

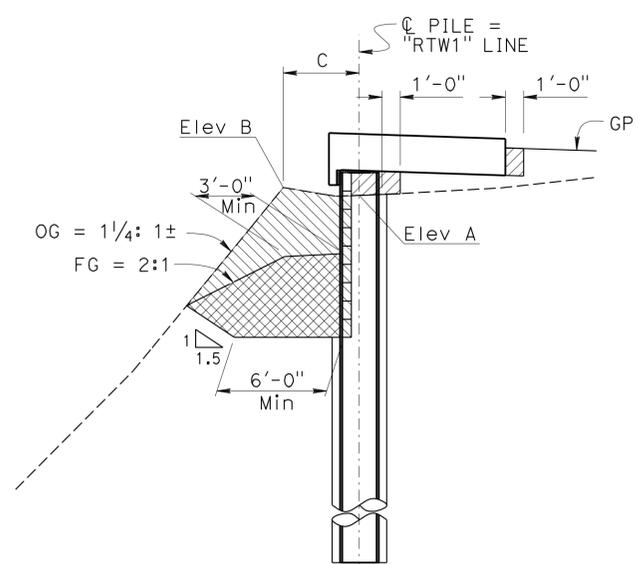
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02	Tri	299	0.4/0.9	101	136

*Kelly Ann Holder* 2-23-13  
REGISTERED CIVIL ENGINEER DATE

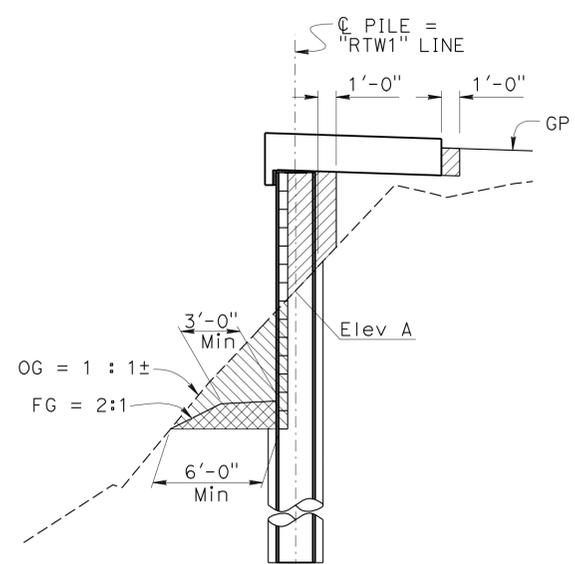
2-25-13  
PLANS APPROVAL DATE

*Kelly Ann Holder*  
REGISTERED PROFESSIONAL ENGINEER  
No. 42268  
Exp. 3/31/14  
CIVIL  
STATE OF CALIFORNIA

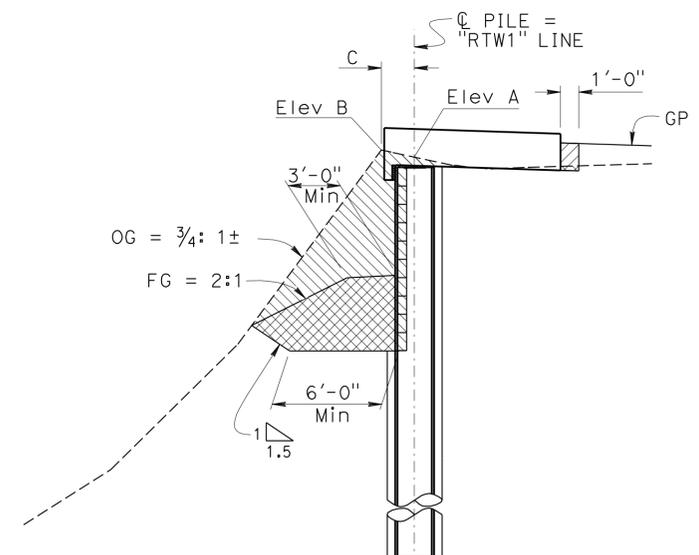
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**SECTION STATION  
10+41.00 TO 10+60.00  
(ALONG "RTW1" LINE)**  
NO SCALE



**SECTION STATION  
10+60.00 TO 11+80.00  
(ALONG "RTW1" LINE)**  
NO SCALE



**SECTION STATION  
11+80.00 TO 12+17.00  
(ALONG "RTW1" LINE)**  
NO SCALE

- LEGEND:
- Indicates Structure Excavation (Soldier Pile Wall)
  - Indicates Structure Backfill (Soldier Pile Wall)

**EXCAVATION AND BACKFILL  
LIMIT TABLE**

"A1" LINE STATION	"RTW1" LINE STATION	Approx Elev (ft)		C (ft)
		Elev A	Elev B	
111+95	10+40	582.17	582.60	13.14
112+00	10+45	582.04	582.43	10.13
112+05	10+50	581.85	582.27	7.11
112+10	10+55	581.67	582.10	4.14
112+15	10+60	581.77	581.93	1.13
112+20	10+65	579.82		
112+25	10+70	578.60		
112+30	10+75	578.15		
112+35	10+80	577.77		
112+40	10+85	577.43		
112+45	10+90	577.09		
112+50	10+95	576.76		
112+55	11+00	576.42		
112+60	11+05	576.08		
112+65	11+10	575.80		
112+70	11+15	576.09		
112+75	11+20	576.40		
112+80	11+25	576.70		
112+85	11+30	577.01		
112+90	11+35	576.98		
112+95	11+40	576.94		
113+00	11+45	577.09		
113+05	11+50	577.46		
113+10	11+55	578.05		
113+15	11+60	579.13		
113+20	11+65	580.21		
113+25	11+70	581.28		
113+30	11+75	582.30		
113+35	11+80	583.05	583.05	1.00
113+40	11+85	583.01	583.23	1.01
113+45	11+90	582.96	583.35	1.80
113+50	11+95	582.90	583.48	2.58
113+55	12+00	582.84	583.60	3.36
113+60	12+05	582.37	583.61	5.25
113+65	12+10	582.27	583.60	7.34
113+70	12+15	582.29	583.58	9.53
113+73	12+18	582.28	583.57	10.90

DESIGN BY Wendy Hou CHECKED K. Stillmunkes / J. Jung			<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>		BRIDGE NO. 05E0009 POST MILE 0.5		<b>ENCHILADA CURVE IMPROVEMENT</b> <b>RETAINING WALL NO. 1</b> <b>EXCAVATION AND BACKFILL DETAILS</b>		
DETAILS BY Gerald Dickerson CHECKED K. Stillmunkes / J. Jung									REVISION DATES: 1-19-12, 9-10-12, 2-28-12		
QUANTITIES BY Evan Franciliso CHECKED Tomoko Kusumi									SHEET 7 OF 14		

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 UNIT: 3592 PROJECT NO. & PHASE: 0200000211-1 CONTRACT NO.: 02-2E3500 DISREGARD PRINTS BEARING EARLIER REVISION DATES

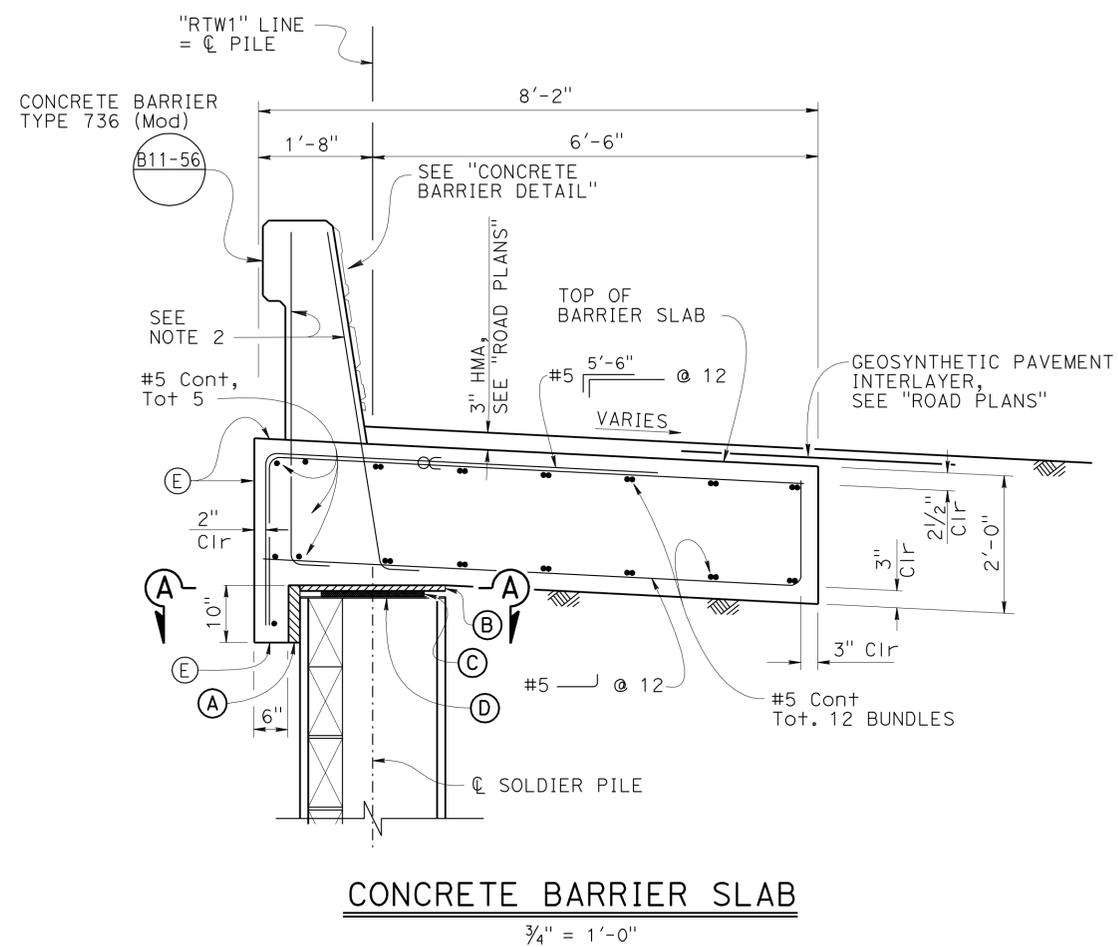
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02	Tri	299	0.4/0.9	102	136

*Kelly Ann Holder* 2-23-13  
REGISTERED CIVIL ENGINEER DATE

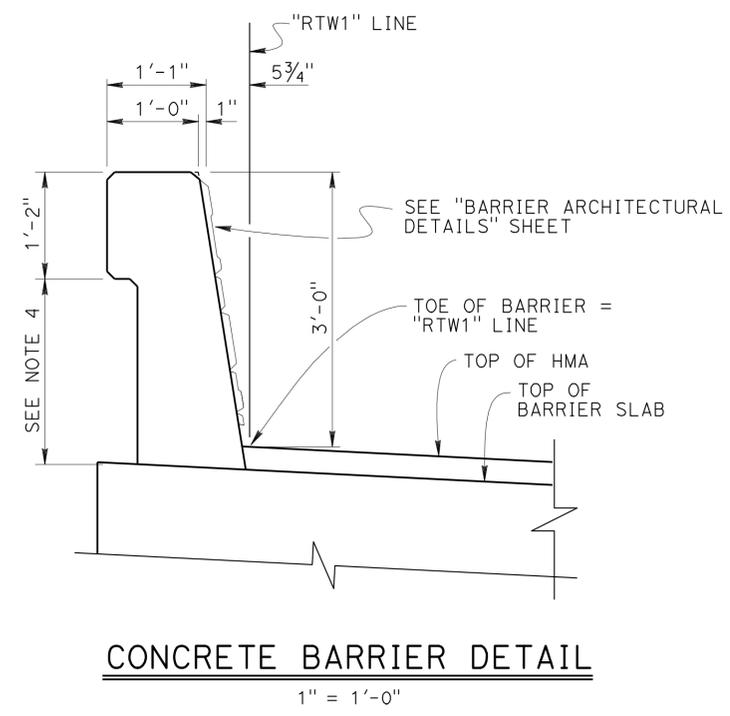
2-25-13  
PLANS APPROVAL DATE

STATE OF CALIFORNIA  
REGISTERED PROFESSIONAL ENGINEER  
No. 42268  
Exp. 3/31/14  
CIVIL

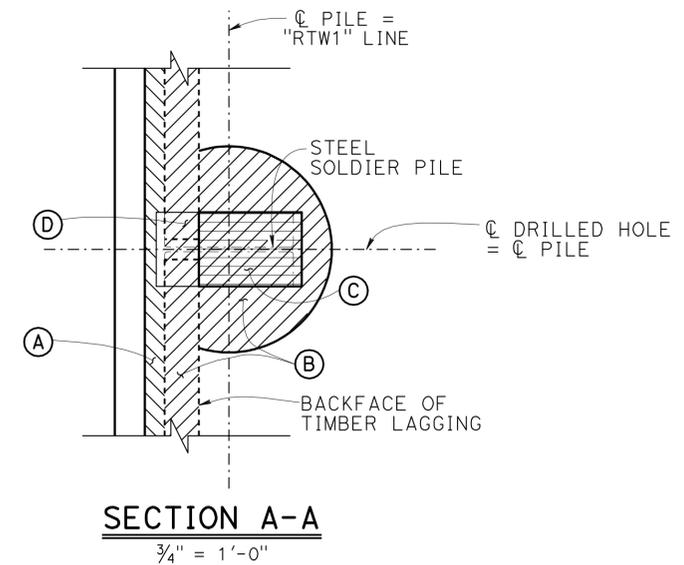
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**CONCRETE BARRIER SLAB**  
3/4" = 1'-0"



**CONCRETE BARRIER DETAIL**  
1" = 1'-0"



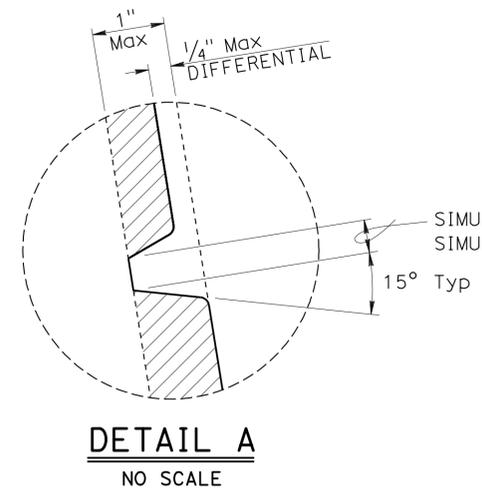
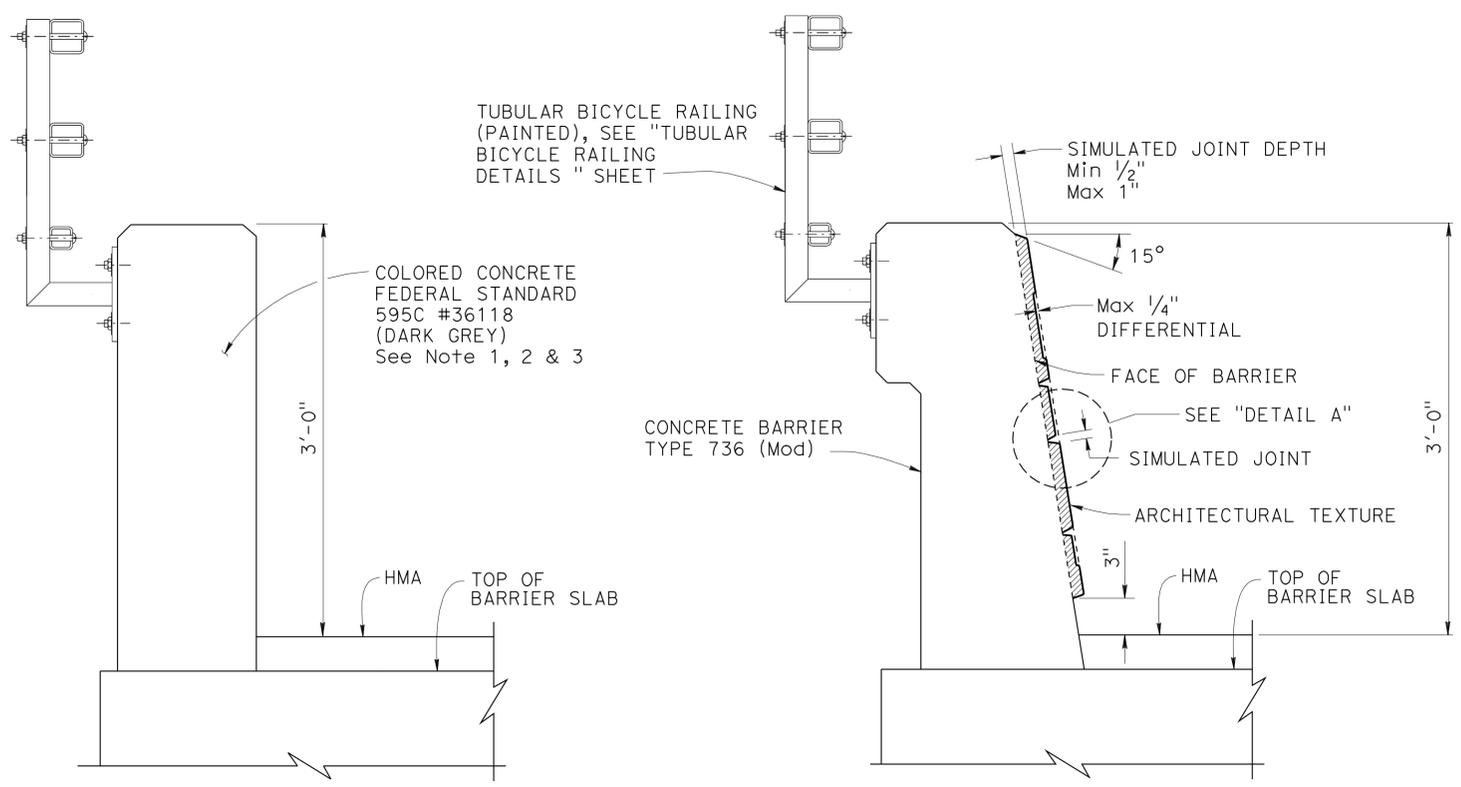
**SECTION A-A**  
3/4" = 1'-0"

- NOTES:
- Barrier and Concrete Barrier Slab reinforcement shall be epoxy coated.
  - Not all barrier reinforcement shown.
  - No expansion joints in concrete barrier or barrier slab within wall limits.
  - Dimension may vary with roadway cross slope and with certain thickness of HMA surfacing.
- (A) 2" Expanded polystyrene  
(B) 1" Expanded polystyrene, see "SECTION A-A"  
(C) 1" x 13" x 18" Elastomeric bearing pad bonded to top of each pile  
(D) 1/4" x 13" x 25 1/2"  $\angle$  welded to the top of pile  
(E) Prepare and stain exposed surfaces of barrier slab FSTD 595C #36118
- LEGEND:
- Indicates 1" Expanded polystyrene
  - Indicates 2" Min Expanded polystyrene
  - Indicates Bearing Pad
  - $\phi$  Indicates bundled bars

<b>ENCHILADA CURVE IMPROVEMENT</b> <b>RETAINING WALL NO. 1</b> <b>CONCRETE BARRIER SLAB DETAILS</b>				BRIDGE NO. 05E0009 POST MILE 0.5
DESIGN BY Wendy Hou CHECKED K. Stillmunkes / J. Jung DETAILS BY G Dickerson / Y. Feng CHECKED K. Stillmunkes / J. Jung QUANTITIES BY Evan Franciliso CHECKED Tomoko Kusumi	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>	UNIT: 3592 PROJECT NO. & PHASE: 0200000211-1 CONTRACT NO.: 02-2E3500	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	DISREGARD PRINTS BEARING EARLIER REVISION DATES
0 1 2 3		REVISION DATES 1-26-12 2-23-13 2-23-13	SHEET OF 8 14	FILE => 05-rtw1-n-bs_det.dgn

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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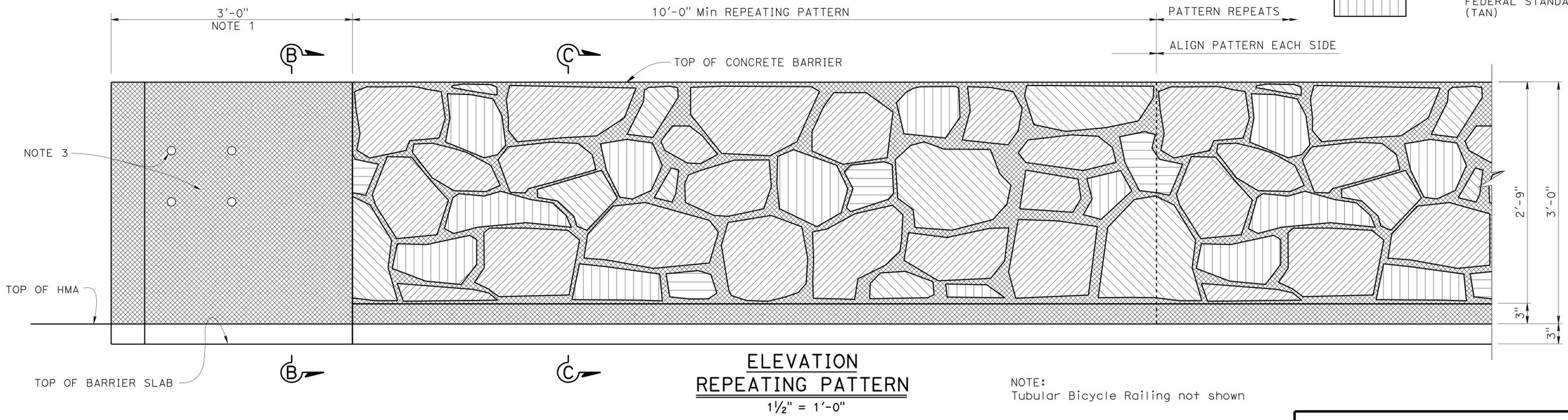
Kelly Ann Holder 2-23-13  
 REGISTERED CIVIL ENGINEER PLANS DATE  
 2-25-13  
 PLANS APPROVAL DATE  
 Kelly Ann Holder  
 No. 42268  
 Exp. 3/31/14  
 CIVIL  
 STATE OF CALIFORNIA  
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- NOTES:
- No architectural texture within 3'-0" of Begin Wall and End Wall
  - For transition front face of barrier, see B11-56
  - For Metal Beam Guard connection details, see RSP A77J2

LEGEND:

	COLORED CONCRETE (ENTIRE BARRIER) FEDERAL STANDARD 595C #36118 (DARK GREY)
	75% CONCRETE STAIN FEDERAL STANDARD 595C #26008 (VERY DARK GRAY)
	13% CONCRETE STAIN FEDERAL STANDARD 595C #26231 (MEDIUM GRAY)
	2% CONCRETE STAIN FEDERAL STANDARD 595C #36650 (OFF WHITE)
	10% CONCRETE STAIN FEDERAL STANDARD 595C #33717 (TAN)



DESIGN BY Wendy Hou DETAILS BY G. Dickerson / Y. Feng QUANTITIES BY Evan Franciliso				CHECKED K. Stillmunkes / J. Jung CHECKED K. Stillmunkes / J. Jung CHECKED Tomoko Kusumi		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7		BRIDGE NO. 05E0009 POST MILE 0.5		<b>ENCHILADA CURVE IMPROVEMENT</b> <b>RETAINING WALL NO. 1</b> <b>BARRIER ARCHITECTURAL DETAILS</b>	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: 3592 PROJECT NO. & PHASE: 020000211-1 CONTRACT NO.: 02-2E3500		DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES SHEET OF 3-28-12 2-14-13 2-23-13 9 14	

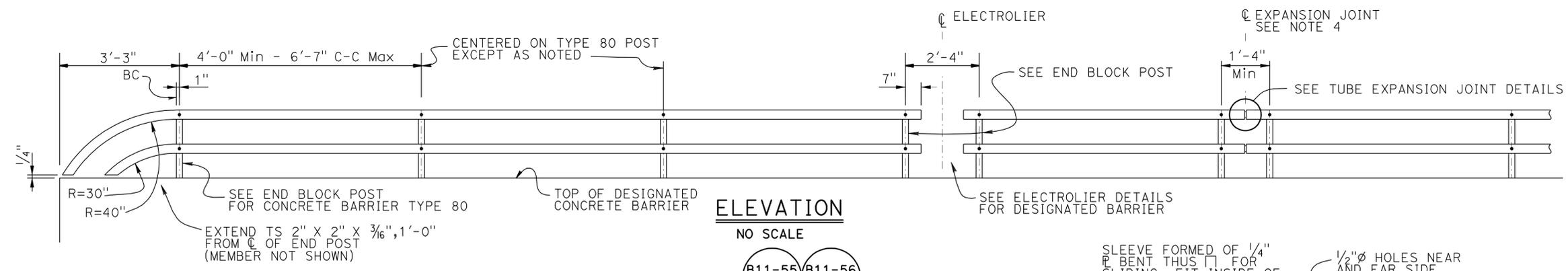
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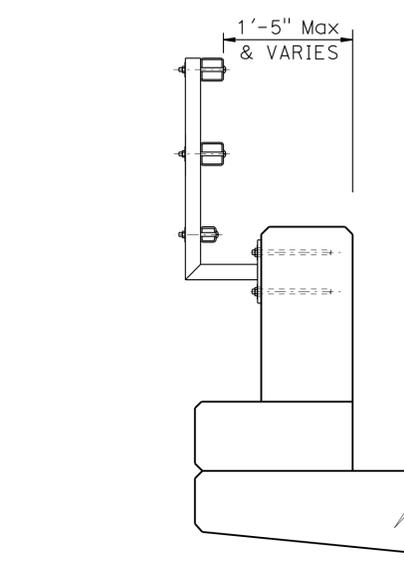
Registered Professional Engineer  
 Gregory J. Koderabek  
 No. C40814  
 Exp. 3-31-13  
 CIVIL  
 STATE OF CALIFORNIA

2-25-13  
 PLANS APPROVAL DATE

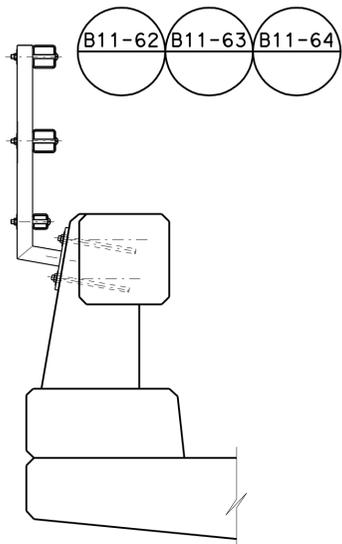
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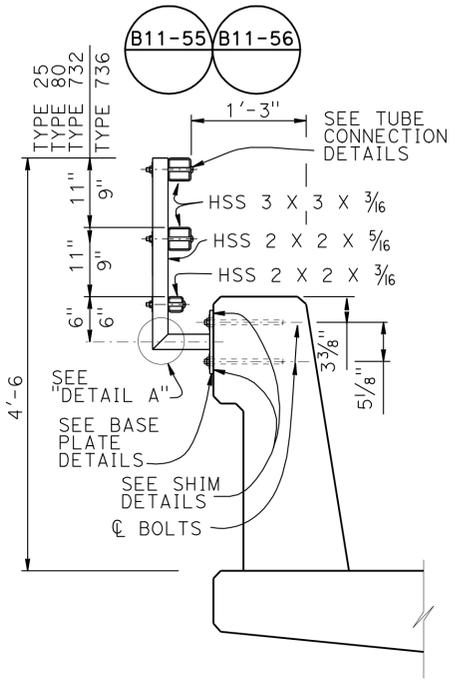
**ELEVATION**  
NO SCALE



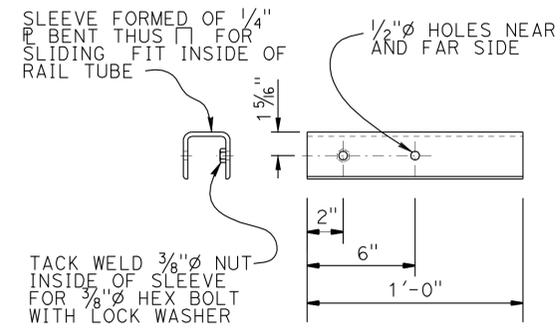
**TYPE 80 END BLOCK POST**  
1" = 1'-0"



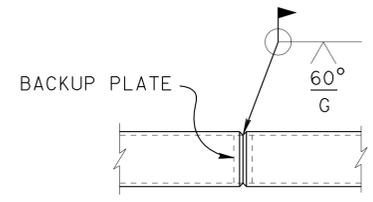
**TYPE 80**  
1" = 1'-0"



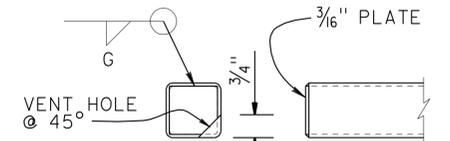
**TYPE 732 OR 736**  
1" = 1'-0"



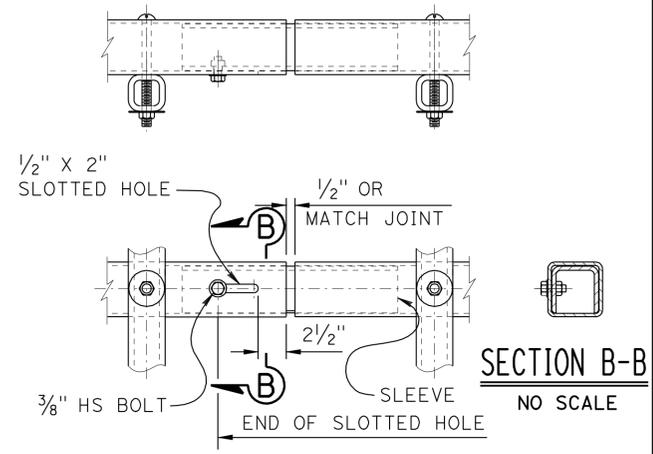
**SLEEVE DETAIL**  
NO SCALE



**WELDED SPLICE DETAIL**  
NO SCALE

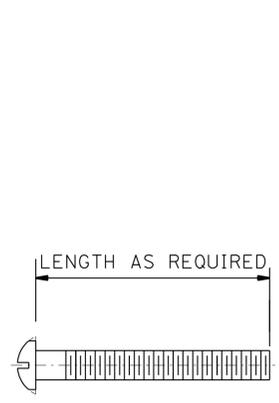


**RAIL CAP DETAIL**  
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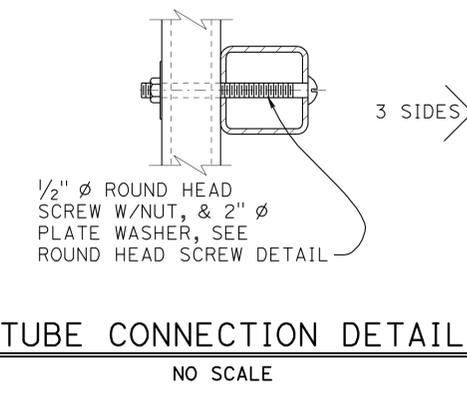


**TUBE EXPANSION JOINT DETAILS**  
NO SCALE

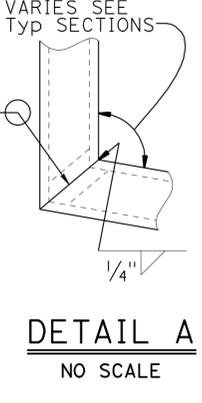
- NOTES:
1. Post shall be normal to railing.
  2. Rail tubes shall be shop bent or fabricated to fit horizontal curve when radius is less than 12".
  3. Tube splices shall be located in the tubes spanning deck or wall joints. Increase joint width in tubes to match expansion joint width and increase sleeve length correspondingly.
  4. Top rail tube shall be continuous over not less than two posts except a short post spacing is permitted near deck or wall joints, electroliers, or other rail discontinuities as noted.
  5. See Project Plans for limits of tubular hand railing.



