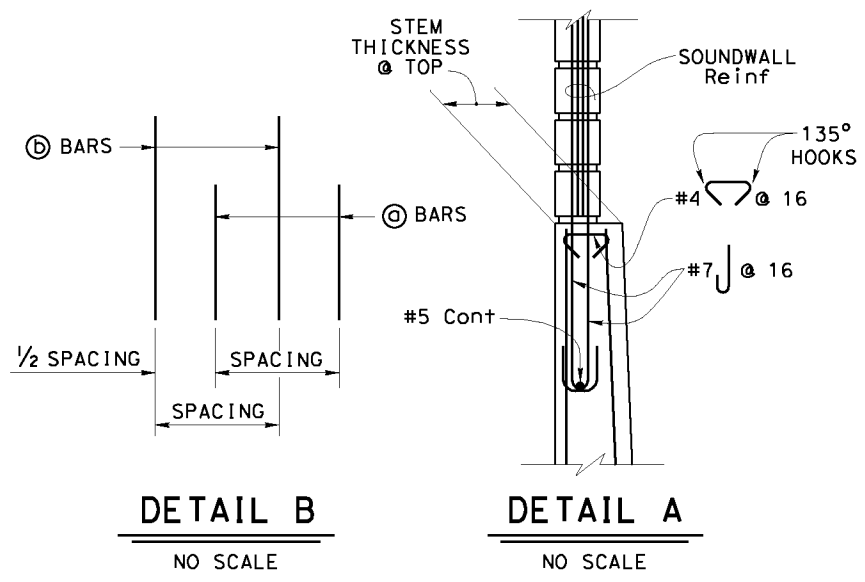


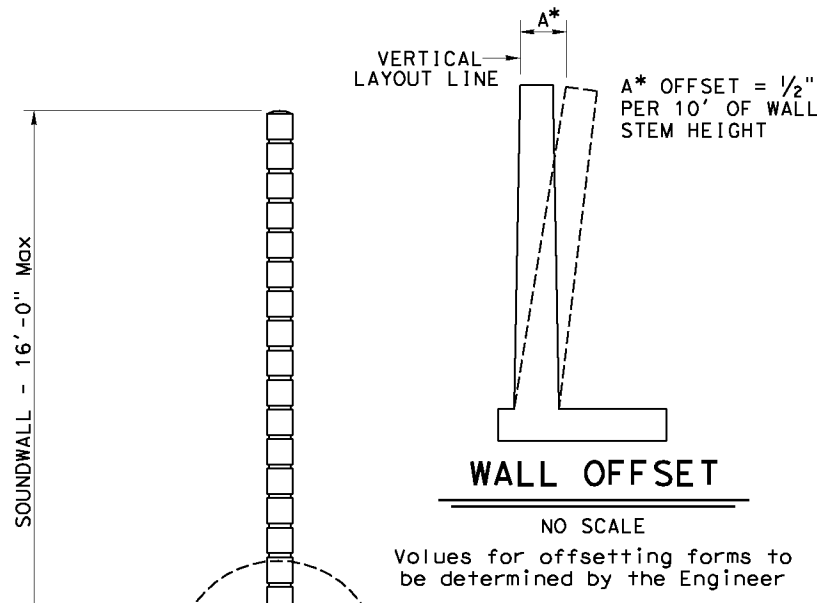
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
X	X	X	X	X	X

REGISTERED CIVIL ENGINEER	DATE	X
PLANS APPROVAL DATE		

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



- ### GENERAL NOTES
- For soundwall and retaining wall architectural finish or texture, see details elsewhere in project plans.
 - For details not shown and drainage notes, see (B3-8)
 - Footing cover, 1'-6" minimum.
 - Limit of no splicing rebars = 3 times the bottom thickness of the stem.
 - Placement of reinforcements:
 - (b) & (c) bars are spliced together.
 - * (a) & (b) bars are bundled together.
 - ** Alternate (a) & (b) bars are shown in "Detail B". Cont = Continuous.
 - For soundwall reinforcements, see "Soundwall Wall Masonry Block" sheets in Standard Plans.

