

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	18.4/18.7	62	85

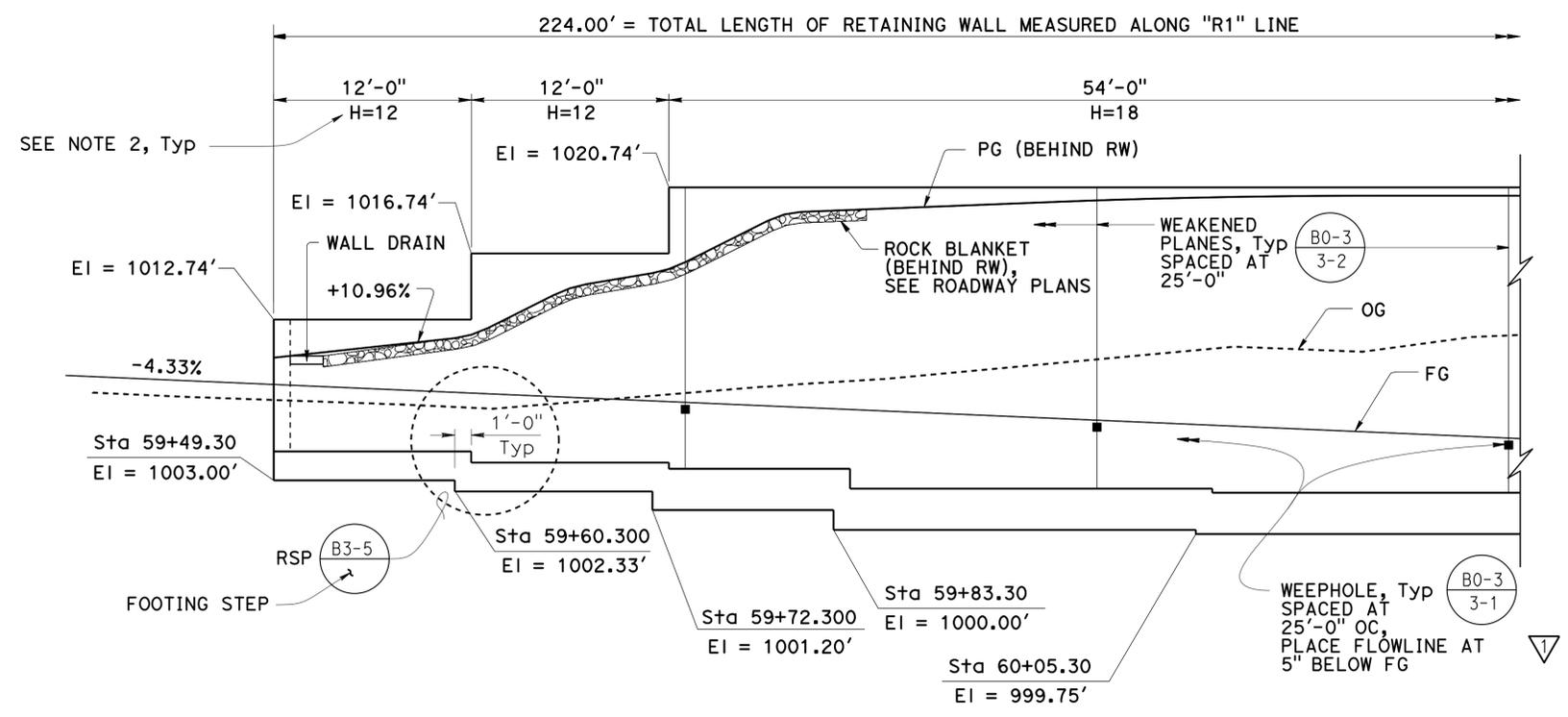
5-29-14
 REGISTERED CIVIL ENGINEER DATE
 06-26-14
 PLANS APPROVAL DATE
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of scanned copies of this plan sheet.

