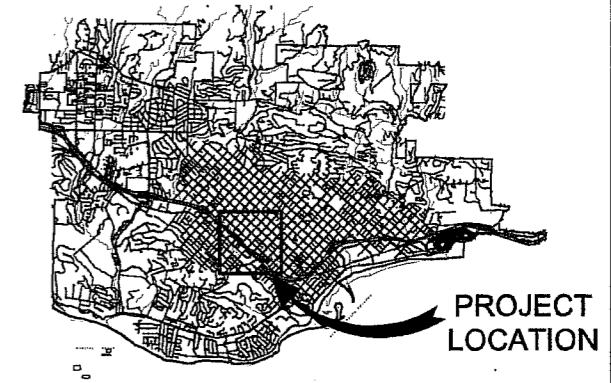
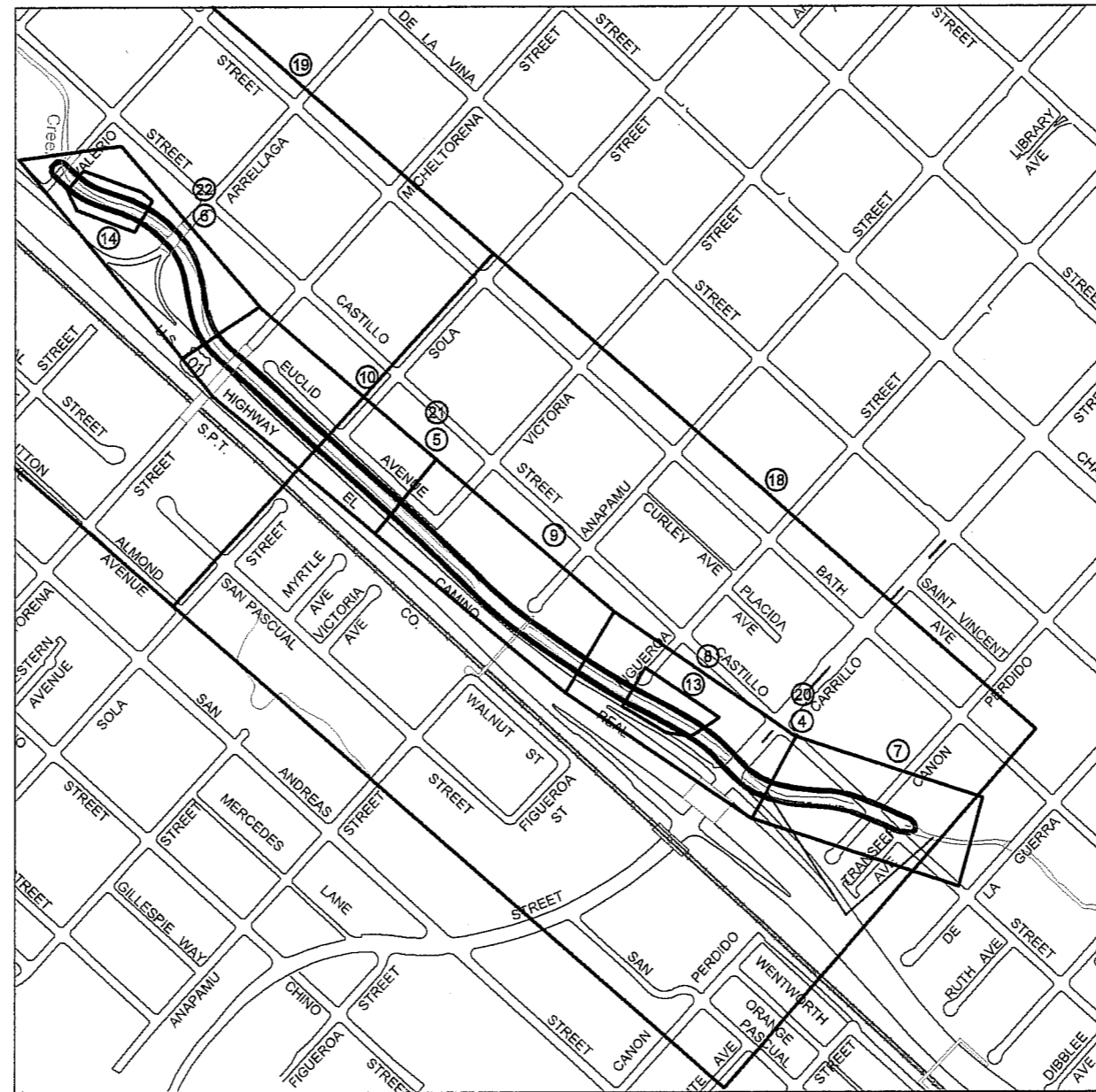
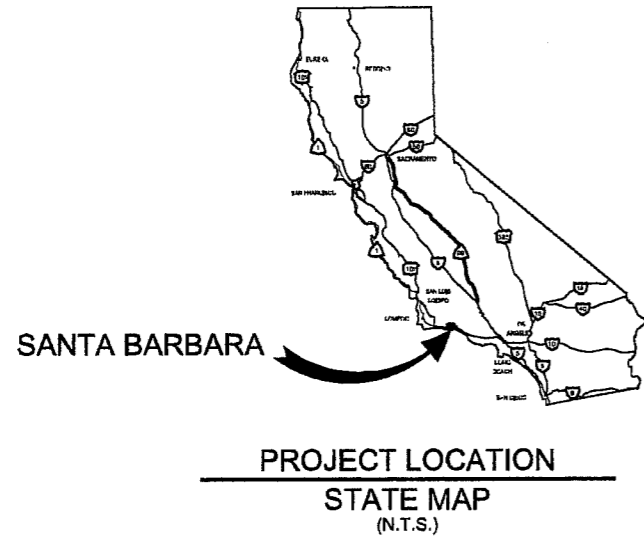


MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)

PROJECT NO. 9024

BID NO. 3620

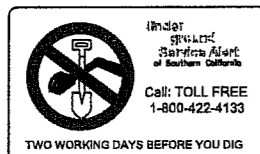


SHEET INDEX

SHEET NO.	TITLE
1	TITLE SHEET & VICINITY MAP
2	GENERAL INFORMATION, LEGEND AND ABBREVIATIONS
3	SURVEY CONTROL & CONSTRUCTION NOTES
4	HORIZONTAL CONTROL STA. 10+00 TO 26+00
5	HORIZONTAL CONTROL STA. 26+00 TO 46+00
6	HORIZONTAL CONTROL STA. 46+00 TO 55+15.64
7	PLAN AND PROFILE STA. 10+00 TO 17+00
8	PLAN AND PROFILE STA. 17+00 TO 26+00
9	PLAN AND PROFILE STA. 26+00 TO 36+00
10	PLAN AND PROFILE STA. 36+00 TO 46+00
11	PLAN AND PROFILE STA. 46+00 TO 55+15.64
12	TYPICAL SECTIONS & FISH POCKET / WEIR LAYOUT
13	ACCESS RAMP GRADING
14	TEMPORARY ACCESS RAMP GRADING

SHEET INDEX (CONT.)

SHEET NO.	TITLE
15	TRANSITION STRUCTURE DETAILS
16	ROCK RIFFLE SECTIONS AND DETAILS
17	STRUCTURAL DETAILS
18	STRUCTURAL DETAILS ACCESS RAMPS
19	TRAFFIC CONTROL PLAN STA. 10+00 TO 40+00
20	TRAFFIC CONTROL PLAN STA. 40+00 TO 55+15.64
21	STAGING AREA PLAN STA. 10+00 TO 26+00
22	STAGING AREA PLAN STA. 26+00 TO 46+00
23	STAGING AREA PLAN STA. 46+00 TO 55+15.64



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ORIGINAL SIGNED DATE _____

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ORIGINAL SIGNED DATE _____



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HDR Engineering, Inc.
3225 El Camino Real, Suite 201
Irvine, California 92614

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DATE: _____ CITY ENGINEER ORIGINAL SIGNED DATE: _____

NO. _____ REVISIONS

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
TITLE SHEET & VICINITY MAP
SITE MAP & STATE MAP

2011-000###
PBW. NO. _____
BID NO. _____ SHT. DES. _____
C-1-4639
DWG. NO. _____
SHT. 1 OF 23

SYMBOL LEGEND

Control Point		Existing Storm Drain Manhole	
Existing Cable TV Box		Existing Structure Bench	
Existing Cable TV Vault		Existing Structure Bollard/Post	
Existing Catch Basin		Existing Telephone Box	
Existing Electric Box		Existing Telephone Manhole	
Existing Electric Guy Wire		Existing Telephone Pole	
Existing Electric Manhole		Existing Telephone Vault	
Existing Electric Meter		Existing Vegetation Bush/Hedge	
Existing Electroliner		Existing Vegetation Cactus	
Existing Fire Hydrant		Existing Vegetation Shrub	
Existing Gas Meter		Existing Vegetation Tree	
Existing Gas Valve		Existing Vegetation Tree Eucalyptus	
Existing Irrigation Sprinkler		Existing Vegetation Tree Lemon	
Existing Luminary		Existing Vegetation Tree Palm	
Existing Mailbox		Existing Vegetation Tree Pine	
Existing Monument		Existing Vegetation Tree Stump	
Existing Power & Telephone Pole		Existing Vegetation Tree Sycamore	
Existing Rock		Existing Vegetation Tree Willow	
Existing Sewer Cleanout		Existing Vegetation Tree Yucca	
Existing Sewer Manhole		Existing Water Meter	
Existing Signage		Existing Water Spigot	
Existing Storm Drain Grate		Existing Water Valve	
		Existing Water Well	

LINETYPE LEGEND

Boundary Easement Line	
Boundary Right of Way Line	
Boundary Property Line	
Centerline	
Contourline-Major	
Contourline-Minor	
Existing AC Edge of Pavement	
Existing Flowline	
Existing Building	
Existing Drainage	
Existing Facilities	
Existing Fence (chainlink)	
Existing Guardrail	
Existing Structure Wall	
Existing Utility Cable TV	
Existing Utility Gas	
Existing Utility Sewer	
Existing Utility Telephone	
Existing Utility Water	
Existing Sidewalk	
Existing Storm Drain	
Existing Wood Rail Fence	
Existing Vegetation Brush	
Existing Structure Concrete	
Proposed Facilities	
Proposed Storm Drain	
Retaining Wall Gutter	
Temporary Construction Fence or Existing Barbed Wire Fence	

ABBREVIATIONS

AB	Aggregate base	IN	Inch
ACP	Asbestos cement pipe	N	North or northing
APN	Assessors parcel number	LF	Linear Feet
APPROX	Approximate	NTS	Not to scale
APWA	American Public Works Assoc.	OC	On center
BC	Beginning of Curve	OD	Outside diameter
BLDG	Building	PCC	Point of Compound Curve, Portland cement concrete
BOT	Bottom	PRC	Point of Reverse Curve
CALTRANS	State of California Department of Transportation	R1	Record per book nn, page nn of maps
CASQA	California Stormwater Quality Association	RSP	Rock Slope Protection
CFS	Cubic feet per second	S	Sewer or slope or south
CITY	City of Santa Barbara	SD	Storm Drain
CJP	Complete Joint Penetration	SDMH	Storm drain manhole
C/L or CL	Center Line	SPPWC	Standard Plans for Public Works Construction
CMP	Corrugated metal pipe	SS	Sanitary Sewer
CONC	Concrete	STA	Station
CONST	Construct	SW	Sidewalk
CONSTR	Construction	SWR	Sewer
COUNTY	County of Santa Barbara	TCE	Temporary construction easement
DIA	Diameter	TBM	Temporary bench mark
E	East or easting	TOF	Top of Footing
EA	Each	TOW	Top of wall
EC	End of Curve	TRANS	Transition
EG	Existing ground	TP	Top of pavement
EL	Elevation	TYP	Typical
EP	Edge of pavement	W	West or Water Line
ELEC	Electric	WL	Water line
EX	Existing	WF	Wall face
FL	Flow LINE	WS	Water Service Line
FOC	Fiber Optic Cable		
FT	Feet		
FP	Fish Passage		
FS	Finished Surface		
GAS	Gas line		
GB	Grade break		
HDPE	High density polyethylene		

STANDARD DETAILS AND PLANS LIST

STATE DEPARTMENT OF TRANSPORTATION

The Standard Plan sheets applicable to this contract include, but are not limited to those indicated below. The Revised Standard Plans (RSP) and New Standard Plans (NSP) which apply to this contract are included as individual sheets and attached hereto.

Standard No.	Description
A10A	Abbreviations
A10B	Symbols
A85	Chain Link Fence

CALIFORNIA STORMWATER QUALITY ASSOCIATION (CASQA)

STORMWATER BEST MANAGEMENT PRACTICES (BMP) HANDBOOK

HDR
HDR Engineering, Inc.
2225 El Camino Real, Suite 200
Folsom, California 95630

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MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)

GENERAL INFORMATION

LEGEND & ABBREVIATIONS

2011-000###

PBW No. _____

BID No. _____ SHT. DES. _____

C-1-4639

DWG. NO.

PROJECT ENGINEER _____ DATE _____

PROPERTY LINES ARE APPROXIMATE



CONTROL

1. MAPPING

TOPOGRAPHIC MAPPING WAS COMPILED BY PENFIELD AND SMITH AT A SCALE OF 1"=20', WITH A ONE FOOT CONTOUR INTERVAL. USING DATA COLLECTED IN A FIELD SURVEY USING CONVENTIONAL METHODS AND PROCEDURES IN OCTOBER AND NOVEMBER OF 2009, AT THE REQUEST OF THE CITY OF SANTA BARBARA.

2. HORIZONTAL DATUM

THE COORDINATE BASIS FOR THIS MAP IS THE CALIFORNIA COORDINATE SYSTEM, NAD 83, ZONE 5 GRID (EPOCH 1989.35), AND IS DERIVED FROM GPS AND CONVENTIONAL TIES TO THE SANTA BARBARA CONTROL NETWORK, SHOWN ON THE RECORD OF SURVEY FILED IN THE OFFICE OF THE SANTA BARBARA COUNTY RECORDER IN BOOK 147, PAGES 70 THROUGH 74, INCLUSIVE, OF RECORD OF SURVEYS.

THE SITE COMBINATION FACTOR IS 0.99994081 AND THE SITE MAPPING ANGLE IS -0°58'37.09", BOTH CALCULATED AT CONTROL POINT 2, SHOWN HEREON.

SEE CONTROL POINT LISTING

3. ELEVATIONS

ELEVATIONS SHOWN HEREON ARE EXPRESSED IN U.S. SURVEY FEET AND ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), UTILIZING SBCN STATION 0012 AS THE PROJECT BENCHMARK. ELEVATION = 157.26 U.S. SURVEY FEET

SEE CONTROL POINT LISTING

4. UTILITIES

SURFACE UTILITY FEATURES SHOWN HEREON HAVE BEEN LOCATED IN A FIELD SURVEY PERFORMED BY PENFIELD AND SMITH BASED ON VISIBILITY ON THE DATE OF SURVEY. ADDITIONALLY, WATER LINES, STORM DRAINS, SEWER LINES AND ASSOCIATED FEATURES HAVE BEEN COMPILED FROM SANTA BARBARA CITY ATLASES, AND ASSEMBLED IN ANOTHER DRAWING TO ACCOMPANY THIS BASEMAP. MISCELLANEOUS OTHER UTILITIES HAVE ADDED TO SAID DRAWING, BASED UPON INFORMATION RECEIVED FROM PRIVATE UTILITY COMPANIES.

THE EXISTING UTILITIES SHOWN HEREON HAVE BEEN COMPILED FROM ATLAS MAPS OBTAINED FROM THE FOLLOWING PUBLIC AND PRIVATE ENTITIES:

- ELECTRIC - SOUTHERN CALIFORNIA EDISON COMPANY
- GAS - SOUTHERN CALIFORNIA GAS COMPANY - COMPILED FROM SO CAL GAS, PANELS SBA 1505-1, 1505-3, 1505-4, 1506-3, 1606-1, 1606-2 AND 1606-4
- CATV - COX COMMUNICATIONS - NO FACILITIES
- TELEPHONE COMMUNICATIONS - VERIZON
- FIBER OPTIC CABLE - AT&T- COMPILED FROM AT&T DRAWING WR 34287-301
- FIBER OPTIC CABLE - U.S. SPRINT- WITHIN UNION PACIFIC R.O.W.
- FIBER OPTIC CABLE - MCI NETWORK SERVICES INC.
- WATER - CITY OF SANTA BARBARA- COMPILED FROM CITY ATLAS
- SEWER - CITY OF SANTA BARBARA- COMPILED FROM CITY ATLAS
- STORM DRAIN - CITY OF SANTA BARBARA- COMPILED FROM CITY ATLAS

WATER, SEWER AND STORM DRAIN OBTAIN FROM CITY OF SANTA BARBARA ATLAS. HORIZONTAL DATUM: CCS ZONE V, NAD 1983, VERTICAL DATUM: NAVD 1988

COMPILED UTILITIES HAVE BEEN GEOREFERENCED TO VISIBLE SURFACE UTILITIES SHOWN ON THE AERIAL TOPO MAP RECEIVED ON SEPTEMBER 19, 2003 FROM STEWART TECHNOLOGIES.

PENFIELD AND SMITH DOES NOT ACCEPT ANY RESPONSIBILITY FOR INDICATED SIZES, LOCATIONS, ACCURACY OR COMPLETENESS OF INFORMATION OBTAINED FROM SAID ATLAS MAPS.

5. ADDITIONAL SURVEY

ADDITIONAL SURVEY OF MISSION CREEK WAS PERFORMED BY CITY OF SANTA BARBARA FOR THIS PROJECT. THIS SURVEY INCLUDED THE UNLINED SECTIONS OF THE CREEK LOCATED BETWEEN PHASE 1 AND PHASE 2 OF THIS PROJECT. THIS SURVEY WAS USED AS A BASIS FOR ANY PROPOSED GRADING SHOWN OUTSIDE THE TOPOGRAPHY DEVELOPED BY PENFIELD AND SMITH WHICH WAS INCLUDED IN THESE PLANS. THE FOLLOWING IS BASIS OF THAT ADDITIONAL SURVEY:

BENCHMARK:
CITY BLOCK MONUMENT IN THE NORTHWEST CORNER SIDEWALK OF CASTILLO STREET AND VALERIO STREET

LEAD AND TAG, CITY ENGR
ELEVATION: 100.53' NAVD 88
BASIS OF BEARINGS: R/S BOOK 147, PAGES 70 - 74

CONTROL POINT LISTING

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1080485.2490	6044709.9770	74.37	60d NAIL
2	1080114.2350	6044557.5580	70.22	MAG NAIL/FEATHER
3	1080085.6426	6044431.267C	79.71	1/2IN IP
4	1079955.0830	6046303.5400	62.23	MAG NAIL/FEATHER
5	1079188.7250	6046829.8950	62.74	MAG NAIL/FEATHER
6	1079084.3530	6046939.1690	49.82	60d NAIL
7	1078923.7050	6048115.2050	47.23	60d NAIL
8	1078650.9250	6046503.823C	41.18	60d NAIL
9	1078467.4550	6048846.4840	35.86	60d NAIL
10	1078287.8340	6047085.7380	31.65	60d NAIL
11	1078250.6950	6047339.0250	23.90	60d NAIL
12	1078193.6350	6047713.8890	40.29	60d NAIL
13	1078298.1720	6047853.8910	35.19	PK&TIN
14	1078155.8330	6047816.1770	26.50	60d NAIL
17	1079191.3900	6046873.1490	62.13	
18	1079241.4930	6046492.0150	70.44	
19	1082058.5910	6041896.2570	114.05	MAG NAIL/FEATHER
20	1082017.7680	6042141.5480	111.41	
21	1081944.5910	6042571.2040	105.97	MAG NAIL
22	1080098.6880	6044837.4750	114.58	SCRIBED +
23	1080222.1800	6045097.0300	65.67	1/2IN IP
24	10822CR.7900	6041875.3740	125.33	PK&TIN
25	1082318.9350	6041742.3830	128.4670	PK&TIN
26	1078239.2390	6047378.8780	48.22	
27	1081855.8231	6043026.4871	109.31	HUB/TACK
28	1081725.6468	6043195.2557	97.04	C-NAIL
29	1078234.2860	6047408.2540	47.67	

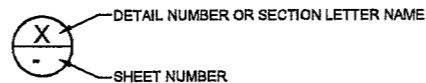
CONSTRUCTION NOTES

- CONST. OUTLET GRADING AND CUT-OFF WALL STRUCTURE PER DETAIL 2 ON SHEET 15
- CONST. 4' WIDE RECTAGULAR FISH PASSAGE CHANNEL PER STRUCTURAL SECTION A ON SHEET 17
- CONST. 10' LONG FISH POCKETS 40' APART (TYPICAL) PER DETAIL 1 ON SHEET 12 AND STRUCTURAL SECTION B ON SHEET 17
- CONST. SILL STRUCTURES 40' APART (TYPICAL) PER DETAIL 1 ON SHEET 12 AND DETAIL 1 ON SHEET 17
- CONST. INLET TRANSITION STRUCTURE PER DETAIL 1 ON SHEET 15
- CONST. 12' WIDE ACCESS RAMP WITH 0.75' PCC PAVING OVER 0.60' THICK AB PER DETAIL A ON SHEET 18
- CONST. 12' WIDE TEMPORARY ACCESS RAMP WITH 0.50' THICK AB PAVING PER DETAIL E ON SHEET 18
- REPLACE EX. CONCRETE CHANNEL LINING PER DETAIL B ON SHEET 18
- INSTALL CONCRETE CHANNEL LINING AT 1:1 H:V SLOPE PER DETAIL C ON SHEET 18
- GRADE CUT/FILL SLOPES AT 2:1 H:V
- GRADE CUT/FILL SLOPES AT 1:1 H:V
- INSTALL 16' WIDE GATE PER CALTRANS STD. A85
- CONST. 12' WIDE ACCESS RAMP WITH 0.75' PCC PAVING OVER 0.60' THICK AB PER DETAIL D ON SHEET 18
- CONSTRUCT ROCK RIFFLE PER STRUCTURAL DETAILS ON SHEET 18 AND PER TABLE ON SHEET 3

