

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
REGISTERED CIVIL ENGINEER			DATE		
PLANS APPROVAL DATE					
<small>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.</small>					
<small>The Registered Civil Engineer for the project is responsible for the selection and proper application of the component design and any modifications shown.</small>					

TABLE OF WALL DIMENSIONS, REINFORCING STEEL AND BEARING STRESS DATA

DESIGN H	STEM WITH HAUNCH			STEM WITHOUT HAUNCH												
	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'	34'	36'
W	8'-3"	8'-3"	8'-3"	8'-3"	10'-0"	8'-3"	8'-6"	9'-0"	10'-0"	10'-9"	11'-9"	12'-6"	13'-6"	14'-6"	15'-6"	16'-0"
C	7'-0"	7'-0"	6'-9"	6'-6"	8'-3"	6'-6"	6'-6"	6'-9"	7'-6"	8'-0"	9'-0"	9'-0"	9'-9"	10'-6"	11'-6"	11'-9"
B	1'-3"	1'-3"	1'-6"	1'-9"	1'-9"	1'-9"	2'-0"	2'-0"	2'-6"	2'-9"	2'-9"	3'-6"	3'-9"	4'-0"	4'-0"	4'-3"
F	1'-9"	1'-9"	1'-9"	1'-9"	2'-0"	2'-4"	2'-6"	2'-6"	2'-9"	2'-9"	3'-0"	3'-3"	3'-6"	3'-9"	3'-9"	4'-0"
STEM THICKNESS AT TOP				1'-7"	1'-7"	1'-7"	1'-9"	1'-9"	1'-9"	2'-0"	2'-0"	2'-0"	2'-3"	2'-3"	2'-3"	2'-6"
STEM THICKNESS AT HAUNCH	1'-0"	1'-0"	1'-3"													
BATTER	0	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	1/2:12	1/2:12
S	0'-9"	0'-9"	0'-9"	0'-6"	0'-5 2/3"	0'-5"	0'-4 1/3"	0'-8"	0'-7 1/2"	0'-9"	0'-7 1/2"	0'-8"	0'-7"	0'-6"	0'-6"	0'-5 1/2"
⊙ BARS																#5
⊕ BARS																#8
hb																28'-3"
⊙ BARS	#6	#6	#6	#5	#5	#5	#5	#5 ⌀	#5 ⌀	#5	#5	#5	#5	#5	#5	#11
hsc		7'-10"	9'-10"	11'-10"	13'-10"	13'-6"	11'-6"	17'-3"	16'-3"	20'-0"	18'-9"	20'-6"	21'-6"	23'-0"	17'-0"	17'-9"
hc																22'-0"
⊙ BARS				#5	#7	#7	#7	#10	#10	#7	#7	#7	#7	#7	#7	
hd				3'-3"	5'-6"	6'-0"	6'-6"	11'-3"	12'-0"	13'-0"	16'-6"	16'-0"	17'-0"	19'-3"		
⊙ BARS										#10	#10	#11	#11	#11		
he										12'-9"	13'-6"	14'-0"	12'-3"	16'-6"		
⊙ BARS						#5 @ 15	#5 @ 13	#5 @ 16	#6 @ 15	#7 @ 18	#5 @ 15	#8 @ 16	#7 @ 14	#7 @ 12	#5 @ 6	#5 @ 5 1/2
BARS BUNDLED WITH ⊙ in ftg							SHORT ⊙	SHORT ⊙	⊙	⊙	SHORT ⊙ & ⊕	⊙ & SHORT ⊙				
⊕ BARS																#5 @ 24
⊕ BARS	#4 @ 12	#4 @ 12	#5 @ 15	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#6 @ 12	#6 @ 12	#6 @ 12	#6 @ 12	#7 @ 12	#7 @ 12	#7 @ 12	#7 @ 12
⊕ BARS	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#4 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12	#5 @ 12
Td (KIPS/FT)	0	0	0	0	0	3	6.75	9.75	11.25	12.75	13.5	18.75	19.5	21.75	21.75	26.25
To (KIPS/FT)	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*
Tp = Larger of 1.33 Td & 1.25 To (KIPS/FT)	0	0	0	0	0	*	*	*	*	*	*	*	*	*	*	*
MAX. ANCHOR SPACING						10'-6"	10'-6"	8'-3"	6'-3"	7'-9"	7'-3"	7'-0"	6'-9"	6'-0"	6'-0"	5'-0"
SER I: B' (ft), q ₀ (ksf)	8.6, 0.3	8.1, 0.4	7.6, 0.5	7.1, 0.8	8.9, 0.7	5.8, 1.9	6.1, 2.7	6.5, 3.3	7.1, 3.5	7.8, 3.7	8.7, 3.6	9.1, 4.5	10.0, 4.5	10.7, 4.6	11.6, 4.5	12.1, 5.0
STR Ia: B' (ft), q ₀ (ksf)	8.3, 1.0	7.6, 1.2	7.0, 1.4	6.2, 1.8	8.0, 1.8	4.7, 3.8	4.9, 4.9	5.2, 5.7	5.8, 6.3	6.2, 6.4	6.7, 6.4	7.3, 7.6	8.1, 7.6	8.6, 7.9	9.4, 7.7	9.8, 8.6
STR Ib: B' (ft), q ₀ (ksf)	7.8, 0.8	6.9, 1.0	6.0, 1.3	5.0, 1.8	6.6, 1.7	3.4, 4.4	3.8, 5.4	4.1, 6.1	4.6, 6.4	5.0, 6.9	5.2, 7.1	5.9, 8.2	6.6, 8.1	7.0, 8.5	7.6, 8.3	8.0, 9.1
Ext I: B' (ft), q ₀ (ksf)	7.9, 0.8	7.1, 0.9	6.2, 1.2	5.0, 1.7	6.3, 1.8	2.8, 5.2	2.9, 7.1	3.2, 8.3	3.5, 9.3	3.6, 9.6	4.6, 11.3	4.3, 11.5	4.6, 11.7	4.9, 12.4	5.2, 12.2	5.3, 13.8
Ext II: B' (ft), q ₀ (ksf)	2.8, 2.0	2.9, 2.3	3.2, 2.4	3.3, 2.7	6.0, 1.7	3.8, 3.6	4.7, 4.1	5.6, 4.5	6.5, 4.5	7.4, 4.5	8.8, 5.1	9.0, 5.1	10.1, 5.1	10.9, 5.2	11.9, 4.9	12.4, 5.4