G. Reyes-Gutierrez
 REGISTERED PROFESSIONAL ENGINEER
 No. C57583
 Exp. 12-31-15
 CIVIL
 STATE OF CALIFORNIA

NOTES:

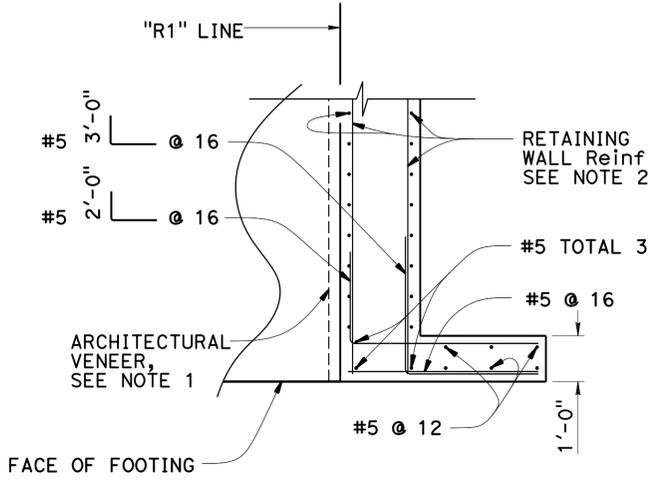
- For clarity Architectural Veneer and Ornamental Railing not shown. For details see, "ARCHITECTURAL TREATMENT" and "ORNAMENTAL RAILING" sheets.
- For details not shown, see "RETAINING WALL TYPE 7B DETAILS" and "VERTICAL GROUND ANCHOR DETAILS" sheets.
- For SECTION C-C, see "RETAINING WALL TYPE 7B - DETAILS No. 1" sheet.

1 REPLACED PER ADDENDUM No. 1 DATED OCTOBER 13, 2014



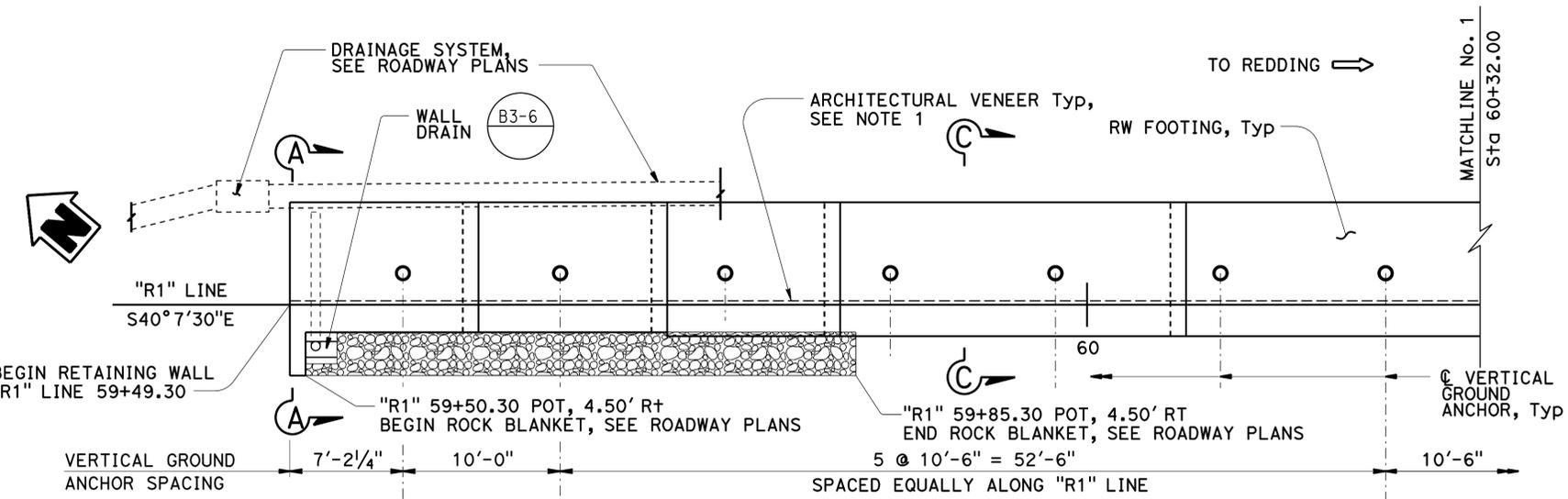
MIRRORED DEVELOPED ELEVATION

3/16" = 1'-0"



