefabricated steel Pratt truss, spanning over the confluence of Barron and Adobe Creeks, adjacent to the existing Adobe Creek Bridge (Bridge No. 37C-0060) along West Bayshore Road. The bridge will accommodate a 12-foot clear width pathway allowing for travel in both direction. The top chord of the steel truss will serve as the top chord of the 4 foot high safety railing for the structure. The abutments will consist of concrete seat type abutments supported by large diameter CIDH piles. It will maintain the same character and style as the existing bridge crossing Adobe Creek adjacent to E Bayshore Road.

EXISTING ADOBE CREEK BRIDGE at E BAYSHORE RD

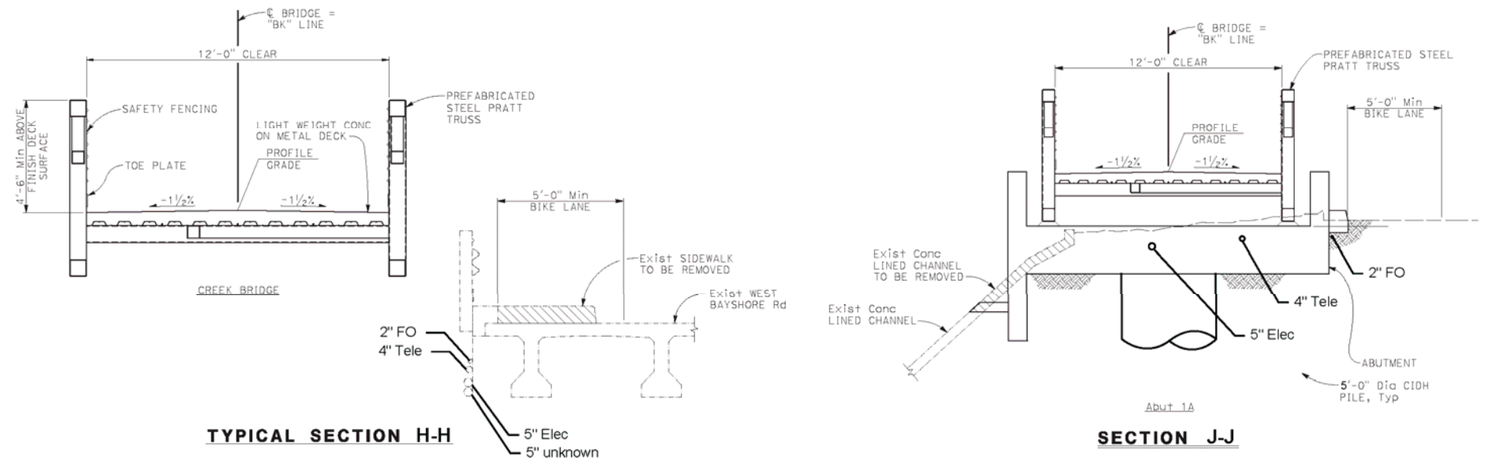
MATERIALS

MAIN TRUSS – Self Weathering Prefabricated Steel Truss
DECKING – CIP Concrete on Metal Decking; Color: Standard Concrete Grey
PANEL RAILINGS – Self-weathering Integrated Metal Rails

ADOBE CREEK BRIDGE SCHEMATICS



TRUSS ELEVATION



TRUSS CROSS SECTIONS

E ACCESS RAMP/CREEK RETAINING WALLS

A pedestrian access ramp has been incorporated into the Western Approach Structure between the Google property (3600 West Bayshore Road) and Adobe Creek Bridge to provide continuous access for pedestrians along West Bayshore and access to the Overcrossing. For northbound pedestrians along West Bayshore Road the access structure can reduce the length of travel by roughly 500 feet. This access structure also provides equal access to mobility impaired trail users and provides a pedestrian bypass allowing the existing bike lane along West Bayshore road to be made continuous across the existing Adobe Creek Bridge. It also provides a functional ADA compliant alternative access which can be used as an ingress/egress if and when the SCVWD closes the trail access area for their channel sedimentation maintenance.

RAMP WALL – Retaining Wall #1

The access ramp wall will be supported by a Caltrans Standard Type 5 Retaining Wall. The tallest section will support the "Y" landing from the access ramp to the Adobe Creek Bridge abutment. The 8-foot clear ramp will be ADA compliant with a 7.5% max slope and 5-foot landings for every 30" vertical rise. The walls will have the theme banding and textured surfaces to deter graffiti.

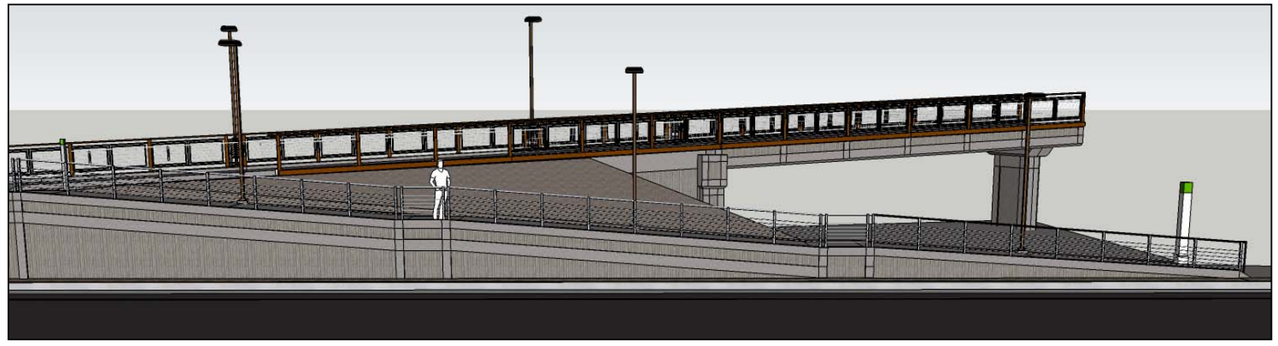
CREEK WALLS – Retaining Wall #3 & #4

The creek walls will also be Caltrans Standard Type 5 walls against the channel. Retaining wall #3 will extend from the POC abutment to the Adobe Creek Bridge abutment and support the ramp fill and the "Y" landing. Retaining wall #4 is located on the other side of the Adobe Creek Bridge and extends from the Bridge Abutment to the exiting landing of the undercrossing entrance to support the widened sidewalk.

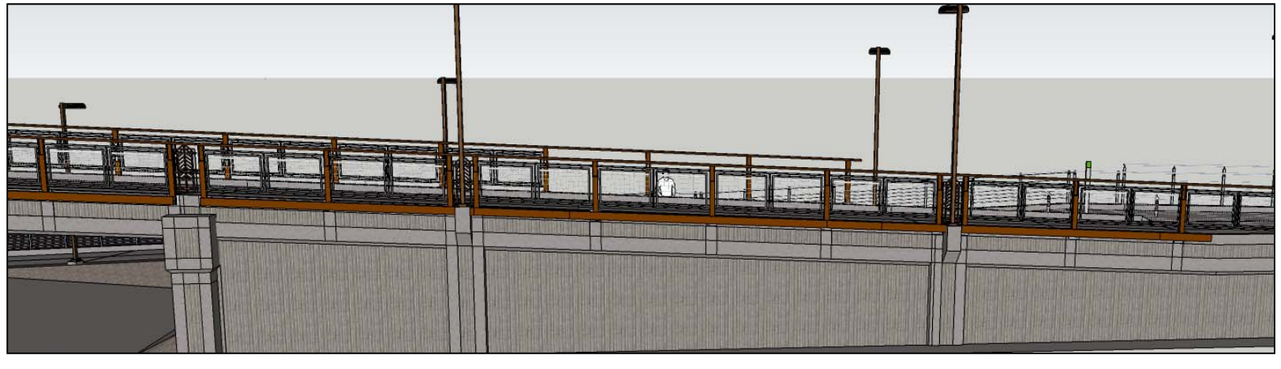
MATERIALS

CONCRETE WALLS – CIP Concrete with Form-lined Textural Banding;
Color: Standard Concrete Grey
TEXTURAL BANDING – Fractured Fin Surface
RAMP RAILINGS – Metal Post with Welded Wire Mesh Fence
CREEK RAILINGS – Same as approach ramps