DEMOLITION NOTES

- REMOVE EXISTING CONCRETE CHANNEL LINING
- REMOVE EXISTING CONCRETE LINING TO NEXT JOINT

DETAILS



GRADATION TABLES

STREAMBED SEDIMENT	
SIEVE SIZE	% PASSING
3"	100
#4	35-70
#50	15-35
#200	15

STREAMBED COBBLESTONE	
STONE SIZE	% PASSING
18	100
8	84
3	50
1	16
No. 10 SIEVE	10

1/4 TON CLASS COBBLESTONE	
STONE SIZE	% LARGER THAN
2000 LB	0-5
1000 LB	10-50
700 LB	
500 LB	85-100
200 LB	
75 LB	90-100
25 LB	
2.2 LB	

GRAVEL BLANKET	
SIEVE SIZE	% PASSING
2"	100
#4	35-70
#50	5-20
#200	0-10



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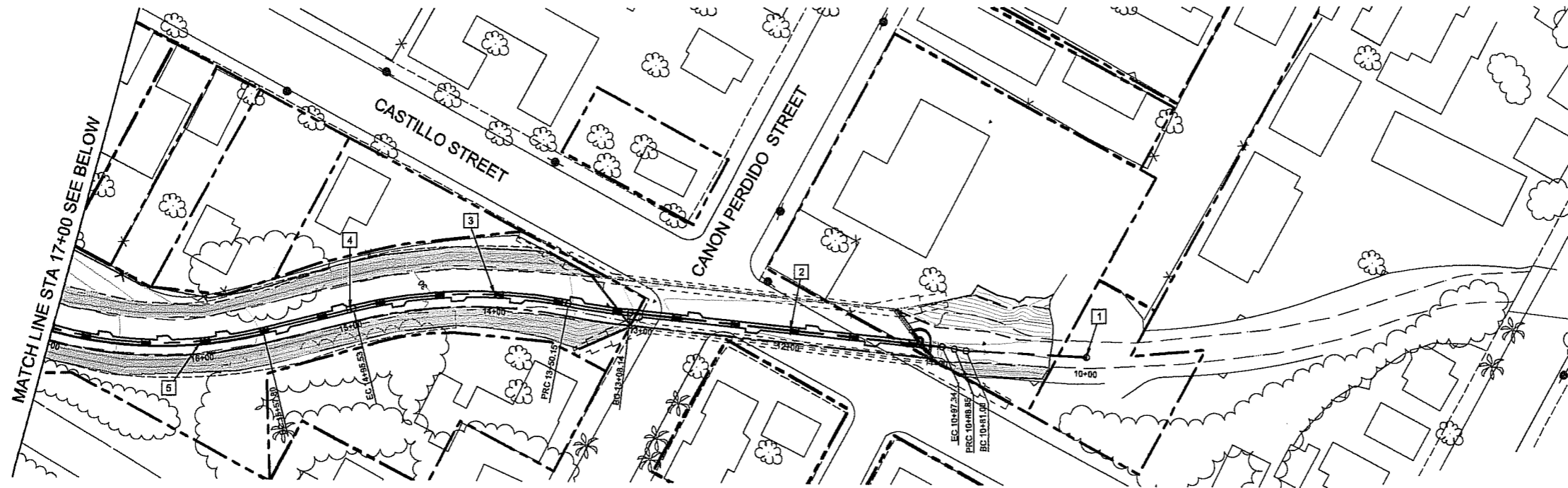
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MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
SURVEY CONTROL & CONSTRUCTION NOTES

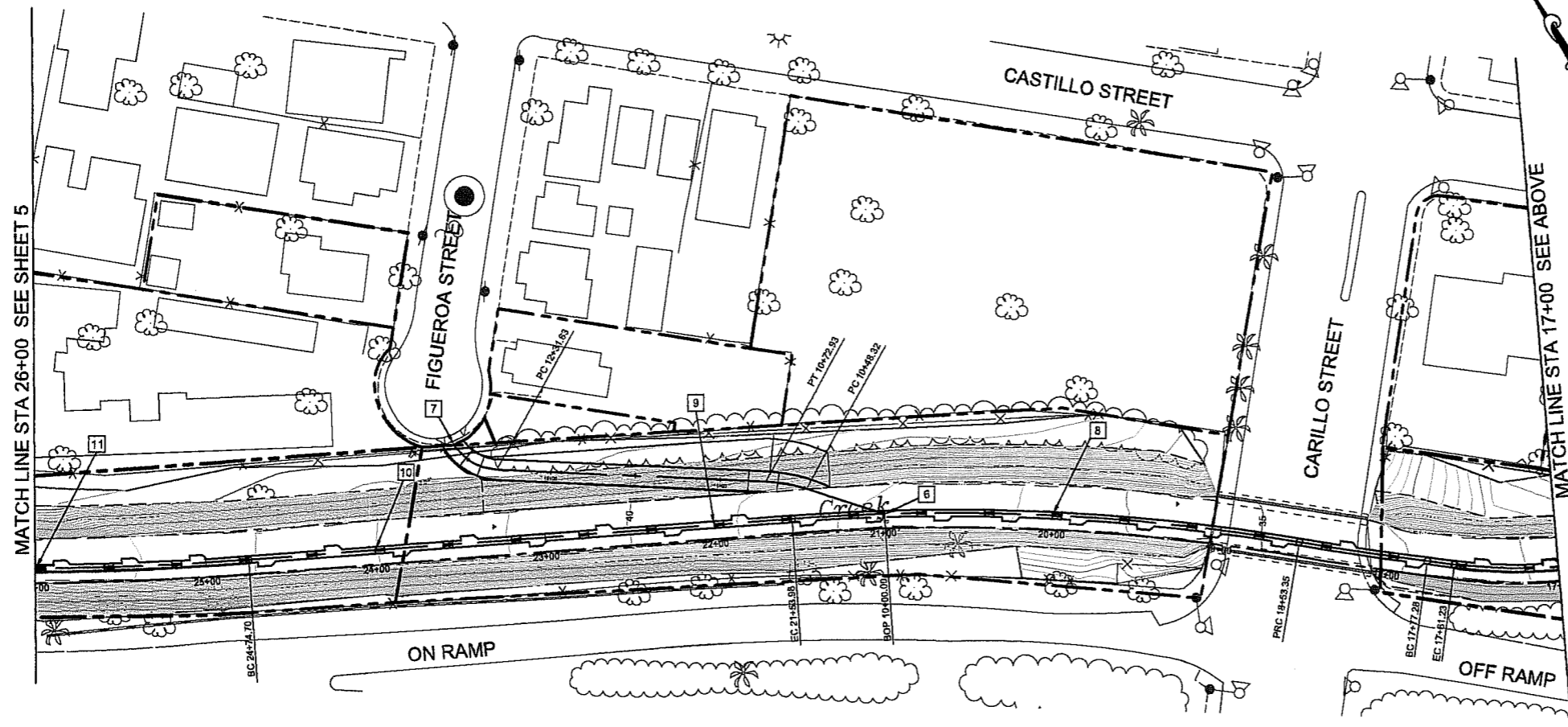


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- - -
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C-1-4639
DWG. NO. _____

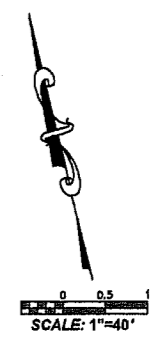


PLAN



PLAN

POINT TABLE			
POINT NO.	NORTHING	EASTING	DESCRIPTION
1	1978129.092	6047681.172	BEGIN FP, STA. 10+00.00
2	1978193.801	6047492.092	CL FP, STA. 12+00.00
3	1978263.910	6047304.874	CL FP, STA. 14+00
4	1978277.373	6047208.328	CL INT FP & ACCESS RAMP
5	1978280.502	6047106.307	CL FP, STA. 16+00
6	1978658.847	6046699.330	BEGIN RAMP, STA. 16+00
7	1978734.196	6046510.614	END ACCESS RAMP
8	1978503.016	6046781.120	CL FP, STA. 20+00
9	1978609.647	6046612.111	CL FP, STA. 22+00
10	1978708.238	6046438.100	CL FP, STA. 24+00
11	1978810.218	6046266.104	CL FP, STA. 26+00



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 2332 El Camino Real, Suite 210
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MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
HORIZONTAL CONTROL
 STA. 10+00 TO 26+00

PROPERTY LINES
 ARE APPROXIMATE



PROJECT ENGINEER _____ DATE _____

2011-000###
 PS# NO. _____
 BID NO. _____ SHT. DES. _____
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 DWG. NO. _____
 SHT. 4 OF 23



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3215 El Camino Real, Suite 210
Irvine, California 92612

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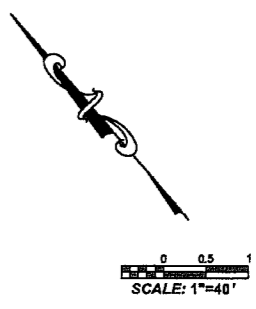
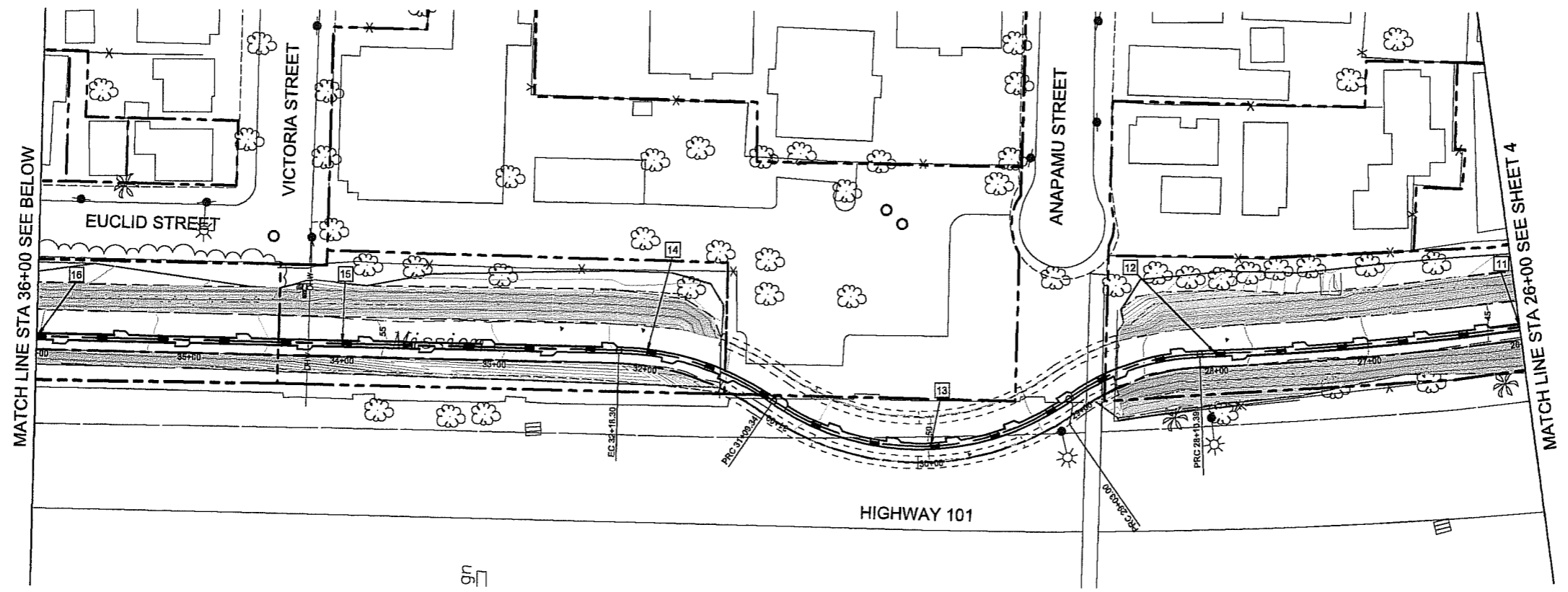
DATE	APPROVED	NO.	REVISIONS

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
HORIZONTAL CONTROL
STA. 26+00 TO 46+00

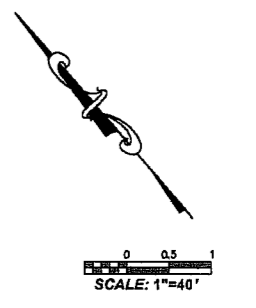
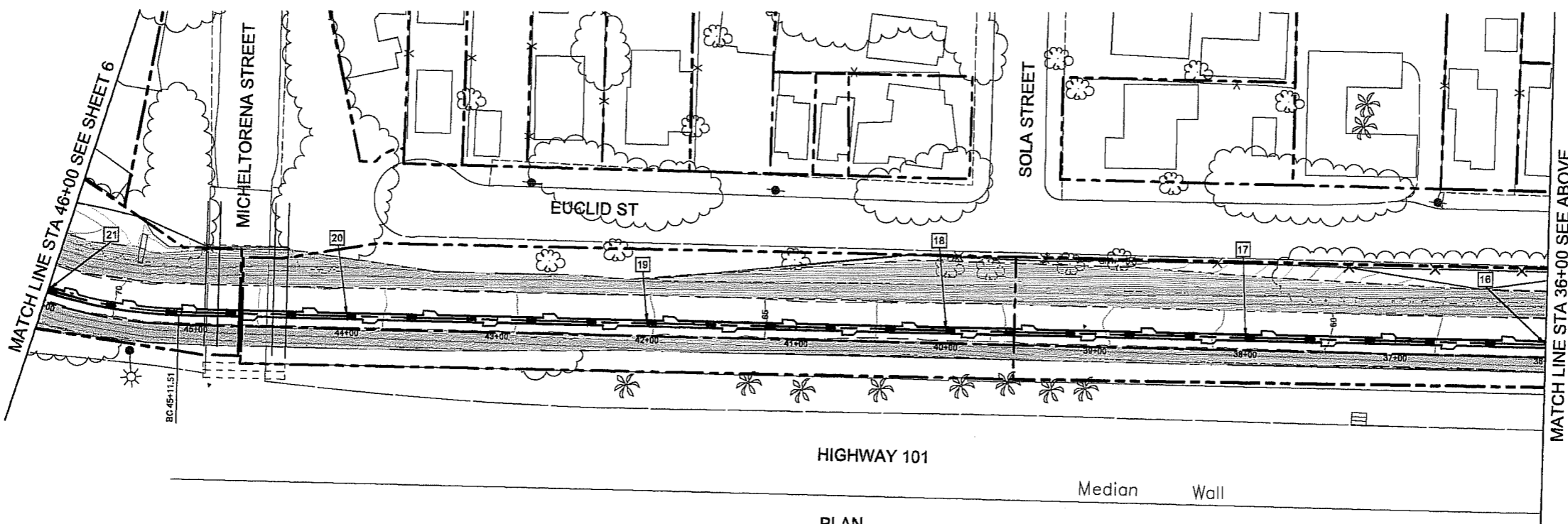
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P.W. NO.

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DWG. NO.

SHT. 5 OF 23



PLAN



PLAN

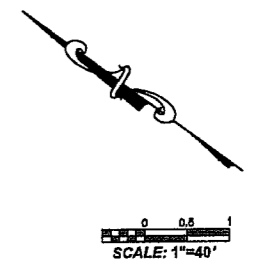
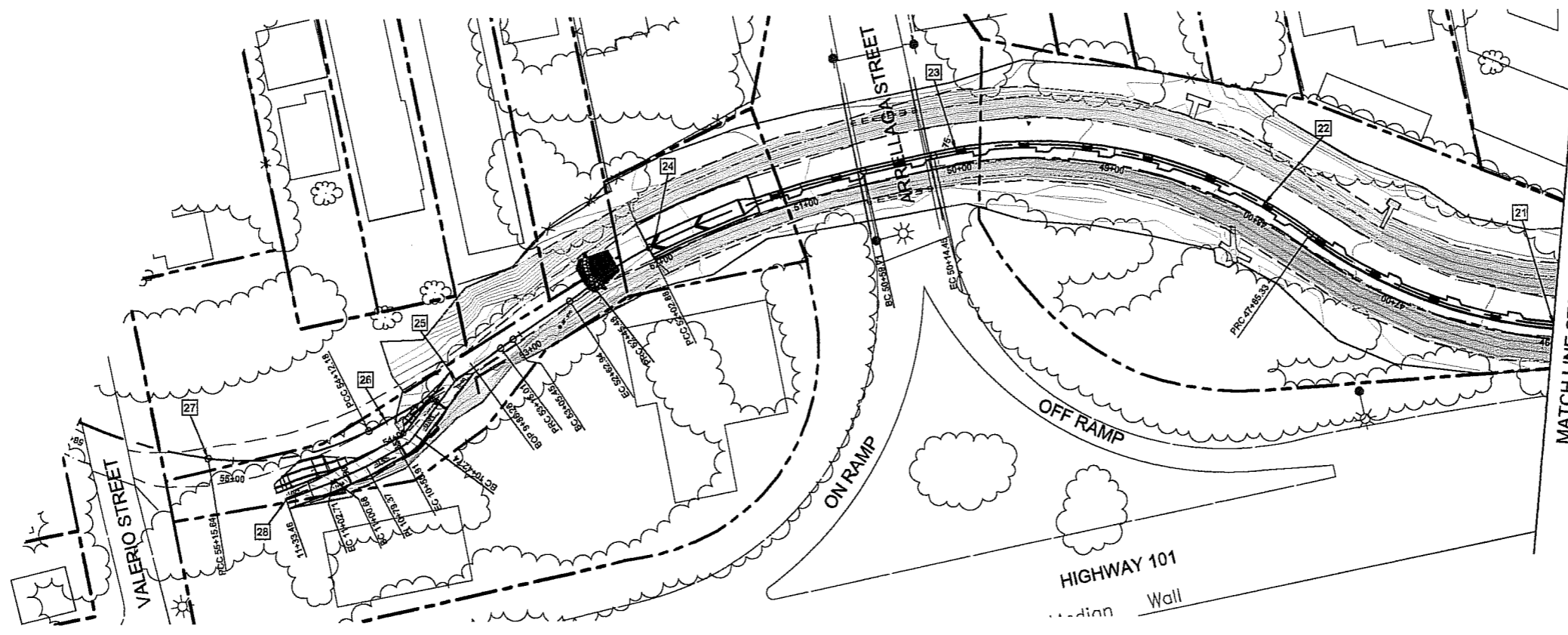
POINT NO.	NORTHING	EASTING	DESCRIPTION
11	1978810.218	6046266.104	CL FP, STA. 26+00
12	1978927.782	6046104.410	CL FP, STA. 28+00
13	1979005.226	6045923.324	CL FP, STA. 30+00
14	1979174.382	6045822.201	CL FP, STA. 32+00
15	1979309.748	6045675.010	CL FP, STA. 34+00
16	1979444.478	6045527.199	CL FP, STA. 36+00

POINT NO.	NORTHING	EASTING	DESCRIPTION
16	1979444.478	6045527.199	CL FP, STA. 36+00
17	1979579.207	6045378.388	CL FP, STA. 38+00
18	1979713.936	6045231.577	CL FP, STA. 40+00
19	1979848.665	6045083.767	CL FP, STA. 42+00
20	1979983.395	6044935.956	CL FP, STA. 44+00
21	1980126.725	6044797.663	CL FP, STA. 46+00

PROPERTY LINES ARE APPROXIMATE



PROJECT ENGINEER _____ DATE _____



PLAN

POINT TABLE			
POINT NO.	NORTHING	EASTING	DESCRIPTION
21	1980126.725	6044797.683	CL FP, STA. 46+00
22	1980318.727	6044752.205	CL FP, STA. 48+00
23	1980495.071	6044666.186	CL FP, STA. 50+00
24	1980615.363	6044507.237	CL FP, STA. 52+00
25	1980666.742	6044367.486	CL INT FP & TEMP ACCESS RAMP
26	1980686.918	6044320.723	CL FP, STA. 54+00
27	1980763.729	6044237.180	END FP, PCC STA 55+15.64
28	1980708.931	6044244.774	END TEMP ACCESS RAMP

PROPERTY LINES ARE APPROXIMATE



PROJECT ENGINEER _____ DATE _____



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NO.	DATE	APPROVED	REVISIONS

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
HORIZONTAL CONTROL
 STA. 46+00 TO 55+15.64

2011-000###
 PBW. NO. _____
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 C-1-4639
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HDR Engineering, Inc.
3255 El Camino Real Suite 200
Irvine, California 92612

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DESIGN DRAWN BY: BJS
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NO. _____

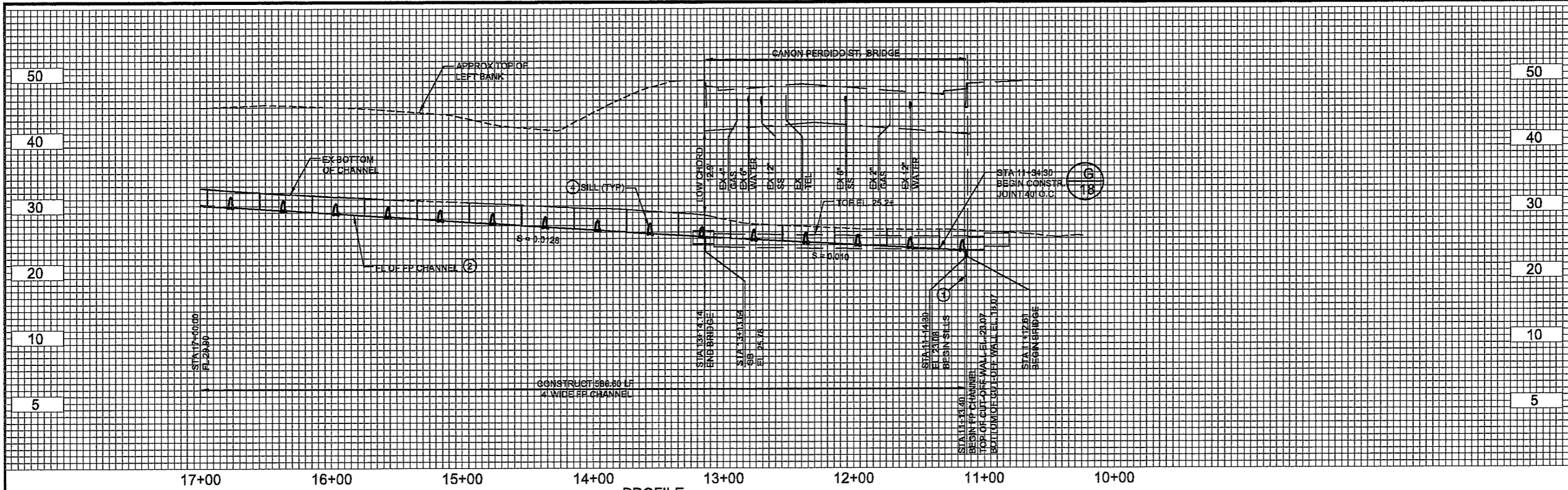
MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
PLAN AND PROFILE
STA. 10+00 TO 17+00