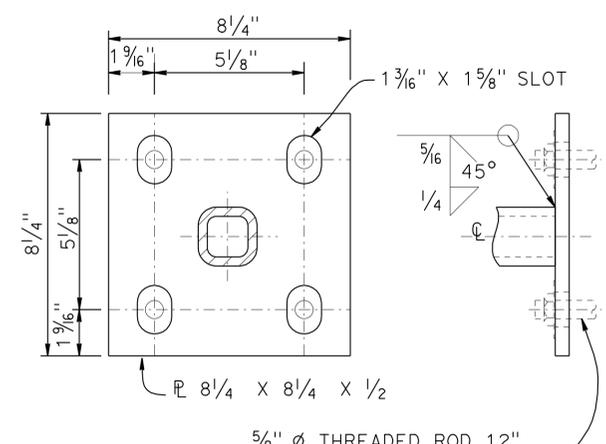
**ROUND HEAD SCREW DETAIL**  
NO SCALE



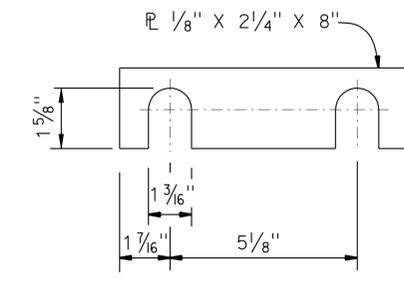
**TUBE CONNECTION DETAIL**  
NO SCALE



**DETAIL A**  
NO SCALE



**BASE PLATE DETAIL**  
NO SCALE



**SHIM DETAILS**  
NO SCALE

**ENCHILADA CURVE IMPROVEMENT**  
**RETAINING WALL NO. 1**  
**CONCRETE BARRIER TYPE 80, 732 & 736**  
**TUBULAR BICYCLE RAILING DETAILS**

STANDARD DRAWING	APPROVAL DATE <u>March 2012</u>
FILE NO. <b>xs16-035</b>	

BRIDGE NO. 05E0009	POST MILE 0.8
UNIT: 3592 PROJECT NUMBER & PHASE: 0200000211-1 CONTRACT NO.: 02-3E3500	

STATE OF CALIFORNIA	DIVISION OF ENGINEERING SERVICES
DEPARTMENT OF TRANSPORTATION	

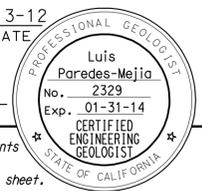
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	105	136

CERTIFIED ENGINEERING GEOLOGIST	DATE
<i>[Signature]</i>	7-13-12
PLANS APPROVAL DATE	
2-25-13	

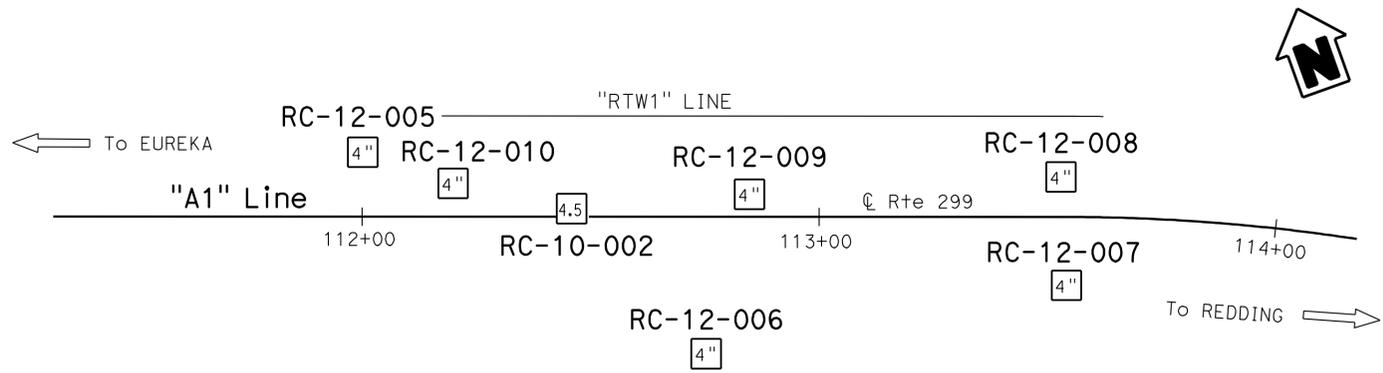
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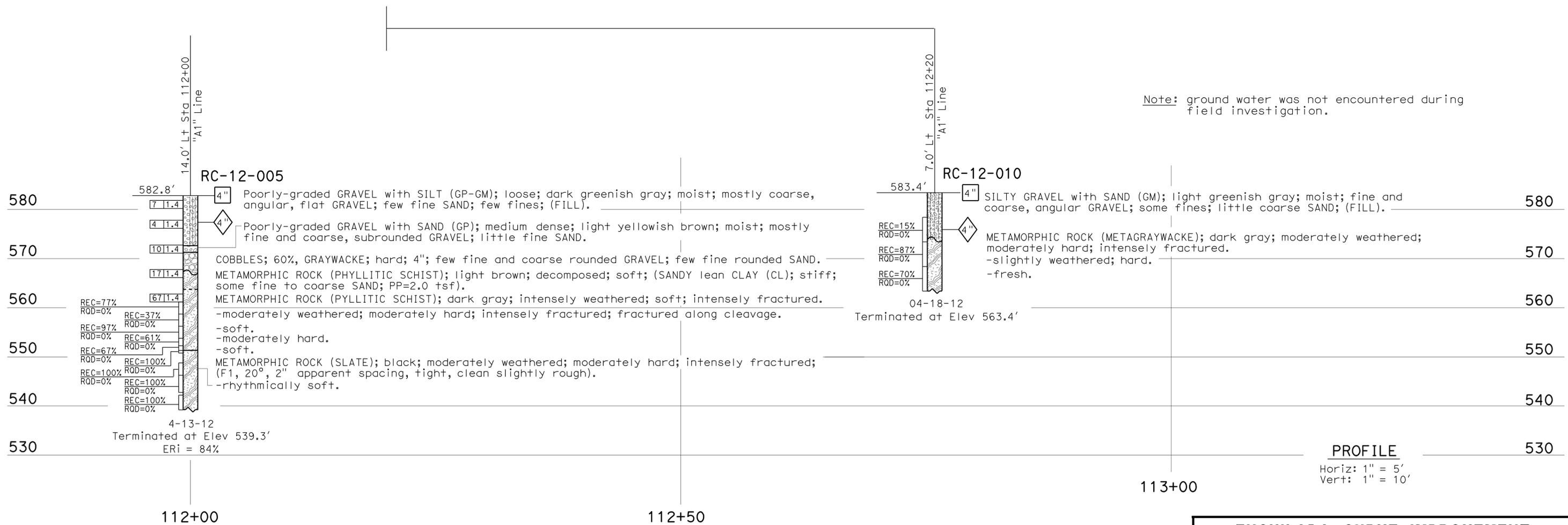
This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition). See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

**BENCH MARK**

TRI 299 0.57  
 Fnd 2 1/4" CADH Brass Disk in Concrete  
 37.15 Ft Rt "A1" Line Rte 299  
 Sta 111+07.93  
 N 673,743.070  
 E 1,865,923.082  
 Elev= 590.31  
 Vertical Datum: NAVD88



**PLAN**  
1" = 20'



**PROFILE**  
 Horiz: 1" = 5'  
 Vert: 1" = 10'

<b>ENGINEERING SERVICES</b>		<b>MATERIALS AND GEOTECHNICAL SERVICES</b>		<b>STATE OF CALIFORNIA</b>		<b>DIVISION OF ENGINEERING SERVICES</b>		<b>ENCHILADA CURVE IMPROVEMENT</b>	
FUNCTIONAL SUPERVISOR		DRAWN BY: I. G-Remmen		DEPARTMENT OF TRANSPORTATION		BRIDGE NO. 05E0009		<b>RETAINING WALL NO. 1</b>	
NAME: M. Hagy		CHECKED BY: F. DeHaro		FIELD INVESTIGATION BY: L. Paredes-Mejia		POST MILE 0.5		<b>LOG OF TEST BORINGS 1 OF 4</b>	
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3643 PROJECT NUMBER & PHASE: 02000002111		CONTRACT NO.: 02-2E3501		REVISION DATES	
								SHEET 11 OF 14	

USERNAME => s121614 DATE PLOTTED => 01-MAR-2013 TIME PLOTTED => 08:18  
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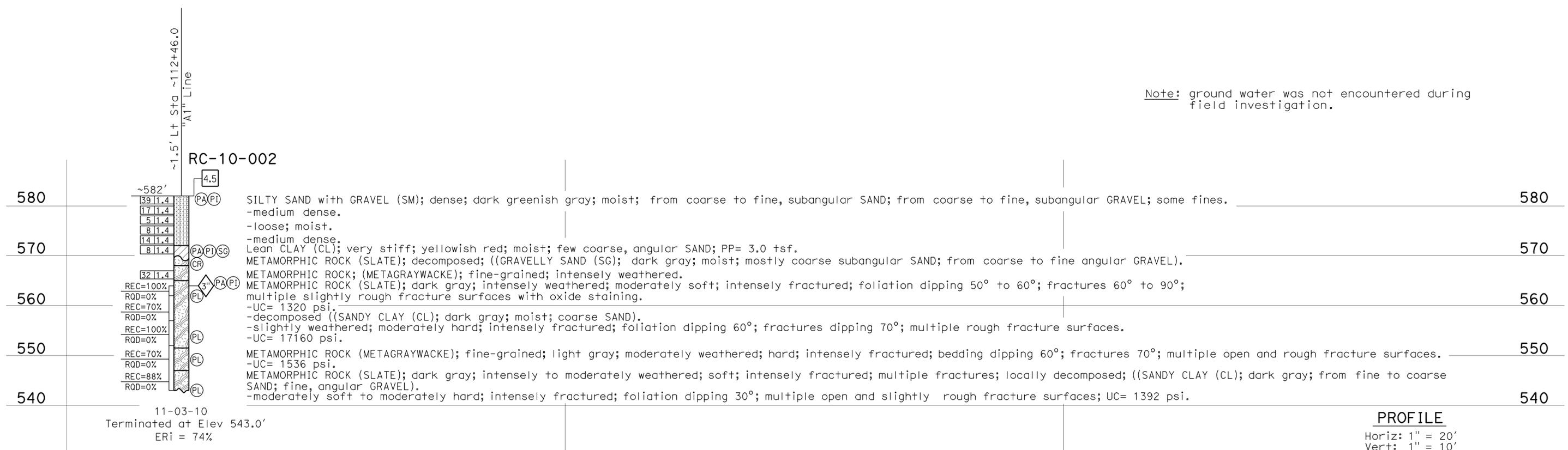
7-13-12  
 CERTIFIED ENGINEERING GEOLOGIST DATE  
 2-25-13  
 PLANS APPROVAL DATE

Luis Paredes-Mejia  
 No. 2329  
 Exp. 01-31-12  
 CERTIFIED ENGINEERING GEOLOGIST  
 STATE OF CALIFORNIA

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FOR PLAN VIEW, SEE  
"LOG OF TEST BORINGS 1 OF 4"



Note: ground water was not encountered during field investigation.

112+00

114+00

116+00

<b>ENGINEERING SERVICES</b>		<b>MATERIALS AND GEOTECHNICAL SERVICES</b>		<b>STATE OF CALIFORNIA</b>		<b>DIVISION OF ENGINEERING SERVICES</b>		<b>BRIDGE NO.</b>		<b>ENCHILADA CURVE IMPROVEMENT</b>	
FUNCTIONAL SUPERVISOR		DRAWN BY: F. Nguyen		FIELD INVESTIGATION BY:		STRUCTURE DESIGN		05E0009		<b>RETAINING WALL NO. 1</b>	
NAME: M. Hagy		CHECKED BY: A. Barrie		L. Paredes-Mejia		<b>DESIGN BRANCH 7</b>		POST MILE		<b>LOG OF TEST BORINGS 2 OF 4</b>	
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3643		PROJECT NUMBER & PHASE: 02000002111		CONTRACT NO.: 02-2E3501		REVISION DATES	
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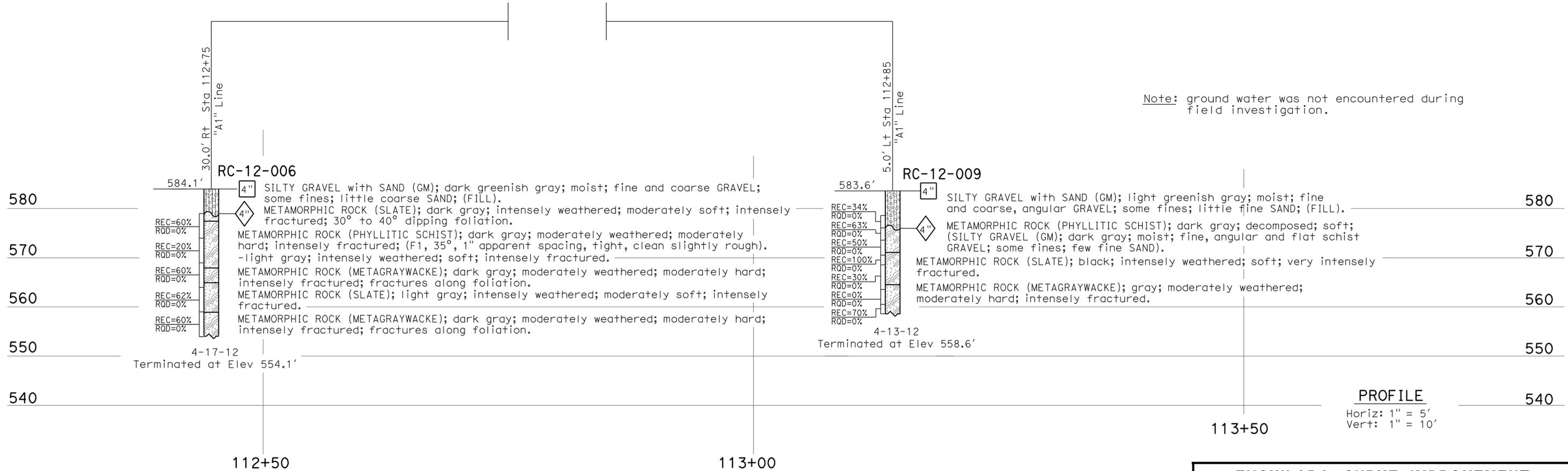
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	107	136

7-13-12  
 CERTIFIED ENGINEERING GEOLOGIST DATE  
 2-25-13  
 PLANS APPROVAL DATE

Luis Paredes-Mejia  
 No. 2329  
 Exp. 01-31-14  
 CERTIFIED ENGINEERING GEOLOGIST  
 STATE OF CALIFORNIA

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FOR PLAN VIEW, SEE  
"LOG OF TEST BORINGS 1 OF 4"

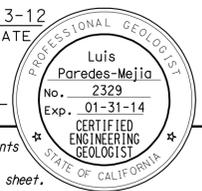


Note: ground water was not encountered during field investigation.

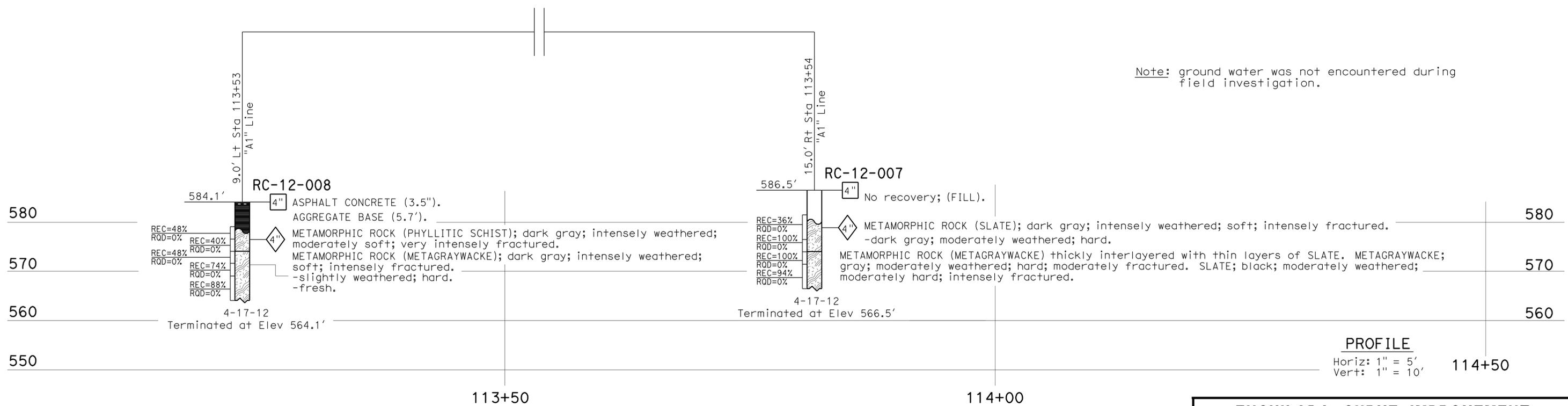
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FUNCTIONAL SUPERVISOR		DRAWN BY: I. G-Remmen		DEPARTMENT OF TRANSPORTATION		BRIDGE NO. 05E0009		<b>RETAINING WALL NO. 1</b>	
NAME: M. Hagy		CHECKED BY: F. DeHaro		FIELD INVESTIGATION BY: L. Paredes-Mejia		POST MILE 0.5		<b>LOG OF TEST BORINGS 3 OF 4</b>	
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3643		PROJECT NUMBER & PHASE: 02000002111		CONTRACT NO.: 02-2E3501	
				DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES		SHEET 13 OF 14	

USERNAME => s121614 DATE PLOTTED => 01-MAR-2013 TIME PLOTTED => 08:46

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	108	136
			7-13-12	DATE	
CERTIFIED ENGINEERING GEOLOGIST					
2-25-13			PLANS APPROVAL DATE		
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FOR PLAN VIEW, SEE  
"LOG OF TEST BORINGS 1 OF 4"

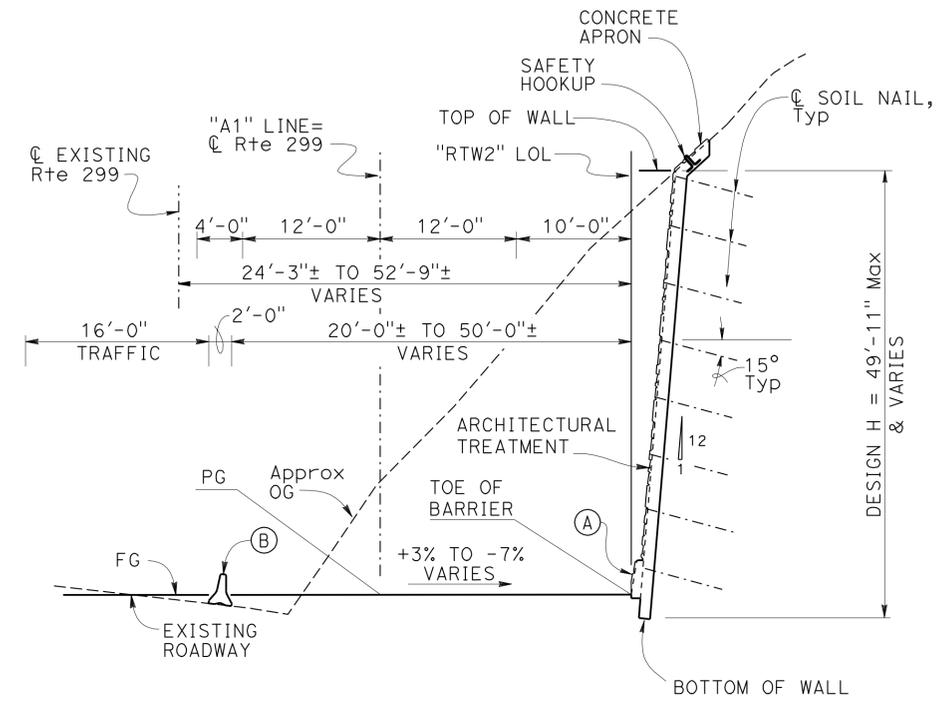
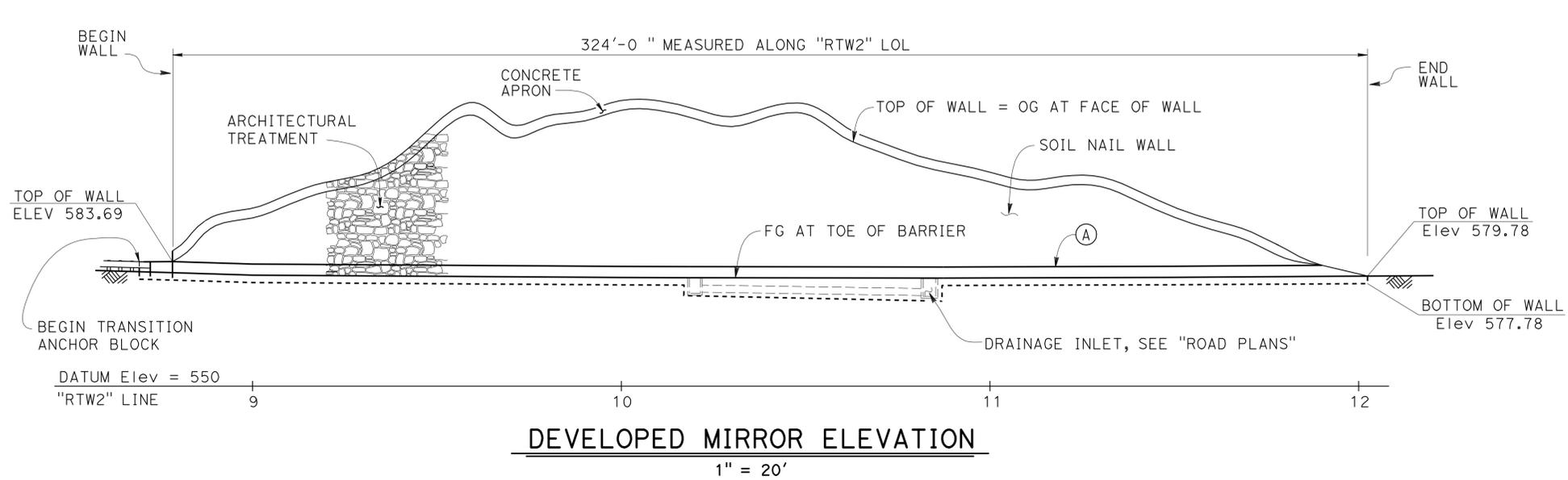
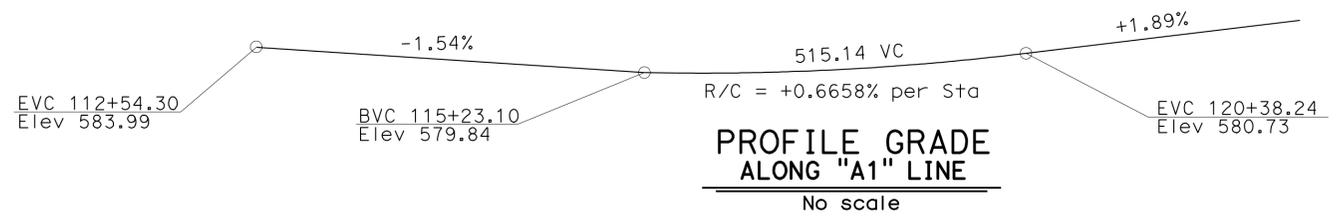


<b>ENGINEERING SERVICES</b>		<b>MATERIALS AND GEOTECHNICAL SERVICES</b>		<b>STATE OF CALIFORNIA</b>		<b>DIVISION OF ENGINEERING SERVICES</b>		<b>ENCHILADA CURVE IMPROVEMENT</b>	
FUNCTIONAL SUPERVISOR		DRAWN BY: I. G-Remmen		DEPARTMENT OF TRANSPORTATION		BRIDGE NO. 05E0009		<b>RETAINING WALL NO. 1</b>	
NAME: M. Hagy		CHECKED BY: F. DeHaro		FIELD INVESTIGATION BY: L. Paredes-Mejia		POST MILE 0.5		<b>LOG OF TEST BORINGS 4 OF 4</b>	
06S CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3643		PROJECT NUMBER & PHASE: 02000002111		CONTRACT NO.: 02-2E3501	
				DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES		SHEET 14 OF 14	

USERNAME => s121614 DATE PLOTTED => 01-MAR-2013 TIME PLOTTED => 08:47

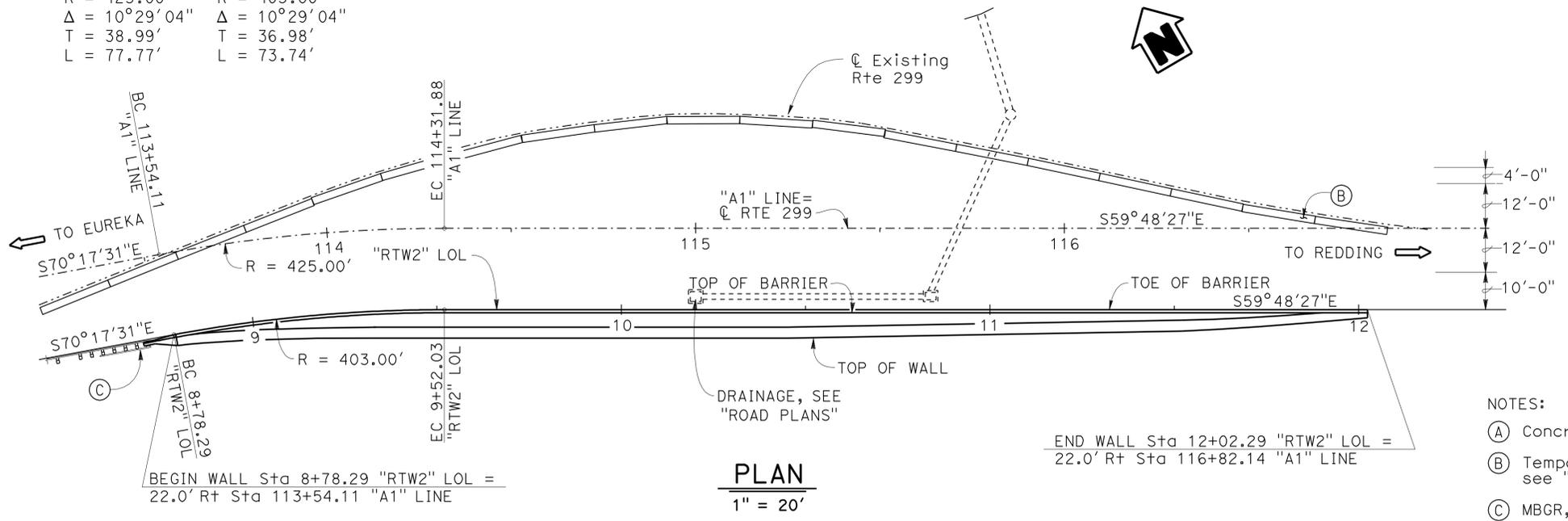
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	109	136

Kelly Ann Holden 2-27-13  
 REGISTERED CIVIL ENGINEER DATE  
 2-25-13  
 PLANS APPROVAL DATE  
 Kelly Holden  
 No. 42268  
 Exp. 3/31/14  
 CIVIL  
 STATE OF CALIFORNIA  
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**CURVE DATA**

"A1" Line	"RTW2" LOL
R = 425.00'	R = 403.00'
Δ = 10°29'04"	Δ = 10°29'04"
T = 38.99'	T = 36.98'
L = 77.77'	L = 73.74'



**QUANTITIES**

STRUCTURE EXCAVATION (SOIL NAIL WALL)	890 CY
STRUCTURE BACKFILL (SOIL NAIL WALL)	37 CY
SOIL NAIL	10,860 LF
STRUCTURAL CONCRETE, RETAINING WALL	302 CY
ARCHITECTURAL TREATMENT	9,209 SQFT
BAR REINFORCING STEEL (RETAINING WALL)	72,240 LB
SHOTCRETE	137 CY
PREPARE AND STAIN CONCRETE	10,208 SQFT
MISCELLANEOUS METAL (SAFETY HOOKUP)	374 LB
CONCRETE BARRIER (TYPE 60D MODIFIED)	324 LF
TRANSITION ANCHOR BLOCK	9 LF

- NOTES:
- (A) Concrete Barrier, Type 60D (Mod)
  - (B) Temporary Railing, Type K, see "ROAD PLANS"
  - (C) MBGR, see "ROAD PLANS"

<b>STATE OF CALIFORNIA</b>				<b>DIVISION OF ENGINEERING SERVICES</b>		<b>BRIDGE NO.</b>		<b>ENCHILADA CURVE IMPROVEMENT</b>			
<b>DEPARTMENT OF TRANSPORTATION</b>				<b>STRUCTURE DESIGN</b>		<b>05E0010</b>		<b>RETAINING WALL NO. 2</b>			
<b>DESIGN BRANCH 7</b>				<b>POST MILE</b>		<b>0.6</b>		<b>GENERAL PLAN</b>			
DESIGN BY: Keith Stillmunkes		CHECKED: Mario Guadamuz		SERVICE LOAD DESIGN				REVISION DATES		SHEET OF	
DETAILS BY: G. Dickerson \ Y. Feng		CHECKED: Mario Guadamuz		LAYOUT BY: Wendy Hou		CHECKED: Keith Stillmunkes		5-28-11		1 14	
QUANTITIES BY: Sameh Hegazi		CHECKED: Tuong Ha		SPECIFICATIONS BY: Adam Menke		PLANS AND SPECS COMPARED: Adam Menke		2-27-13			
DESIGN ENGINEER: Kelly Ann Holden				PROJECT NO. & PHASE: 0200000211-1				CONTRACT NO.: 02-2E3500			
DISREGARD PRINTS BEARING EARLIER REVISION DATES				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				FILE => 05-rtw2-a-gp.dgn			

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	110	136

*Kelly Ann Holden* 2-23-13  
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## INDEX TO PLANS

SHEET	TITLE
1.	GENERAL PLAN
2.	INDEX TO PLANS
3.	STRUCTURE PLAN NO. 1
4.	STRUCTURE PLAN NO. 2
5.	FOUNDATION PLAN
6.	TYPICAL SECTION
7.	RETAINING WALL DETAILS NO. 1
8.	RETAINING WALL DETAILS NO. 2
9.	SOIL NAIL DETAILS
10.	DRAINAGE DETAILS
11.	ARCHITECTURAL DETAILS
12.	TRANSITION ANCHOR BLOCK DETAILS
13.	LOG OF TEST BORINGS 1 OF 2
14.	LOG OF TEST BORINGS 2 OF 2

## GENERAL NOTES

### DESIGN:

Bridge Design Specification, April 2000 (LFD)  
(1996 AASHTO with interims and Revisions by Caltrans)

### SOIL PARAMETERS:

$\phi = 35^\circ$   
 $\gamma = 135$  pcf

### REINFORCED CONCRETE & SHOTCRETE:

$f'_c = 3.6$  ksi  
 $f_y = 60$  ksi  
 $n = 8$

### STRUCTURAL STEEL:

Plates and shapes shall conform to ASTM Designation A709 Grade (36 ksi)

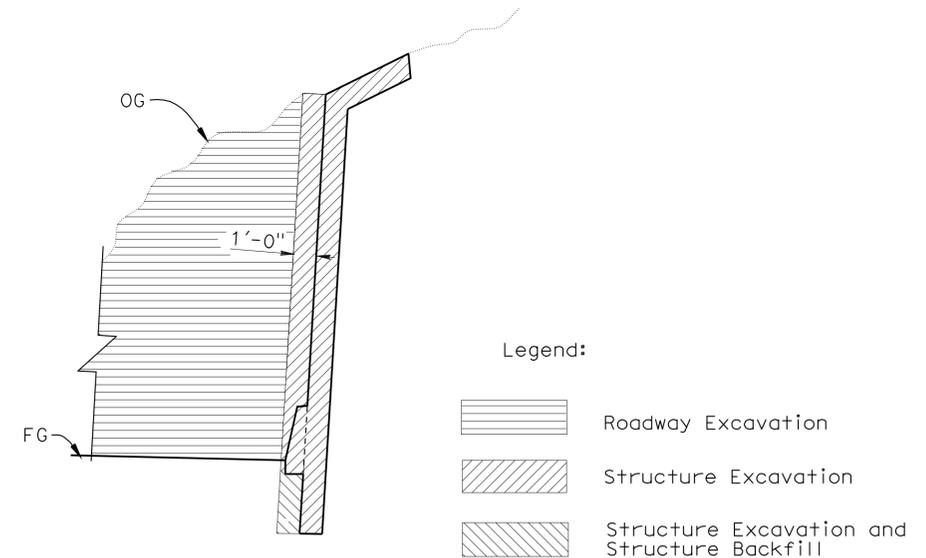
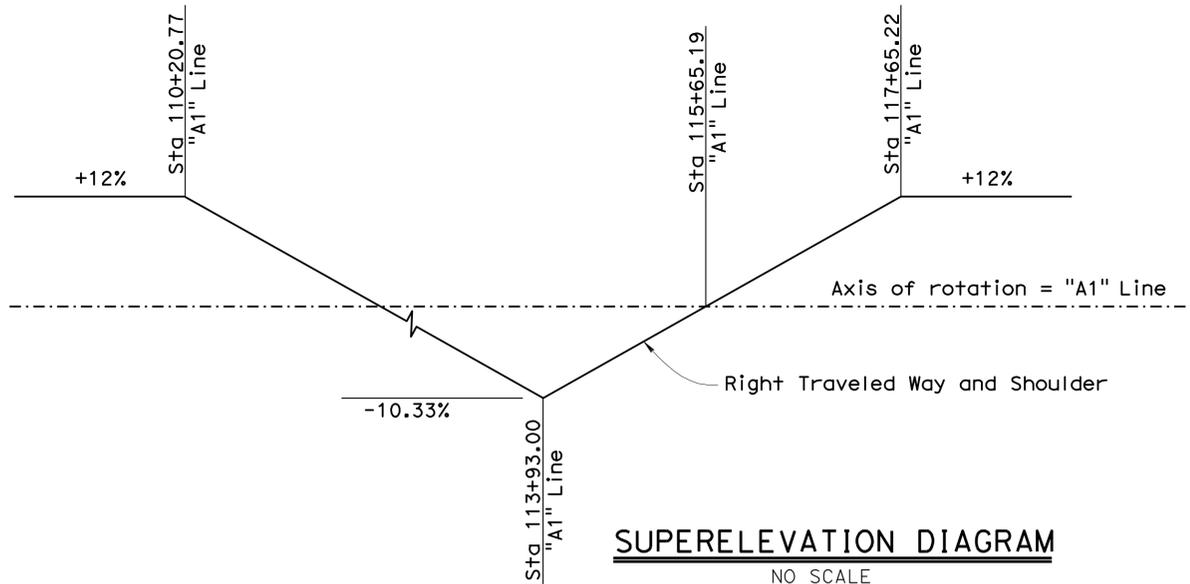
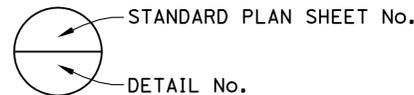
### SOIL NAILS:

Soil nails shall conform to ASTM Designation A615, Grade 60,  $f_y = 60$  ksi

Design pullout resistance,  $Q_d = 3600$  lb/ft

## STANDARD PLANS DATED MAY 2006

A10A	ACRONYMS AND ABBREVIATIONS (A-L)
A10B	ACRONYMS AND ABBREVIATIONS (M-Z)
RSP A76A	CONCRETE BARRIER TYPE 60
RSP A77J3	METAL BEAM GUARD RAILING CONNECTIONS TO ABUTMENTS AND WALLS
T3	TEMPORARY RAILING (TYPE K)
NSP T3A	TEMPORARY RAILING (TYPE K)



## ENCHILADA CURVE IMPROVEMENT

### RETAINING WALL NO. 2

### INDEX TO PLANS

DESIGN	BY Keith Stillmunkes	CHECKED Mario Guadamuz
DETAILS	BY Bruno Jenko	CHECKED Mario Guadamuz
QUANTITIES	BY Sameh Hegazi	CHECKED Tuong Ha

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
STRUCTURE DESIGN  
DESIGN BRANCH 7