ACCESS RAMP IMPROVEMENTS



ACCESS RAMP WALL ELEVATION



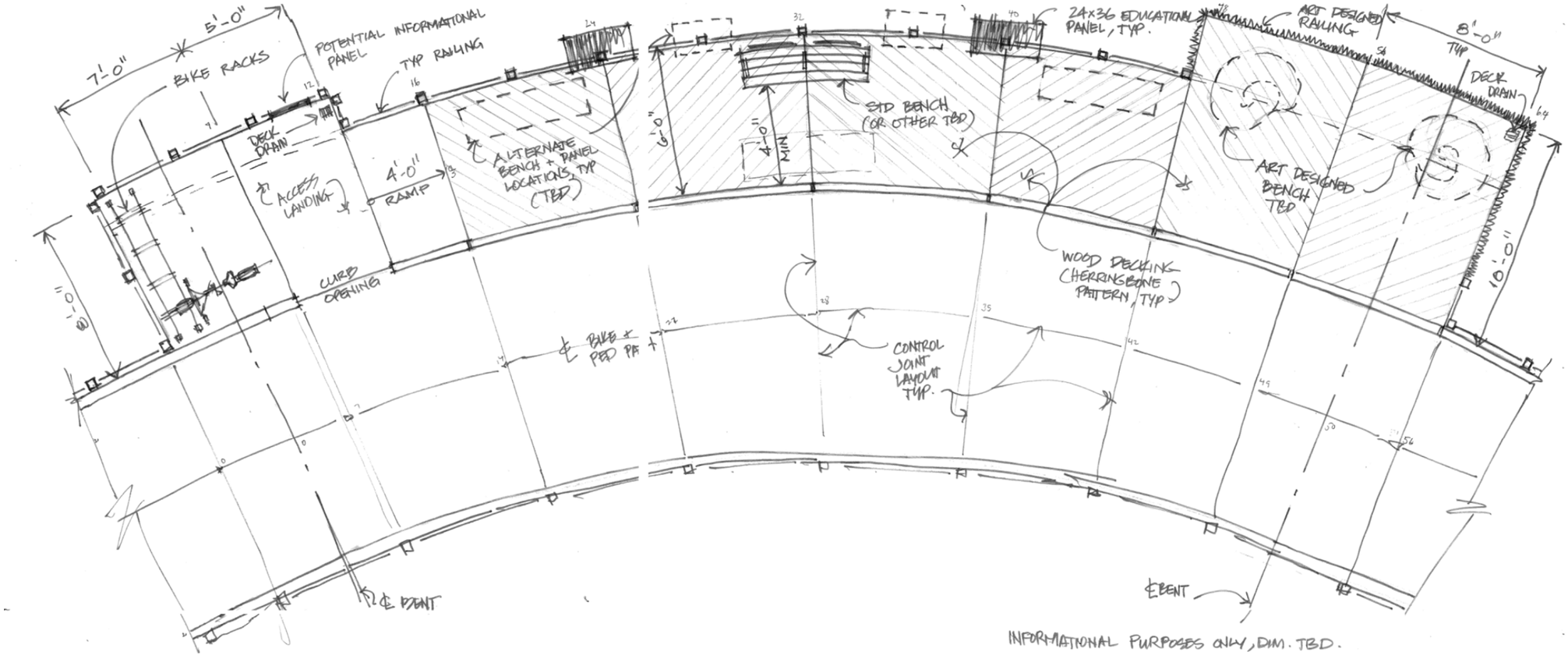
CREEK WALL ELEVATION

F BAYLANDS OVERLOOK

In order to provide the trail users an opportunity to pause, rest and view the adjacent Baylands without impeding pedestrian and bicycle through traffic. The architecture of the overlook will extend from the main bridge structure elements. The overlook will be decked with a wood finish to make the area more distinguishable from the main pathway and to give it some warmth in texture and color. Benches will be located along the overlook to allow users to rest and/or view the surrounding vistas of the Baylands.

It is envisioned that the art elements will be primarily located on the overlook in the form of benches, railings and art panels. The City has hired Mary Lucking Studio to develop the art work. The artwork will be coordinated with the design team and may be incorporated as part of the design contract drawings

Informational and educational signage will also be located on the overlook to further enhance the experience for the users.



OVERLOOK CONCEPTUAL BASE PLAN

G BAYTRAIL CONNECTION

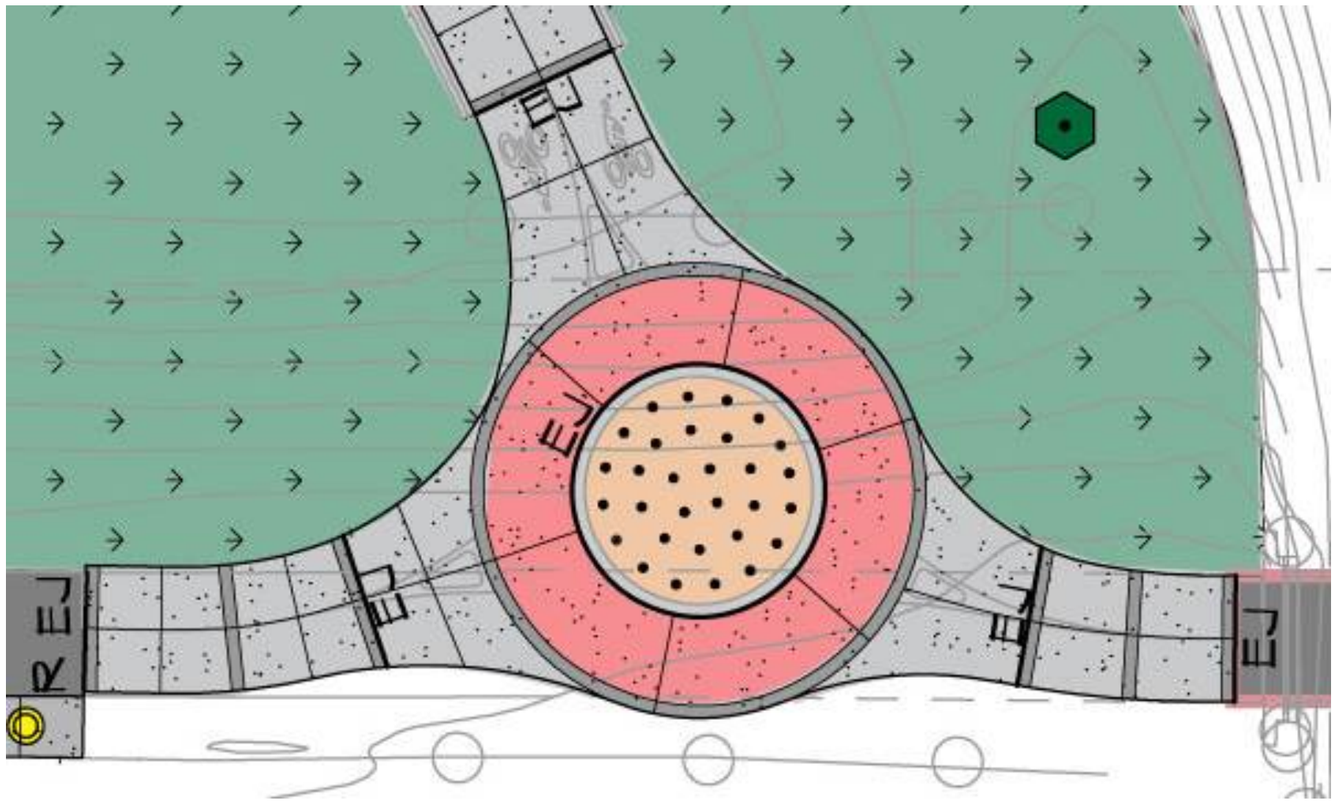
The intersection was reconfigured to a roundabout configuration. The inner circle and edge of mountable apron will have a radius of 7-feet and the outer path radius will be 15-feet. The path will possibly be used in combination with signage and pavement markings to slow bicyclists. The circle path will also be colorized to differentiate the roundabout and to serve as a visual cue for both bicyclists and pedestrians.

MATERIALS

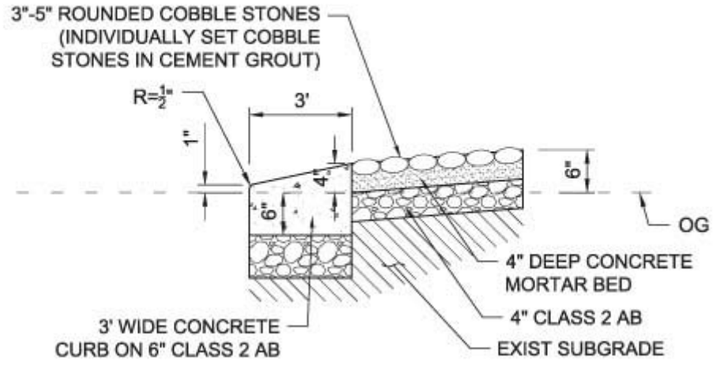
CONCRETE PAVING CIRCLE – Colored concrete paving. Color will be a reddish color TBD.

CONCRETE APPROACH PAVING – Concrete paving. Paving layout to match spacing on bridge edge.: 9" band and 96"control joint spacing between bands.

ROUNDABOUT APRON HARDSCAPE – 3"mountable apron curb surrounding a cobble stone center finish. See Mountable Apron Detail.



ROUNDABOUT



MOUNTABLE APRON

H ADOBE CREEK TRAIL/TRAILHEADS*

The proposed Adobe Creek Reach Trail involves designating a 10-foot wide section along the approximately 800 linear feet segment of the existing Santa Clara Valley Water District (SCVWD) maintenance road on the east side of Adobe Creek, between West Bayshore Road and East Meadow Drive, as the Adobe Creek Reach Trail. The Adobe Creek Reach Trail will provide a more direct, comfortable, and potentially safer alternative to Fabian Way/West Bayshore Road for pedestrians and bicyclists. The trail will utilize the existing SCVWD maintenance road along Adobe Creek (maintaining the existing aggregate base surfacing) and will include installation of safety railing along the top of bank of Adobe Creek (subject to acceptance by the SCVWD). The project will include trail heads at West Bayshore Road and East Meadow Drive. Trail heads will consist of simple concrete connections to the adjoining streets/sidewalks (no formal plazas), associated pavement delineation and street signage. Resurfacing of the Adobe Creek Reach Trail was not originally included in this project. However, potential trail resurfacing as part of a future project will be environmentally cleared as part of this project.

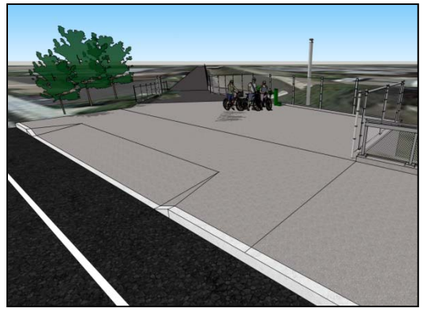
MEADOW WAY TRAILHEAD

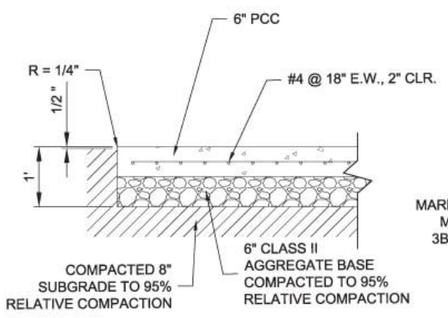
Based on the coordination with Transportation, the project modified the Meadow Way Trailhead at Adobe Creek trail to incorporate a raised crosswalk and bulb outs that are also being done as a part of a separate bike safety project by the City in the area. Signage will be coordinated with staff

WEST BAYSHORE TRAILHEAD

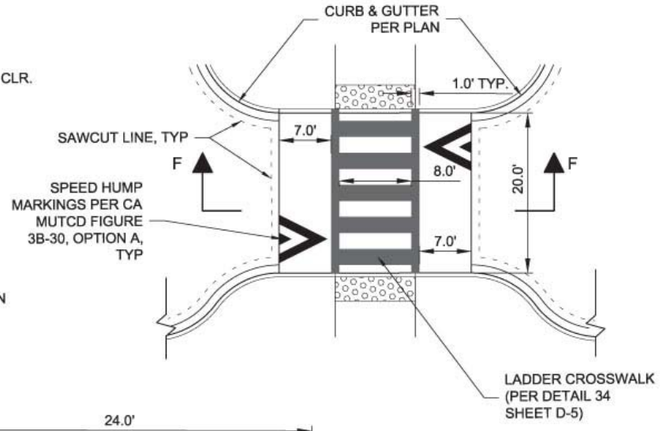
Based on the coordination with Transportation and the SCVWD, the trailhead at the Adobe Creek trail will be a large open concrete area paved area. The open area will be used as a staging area for the SCVWD when they perform their maintenance operations. They would also like gates on either side to store equipment during those periods. Minor amenities will be located at this trailhead subject to SCVWD approval.