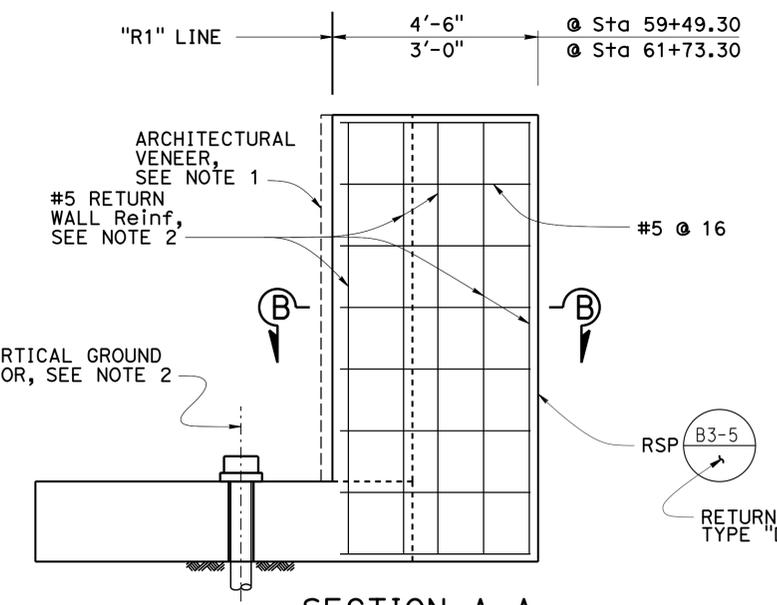
SECTION B-B

1/2" = 1'-0"



FOOTING PLAN

3/16" = 1'-0"



SECTION A-A

1/2" = 1'-0"

NOTE: RETURN WALL AT Sta 59+49.30 SHOWN, WALL DRAIN DETAILS NOT SHOWN FOR CLARITY.

LEGEND:

○ Denote Vertical Ground Anchor, see Note 2

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	DESIGN	BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 6	BRIDGE NO.	06E0008	OLD SHASTA ADA RETAINING WALL STRUCTURE PLAN No. 1	
	DETAILS	BY SUSAN NG	CHECKED GLORIA REYES-GUTIERREZ			POST MILE	18.4/18.7		
	QUANTITIES	BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ						
ORIGINAL SCALE IN INCHES FOR REDUCED PLANS				UNIT: 3591	PROJECT NUMBER & PHASE: 021400003-1	CONTRACT NO.: 02-4G4804	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES	SHEET 3 OF 26

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	18.4/18.7	66	85

5-29-14
 REGISTERED CIVIL ENGINEER DATE
 06-26-14
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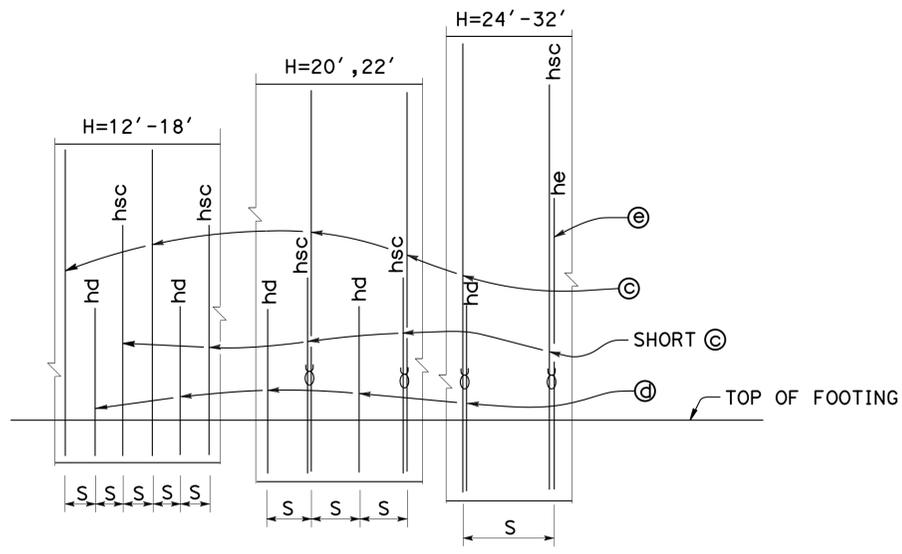
G. Reyes-Gutierrez
 No. C57583
 Exp. 12-31-15
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GROUND ANCHOR DATA TABLE