BRIDGE NO.	05E0010
POST MILE	0.6

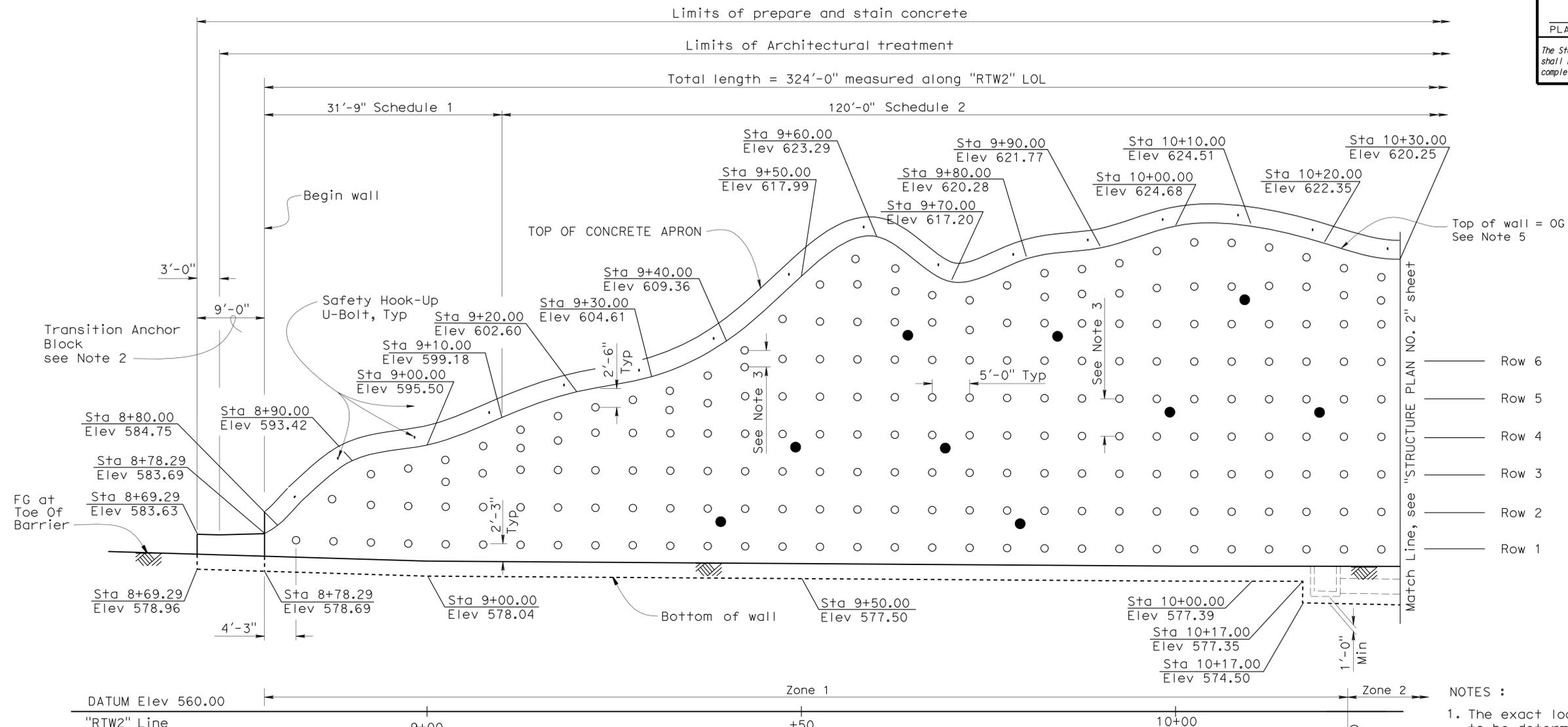
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02	Tri	299	0.4/0.9	111	136

*Kelly Ann Holden* 2-23-13  
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**MIRRORED ELEVATION**  
1/8" = 1'-0"

SOIL NAIL SCHEDULE	
Location	Soil Nail Embedment Length, L <sub>e</sub>
Schedule 1	All rows : L <sub>e</sub> = 15.0'
Schedule 2	Rows 1, 2 & 3 : L <sub>e</sub> = 20.0' Rows 4, 5 & 6 : L <sub>e</sub> = 30.0' All others : L <sub>e</sub> = 40.0'
Schedule 3	Rows 1 & 2 : L <sub>e</sub> = 15.0' All others : L <sub>e</sub> = 20.0'

- NOTES :
- The exact location of Proof Test soil nails to be determined by the Engineer.
  - For transition Anchor Block details, see "TRANSITION ANCHOR BLOCK DETAILS" sheet.
  - The soil nails shall be spaced vertically at minimum 2'-6" to maximum 5'-0".
  - Concrete barrier not shown.
  - Top of wall spot elevations are approximate and shall be verified in the field. Top of wall profile shall be a parabolic curve between given elevations.
- LEGEND :
- = Production Nails
  - = Proof Test Nails

**ENCHILADA CURVE IMPROVEMENT**  
**RETAINING WALL NO. 2**  
**STRUCTURE PLAN NO. 1**

DESIGN	BY Keith Stillmunkes	CHECKED Mario Guadamuz	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	05E0010
DETAILS	BY Bruno Jenko	CHECKED Mario Guadamuz			POST MILE	0.6
QUANTITIES	BY Sameh Hegazi	CHECKED Tuong Ha				

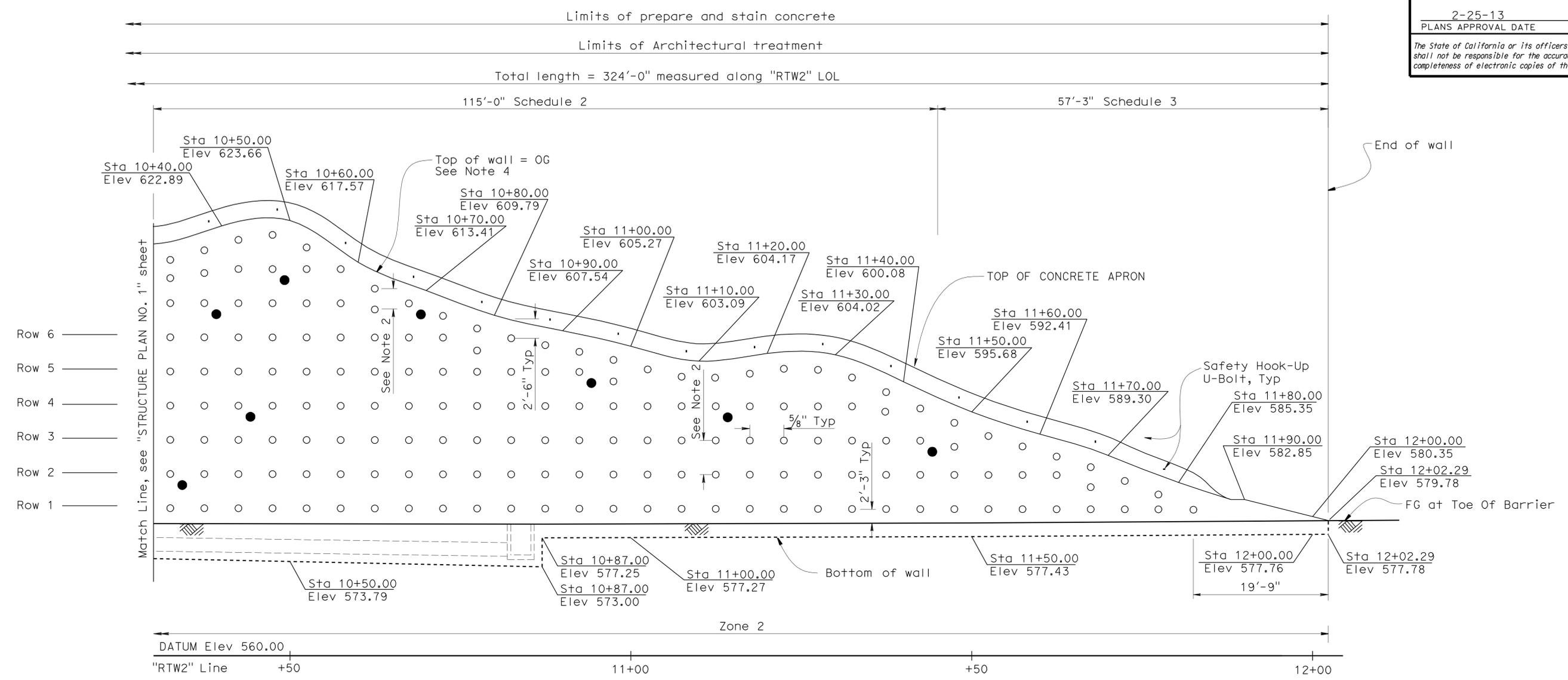
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	112	136

*Kelly An Holder* 2-23-13  
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**MIRRORED ELEVATION**  
1/8" = 1'-0"

SOIL NAIL SCHEDULE	
Location	Soil Nail Embedment Length, $L_e$
Schedule 1	All rows : $L_e = 15.0'$
Schedule 2	Rows 1, 2 & 3 : $L_e = 20.0'$ Rows 4, 5 & 6 : $L_e = 30.0'$ All others : $L_e = 40.0'$
Schedule 3	Rows 1 & 2 : $L_e = 15.0'$ All others : $L_e = 20.0'$

- LEGEND :
- = Production Nails
  - = Proof Test Nails

- NOTES :
- The exact location of Proof Test soil nails to be determined by the Engineer.
  - The soil nails shall be spaced vertically at minimum 2'-6" to maximum 5'-0".
  - Concrete barrier not shown.
  - Top of wall spot elevations are approximate and shall be verified in the field. Top of wall profile shall be a parabolic curve between given elevations.

<b>ENCHILADA CURVE IMPROVEMENT</b>				<b>RETAINING WALL NO. 2</b>		<b>STRUCTURE PLAN NO. 2</b>	
DESIGN	BY Keith Stillmunkes	CHECKED Mario Guadamuz	<b>STATE OF CALIFORNIA</b>	<b>DIVISION OF ENGINEERING SERVICES</b>	BRIDGE NO.	<b>05E0010</b>	
DETAILS	BY Bruno Jenko	CHECKED Mario Guadamuz	<b>DEPARTMENT OF TRANSPORTATION</b>	<b>DESIGN BRANCH 7</b>	POST MILE		
QUANTITIES	BY Sameh Hegazi	CHECKED Tuong Ha			0.6		
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3592	PROJECT NUMBER & PHASE: 0200000211-1	
				0 1 2 3	CONTRACT NO.: 02-2E3500		DISREGARD PRINTS BEARING EARLIER REVISION DATES
				FILE => 05-rtw2-b-sp02.dgn		REVISION DATES	SHEET 4 OF 14

CURVE DATA

No.	R	Δ	T	L
(A)	425.00	10°29'04"	38.99	77.77
(B)	425.00	91°27'46"	435.99	678.44
(C)	403.00	10°29'04"	36.98	73.74
(D)	447.00	0°11'45"	0.76	1.53

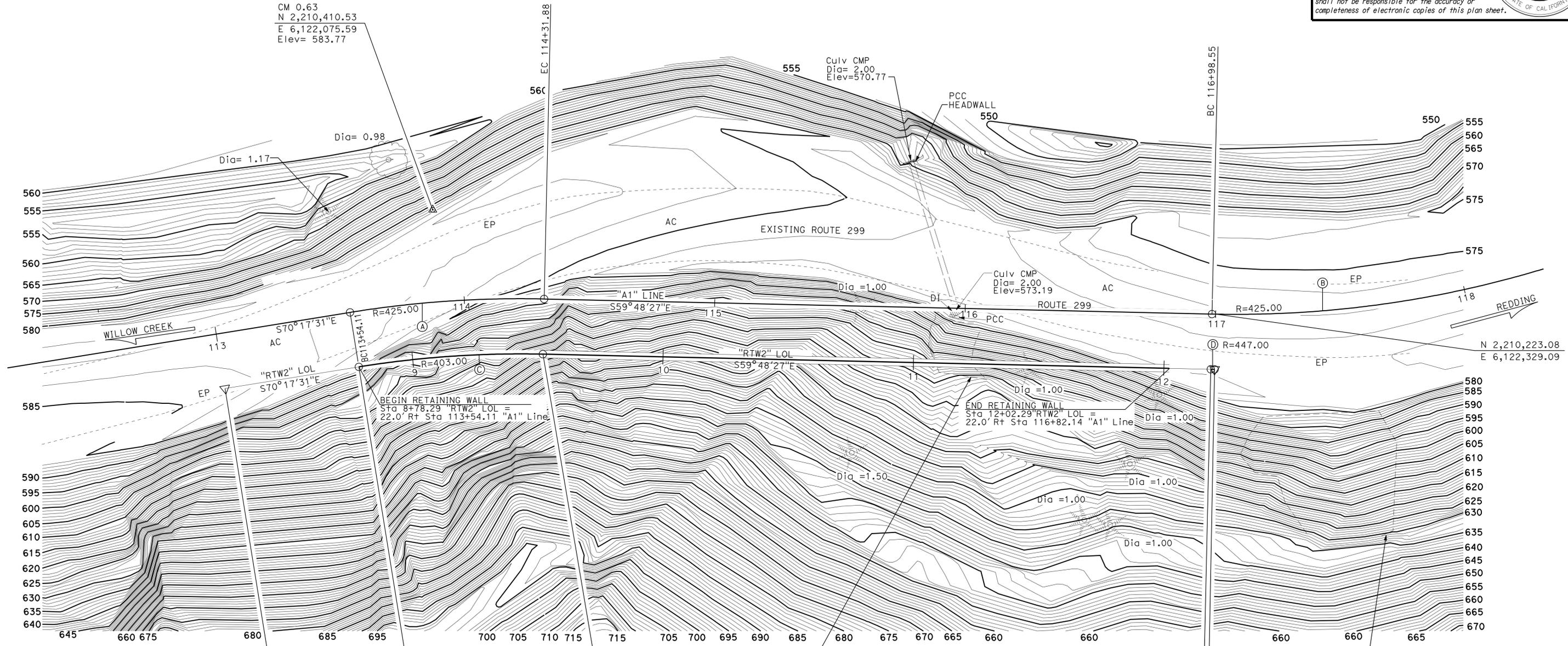
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02	Tri	299	0.4/0.9	113	136

*Kelly An Holder* 2-23-13  
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**SURVEY CONTROL**  
 TRI 299 0.57 (NOT SHOWN)  
 Fnd 2 1/4" CADH Brass Disk in Concrete  
 37.15 F+ Rt "A1" LINE ROUTE 299  
 Sta 111+07.93  
 N 2,210,438.72  
 E 6,121,782.65  
 Elev= 590.31  
 CM 0.63  
 Fnd CADT Alum Cap on 3/4" Rebar  
 36.75 F+ Lt "A1" LINE ROUTE 299  
 Sta 113+90.15  
 N 2,210,410.53  
 E 6,122,075.59  
 Elev= 583.77

**ENCHILADA CURVE IMPROVEMENT**  
**RETAINING WALL NO. 2**  
**FOUNDATION PLAN**

PRELIMINARY INVESTIGATION SECTION				DESIGN	BY Keith Stillmunkes	CHECKED Mario Guadamuz	STATE OF CALIFORNIA	DIVISION OF ENGINEERING SERVICES	BRIDGE NO.
SCALE	VERT. DATUM	NAVD 88	PHOTOGRAMMETRY AS OF: X	DETAILS	BY Bruno Jenko	CHECKED Mario Guadamuz	DEPARTMENT OF TRANSPORTATION	STRUCTURE DESIGN	05E0010
1"=20'	HORIZ. DATUM	NAD83(2004.69)	SURVEYED	BY District	BY J. Pallares	07/2011		DESIGN BRANCH	7
ALIGNMENT TIES	Dist. Traverse Sheet	DRAFTED	BY Jin Zhou	07/2011	CHECKED	BY L. Lew	07/2011	QUANTITIES	BY Sameh Hegazi
									CHECKED Tuong Ha

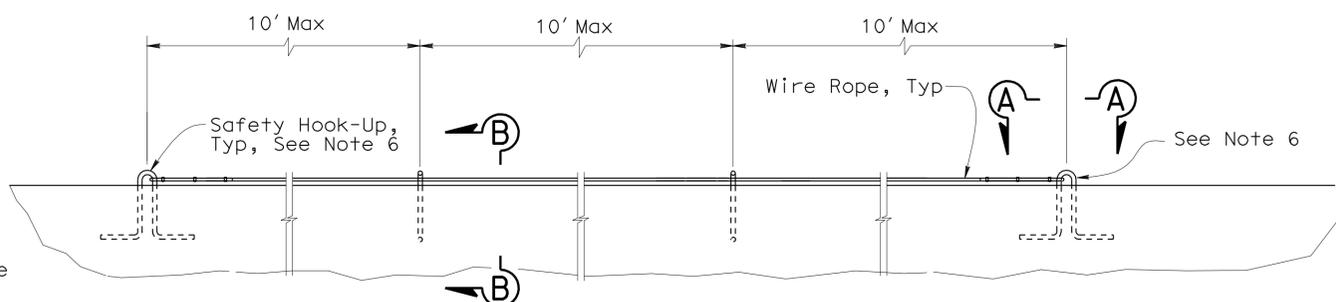
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	114	136

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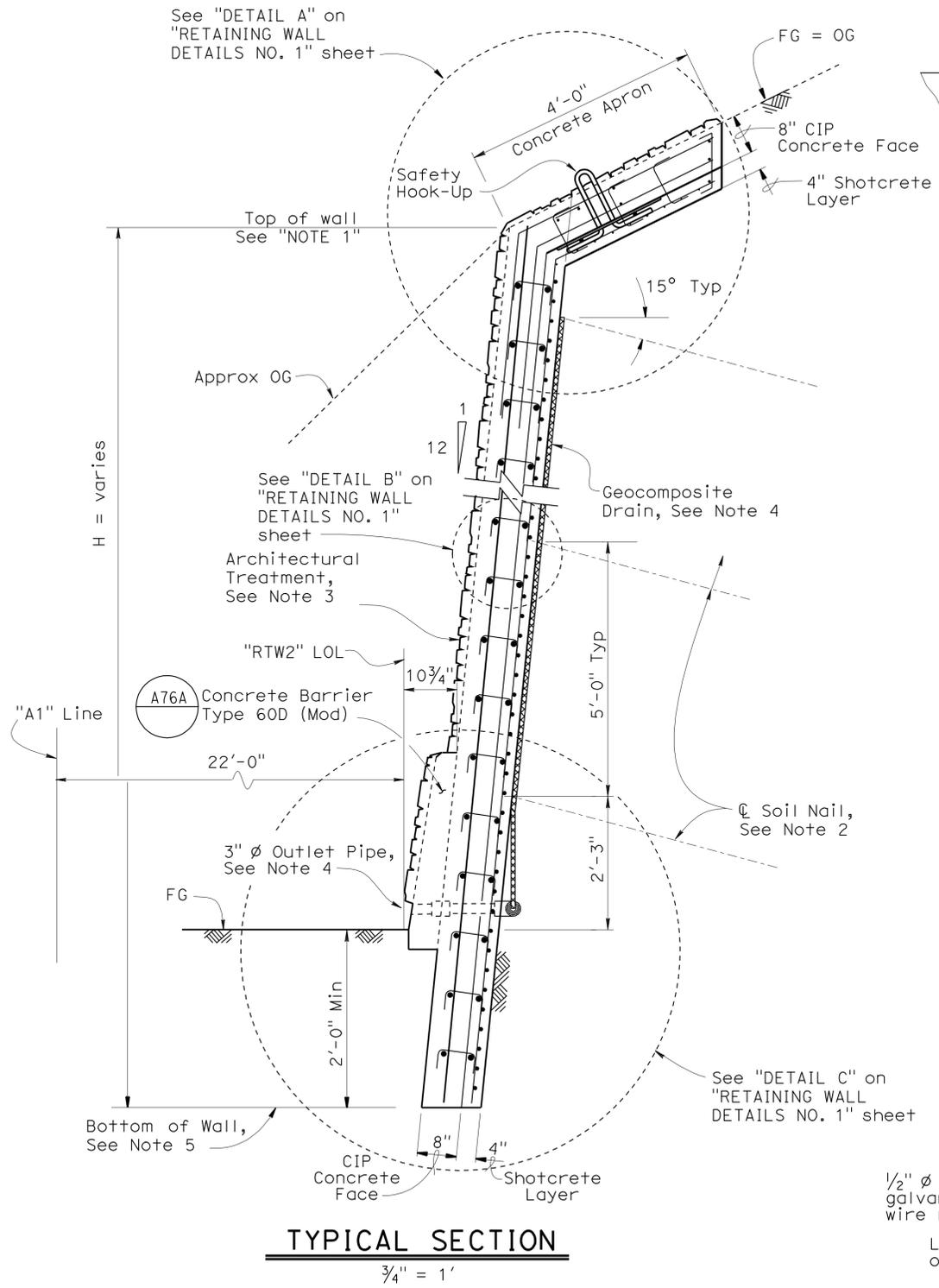
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REGISTERED PROFESSIONAL ENGINEER  
 Kelly Holden  
 No. 42268  
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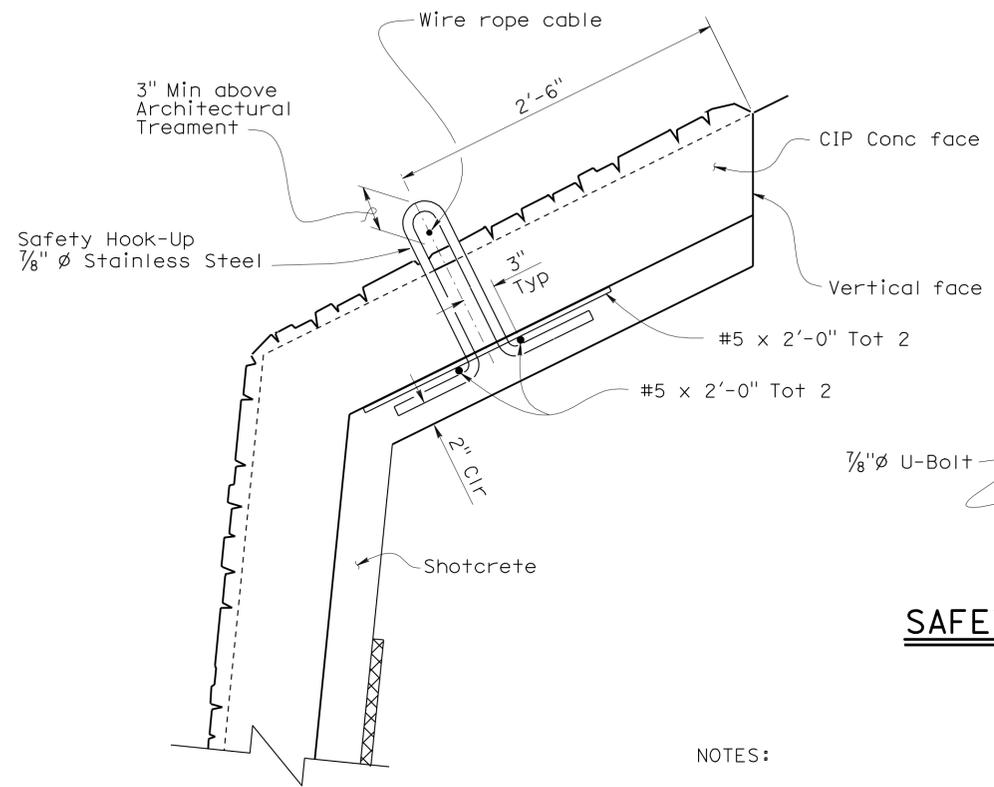


**TYPICAL SAFETY HOOKUP ELEVATION**  
 No Scale

NOTE:  
 Architectural Treatment not shown for clarity.



**TYPICAL SECTION**  
 $\frac{3}{4}'' = 1'$

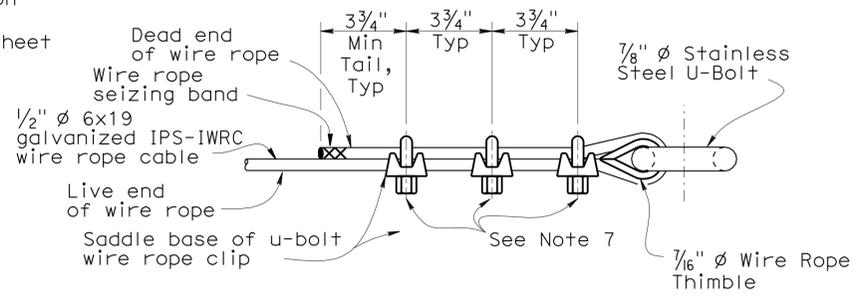


**SECTION B-B**  
 $1\frac{1}{2}'' = 1'$

**SAFETY HOOK-UP DETAILS**  
 $1\frac{1}{2}'' = 1'$

NOTES:

1. Top of the wall Elevations shall be verified in field.
2. For Soil Nail Assembly and Test Soil Nail, see "SOIL NAIL DETAILS" sheet.
3. For Architectural Treatment detail, see "ARCHITECTURAL DETAILS" sheets.
4. For Geocomposite Drain and outlet pipe details, see "DRAINAGE DETAILS" sheet
5. Bottom of wall to be placed against undisturbed material.
6. Terminate Safety Hook-Up system when wall height is less than 6'-0" above FG.
7.  $\frac{1}{2}''$   $\emptyset$  galvanized u-bolt wire rope clips. Install and torque to manufacturer's guidelines.



**VIEW A-A**  
 No Scale

DESIGN	BY Keith Stillmunkes	CHECKED Mario Guadamuz
DETAILS	BY Bruno Jenko	CHECKED Mario Guadamuz
QUANTITIES	BY Sameh Hegazi	CHECKED Tuong Ha

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES  
 STRUCTURE DESIGN  
**DESIGN BRANCH 7**

BRIDGE NO.	05E0010
POST MILE	0.6

**ENCHILADA CURVE IMPROVEMENT**

**RETAINING WALL NO. 2**

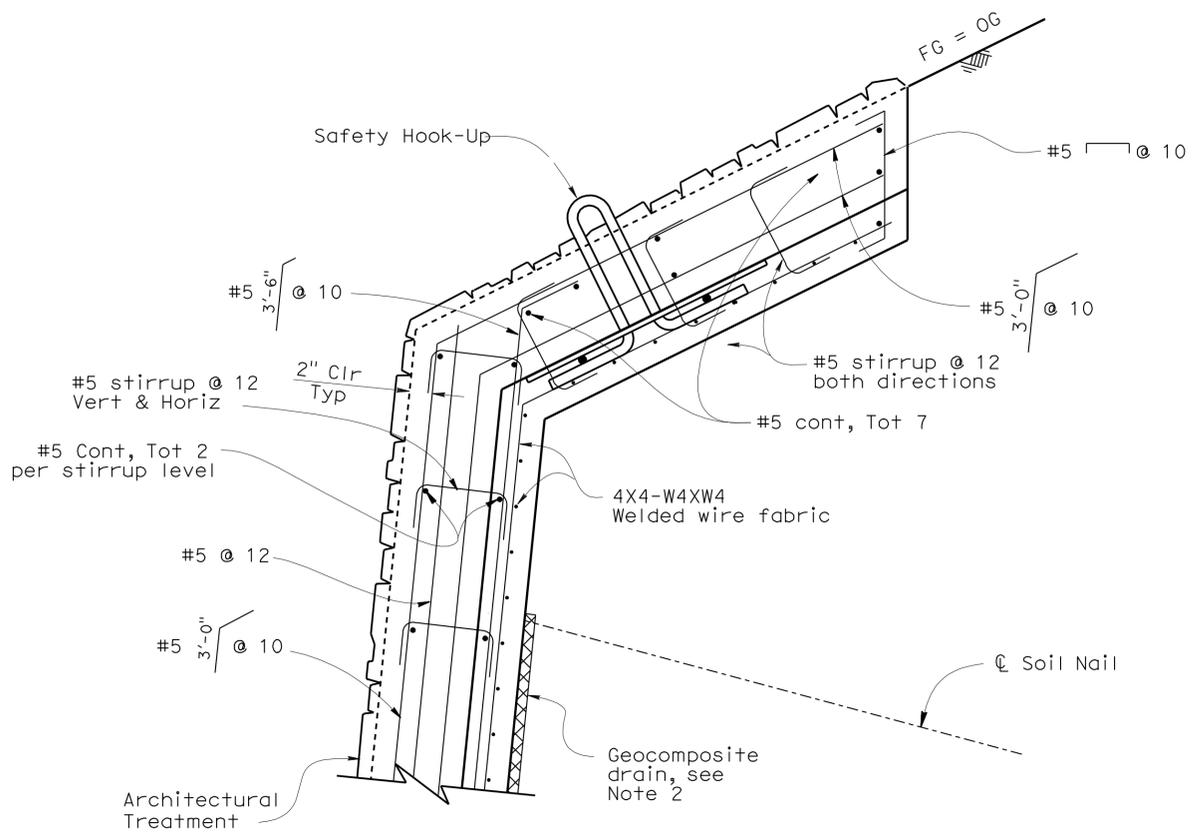
**TYPICAL SECTION**

REVISION DATES	SHEET	OF
1-26-12 4-11-12 8-08-12 2-14-13	6	14

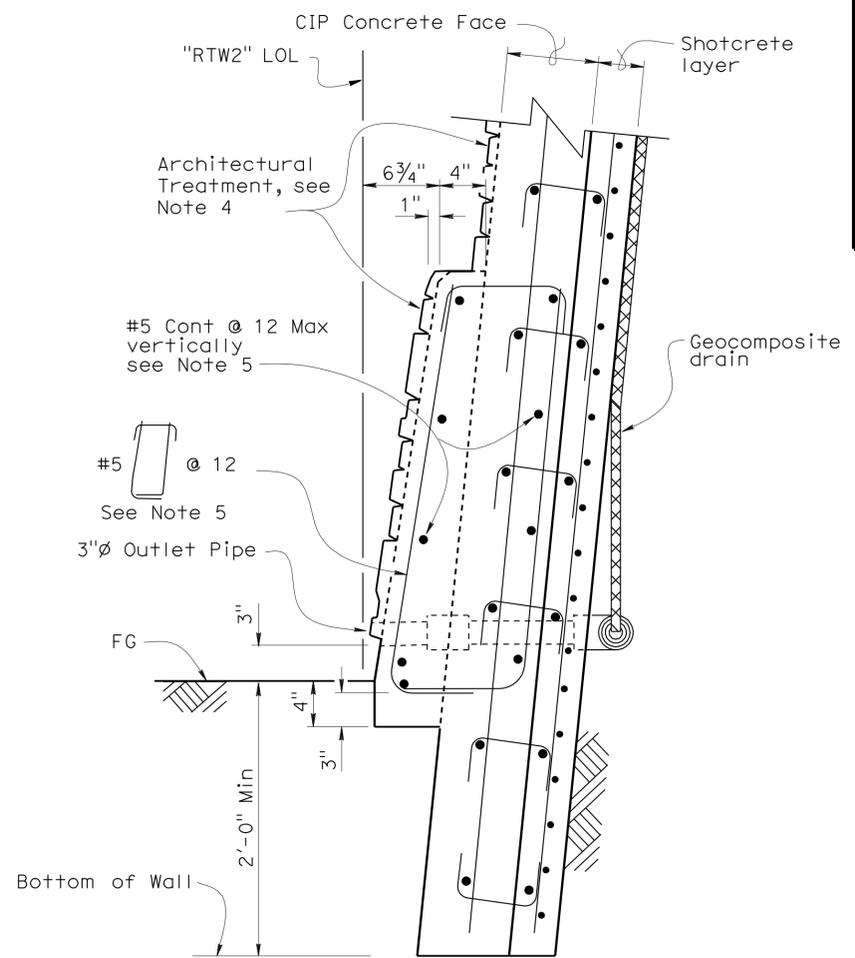
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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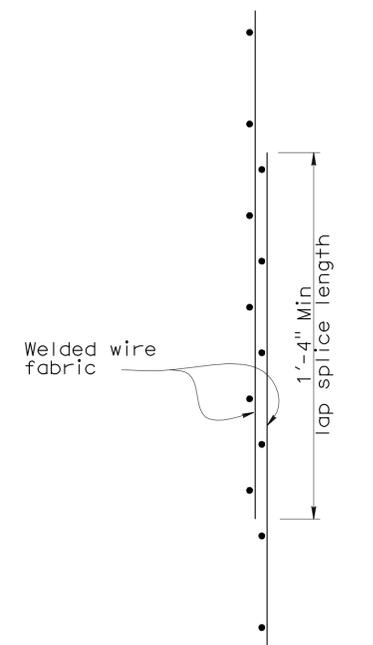
REGISTERED PROFESSIONAL ENGINEER
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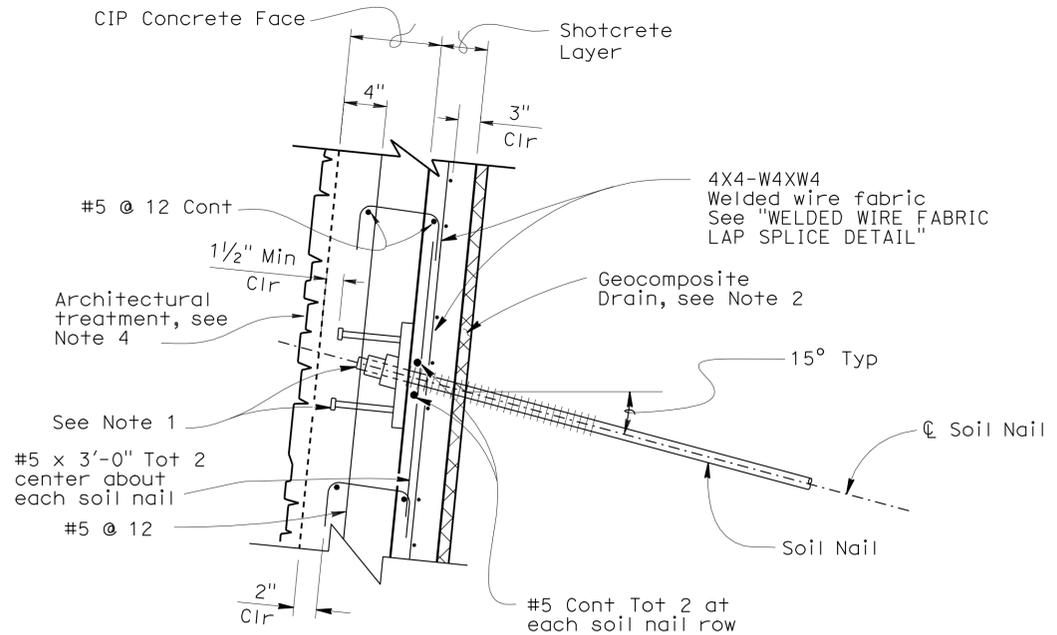
**DETAIL A**  
1/2" = 1'



**DETAIL C**  
1/2" = 1'



**WELDED WIRE FABRIC LAP SPLICE DETAIL**  
3" = 1'



**DETAIL B**  
1/2" = 1'

- NOTES :
1. For Bearing Plate and Soil Nail details, not shown see "SOIL NAIL DETAILS" sheet.
  2. For Geocomposite Drain details, see "DRAINAGE DETAILS" sheet.
  3. For location of "DETAIL A", "DETAIL B" and "DETAIL C", see "TYPICAL SECTION" sheet.
  4. For Architectural Treatment details see "ARCHITECTURAL DETAILS" sheets.
  5. Reinforcement shall be epoxy coated.

