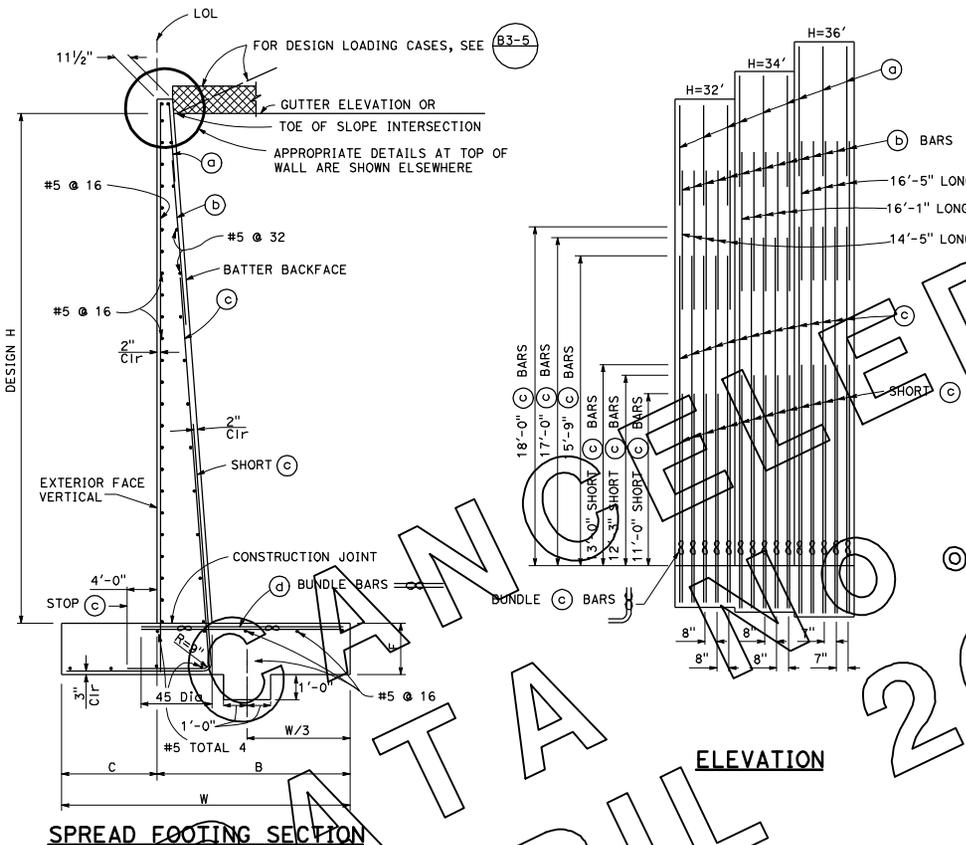


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL SHEETS

*Gary Wong*  
 REGISTERED CIVIL ENGINEER  
 No. C88238  
 Exp. 6-30-12  
 CIVIL  
 STATE OF CALIFORNIA

May 20, 2011  
 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.



**TABLE OF REINFORCING STEEL, DIMENSIONS AND DATA**

DESIGN H	32'	34'	36'
W	21'-0"	23'-0"	25'-0"
C	7'-0"	7'-4"	8'-0"
B	14'-0"	15'-8"	17'-0"
F SPREAD FOOTING	3'-3"	3'-6"	3'-9"
BATTER	1:12	1:12	1:12
Ⓐ BARS	#6 @ 16	#5 @ 16	#6 @ 14
Ⓑ BARS	#9 @ 8	#9 @ 8	#9 @ 7
Ⓒ BARS	#11 @ 8	#11 @ 8	#11 @ 7
Ⓓ BARS	#9 @ 8	#9 @ 8	#9 @ 7
LOAD CASE I	Ser: B, q <sub>o</sub> 18.0, 3.4 Str: B', q <sub>o</sub> 17.0, 5.6	29.2, 3.6 9.6, 5.9	22.4, 3.6 21.4, 6.0
LOAD CASE II	Ser: B', q <sub>o</sub> 18.2, 4.5 Str: B', q <sub>o</sub> 17.3, 7.2	20.2, 4.8 19.3, 7.7	22.4, 4.9 21.4, 7.9
LOAD CASE III	Ser: B', q <sub>o</sub> 14.4, 4.5 Str: B', q <sub>o</sub> 13.2, 7.6	16.8, 4.6 15.8, 7.5	19.2, 4.5 18.2, 7.5

**DESIGN CONDITIONS:**

Design H may be exceeded by 6" before going to the next size. Special footing design is required where foundation material is incapable of supporting bearing stress listed in table.

**DESIGN NOTES:**

- DESIGN: AASHTO LRFD Bridge Design Specifications, 4th edition with California Amendments
- LIVE LOAD: Surcharge on level ground surface
- SOIL:  $\phi = 34^\circ$   
 $\gamma = 120$  pcf
- REINFORCED CONCRETE:  $f_y = 60,000$  psi  
 $f_c' = 3,600$  psi  
 $n = 8$

**NOTES:**

- For details not shown and drainage notes see B3-5
- For wall stem joint details see B0-3/3-3 and B0-3/3-4
- At Ⓒ and Short Ⓒ bars:  
 $H \leq 6'$ , no splices are allowed within 1'-8" above the top of footing.  
 $H > 6'$ , no splices are allowed within H/4 above the top of footing.

**SYMBOLS**

Ser - service limit state 1  
 Str - strength limit state 1  
 B' - effective footing width (ft)  
 q<sub>o</sub>' - net bearing stress (ksf)  
 q<sub>o</sub> - gross uniform bearing stress (ksf)  
 ⌘ - Denotes a bundle of 2 bars

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**RETAINING WALL**  
**TYPE 1**  
**H=32' THROUGH 36'**  
 NO SCALE

**B3-2**