PROPERTY LINES ARE APPROXIMATE

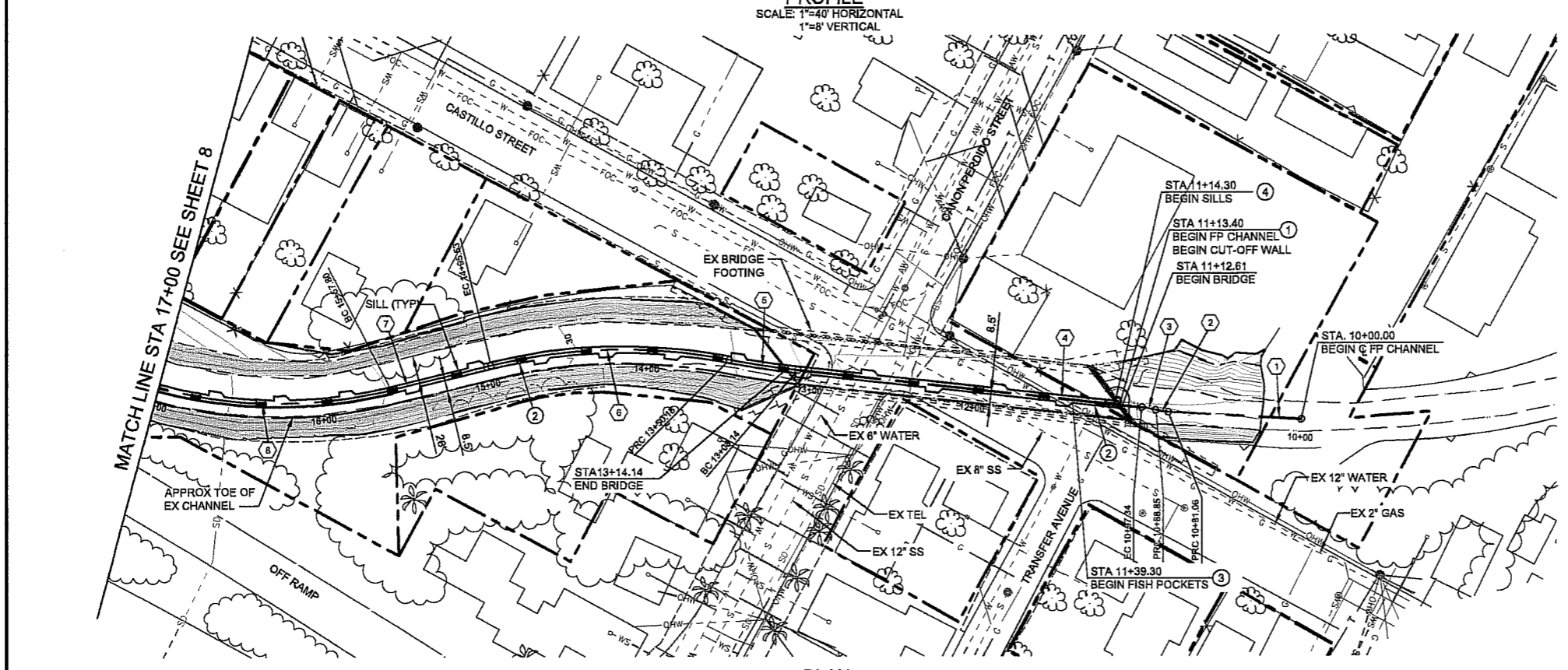
2011-000###
PBW. NO.

BID NO. _____ SHT. DES. _____
C-1-4639
DWG. NO.

SHT. 7 OF 23



PROFILE
SCALE: 1"=40' HORIZONTAL
1"=8' VERTICAL



PLAN

CONSTRUCTION NOTES

- ① CONST. OUTLET GRADING AND CUT-OFF WALL STRUCTURE PER DETAIL 2 ON SHEET 15
- ② CONST. 4' WIDE RECTANGULAR FISH PASSAGE CHANNEL PER STRUCTURAL SECTION A ON SHEET 17
- ③ CONST. 10' LONG FISH POCKETS 40' APART (TYPICAL) PER DETAIL 1 ON SHEET 12 AND STRUCTURAL SECTION B ON SHEET 17
- ④ CONST. SILL STRUCTURES 40' APART (TYPICAL) PER DETAIL 1 ON SHEET 12 AND DETAIL 1 ON SHEET 17

NOTES

ALL DIMENSIONS IN FEET UNLESS OTHERWISE NOTED
ALL UTILITIES MUST BE PROTECTED IN PLACE
ALL TREES MUST BE PROTECTED IN PLACE



PROJECT ENGINEER DATE _____



HDR

HDR Engineering, Inc.
3250 El Camino Real Suite 200
Irvine, California 92614

PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

APPROVED:	DATE
CITY ENGINEER	ORIGINAL SIGNED DATE

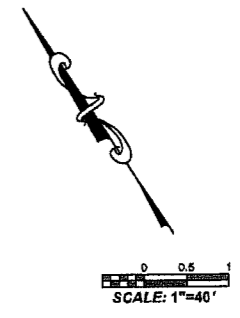
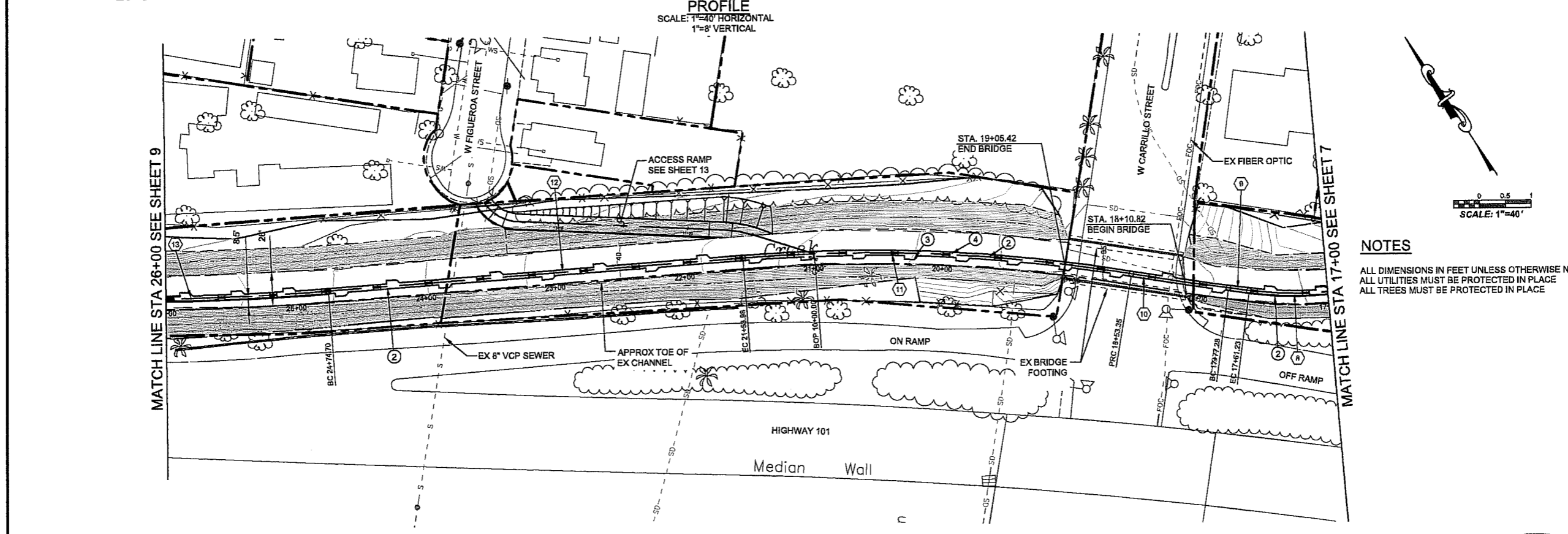
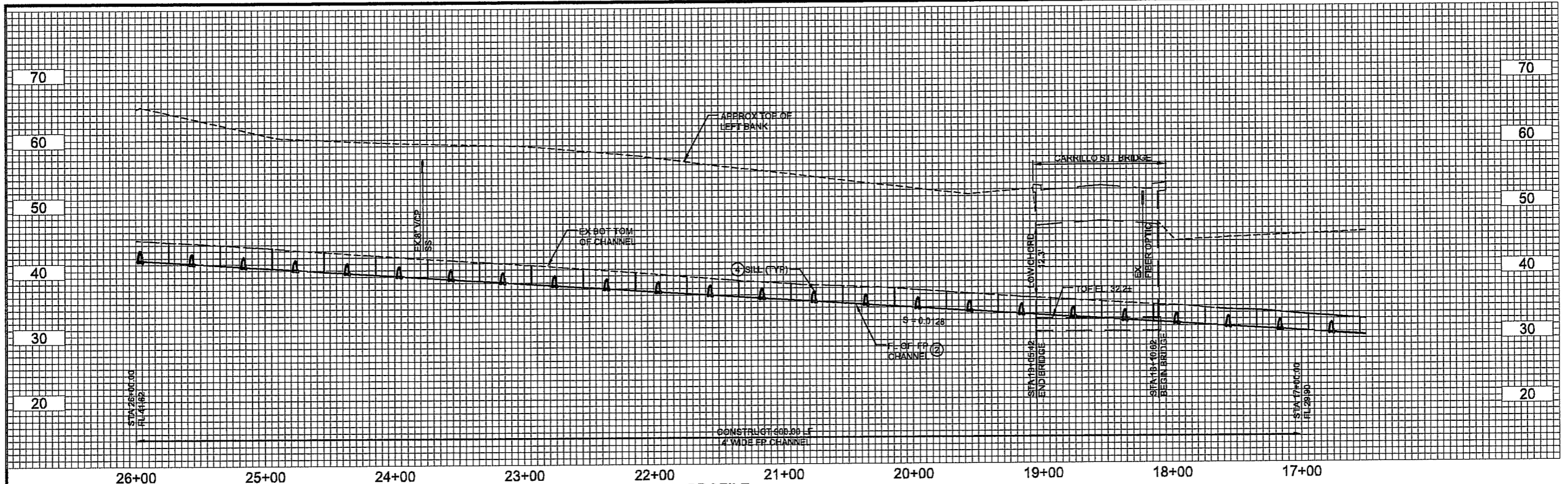
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DRAWN	DRAWN	DRAWN
CHECKED	CHECKED	CHECKED
MEY	MEY	MEY

NO.	REVISIONS

DATE	APPROVED	DESIGN	DRAWN	CHECKED	MEY

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
PLAN AND PROFILE
STA. 17+00 TO 26+00

2011-000###
PBW. No.
BID NO. SHT. DES.
C-1-4639
DWG. NO.
SHT. 8 OF 23



NOTES
ALL DIMENSIONS IN FEET UNLESS OTHERWISE NOTED
ALL UTILITIES MUST BE PROTECTED IN PLACE
ALL TREES MUST BE PROTECTED IN PLACE

- CONSTRUCTION NOTES**
- ② CONST. 4' WIDE RECTANGULAR FISH PASSAGE CHANNEL PER STRUCTURAL SECTION A ON SHEET 17
 - ③ CONST. 10' LONG FISH POCKETS 40' APART (TYPICAL) PER DETAIL 1 ON SHEET 12 AND STRUCTURAL SECTION B ON SHEET 17
 - ④ CONST. SILL STRUCTURES 40' APART (TYPICAL) PER DETAIL 1 ON SHEET 12 AND DETAIL 1 ON SHEET 17

PLAN

CURVE/LINE TABLE					
LINE/CURVE	STATION	Δ/BEARING	LENGTH	RADIUS	TANGENT
(8)	15+57.80	138°53'13"	203.43'	283.50'	106.31'
(9)	17+61.23	N48°53'24.45"W	16.05'	-	-
(10)	17+77.28	177°48'41"	76.07'	1891.50'	38.04'
(11)	18+53.35	168°14'11"	300.83'	1251.50'	151.04'
(12)	21+53.98	N60°27'54.50"W	320.71'	-	-
(13)	24+74.70	170°20'14"	335.70'	1990.50'	168.25'

PROPERTY LINES ARE APPROXIMATE



PROJECT ENGINEER DATE



HR

HRB Engineering, Inc.
2500 California Road, Suite 204
Berkeley, California 94702

PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

APPROVED: _____ DATE _____
CITY ENGINEER ORIGINAL SIGNED DATE _____

DESIGN: _____
DRAWN: _____
CHECKED: _____
FINAL PLANS

NO.	DATE	APPROVED	DESIGN	BUS	JLR	WFC	REVISIONS

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
PLAN AND PROFILE
STA. 26+00 TO 36+00

2011-000###

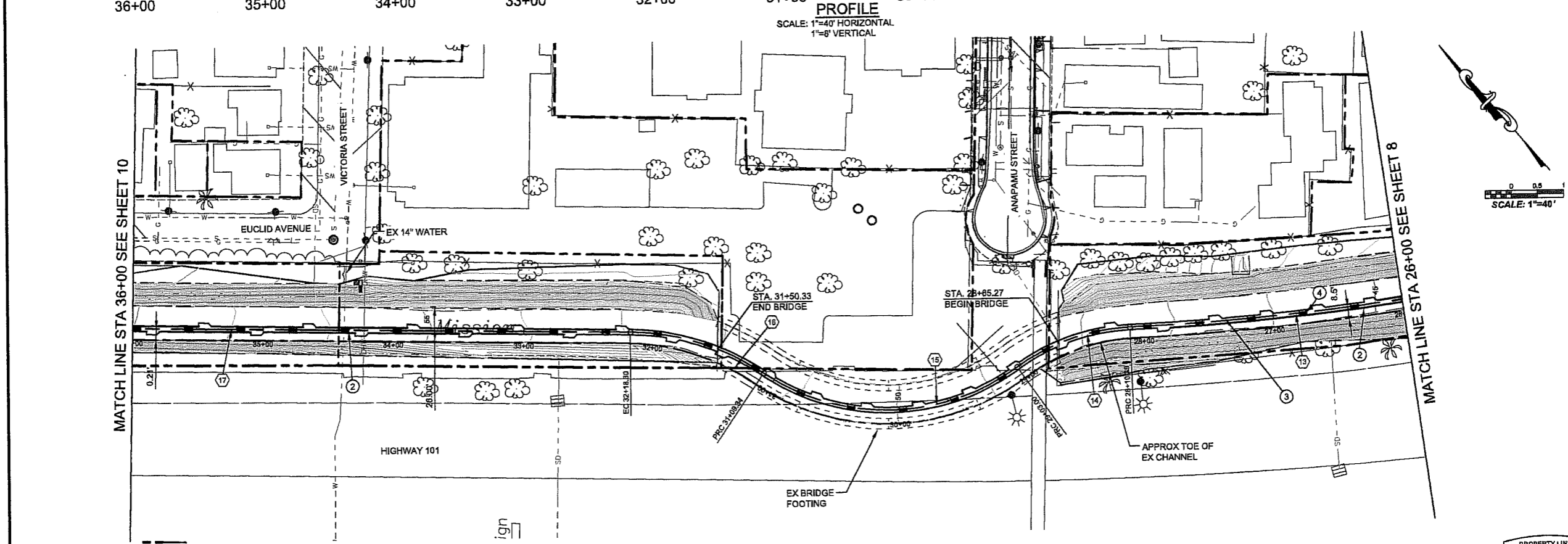
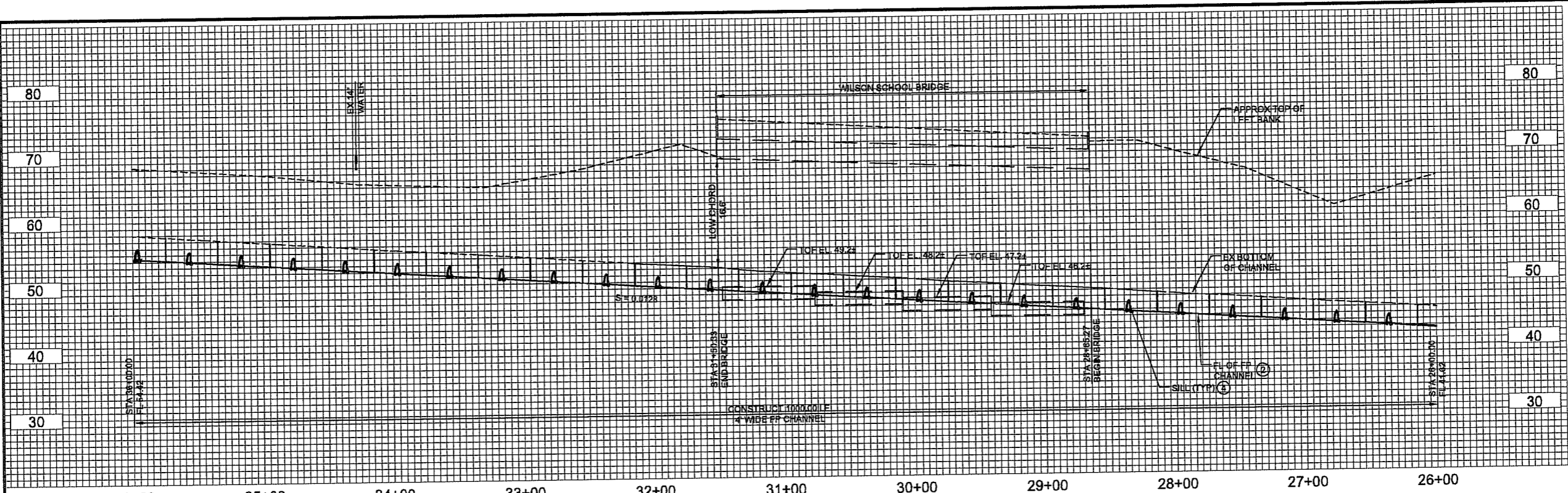
PBW No. _____

BID No. _____ SHT. DES. _____

C-1-4639

DWG. No. _____

SHT. 9 OF 23



CONSTRUCTION NOTES

- ② CONST. 4' WIDE RECTANGULAR FISH PASSAGE CHANNEL PER STRUCTURAL SECTION A ON SHEET 17
- ③ CONST. 10' LONG FISH POCKETS 40' APART (TYPICAL) PER DETAIL 1 ON SHEET 12 AND STRUCTURAL SECTION B ON SHEET 17
- ④ CONST. SILL STRUCTURES 40' APART (TYPICAL) PER DETAIL 1 ON SHEET 12 AND DETAIL 1 ON SHEET 17

NOTES

ALL DIMENSIONS IN FEET UNLESS OTHERWISE NOTED
ALL UTILITIES MUST BE PROTECTED IN PLACE
ALL TREES MUST BE PROTECTED IN PLACE

LINE/CURVE	STATION	Δ/BEARING	LENGTH	RADIUS	TANGENT
⑬	24+74.70	170°20'14"	335.70'	1990.50'	168.25'
⑭	28+10.39	146°31'21"	92.81'	158.50'	47.67'
⑮	29+03	110°15'06"	206.34'	169.50'	118.13'
⑯	31+09.34	146°52'50"	108.96'	188.50'	56.05'
⑰	32+18.30	N47° 39' 03.16"W	1293.21'	-	-

PROPERTY LINES ARE APPROXIMATE



PROJECT ENGINEER DATE _____



HR

HR Engineering, Inc.
2541 El Camino Real, Suite 210
Irvine, California 92612

PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

APPROVED:	DATE
CITY ENGINEER	ORIGINAL SIGNED DATE

DESIGN	B.A.S.
DRAWN	J.L.R.
CHECKED	M.F.Y.

FINAL PLANS

DATE	APPROVED	DESIGN	B.A.S.

REVISIONS

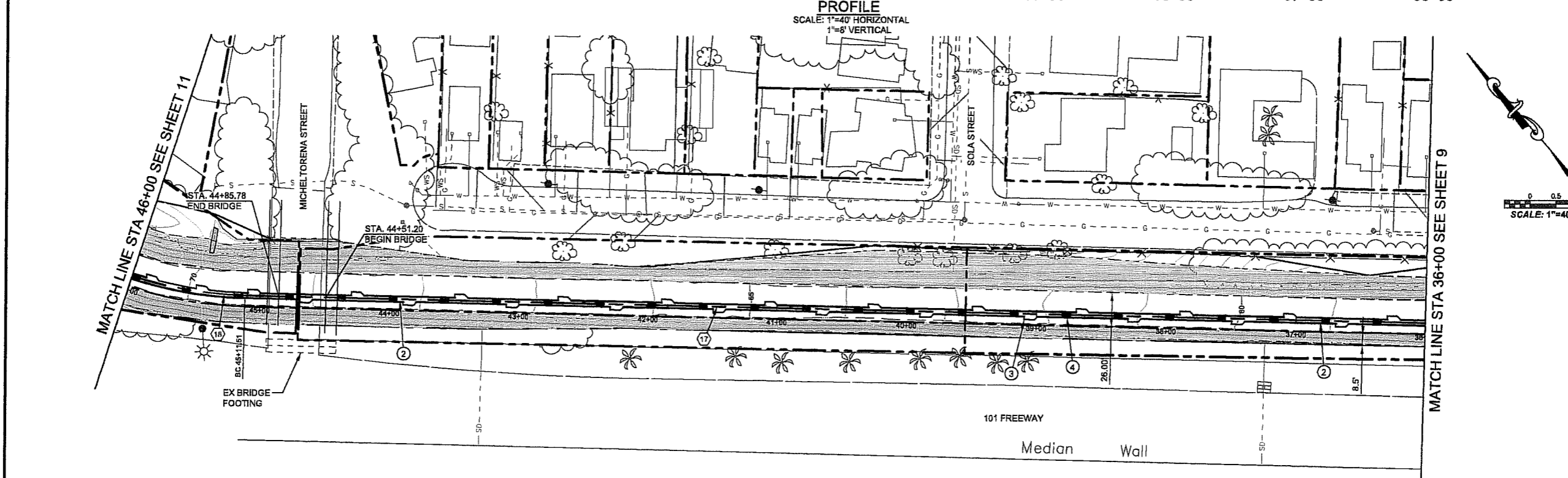
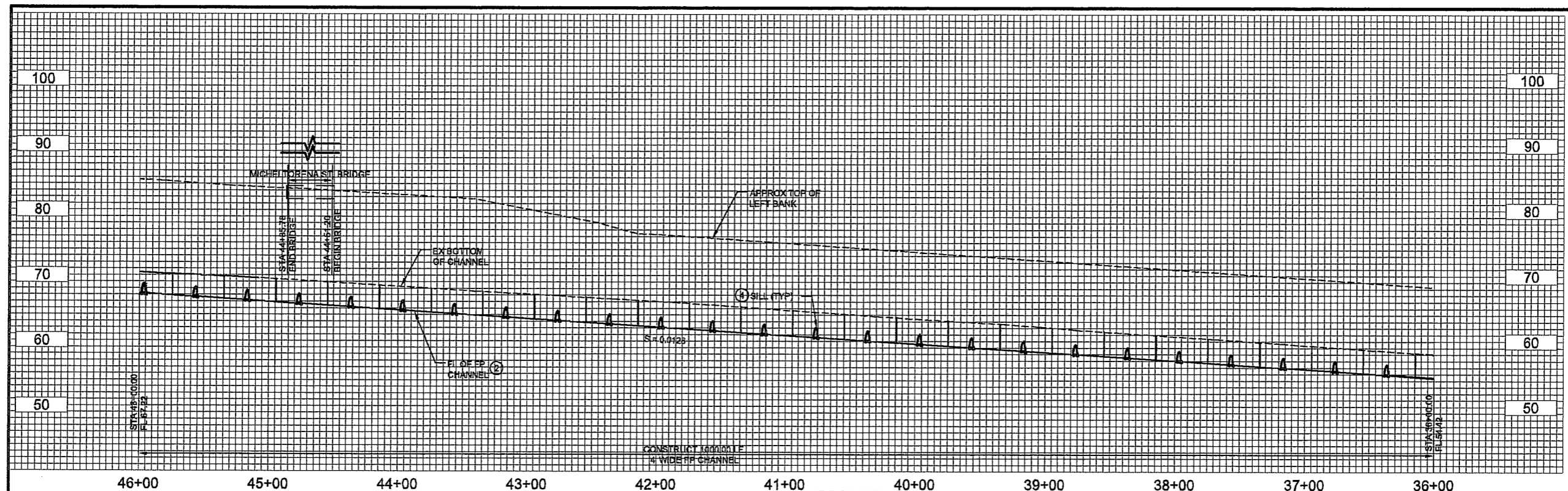
MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
PLAN AND PROFILE
STA. 36+00 TO 46+00

PROPERTY LINES ARE APPROXIMATE

2011-000###
P.W. No.