STATION	DESIGN H (ft)	Td (kips)	FTL (kips)	NUMBER OF ANCHORS	To (kips)	ANCHOR SPACING
59+49.30 TO 59+73.30	12'	63	84	2	63	10'-0"
59+73.30 TO 60+27.30	18'	76	101	5	76	10'-6"
60+27.30 TO 60+50.30	20'	69	92	3	69	8'-3"
60+50.30 TO 61+03.30	22'	40	53	8	40	6'-2"
61+03.30 TO 61+33.30	24'	60	80	4	60	7'-9"
61+33.30 TO 61+53.30	20'	54	72	3	54	7'-9"
61+53.30 TO 61+73.30	14'	40	53	1	40	--

Where: Td = Anchor Design Load
 To = Anchor Lockoff Load
 FTL = Anchor Factored Test Load



ELEVATION
NO SCALE

LEGEND:
 "hsc", "he" and "hd" above bars indicate distance from top of footing to upper end of the bars, see Wall Data Table (Note 2).
 "ø" Indicates 2 bars bundled

- NOTES:**
- For Retaining Wall Architectural finish or texture see ARCHITECTURAL TREATMENT sheets.
 - For Wall Data Table, Drainage and other details not shown, see "RETAINING WALL TYPE 7B - DETAILS No. 2" sheet
 - Footing cover, 2'-0" minimum.
 - Shift ⊕ bars, ⊙ bars and ⊗ bars as required to clear formed hole for ground anchor.
 - Dimensions may vary with roadway cross slope and with certain thickness of surfacing. See Project Plans.
 - Footing is designed to resist FTL = 1.33 Td For anchor spacing, see GROUND ANCHOR DATA TABLE.

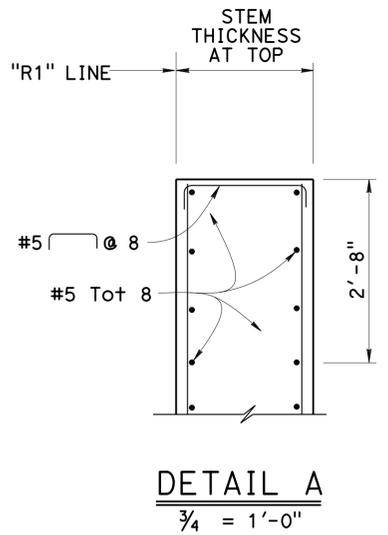
GENERAL NOTES

Design: AASHTO LRFD Bridge Design Specifications, 4th edition with California Amendments
 LS: Varied surcharge on level ground surface
 EQE: Trial Wedge Method
 $K_h = 0.1$
 $K_v = 0.0$
 Soil: $\phi = 34^\circ$
 $\gamma = 120$ pcf
 Reinforced Concrete: $f'_c = 3600$ psi
 $f_y = 60,000$ psi

