

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.

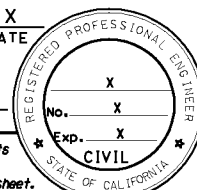


TABLE OF WALL DIMENSIONS, REINFORCING STEEL, AND BEARING STRESS													
DESIGN H	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'
W	6'-9"	7'-6"	7'-0"	7'-6"	8'-6"	9'-3"	10'-3"	11'-3"	12'-3"	13'-0"	14'-3"	15'-3"	16'-3"
C	5'-6"	6'-3"	5'-6"	6'-0"	6'-9"	7'-3"	8'-0"	8'-6"	9'-6"	10'-0"	10'-10"	11'-6"	12'-5"
B	1'-3"	1'-3"	1'-6"	1'-6"	1'-9"	2'-0"	2'-3"	2'-9"	2'-9"	3'-0"	3'-5"	3'-9"	3'-10"
F	1'-6"	2'-0"	2'-4"	2'-4"	2'-6"	2'-6"	2'-9"	2'-9"	3'-0"	3'-3"	3'-6"	3'-9"	4'-0"
STEM THICKNESS AT TOP	1'-0"	1'-0"	1'-3"	1'-3"	1'-7"	1'-9"	2'-0"	2'-0"	2'-0"	2'-0"	2'-0"	2'-3"	2'-3"
BATTER	0	0	0	0	0	0	0	1/4:12	1/4:12	1/4:12	1/2:12	1/2:12	1/2:12
⊙ BARS					#5 @ 14	#6 @ 13	#6 @ 13	#6 @ 13	#6 @ 13	#6 @ 11	#7 @ 12	#7 @ 11	#8 @ 11
⊕ BARS	#5 @ 6	#5 @ 5.5	#6 @ 5	#6 @ 5	#8 @ 7	#8 @ 6.5	#9 @ 6.5	#9 @ 6.5	#9 @ 5.5	#10 @ 6	#10 @ 11	#10 @ 10	#11 @ 11
ha	7'-10"	9'-10"	5'-3"	6'-0"	6'-9"	7'-6"	7'-3"	9'-0"	9'-9"	9'-3"	11'-3"	13'-0"	13'-0"
hb					13'-0"	13'-0"	13'-0"	14'-6"	15'-6"	18'-6"	20'-6"	21'-6"	23'-0"
hx	5'-3"	6'-0"	5'-3"	5'-9"	6'-6"	7'-0"	7'-9"	7'-6"	8'-3"	9'-9"	10'-0"	11'-0"	12'-2"
⊙ BARS	#5 @ 12	#5 @ 11	#5 @ 10	#5 @ 10	#5 @ 14	#5 @ 13	#5 @ 13	#5 @ 13	#5 @ 11	#5 @ 12	#5 @ 11	#5 @ 10	#5 @ 11
⊕ BAR LENGTH	3'-6"	3'-6"	3'-6"	3'-6"	4'-6"	7'-0"	7'-6"	10'-9"	11'-9"	12'-6"	13'-9"	14'-9"	15'-9"
⊙ BARS								#4 @ 13	#4 @ 11	#4 @ 12	#4 @ 11	#4 @ 10	#4 @ 11
⊙ Bars	#4 @ 12	#4 @ 12	#5 @ 15	#5 @ 15	#5 @ 12	#5 @ 12	#6 @ 12	#6 @ 12	#6 @ 12	#6 @ 12	#6 @ 12	#7 @ 12	#7 @ 12
⊕ Bars	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 18	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12
Td (KIPS/FT)	0	0	5.25	7.5	9.0	11.25	12.75	15.0	16.5	21.0	21.75	24.75	27.75
To (KIPS/FT)	0	0	*	*	*	*	*	*	*	*	*	*	*
TP = Larger of 1.33 Td & 1.25 To (KIPS/FT)	0	0	*	*	*	*	*	*	*	*	*	*	*
Max ANCHOR SPACING			10'-6"	9'-6"	7'-9"	6'-3"	7'-9"	6'-6"	8'-0"	6'-3"	6'-0"	5'-3"	4'-9"
SER I: B'(ft), q <sub>0</sub> (ksf)	6.3, 0.6	6.9, 0.7	5.7, 2.1	6.1, 2.4	7.4, 2.4	8.1, 2.7	9.1, 2.8	9.8, 3.0	10.9, 3.0	11.4, 3.5	12.6, 3.5	13.6, 3.7	14.7, 3.8
STR Ia: B'(ft), q <sub>0</sub> (ksf)	6.5, 1.3	6.7, 1.6	5.4, 3.3	5.7, 3.7	6.7, 3.8	7.4, 4.2	8.2, 4.3	8.9, 4.8	9.8, 4.9	10.1, 5.5	11.2, 5.6	12.1, 5.9	12.8, 6.2
STR, Ib: B'(ft), q <sub>0</sub> (ksf)	5.7, 1.2	5.7, 1.5	4.6, 3.3	5.0, 3.7	5.9, 3.8	6.6, 4.0	7.3, 4.2	7.9, 4.6	8.7, 4.7	9.1, 5.3	10.0, 5.4	10.8, 5.7	11.5, 6.0
STR, IIa: B'(ft), q <sub>0</sub> (ksf)	5.0, 1.9	5.7, 2.6	4.9, 4.0	5.4, 4.4	6.4, 4.0	7.2, 4.5	8.2, 4.6	9.0, 4.9	10.0, 4.9	10.4, 5.4	11.6, 5.4	12.6, 5.7	13.4, 5.8
STR, IIb: B'(ft), q <sub>0</sub> (ksf)	3.7, 2.3	4.2, 2.8	4.0, 4.2	4.5, 4.5	5.6, 4.2	6.3, 4.5	7.2, 4.5	8.0, 4.8	8.9, 4.7	9.4, 5.3	10.4, 5.3	11.3, 5.3	12.1, 5.6
STR, Va: B'(ft), q <sub>0</sub> (ksf)	6.0, 1.4	6.4, 1.7	5.2, 3.4	5.5, 3.8	6.6, 3.9	7.3, 4.3	8.2, 4.5	8.8, 4.8	9.8, 4.9	10.2, 5.6	11.2, 5.5	12.2, 5.9	12.9, 6.1
STR, Vb: B'(ft), q <sub>0</sub> (ksf)	5.0, 1.3	5.2, 1.6	4.4, 3.4	4.8, 3.8	5.7, 3.8	6.4, 4.2	7.2, 4.4	7.8, 4.7	8.7, 4.8	9.1, 5.5	10.0, 5.4	10.9, 5.8	11.6, 6.0
Ext I: B'(ft), q <sub>0</sub> (ksf)	3.4, 2.0	3.1, 3.6	2.4, 6.5	2.6, 8.1	3.0, 7.7	3.3, 9.0	3.5, 9.4	3.9, 10.1	4.3, 10.4	4.4, 11.9	4.9, 11.9	5.3, 12.7	5.5, 13.4