BID NO.	SHT. DES.
C-1-4639	
DWG. NO.	

SHT. 10 OF 23



CONSTRUCTION NOTES

- ② CONST. 4' WIDE RECTANGULAR FISH PASSAGE CHANNEL PER STRUCTURAL SECTION A ON SHEET 17
- ③ CONST. 10' LONG FISH POCKETS 40' APART (TYPICAL) PER DETAIL 1 ON SHEET 12 AND STRUCTURAL SECTION B ON SHEET 17
- ④ CONST. SILL STRUCTURES 40' APART (TYPICAL) PER DETAIL 1 ON SHEET 12 AND DETAIL 1 ON SHEET 17

NOTES

ALL DIMENSIONS IN FEET UNLESS OTHERWISE NOTED
ALL UTILITIES MUST BE PROTECTED IN PLACE
ALL TREES MUST BE PROTECTED IN PLACE

PLAN

SCALE: 1" = 40'

CURVE/LINE TABLE

LINE/CURVE	Station	Δ/BEARING	LENGTH	RADIUS	TANGENT
(17)	32+18.30	N47° 39' 03.16"W	1283.21'	-	-
(18)	45+11.51	132° 14' 25"	253.82'	304.50'	134.81'



PROJECT ENGINEER DATE



HDR
HDR Engineering, Inc.
325 E. Colorado Street, Suite 200
Irvine, California 92612

PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

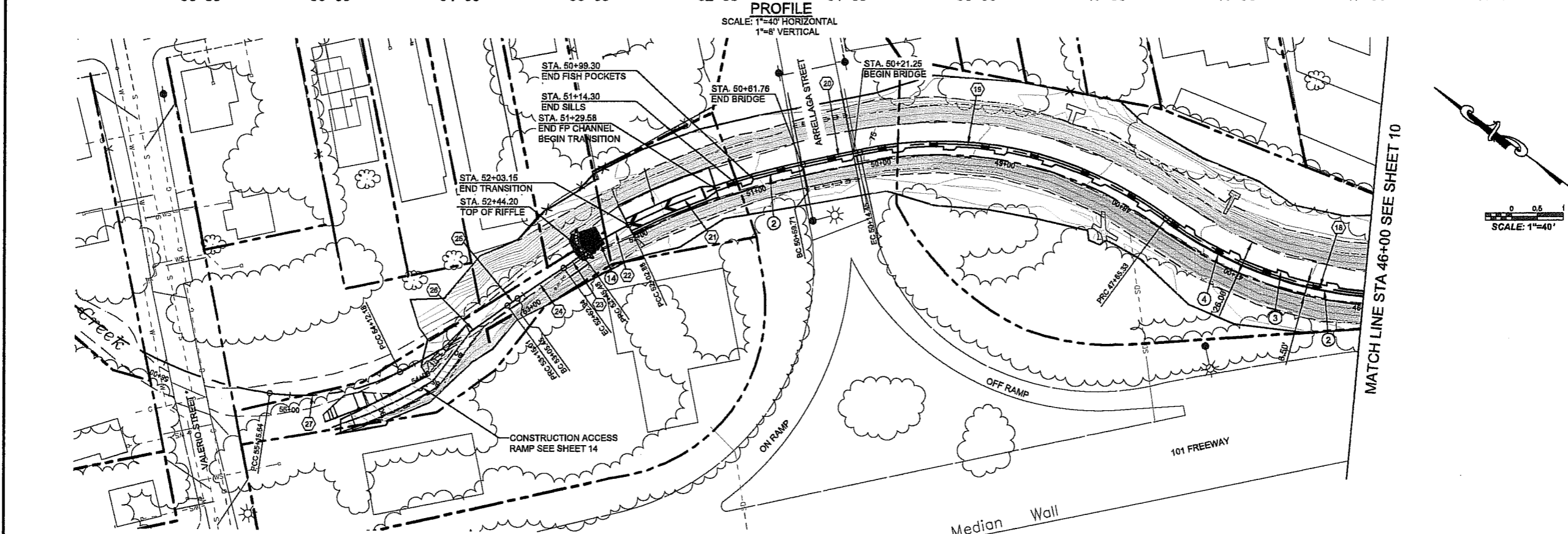
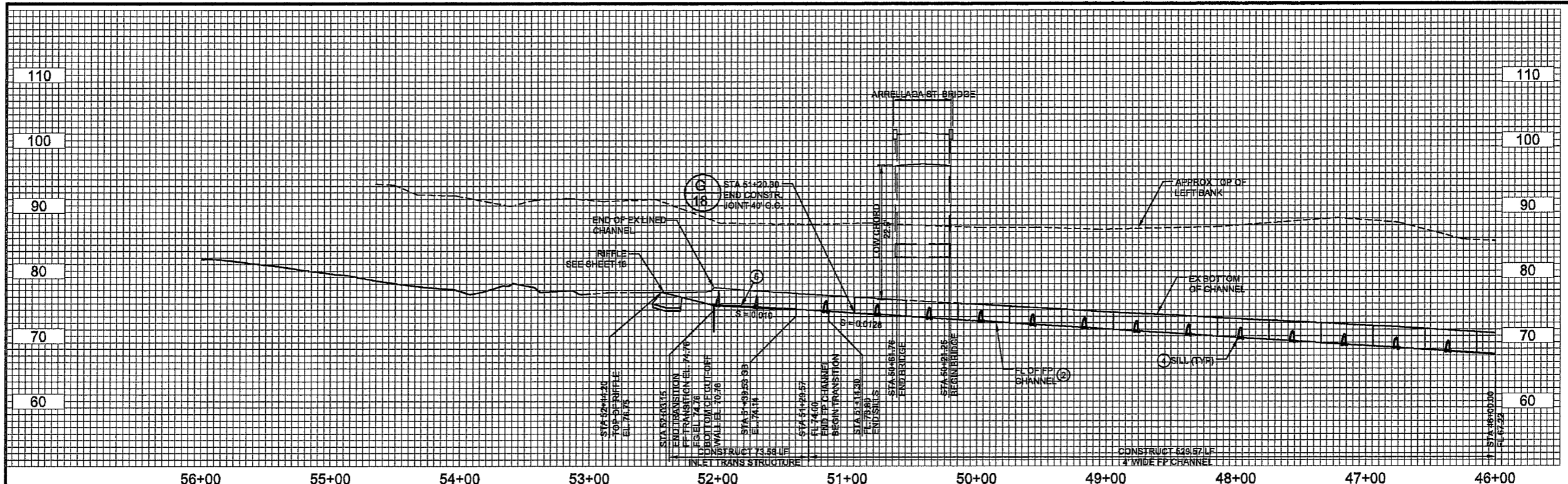
APPROVED: _____ DATE _____
CITY ENGINEER ORIGINAL SIGNED DATE _____

DESIGN: BJS
DRAWN: JLR
CHECKED: WCY
FINAL PLANS

DATE	APPROVED	DESIGN	DRAWN	CHECKED	WFX

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
PLAN AND PROFILE
STA. 46+00 TO 55+15.64

2011-000###
PGW. NO.
- -
- -
- -
C-1-4639
DWO. NO.
PROJECT ENGINEER _____ DATE _____
SHT. 11 OF 23



- CONSTRUCTION NOTES**
- ② CONST. 4' WIDE RECTANGULAR FISH PASSAGE CHANNEL PER STRUCTURAL SECTION A ON SHEET 17
 - ③ CONST. 10' LONG FISH POCKETS 40' APART (TYPICAL) PER DETAIL 1 ON SHEET 12 AND STRUCTURAL SECTION B ON SHEET 17
 - ④ CONST. SILL STRUCTURES 40' APART (TYPICAL) PER DETAIL 1 ON SHEET 12 AND DETAIL 1 ON SHEET 17
 - ⑤ CONST. INLET TRANSITION STRUCTURE PER DETAIL 1 ON SHEET 15
 - ⑭ CONSTRUCT ROCK RIFFLE PER STRUCTURAL DETAILS ON SHEET 16 AND PER TABLE ON SHEET 3

NOTES

ALL DIMENSIONS IN FEET UNLESS OTHERWISE NOTED
 * VALERIO STREET BRIDGE, BR. NO. 51C0290 IS RATED FOR ITS-20 LOADING.
 NO PERMIT LOADS ARE PERMISSIBLE ON VALERIO STREET BRIDGE
 ALL UTILITIES MUST BE PROTECTED IN PLACE
 ALL TREES MUST BE PROTECTED IN PLACE

PLAN

LINE/CURVE	STATION	Δ/BEARING	LENGTH	RADIUS	TANGENT
⑭	45+11.51	132°14'25"	253.82'	304.50'	134.81'
⑰	47+65.33	131°41'47"	249.12'	295.50'	132.50'
⑳	50+14.45	N48°11'40.82"W	45.28'	-	-
㉑	50+59.71	166°03'43"	143.16'	588.50'	71.94'
㉒	52+02.88	167°30'48"	42.61'	195.50'	21.39'
㉓	52+45.48	175°08'35"	17.45'	204.50'	8.73'
㉔	52+62.94	N69°43'45.13"W	42.52'	-	-

LINE/CURVE	STATION	Δ/BEARING	LENGTH	RADIUS	TANGENT
㉕	53+05.45	177°15'48"	9.55'	200.00'	4.78'
㉖	53+15.01	170°31'25"	97.17'	587.50'	48.70'
㉗	54+12.18	145°01'37"	103.46'	169.50'	53.40'

PROPERTY LINES ARE APPROXIMATE

PROJECT ENGINEER _____ DATE _____



HDR

HDR Engineering, Inc.
3224 85 Canyon Road Suite 201
Irvine, California 92612

PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

APPROVED: _____
DESIGN: _____
DRAWN: _____
CHECKED: _____
CITY ENGINEER: _____
ORIGINAL SIGNED DATE: _____

DATE: _____
REVISIONS: _____

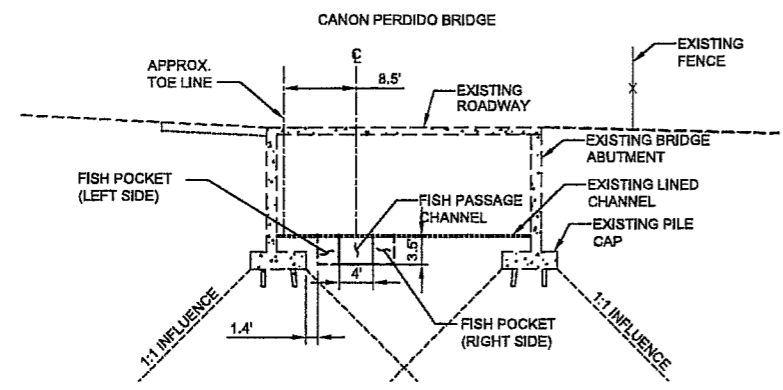
NO.	DATE	APPROVED	DESIGN	DRAWN	CHECKED	FINAL PLANS

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
TYPICAL SECTIONS

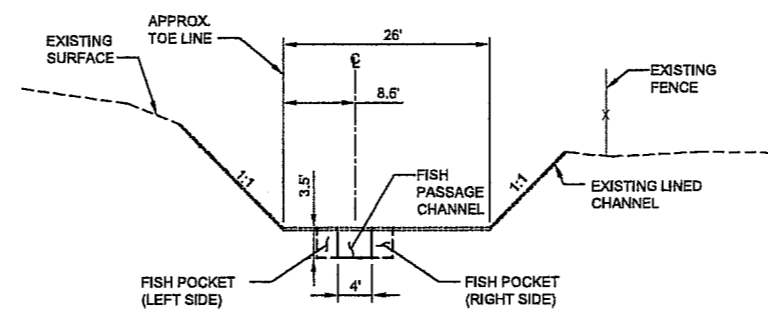
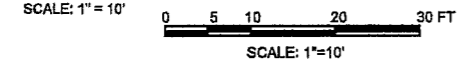
2011-000###

PBW. NO. _____
BID NO. _____
C-1-4639
DWS. NO. _____

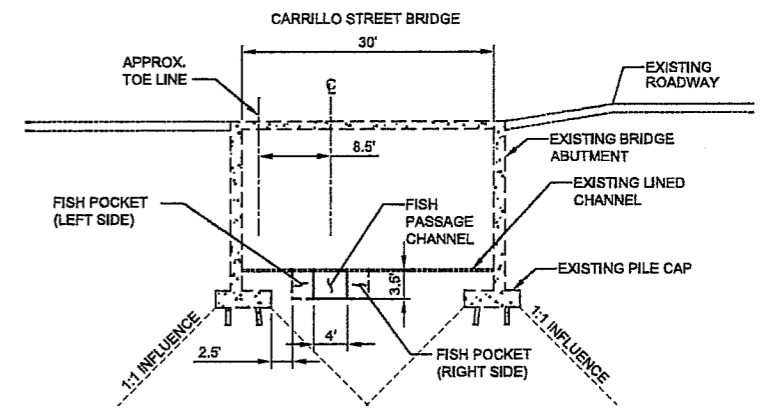
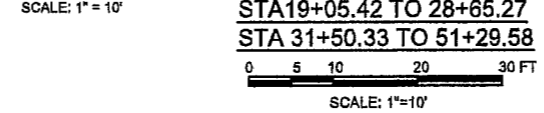
SHT. 12 OF 23



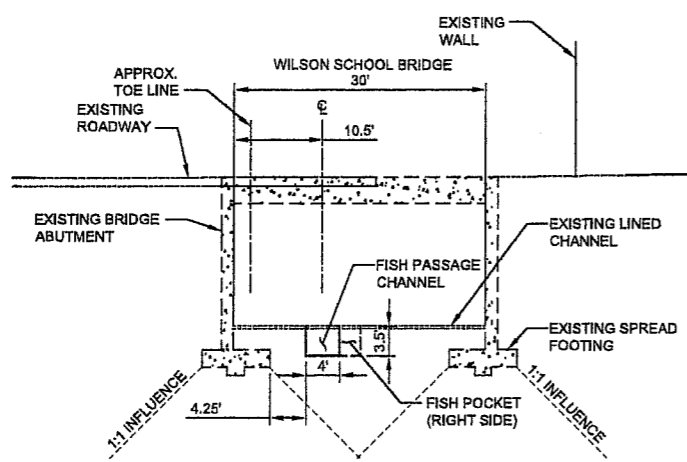
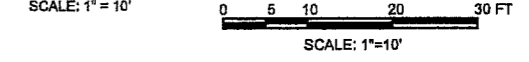
TYPICAL SECTION STA 11+12.61 TO 13+14.14



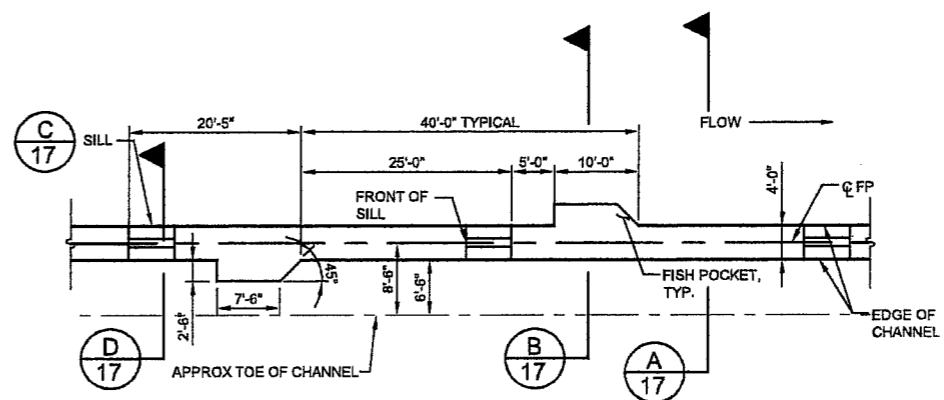
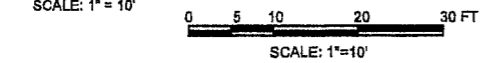
TYPICAL SECTION STA 13+14.14 TO 18+10.82



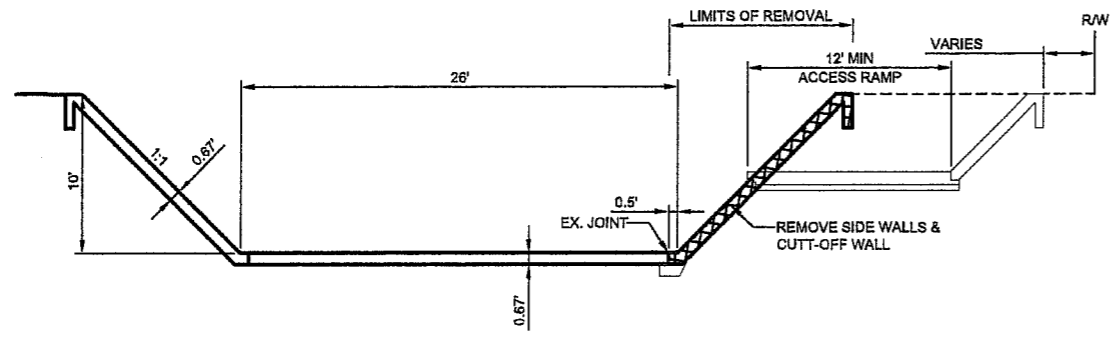
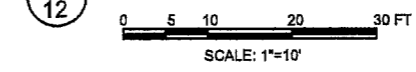
TYPICAL SECTION STA 18+10.82 TO 19+05.42



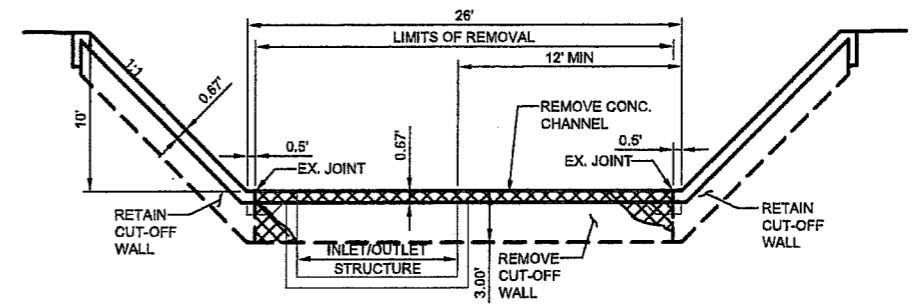
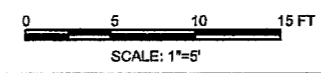
TYPICAL SECTION STA 28+65.27 TO 31+50.33



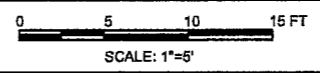
1 FISH POCKET AND SILL LAYOUT



TYPICAL REMOVAL ACCESS RAMP



TYPICAL REMOVAL INLET/OUTLET STRUCTURES



PROPERTY LINES ARE APPROXIMATE



PROJECT ENGINEER DATE



HDR

HDR Engineering, Inc.
2224 W. California Road Suite 200
Irvine, California 92612

PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

APPROVED: _____
DESIGN: _____
DRAWN: _____
CHECKED: _____
DATE: _____
CITY ENGINEER: _____
ORIGINAL SIGNED DATE: _____

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ORIGINAL SIGNED DATE: _____

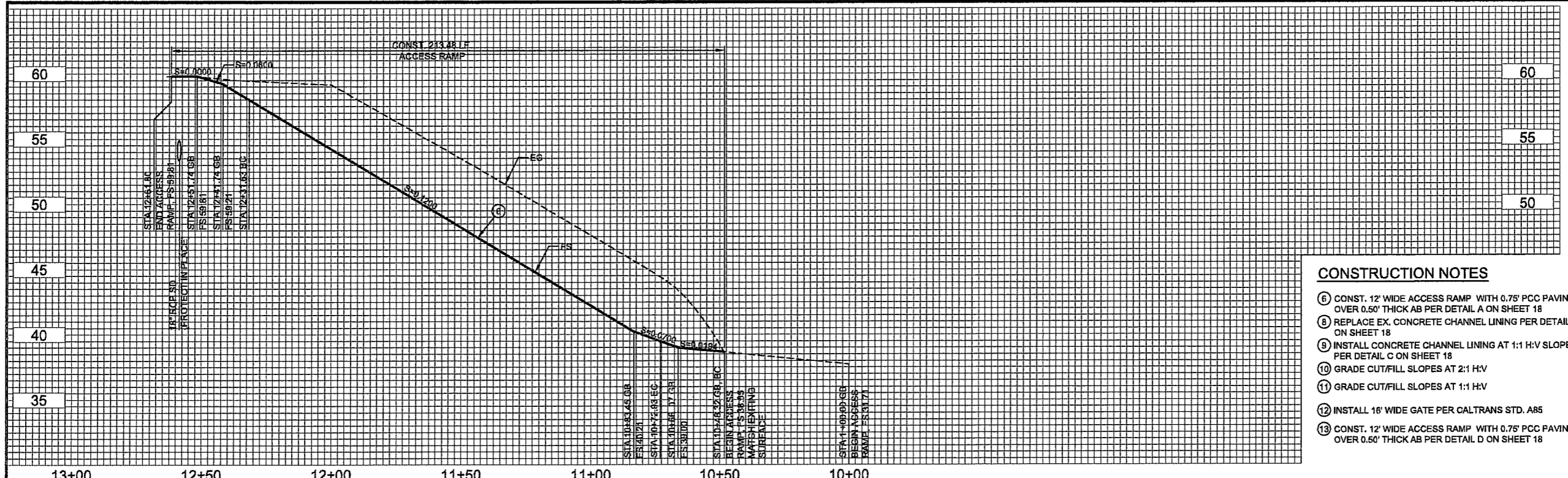
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CHECKED: _____
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CITY ENGINEER: _____
ORIGINAL SIGNED DATE: _____