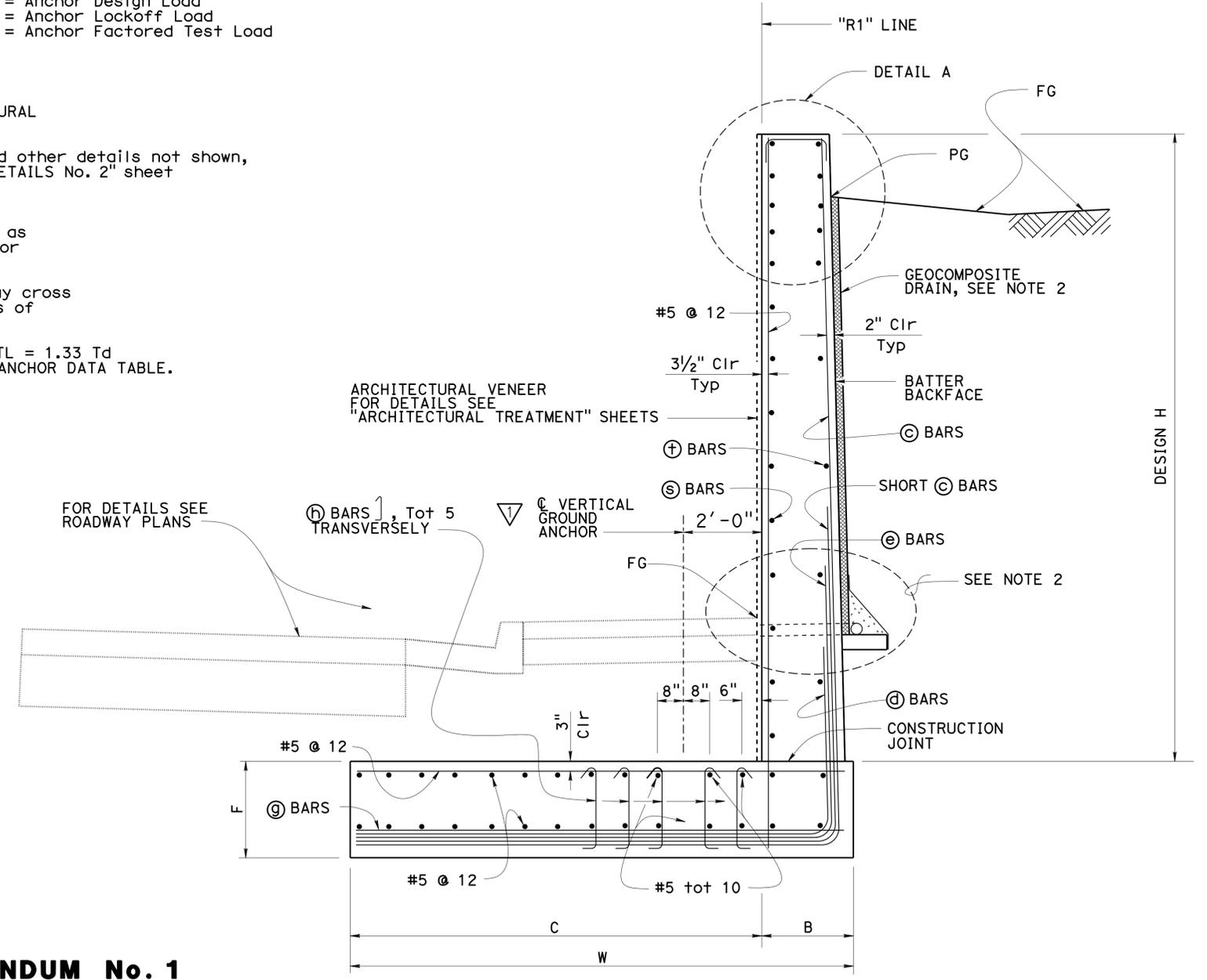
Load Combinations and Limit States

Service I $Q=1.00DC+1.00EV+1.00EH+1.00LS$
 Strength Ia $Q=aDC+\beta EV+1.50EH+1.75LS$
 Strength Ib $Q=aDC+\beta EV+1.50EH+1.75LS$
 Extreme I $Q=1.00DC+1.00EV+1.00EH+1.00EQD+1.00EQE$

Where: Q: Force Effects
 a: 1.25 or 0.90, Which ever Controls Design
 B: 1.35 or 1.00, which ever Controls Design
 DC: Dead Load of Structure Components
 EH: Horizontal Earth Fill Pressure
 EV: Vertical Earth Fill Pressure
 LS: Live Load Surcharge
 EQE: Seismic Earth Pressure
 EQD: Soil and Structure Components Inertia. Soil inertia ignored for stem design



DETAIL A
 $\frac{3}{4} = 1'-0"$



SECTION C-C
NO SCALE

1 REPLACED PER ADDENDUM No. 1 DATED OCTOBER 13, 2014

DESIGN BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 6	BRIDGE NO. 06E0008	OLD SHASTA ADA RETAINING WALL RETAINING WALL TYPE 7B - DETAILS No. 1
DETAILS BY SUSAN NG	CHECKED GLORIA REYES-GUTIERREZ		PROJECT NUMBER & PHASE: 021400003-1	POST MILE 18.4/18.7	
QUANTITIES BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ		CONTRACT NO.: 02-4G4804	REVISION DATES: 12-18-13, 06-02-14, 05-28-14	

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3 UNIT: 3591 PROJECT NUMBER & PHASE: 021400003-1 CONTRACT NO.: 02-4G4804 DISREGARD PRINTS BEARING EARLIER REVISION DATES SHEET 7 OF 26

WALL DATA TABLE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Sha	299	18.4/18.7	67	85