NOTE:  
 ⊙ Bar spacing shown is along the length of the retaining wall.  
 \* denotes values to be determined by designer, and this note is removed afterwards.

SYMBOLS:  
 SER: service limit state  
 STR: strength limit state  
 EXT: extreme event limit state  
 B': effective footing width (ft)  
 q<sub>0</sub>: net bearing stress (ksf)  
 q<sub>0</sub>: gross uniform bearing stress (ksf)  
 ⊙: 2 bar bundle  
 T<sub>o</sub>: Anchor Lockoff Load  
 T<sub>p</sub>: Anchor Factored Test Load

STANDARD DRAWING		STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO. X		X	
FILE NO. <b>xs14-380-2</b>	APPROVAL DATE <u>July 2011</u>	DEPARTMENT OF TRANSPORTATION		PROJECT NUMBER & PHASE: X		POST MILE X		RETAINING WALL TYPE 7SW - DETAILS NO.2	
DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. [02-02-11])		ORIGINAL SCALE IN INCHES FOR REDUCED PLANS		UNIT: X		CONTRACT NO.: X		DISREGARD PRINTS BEARING EARLIER REVISION DATES	
		0 1 2 3						REVISION DATES SHEET OF X X	

DATE PLOTTED => \$DATE USERNAME => \$USER TIME PLOTTED => \$TIME