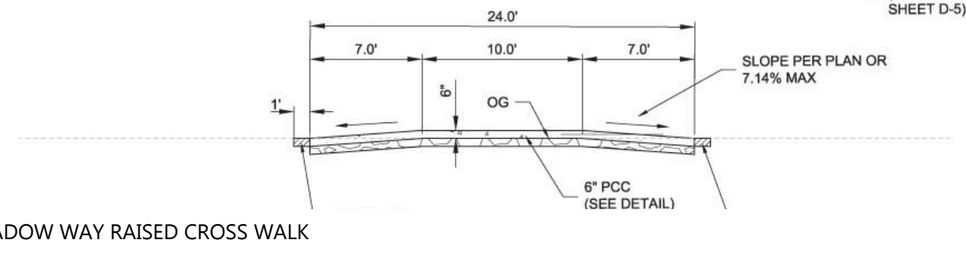
* Note: Funding for paving the Adobe Creek Reach Trail has recently become available. Paving of the Adobe Creek Reach Trail is now considered as included as part of the baseline project.



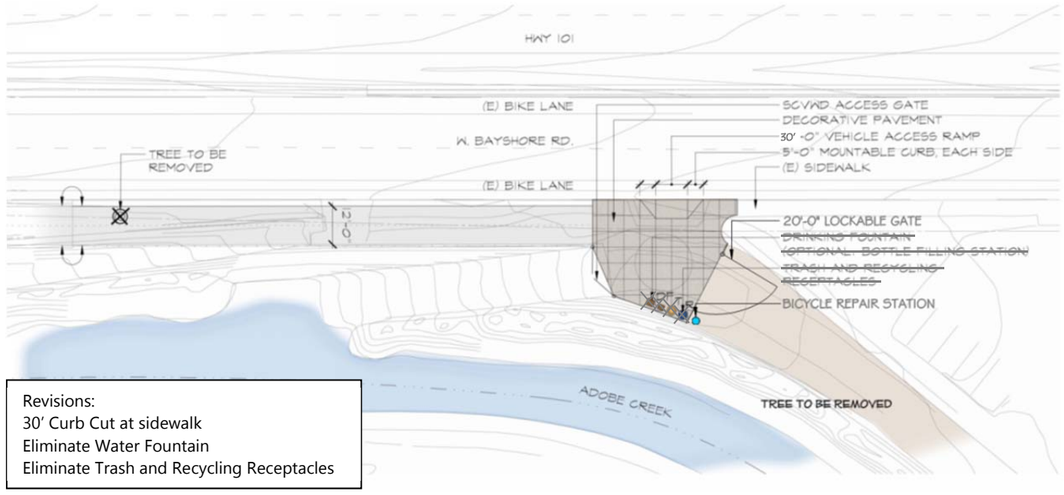


6" PCC PAVING DETAIL





MEADOW WAY RAISED CROSS WALK



Revisions:
30' Curb Cut at sidewalk
Eliminate Water Fountain
Eliminate Trash and Recycling Receptacles

WEST BAYSHORE BLVD PLAN

AMENITIES

As part of the council direction, enhanced amenities were approved to be incorporated as part of the overall project, including hydration station, benches, upgraded trash receptacles and bicycle racks.

ENHANCED AMENITIES LIST

BAYTRAIL TRAILHEAD

HYDRATION STATION – Elkay EZ-H2O LK4420-BF1; bottle filling station, water fountain, pet fountain, Color TBD
TRASH/RECYCLE RECEPTACLES – Du Mor #148
BIKE REPAIR STAND – DERO FIXIT with Air Kit, Galvanized, Color TBD

ADOBE CREEK TRAILHEAD

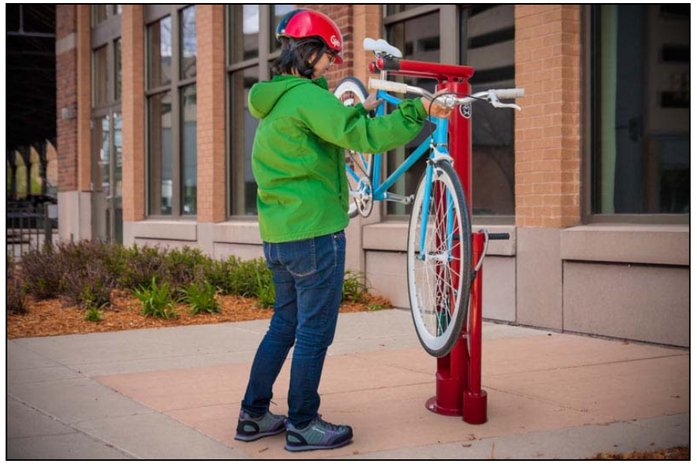
BIKE REPAIR STAND – DERO FIXIT with Air Kit, Galvanized, Color TBD

OVERLOOK

BIKE RACKS – FORMS+SURFACES Bike Garden Racks, Color TBD
BENCHES – Artist-designed benches with back and armrests

HYDRATION STATION – Elkay EZH2O

BIKE RACK – Emerson Bike Rack



BIKE REPAIR STAND – Dero Fixit

TRASH RECEPTACLES – DuMor Model 148-32SH-FTO

SIGNAGE

Signage is limited to 5 areas:

- Baytrail Connection
- Adobe Creek Trailhead @ Meadow
- Adobe Creek Trailhead @ Bayshore
- The "Y" Landing
- The Overlook

WAYFINDING SIGNS

Destination Wayfinding
Roundabout Wayfinding
Green background with white reflective border and text.

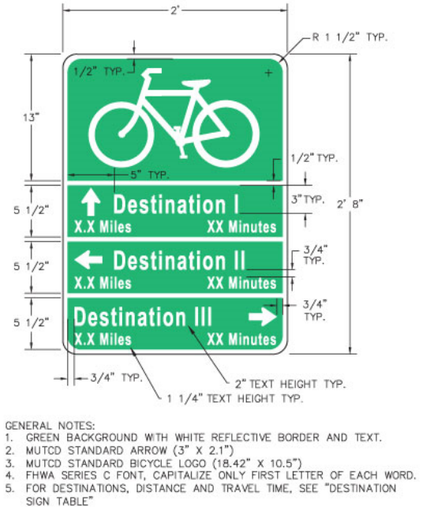
INFORMATIONAL SIGNS

Pedestrian Crossing Warning Sign
Dismount Warning Sign
Share Use Path/Etiquette Signs
White background with Black border and text.

EDUCATIONAL SIGNS

24"x36 Panels (by others)
"You are here"/Trail Map

Sample signage shown. Final colors, types, messages, etc. will be refined during final design phase.



TOPPING OPTIONS

"SHARED-USE PATH
SLOW FOR PEDS"

MOTOR CYCLES

INFORMATIONAL EXAMPLES – TRAIL ETIQUETTE

Mini-Stencil (white on pavement)

PAVEMENT MARKINGS

NOTES:

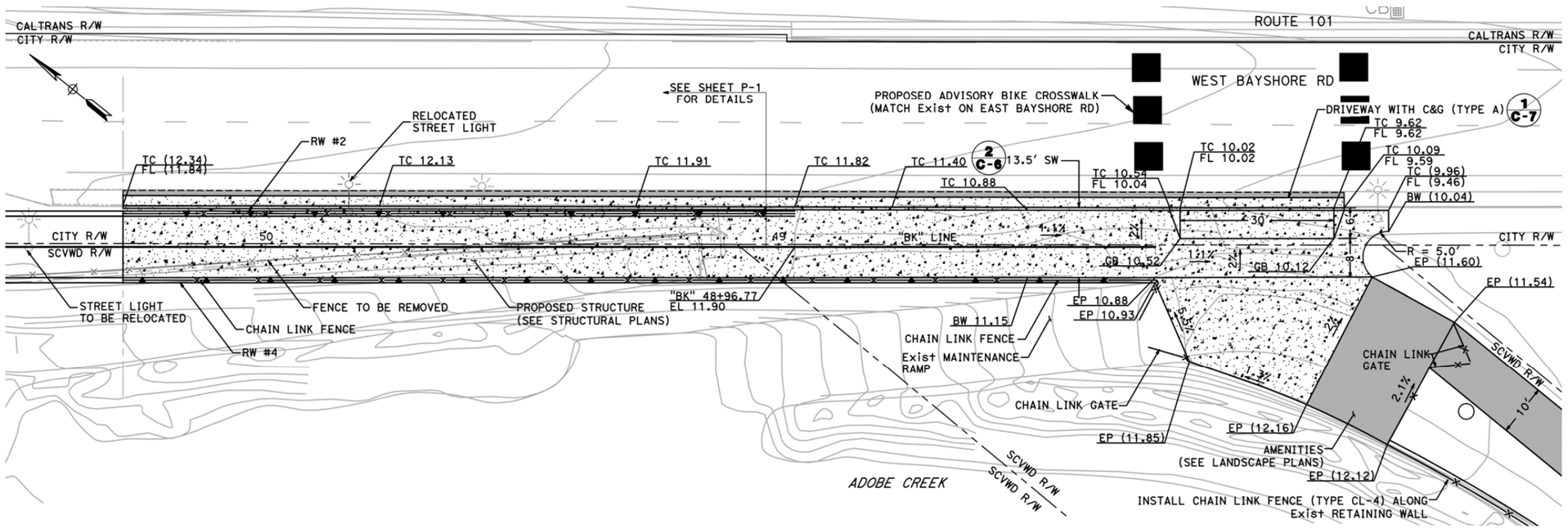
1. PAVEMENT ELEVATIONS ARE AT 50 FEET INTERVALS UNLESS OTHERWISE NOTED.
2. ELEVATIONS SHOWN ARE AT TC UNLESS OTHERWISE NOTED.
3. SAWCUT SHALL BE 1' FROM THE LIP OF GUTTER UNLESS OTHERWISE NOTED.
4. CONSTRUCT VERTICAL CURB AND GUTTER (TYPE A) PER CITY OF PALO ALTO STANDARD CONSTRUCTION DETAIL DRAWING DWG No. 133. (1 C-6)
5. CONSTRUCT PCC SIDEWALK PER CITY OF PALO ALTO STANDARD CONSTRUCTION DETAIL DRAWING DWG No. 141. (2 C-6)
6. CONSTRUCT PCC DRIVEWAY PER CITY OF PALO ALTO STANDARD CONSTRUCTION DETAIL DRAWING DWG No. 120. (1 C-7)
7. CONSTRUCT CATCH BASIN (TYPE A) PER CITY OF PALO ALTO STANDARD CONSTRUCTION DETAIL DRAWING DWG No. 301. (2 C-8)
8. CATCH BASIN (TYPE A) SHALL HAVE HOOD, FRAME, AND GRATE PER CITY OF PALO ALTO STANDARD DETAIL DRAWING DWG No. 303. (2 C-7)
9. CONSTRUCT CHAIN LINK GATE AND CHAIN LINK FENCE (TYPE CL-4) PER CALTRANS REVISED STANDARD PLAN RSP A85.
10. CONSTRUCT CATCH BASIN AWAY FROM CURB PER CITY OF PALO ALTO STANDARD CONSTRUCTION DETAIL DRAWING DWG NO. 304. (1 C-8)
11. CONSTRUCT CURB (TYPE A1-6) PER CALTRANS STANDARD PLAN A87A.
12. EXISTING DRAINAGE LOCATIONS ARE APPROXIMATE ONLY. VERIFY LOCATION AND ELEVATION BEFORE MODIFYING EXISTING DRAINAGE FACILITIES.
13. CONTRACTOR TO VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS
14. CONSTRUCT DI (TYPE G2) PER CALTRANS REVISED STANDARD PLAN RSP D73B.
15. DI (TYPE G2) SHALL HAVE GRATE (TYPE 24-12X) COVER PER CALTRANS STANDARD PLAN D77B.
16. FOR TREE REMOVAL, SEE LANDSCAPING PLANS.
17. FOR STREET LIGHT RELOCATION, SEE ELECTRICAL PLANS.