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ORIGINAL SIGNED DATE: _____

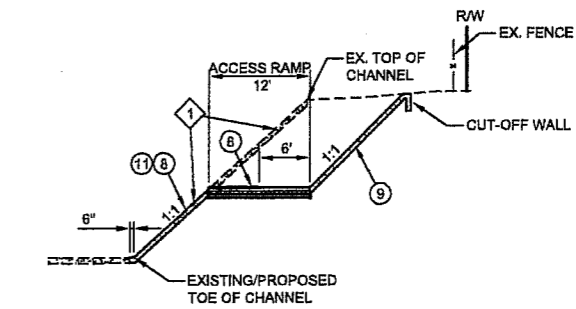
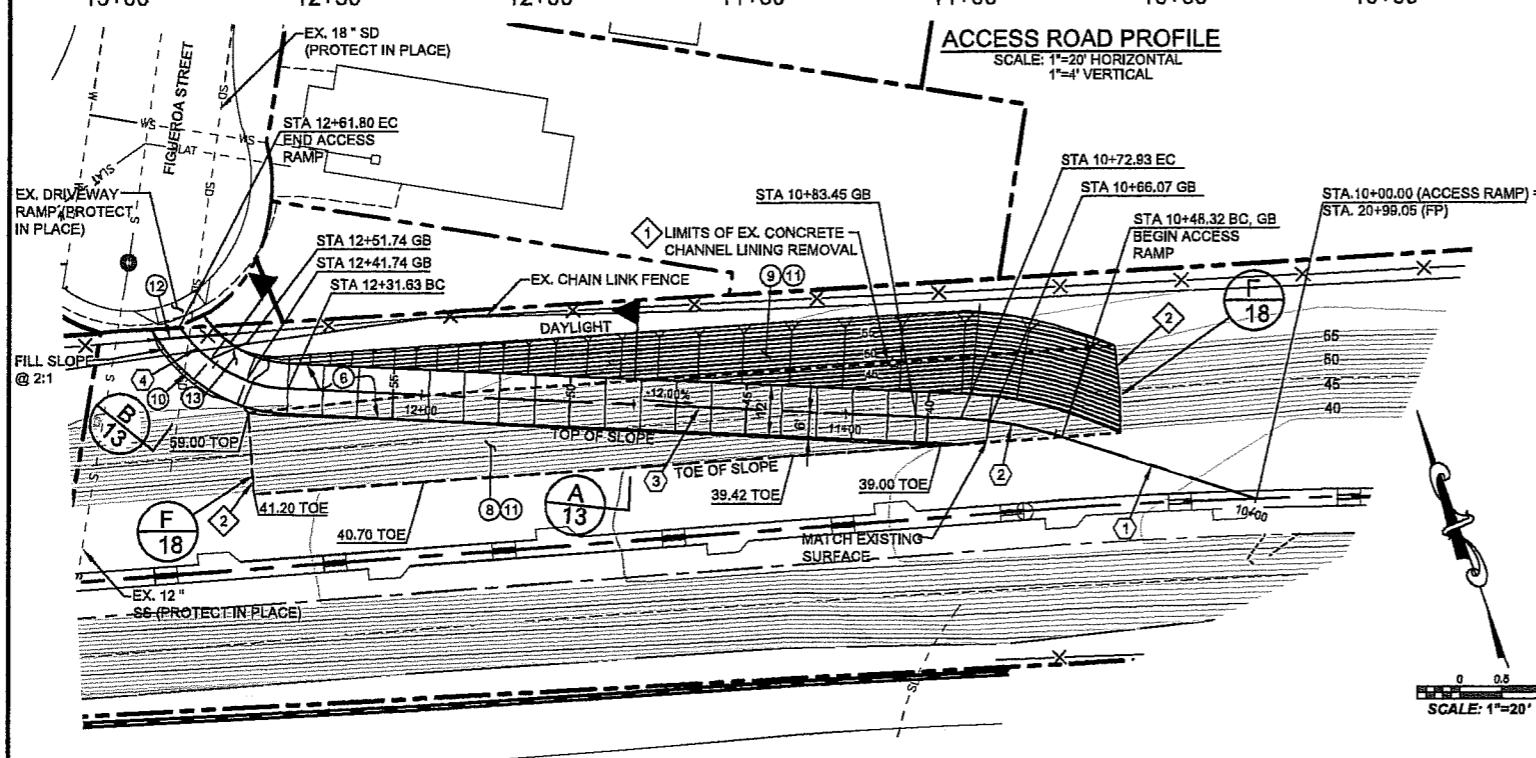
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CITY ENGINEER: _____
ORIGINAL SIGNED DATE: _____

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CITY ENGINEER: _____
ORIGINAL SIGNED DATE: _____

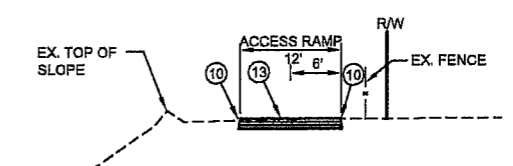
DATE: _____
DESIGN: _____
DRAWN: _____
CHECKED: _____
DATE: _____
CITY ENGINEER: _____
ORIGINAL SIGNED DATE: _____



- CONSTRUCTION NOTES**
- ⑥ CONST. 12' WIDE ACCESS RAMP WITH 0.75" PCC PAVING OVER 0.50" THICK AB PER DETAIL A ON SHEET 18
 - ⑧ REPLACE EX. CONCRETE CHANNEL LINING PER DETAIL B ON SHEET 18
 - ⑨ INSTALL CONCRETE CHANNEL LINING AT 1:1 H:V SLOPE PER DETAIL C ON SHEET 18
 - ⑩ GRADE CUT/FILL SLOPES AT 2:1 H:V
 - ⑪ GRADE CUT/FILL SLOPES AT 1:1 H:V
 - ⑫ INSTALL 16" WIDE GATE PER CALTRANS STD. A85
 - ⑬ CONST. 12' WIDE ACCESS RAMP WITH 0.75" PCC PAVING OVER 0.50" THICK AB PER DETAIL D ON SHEET 18



A SECTION
SCALE: 1" = 10'



B SECTION
SCALE: 1" = 10'

- DEMOLITION NOTES**
- ① REMOVE EXISTING CONCRETE CHANNEL LINING
 - ② REMOVE EXISTING CONCRETE LINING TO NEXT JOINT

LINE/CURVE	STATION	Δ/BEARING	LENGTH	RADIUS	TANGENT
①	10+00	N38° 38' 57.81"W	48.32'	-	-
②	10+48.32	165° 00' 02"	24.61'	94.00'	12.37'
③	10+72.93	N63° 38' 55.92"W	158.70'	-	-
④	12+31.63	123° 15' 47"	31.69'	32.00'	17.28'

PROPERTY LINES ARE APPROXIMATE



MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
ACCESS RAMP GRADING

2011-000###
P.W. NO. -
BID NO. -
SHT. DES. -
C-1-4639
D.W. NO. -



HR

HR Engineering, Inc.
2220 El Camino Real Suite 202
Irvine, California 92612

PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

APPROVED: _____ DATE _____
CITY ENGINEER ORIGINAL SIGNED DATE _____

DESIGN: _____
DRAWN: _____
CHECKED: _____
FINAL PLANS

NO.	DATE	APPROVED	REVISIONS

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
TEMPORARY ACCESS RAMP GRADING

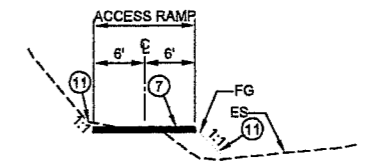
2011-000###

PBW No. -
BID No. -
SMT, DES. -
C-1-4639
Dwg. No.

SHT. 14 OF 23

CONSTRUCTION NOTES

- ⑦ CONST. 12' WIDE TEMPORARY ACCESS RAMP WITH 0.50' THICK AB PAVING PER DETAIL E ON SHEET 18
- ⑪ GRADE CUT/FILL SLOPES AT 1:1 H:V



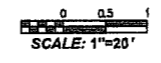
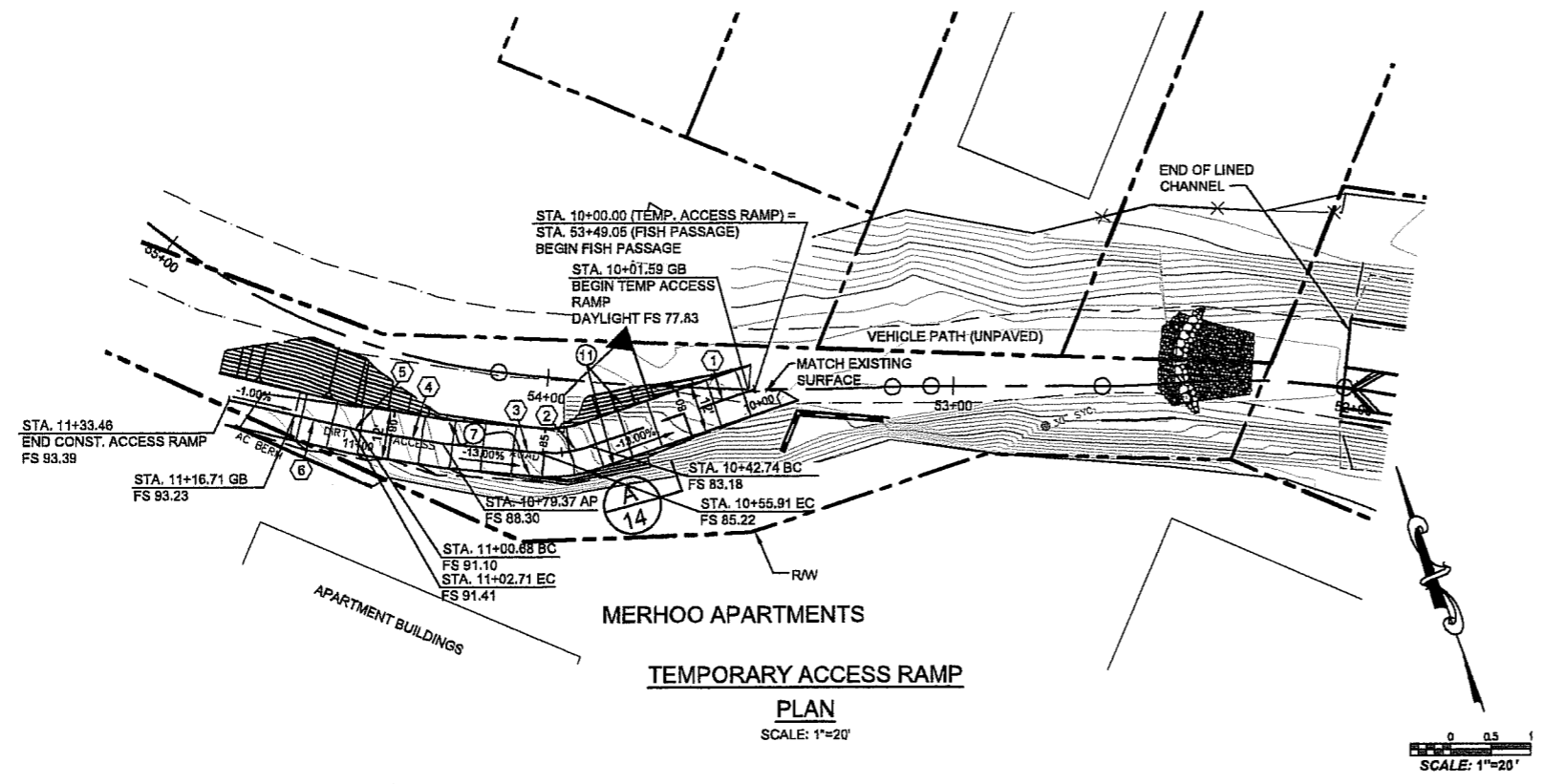
A SECTION
14 SCALE: 1" = 10'

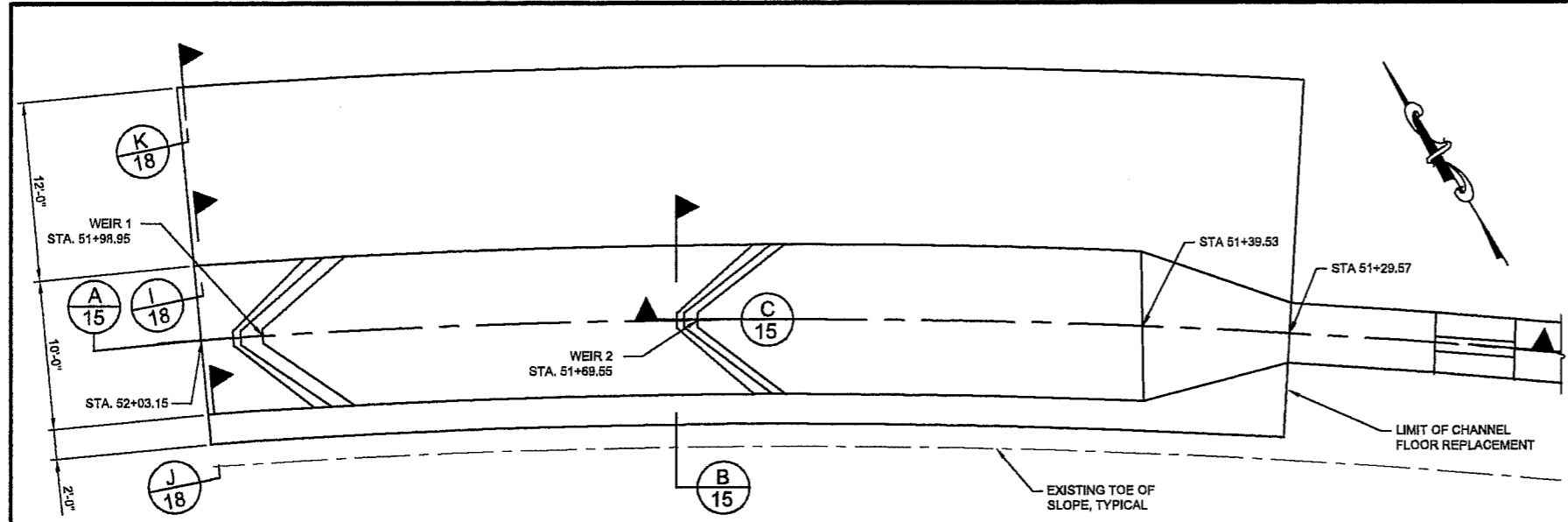
LINE/CURVE	STATION	Δ/BEARING	LENGTH	RADIUS	TANGENT
①	9+86.26	N88° 54' 02.12"W	56.48'	-	-
②	10+42.74	155° 38' 33"	13.17'	31.00'	6.69'
③	10+55.91	N64° 33' 34.89"W	23.46'	-	-
④	10+79.37	N60° 38' 58.99"W	21.32'	-	-
⑤	11+00.68	176° 14' 58"	2.03'	31.00'	1.01'
⑥	11+02.71	N56° 53' 67.04"W	30.75'	-	-

PROPERTY LINES ARE APPROXIMATE

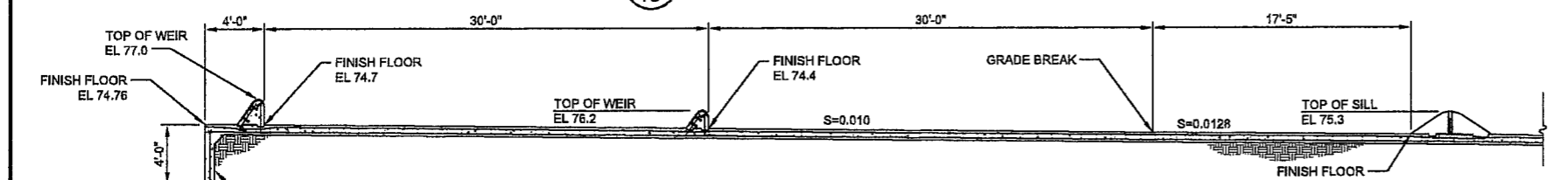


PROJECT ENGINEER DATE

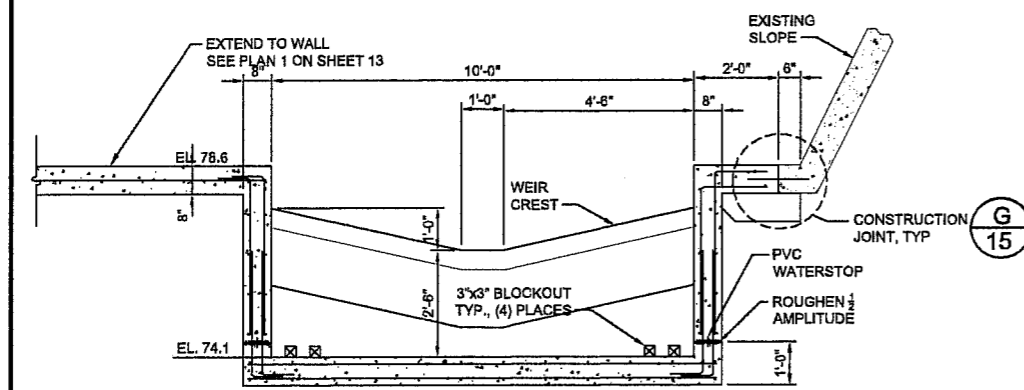




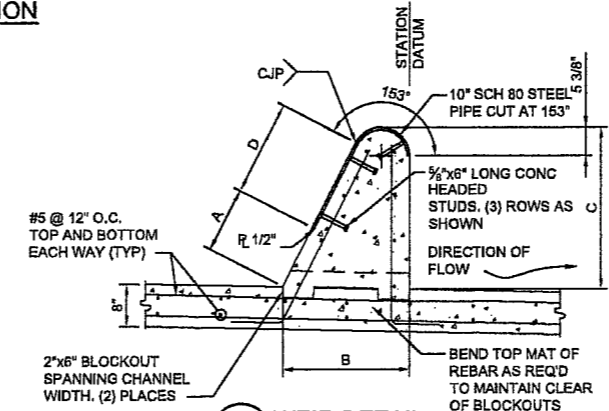
1 INLET TRANSITION - PLAN
SCALE: 1" = 5'



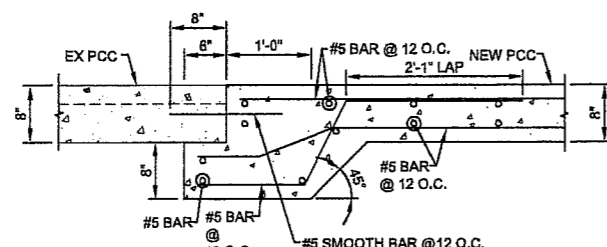
A INLET TRANSITION - ELEVATION
SCALE: 1" = 5'



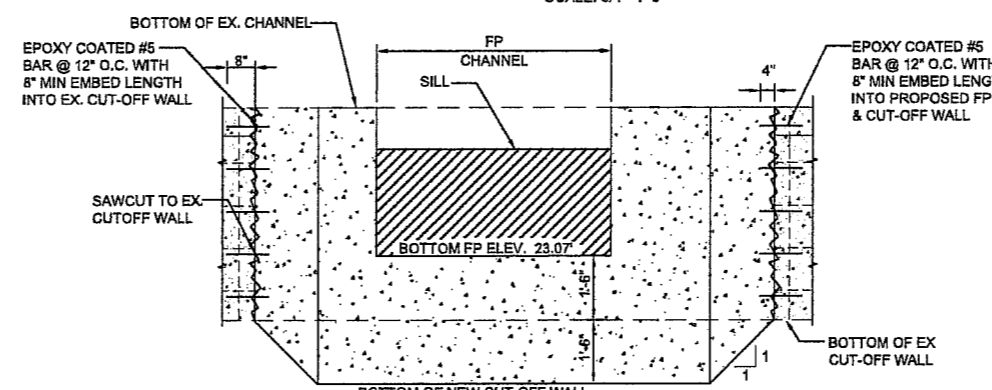
B INLET TRANSITION - SECTION
SCALE: 1/2" = 1'-0"



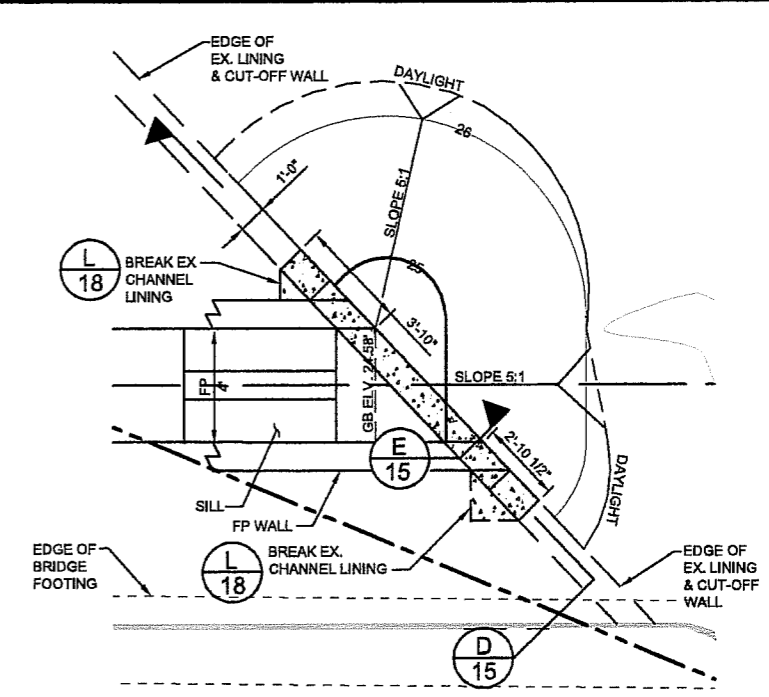
C WEIR DETAIL
SCALE: 3/4" = 1'-0"



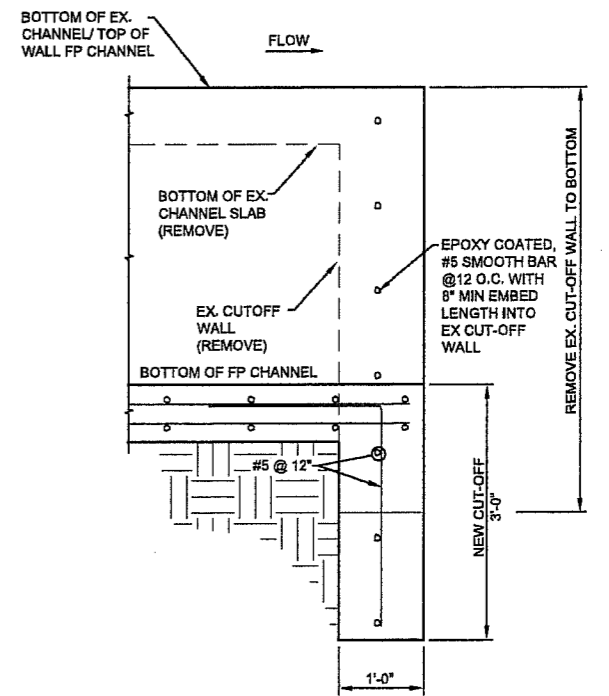
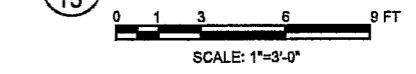
G CONNECTION DETAIL
SCALE: 1" = 1'-0"



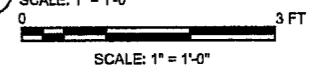
D CUT-OFF WALL FRONT VIEW
SCALE: 1" = 3'-0"



2 OUTLET GRADING - PLAN
SCALE: 1" = 3'-0"



E CONNECTION DETAIL (SECTION)
SCALE: 1" = 1'-0"



H.R.
H.R. Engineering, Inc.
3331 El Camino Real Suite 200
Troy, California 95472

PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

APPROVED: _____
CITY ENGINEER
DATE _____
ORIGINAL SIGNED DATE _____

DESIGN APPROVED: _____
DRAWN: _____
CHECKED: _____
FINAL PLANS

NO.	DATE	APPROVED	DESIGN	DRAWN	CHECKED	BY	REVISIONS

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
TRANSITION STRUCTURE
DETAILS

2011-000###

PBW NO. _____
BID NO. _____
SHT. DES. _____
C-1-4639
DWG. NO.