DESIGN BY Keith Stillmunkes CHECKED Mario Guadamuz DETAILS BY Bruno Jenko CHECKED Mario Guadamuz QUANTITIES BY Sameh Hegazi CHECKED Tuong Ha				STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>	BRIDGE NO. 05E0010 POST MILE 0.6	<b>ENCHILADA CURVE IMPROVEMENT</b> <b>RETAINING WALL NO. 2</b> <b>RETAINING WALL DETAILS NO. 1</b>	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3592 PROJECT NUMBER & PHASE: 0200000211-1	CONTRACT NO.: 02-2E3500	DISREGARD PRINTS BEARING EARLIER REVISION DATES	
				0	1	2	3	REVISION DATES: 1-27-12, 5-24-12, 8-08-12, 2-23-13 SHEET 7 OF 14

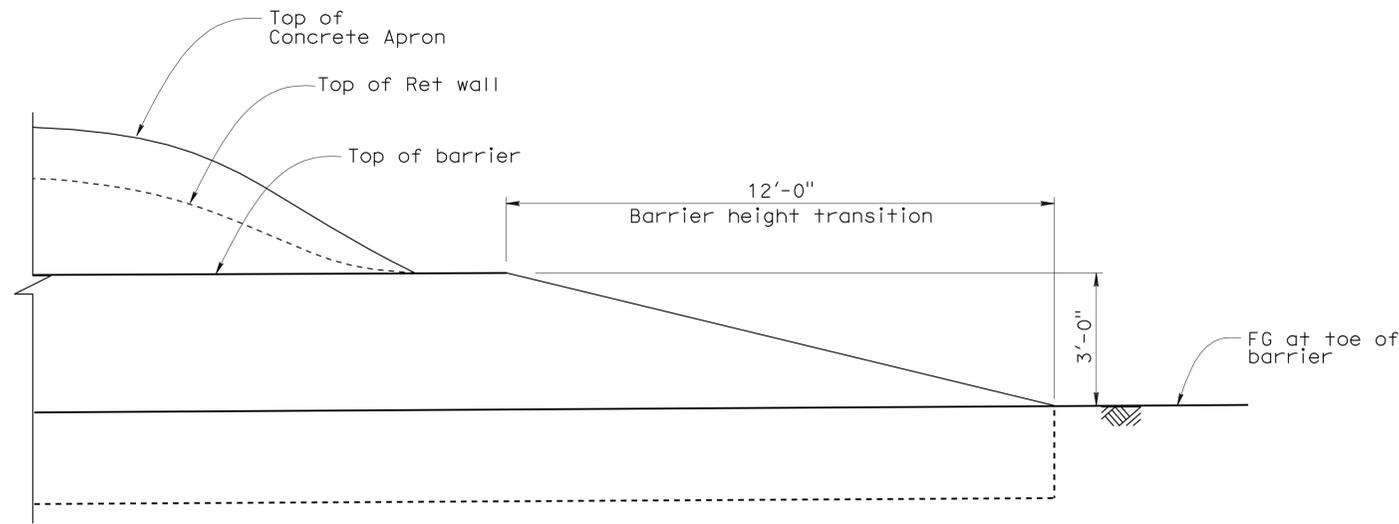
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	116	136

*Kelly Ann Holder* 2-23-13  
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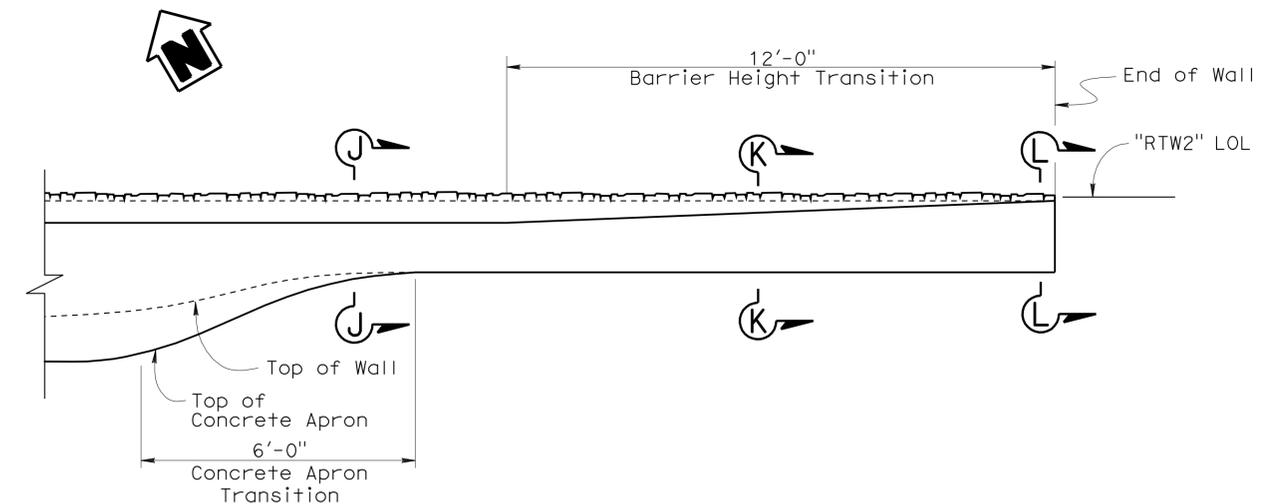
2-25-13  
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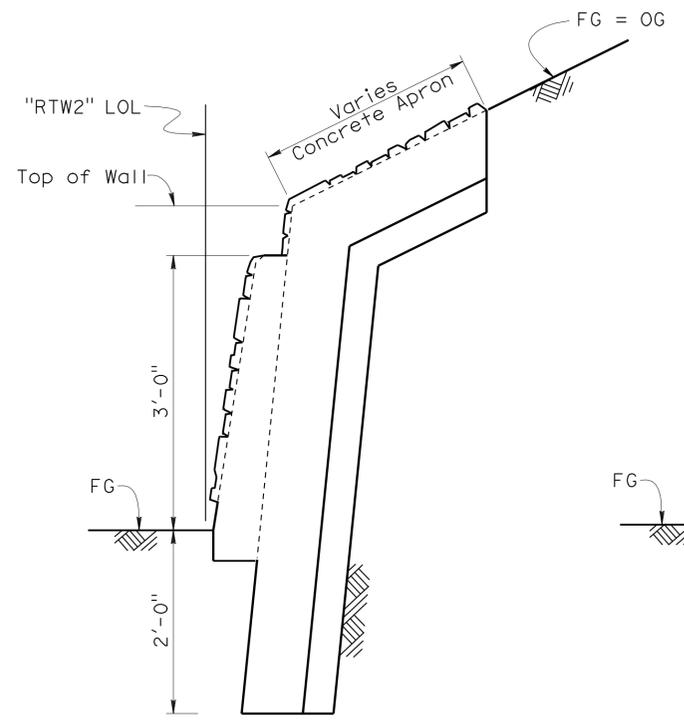
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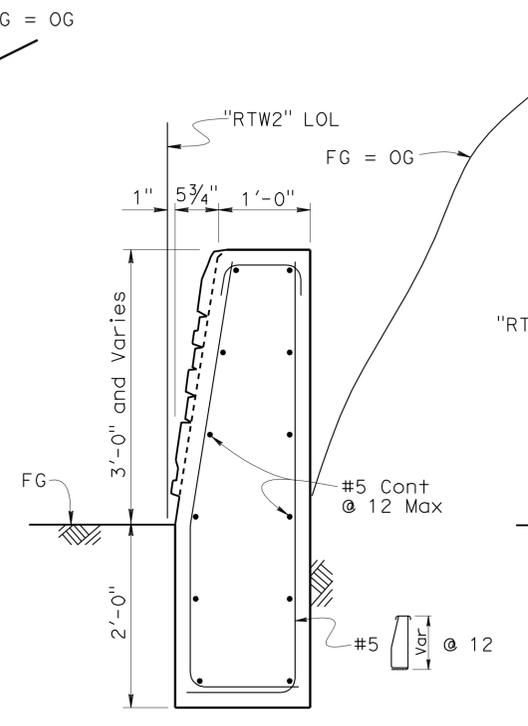
**END OF WALL PART MIRROR ELEVATION**  
 $\frac{1}{2}'' = 1'-0''$



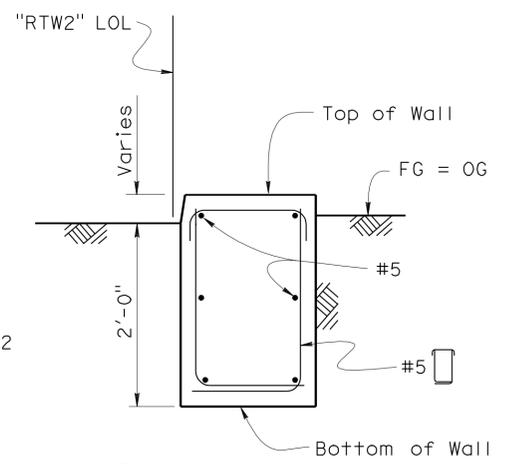
**END OF WALL PART PLAN**  
 $\frac{1}{2}'' = 1'-0''$



**SECTION J-J**  
 $1'' = 1'-0''$



**SECTION K-K**  
 $1'' = 1'-0''$



**SECTION L-L**  
 $1'' = 1'-0''$

NOTE:  
For details not shown, see "DETAIL A" and "DETAIL C" on "RETAINING WALL DETAILS NO. 1" sheet

<b>STATE OF CALIFORNIA</b>				<b>DIVISION OF ENGINEERING SERVICES</b>		<b>ENCHILADA CURVE IMPROVEMENT</b>	
<b>DEPARTMENT OF TRANSPORTATION</b>				<b>STRUCTURE DESIGN</b>		<b>RETAINING WALL NO. 2</b>	
<b>DESIGN BRANCH 7</b>				<b>BRIDGE NO.</b>		<b>RETAINING WALL DETAILS NO. 2</b>	
				05E0010			
				POST MILE			
				0.6			
DESIGN BY Keith Stillmunkes		CHECKED Mario Guadamuz		BRIDGE NO.		SHEET OF	
DETAILS BY Gerald Dickerson		CHECKED Mario Guadamuz		POST MILE		8 14	
QUANTITIES BY Sameh Hegazi		CHECKED Tuong Ha		CONTRACT NO.:		02-2E3500	
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3592		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
0 1 2 3				PROJECT NUMBER & PHASE: 0200000211-1		REVISION DATES	
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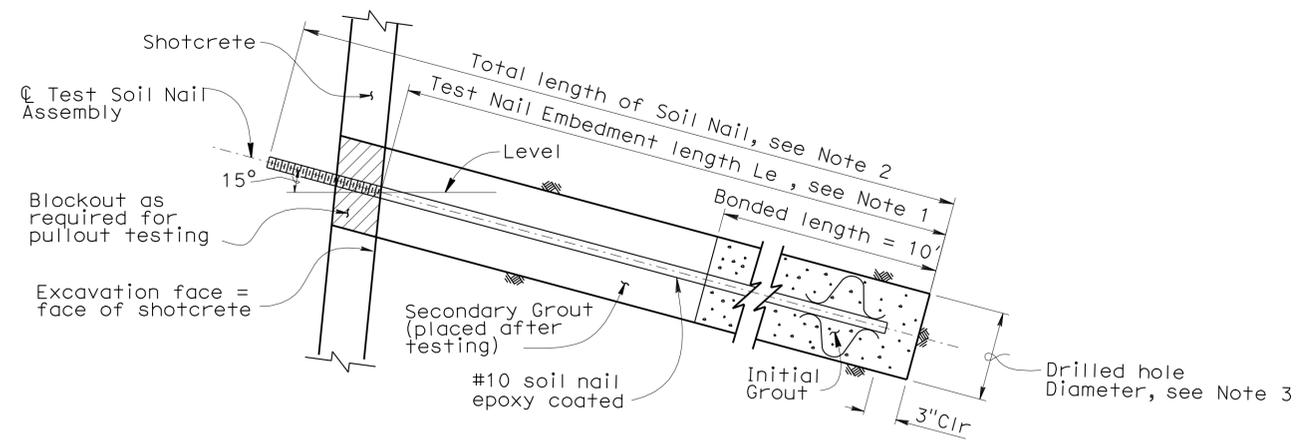
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*Kelly Ann Holden* 2-23-13  
 REGISTERED CIVIL ENGINEER DATE

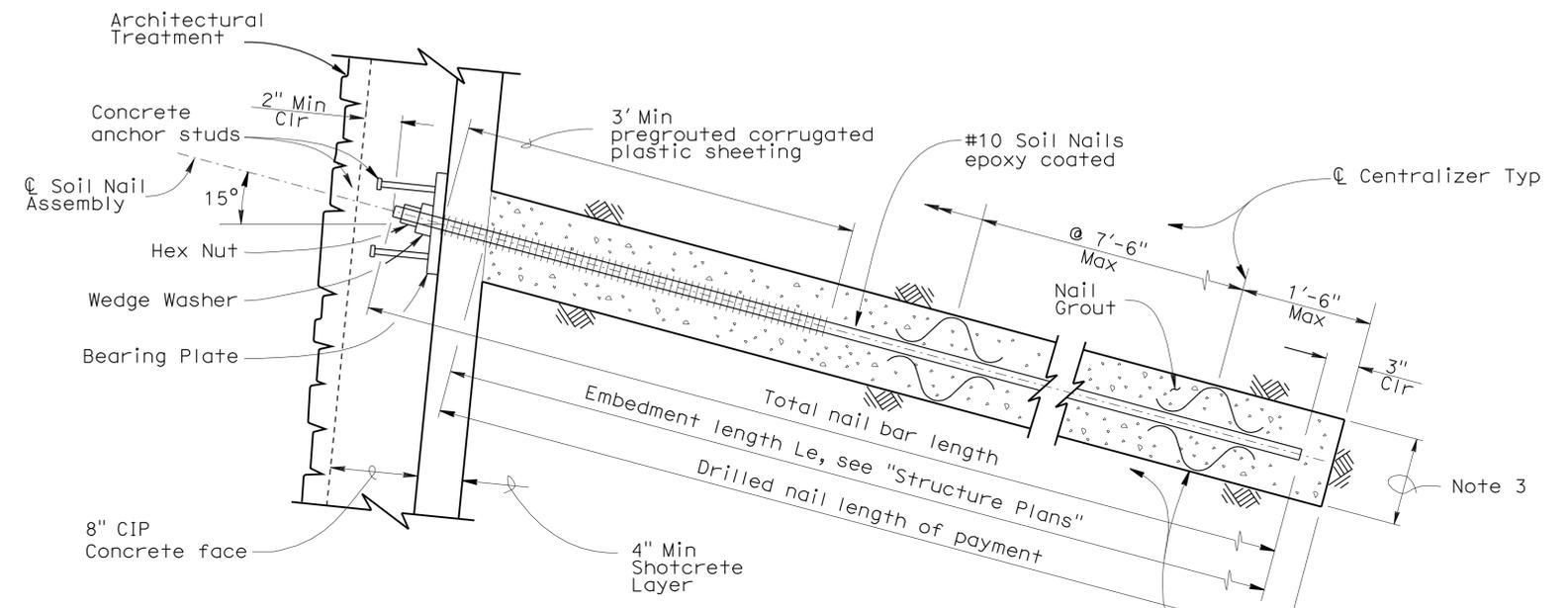
2-25-13  
 PLANS APPROVAL DATE

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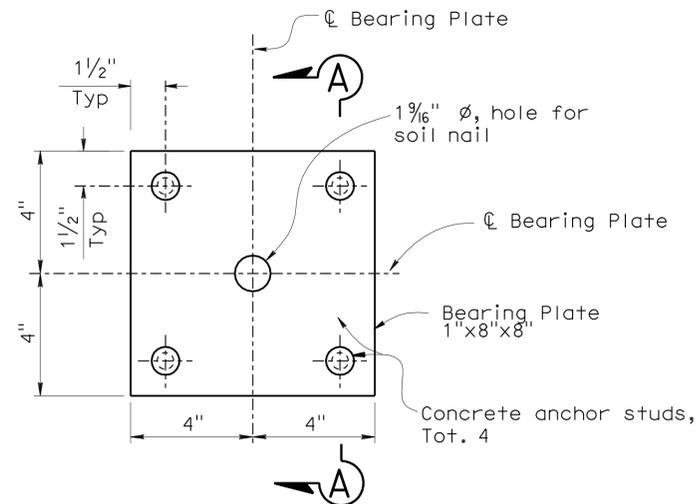
REGISTERED PROFESSIONAL ENGINEER  
 Kelly Holden  
 No. 42268  
 Exp. 3/31/14  
 CIVIL  
 STATE OF CALIFORNIA



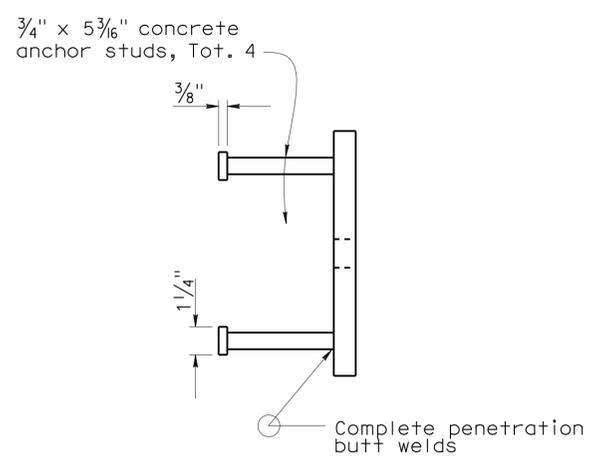
**PROOF TEST NAIL DETAIL**  
 No Scale



**PRODUCTION SOIL NAIL DETAIL**  
 No Scale



**BEARING PLATE DETAIL**  
 3" = 1'



**SECTION A-A**  
 3" = 1'

- NOTES:
1. Embedment length of Proof Test nails equals 2/3 of embedment length of adjacent production soil nail assemblies, but not less than 12 ft.
  2. Total length of Proof Test nail assembly equals embedment length plus length required for jacking equipment.
  3. Contractor to determine drilled hole diameter.

DESIGN BY Keith Stillmunkes CHECKED Mario Guadamuz DETAILS BY Bruno Jenko CHECKED Mario Guadamuz QUANTITIES BY Sameh Hegazi CHECKED Tuong Ha				STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>	BRIDGE NO. 05E0010 POST MILE 0.6	<b>ENCHILADA CURVE IMPROVEMENT</b> <b>RETAINING WALL NO. 2</b> <b>SOIL NAIL DETAILS</b>
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3592 PROJECT NUMBER & PHASE: 0200000211-1	CONTRACT NO.: 02-2E3500	DISREGARD PRINTS BEARING EARLIER REVISION DATES
				0	1	2	3
				REVISION DATES: 1-18-12, 8-08-12, 2-13-13			SHEET 9 OF 14

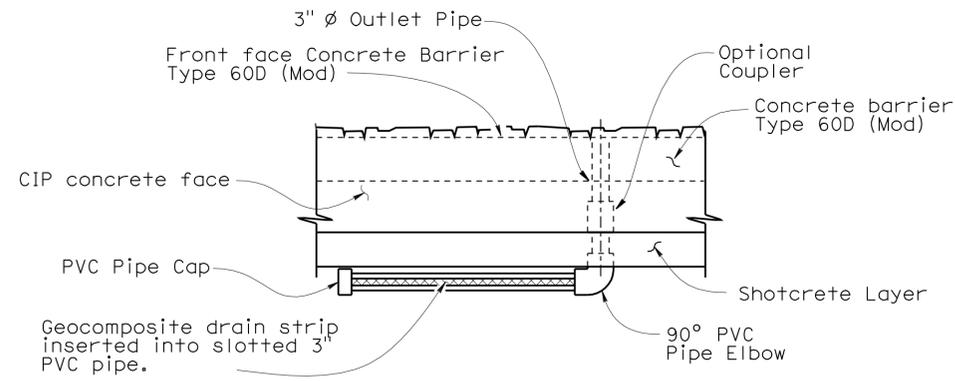
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	118	136

*Kelly Holden* 2-23-13  
 REGISTERED CIVIL ENGINEER DATE

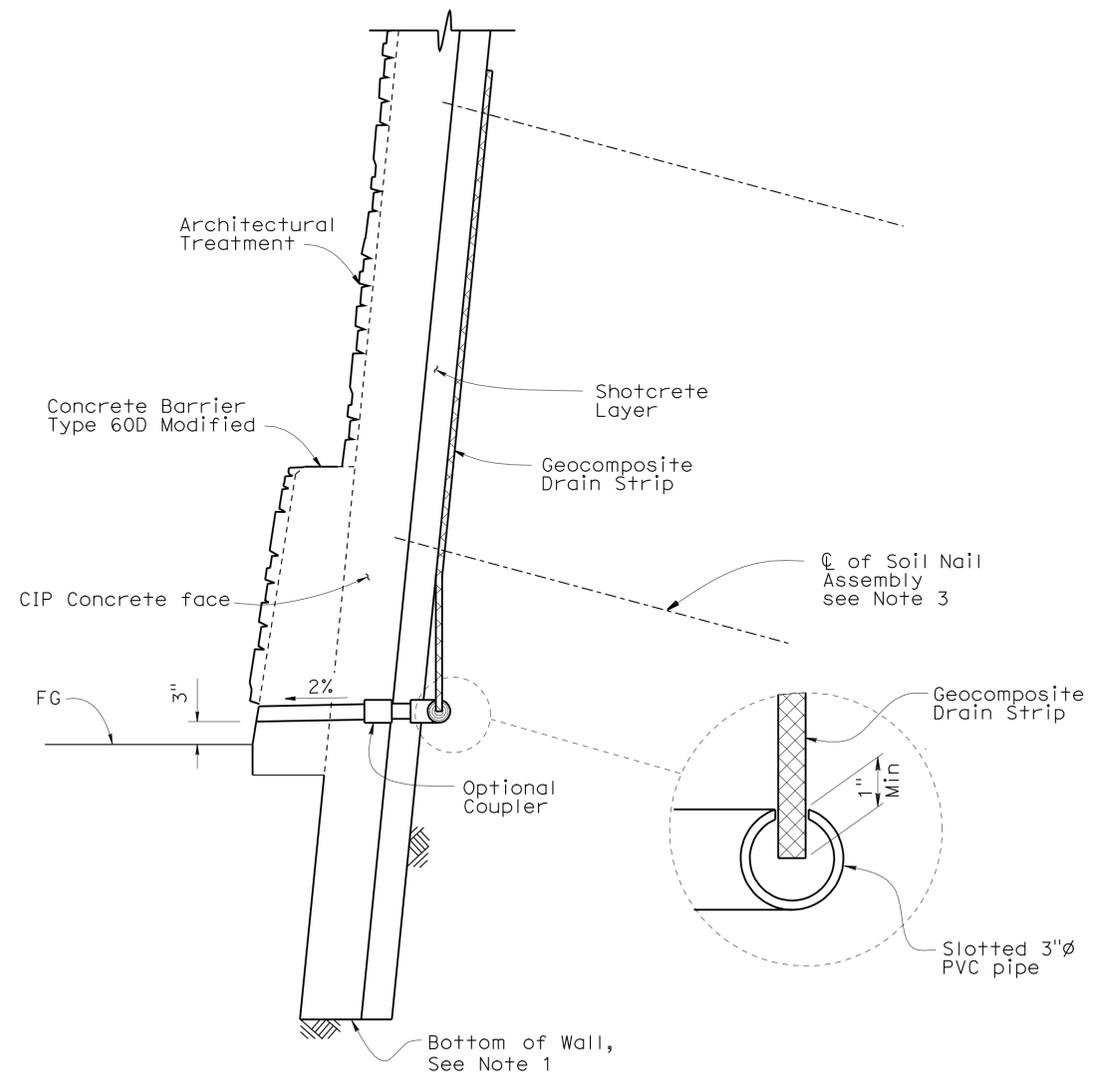
2-25-13  
 PLANS APPROVAL DATE

Kelly Holden  
 No. 42268  
 Exp. 3/31/14  
 CIVIL  
 STATE OF CALIFORNIA

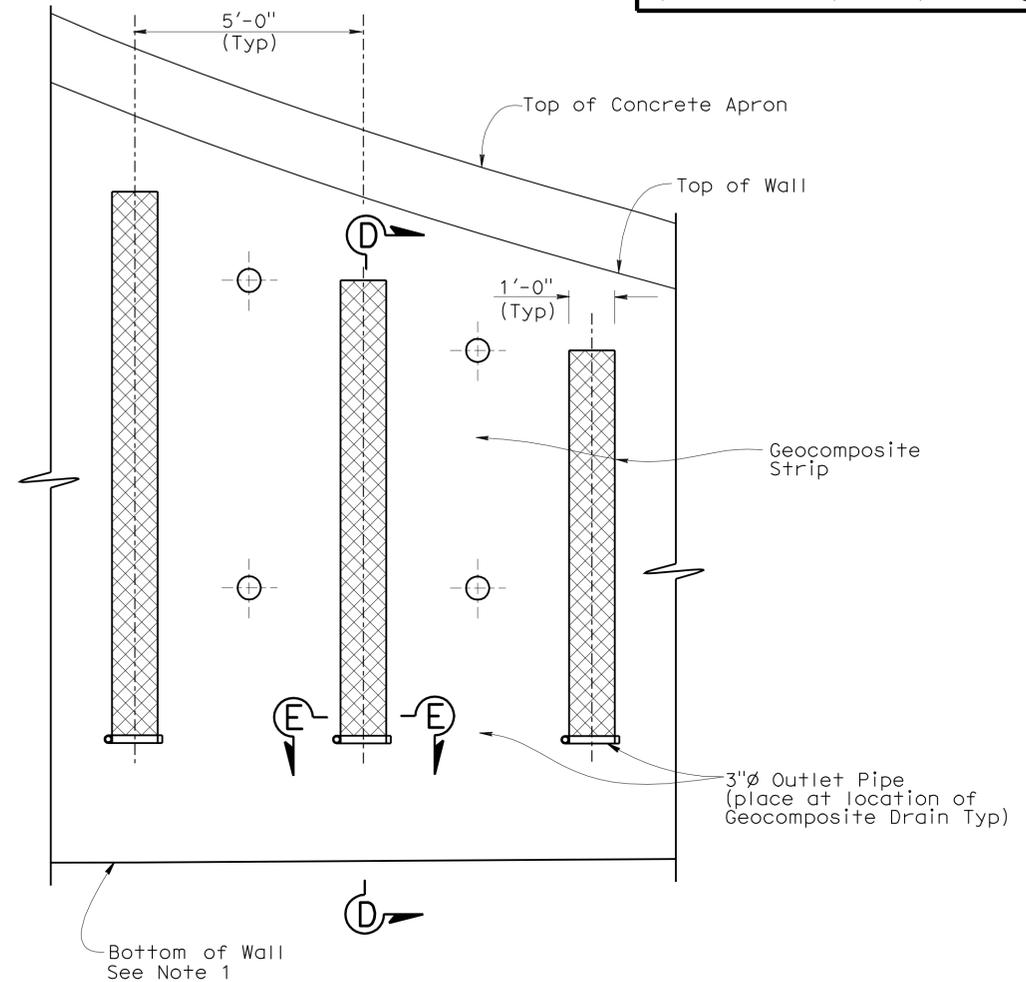
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**SECTION E-E**  
No Scale



**SECTION D-D**  
No Scale



**WALL PART ELEVATION**  
No Scale

- NOTES:
1. Bottom of wall to be placed against undisturbed material.
  2. Geocomposite Strips shall be centered vertically between Soil Nail Assemblies and extended to height of highest adjacent soil nail.
  3.  $\phi$  Indicates soil nail locations. For Soil Nail Layout see "STRUCTURE PLAN NO. 1" and "STRUCTURE PLAN NO. 2" sheets.

DESIGN BY Keith Stillmunkes CHECKED Mario Guadamuz DETAILS BY Bruno Jenko CHECKED Mario Guadamuz QUANTITIES BY Sameh Hegazi CHECKED Tuong Ha				<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>		BRIDGE NO. 05E0010 POST MILE 0.6		<b>ENCHILADA CURVE IMPROVEMENT</b> <b>RETAINING WALL NO. 2</b> <b>DRAINAGE DETAILS</b>			
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: 3592 PROJECT NUMBER & PHASE: 0200000211-1 CONTRACT NO.: 02-2E3500		DISREGARD PRINTS BEARING EARLIER REVISION DATES					
								REVISION DATES: 1-30-12, 8-08-12, 2-14-13		SHEET 10 OF 14			

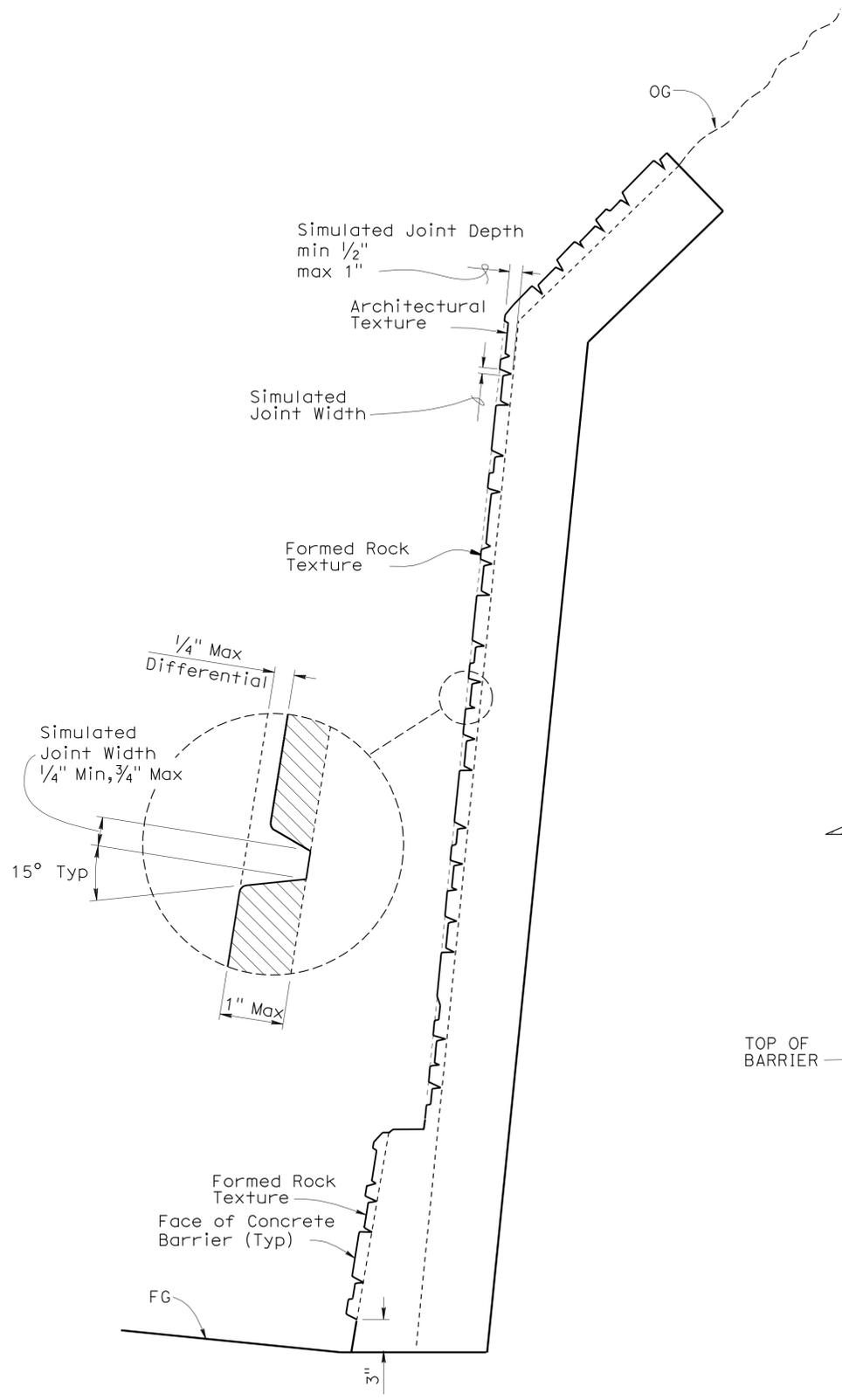
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	119	136

*Kelly Ann Holder* 2-23-13  
 REGISTERED CIVIL ENGINEER DATE

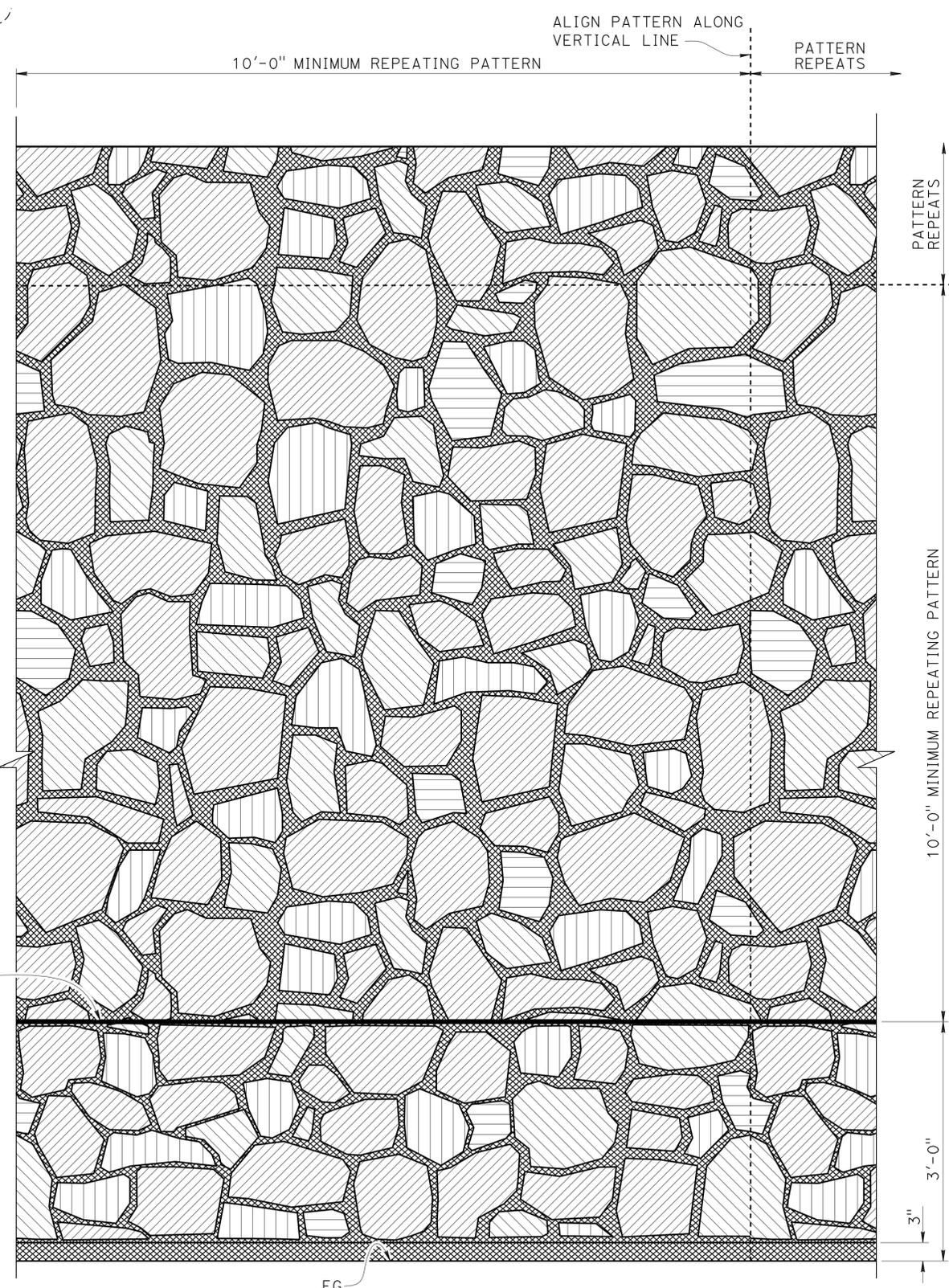
2-25-13  
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 STATE OF CALIFORNIA



**TYPICAL CROSS SECTION**  
 No Scale



**REPEATING PATTERN AND COLOR KEY**  
 1"=1'-0"

- Notes:
1. Matching architectural treatment texture and colors to be applied to roadside face of wall, top of wall, and face of barrier.
  2. Architectural treatment and colors for Concrete Barrier and Soil Nail Wall to match.