Gloria Reyes-Gutierrez 5-29-14
 REGISTERED CIVIL ENGINEER DATE

6-26-14
 PLANS APPROVAL DATE

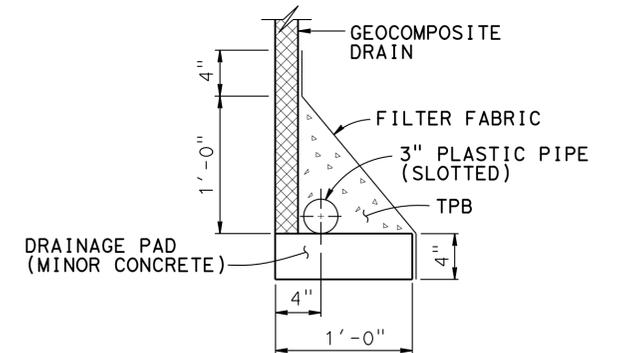
REGISTERED PROFESSIONAL ENGINEER
 G. REYES-GUTIERREZ
 No. C 57583
 Exp. 12-31-15
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	DESIGN H					
	12'	14'	18'	20'	22'	24'
W	8'-3"	10'-0"	8'-6"	9'-0"	10'-0"	10'-9"
C	6'-6"	8'-3"	6'-6"	6'-9"	7'-6"	8'-0"
B	1'-9"	1'-9"	2'-0"	2'-3"	2'-6"	2'-9"
F	1'-9"	2'-0"	2'-6"	2'-6"	2'-9"	2'-9"
STEM THICKNESS AT TOP	1'-9"	1'-9"	1'-9"	1'-9"	1'-9"	2'-0"
BATTER	0	0	0	0	1/4:12	1/4:12
S	0'-6"	0'-5 2/3"	0'-4 1/3"	0'-8"	0'-7 1/2"	0'-9"
⊙ BARS						
⊕ BARS						
hb						
⊙ BARS	#5	#5	#5	#7 Ø	#7 Ø	#9
hsc	11'-10"	13'-10"	11'-6"	17'-3"	16'-3"	20'-0"
hc						
⊙ BARS	#5	#7	#7	#10	#10	#9
hd	3'-3"	5'-6"	6'-6"	11'-3"	12'-0"	13'-0"
⊙ BARS						#10
he						12'-9"
⊙ BARS			#5 @ 13	#5 @ 16	#6 @ 15	#7 @ 18
BARS BUNDLED WITH ⊙ in ftg			SHORT ⊙	⊙	⊙	SHORT ⊙ & ⊙
⊕ BARS	#5 @ 24	#5 @ 24	#5 @ 24	#5 @ 24	#5 @ 24	#5 @ 24
⊙ BARS	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#6 @ 12	#6 @ 12
⊕ BARS	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12

NOTE:

⊕ Bar spacing shown is along the length of the retaining wall.



WITHOUT FOOTING

GEOCOMPOSITE DRAIN

1 1/2" = 1'-0"

DRAINAGE DETAILS

NOTES:

1. Geocomposite drain strip per Section 88 Geosynthetics of the Standard Specifications
2. Elevation of drains and weepholes as shown elsewhere on plans

1
**REPLACED PER ADDENDUM No. 1
 DATED OCTOBER 13, 2014**

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: x-small;">DESIGN</td> <td style="font-size: x-small;">BY HILARIO TUAZON</td> <td style="font-size: x-small;">CHECKED GLORIA REYES-GUTIERREZ</td> </tr> <tr> <td style="font-size: x-small;">DETAILS</td> <td style="font-size: x-small;">BY SUSAN NG</td> <td style="font-size: x-small;">CHECKED GLORIA REYES-GUTIERREZ</td> </tr> <tr> <td style="font-size: x-small;">QUANTITIES</td> <td style="font-size: x-small;">BY HILARIO TUAZON</td> <td style="font-size: x-small;">CHECKED GLORIA REYES-GUTIERREZ</td> </tr> </table>	DESIGN	BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ	DETAILS	BY SUSAN NG	CHECKED GLORIA REYES-GUTIERREZ	QUANTITIES	BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 6	BRIDGE NO. 06E0008 POST MILE 18.4/18.7	OLD SHASTA ADA RETAINING WALL RETAINING WALL TYPE 7B - DETAILS No. 2
DESIGN	BY HILARIO TUAZON	CHECKED GLORIA REYES-GUTIERREZ											
DETAILS	BY SUSAN NG	CHECKED GLORIA REYES-GUTIERREZ											
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STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)	ORIGINAL SCALE IN INCHES FOR REDUCED PLANS	0 1 2 3	UNIT: 3591 PROJECT NUMBER & PHASE: 0214000003-1 CONTRACT NO.: 02-4G4804	DISREGARD PRINTS BEARING EARLIER REVISION DATES									
			REVISION DATES	SHEET 8 OF 26									