SHT. 15 OF 23

PROPERTY LINES ARE APPROXIMATE



PROJECT ENGINEER DATE _____



HDR

HDR Engineering, Inc.
8200 El Camino Real, Suite 200
Culver City, California 90232

PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

APPROVED: _____
CITY ENGINEER
ORIGINAL SIGNED DATE: _____

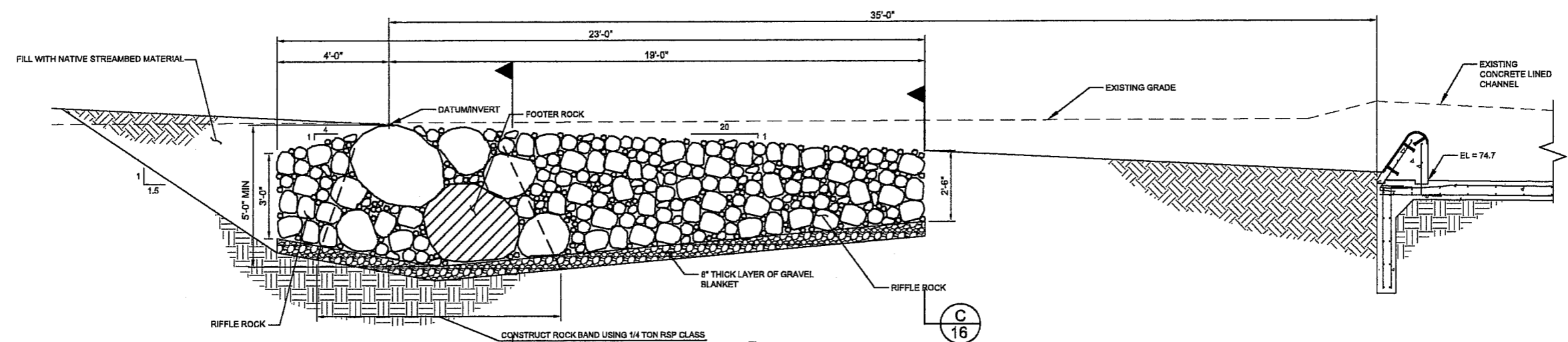
DESIGN: _____
DRAWN: _____
CHECKED: _____
FINAL PLANS

DATE	APPROVED	DESIGN	DRAWN	CHECKED	NO.

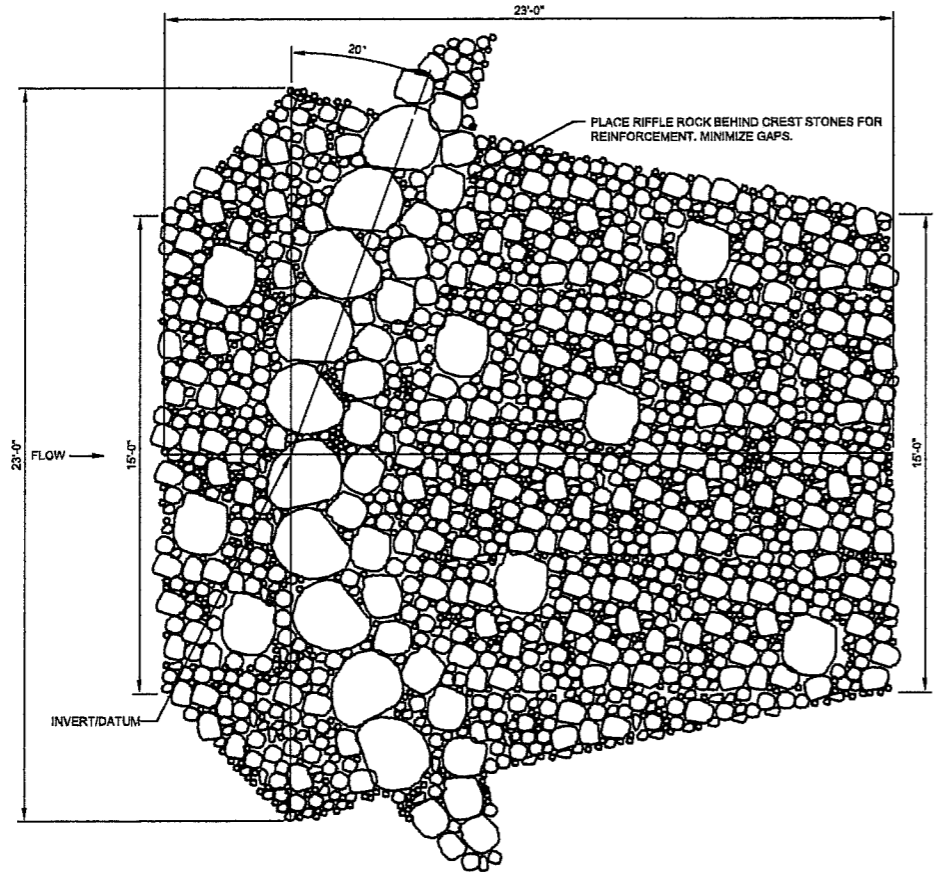
MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
ROCK RIFFLE
SECTIONS AND DETAILS

2011-000###
P&W. NO. _____
BID NO. _____ SHT. DES. _____
C-1-4639
DWG. NO. _____

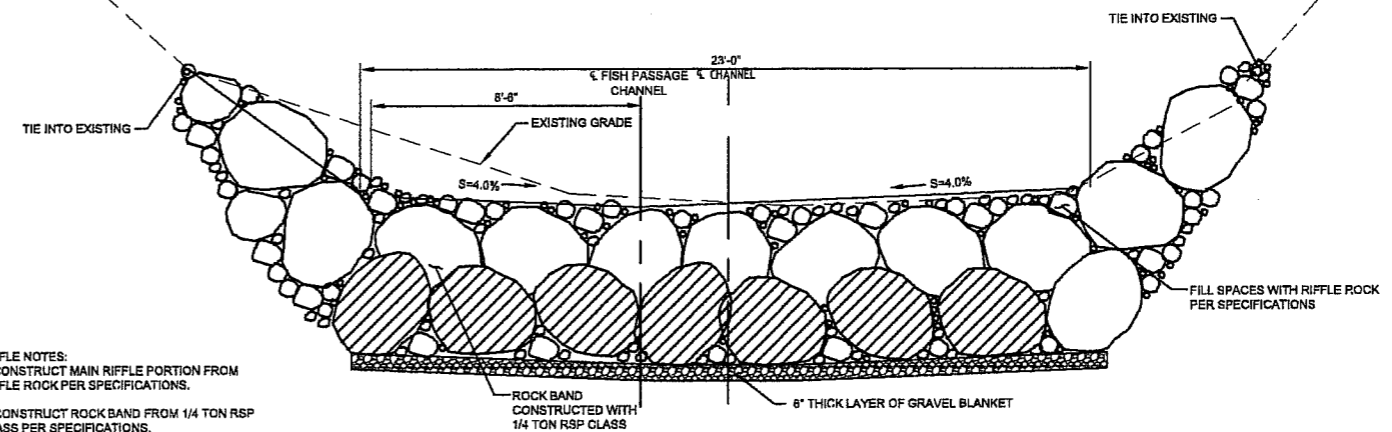
SHT. 16 OF 23



A SECTION - ROCK RIFFLE
16 SCALE: 1/2" = 1'-0"
0 1 2 4 8 FT
SCALE: 1/2" = 1'-0"

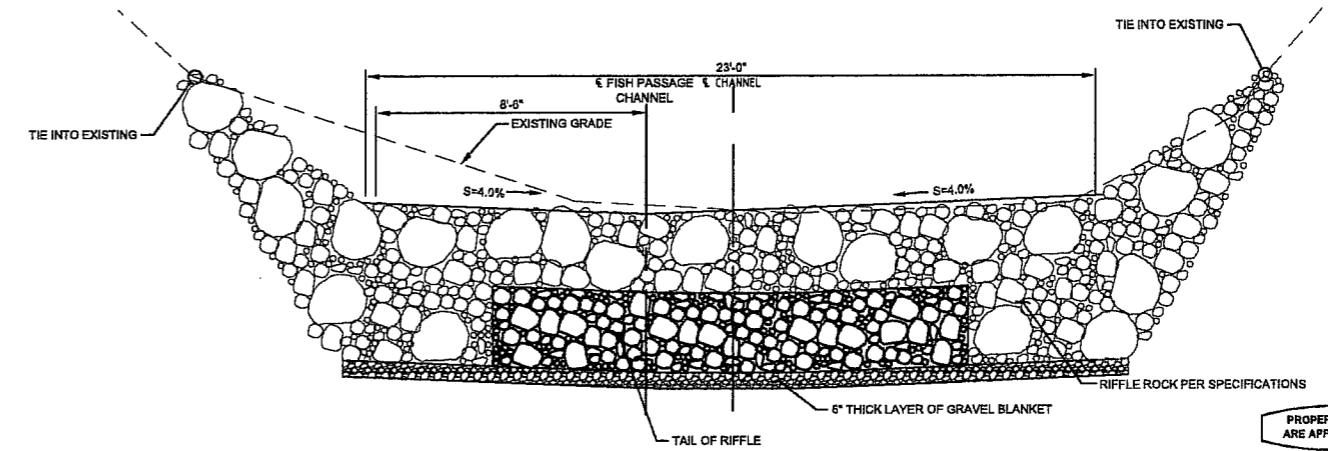


1 PLAN - ROCK RIFFLE
16 SCALE: 3/8" = 1'-0"
0 2 4 8 FT
SCALE: 3/8" = 1'-0"



B SECTION - ROCK RIFFLE
16 SCALE: 3/8" = 1'-0"
0 2 4 8 FT
SCALE: 3/8" = 1'-0"

RIFFLE NOTES:
1. CONSTRUCT MAIN RIFFLE PORTION FROM RIFFLE ROCK PER SPECIFICATIONS.
2. CONSTRUCT ROCK BAND FROM 1/4 TON RSP CLASS PER SPECIFICATIONS.



C SECTION - ROCK RIFFLE
16 SCALE: 3/8" = 1'-0"
0 2 4 8 FT
SCALE: 3/8" = 1'-0"

PROPERTY LINES ARE APPROXIMATE



PROJECT ENGINEER DATE



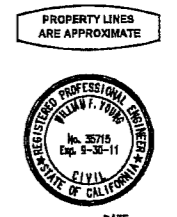
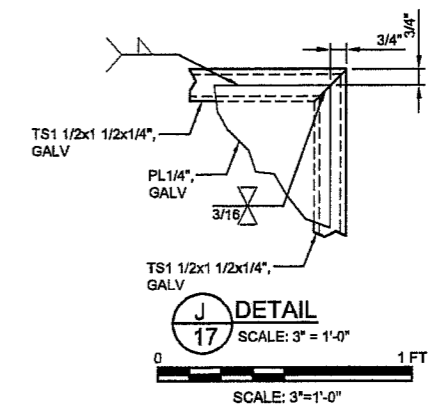
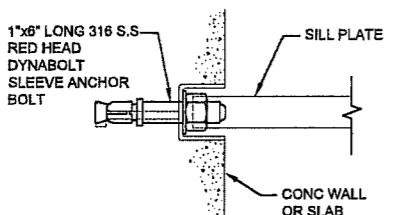
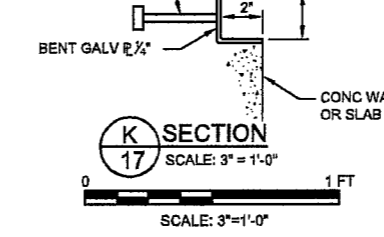
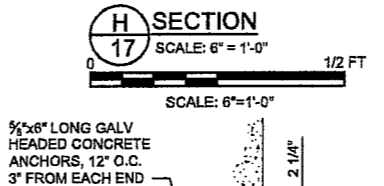
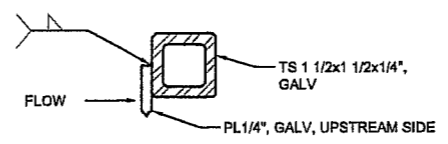
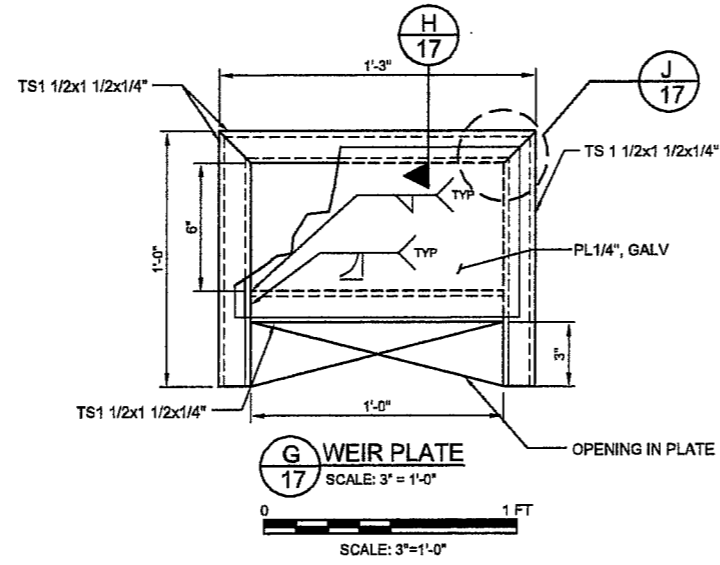
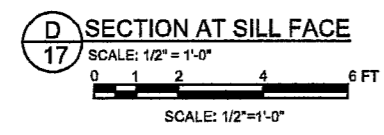
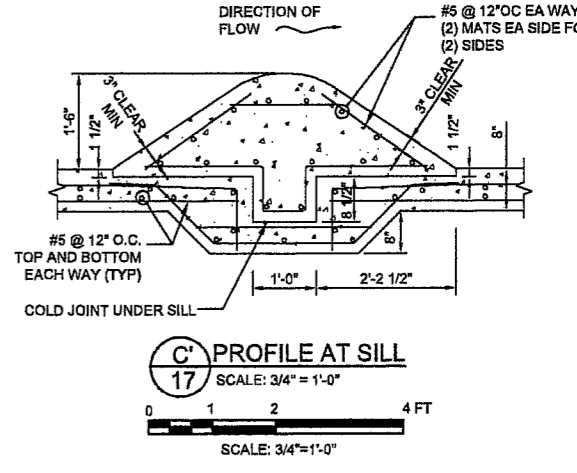
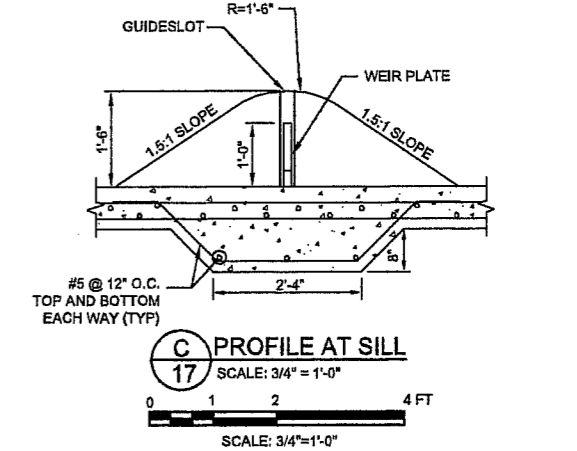
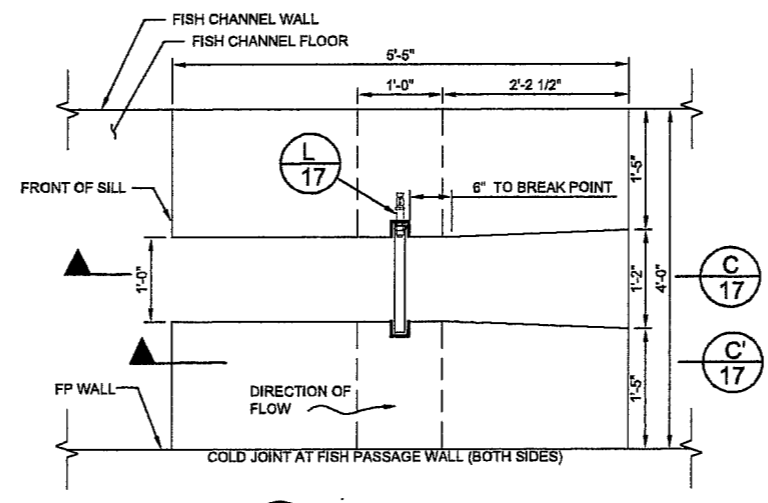
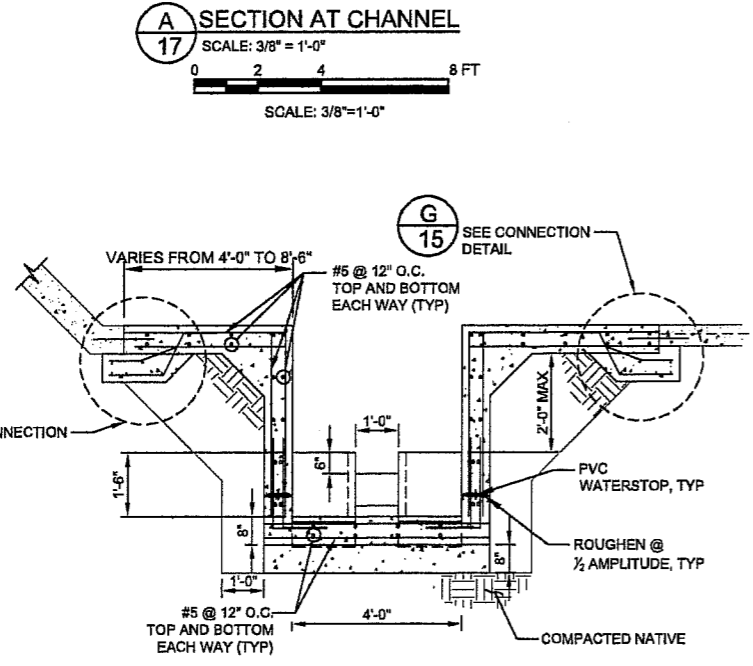
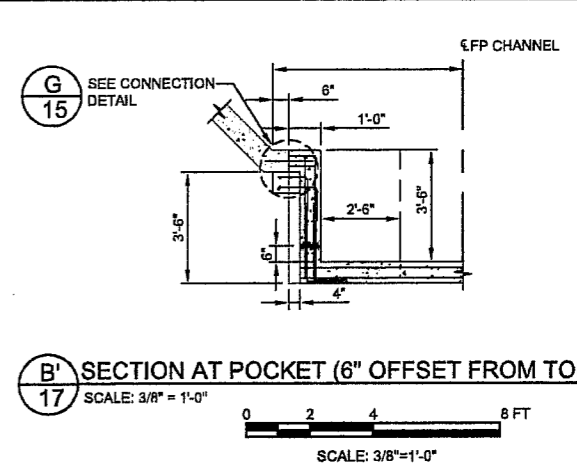
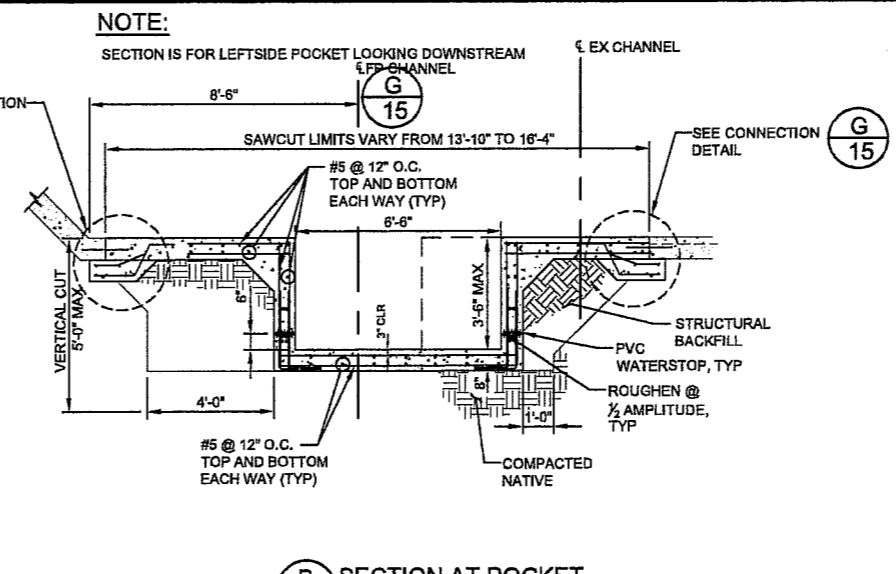
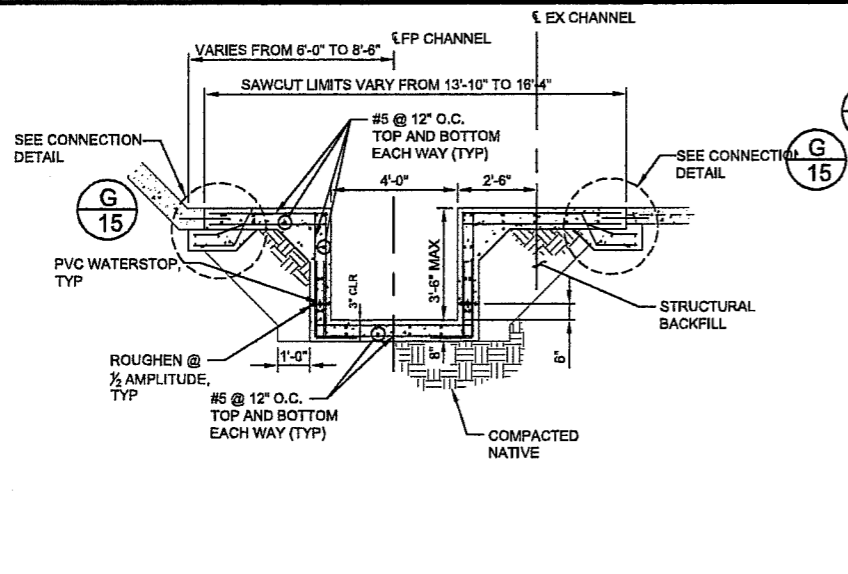
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