LEGEND:

	COLORED CONCRETE (ENTIRE BARRIER, TRANSITION ANCHOR BLOCK AND WALL) FEDERAL STANDARD 595C #36118 (DARK GREY)
	75% CONCRETE STAIN FEDERAL STANDARD 595C #26008 (VERY DARK GRAY)
	13% CONCRETE STAIN FEDERAL STANDARD 595C #26231 (MEDIUM GRAY)
	2% CONCRETE STAIN FEDERAL STANDARD 595C #36650 (OFF WHITE)
	10% CONCRETE STAIN FEDERAL STANDARD 595C #33717 (TAN)

**ENCHILADA CURVE IMPROVEMENT**  
**RETAINING WALL NO. 2**  
**ARCHITECTURAL DETAILS**

DESIGN BY Keith Stillmunkes	CHECKED Mario Guadamuz	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN	BRIDGE NO. 05E0010
DETAILS BY Bruno Jenko	CHECKED Mario Guadamuz		DESIGN BRANCH 7	POST MILE 0.6
QUANTITIES BY Sameh Hegazi	CHECKED Tuong Ha			

08419  
 TIME PLOTTED =>  
 01-MAR-2013  
 DATE PLOTTED =>

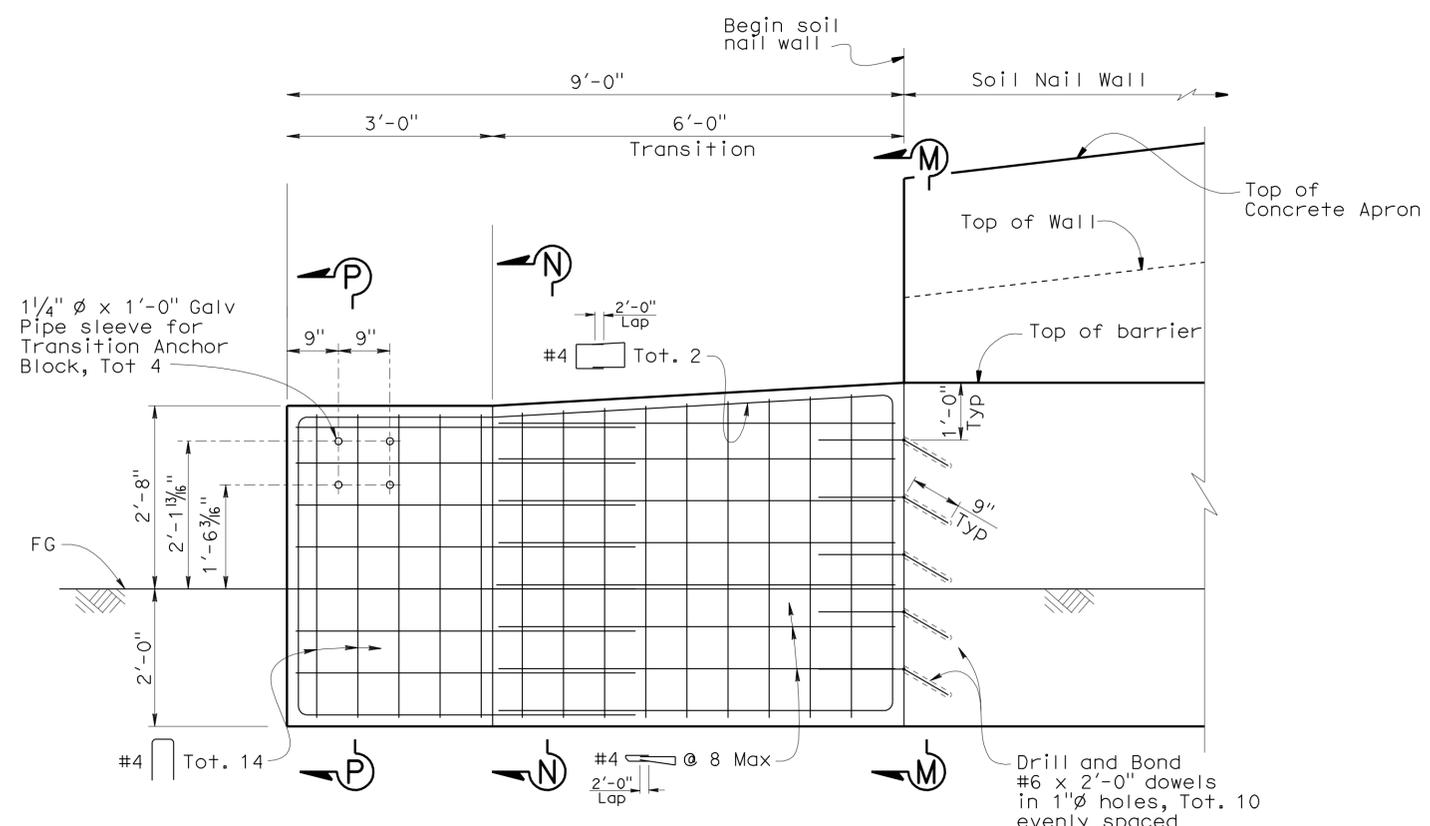
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	120	136

*Kelly Ann Holder* 2-23-13  
 REGISTERED CIVIL ENGINEER DATE

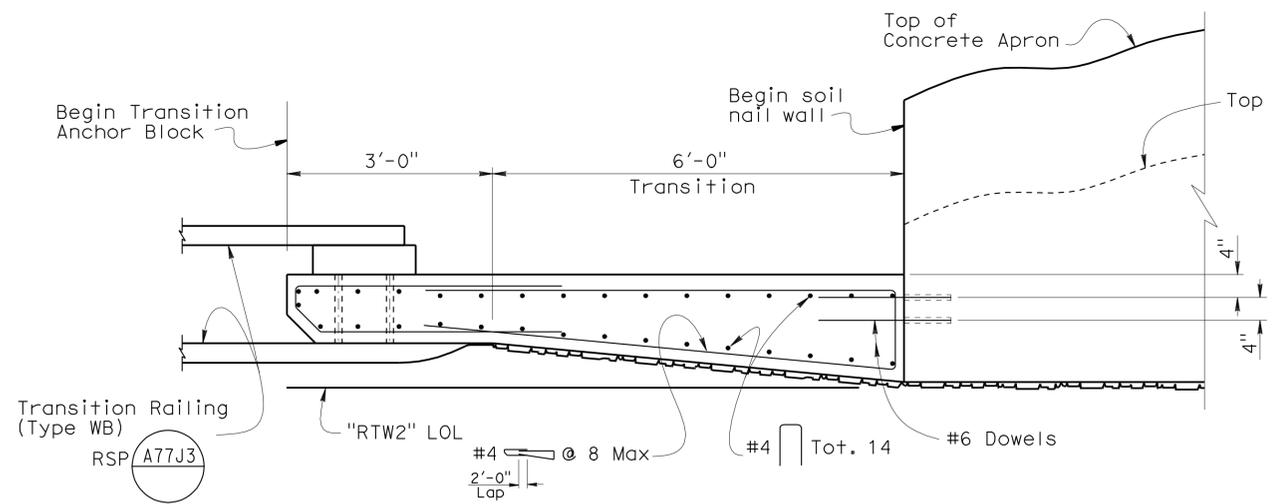
2-25-13  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 Kelly Ann Holder  
 No. 42268  
 Exp. 3/31/14  
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 STATE OF CALIFORNIA

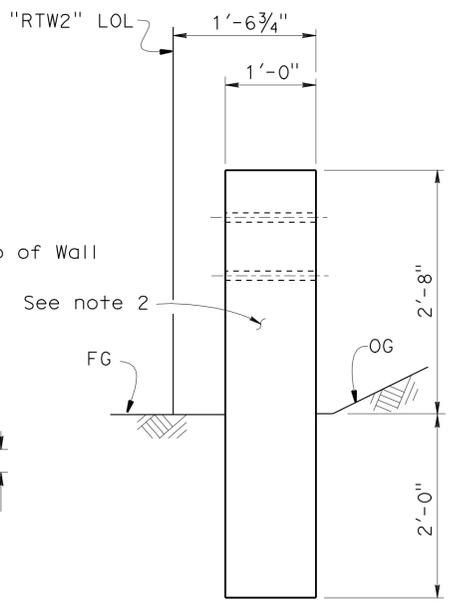
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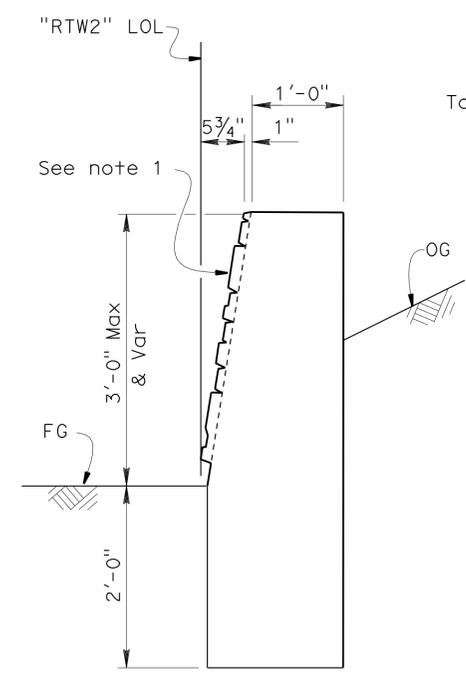
**TRANSITION ANCHOR BLOCK PART MIRROR ELEVATION**  
 RSP (A77J3)  
 3/4" = 1'-0"



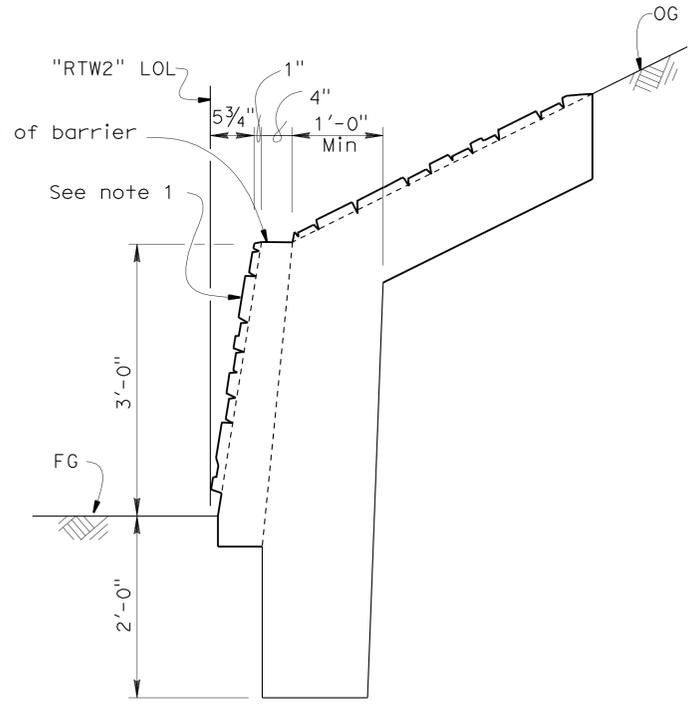
**TRANSITION ANCHOR BLOCK PART PLAN**  
 RSP (A77J3)  
 3/4" = 1'-0"



**SECTION P-P**



**SECTION N-N**



**SECTION M-M**

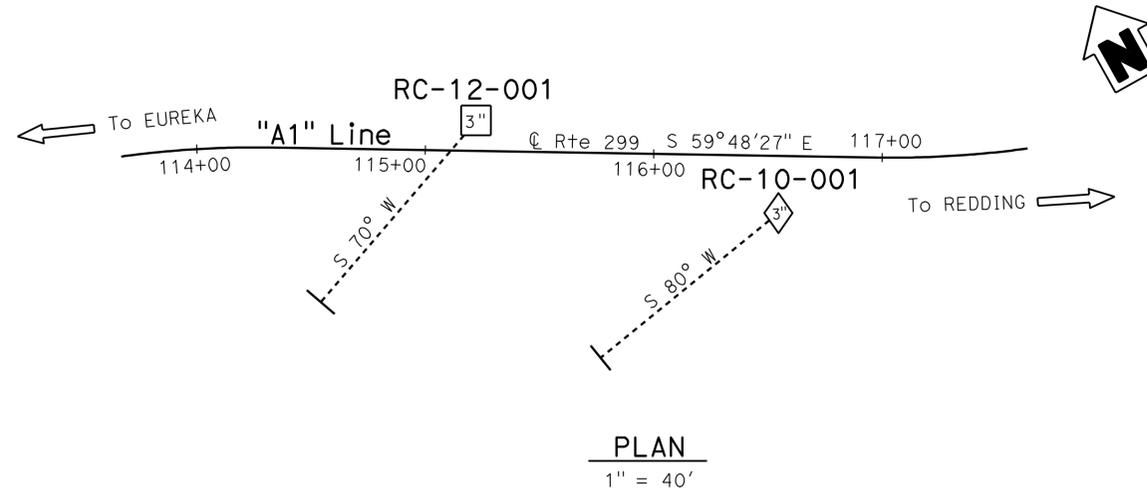
**TRANSITION ANCHOR BLOCK TO BARRIER CONNECTION**  
 1" = 1'-0"

- NOTES:
- For Architectural texture, see "ARCHITECTURAL DETAILS" sheet.
  - Colored Concrete Federal Standard 595C #36118 (dark grey)

DESIGN BY Keith Stillmunkes DETAILS BY Bruno Jenko QUANTITIES BY Sameh Hegazi			CHECKED Mario Guadamuz CHECKED Mario Guadamuz CHECKED Tuong Ha			<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION			DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>			BRIDGE NO. 05E0010 POST MILE 0.6			<b>ENCHILADA CURVE IMPROVEMENT</b> <b>RETAINING WALL NO. 2</b> <b>TRANSITION ANCHOR BLOCK DETAILS</b>														
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)						ORIGINAL SCALE IN INCHES FOR REDUCED PLANS						UNIT: 3592 PROJECT NUMBER & PHASE: 0200000211-1 CONTRACT NO.: 02-2E3500						DISREGARD PRINTS BEARING EARLIER REVISION DATES						REVISION DATES: 1-18-12, 2-23-13, 2-28-13 SHEET 12 OF 14					

**BENCH MARK**

TRI 299 0.54  
 Fdn 2 1/4" CADH Brass Disk in Concrete,  
 37.15' Rt "A1" Line Rte 299, Sta 111+07.93,  
 N 673,743.070  
 E 1,865,923.082  
 Elev 590.31  
 Vertical Datum: NAVD 88



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	121	136

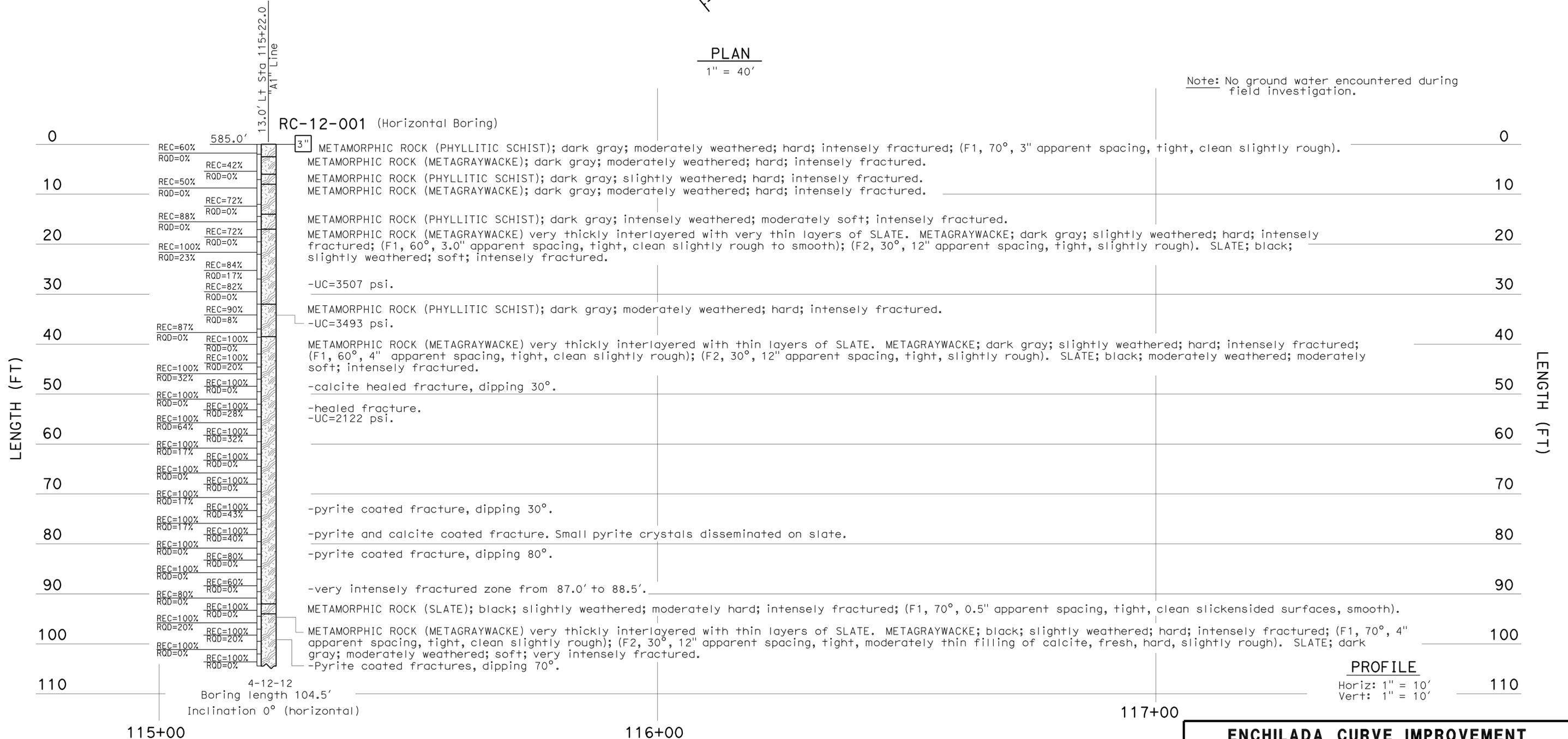
7-13-12  
 CERTIFIED ENGINEERING GEOLOGIST DATE  
 2-25-13  
 PLANS APPROVAL DATE

Luis Paredes-Mejia  
 No. 2329  
 Exp. 1-31-14  
 CERTIFIED ENGINEERING GEOLOGIST  
 STATE OF CALIFORNIA

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This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition). See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

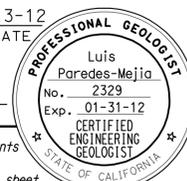
Note: No ground water encountered during field investigation.



USERNAME => s121614 DATE PLOTTED => 01-MAR-2013 TIME PLOTTED => 08:20

<b>ENGINEERING SERVICES</b>		<b>MATERIALS AND GEOTECHNICAL SERVICES</b>		<b>STATE OF CALIFORNIA</b>		<b>DIVISION OF ENGINEERING SERVICES</b>		<b>BRIDGE NO.</b>		<b>ENCHILADA CURVE IMPROVEMENT</b>	
FUNCTIONAL SUPERVISOR		DRAWN BY: W. Tang, I.G-Remmen		DEPARTMENT OF TRANSPORTATION		STRUCTURE DESIGN		05E0010		<b>RETAINING WALL NO. 2</b>	
NAME: M. Hagy		CHECKED BY: F. DeHaro		FIELD INVESTIGATION BY: L. Paredes-Mejia		<b>DESIGN BRANCH 7</b>		POST MILE		<b>LOG OF TEST BORINGS 1 OF 2</b>	
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3643		PROJECT NUMBER & PHASE: 0200000211		CONTRACT NO.: 02-2E3501		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
				0 1 2 3				REVISION DATES		SHEET OF	
								07-11-12 07-12-12		13 14	

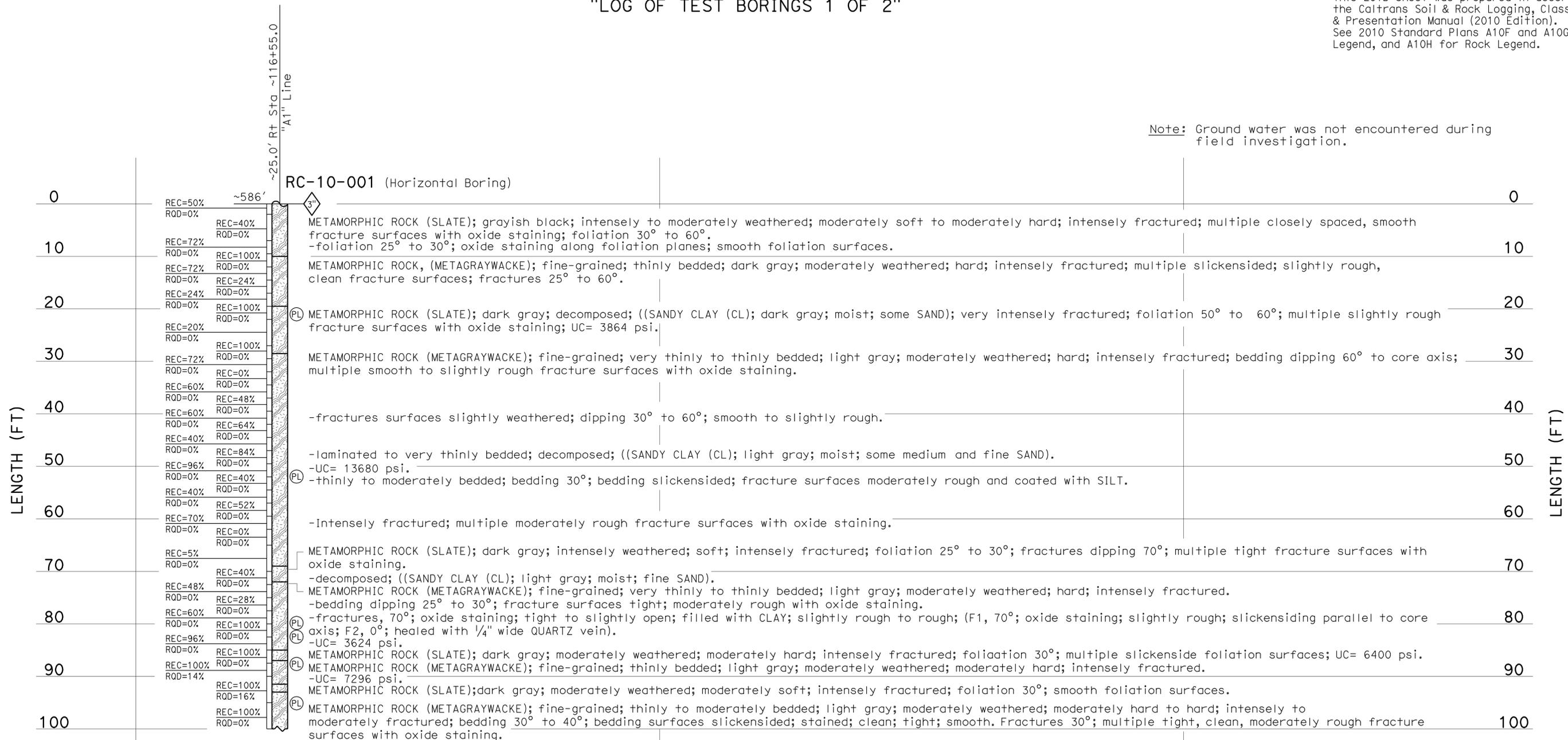
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	122	136
			7-13-12		
CERTIFIED ENGINEERING GEOLOGIST			DATE		
2-25-13			PLANS APPROVAL DATE		
					
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FOR PLAN VIEW, SEE  
"LOG OF TEST BORINGS 1 OF 2"

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition). See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

Note: Ground water was not encountered during field investigation.



11-02-10  
Boring Length 100.0'  
Inclination 0° (horizontal).

**PROFILE**  
Horiz: 1" = 20'  
Vert: 1" = 10'

120+00

116+00

118+00

**ENCHILADA CURVE IMPROVEMENT**

**RETAINING WALL NO. 2**

**LOG OF TEST BORINGS 2 OF 2**

<b>ENGINEERING SERVICES</b>		<b>MATERIALS AND GEOTECHNICAL SERVICES</b>		<b>STATE OF CALIFORNIA</b>		<b>DIVISION OF ENGINEERING SERVICES</b>		<b>BRIDGE NO.</b>		<b>REVISION DATES</b>		<b>SHEET</b>		<b>OF</b>	
FUNCTIONAL SUPERVISOR		DRAWN BY: F. Nguyen		FIELD INVESTIGATION BY:		DEPARTMENT OF TRANSPORTATION		05E0010		07-12-12		14		14	
NAME: M. Hagy		CHECKED BY: A. Barrie		L. Paredes-Mejia		DESIGN BRANCH <b>7</b>		POST MILE							
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3643		PROJECT NUMBER & PHASE: 02000002111		CONTRACT NO.: 02-2E3501		DISREGARD PRINTS BEARING EARLIER REVISION DATES					
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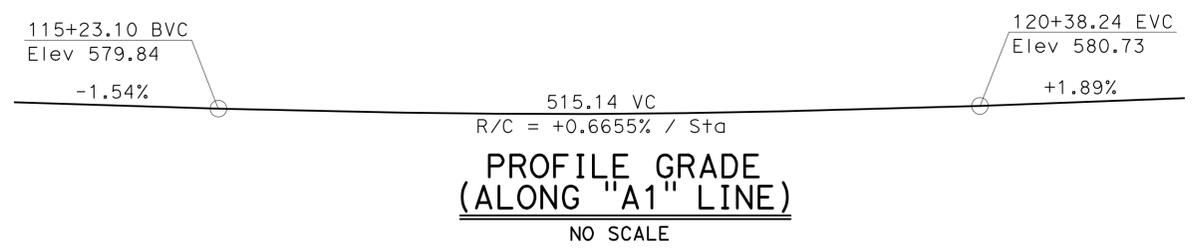
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02	Tri	299	0.4/0.9	123	136

*Kelly Ann Holder* 2-23-13  
 REGISTERED CIVIL ENGINEER DATE

2-25-13  
 PLANS APPROVAL DATE

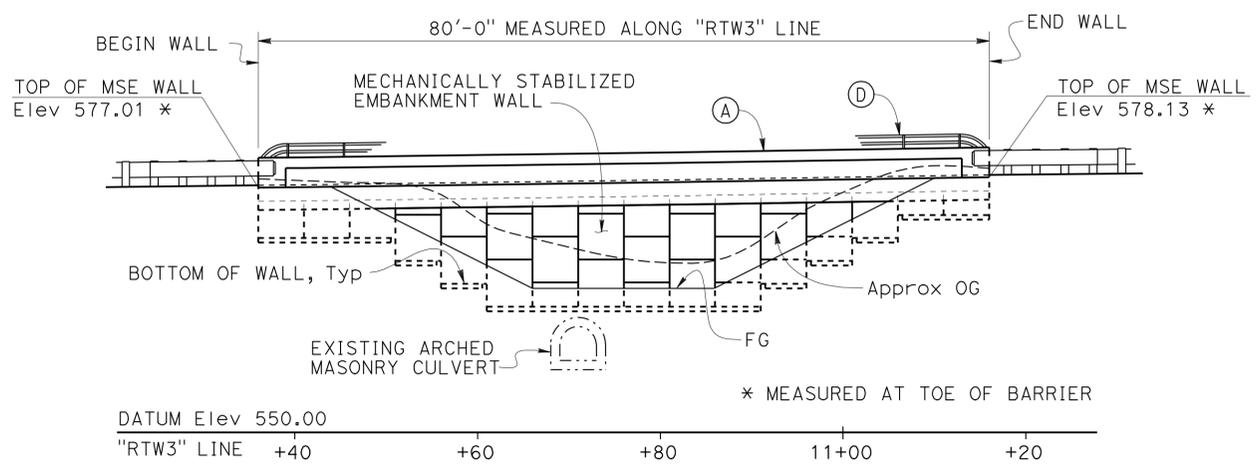
*Kelly Ann Holder*  
 No. 42268  
 Exp. 3/31/14  
 CIVIL  
 STATE OF CALIFORNIA

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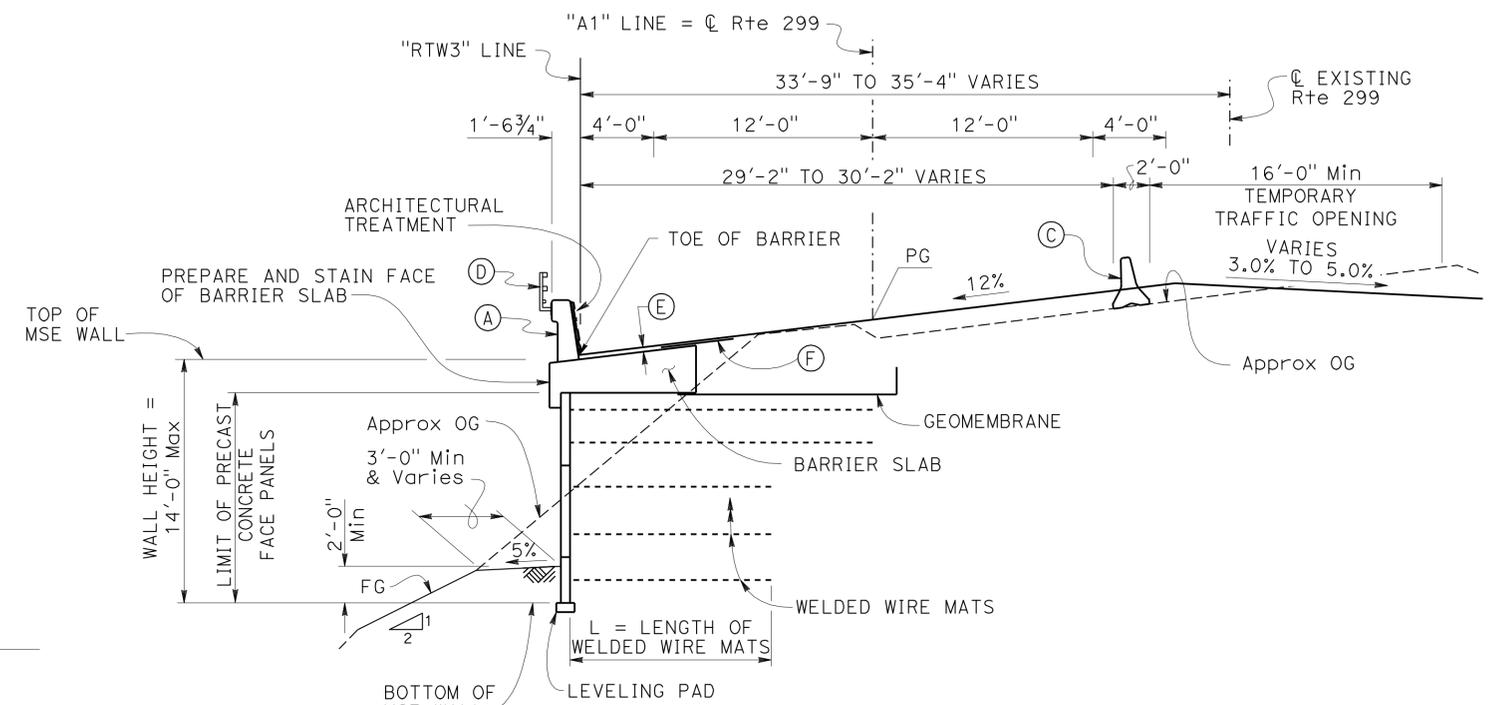


QUANTITIES

EARTH RETAINING STRUCTURE (MECHANICALLY STABILIZED EARTH WALL)	777 SQFT
STRUCTURAL CONCRETE, BARRIER SLAB	50 CY
PREPARE AND STAIN CONCRETE	440 SQFT
DRAINAGE SYSTEM	LUMP SUM
GEOMEMBRANE	122 SQYD
TUBULAR BICYCLE RAILING	80 LF
CONCRETE BARRIER (TYPE 736 MODIFIED)	80 LF