LEGEND:

- (X.XX) EXISTING PAVEMENT ELEVATION
- X.XX PROPOSED PAVEMENT ELEVATION
- PCC SIDEWALK AND DRIVEWAY
- 1.00' DEEP LIFT HMA (TYPE A)
- HMA (TYPE A)
- LANDSCAPE AREA
- SAWCUT
- CHAIN LINK FENCE
- HANDRAIL
- RETAINING WALL
- C | F — CUT AND FILL LINE
- (1 C-1) DETAIL NUMBER DESIGNATION — DETAIL 1 ON SHEET C-1

ABBREVIATIONS:

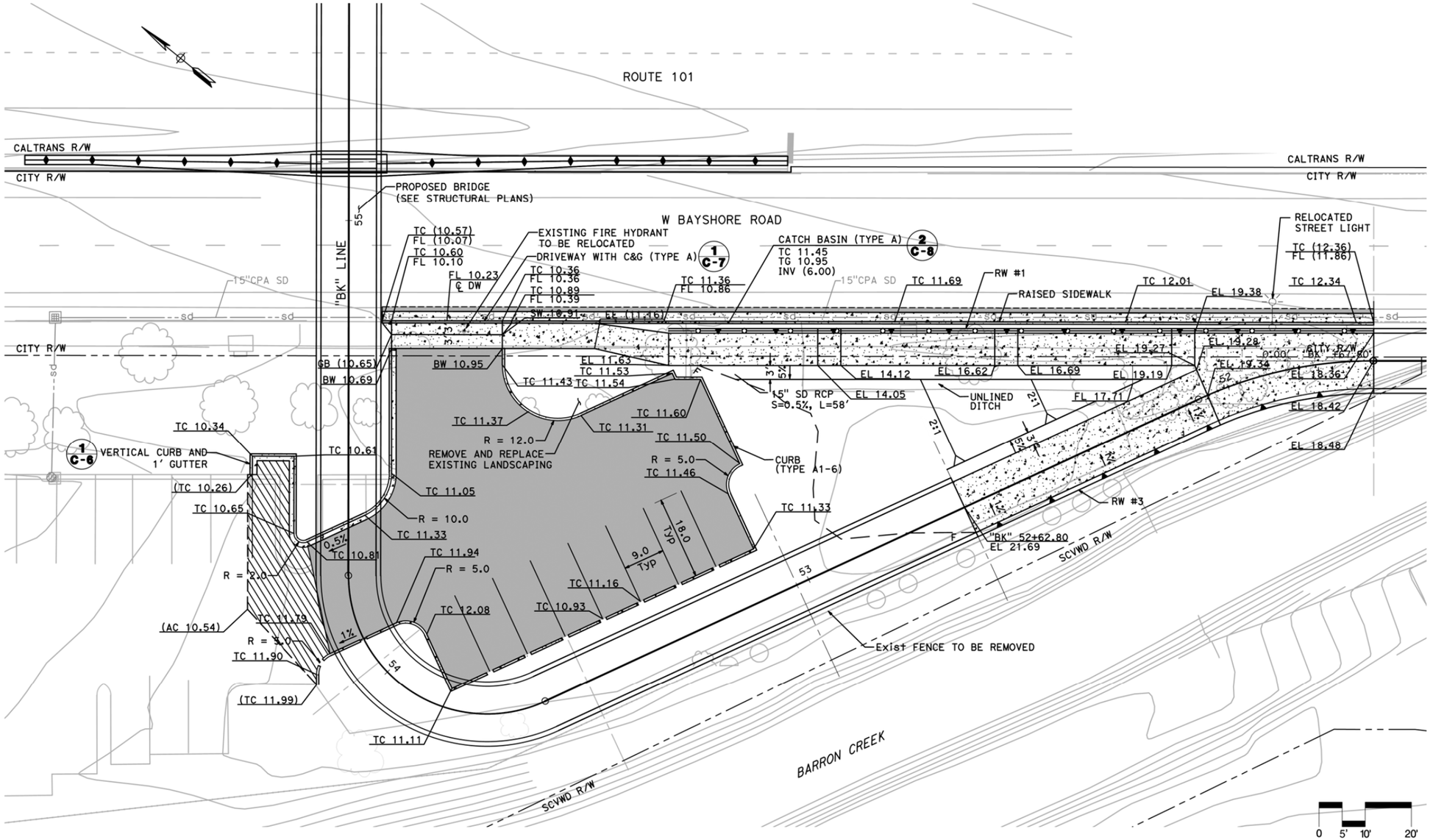
BW	BACK OF WALK
C&G	CURB & GUTTER
CR	CURB RAMP
EL	ELEVATION
ETWHP	EDGE OF TRAVEL WAY HIGH POINT
GB	GRADE BREAK
HI	HIGH
PT	POINT
Rem	REMOVE



CONSTRUCTION DETAIL
SCALE AS SHOWN
0 5' 10' 20'

C-1

APPROVED FOR PAVEMENT ELEVATION WORK ONLY

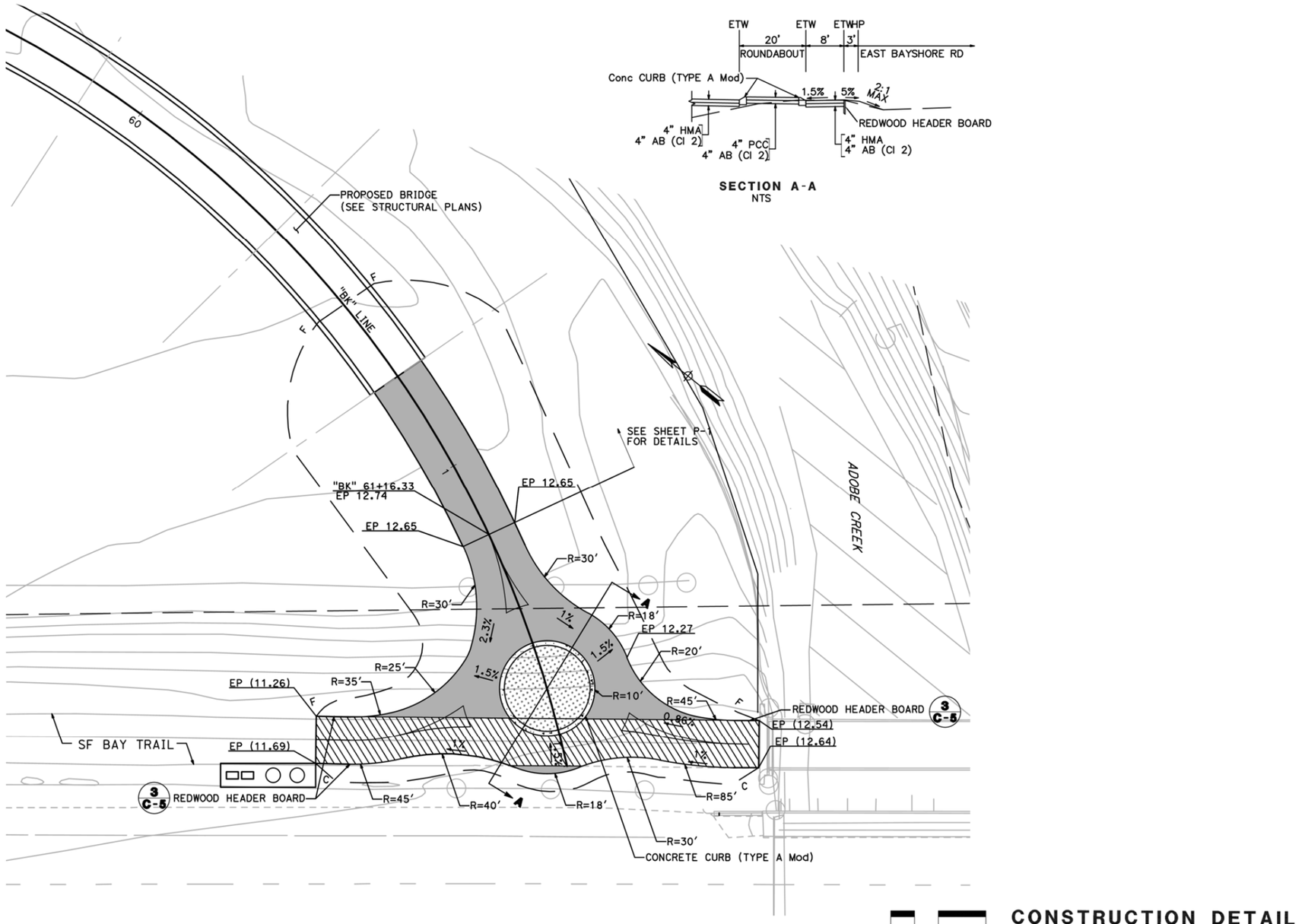


CONSTRUCTION DETAIL
SCALE AS SHOWN

C-2

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET C-1

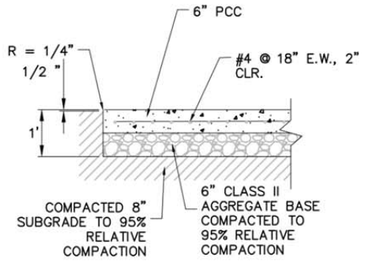
APPROVED FOR PAVEMENT ELEVATION WORK ONLY