APPROVER: _____ DATE _____
CITY ENGINEER ORIGINAL SIGNED DATE _____

DATE	APPROVED	DESIGN	BJS	JLR	DRAWN	CHECKED	WJY	FINAL PLANS

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
STRUCTURAL DETAILS

2011-000###
PRJ. NO. _____
SHT. NO. _____
C-1-4639
DWD. NO. _____
SHT. 17 OF 23



PROPERTY LINES ARE APPROXIMATE

PROJECT ENGINEER _____ DATE _____



HR
 HR Engineering, Inc.
 2228 E. Carson Road, Suite 201
 Irvine, California 92602

PUBLIC WORKS
 DEPARTMENT
 ENGINEERING DIVISION

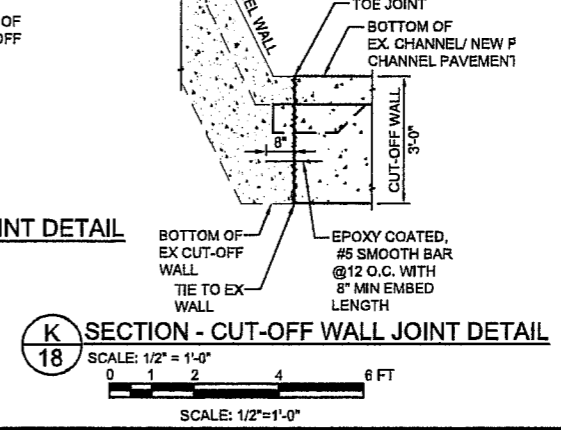
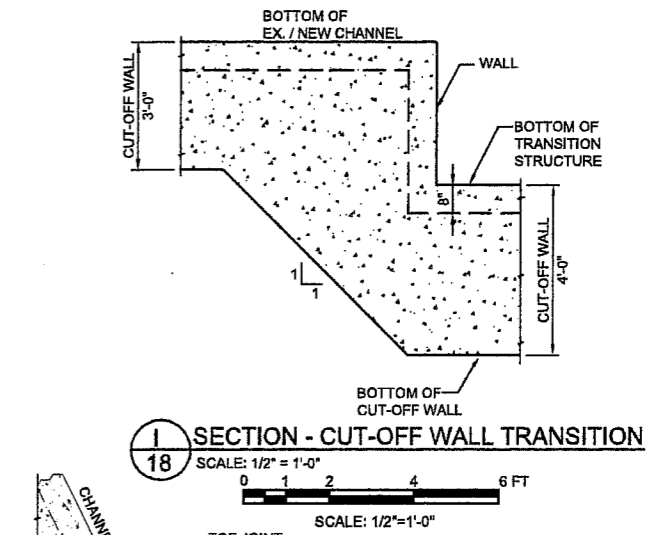
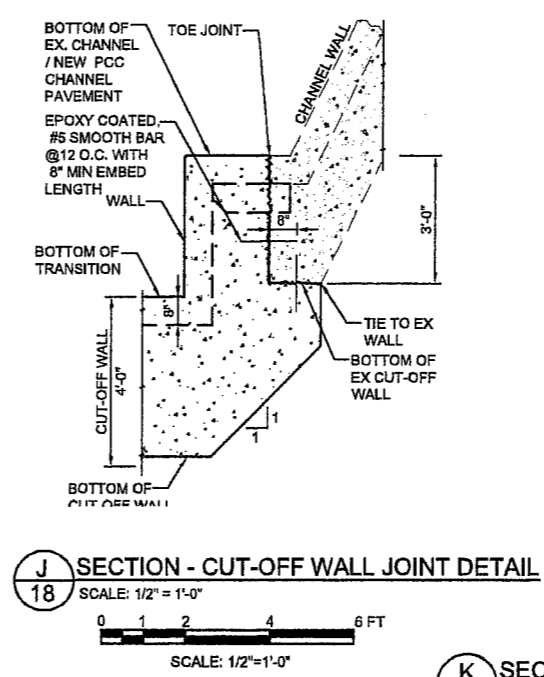
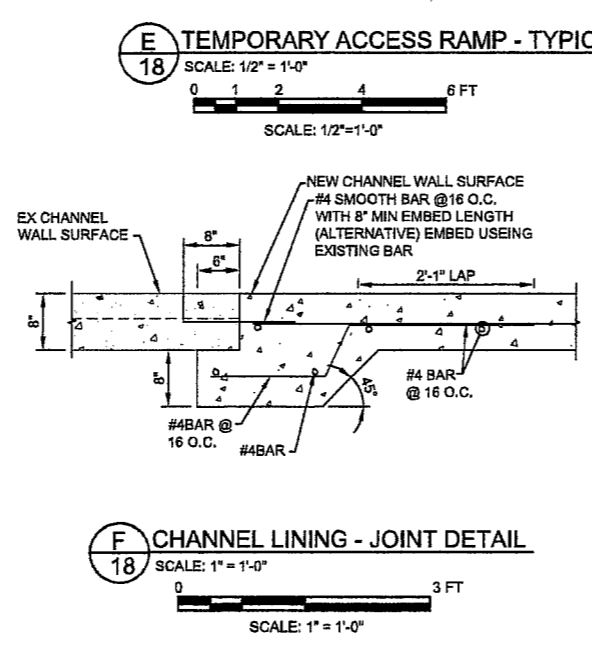
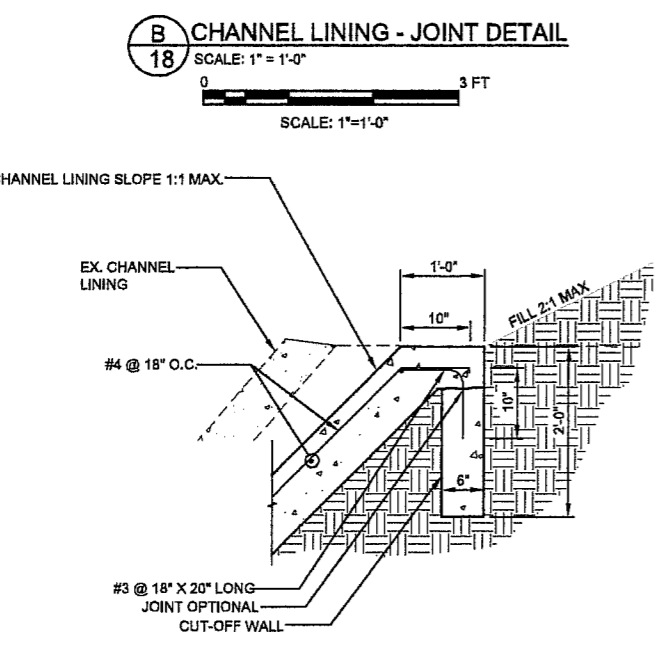
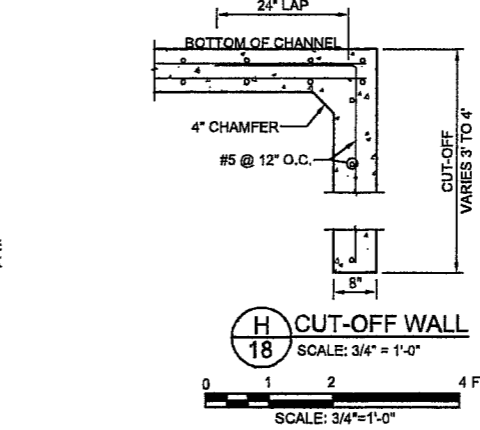
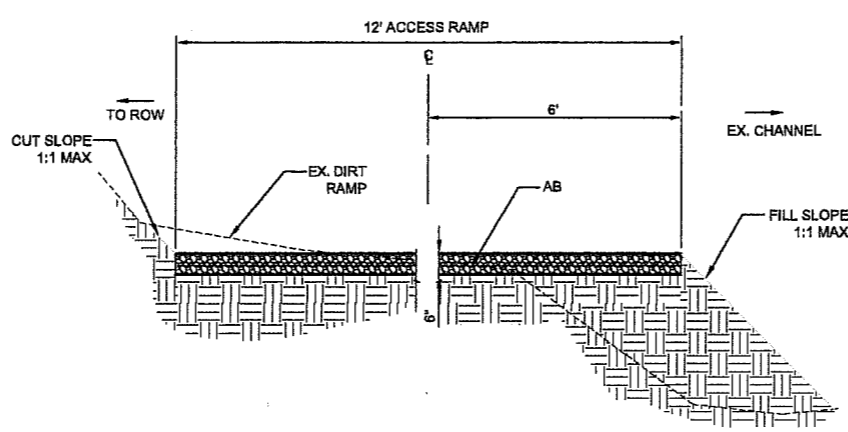
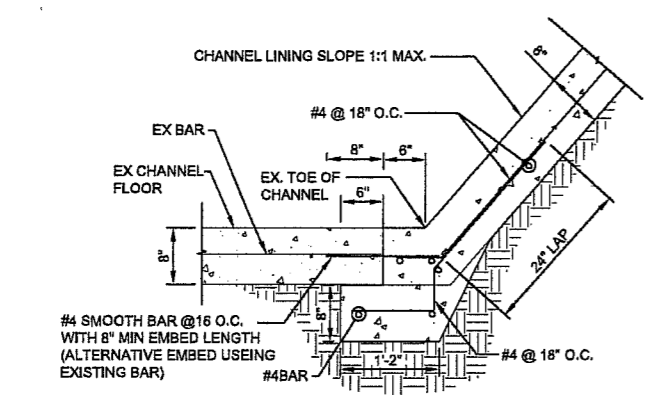
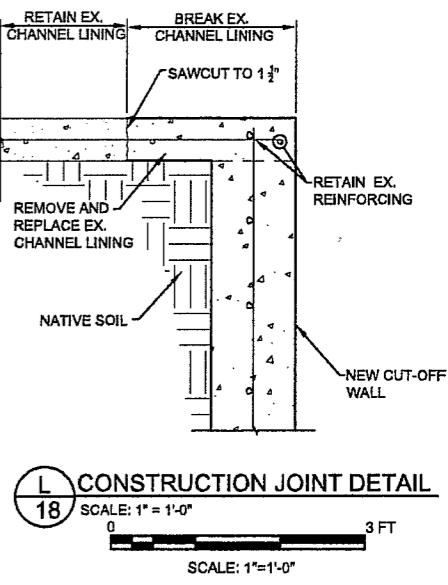
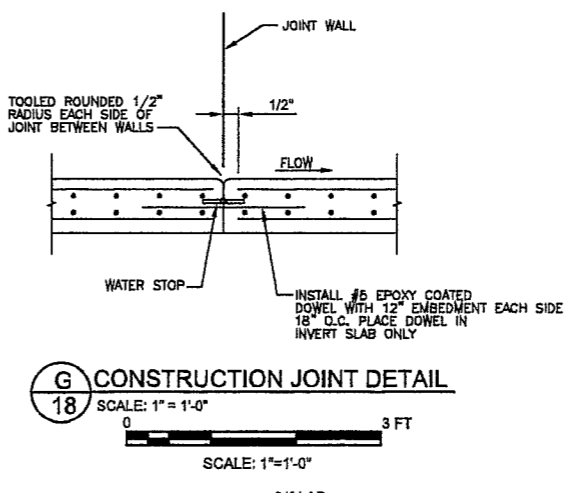
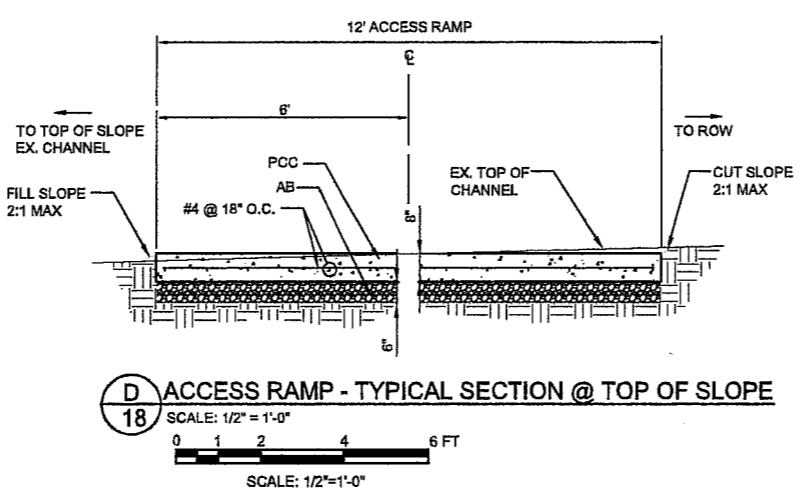
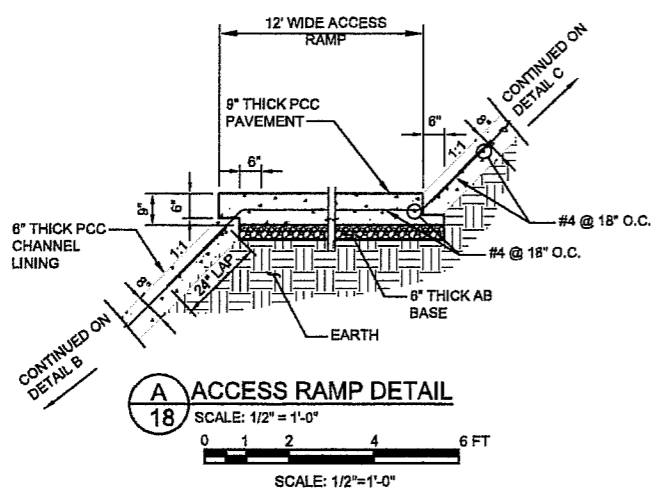
APPROVED: _____ DATE _____
 CITY ENGINEER ORIGINAL SIGNED DATE _____

DESIGN: _____
 DRAWN: _____
 CHECKED: _____
 DATE: _____

NO. _____
 REVISIONS

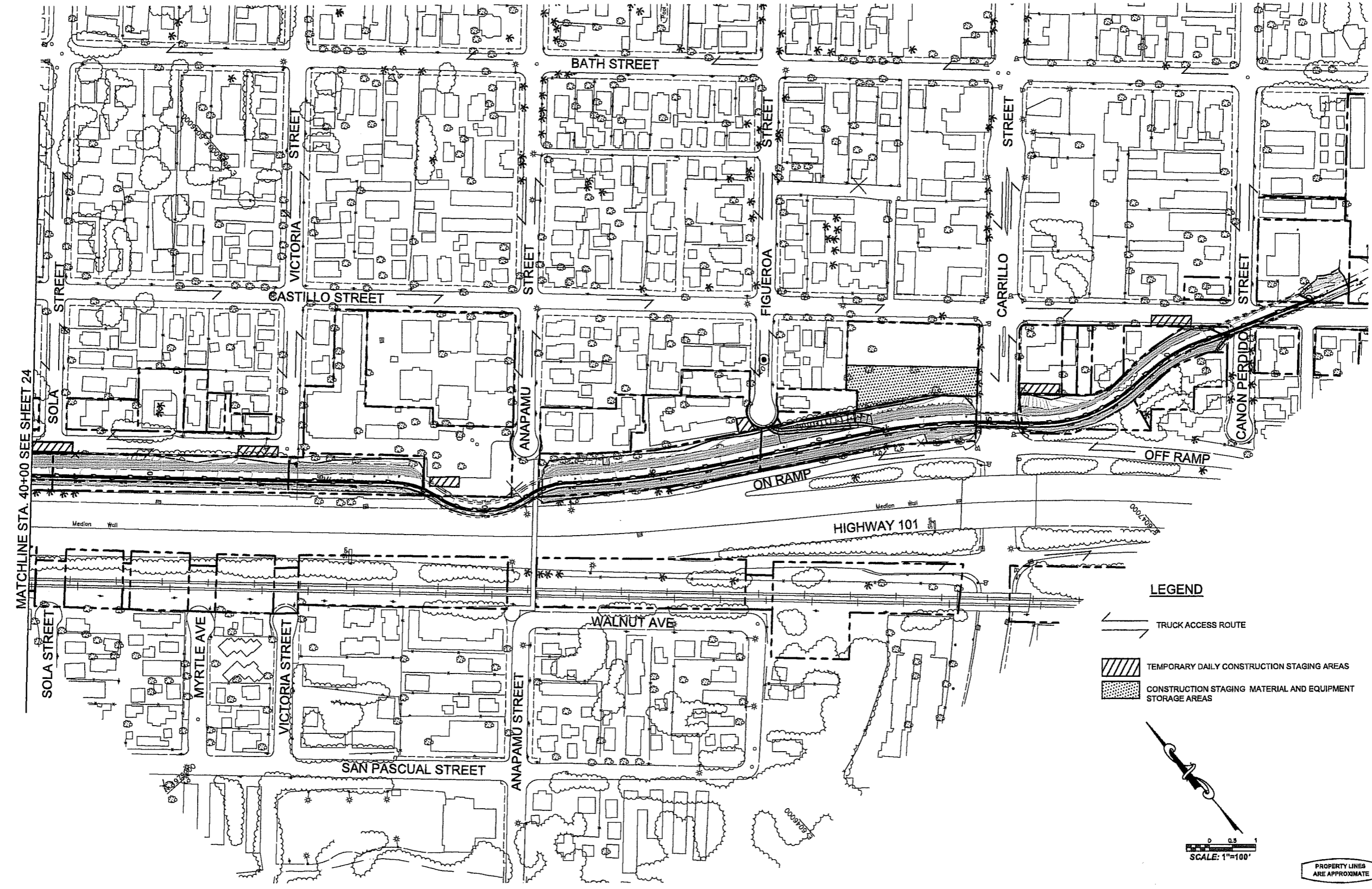
MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
STRUCTURAL DETAILS
ACCESS RAMPS

2011-000###
 PBW. NO. _____
 BID NO. _____ SHT. DES. _____
 C-1-4639
 DWG. NO. _____
 PROJECT ENGINEER DATE _____
 SHT. 18 OF 23



PROPERTY LINES
 ARE APPROXIMATE





MATCHLINE STA. 40+00 SEE SHEET 24

LEGEND

- TRUCK ACCESS ROUTE
- TEMPORARY DAILY CONSTRUCTION STAGING AREAS
- CONSTRUCTION STAGING MATERIAL AND EQUIPMENT STORAGE AREAS

SCALE: 1"=100'

PROPERTY LINES ARE APPROXIMATE



PROJECT ENGINEER _____ DATE _____



PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

APPROVER:	DATE
CITY ENGINEER	ORIGINAL SIGNED DATE

NO.	DATE	APPROVED	DESIGN	BUS	JLR	WIFY	FINAL
			DRAWN	CHECKED			PLANS

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
TRAFFIC CONTROL PLAN
STA. 10+00 TO 40+00

2011-000###
PBW. NO. -
BID NO. - SHT. DES. -
C-1-4639
DWD. NO.



HDR

HDR Engineering, Inc.
12240 El Camino Real, Suite 200
San Diego, California 92121

PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

APPROVED:	CITY ENGINEER	DATE
	ORIGINAL SIGNED DATE	

DESIGN	BUS
DRAWN	JLR
CHECKED	WEY

DATE	APPROVED	NO.