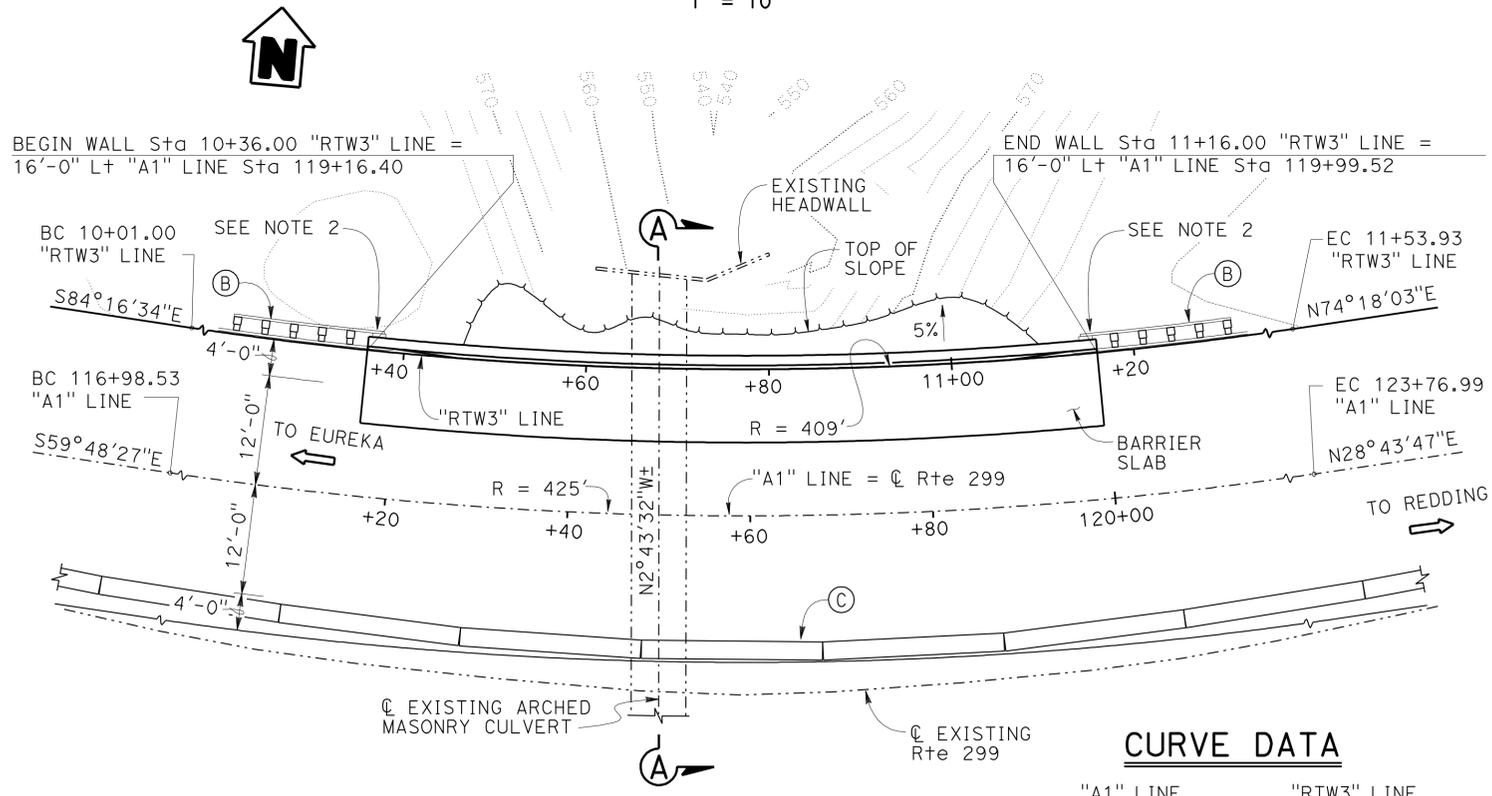


**DEVELOPED MIRRORED ELEVATION**  
 1" = 10'



**TYPICAL SECTION**  
 1" = 5'

- NOTES:
- For General Notes, Standard Plan List and Index to Plans, see "INDEX TO PLANS" sheet
  - See RSP (A77J2)
- (A) Concrete Barrier, Type 736 (Mod)  
 (B) MBGR, see "ROAD PLANS"  
 (C) Temporary Railing, Type K, see "ROAD PLANS"  
 (D) Tubular Bicycle Railing (Painted)  
 (E) 3" HMA, see "ROAD PLANS"  
 (F) Geosynthetic Pavement Interlayer, see "ROAD PLANS"
- LEGEND:  
 ---- Indicates existing structure



**CURVE DATA**

"A1" LINE	"RTW3" LINE
R = 425'	R = 409'
Δ = 91°27'46"	Δ = 21°25'23"
T = 435.99'	T = 77.37'
L = 678.44'	L = 152.93'

**PLAN**  
 1" = 10'

NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN ENGINEER <i>Kelly Ann Holder</i>	DESIGN	BY J. Jung / C. Le	CHECKED Wendy Hou	SERVICE LOAD DESIGN	LIVE LOADING: 240 PSF SURCHARGE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 7	BRIDGE NO.	05E0011	
	DETAILS	BY G. Dickerson / Y. Feng	CHECKED Wendy Hou	LAYOUT	BY Wendy Hou			CHECKED Jun Ki Jung	POST MILE	0.8
	QUANTITIES	BY David Alvarez	CHECKED Seiji Morimoto	SPECIFICATIONS	BY Adam Menke			CHECKED Adam Menke	PLANS AND SPECS COMPARED	

**ENCHILADA CURVE IMPROVEMENT**  
**RETAINING WALL NO. 3**  
**GENERAL PLAN**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	124	136

*Kelly Ann Holder* 2-23-13  
 REGISTERED CIVIL ENGINEER DATE

2-25-13  
 PLANS APPROVAL DATE

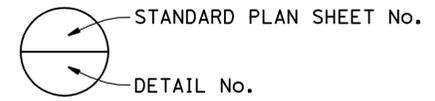
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**INDEX TO PLANS**

SHEET NO.	TITLE
1.	GENERAL PLAN
2.	INDEX TO PLANS
3.	FOUNDATION PLAN
4.	WALL LAYOUT
5.	MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 1
6.	MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 2
7.	MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 3
8.	MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 4
9.	EXCAVATION AND BACKFILL DETAILS
10.	DRAINAGE DETAILS
11.	BARRIER ARCHITECTURAL DETAILS
12.	TUBULAR BICYCLE RAILING DETAILS
13.	LOG OF TEST BORINGS 1 OF 2
14.	LOG OF TEST BORINGS 2 OF 2

**STANDARD PLANS DATED MAY 2006**

A10A	ACRONYMS AND ABBREVIATIONS (SHEET 1 OF 2)
A10B	ACRONYMS AND ABBREVIATIONS (SHEET 2 OF 2)
A10C	SYMBOLS (SHEET 1 OF 2)
RSP A77J2	METAL BEAM GUARD RAILING-CONNECTIONS TO BRIDGE RAILINGS WITHOUT SIDEWALKS DETAILS NO.2
B11-56	CONCRETE BARRIER TYPE 736
D87B	PLASTIC PIPE DOWNDRAIN DETAILS
D102	UNDERDRAINS
T3	TEMPORARY RAILING (TYPE K)
NSP T3A	TEMPORARY RAILING (TYPE K)



**GENERAL NOTES**

**DESIGN:**  
 Bridge Design Specification, April 2000  
 (1996 AASHTO with Interims and Revisions by Caltrans)

**WORKING STRESS DESIGN**

**LIVE LOAD:**  
 Surcharge = 240 lb/ft<sup>2</sup>

**SOIL PARAMETERS:**  
 Internal Design:  $\phi = 34^\circ$ ,  $\sigma = 120 \text{ lb/ft}^3$   
 External Design:  $\phi$  (Backfill) =  $34^\circ$ ,  $\sigma = 120 \text{ lb/ft}^3$   
 $\phi$  (Foundation) =  $30^\circ$

**PRECAST CONCRETE PANELS:**  
 See "GENERAL NOTES (MSE) WALLS" on "MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 2" sheet

**SOIL REINFORCEMENT:**  
 See "GENERAL NOTES (MSE) WALLS" on "MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 2" sheet

**LOAD FACTOR DESIGN**

**LIVE LOAD:**  
 HS20-44 and Alternative and Permit Design Load

**REINFORCED CONCRETE:**  
 $f'_c = 3.6 \text{ ksi}$ , except as noted (Concrete compressive strength at 28 days)  
 $f_y = 60 \text{ ksi}$  (Yield strength of reinforcement)

<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION				DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>		BRIDGE NO. 05E0011 POST MILE 0.8	<b>ENCHILADA CURVE IMPROVEMENT</b> <b>RETAINING WALL NO. 3</b> <b>INDEX TO PLANS</b>
DESIGN	BY Jun Ki Jung	CHECKED Wendy Hou					
DETAILS	BY G. Dickerson / Y. Feng	CHECKED Wendy Hou					
QUANTITIES	BY David Alvarez	CHECKED Seiji Morimoto					
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)			ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3592 PROJECT NO. & PHASE: 0200000211-1 CONTRACT NO.: 02-2E3500		DISREGARD PRINTS BEARING EARLIER REVISION DATES
						REVISION DATES 1-18-12    3-1-12    2-13-13	SHEET OF 2 14

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08420  
 TIME PLOTTED =>  
 01-MAR-2013  
 DATE PLOTTED =>

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	125	136

*Kelly Ann Holder* 2-23-13  
 REGISTERED CIVIL ENGINEER DATE

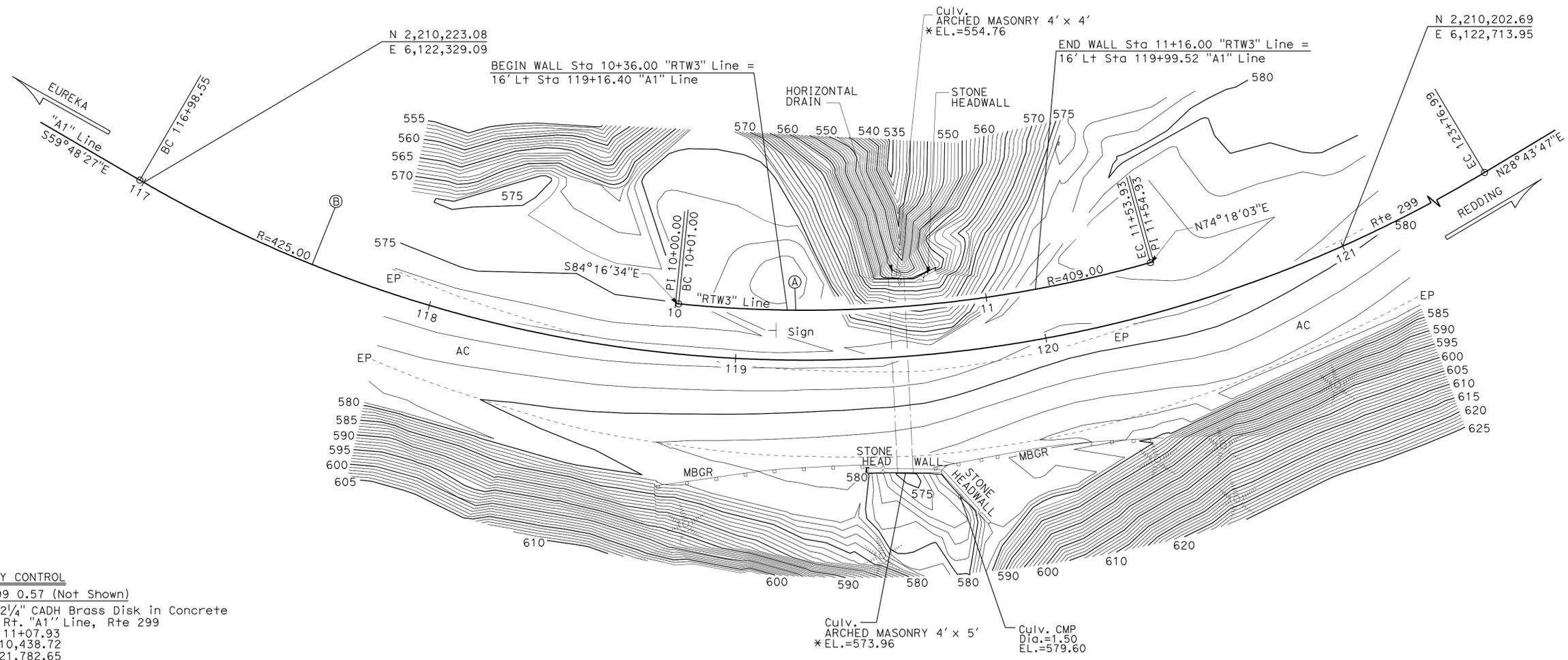
2-25-13  
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REGISTERED PROFESSIONAL ENGINEER  
 Kelly Ann Holder  
 No. 42268  
 Exp. 3/31/14  
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 STATE OF CALIFORNIA

**CURVE DATA**

No.	R	Δ	T	L
(A)	409.00	21°25'23"	77.37	152.93
(B)	425.00	91°27'46"	435.99	678.44



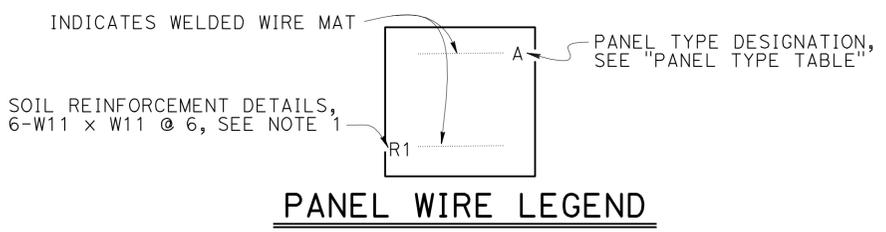
**SURVEY CONTROL**  
 TRI 299 0.57 (Not Shown)  
 Fnd 2 1/4" CADH Brass Disk in Concrete  
 37.15 Rt. "A1" Line, Rte 299  
 Sta. 111+07.93  
 N 2,210,438.72  
 E 6,121,782.65  
 EL.=590.31  
 CM 0.63 (Not Shown)  
 Fnd CADT Alum Cap on 3/4" Rebar  
 36.75 Lt. "A1" Line, Rte 299  
 Sta. 113+90.15  
 N 2,210,410.53  
 E 6,122,075.59  
 EL.=583.77

**NOTE:**  
 \* - Indicates flow line elevation.

**NOTE:**  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

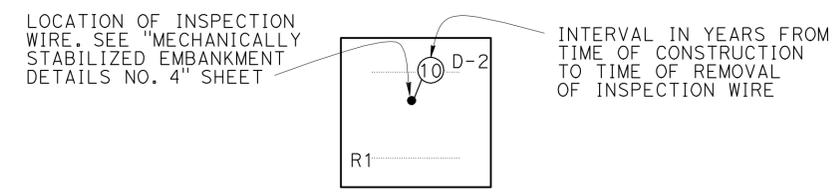
<b>PRELIMINARY INVESTIGATION SECTION</b>				DESIGN BY Jun Ki Jung	CHECKED Wendy Hou	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	<b>DIVISION OF ENGINEERING SERVICES</b> STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>	BRIDGE NO. 05E0011	<b>ENCHILADA CURVE IMPROVEMENT</b>	
SCALE 1"=20'	VERT.DATUM NAVD88	PHOTOGRAMMETRY AS OF: X	DETAILS BY Gerald Dickerson	CHECKED Wendy Hou	POST MILE 0.8			<b>RETAINING WALL NO. 3</b>		
ALIGNMENT TIES Dist. Traverse Sheet	DRAFTED BY S. Zheng	CHECKED 07/2011	QUANTITIES BY David Alvarez	CHECKED Seiji Morimoto	<b>FOUNDATION PLAN</b>					
STRUCTURES FOUNDATION PLAN SHEET (ENGLISH) (REV. 09-01-10)		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3592 PROJECT NO. & PHASE: 0200000211-1		CONTRACT NO.: 02-2E3500	DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES	SHEET 3 OF 14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	126	136
<i>Kelly Ann Holder</i> 2-23-13 REGISTERED CIVIL ENGINEER DATE			STATE OF CALIFORNIA CIVIL		
2-25-13			PLANS APPROVAL DATE		
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.					



**PANEL WIRE LEGEND**

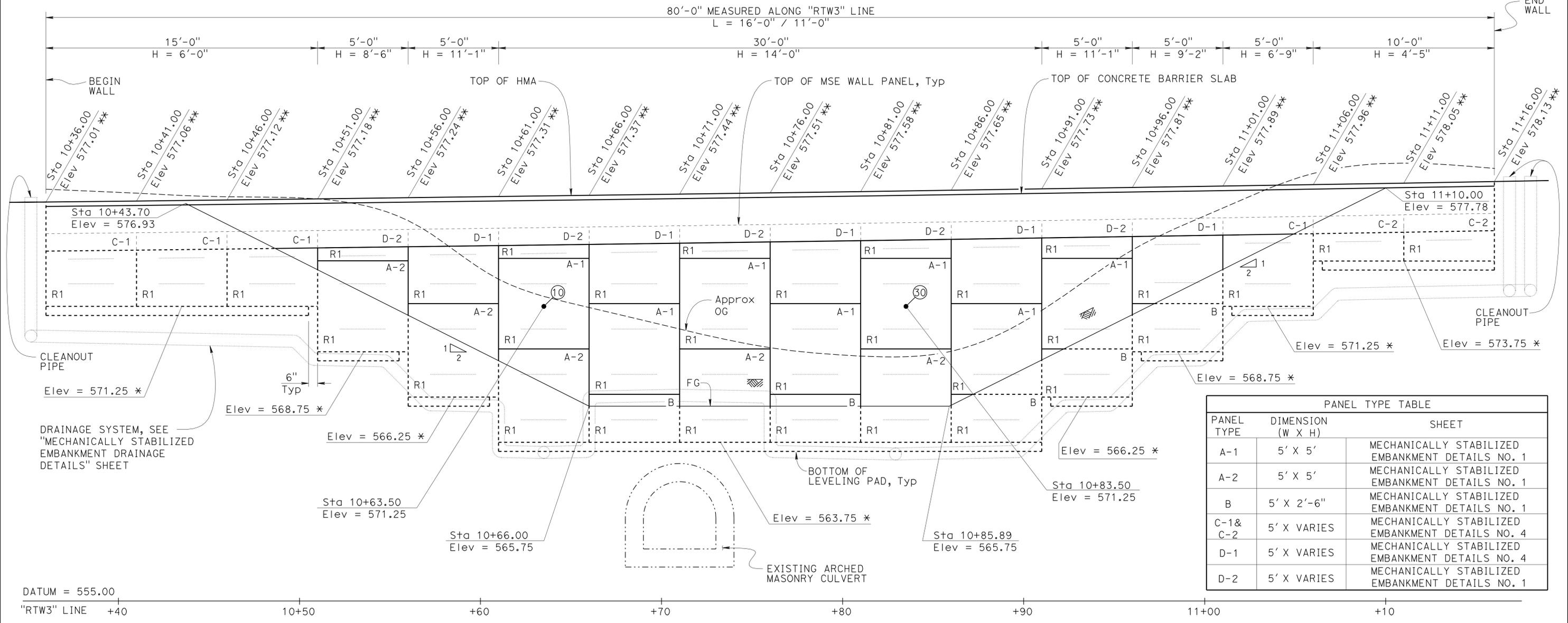
- LEGEND:
- \* - Indicates top of leveling pad elevation
  - \*\* - Indicates Toe of Barrier (Top of HMA) spot elevation along "RTW3" Line
  - H - Indicates maximum wall height
  - L - Indicates Welded Wire Mat length. L=16'-0" for top 2 levels and L=11'-0" for other levels



**INSPECTION LEGEND**

NO SCALE

- NOTES:
- Configuration: R1 = indicates 6 - W11 = 6 longitudinal wires W11 sized at 6-inch spacing
  - Concrete barrier and tubular bicycle railing not shown



PANEL TYPE	DIMENSION (W X H)	SHEET
A-1	5' X 5'	MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 1
A-2	5' X 5'	MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 1
B	5' X 2'-6"	MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 1
C-1&C-2	5' X VARIES	MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 4
D-1	5' X VARIES	MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 4
D-2	5' X VARIES	MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 1

**DEVELOPED ELEVATION**

3/8" = 1'-0"

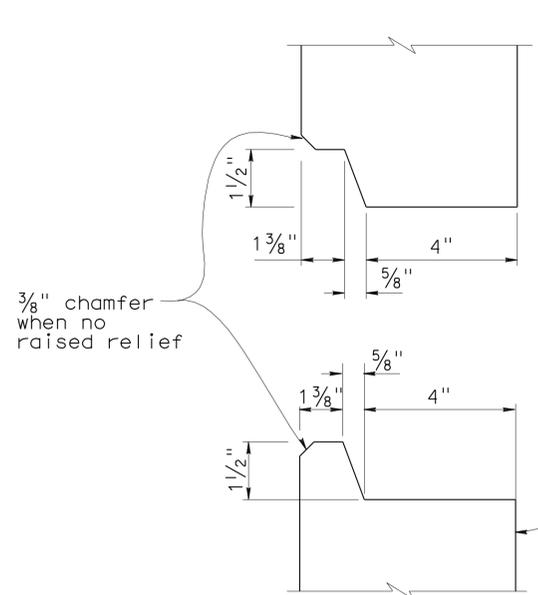
NOTE:  
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN BY Jun Jung / David Soon CHECKED Wendy Hou		<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>	BRIDGE NO. 05E0011	<b>ENCHILADA CURVE IMPROVEMENT</b> <b>RETAINING WALL NO. 3</b> <b>WALL LAYOUT</b>	
DETAILS BY G. Dickerson / Y. Feng CHECKED Wendy Hou				POST MILE 0.8		
QUANTITIES BY David Alvarez CHECKED Seiji Morimoto				CONTRACT NO.: 02-2E3500		
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)			UNIT: 3592 PROJECT NO. & PHASE: 0200000211-1	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES: 12-29-11, 2-13-13, 9-18-12	SHEET 4 OF 14

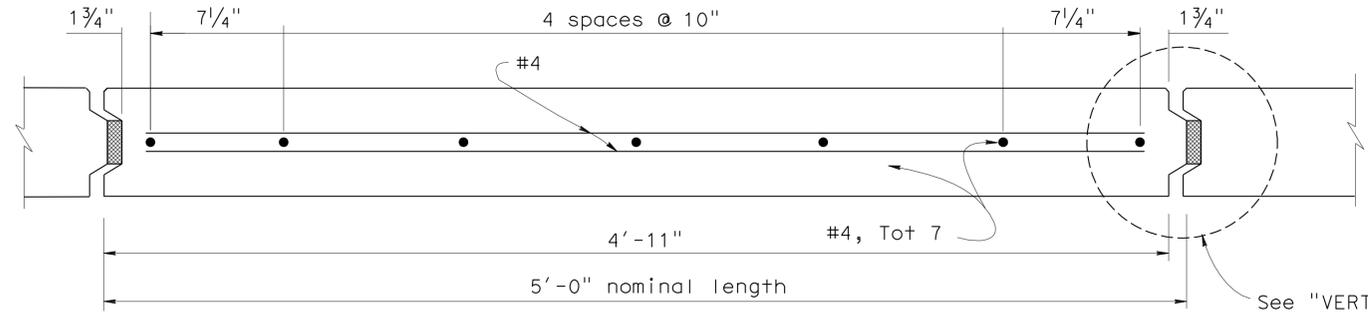
DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Tri	299	0.4/0.9	127	136

*Kelly Ann Holden* 2-23-13  
 REGISTERED ENGINEER - CIVIL  
 No. 42268  
 Exp. 3/31/14  
 CIVIL  
 STATE OF CALIFORNIA

2-25-13  
 PLANS APPROVAL DATE  
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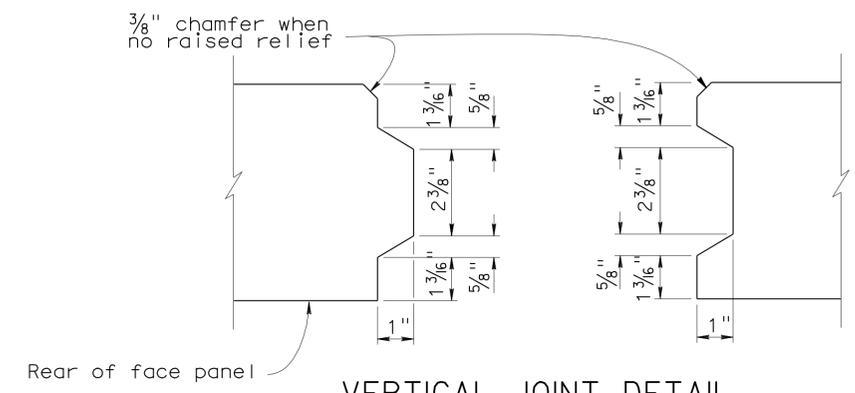


**HORIZONTAL JOINT DETAIL**  
1:2.5

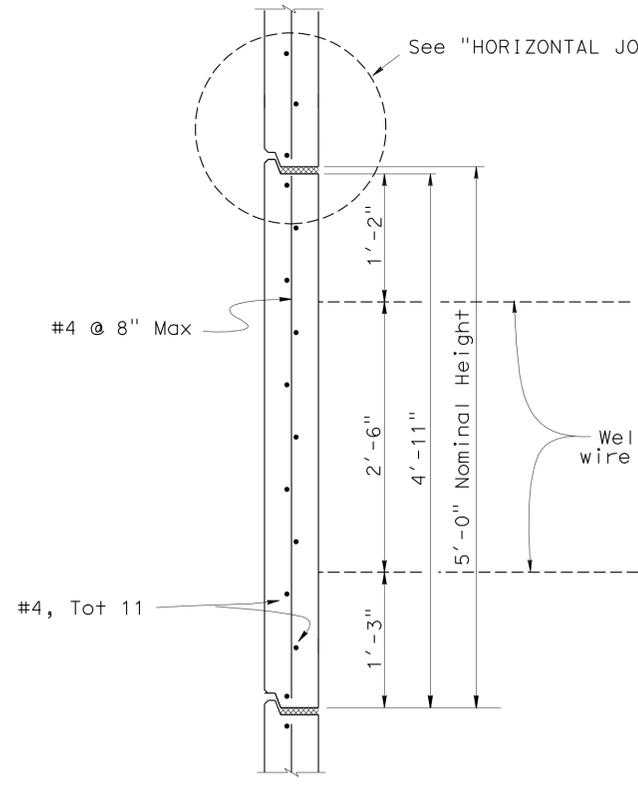


**PLAN - FACE PANEL**

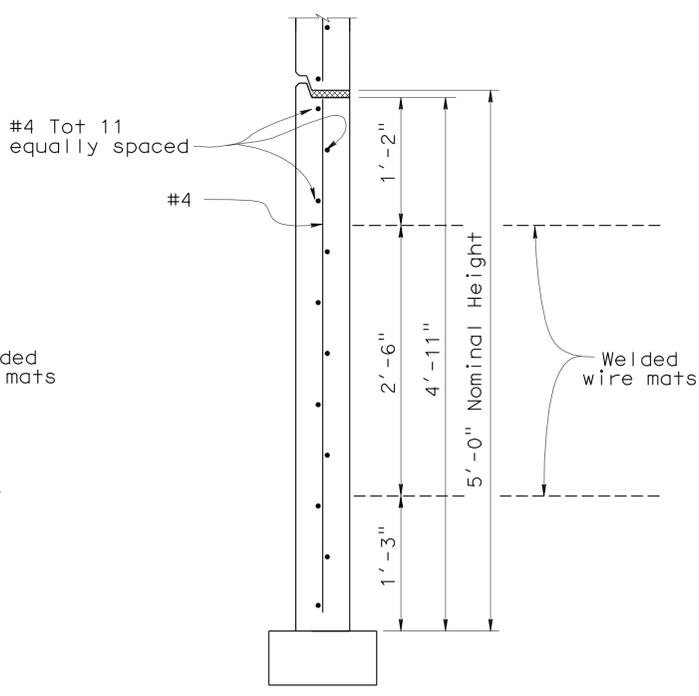
- NOTES:
1. Architectural treatment not shown.
  2. Place reinforced elastomeric bearing pads in all of the panel joints between the panels. Place one in each vertical joint where the horizontal joint intersects it. Place two per panel in each horizontal joint.  
 $\frac{3}{4}$ " x  $2\frac{3}{8}$ " x 6" for vertical joints  
 $\frac{3}{4}$ " x 4" x 6" for horizontal joints.
  3. Bond a strip of filter fabric, 1' - 0" wide, over the full length of all panel joints.



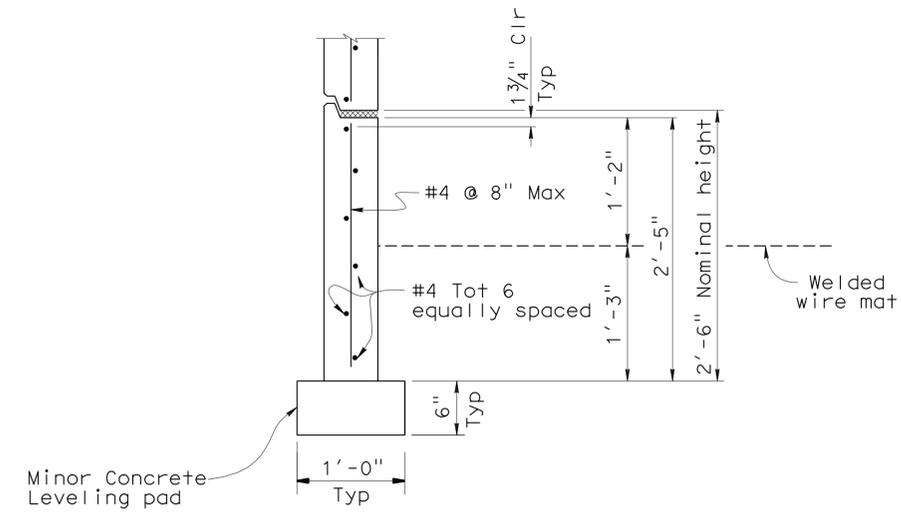
**VERTICAL JOINT DETAIL**  
1:2.5



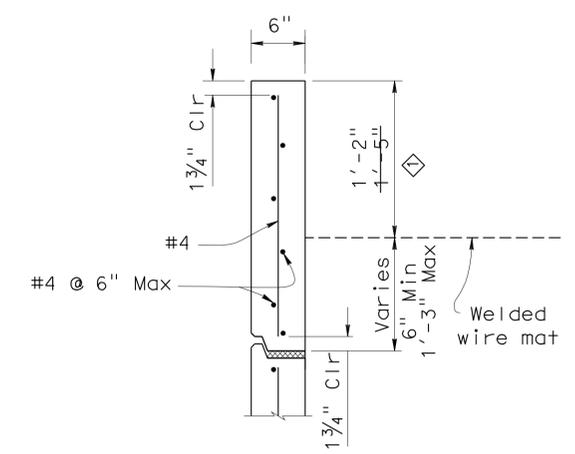
**TYPE A-1 PANEL**  
1:10



**TYPE A-2 PANEL**  
1:10



**TYPE B PANEL**  
1:10



**TYPE D-2 PANEL**  
1:10

STANDARD DRAWING		
FILE NO. <b>xs13-020-1e</b>	APPROVED BY <i>K. GRISWELL</i> RESPONSIBLE TECHNICAL SPECIALIST	RELEASED BY <i>ROBERTO LACALLE</i> RESPONSIBLE OFFICE CHIEF
	APPROVAL DATE <b>5-6-08</b>	RELEASE DATE <b>5-6-08</b>

- ◇ Change dimension
- ◇ Change Panel Name

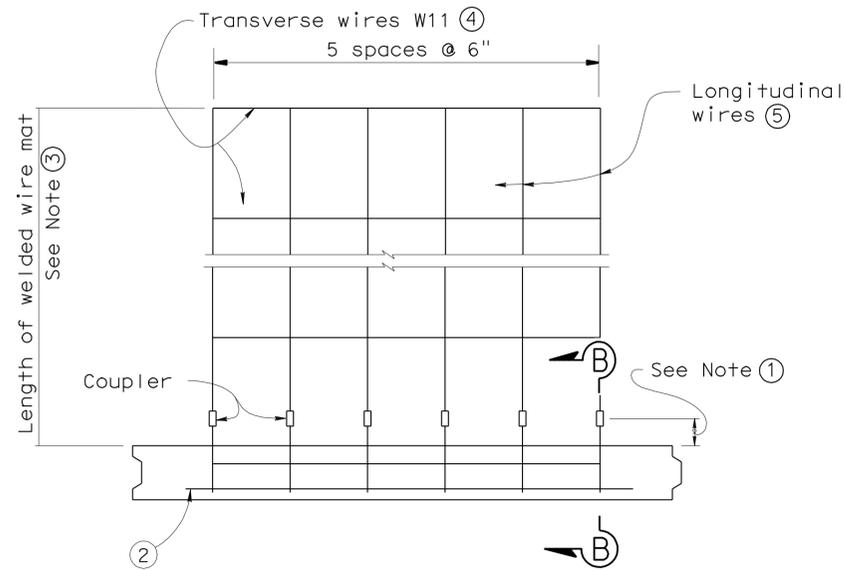
<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION	<b>DIVISION OF ENGINEERING SERVICES</b>
--	---

BRIDGE NO. 05E0011
POST MILE 0.8

<b>ENCHILADA CURVE IMPROVEMENT</b>
<b>RETAINING WALL NO. 3</b>
<b>MECHANICALLY STABILIZED EMBANKMENT</b>
<b>DETAILS NO. 1</b>

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Tri	299	0.4/0.9	128	136

*Kelly Ann Holden* 2-23-13  
 REGISTERED ENGINEER - CIVIL  
 No. 42268  
 Exp. 3/31/14  
 PLANS APPROVAL DATE  
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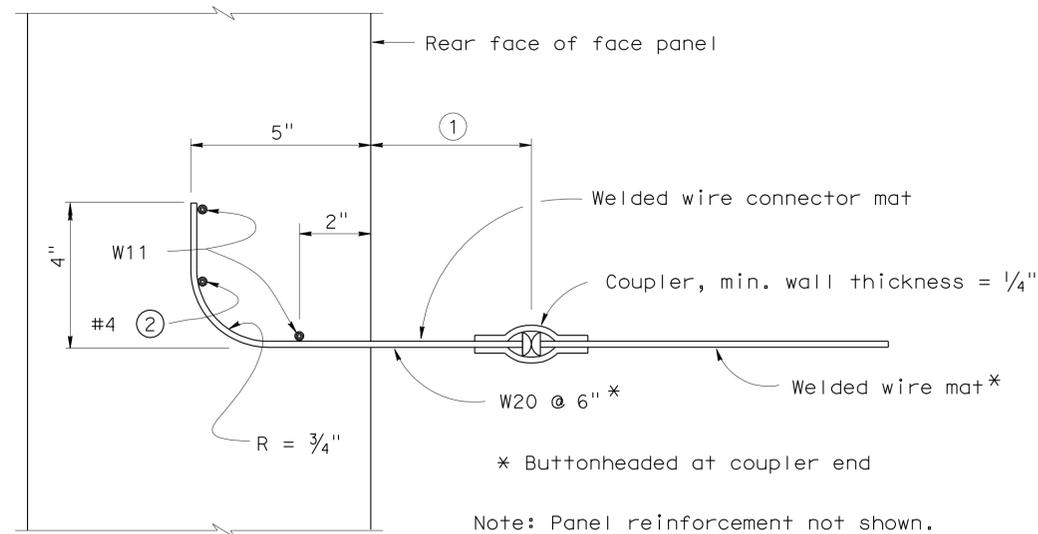
**PLAN OF PANEL WITH WELDED WIRE MAT**  
No scale

**GENERAL NOTES (MSE WALLS)**

Live loading: Surcharge = 240 lb/ft<sup>2</sup>  
 Soil parameters:  
 Internal design  $\phi = 34^\circ$ ,  $\gamma = 120$  lb/ft<sup>3</sup>  
 External design  $\phi$  (Backfill) = 34°,  $\gamma = 120$  lb/ft<sup>3</sup>  
 $\phi$  (Foundation) = 30°  
 Precast concrete panels:  
 $f'c = 4,000$  psi (Concrete compressive strength at 28 days)  
 $f_y = 60,000$  psi (Yield strength of reinforcement)  
 Soil reinforcement:  
 Welded wire mats:  $f_y = 65,000$  psi (Yield strength)  
 Coupler:  $f_y = 36,000$  psi (Yield strength)  
 Corrosion rate = 1.1 mils/year  
 Reinforced concrete:  
 $f'c = 3,600$  psi, except as noted  
 (Concrete compressive strength at 28 days)  
 $f_y = 60,000$  psi (Yield strength of reinforcement)  
 MSE = Mechanically stabilized embankment

**Notes:**

- ① Distance as required to permit coupler to be swaged.
- ② Place #4 bar, 3' - 2" long, centered on connector mat, but not welded to it.
- ③ Length equals "Base width" of wall, except it shall not be less than 16' for the top 2 levels of mats at the top of the wall.
- ④ All Transverse Wires size W11 at various spacings as shown elsewhere in plans.
- ⑤ All Longitudinal Wires at 6" spacing, of various sizes, as shown elsewhere in plans.



