

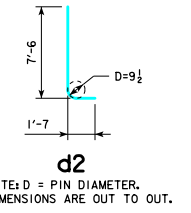
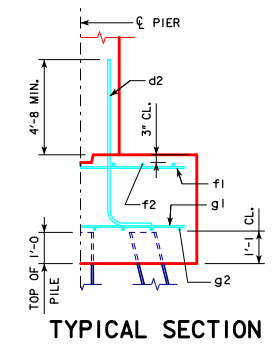
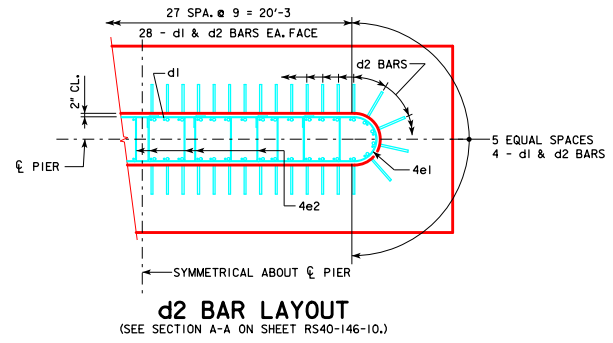
REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.
REVISED 10-2016 - CHANGED VERTICAL CLEARANCE OF REBAR "f2" TO TOP OF PIER FOOTING TO 3" WAS 2".

H IN ABUT. FT.	C - C	PILING (HP10x57)		FOOTING SIZE
		NO. & LAYOUT	① LRFD P _u , STRENGTH I, DES. LOAD (KIPS)	
16 TO 18	160'-0	10A	215	4' x 8' x 27'
	180'-0	11A	216	
	200'-0	12A	211	
	220'-0	13A	218	
	240'-0	14A	216	
	260'-0	14B	219	
	280'-0	16A	212	
	300'-0	16C	210	
	320'-0	17B	212	
	340'-0	18A	211	
19 TO 21	160'-0	11A	210	4' x 8' x 27'
	180'-0	12A	206	
	200'-0	12B	214	
	220'-0	13B	218	
	240'-0	14B	210	
	260'-0	15A	215	
	280'-0	16A	217	
	300'-0	16C	215	
	320'-0	17B	217	
	340'-0	18A	216	
22 TO 24	160'-0	11B	213	4' x 9' x 27'
	180'-0	12B	208	
	200'-0	12C	218	
	220'-0	14A	213	
	240'-0	14B	215	
	260'-0	15A	220	
	280'-0	16C	207	
	300'-0	16C	219	
	320'-0	18A	211	
	340'-0	19A	213	
25 TO 27	160'-0	11C	217	4' x 10' x 27'
	180'-0	12C	212	
	200'-0	13B	213	
	220'-0	14A	218	
	240'-0	15A	211	
	260'-0	16A	212	
	280'-0	16C	211	
	300'-0	17B	214	
	320'-0	18A	215	
	340'-0	19A	216	
28 TO 30	160'-0	12C	204	4' x 10' x 27'
	180'-0	12C	217	
	200'-0	13B	218	
	220'-0	14B	210	
	240'-0	15A	215	
	260'-0	16A	216	
	280'-0	16C	215	
	300'-0	17B	218	
	320'-0	18A	218	
	340'-0	19B	218	
31 TO 33	160'-0	12C	209	4' x 10' x 27'
	180'-0	12D	217	
	200'-0	13C	218	
	220'-0	14B	214	
	240'-0	15A	219	
	260'-0	16B	218	
	280'-0	16C	218	
	300'-0	18A	211	
	320'-0	19A	214	
	340'-0	20A	214	
34 TO 36	160'-0	12D	209	4' x 11' x 27'
	180'-0	13C	211	
	200'-0	14B	204	
	220'-0	14B	218	
	240'-0	16A	211	
	260'-0	17A	214	
	280'-0	17B	213	
	300'-0	18A	214	
	320'-0	19B	215	
	340'-0	20A	216	

H IN ABUT. FT.	C - C	PILING (HP10x57)		FOOTING SIZE
		NO. & LAYOUT	① LRFD P _u , STRENGTH I, DES. LOAD (KIPS)	
37 TO 40	160'-0	12D	215	4' x 11' x 27'
	180'-0	14B	199	
	200'-0	14B	209	
	220'-0	15A	214	
	240'-0	16A	216	
	260'-0	17A	218	
	280'-0	17B	217	
	300'-0	18A	217	
	320'-0	19B	219	
	340'-0	20B	218	

FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)				TOTAL WEIGHT (L.B.)	STRUCTURAL CONCRETE (CY)
	BAR	NO., SIZE & SPACING	LENGTH	WEIGHT (L.B.)		
4' x 8' x 27'	d2	64 - #9 AS SHOWN	9'-1	1977	3248	32.0
	f1	27 - #5 @ 1'-0	7'-8	216		
	f2	8 - #5 @ 1'-0	26'-8	223		
	g1	27 - #6 @ 1'-0	7'-8	311		
	g2	13 - #6 @ 0'-7 1/2	26'-8	521		
	d2	64 - #9 AS SHOWN	9'-1	1977		
f1	27 - #5 @ 1'-0	8'-8	244			
f2	9 - #5 @ 1'-0	26'-8	250			
g1	29 - #6 @ 0'-11	8'-8	378			
g2	13 - #6 @ 0'-8 1/2	26'-8	521			
d2	64 - #9 AS SHOWN	9'-1	1977	3601	40.0	
f1	27 - #5 @ 1'-0	9'-8	272			
f2	10 - #5 @ 1'-0	26'-8	278			
g1	28 - #7 @ 0'-11 1/2	9'-8	553			
g2	13 - #6 @ 0'-9 1/2	26'-8	521			
d2	64 - #9 AS SHOWN	9'-1	1977			4083
f1	27 - #5 @ 1'-0	10'-8	300			
f2	11 - #5 @ 1'-0	26'-8	306			
g1	27 - #9 @ 1'-0	10'-8	979			
g2	13 - #6 @ 0'-10 1/2	26'-8	521			
d2	64 - #9 AS SHOWN	9'-1	1977	4391	48.0	
f1	27 - #5 @ 1'-0	11'-8	329			
f2	12 - #5 @ 1'-0	26'-8	334			
g1	31 - #9 @ 0'-10 1/2	11'-8	1230			
g2	13 - #6 @ 0'-11 1/2	26'-8	521			
d2	64 - #9 AS SHOWN	9'-1	1977			5452
f1	29 - #5 @ 1'-0	11'-8	353			
f2	12 - #5 @ 1'-0	28'-8	359			
g1	33 - #9 @ 0'-10 1/2	11'-8	1309			
g2	19 - #8 @ 0'-7 1/2	28'-8	1454			
d2	64 - #9 AS SHOWN	9'-1	1977	5787	55.9	
f1	29 - #5 @ 1'-0	12'-8	383			
f2	13 - #5 @ 1'-0	28'-8	389			
g1	35 - #9 @ 0'-10	12'-8	1507			
g2	20 - #8 @ 0'-7 1/2	28'-8	1531			
d2	64 - #9 AS SHOWN	9'-1	1977			5966
f1	29 - #5 @ 1'-0	13'-8	413			
f2	14 - #5 @ 1'-0	28'-8	419			
g1	35 - #9 @ 0'-10	13'-8	1626			
g2	20 - #8 @ 0'-8 1/2	28'-8	1531			

① NOTE: P_u, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.



FOOTING NOTES:

- THESE FOOTINGS ARE DESIGNED AND DETAILED TO BE USED WITH THE CAP AND COLUMN DETAILS OF THE TEE PIERS AS SHOWN ON SHEET RS40-146-10.
- BATTER PILES IN EXTERIOR ROWS 1:4 IN THE DIRECTION SHOWN.
- STEEL PILING USED AS POINT BEARING SHALL HAVE A MINIMUM DISTANCE OF APPROXIMATELY 10 FEET FROM BOTTOM OF FOOTING TO TOP OF BEARING ROCK. THE PILE LAYOUTS ARE SUCH THAT THE DISTANCE CENTER TO CENTER OF ADJACENT PILING SHALL NOT EXCEED 8'-0.
- PIER PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.

10-2016 LATEST REVISION DATE <i>Thomas E. McQuinn</i> APPROVED BY BRIDGE ENGINEER	
	STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES JUNE, 2010
TEE PIER-HP10x57 SRL-2 STEEL PILE FOOTINGS 30° SKEW - SHEET 1	RS40-151-10