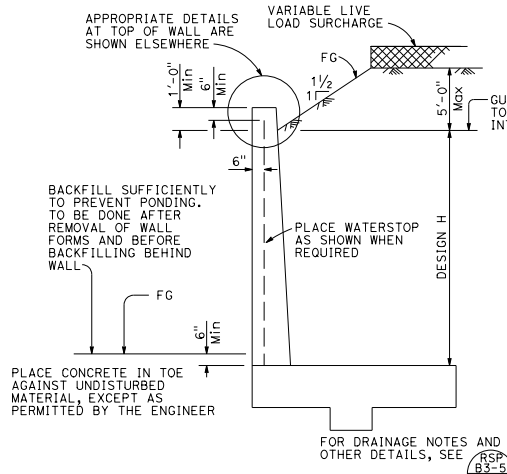
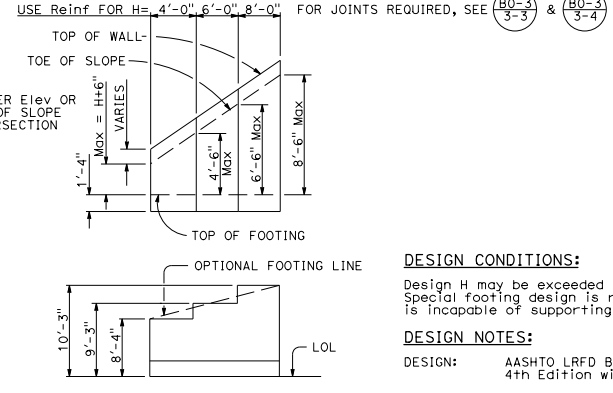


SPREAD FOOTING SECTION



DESIGN SECTION



TYPICAL LAYOUT EXAMPLE

D16+	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL No. SHEETS

Gary Wong
 REGISTERED CIVIL ENGINEER
 No. C58298
 Exp. 6-30-12
 CIVIL
 STATE OF CALIFORNIA

April 20, 2012
 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.

TO ACCOMPANY PLANS DATED _____

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:

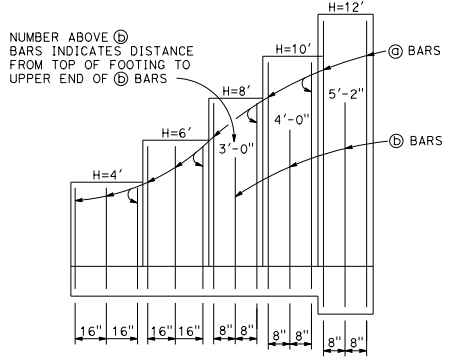
- DESIGN: AASHTO LRFD Bridge Design Specifications, 4th Edition with California Amendments
- LS: Varied surcharge on level ground surface
- DC: Stem Architectural Treatment of thickness up to 6' of concrete (75 psf) considered
- SEISMIC: $K_h = 0.2$
 $K_v = 0.0$
- SOIL: $\phi = 34^\circ$
 $\gamma = 120$ pcf
- REINFORCED CONCRETE: $f'_c = 3,600$ psi
 $f_y = 60,000$ psi

- LOAD COMBINATIONS AND LIMIT STATES:
- Service I $0 = 1.00DC + 1.00EV + 1.00EH + 1.00LS$
- Strength I $0 = \alpha DC + \beta EV + \eta EH + 1.75LS$
- Extreme I $0 = 1.00DC + 1.00EV + 1.00EH + 1.00EQD + 1.00EQE$

- Where:
- 0: 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
 - EQE: Seismic Earth Pressure
 - EQD: Soil and Structural and Nonstructural Components Inertia

NOTES:

- At $\text{\textcircled{a}}$ and $\text{\textcircled{b}}$ 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.



ELEVATION

SYMBOLS:

- Ser - service limit state I
- Str - strength limit state I
- Ext - extreme event limit state I
- B' - effective footing width (ft)
- q_0 - net bearing stress (ksf), q_0 assumed to be FG at toe
- q_u - gross uniform bearing stress (ksf)

DESIGN H	4'	6'	8'	10'	12'
W	8'-4"	9'-3"	10'-3"	11'-0"	12'-4"
F SPREAD FOOTING	1'-4"	1'-4"	1'-4"	1'-4"	1'-7"
BATTER	NONE	NONE	NONE	100 : 3	100 : 5
$\text{\textcircled{a}}$ BARS	#5 @ 16	#5 @ 16	#5 @ 16	#5 @ 16	#5 @ 16
$\text{\textcircled{b}}$ BARS	NONE	NONE	#5 @ 16	#5 @ 16	#5 @ 16
$\text{\textcircled{c}}$ BARS	#6 @ 8	#7 @ 8	#8 @ 8	#9 @ 8	#9 @ 8
Ser: B', q_0	5.6, 1.4	6.4, 1.8	7.4, 2.2	7.8, 2.6	8.9, 3.0
Str: B', q_0	3.6, 2.4	4.2, 3.0	5.0, 3.4	5.3, 4.0	6.4, 4.2
Ext: B', q_0	4.4, 2.1	4.2, 3.0	4.2, 4.0	3.9, 5.5	4.2, 6.7

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
RETAINING WALL TYPE 5 (CASE 3)
NO SCALE

RSP B3-4C DATED APRIL 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP B3-4C

2010 REVISED STANDARD PLAN RSP B3-4C