**SECTION B-B**  
No scale

**ENCHILADA CURVE IMPROVEMENT  
 RETAINING WALL NO. 3  
 MECHANICALLY STABILIZED EMBANKMENT  
 DETAILS NO. 2**

STANDARD DRAWING			
FILE NO. <b>xs13-020-2e</b>	APPROVED BY <u>K. GRISWELL</u> RESPONSIBLE TECHNICAL SPECIALIST	RELEASED BY <u>ROBERTO LACALLE</u> RESPONSIBLE OFFICE CHIEF	
	APPROVAL DATE <u>5-6-08</u>	RELEASE DATE <u>5-6-08</u>	

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF ENGINEERING SERVICES

BRIDGE NO.	05E0011
POST MILE	0.8

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Tri	299	0.4/0.9	129	136

*Kelly Ann Holden* 2-23-13  
 REGISTERED ENGINEER - CIVIL  
 No. 42268  
 Exp. 3/31/14  
 CIVIL  
 STATE OF CALIFORNIA

2-25-13  
 PLANS APPROVAL DATE  
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Place vertical bearing pads where horizontal panel joint intersects vertical panel joint.

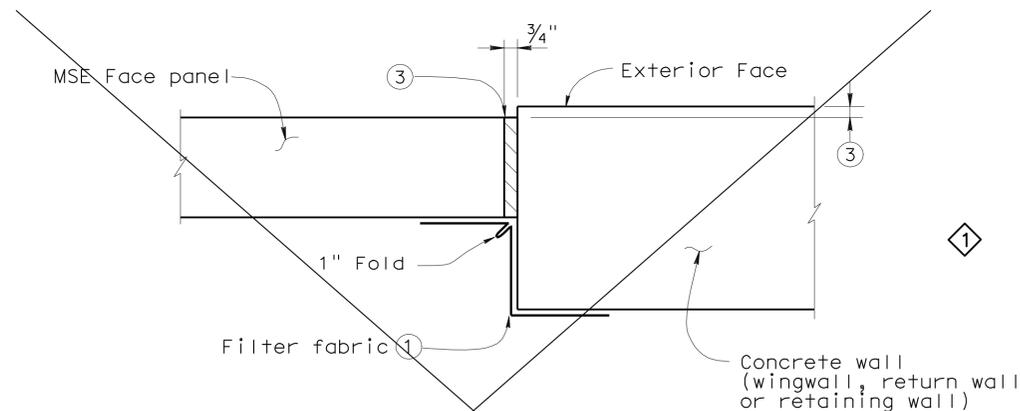
Welded wire mats

Leveling pad

6" Typ

REAR ELEVATION

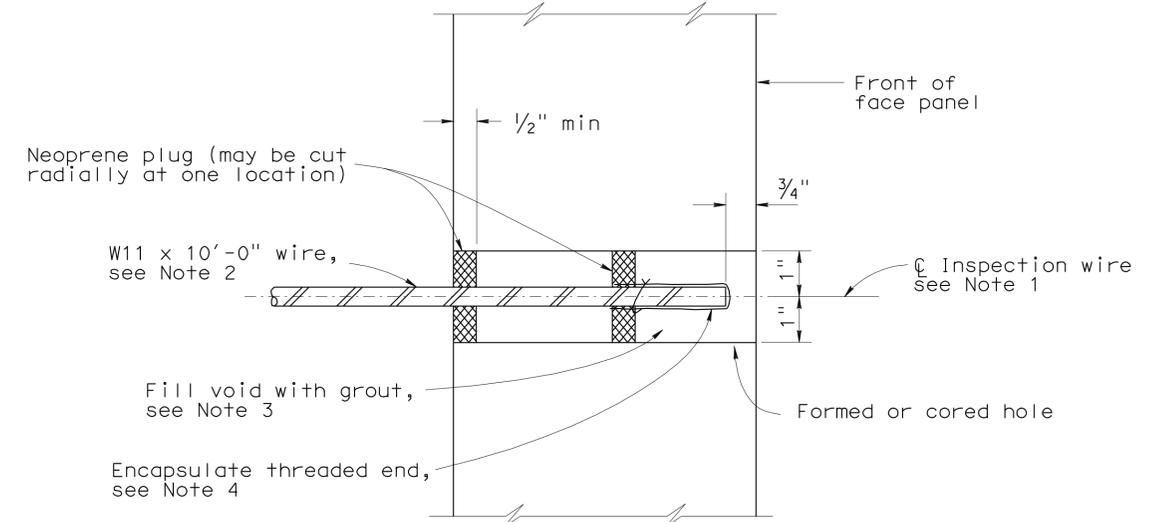
1'-0" wide strip of filter fabric bonded to adjacent panels full length of both vertical and horizontal panel joints.



MSE FACE PANEL-TO-CONCRETE WALL JOINT DETAIL

LEGEND:

- ① Bond a strip of filter fabric, 1'-6" wide, to back of MSE panels and the adjacent concrete wall for entire length of vertical joint.
- ② Bond expansion joint material to the concrete wall.
- ③ Offset between face of MSE face panel and face of the concrete wall as dictated by location of layout lines shown elsewhere in Project Plans.



SECTION THRU INSPECTION WIRE

NOTES:

1. Center inspection wire in face panel.
2. Fabricate inspection wires from W11 wire representative of the welded wire mats, with 3/8" dia - 16 UNC threads for at least 1 1/2" of one end.
3. Place inspection wire horizontal and perpendicular to the wall panel prior to backfilling. After backfill placement to a level at least 2'-0" above the inspection wire, dry pack opening with 1000 to 1500 psi mortar. Trowel mortar smooth and flush with face of panel.
4. Encapsulate threaded end with corrosion inhibiting mastic, and secure round vinyl cover with nylon tie.

UNC = Unified coarse threads

ENCHILADA CURVE IMPROVEMENT  
 RETAINING WALL NO. 3  
 MECHANICALLY STABILIZED EMBANKMENT  
 DETAILS NO. 3

STANDARD DRAWING

FILE NO. <b>xs13-020-3e</b>	APPROVED BY <u>K. GRISWELL</u> RESPONSIBLE TECHNICAL SPECIALIST	RELEASED BY <u>ROBERTO LACALLE</u> RESPONSIBLE OFFICE CHIEF
APPROVAL DATE <u>5-6-08</u>	RELEASE DATE <u>5-6-08</u>	

① Remove Detail

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

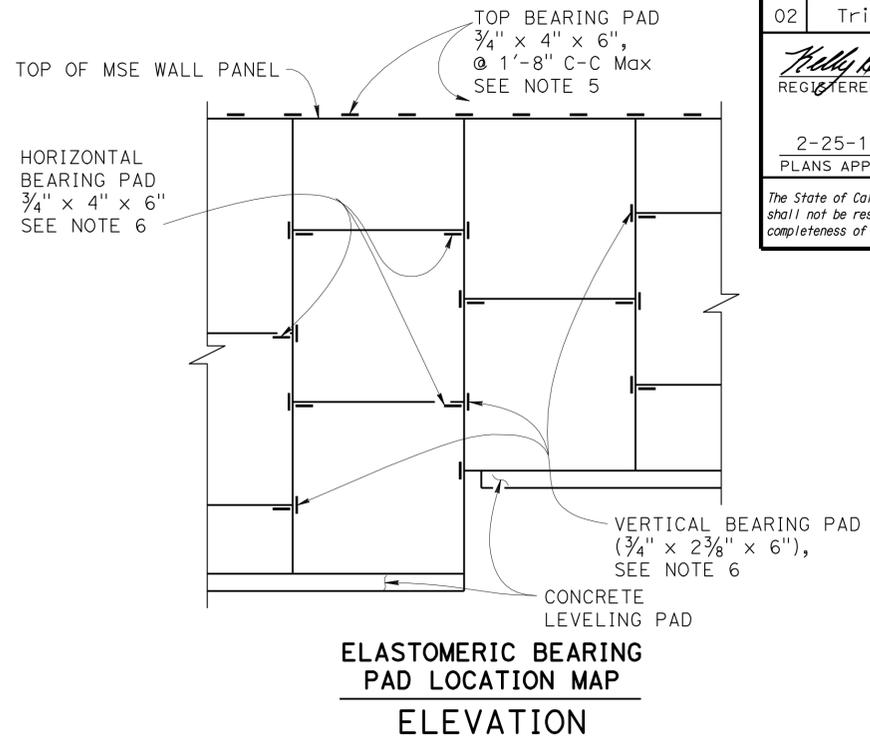
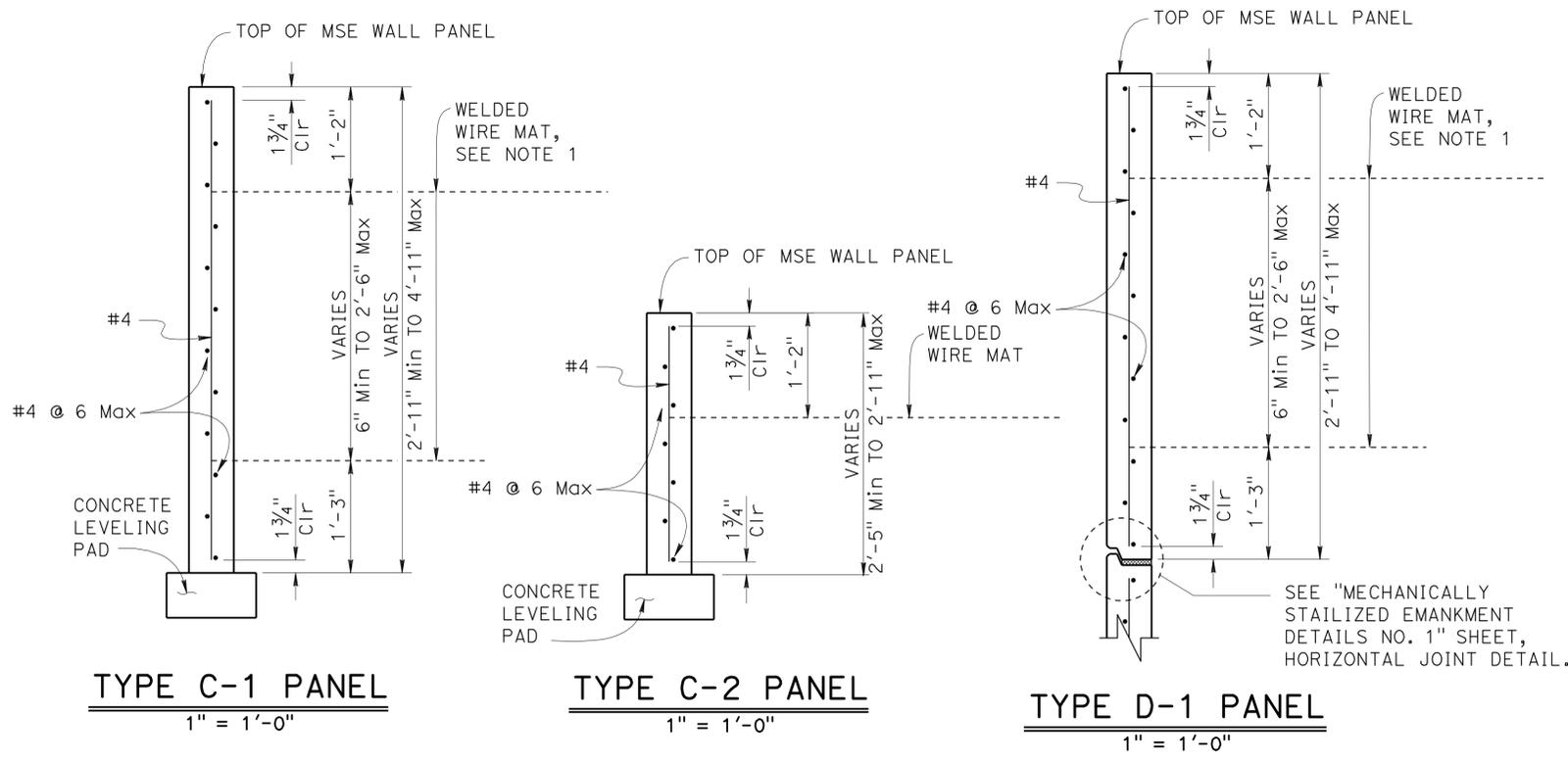
DIVISION OF ENGINEERING SERVICES

BRIDGE NO.	05E0011
POST MILE	0.8

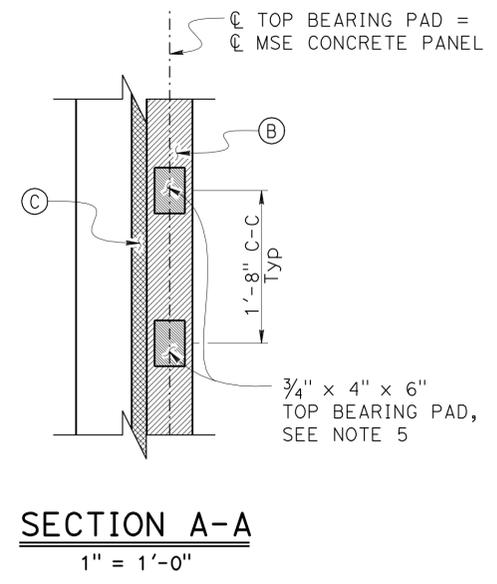
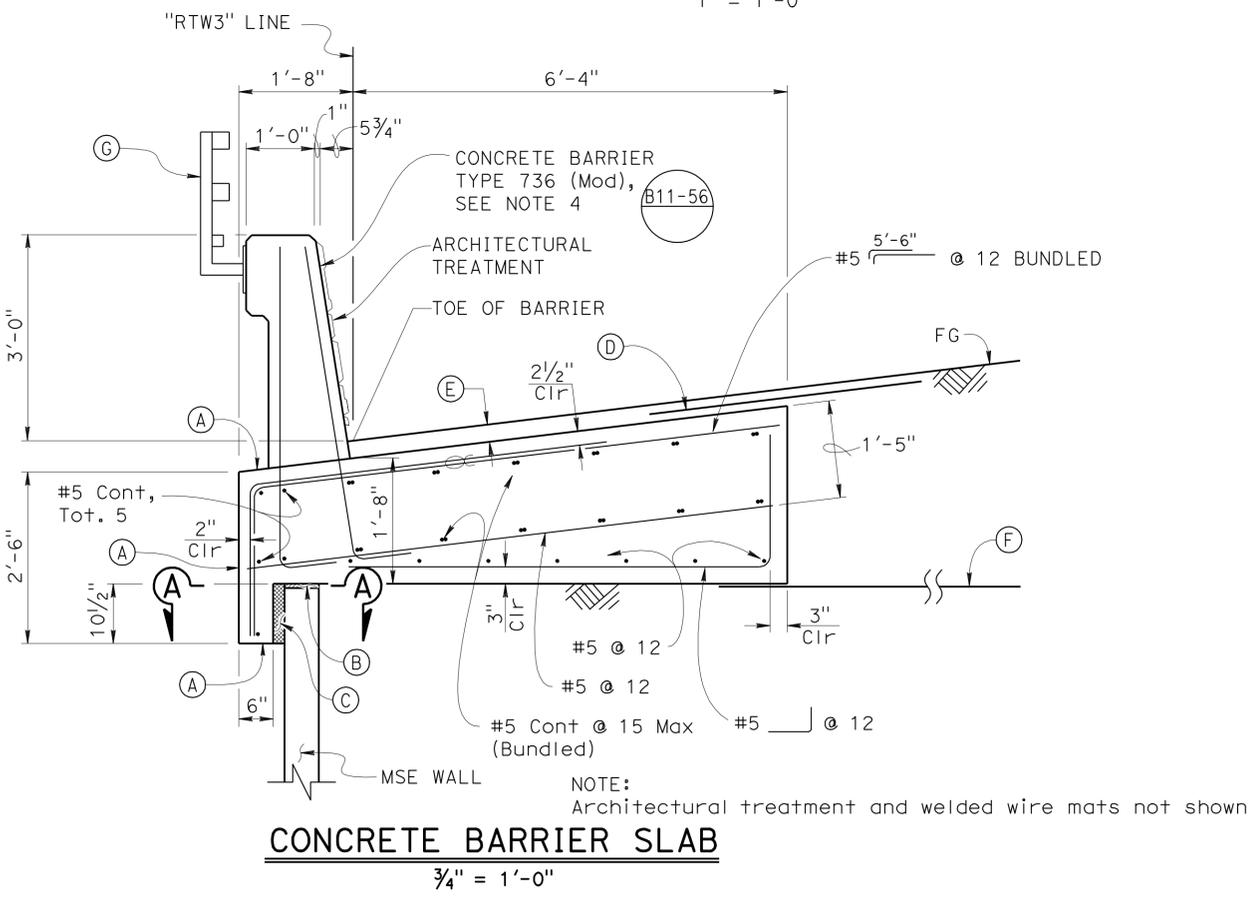
DATE PLOTTED => 01-MAR-2013 TIME PLOTTED => 08:21

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	130	136

2-23-13  
 REGISTERED CIVIL ENGINEER DATE  
 2-25-13  
 PLANS APPROVAL DATE  
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**TOP PANEL WITH MULTIPLE MATS**  
1" = 1'-0"



- NOTES:
- Top layer of welded wire mats shall be attached parallel to top of MSE wall.
  - 1'-0" wide filter fabric not shown
  - Reinforcement for welded wire connection mat not shown. See "MECHANICALLY STABILIZED EMBANKMENT DETAILS NO. 2" sheet
  - For reinforcement not shown, see B11-56
  - Place elastomeric top bearing pads (3/4" x 4" x 6") bonded on top of MSE wall panel.
  - Place horizontal and vertical elastomeric bearing pads in all of the panel joints between the panels. Place one in each vertical joint where horizontal joints intersect. Place two per panel in each horizontal joint.
  - Epoxy coated reinforcement for Barrier and Concrete Barrier Slab.
- (A) Prepare and Stain exposed surfaces of barrier slab FSTD 595C #36118  
 (B) 3/4" Expanded Polystyrene  
 (C) 2" Expanded Polystyrene  
 (D) 4'-0" wide Geosynthetic Pavement Interlayer, see "ROAD PLANS". Center over edge of barrier slab.  
 (E) 3" HMA overlay, see "ROAD PLANS"  
 (F) Geomembrane placed along entire length of barrier slab.  
 (G) Tubular Bicycle Railing (Painted), see "TUBULAR BICYCLE RAILING DETAILS" sheet

- LEGEND:
- ⊖ Indicates bundled bars horizontally
  - ▨ 2" Expanded Polystyrene
  - ▧ 3/4" Expanded Polystyrene

**ENCHILADA CURVE IMPROVEMENT**  
**RETAINING WALL NO. 3**  
**MECHANICALLY STABILIZED EMBANKMENT**  
**DETAILS NO. 4**

DESIGN	BY Jun Jung / David Soon	CHECKED Wendy Hou	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>	BRIDGE NO.	05E0011
DETAILS	BY Yingjue Feng	CHECKED Wendy Hou		POST MILE	0.8
QUANTITIES	BY David Alvarez	CHECKED Seiji Morimoto			

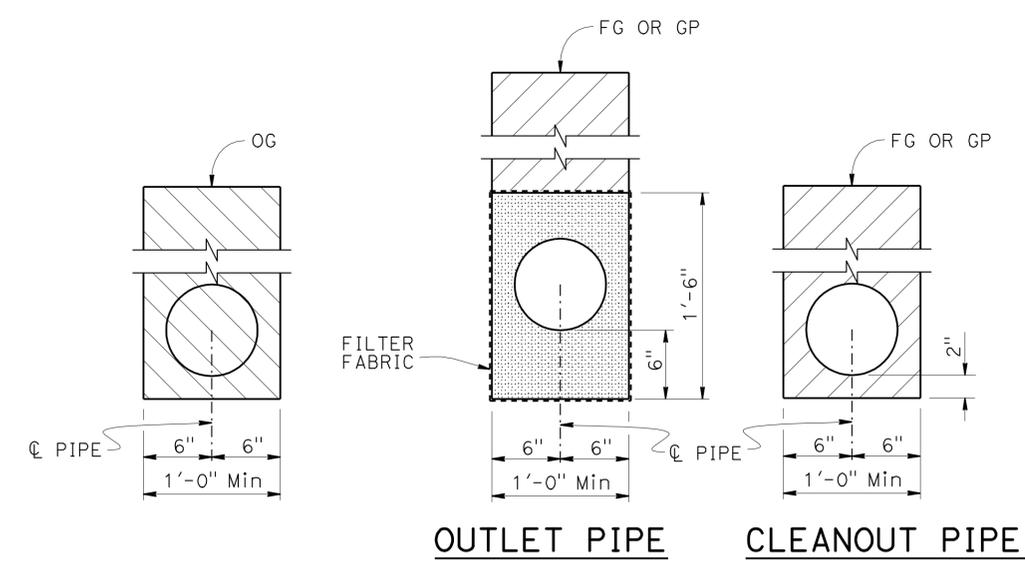
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	131	136

*Kelly Ann Holder* 2-23-13  
 REGISTERED CIVIL ENGINEER DATE

2-25-13  
 PLANS APPROVAL DATE

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REGISTERED PROFESSIONAL ENGINEER  
 Kelly Ann Holder  
 No. 42268  
 Exp. 3/31/14  
 CIVIL  
 STATE OF CALIFORNIA

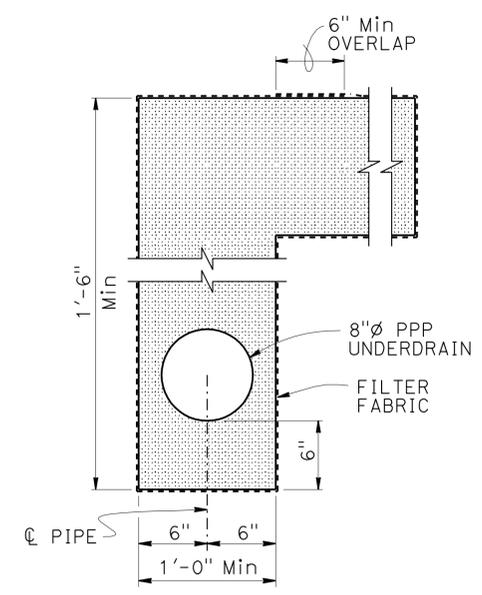


EXCAVATION

BACKFILL

UNPERFORATED OUTLET OR CLEAN OUT PIPE FOR UNDERDRAIN

NO SCALE



UNDERDRAIN DETAIL

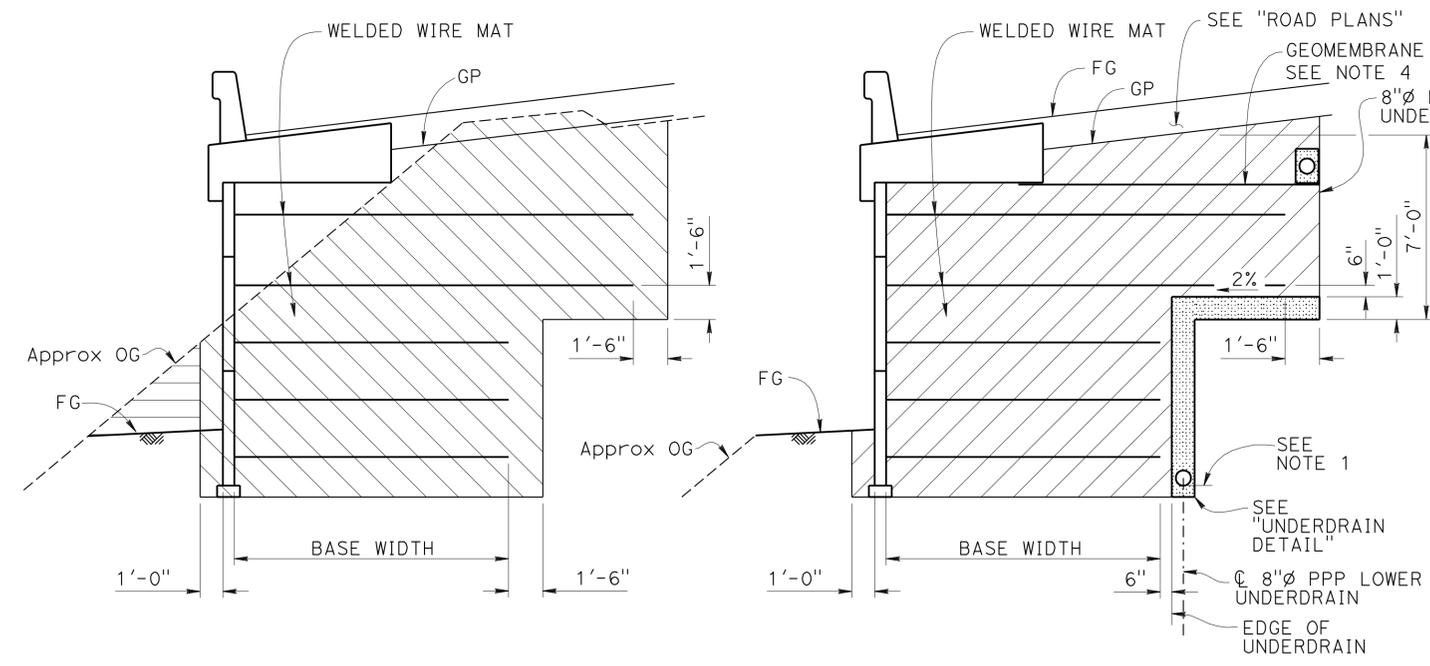
NO SCALE

NOTES:

1. Locate underdrain behind bottom level of welded wire mats wherever possible or at elevation needed to drain as shown on "MECHANICALLY STABILIZED EMBANKMENT DRAINAGE DETAIL" sheet.
2. Hand guided compaction equipment shall be used to compact structural backfill material within 6' from top of culvert.
3. Adjust welded wire mat to avoid conflict with existing culvert as directed by the Engineer
4. 13'-0" wide geomembrane. Extend full length and 2' beyond wall ends.

LEGEND:

- ▨ Indicates limits of structure excavation
- ▧ Indicates limits of structure backfill
- ▬ Indicates limits of roadway excavation
- ▩ Indicates limits of permeable material

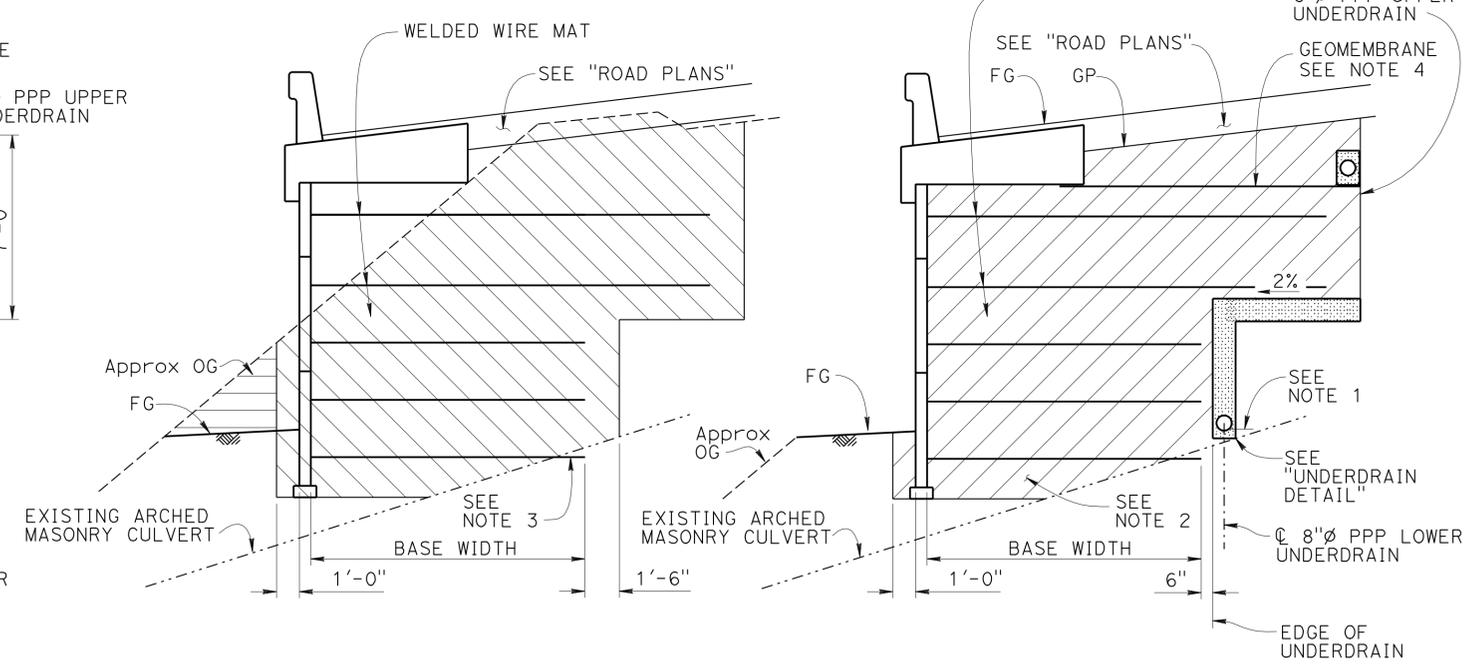


LIMITS OF EXCAVATION

LIMITS OF BACKFILL

TYPICAL SECTION

NO SCALE



LIMITS OF EXCAVATION

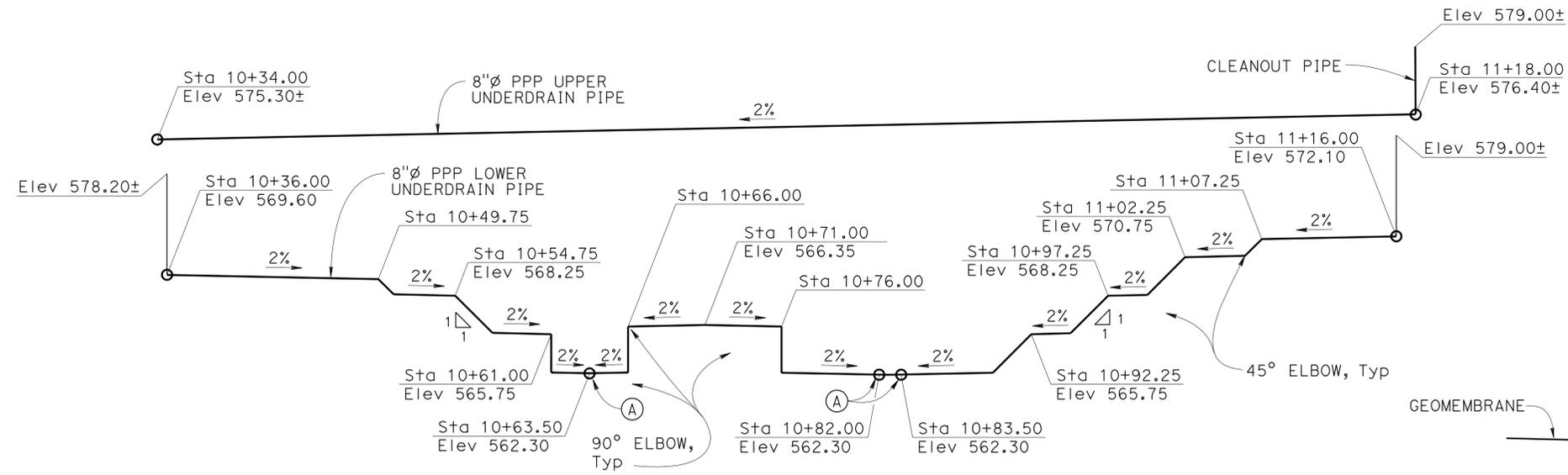
LIMITS OF BACKFILL

SECTION AT EXISTING ARCHED MASONRY CULVERT

NO SCALE

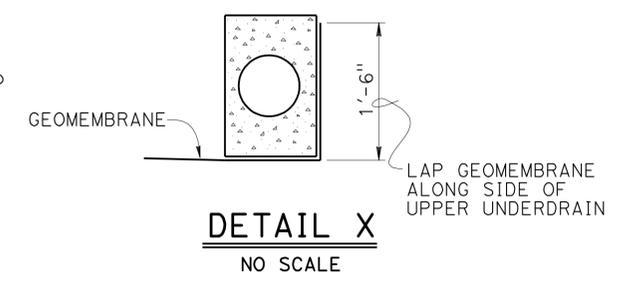
DESIGN BY Jun Jung / David Soon CHECKED Wendy Hou DETAILS BY G. Dickerson / Y. Feng CHECKED Wendy Hou QUANTITIES BY Gerald Dickerson CHECKED Jun Ki Jung				STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>	BRIDGE NO. 05E0011 POST MILE 0.8	<b>ENCHILADA CURVE IMPROVEMENT</b> <b>RETAINING WALL NO. 3</b> <b>EXCAVATION AND BACKFILL DETAILS</b>
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3592 PROJECT NO. & PHASE: 020000211-1	CONTRACT NO.: 02-2E3500	DISREGARD PRINTS BEARING EARLIER REVISION DATES
				0 1 2 3	05-r1w3-g-msed105.dgn	REVISION DATES: 1-28-12, 2-14-13, 2-23-13	SHEET 9 OF 14