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.

LEGEND:
 SER: service limit state
 STR: strength limit state
 EXT: extreme event limit state
 B': effective footing width (ft)
 q₀: net bearing stress (ksf)
 q_g: gross uniform bearing stress (ksf)
 ⌀: 2 bar bundle
 ⊕: Anchor Lockoff Load
 Tp: Anchor Factored Test Load

BRIDGE STANDARD DETAILS		<small>The components of the Bridge Standard Details have been prepared under the responsible charge of the Technical Owner, a registered civil engineer in the State of California.</small>	STATE OF CALIFORNIA		DIVISION OF ENGINEERING SERVICES		BRIDGE NO.	RETAINING WALL TYPE 7B - DETAILS No. 2
xs14-375-2 <small>FILE NO.</small>	October 2014 <small>APPROVAL DATE</small>		DEPARTMENT OF TRANSPORTATION		ENGINEERING SERVICES		POST MILE	
<small>Refer to: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html</small>		<small>FILE => \$REQUEST USERNAME => \$USER TIME PLOTTED => \$TIME DATE PLOTTED => \$DATE</small>	<small>ORIGINAL SCALE IN INCHES FOR REDUCED PLANS</small> 0 1 2 3	<small>UNIT: PROJECT NUMBER & PHASE:</small>	<small>CONTRACT NO.:</small>	<small>DISREGARD PRINTS BEARING EARLIER REVISION DATES</small>	<small>REVISION DATES</small> 6-18-14 8-6-14 7-14-16	<small>SHEET OF</small>