

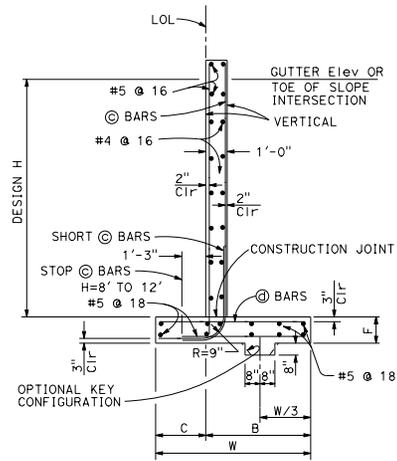
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

*Jerry Wong*  
REGISTERED CIVIL ENGINEER

April 20, 2012  
PLANS APPROVAL DATE

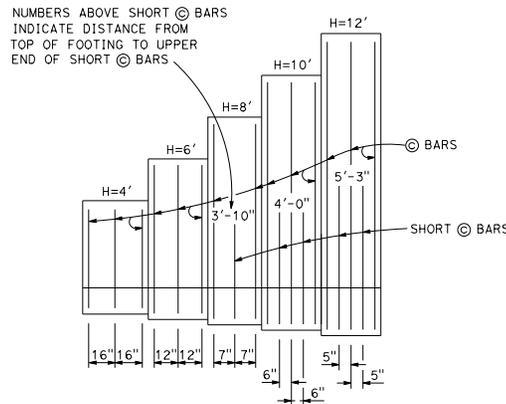
Exp. 6-30-12  
CIVIL

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.

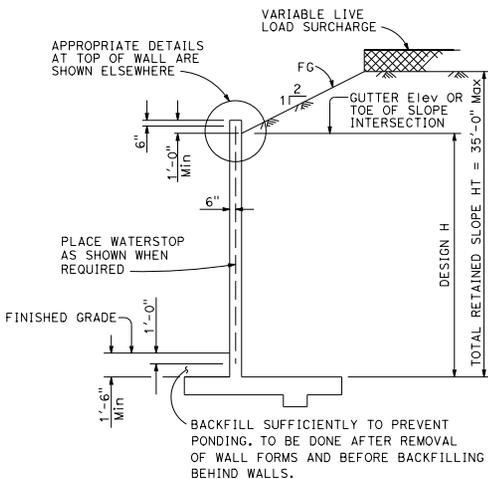


**SPREAD FOOTING SECTION**

Place concrete in toe against undisturbed material, except as permitted by the Engineer.



**ELEVATION**



**DESIGN SECTION**

**SYMBOLS:**

- Ser - service limit state I
- Str - strength limit state I
- Ext - extreme event limit state I
- B' - effective footing width (ft)
- q<sub>0</sub> - net bearing stress (ksf), OG assumed to be FG at toe
- q<sub>o</sub> - gross uniform bearing stress (ksf)

DESIGN H	4'	6'	8'	10'	12'
W	5'-10"	7'-7"	9'-0"	11'-0"	12'-5"
C	2'-4"	2'-7"	3'-0"	3'-6"	4'-0"
B	3'-6"	5'-0"	6'-0"	7'-6"	8'-5"
F	1'-4"	1'-7"	1'-7"	1'-9"	1'-9"
© BARS	#5 @ 16	#5 @ 12	#5 @ 7	#6 @ 6	#7 @ 5
© BARS	#5 @ 16	#5 @ 12	#5 @ 7	#6 @ 6	#7 @ 5
Ser: B', q <sub>0</sub>	4.0, 0.8	5.6, 1.0	8.8, 1.1	10.6, 1.3	12.0, 1.6
Str: B', q <sub>0</sub>	1.9, 2.0	3.5, 2.1	4.5, 2.3	6.5, 2.3	7.7, 2.5
Ext: B', q <sub>0</sub>	2.8, 2.3	3.3, 3.3	3.9, 3.9	5.3, 4.1	5.9, 4.5

**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 the table.

**DESIGN NOTES:**

- DESIGN: AASHTO LRFD Bridge Design Specifications, 4th Edition with California Amendments
- LS: Varied surcharge on level ground surface
- DC: Stem Architectural Treatment of thickness up to 6" of concrete (75 psf) considered
- SEISMIC: k<sub>h</sub> = 0.2  
k<sub>v</sub> = 0.0
- SOIL: φ = 34°  
γ = 120 pcf
- REINFORCED CONCRETE: f'<sub>c</sub> = 3,600 psi  
f<sub>y</sub> = 60,000 psi
- LOAD COMBINATIONS AND LIMIT STATES:  
Service I Q = 1.00DC+1.00EV+1.00EH+1.00LS  
Strength I Q = αDC+βEV+ηEH+1.75LS  
Extreme I Q = 1.00DC+1.00EV+1.00EH+1.00EOD+1.00EOE
- Where:  
Q: Force Effects  
α: 1.25 or 0.90, Whichever Controls Design  
β: 1.35 or 1.00, Whichever Controls Design  
η: 1.50 or 0.90, Whichever Controls Design  
DC: Dead Load of Structure Components  
EH: Horizontal Earth Fill Pressure  
EV: Vertical Earth Pressure from Earth Fill Weight  
LS: Live Load Surcharge  
EOE: Seismic Earth Pressure  
EOD: Soil and Structural and Nonstructural Components Inertia

**NOTES:**

1. For details not shown and drainage notes see <sup>(RSP B3-5)</sup>
2. For wall stem joint details see <sup>(B0-3 3-3)</sup> and <sup>(B0-3 3-4)</sup>
3. At © and short © bars:  
H ≤ 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.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**RETAINING WALL TYPE 1A (CASE 2)**  
NO SCALE  
RSP B3-3B DATED APRIL 20, 2012 SUPPLEMENTS THE  
STANDARD PLANS BOOK DATED 2010.  
**REVISED STANDARD PLAN RSP B3-3B**

2010 REVISED STANDARD PLAN RSP B3-3B