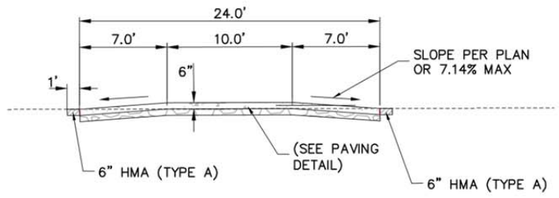
FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET C-1

APPROVED FOR PAVEMENT ELEVATION WORK ONLY

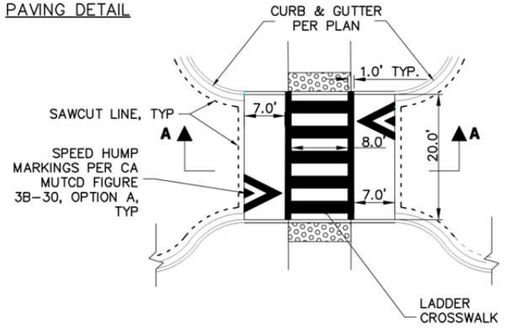
C-4



PAVING DETAIL



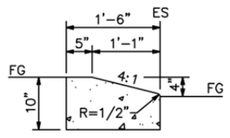
SECTION A-A



PLAN VIEW

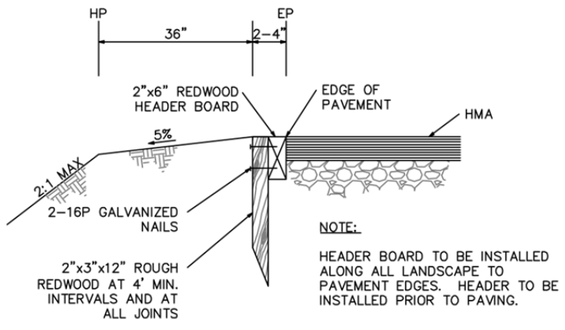
IMPROVEMENTS NEAR E MEADOW DRIVE 1

NOT TO SCALE



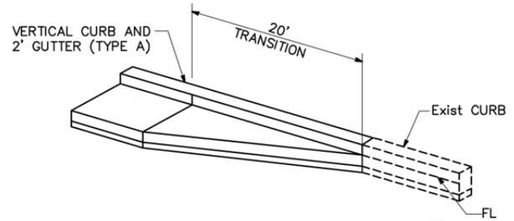
CONCRETE CURB (TYPE A Mod) 2

NOT TO SCALE



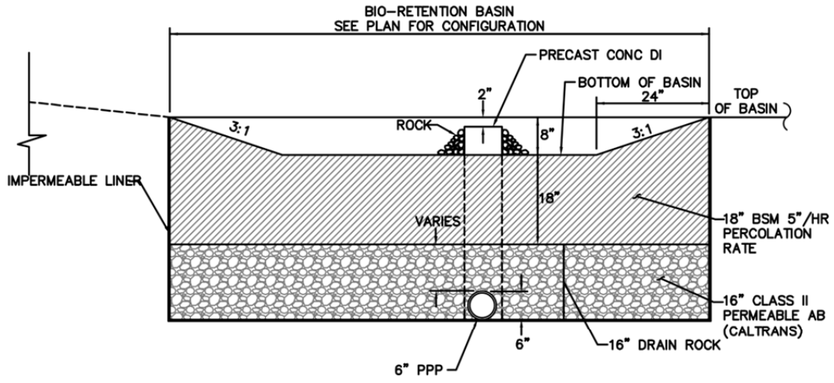
REDWOOD HEADER BOARD 3

NOT TO SCALE



CURB AND GUTTER TRANSITION 4

NOT TO SCALE



BIORETENTION BASIN 5

NOT TO SCALE

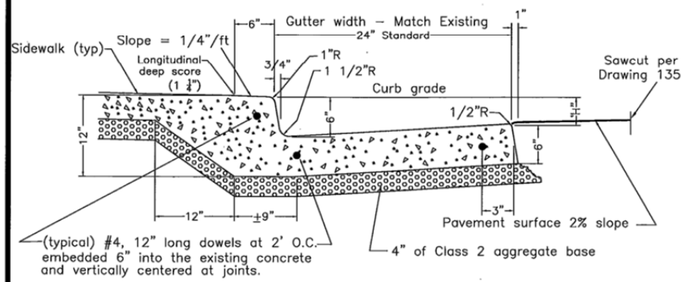
CONSTRUCTION DETAIL

SCALE AS SHOWN

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET C-1

C-5

Vertical Curb and Gutter



NOTES

1. Use 1/2" wide felt expansion material at each end of curb returns and a maximum of 60" O.C.
2. Use #4, 12" long dowels at each expansion joint and at end of pours. (3 dowels for 2' and 3' gutters, 5 dowels for 6' gutters).
3. Mark contraction joints 1 1/2" to 2" deep at 20' centers.
4. Surface finish to be light brooming.
5. "H" dim = 5" with 1' gutter;
   "H" dim = 3" with 6' gutter
   "H" dim = 4 1/2" with 2' gutter;
   "H" dim = 4" with 3' gutter;
   Existing gutter widths vary (1', 2', 3', or 6'). Match existing.
6. All new Asphalt Concrete patches shall be with 3/8" hot mix.
7. No saw cutting permitted parallel to the face of curb within the width of the gutter pan.
8. When possible, pour Type A curb and gutter monolithically with sidewalks, driveways and PCC slabs.
9. Install longitudinal deep score along entire back of curb.

Rev	By	Date
0	DWH	12/14/92
1	MN	10/25/04
2	JT	08/14/06
3	HQN	01/04/07

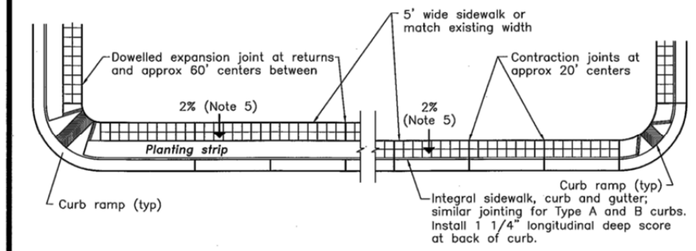
Scale: NTS

Vertical Curb and Gutter Type A Construction Detail

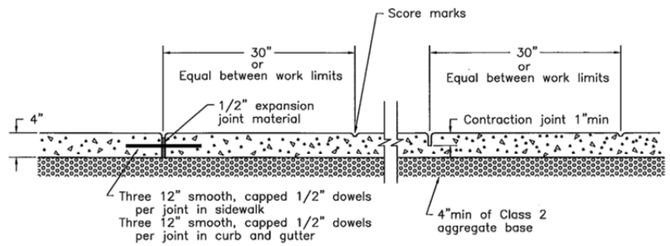
City of Palo Alto Standard

Approved by:
PE No. 35411
Date 5/14/07
Dwg No. 133

VERTICAL C&G (TYPE A) 1 -
NOT TO SCALE



TYPICAL CITY BLOCK
PLAN



Expansion joint Contraction joint

LONGITUDINAL SECTIONS

NOTES

1. Sidewalks to be marked in 30" squares.
2. Edges to have a 3/4" radius.
3. Score marks shall not be less than 3/8" deep; contraction joints shall be 1" minimum depth.
4. Contraction joints may be saw cut.
5. Sidewalks to have 2% slope to street.
6. All new sidewalk shall be doweled at 2' O.C. into existing concrete with #4, 12" long dowels and embedded 6".
7. Sawcut walk full depth and full width on score marks perpendicular to the curb. No sawcutting on longitudinal score marks.
8. Install longitudinal deep score along entire back of curb that is monolithic with the sidewalk.

