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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

Kathryn Griswell
No. C55599
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA
REGISTERED PROFESSIONAL ENGINEER

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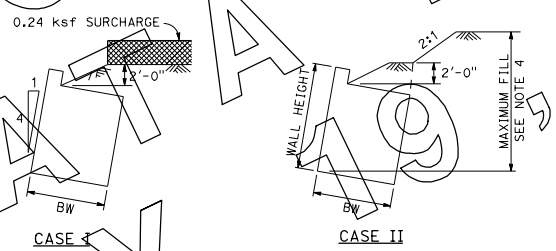
TYPE	BW (ft)	CASE	MAXIMUM FILL (ft)	qu (ksf) B′ (ft)	1:4 BATTERED WALL HEIGHT (ft)																									
					4.00	5.33	6.67	8.00	9.33	10.67	12.00	13.33	14.67	16.00	17.33	18.67	20.00	21.33	22.67	24.00	25.33	26.67	28.00	29.33	30.67	32.00	33.33	34.67	36.00
A	7.7	I	N/A	qu	1.65	1.94	2.25	2.55	2.86	3.16	3.45	3.74	4.00	4.26	4.49	4.70	4.90	5.07	5.23	5.36	5.48								
				B′	5.2	5.3	5.4	5.5	5.6	5.6	5.7	5.8	5.9	6.0	6.1	6.3	6.4	6.6	6.8	7.0	7.2								
		II	60	qu	1.44	1.75	2.06	2.38	2.68	2.98	3.25																		
				B′	6.0	5.9	5.9	5.9	6.0	6.0	6.1																		
B	9.9	I	N/A	qu										4.76	5.06	5.35	5.62	5.89	6.13	6.36	6.58	6.77	6.95	7.11	7.26	7.38	7.50	7.59	
				B′										6.9	7.0	7.0	7.1	7.2	7.4	7.5	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	
		II	60	qu					2.76	3.08	3.39	3.69	3.98	4.26	4.53	4.77	5.00												
				B′					7.6	7.6	7.6	7.7	7.7	7.8	7.9	8.1	8.2												
C	12.1	I	N/A	qu																	7.30	7.57	7.82	8.06	8.29	8.50	8.70	8.88	9.04
				B′																	8.4	8.5	8.6	8.7	8.9	9.0	9.2	9.3	9.5
		II	60	qu											4.68	4.98	5.25	5.52	5.77	6.01	8.23	9.44							
				B′											9.4	9.4	9.5	9.6	9.8	9.9	10.1	10.2							
			90	qu	1.56	1.86	2.16	2.48	2.80	3.12	3.44	3.76	4.07	4.38	4.68	4.98	5.25												
				B′	9.4	9.4	9.4	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.4	9.4	9.5												
D	14.3	II	90	qu										4.43	4.75	5.06	5.37	5.67	5.96	6.24	6.51	6.76							
				B′										10.9	11.0	11.0	11.0	11.1	11.2	11.2	11.3	11.5							

LEGEND

BW - BASE WIDTH

qu - GROSS FACTORED BEARING STRESS

B′ - EFFECTIVE BASE WIDTH



DETAIL OF DESIGN LOADING CASES

NOTES:

1. DESIGN:

   AASHTO LRFD Bridge Design Specifications, 4th edition with the California Amendments.

2. FOUNDATION:

   Nominal soil bearing resistance, design lateral loads, settlement, and overall slope stability shall be determined by analysis based on a foundation site investigation.

   If original ground slopes away from toe of wall, reduction in the bearing resistance due to slope must be considered. Walls shall not be founded in original ground having an allowable bearing resistance of less than 3.0 ksf. Consideration should be given to removal and replacement of unsuitable material with "Structure Backfill" material.

3. DRAINAGE:

   If the combined height of wall and overfill (measured along face of wall and vertically from the toe of fill to top of fill) exceeds 25′, a system to drain water away from the back face of wall shall be provided. The type and extent of this system will depend on the type of wall and backfill, and the location of the water table in the area.

4. SLOPING SURCHARGE LIMITATIONS:

   See the above table for maximum fill heights behind different wall types. The maximum fill height is measured vertically from the toe of the wall to the top of fill behind the wall.

5. MATERIAL SPECIFICATIONS:

   Steel sheets:
   AASHTO M218
   45,000 psi Ultimate
   33,000 psi Yield
   @ 20% Elongation
   Bolts:
   ASTM A307 Grade A

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

STEEL CRIB WALL DESIGN DATA

NO SCALE

C8C

2010 STANDARD PLAN C8C

CANCELED BY ERRATA No. 10-1 JULY 19 2013

10-6-10