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	132	136
<i>Kelly Ann Holder</i> 2-23-13 REGISTERED CIVIL ENGINEER DATE					
2-25-13 PLANS APPROVAL DATE					
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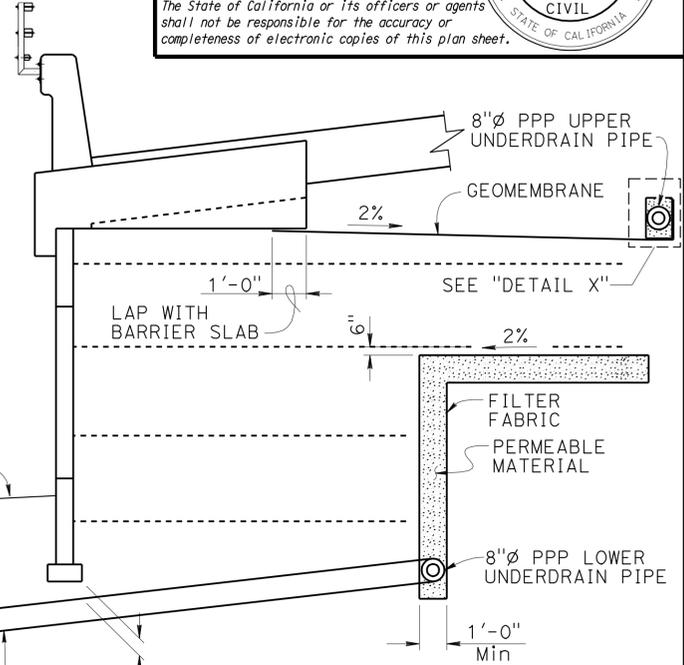


**UNDERDRAIN PROFILE**  
NO SCALE

NOTE:  
 (A) Outlet pipe, see "OUTLET PIPE DETAIL"

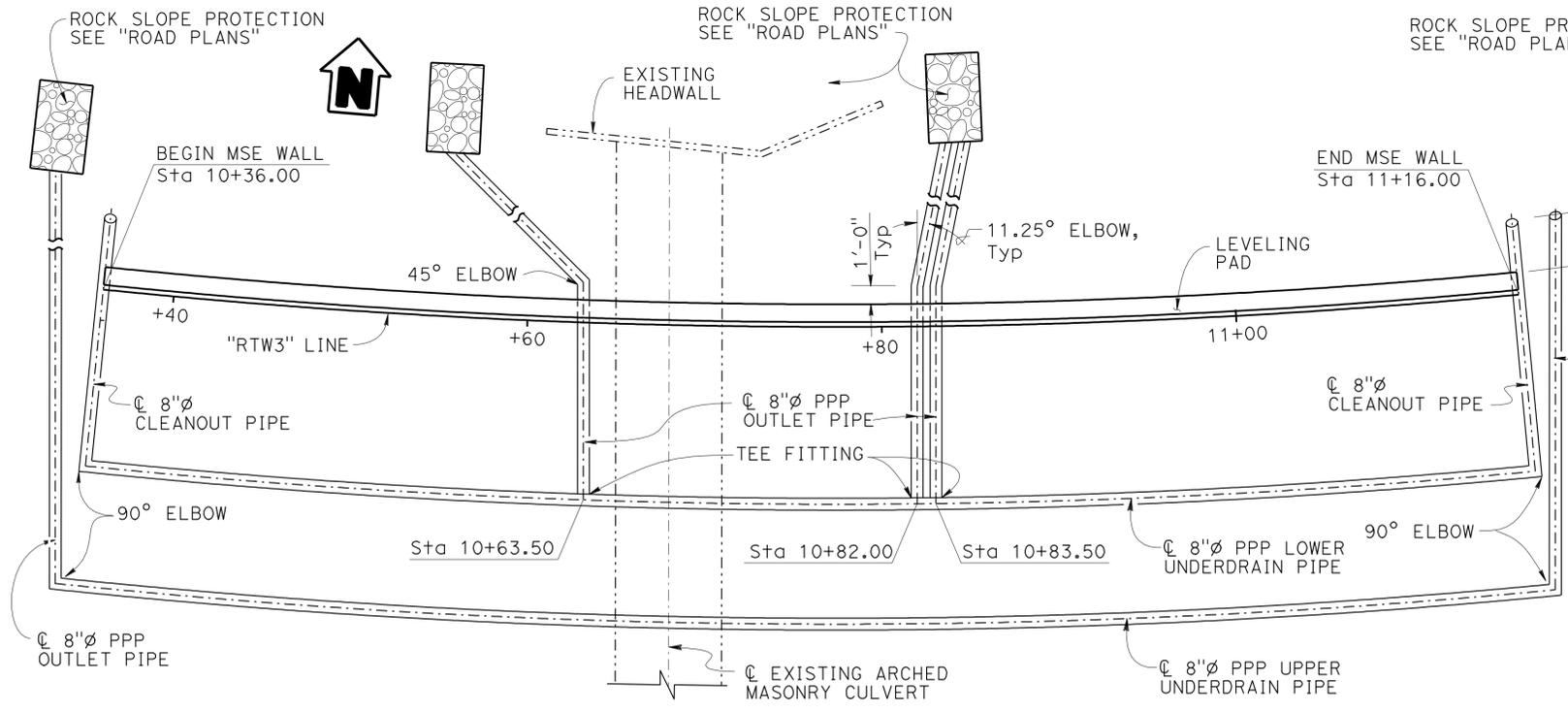


**DETAIL X**  
NO SCALE



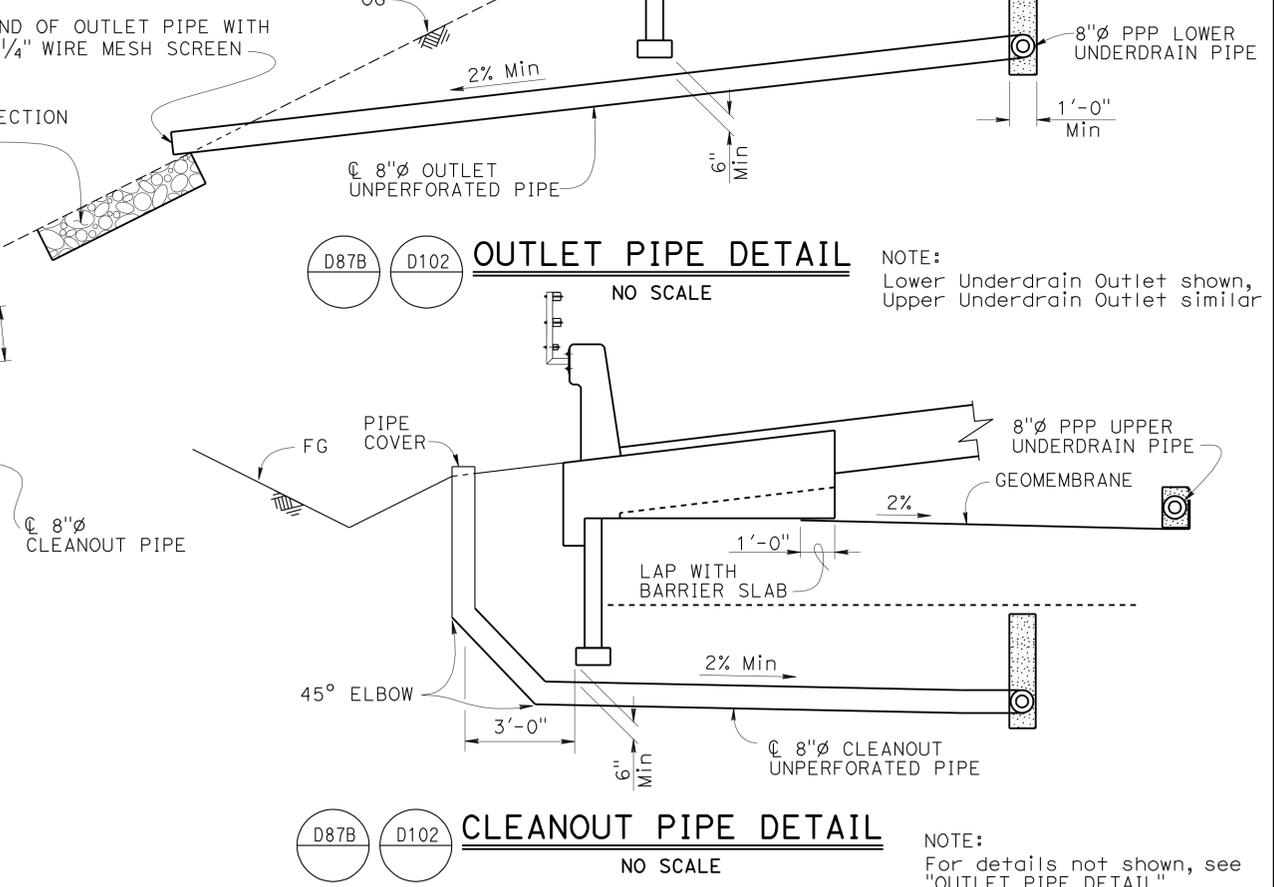
**OUTLET PIPE DETAIL**  
NO SCALE

NOTE:  
 Lower Underdrain Outlet shown, Upper Underdrain Outlet similar



**DRAINAGE PLAN**  
1" = 5'

NOTE:  
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.



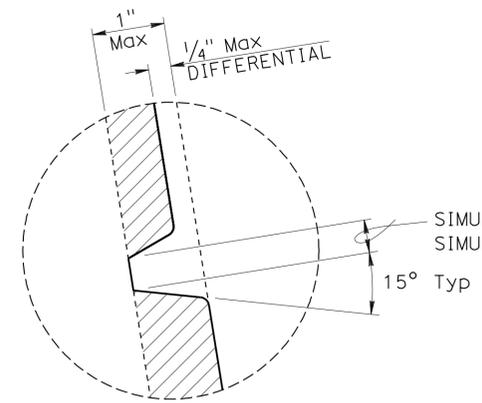
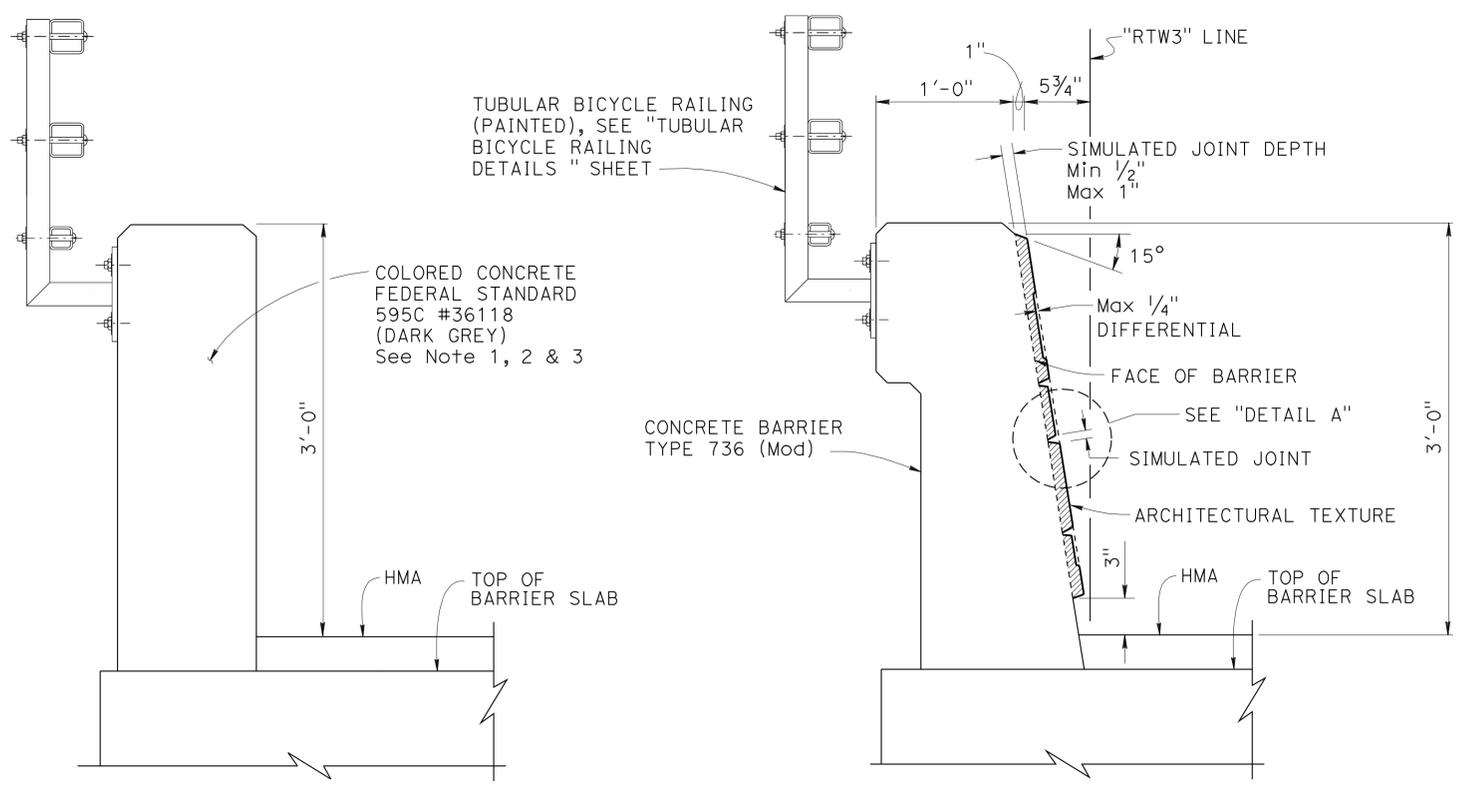
**CLEANOUT PIPE DETAIL**  
NO SCALE

NOTE:  
 For details not shown, see "OUTLET PIPE DETAIL"

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3592 PROJECT NO. & PHASE: 020000211-1		CONTRACT NO.: 02-2E3500		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
DESIGN	BY Jun Jung / David Soon	CHECKED Wendy Hou	<b>STATE OF CALIFORNIA</b> DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>		BRIDGE NO.	<b>ENCHILADA CURVE IMPROVEMENT</b>			
DETAILS	BY G. Dickerson / Y. Feng	CHECKED Wendy Hou					05E0011	<b>RETAINING WALL NO. 3</b>			
QUANTITIES	BY David Alvarez	CHECKED Seiji Morimoto					0.8	<b>DRAINAGE DETAILS</b>			
								REVISION DATES	SHEET	OF	
								1-28-12	10	14	

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	133	136

Kelly Ann Holder 2-23-13  
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 PLANS  
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 CIVIL  
 STATE OF CALIFORNIA  
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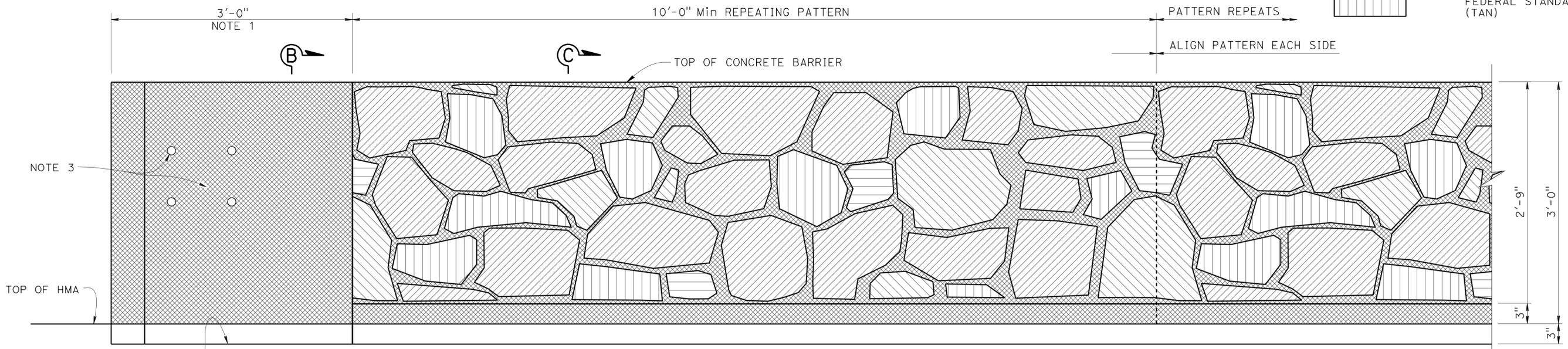


**DETAIL A**  
NO SCALE

- NOTES:
- No architectural texture within 3'-0" of Begin Wall and End Wall
  - For transition front face of barrier, see **B11-56**
  - For Metal Beam Guard connection details, see **RSP A77J2**

LEGEND:

	COLORED CONCRETE (ENTIRE BARRIER) FEDERAL STANDARD 595C #36118 (DARK GREY)
	75% CONCRETE STAIN FEDERAL STANDARD 595C #26008 (VERY DARK GRAY)
	13% CONCRETE STAIN FEDERAL STANDARD 595C #26231 (MEDIUM GRAY)
	2% CONCRETE STAIN FEDERAL STANDARD 595C #36650 (OFF WHITE)
	10% CONCRETE STAIN FEDERAL STANDARD 595C #33717 (TAN)

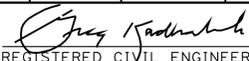


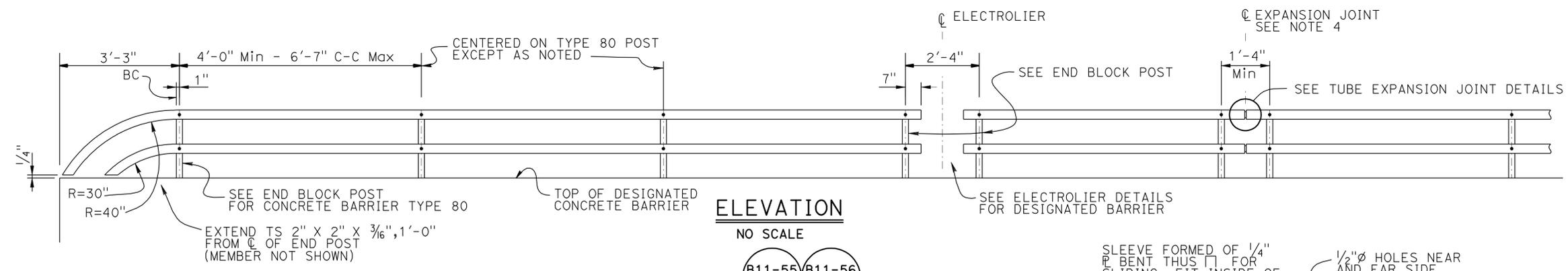
**ELEVATION REPEATING PATTERN**  
1/2" = 1'-0"

NOTE: Tubular Bicycle Railing not shown

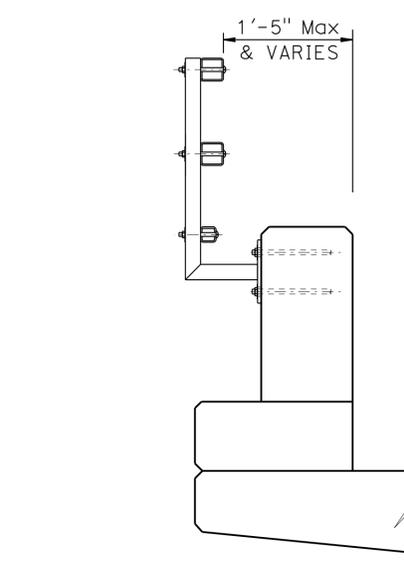
DESIGN BY Jun Ki Jung CHECKED Wendy Hou DETAILS BY G. Dickerson \ Y. Feng CHECKED Wendy Hou QUANTITIES BY David Alvarez CHECKED Seiji Morimoto				STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN <b>DESIGN BRANCH 7</b>	BRIDGE NO. 05E0011 POST MILE 0.8	<b>ENCHILADA CURVE IMPROVEMENT</b> <b>RETAINING WALL NO. 3</b> <b>BARRIER ARCHITECTURAL DETAILS</b>	
STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)				ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	UNIT: 3592 PROJECT NO. & PHASE: 0200000211-1	CONTRACT NO.: 02-2E3500	DISREGARD PRINTS BEARING EARLIER REVISION DATES	
				0	1	2	3	REVISION DATES 1-18-12 2-14-13 2-23-13 SHEET 11 OF 14

FILE => 05-rtw3-1-bar\_archdet.dgn

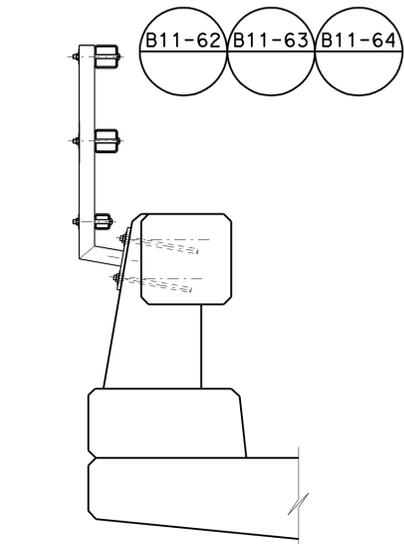
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	134	136
 REGISTERED CIVIL ENGINEER DATE X					
2-25-13 PLANS APPROVAL DATE					
<small>The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.</small>					



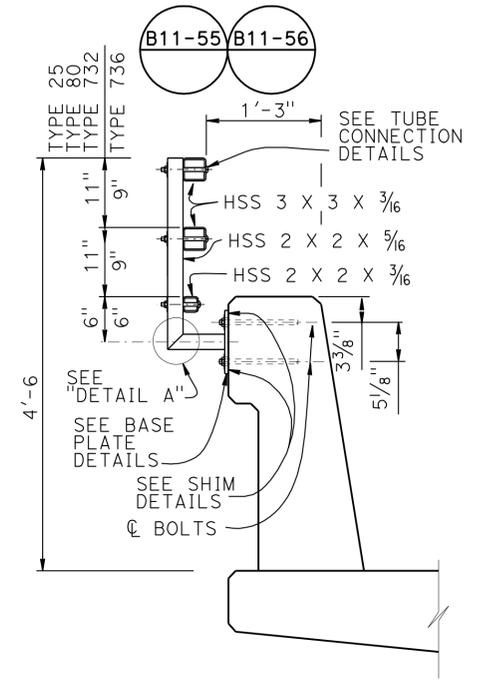
**ELEVATION**  
NO SCALE



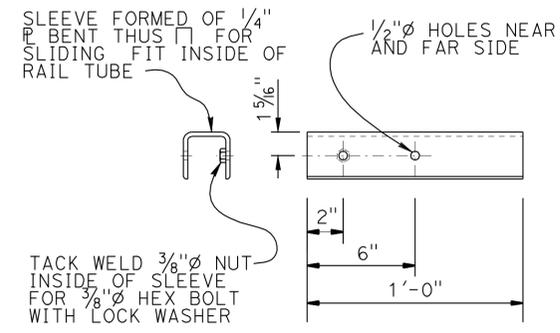
**TYPE 80 END BLOCK POST**  
1" = 1'-0"



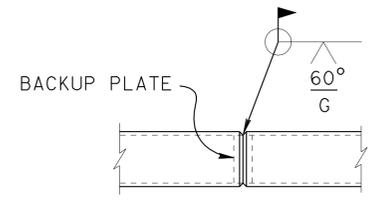
**TYPE 80**  
1" = 1'-0"



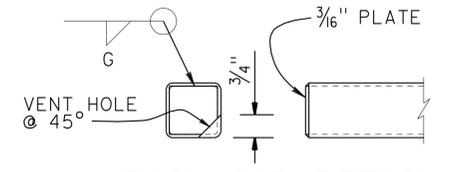
**TYPE 732 OR 736**  
1" = 1'-0"



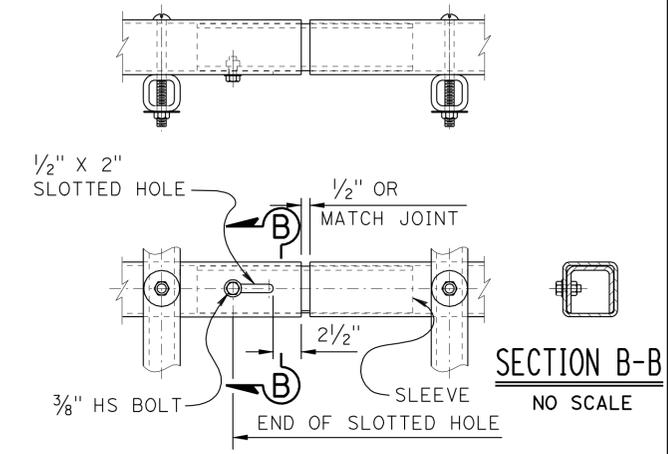
**SLEEVE DETAIL**  
NO SCALE



**WELDED SPLICE DETAIL**  
NO SCALE

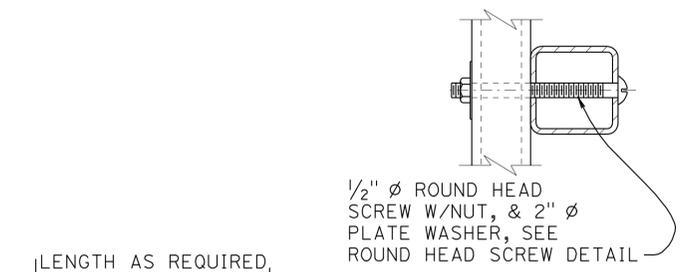


**RAIL CAP DETAIL**  
NO SCALE

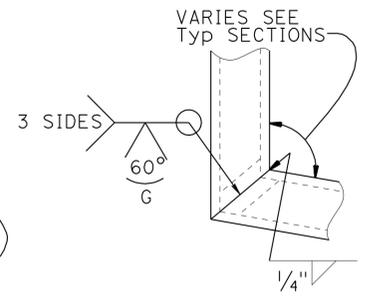


**TUBE EXPANSION JOINT DETAILS**  
NO SCALE

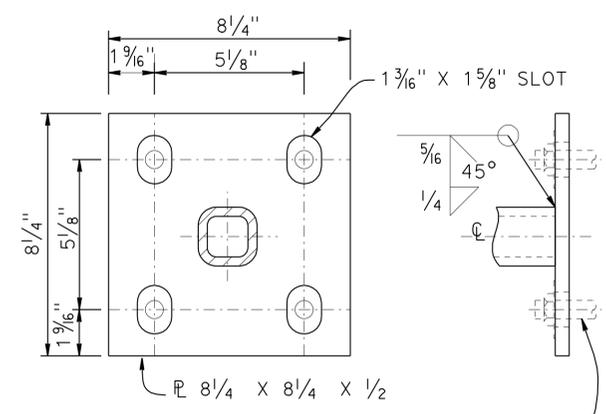
- NOTES:
1. Post shall be normal to railing.
  2. Rail tubes shall be shop bent or fabricated to fit horizontal curve when radius is less than 12".
  3. Tube splices shall be located in the tubes spanning deck or wall joints. Increase joint width in tubes to match expansion joint width and increase sleeve length correspondingly.
  4. Top rail tube shall be continuous over not less than two posts except a short post spacing is permitted near deck or wall joints, electroliers, or other rail discontinuities as noted.
  5. See Project Plans for limits of tubular hand railing.



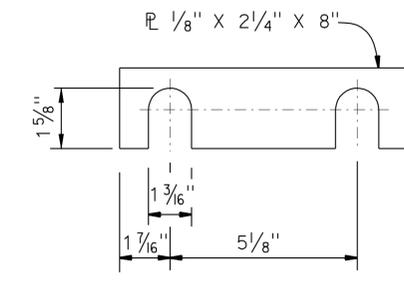
**TUBE CONNECTION DETAIL**  
NO SCALE



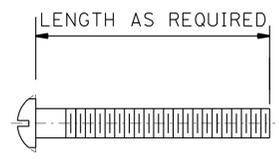
**DETAIL A**  
NO SCALE



**BASE PLATE DETAIL**  
NO SCALE



**SHIM DETAILS**  
NO SCALE



**ROUND HEAD SCREW DETAIL**  
NO SCALE

STANDARD DRAWING		STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION		DIVISION OF ENGINEERING SERVICES		BRIDGE NO. 05E0011		<b>ENCHILADA CURVE IMPROVEMENT</b>	
FILE NO. <b>xs16-035</b>	APPROVAL DATE <u>March 2012</u>					POST MILE 0.8		<b>RETAINING WALL NO. 3</b>	
						CONTRACT NO.: 02-2E3500		<b>CONCRETE BARRIER TYPE 80, 732 &amp; 736</b>	
						DISREGARD PRINTS BEARING EARLIER REVISION DATES		<b>TUBULAR BICYCLE RAILING DETAILS</b>	
DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. (02-02-11))		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3592 PROJECT NUMBER & PHASE: 0200000211-1		CONTRACT NO.: 02-2E3500		REVISION DATES	
				0 1 2 3				SHEET 12 OF 14	

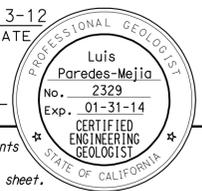
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Tri	299	0.4/0.9	135	136

CERTIFIED ENGINEERING GEOLOGIST	DATE
<i>[Signature]</i>	7-13-12
PLANS APPROVAL DATE	
2-25-13	

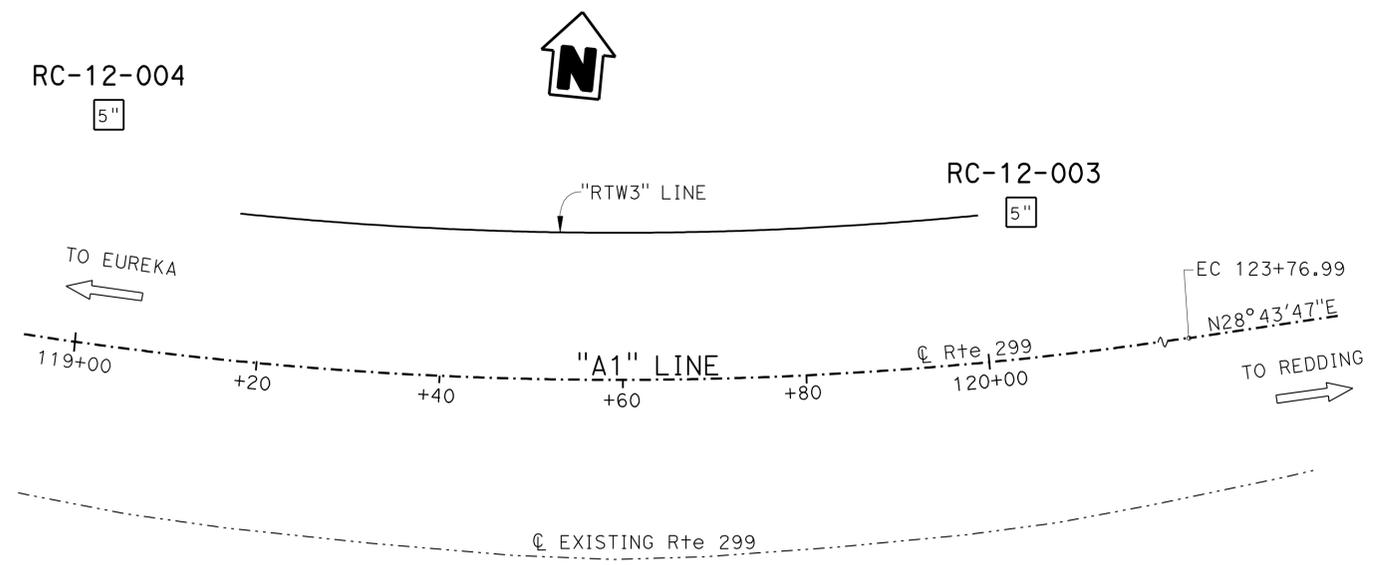
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This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition). See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.

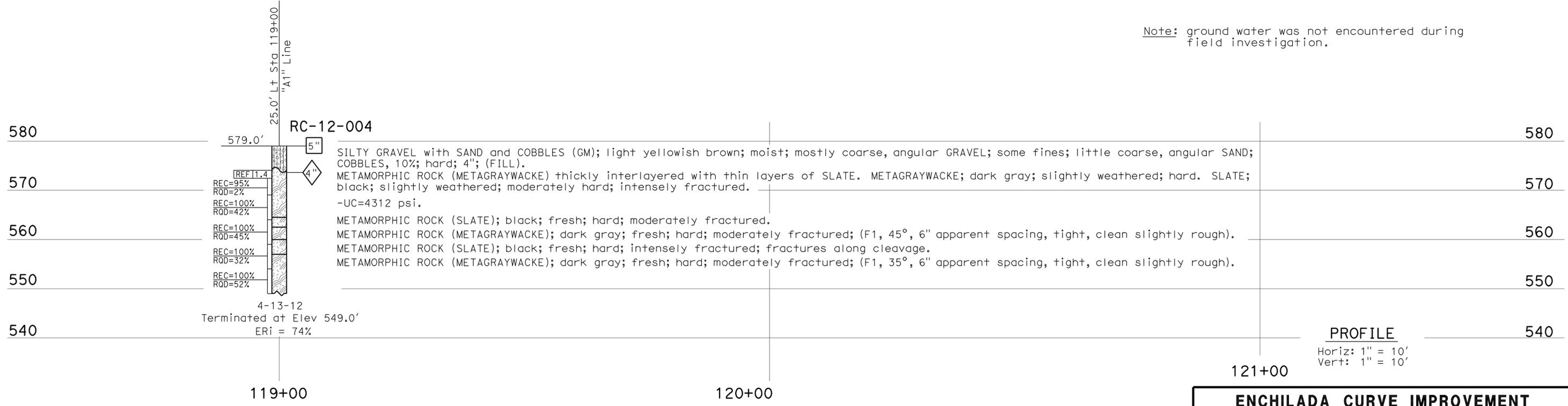
**BENCH MARK**

TRI 299 0.54  
 Fnd 2 1/4" CADH Brass Disk in Concrete  
 37.15 Ft Rt "A1" Line Rte 299  
 Sta 111+07.93  
 N 673,743.070  
 E 1,865,923.082  
 Elev= 590.31  
 Vertical Datum: NAVD88



**PLAN**  
1" = 10'

Note: ground water was not encountered during field investigation.



**PROFILE**  
 Horiz: 1" = 10'  
 Vert: 1" = 10'

<b>ENGINEERING SERVICES</b>		<b>MATERIALS AND GEOTECHNICAL SERVICES</b>		<b>STATE OF CALIFORNIA</b>		<b>DIVISION OF ENGINEERING SERVICES</b>		<b>ENCHILADA CURVE IMPROVEMENT</b>	
FUNCTIONAL SUPERVISOR		DRAWN BY: I. G-Remmen		DEPARTMENT OF TRANSPORTATION		BRIDGE NO. 05E0011		<b>RETAINING WALL NO. 3</b>	
NAME: M. Hagy		CHECKED BY: F. DeHaro		FIELD INVESTIGATION BY: L. Paredes-Mejia		POST MILE 0.8		<b>LOG OF TEST BORINGS 1 OF 2</b>	
065 CIVIL LOG OF TEST BORINGS SHEET		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: 3643		PROJECT NUMBER & PHASE: 02000002111		CONTRACT NO.: 02-2E3501	
				DISREGARD PRINTS BEARING EARLIER REVISION DATES		REVISION DATES		SHEET 13 OF 14	

USERNAME => s121614 DATE PLOTTED => 01-MAR-2013 TIME PLOTTED => 08:50