Rev	By	Date
0	DWH	12/14/92
1	MN	01/29/02
2	HQN	01/04/07

Scale: NTS

Sidewalk Construction

City of Palo Alto Standard

Approved by:
PE No. 35411
Date 5/14/07
Dwg No. 141

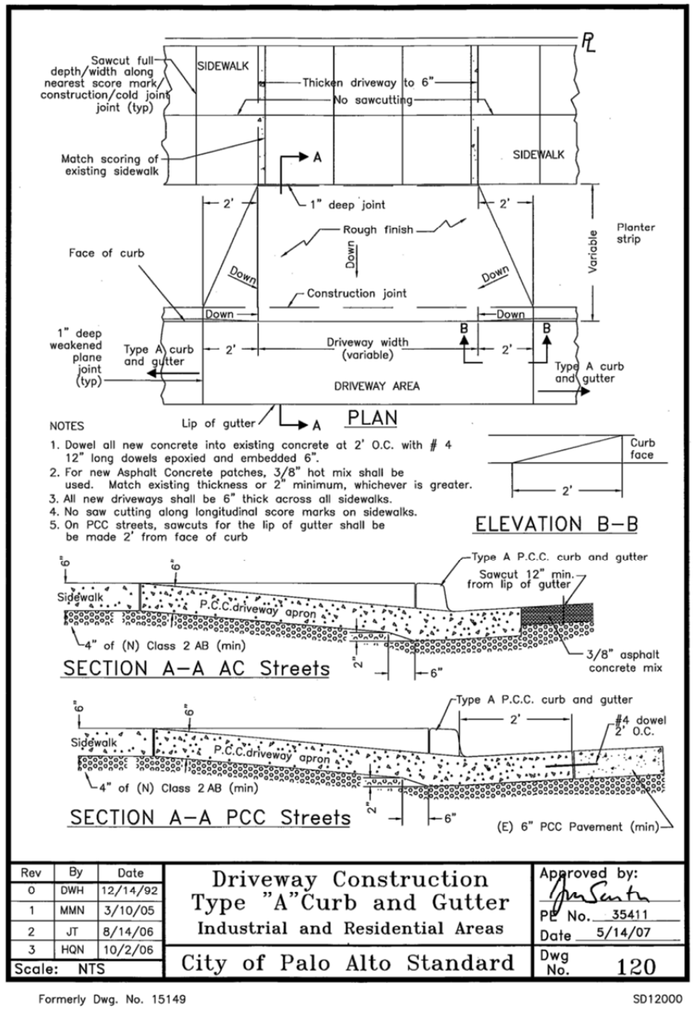
Formerly Dwg. No. 15501

SD1410

SIDEWALK DETAIL 2 -
NOT TO SCALE

CONSTRUCTION DETAIL
NO SCALE

C-6



Rev	By	Date
0	DWH	12/14/92
1	MMN	3/10/05
2	JT	8/14/06
3	HQN	10/2/06

Scale: NTS

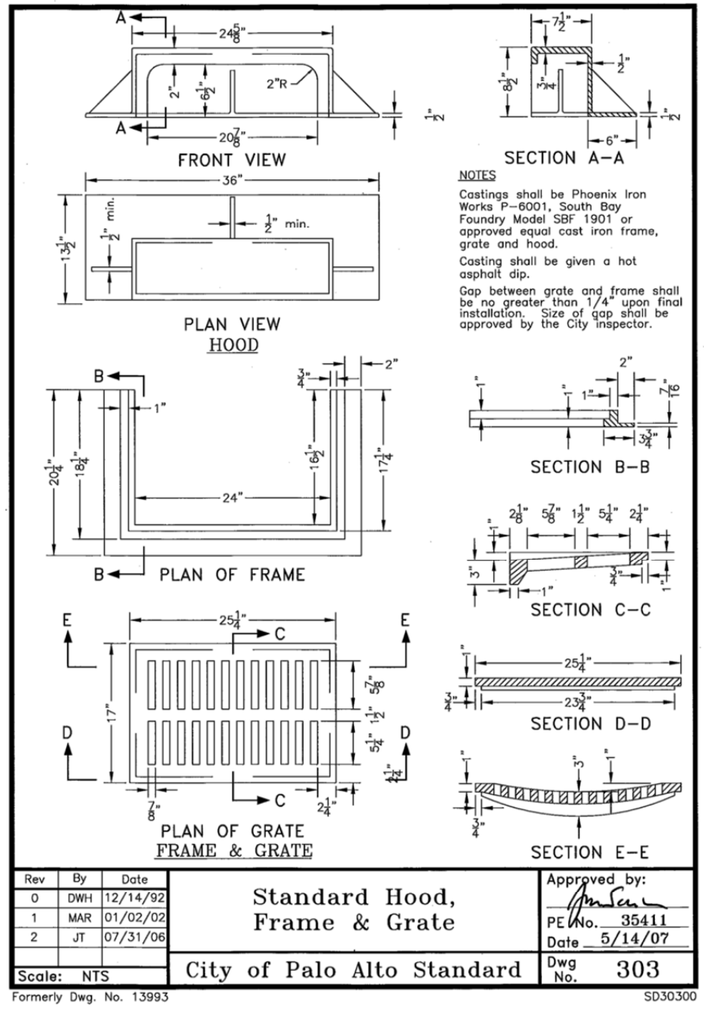
Driveway Construction
Type "A" Curb and Gutter
Industrial and Residential Areas

City of Palo Alto Standard

Approved by:
PE No. 35411
Date 5/14/07
Dwg No. 120

Formerly Dwg. No. 15149 SD12000

DRIVEWAY DETAIL 1
NOT TO SCALE



Rev	By	Date
0	DWH	12/14/92
1	MAR	01/02/02
2	JT	07/31/06

Scale: NTS

Standard Hood, Frame & Grate

City of Palo Alto Standard

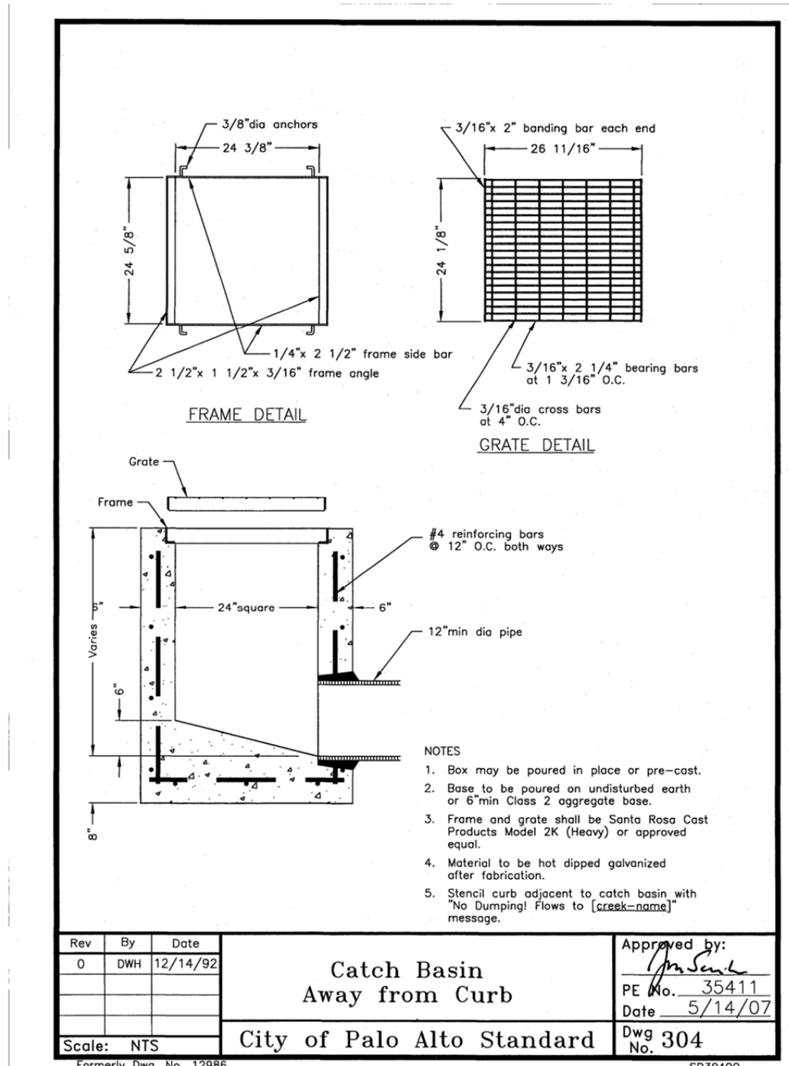
Approved by:
PE No. 35411
Date 5/14/07
Dwg No. 303

Formerly Dwg. No. 13993 SD30300

HOOD, FRAME, GRATE 2
NOT TO SCALE

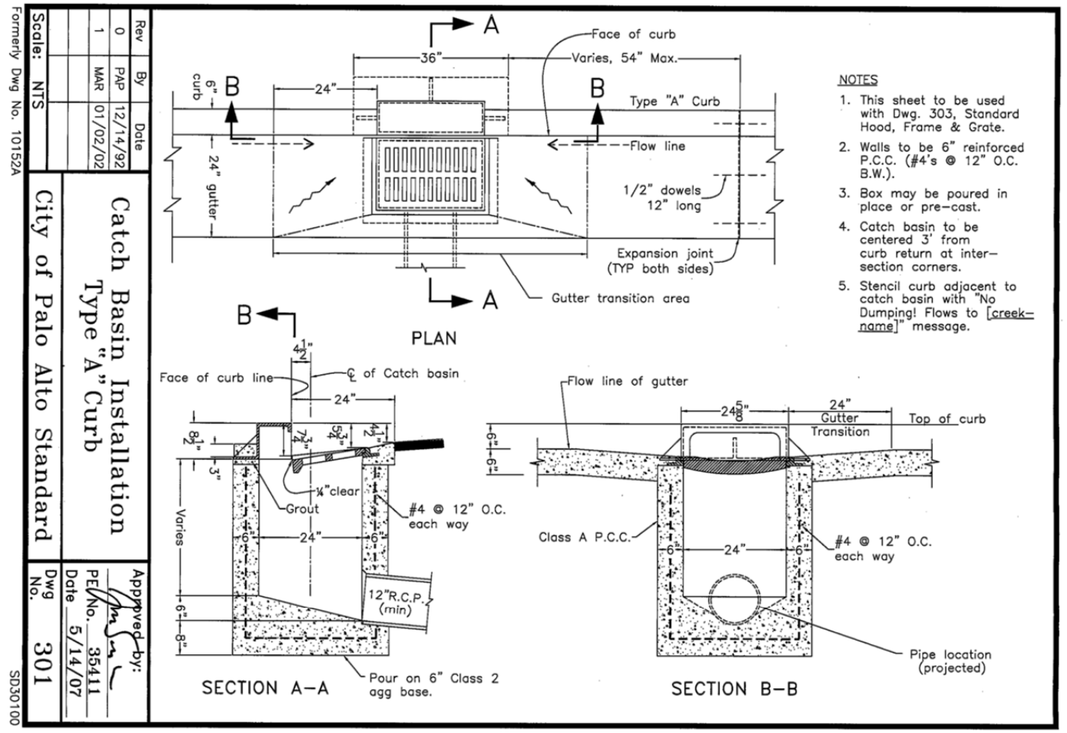
CONSTRUCTION DETAIL
NO SCALE

C-7



CATCH BASIN AWAY FROM CURB 1

NOT TO SCALE



CATCH BASIN (TYPE A) 2

NOT TO SCALE

CONSTRUCTION DETAIL

NO SCALE

C-8

See Attached

City of Palo Alto
Tree Protection - It's Part of the Plan!

Make sure your crews and subs do the job right!

Fenced enclosures around trees are essential to protect them by keeping the foliage canopy and branching structure clear from contact by equipment, materials and activities, preserving roots and soil conditions in an intact and non-compacted state, and identifying the Tree Protection Zone (TPZ) in which no soil disturbance is permitted and activities are restricted, unless otherwise approved. **An approved tree protection report must be added to this sheet when project activity occurs within the TPZ of a regulated tree.**
For detailed information on Palo Alto's regulated trees and protection during development, review the **City Tree Technical Manual** (TTM) found at www.cityofpaloalto.org/trees/.