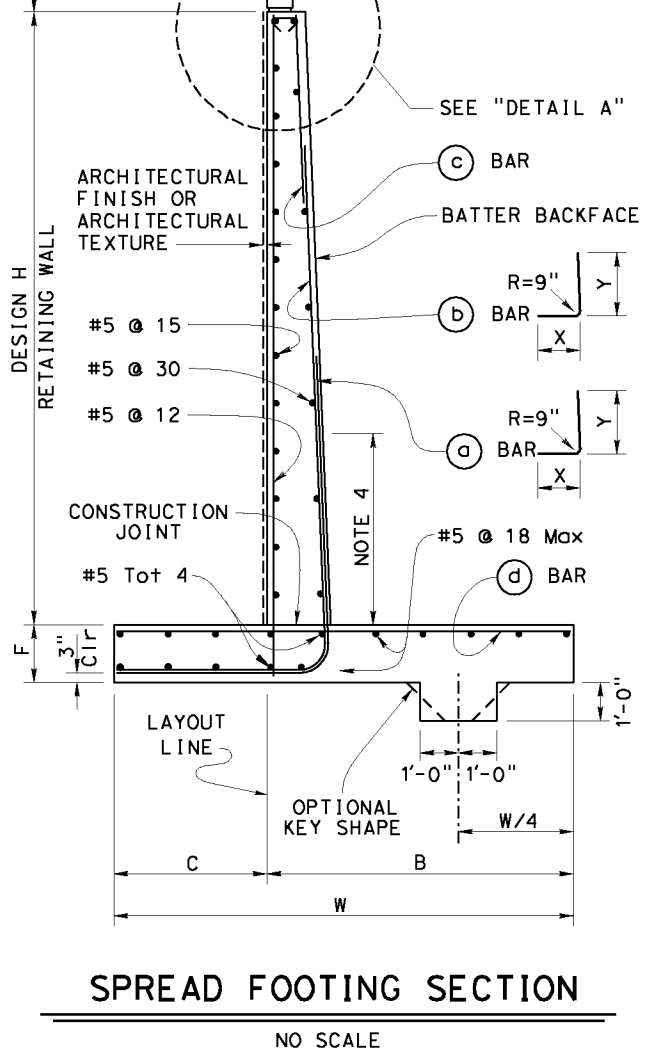


ALTERNATIVE A: (CONSTANT TOP OF WALL THICKNESS) TABLE OF REINFORCING STEEL DIMENSIONS AND DATA

Design H	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'
W	7'-9"	8'-0"	8'-9"	9'-9"	10'-9"	12'-0"	13'-0"	14'-3"	15'-3"	16'-6"	18'-6"	19'-9"	21'-3"	22'-6"
C	2'-9"	2'-9"	3'-0"	3'-3"	3'-6"	4'-0"	4'-3"	4'-9"	5'-0"	5'-6"	6'-3"	6'-9"	7'-3"	7'-9"
B	5'-0"	5'-3"	5'-9"	6'-6"	7'-3"	8'-0"	8'-9"	9'-6"	10'-3"	11'-0"	12'-3"	13'-0"	14'-0"	14'-9"
F Spread footing	1'-3"	1'-3"	1'-3"	1'-3"	1'-3"	1'-6"	1'-6"	1'-9"	2'-0"	2'-3"	2'-9"	3'-0"	3'-3"	3'-9"
Batter	0	1/2 : 12	1/2 : 12	1/2 : 12	1/2 : 12	1/2 : 12	1/2 : 12	1/2 : 12	1/2 : 12	5/8 : 12	3/4 : 12	7/8 : 12	1 : 12	1 : 12
Stem thcknss @ top	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
(a) Bars				#6 @ 18**	#7 @ 18**	#8 @ 18**	#9 @ 18**	#10 @ 18**	#8 @ 9*	#8 @ 9*	#7 @ 6*	#10 @ 12**	#9 @ 9*	#11 @ 12**
X				Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont
Y				8'-0"	6'-6"	7'-6"	8'-6"	9'-6"	9'-6"	11'-0"	11'-6"	13'-0"	14'-0"	15'-6"
(b) Bars	#5 @ 12	#5 @ 12	#5 @ 9	#6 @ 18**	#7 @ 18**	#8 @ 18**	#9 @ 18**	#10 @ 18**	#8 @ 9*	#8 @ 9*	#7 @ 6*	#10 @ 12**	#9 @ 9*	#11 @ 12**
X	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	5'-6"	6'-6"	7'-0"	8'-0"	8'-6"
Y	Cont	Cont	Cont	Cont	10'-6"	13'-0"	15'-0"	17'-6"	19'-6"	21'-0"	18'-6"	19'-0"	25'-6"	23'-6"
(c) Bars				#6 @ 18	#6 @ 18	#6 @ 18	#6 @ 18	#6 @ 18	#6 @ 18	#6 @ 12	#7 @ 12	#7 @ 18	#7 @ 12	#7 @ 12
(d) Bars	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 9	#6 @ 9	#6 @ 9	#6 @ 6	#8 @ 9	#8 @ 9	#8 @ 9	#7 @ 6	#7 @ 6	#9 @ 9	#9 @ 9
Ultimate Bearing Capacity Req'd k/sf	4.6	5.5	6.1	6.6	7.3	8.1	9.0	9.9	11.3	12.2	12.5	13.4	14.1	15.4