REVISIONS

NO.	DATE	APPROVED	DESIGN	BUS
			DRAWN	JLR
			CHECKED	WEY

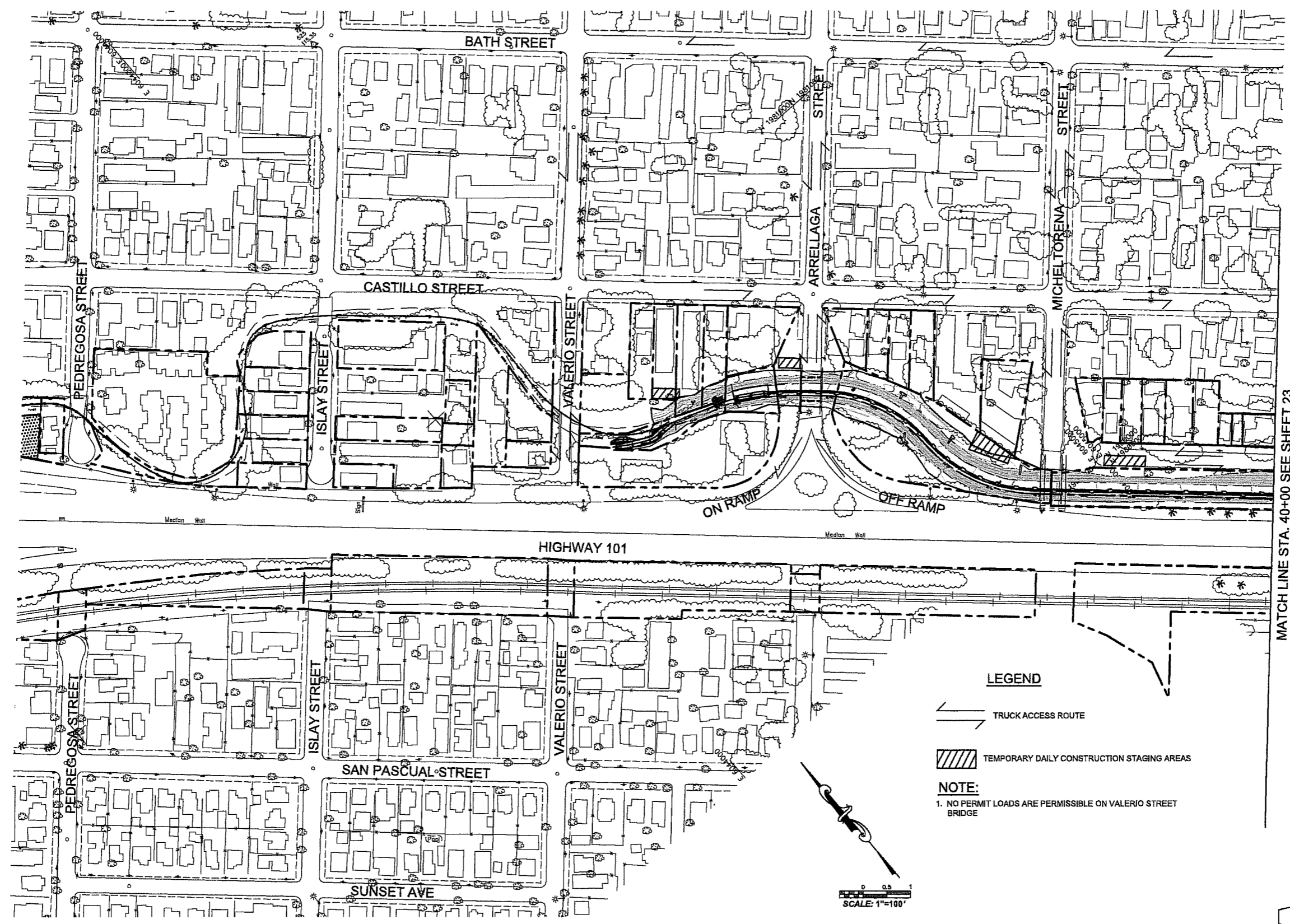
FINAL
PLANS

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
TRAFFIC CONTROL PLAN
STA. 40+00 TO 55+15.64

2011-000###
PBW. NO.
BID NO.
SHT. DES.
C-1-4639
DWG. NO.

PROJECT ENGINEER	DATE

SHT. 20	OF 23
---------	-------



MATCH LINE STA. 40+00 SEE SHEET 23

LEGEND

- TRUCK ACCESS ROUTE
- TEMPORARY DAILY CONSTRUCTION STAGING AREAS

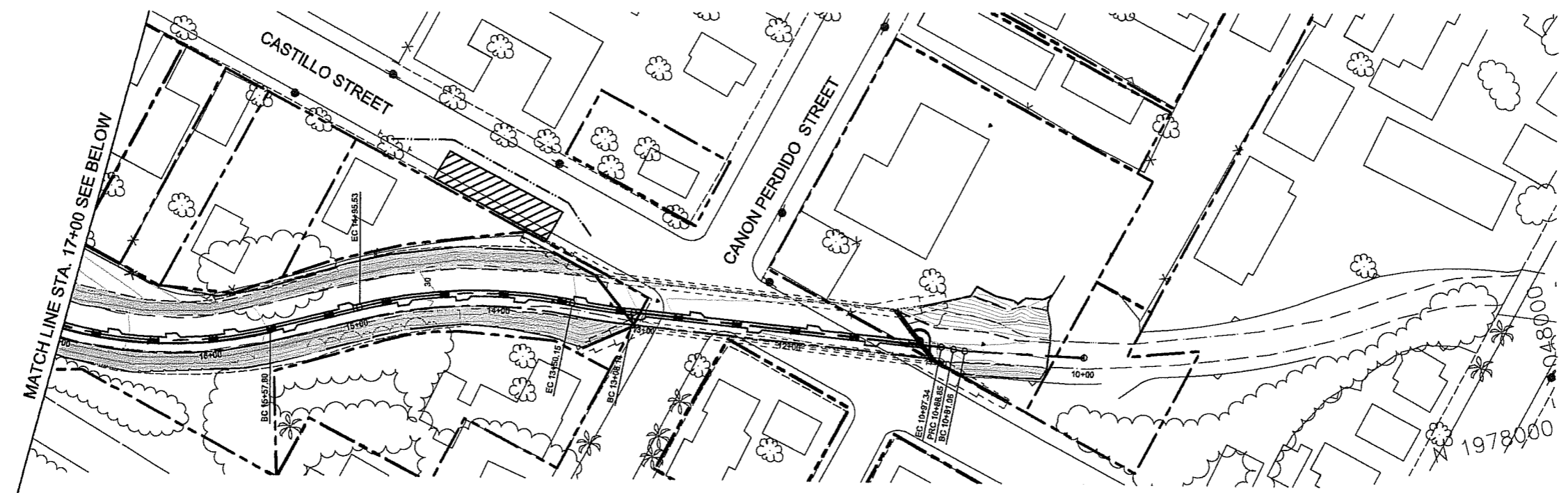
NOTE:
1. NO PERMIT LOADS ARE PERMISSIBLE ON VALERIO STREET BRIDGE

SCALE: 1"=100'

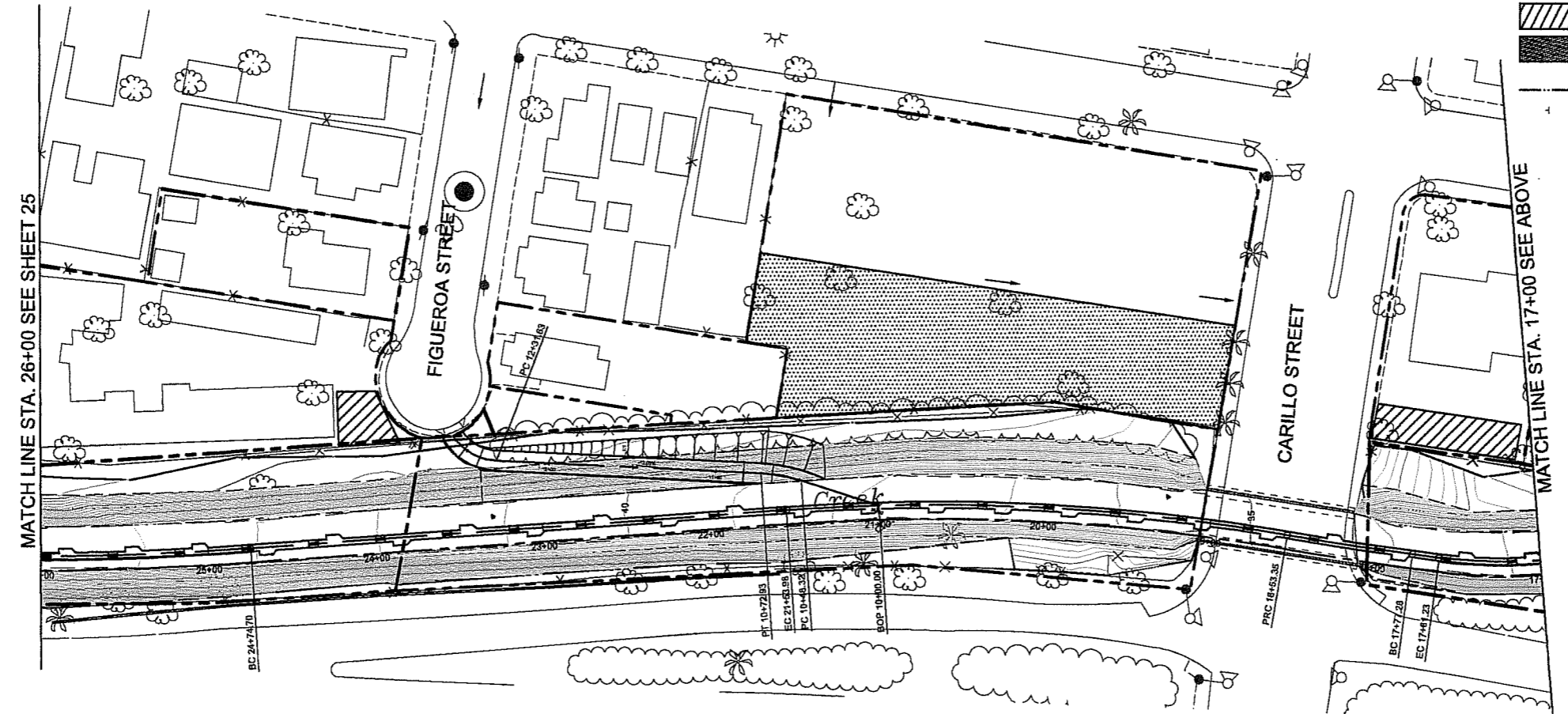
PROPERTY LINES ARE APPROXIMATE



PROJECT ENGINEER DATE



PLAN

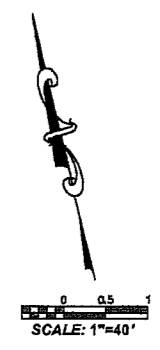


PLAN

NOTE:
 1. TRAFFIC CONTROL SIGN AND DELINEATORS PER THE LATEST EDITION OF THE WORK AREA TRAFFIC CONTROL HANDBOOK (W.A.T.C.H.)

LEGEND

- TEMPORARY DAILY CONSTRUCTION STAGING AREAS
- CONSTRUCTION STAGING MATERNAL AND EQUIPMENT STORAGE AREAS
- TRAFFIC DELINEATORS
- TRAFFIC SIGN



PROPERTY LINES ARE APPROXIMATE



PROJECT ENGINEER DATE



HDR
 HDR Engineering, Inc.
 527 El Camino Real, Suite 210
 Foster, California 92522

PUBLIC WORKS DEPARTMENT
 ENGINEERING DIVISION

APPROVED: _____ DATE _____
 CITY ENGINEER ORIGINAL SIGNED DATE _____

DESIGN: _____
 DRAWN: _____
 CHECKED: _____
 W.F.Y.

DATE	APPROVED	DESIGN	BUS	FINAL
				PLANS

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
STAGING AREA PLAN
 STA. 10+00 TO 26+00

2011-000###
 PB# NO.
 BID NO. SHT. DES.
 C-1-4639
 DWG. NO.
 SHT. 21 OF 23



HR

HRA Engineering, Inc.
2224 El Camino Real, Suite 210
Irvine, California 92614

PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

APPROVED: _____ DATE _____
CITY ENGINEER ORIGINAL SIGNED DATE _____

DESIGN _____
DRAWN _____
CHECKED _____
FINAL PLANS

DATE APPROVED _____
DESIGN _____
DRAWN _____
CHECKED _____

NO. _____
REVISIONS

NO. _____
REVISIONS

NO. _____
REVISIONS

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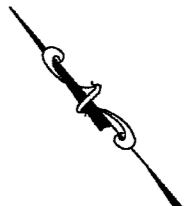
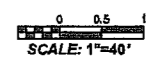
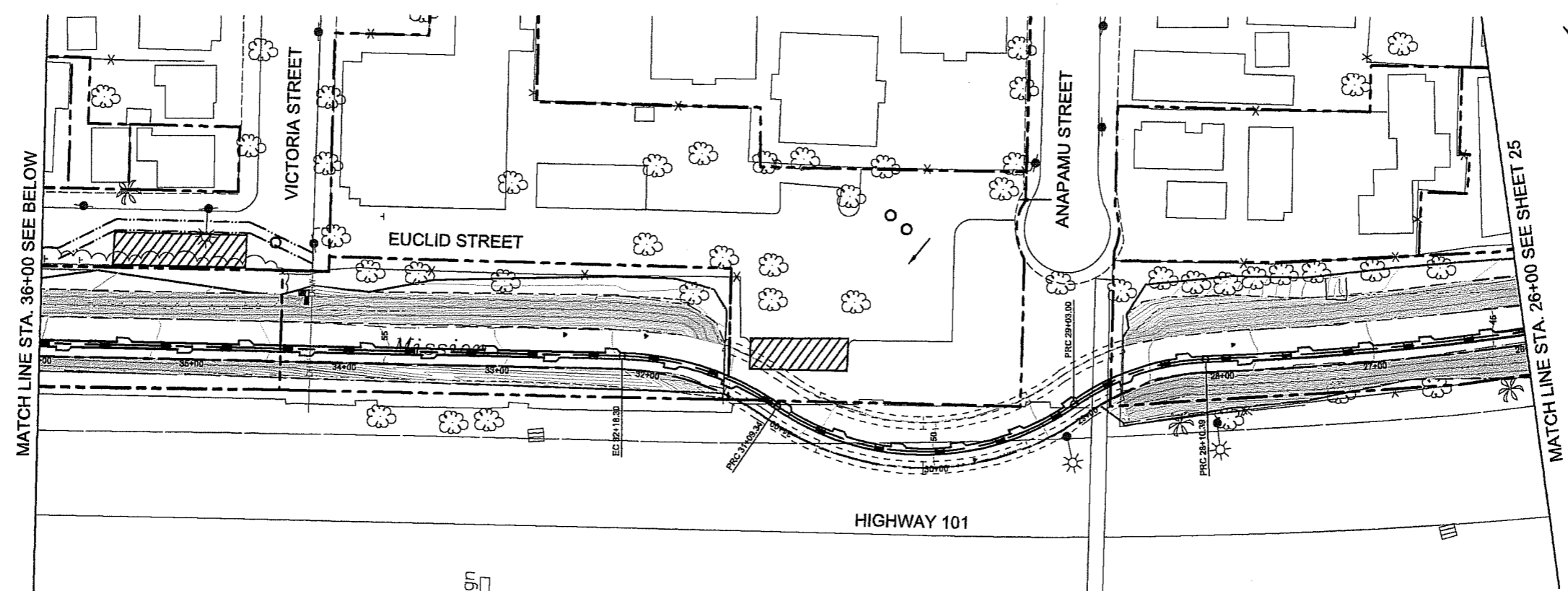
MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
STAGING AREA PLAN

2011-000###
PBW. NO.

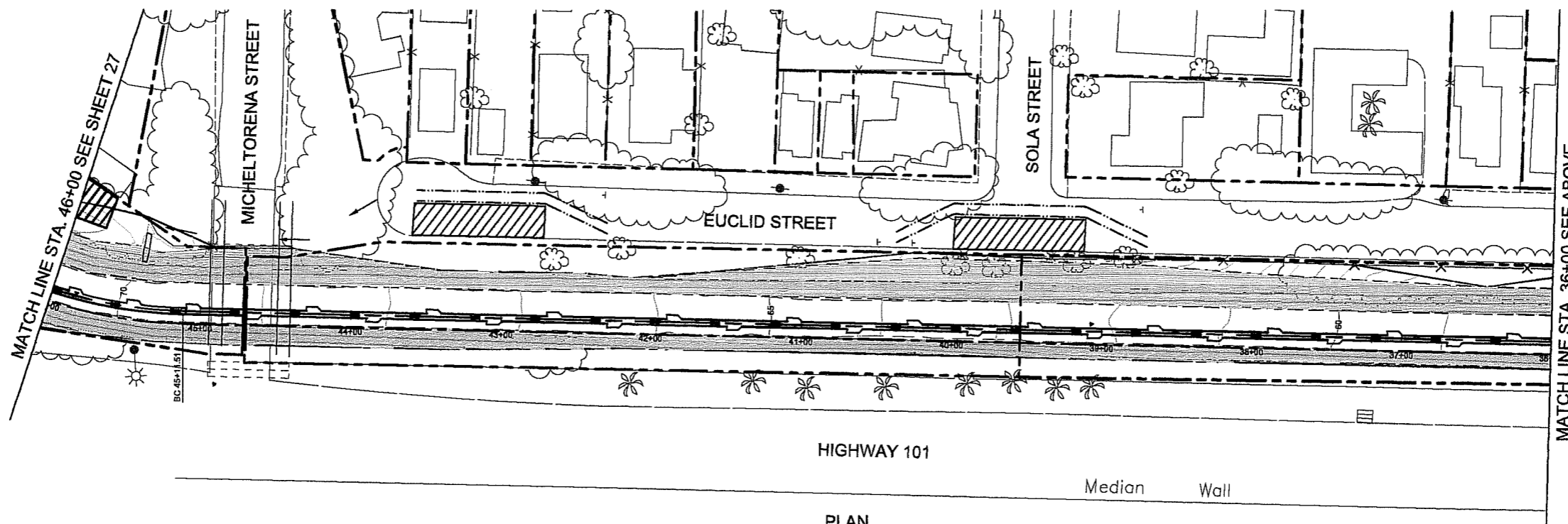
BID NO. _____ SHT. DES. _____

C-1-4639
DWG. NO.




SHT. 22 OF 23



PLAN



PLAN

- LEGEND**
-  TEMPORARY DAILY CONSTRUCTION STAGING AREAS
 -  TRAFFIC DELINEATORS
 -  TRAFFIC SIGN

NOTE:
1. TRAFFIC CONTROL SIGN AND DELINEATORS PER THE LATEST EDITION OF THE WORK AREA TRAFFIC CONTROL HANDBOOK (W.A.T.C.H.).

PROPERTY LINES ARE APPROXIMATE



PROJECT ENGINEER _____ DATE _____



HR
 HR Engineering, Inc.
 2290 El Camino Real, Suite 250
 Irvine, California 92612

PUBLIC WORKS
 DEPARTMENT
 ENGINEERING DIVISION

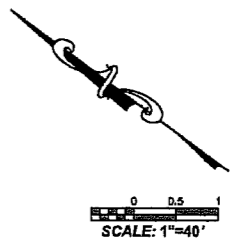
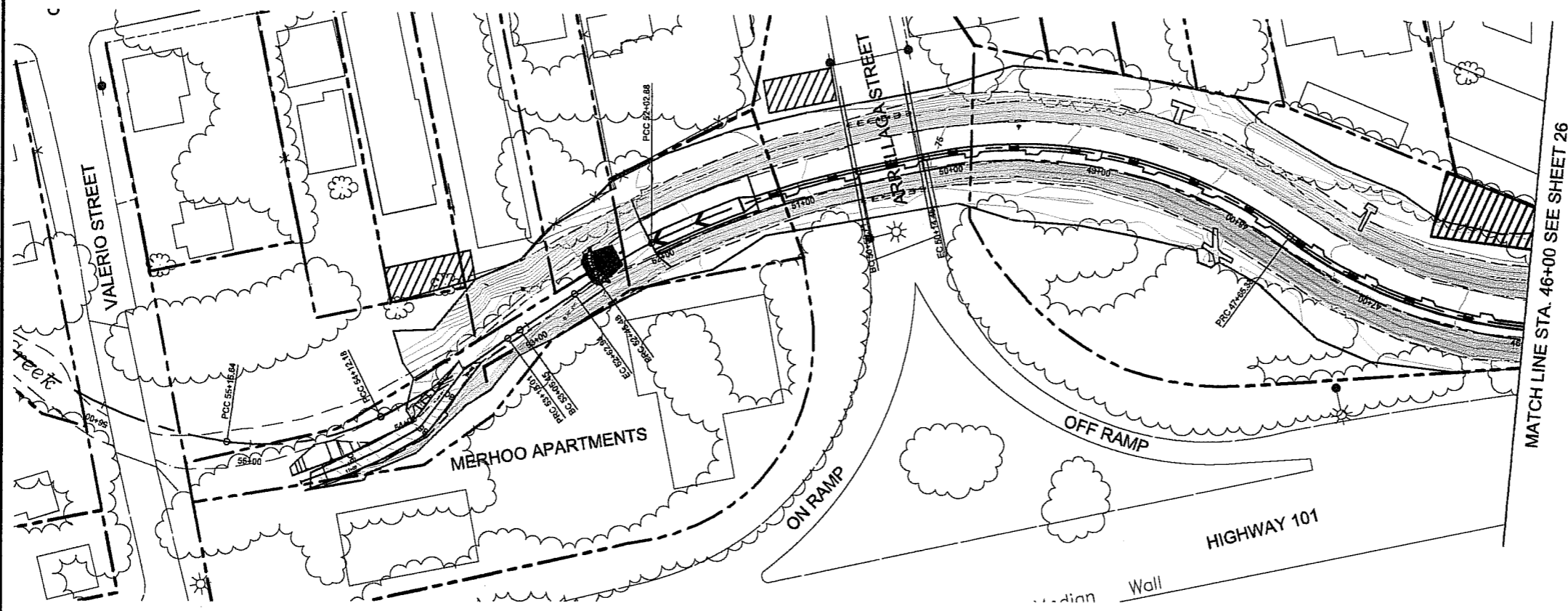
APPROVED: _____ DATE _____
 CITY ENGINEER ORIGINAL SIGNED DATE _____

DESIGN: BJS
 DRAWN: JLR
 CHECKED: JCY
 FINAL PLANS

NO.	DATE	APPROVED	REVISIONS

MISSION CREEK FISH PASSAGE PROJECT (PHASE 2)
STAGING AREA PLAN
 STA. 46+00 TO 55+15.64

2011-000###
 PERM. NO. _____
 BID NO. _____ SHT. DES. _____
 C-1-4639
 DWG. NO. _____
 SHT. 23 OF 23



PLAN

LEGEND

TEMPORARY DAILY CONSTRUCTION STAGING AREAS

NOTES:

1. TRAFFIC CONTROL SIGN AND DELINEATORS PER THE LATEST EDITION OF THE WORK AREA TRAFFIC CONTROL HANDBOOK (W.A.T.C.H.)
2. NO PERMIT LOADS ARE PERMISSIBLE ON VALERIO STREET BRIDGE
3. VALERIO STREET BRIDGE BR. NO. 51C0290 IS RATED FOR HS-20 LOADING

PROPERTY LINES ARE APPROXIMATE



PROJECT ENGINEER _____ DATE _____