TREE DISCLOSURE STATEMENT

CITY OF PALO ALTO
Planning Division, 250 Hamilton Avenue
Palo Alto, CA 94301
(650) 329-2441
http://www.cityofpaloalto.org

Palo Alto Municipal Code, Chapter 8.10.040, requires disclosure and protection of certain trees located on private and public property, and that they be shown on approved site plans. A completed disclosure statement must accompany all building permit applications that include exterior work, all demolition or grading permit applications, or other development activity.

PROPERTY ADDRESS: 0.3 MILES NORTH OF SAN ANTONIO ROAD

Are there Regulated[1] trees on or adjacent to the property? **YES** **NO** (If no, proceed to Section 4)

[Sections 1- 4 MUST be completed by the applicant. Please circle and/or check where applicable.]

1. Where are the trees? Check those that apply. **(Plans must be submitted showing over 4" diameter trees)**
   - ☒ On the property
   - ☐ On adjacent property overhanging the project site
   - ☐ In the City planter strip or right-of-way easement within 30' of property line (Street Trees)*

*Street trees[1] **require special protection by a fenced enclosure**, per the attached instructions. Prior to receiving any permit, you must provide an authorized Street Tree Protection Verification form by calling Public Works Operations at 493-5953 for inspection of required type I, II or III fencing (see attached Detail #605).

2. Are there any Protected[1] or Designated[1] Trees? **YES** (Check where applicable) **NO**
   - ☒ Protected Tree (s)
   - ☐ Designated Tree (s)
   - ☐ On or overhanging the property

3. Is there activity or grading within the dripline? (radius 10 times the trunk diameter) of these trees? **YES** **NO**
*If Yes, a **Tree Preservation Report** must be prepared by an ISA certified arborist and submitted for staff review (see TTM[2], Section 6.25). Attach this report to Sheet T-1,'Tree Protection, its Part of the Plan!", per Site Plan Requirements.*

4. Are the Site Plan Requirements** completed? **YES** **NO**

**Protection of Regulated trees during development require the following: (1) Plans must show the measured trunk diameter and canopy dripline; (2) Plans must denote, as a bold dashed line, a fenced enclosure area out to the dripline, per Sheet T-1 and Detail #605 - http://www.cityofpaloalto.org/trees/forms.htm (See also TTM[2], Section 2.15 for area to be fenced)

I, the undersigned, agree to the conditions of this disclosure. I understand that knowingly or negligently providing false or misleading information in response to this disclosure requirement constitutes a violation of the Palo Alto Municipal Code Section 8.10.040, which can lead to criminal and/or civil legal action.

Signature: _____ Print: _____ Date: _____
(Prop. Owner or Agent)

FOR STAFF USE:

Protective Fencing
Sections 5-6 must be **completed by staff** for the issuance of any development permit (demolition, grading or building permit).

5. Protected Trees. The specified tree fencing is in place. A written statement is attached verifying that protective fencing is correctly in place around protected and/or designated trees. **YES** **NO**
(N/A if there are no protected trees, check here ☐)

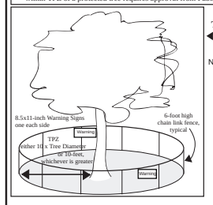
6. Street Trees. A signed Public Works Street Tree Protection Verification form is attached. **YES** **NO**
(N/A if there are no street trees, check here ☐).

[1] Regulated Trees – a) Street trees – trees on public property; b) Protected trees – Coast Live Oaks or Valley Oaks which are 11.5" in diameter or larger, Coast Redwoods which are 18" in diameter or larger, when measured 54" above natural grade; and Heritage trees are trees designated by City Council; and c) Designated Trees – commercial or non-residential property trees, which are part of an approved landscape plan.
[2] Palo Alto Tree Technical Manual (TTM) contains instructions for all requirements on this form, available at http://www.cityofpaloalto.org/planning-community/tree_technical-manual.html

S:Plan/Pladv/Arborist/Tree Protection Info/Tree Disclosure Statement — Revised 08/06

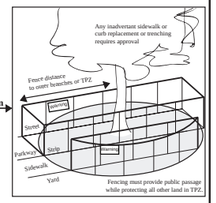
For written specifications associated with illustrations below, see Public Works Specifications Section 31
Detailed specifications are found in the Palo Alto Tree Technical Manual (TTM) (www.cityofpaloalto.org/trees/)

Tree Protection Zone (TPZ) shown in gray (radius of TPZ equals 10-times the diameter of the tree or 10-feet, whichever is greater).
- Restricted activity area -- see Tree Technical Manual Sec 2.15(E).
- Restricted trenching area -- see Tree Technical Manual Sec 2.20(C-D), any proposed trench or form work within TPZ of a protected tree requires approval from Public Works Operations. Call 650-496-5953.

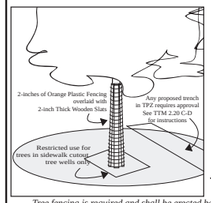


Type I Tree Protection — For all Ordinance Protected and Designated trees, as detailed in the site specific tree preservation report (TPR) prepared by the applicant's project arborist as diagramed on the plans.

Note: Ordinance Protected & Designated Trees. Issuance of a permit requires applicant's project arborist written verification Type I is installed correctly according to the plans and Tree Preservation Report



Type II Tree Protection



Note: Street Trees. Issuance of a permit requires Public Works Operations inspection and signed approval on the Street Tree Verification (STV) form provided.

Type III Tree Protection
(to be used only with approval of Public Works Operations)

Tree fencing is required and shall be erected before demolition, grading or construction begins.

Rev	By	Date		
0	DWH	12/14/92	Tree Protection During Construction	Approved by: Dave Dockter
01	D.D.	08/04/04		PE No. _____
02	D.D.	08/10/06		Date 2006
			City of Palo Alto Standard	Dwg No. 605
Scale: NTS				

APPENDIX J

PALO ALTO
STREET TREE PROTECTION INSTRUCTIONS
--SECTION 31--

31-1 General
- **a. Tree protection has three primary functions.** 1) to keep the foliage canopy and branching structure clear from contact by equipment, materials and activities; 2) to preserve roots and soil conditions in an intact and non-compacted state and 3) to identify the Tree Protection Zone (TPZ) in which no soil disturbance is permitted and activities are restricted, unless otherwise approved.
- **b. The Tree Protection Zone (TPZ)** is a restricted area around the base of the tree with a radius of ten-times the diameter of the tree's trunk or ten feet; whichever is greater, enclosed by fencing.

31-2 Reference Documents
- **a. Detail 605** – Illustration of situations described below.
- **b. Tree Technical Manual (TTM) Forms** (http://www.cityofpaloalto.org/trees/)
  1. Trenching Restriction Zones (TTM, Section 2.20(C))
  2. Arborist Reporting Protocol (TTM, Section 6.30)
  3. Site Plan Requirements (TTM, Section 6.35)
  4. Tree Disclosure Statement (TTM, Appendix J)
- **c. Street Tree Verification (STV) Form** (http://www.cityofpaloalto.org/trees/forms)

31-3 Execution
- **a. Type I Tree Protection:** The fence shall enclose the entire TPZ of the tree(s) to be protected throughout the life of the construction project. In some parking areas, if fencing is located on paving or concrete that will not be demolished, then the posts may be supported by an appropriate grade level concrete base, if approved by Public Works Operations.
- **b. Type II Tree Protection:** For trees situated within a planting strip, only the planting strip and yard side of the TPZ shall be enclosed with the required chain link protective fencing in order to keep the sidewalk and street open for public use.
- **c. Type III Tree Protection:** To be used only with approval of Public Works Operations. Trees situated in a tree well or sidewalk planter pit, shall be wrapped with 2-inches of orange plastic fencing from the ground to the first branch and overlaid with 2-inch thick wooden slats bound securely (slats shall not be allowed to dig into the bark). During installation of the plastic fencing, caution shall be used to avoid damaging any branches. Major limbs may also require plastic fencing as directed by the City Arborist.
- **d. Size, type and area to be fenced.** All trees to be preserved shall be protected with six (6') foot high chain link fences. Fences are to be mounted on two-inch diameter galvanized iron posts, driven into the ground to a depth of at least 2-feet at no more than 10-foot spacing. Fencing shall extend to the outer branching, unless specifically approved on the STV Form.
- **e. "Warning" signs**. A warning sign shall be weather proof and prominently displayed on each fence at 20-foot intervals. The sign shall be minimum 8.5-inches x 11-inches and clearly state in half inch tall letters: "WARNING - Tree Protection Zone - This fence shall not be removed and is subject to a fine according to PAMC Section 8.10.116."
- **f. Duration**. Tree fencing shall be erected before demolition; grading or construction begins and remain in place until final inspection of the project, except for work specifically allowed in the TPZ. Work or soil disturbance in the TPZ requires approval by the project arborist or City Arborist (in the case of work around Street Trees). Excavations within the public right of way require a Street Work Permit from Public Works.
- **g. During construction**
  1. All neighbors' trees that overhang the project site shall be protected from impact of any kind.
  2. The applicant shall be responsible for the repair or replacement plus penalty of any publicly owned trees that are damaged during the course of construction, pursuant to Section 8.04.070 of the Palo Alto Municipal Code.
  3. The following tree preservation measures apply to all trees to be retained:
     - **a.** No storage of material, topsoil, vehicles or equipment shall be permitted within the TPZ.
     - **b.** The ground under and around the tree canopy area shall not be altered.
     - **c.** Trees to be retained shall be irrigated, aerated and maintained as necessary to ensure survival.