ALTERNATIVE B: (VARIABLE TOP OF WALL THICKNESS) TABLE OF REINFORCING STEEL DIMENSIONS AND DATA

Design H		8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'
W		8'-0"	8'-6"	9'-3"	10'-3"	11'-3"	13'-0"	13'-9"	16'-0"	16'-6"	18'-6"	20'-0"	20'-6"	21'-9"
C		2'-9"	2'-9"	3'-0"	3'-6"	3'-9"	4'-3"	4'-6"	5'-3"	5'-6"	6'-3"	6'-9"	6'-9"	7'-6"
B		5'-3"	5'-9"	6'-3"	6'-9"	7'-6"	8'-9"	9'-3"	10'-9"	11'-0"	12'-3"	13'-3"	13'-9"	14'-3"
F Spread footing		1'-3"	1'-3"	1'-3"	1'-3"	1'-6"	1'-6"	1'-9"	2'-0"	2'-3"	2'-9"	3'-0"	3'-3"	3'-6"
Batter		0	0	0	0	0	0	0	0	1/4 : 12	1/2 : 12	1/2 : 12	1/2 : 12	1/2 : 12
Stem thcknss @ top		1'-0"	1'-0"	1'-0"	1'-0"	1'-3"	1'-3"	1'-6"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"
(a) Bars				#6 @ 12**	#5 @ 6*	#9 @ 18**	#9 @ 12**	#9 @ 12**	#9 @ 12**	#7 @ 6*	#7 @ 6*	#7 @ 6**	#9 @ 9*	#11 @ 12**
X				Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont
Y				5'-6"	5'-6"	8'-6"	8'-6"	8'-6"	8'-6"	9'-6"	11'-0"	12'-6"	13'-6"	14'-6"
(b) Bars		#5 @ 9	#6 @ 9	#6 @ 12**	#5 @ 6*	#9 @ 18**	#9 @ 12**	#9 @ 12**	#9 @ 12**	#7 @ 6*	#7 @ 6*	#7 @ 6**	#9 @ 9*	#11 @ 12**
X		Cont	Cont	Cont	Cont	Cont	Cont	Cont	Cont	5'-6"	6'-0"	7'-6"	7'-6"	8'-0"
Y		Cont	Cont	Cont	Cont	11'-6"	11'-6"	12'-0"	12'-0"	17'-6"	20'-0"	21'-6"	24'-0"	24'-0"
(c) Bars						#7 @ 18	#7 @ 12	#7 @ 12	#7 @ 12	#6 @ 12	#6 @ 12	#6 @ 12	#7 @ 18	#7 @ 12
(d) Bars		#5 @ 12	#5 @ 9	#5 @ 9	#6 @ 9	#6 @ 9	#9 @ 12	#9 @ 12	#7 @ 6	#7 @ 6	#7 @ 6	#7 @ 6	#9 @ 9	#9 @ 9
Ultimate Bearing Capacity Req'd k/sf		5.5	6.5	7.3	7.6	9.0	9.0	10.6	10.5	12.2	12.6	13.3	15.4	16.0



DESIGN DATA

DESIGN: Load Factor Design (LFD)
 CONCRETE: Reinforced Concrete, f'c = 3600 psi
 fy = 60,000 psi

LOADING CASE:
 Level ground with 240 psf surcharge and 16" Soundwall

Seismic Load = 0.3 Dead Load
 Wind Load = 30 psf
 Dead Load of Soundwall = 1414 lb/ft

SEISMIC LOAD: SOIL
 Kh = 0.3g
 Kv = 0.0
 Kae : Mononobe-Okabe Method

SOIL: φ = 34° γ = 120 pcf
 Equivalent fluid pressure:
 = 36 pcf for determination of toe pressure
 = 27 pcf for determination of heel pressure

EXTERNAL STABILITY:
 Group 1 : D + E + SC
 Group 2 : D + E + SC + W
 Group 3 : D + PYM

INTERNAL STABILITY (LFD):
 Group A : βD + 1.7E + 1.7SC
 Group B : βD + 1.7E + 1.3W
 Group C (stem) : 1.0D + 1.0E + 1.0EOD + 1.0EOE
 Group C (footing) : D + PYM

Where : β = 1.0 or 1.3 whichever controls design
 D = Dead Load
 E = Lateral Earth Pressure
 SC = Surcharge
 W = Wind load
 EOD = Seismic Dead Load
 EOE = Seismic Lateral Earth Pressure
 PYM = Probable Yield Moment (1.3 x Nominal Yield Moment of Stem)