END OF SECTION

City of Palo Alto 2004 Standard Drawings and Specifications
Street Tree Verification of Protection, PWE, Section 31 — Revised 08/06

Table 2-2 Palo Alto Tree Technical Manual

CONTRACTOR & ARBORIST INSPECTION SCHEDULE

Reference: the Palo Alto Tree Technical Manual is available at www.cityofpaloalto.org/environment/

ALL CHECKED ITEMS APPLY TO THIS PROJECT:

1. ☑ **Inspection of Protective Tree Fencing**. For Public Trees, the Street Tree Verification Form shall be signed by the City Arborist. For Protected Trees, the project site arborist shall provide an initial Monthly Tree Activity Report form with a photograph verifying that he has conducted a field inspection of the trees and that the correct type of protective fencing is in place around the designated tree protection zone (TPZ) prior to issuance of a demolition, grading, or building permit. (See TTM, Verification of Tree Protection, Section 1.39).
2. ☑ **Pre-Construction Meeting**. Prior to commencement of construction, the applicant or contractor shall conduct a pre-construction meeting to discuss tree protection with the job site superintendent, grading operators, project site arborist, City Arborist, and, if a city maintained irrigation system is involved, the Parks Manager (Contact 650-496-6962).
3. ☑ **Inspection of Rough Grading or Trenching**. Contractor shall ensure the project site arborist performs an inspection during the course of rough grading or trenching adjacent to or within the TPZ to ensure trees will not be injured by compaction, cut or fill, drainage and trenching, and if required, inspect aeration systems, tree wells, drains and special paving. The contractor shall provide the project arborist at least 24 hours advance notice of such activity.
4. ☑ **Monthly Tree Activity Report Inspections**. The project site arborist shall perform a minimum monthly activity inspection to monitor and advise on conditions for tree health and retention or, immediately if there are *any revisions* to the approved plans or protection measures. The Tree Technical Manual Monthly Tree Activity Report format shall be used and sent to the Planning Dept. landscape review staff no later than 14 days after issuance of building permit date. Fax to (650) 329-2154. (See TTM, Monthly Tree Activity Inspection Report, Addendum 11 & section 1.17).
5. ☑ **Special activity within the Tree Protection Zone**. Work in the TPZ area (see also #7 below) requires the direct onsite supervision of the project arborist (see TTM, Trenching, Excavation & Equipment, Section 2.20 C).
6. ☐ **Landscape Architect Inspection**. For discretionary development projects, prior to temporary or final occupancy the applicant or contractor shall arrange for the Landscape Architect to perform an on site inspection of all plant stock, quality of the materials and planting (see TTM, Planting Quality, Section 5.20.1 A) and that the irrigation is functioning consistent with the approved construction plans. The Planning Dept. landscape review staff shall be in receipt of written verification of Landscape Architect approval prior to scheduling the final inspection, unless otherwise approved.
7. ☐ **List Other** (please describe as called out in the site Tree Preservation Report, Sheet T-1, T-2, etc.)
   - *
   - *

City of Palo Alto
Tree Department
Public Works Operations
PO Box 10250 Palo Alto, CA 94303
650/496-5953 FAX: 650/852-9289
treeprotection@CityofPaloAlto.org

Verification of Street Tree Protection

Applicant Instructions: Complete upper portion of this form. Mail or FAX this form along with signed Tree Disclosure Statement to Public Works Dept. Public Works Tree Staff will inspect and notify applicant.

APPLICATION DATE:	
ADDRESS/LOCATION OF STREET TREES TO BE PROTECTED:	
APPLICANT'S NAME:	
APPLICANT'S ADDRESS:	
APPLICANT'S TELEPHONE & FAX NUMBERS:	

This section to be filled out by City Tree Staff

1. The Street Trees at the above address(es) are adequately protected. The type of protection used is:	YES ☐ NO* ☐ * If NO, go to #2 below
Inspected by:	
Date of Inspection:	
2. The Street Trees at the above address are **NOT** adequately protected. The following modifications are required: Indicate how the required modifications were communicated to the applicant.	_____ _____ _____ _____ _____ _____

Subsequent Inspection

Street trees at above address were found to be adequately protected:	YES ☐ NO* ☐ * If NO, indicate in "Notes" below the disposition of case.
Inpsected by:	
Date of Inspection:	
Notes: List City street trees by species, site, condition and type of tree protection installed. Also note if pictures were taken. Use back of sheet if necessary.	

Return approved sheet to Applicant for demolition or building permit issuance.
S:PWD/OPS/Tree/DS/SLTreeProtect — 5/1706

City of Palo Alto Tree Technical Manual — ADDENDUM 11

Arborist Firm Data Here — email: ISA Certified Arborist #WE-000 Contract Call #:

Monthly Tree Activity Report- *Construction Site*

Inspection Date: _____ **Inspection #**_____	**Site address:** _____ Palo Alto, CA	**Contractor- Main Site Contact Information**	#1: Job site superintendent Company: Email: Job site: Office: Cell: Mail:
		Also present:	• _____ • _____
Distribution:	1. City of Palo Alto 2. Others	**Attn: Dave Dockter**	Dave.dockter@cityofpaloalto.org 650-329-2440

Provide the requested minimum information with each report, customize as necessary. To be completed by project site arborist. Send monthly to city arborist at above address until project completion. Use additional sheets as needed.

1. Assignment Activity (Demolition/grading/sewer/trenching/foundation/list relevant visits)
   a. Pre-construction meeting requirement with sub-contractors
   b. Inspect to verify that tree protection measures are in place
   c. Determine if field adjustments, watering or plan revisions may be needed
2. Field Observations (general site-wide and list by individual tree number)
   a. Tree Protection Fences (TPF) are …
   b. Trenching has/will occur …
3. Action Items (list site-wide, by tree number and date to be satisfied) and Date Due
   a. Tree Protection Fence (TPF) needs adjusting (tree # x, x, x)
   b. Root zone buffer material (wood chips) can be installed next
   c. Schedule sewer trench, foundation dig with …
4. Photographs (use often)
5. Tree Location Map (mandatory 8.5 x 11 sheet)
6. Recommendations, notes or monitor items for project/staff/schedule
   •
7. Past visits (list carry-over items satisfied/still outstanding)
   •

Respectfully submitted,

Project site arborist
Consultant contact information (Include email, cell#, and mailing)
Cc:

Enter Date — CPA Monthly Tree Activity Report: Type site address here — Page #1 of 1

---WARNING---
Tree Protection Zone

This fencing shall not be removed without City Arborist approval (650-496-5953)

Removal without permission is subject to a $500 fine per day*

Palo Alto Municipal Code Section 8.10.110

City of Palo Alto Tree Protection Instructions are located at http://www.city.palo-alto.ca.us/trees/technical-manual.html

SPECIAL INSPECTIONS **PLANNING DEPARTMENT**

TREE PROTECTION INSPECTIONS MANDATORY

PAMC 8.10 PROTECTED TREES. CONTRACTOR SHALL ENSURE PROJECT SITE ARBORIST IS PERFORMING REQUIRED TREE INSPECTION AND SITE MONITORING. PROVIDE WRITTEN MONTHLY TREE ACTIVITY REPORTS TO THE PLANNING DEPARTMENT LANDSCAPE REVIEW STAFF BEGINNING 14 DAYS AFTER BUILDING PERMIT ISSUANCE.

BUILDING PERMIT DATE: _____

DATE OF 1ST TREE ACTIVITY REPORT: _____

CITY STAFF: _____

REPORTING DETAILS OF THE MONTHLY TREE ACTIVITY REPORT SHALL CONFORM TO SHEET T-1 FORMAT, VERIFY THAT ALL TREE PROTECTION MEASURES ARE IMPLIMENTED AND WILL INCLUDE ALL CONTRACTOR ACTIVITY, SCHEDULED OR UNSCHEDULED, WITHIN A TREE PROTECTION ROOT ZONE. NON-COMPLIANCE IS SUBJECT TO VIOLATION OF PAMC 8.10.080. REFERENCE: PALO ALTO TREE TECHNICAL MANUAL, SECTION 2.00 AND ADDENDUM 11.

Apply Tree Protection Report on sheet(s) T-2

Use addtional "T" sheets as needed

Project Data

City of Palo Alto
250 Hamilton Avenue, Palo Alto, CA 94301

Search: Advanced — Browse By Topic

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Home
City-owned Trees
Privately-owned Trees
About the Tree Ordinance
Title 8.10
Heritage Trees
Forms
Tree Technical Manual
FAQs
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Resources

Tree Technical Manual

To purchase the Tree Technical Manual

June, 2001 First Edition

View by section:

- Table of Contents (PDF, 87KB)
- Intent and Purpose (PDF, 1.05MB)
- Introduction - Use of Manual (PDF, 1.05MB)
- Section 1.0 - Definitions (PDF, 96KB)
- Section 2.0 - Protection of Trees During Construction (PDF, 259KB)
- Section 3.0 - Removal, Replacement & Planting of Trees (PDF, 117KB)
- Section 4.0 - Hazardous Trees (PDF, 105KB)
- Section 5.0 - Tree Maintenance Guidelines (PDF, 110KB)
- Section 6.0 - Tree Reports (PDF, 84KB)

View ALL sections:

- Tree Technical Manual - Full (PDF, 1.84MB)

APPENDICES
A: Palo Alto Municipal Code Chapter 8.10, Tree Preservation & Management Regulations
B: Tree City - USA
C: ISA Hazard Evaluation Form
D: List of Inherent Failure Patterns for Selected Species (Reference source)
E: ISA Tree Pruning Guidelines (PDF, 1.85MB)
F: Tree Care Safety Standards, ANSI Z133.1-1994 (Reference source)
G: Pruning Performance Standards, ANSI A300-1995 (Reference source) H: Tree Planting Details, Diagram 504 & 505
I: Tree Disclosure Statement
J: Palo Alto Standard Tree Protection Instructions

T-1

All other tree-related reports shall be added to the space provided on this sheet (adding as needed)
Include this sheet(s) on Project Sheet Index or Legend Page.
A copy of T-1 can be downloaded at
http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=6460

Special Tree Protection Instruction Sheet
City of Palo Alto

T-1

City of Palo Alto

Tree Protection - It’s Part of the Plan!

Make sure your crews and subs do the job right!

Fenced enclosures around trees are essential to protect them by keeping the foliage canopy and branching structure clear from contact by equipment, materials and activities, preserving roots and soil conditions in an intact and non-compacted state, and identifying the Tree Protection Zone (TPZ) in which no soil disturbance is permitted and activities are restricted, unless otherwise approved. **An appoved tree protection report must be added to this sheet when project activity occurs within the TPZ of a regulated tree.**
For detailed information on Palo Alto's regulated trees and protection during development, review the **City Tree Technical Manual** (TTM) found at www.cityofpaloalto.org/trees/.

Apply Tree Protection Report on sheet(s) T-2
Use addtional “T” sheets as needed

Project Data

All other tree-related reports shall be added to the space provided on this sheet (adding as needed)
Include this sheet(s) on Project Sheet Index or Legend Page.
A copy of T-1 can be downloaded at
http://www.cityofpaloalto.org/civica/filebank/blobdload.asp?BlobID=6460

Special Tree Protection Instruction Sheet
City of Palo Alto

T-2