

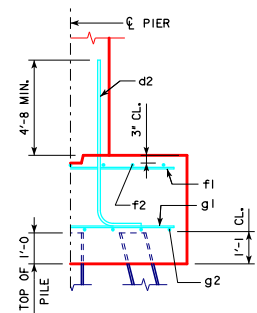
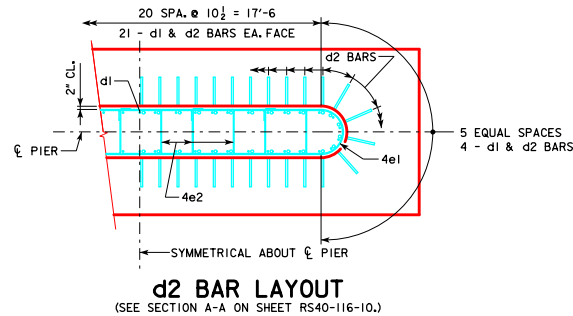
REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.
REVISED 10-2016 - CHANGED VERTICAL CLEARANCE OF REBAR "f2" TO TOP OF PIER FOOTING TO 3" WAS 2".

H IN FT.	C - C ABUT. BRG.	PILING (HP10x57)		FOOTING SIZE
		NO. & LAYOUT	① LRFD P _u , STRENGTH I, DES. LOAD (KIPS)	
16 TO 18	160'-0	15A	146	4' x 9' x 24'
	180'-0	16A	146	
	200'-0	18A	145	
	220'-0	18E	142	
	240'-0	20A	142	
	260'-0	20B	145	
	280'-0	22A	144	
	300'-0	23B	144	
	320'-0	24B	146	
	340'-0	25A	144	
19 TO 21	160'-0	16A	141	4' x 9' x 24'
	180'-0	17A	145	
	200'-0	18D	143	
	220'-0	18E	145	
	240'-0	20A	145	
	260'-0	21B	143	
	280'-0	23A	143	
	300'-0	23B	146	
	320'-0	25A	144	
	340'-0	26A	147	
22 TO 24	160'-0	16B	143	4' x 10' x 24'
	180'-0	18B	142	
	200'-0	18D	146	
	220'-0	19A	144	
	240'-0	20B	141	
	260'-0	21B	146	
	280'-0	23A	145	
	300'-0	24B	143	
	320'-0	25A	147	
	340'-0	26B	142	
25 TO 27	160'-0	16C	144	4' x 10' x 26'
	180'-0	18C	142	
	200'-0	18E	141	
	220'-0	19A	146	
	240'-0	20B	144	
	260'-0	22A	142	
	280'-0	24A	143	
	300'-0	24B	145	
	320'-0	26A	144	
	340'-0	26B	144	
28 TO 30	160'-0	17B	142	4' x 10' x 26'
	180'-0	18C	145	
	200'-0	18E	144	
	220'-0	20A	143	
	240'-0	20B	146	
	260'-0	22A	144	
	280'-0	24A	145	
	300'-0	25A	143	
	320'-0	26A	146	
	340'-0	26B	145	
31 TO 33	160'-0	17C	143	4' x 11' x 26'
	180'-0	18D	146	
	200'-0	18E	146	
	220'-0	20A	145	
	240'-0	21B	143	
	260'-0	22A	146	
	280'-0	24B	140	
	300'-0	25A	144	
	320'-0	26B	141	
	340'-0	27A	143	
34 TO 36	160'-0	17D	141	4' x 11' x 28'
	180'-0	18E	141	
	200'-0	19A	144	
	220'-0	21A	143	
	240'-0	21B	145	
	260'-0	23A	144	
	280'-0	24B	142	
	300'-0	25A	146	
	320'-0	26B	142	
	340'-0	27A	144	

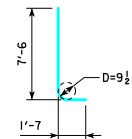
H IN FT.	C - C ABUT. BRG.	PILING (HP10x57)		FOOTING SIZE
		NO. & LAYOUT	① LRFD P _u , STRENGTH I, DES. LOAD (KIPS)	
37 TO 40	160'-0	18E	136	4' x 11' x 28'
	180'-0	18E	144	
	200'-0	20A	141	
	220'-0	21A	146	
	240'-0	22A	142	
	260'-0	23A	146	
	280'-0	24B	144	
	300'-0	26A	143	
	320'-0	26B	144	
	340'-0	27A	146	

FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)			TOTAL WEIGHT (L.B.)	STRUCTURAL CONCRETE (CY)	
	BAR NO., SIZE & SPACING	LENGTH	WEIGHT (L.B.)			
4' x 9' x 24'	d2	50 - #9 AS SHOWN	9'-1	1544	2694	32.0
	f1	24 - #5 @ 1'-0	8'-8	217		
	f2	9 - #5 @ 1'-0	23'-8	222		
	g1	30 - #6 @ 0'-9 1/2	8'-8	391		
	g2	9 - #6 @ 1'-0	23'-8	320		
	d2	50 - #9 AS SHOWN	9'-1	1544		
f1	24 - #5 @ 1'-0	9'-8	242			
f2	10 - #5 @ 1'-0	23'-8	247			
g1	28 - #7 @ 0'-10	9'-8	553			
g2	10 - #6 @ 1'-0	23'-8	355			
d2	50 - #9 AS SHOWN	9'-1	1544	3309	38.5	
f1	26 - #5 @ 1'-0	9'-8	262			
f2	10 - #5 @ 1'-0	25'-8	268			
g1	28 - #7 @ 0'-11	9'-8	553			
g2	13 - #7 @ 0'-9 1/2	25'-8	682			
d2	50 - #9 AS SHOWN	9'-1	1544			3578
f1	26 - #5 @ 1'-0	10'-8	289			
f2	11 - #5 @ 1'-0	25'-8	294			
g1	27 - #8 @ 0'-11 1/2	10'-8	769			
g2	13 - #7 @ 0'-10 1/2	25'-8	682			
d2	50 - #9 AS SHOWN	9'-1	1544	4164	45.6	
f1	28 - #5 @ 1'-0	10'-8	312			
f2	11 - #5 @ 1'-0	27'-8	317			
g1	31 - #8 @ 0'-11	10'-8	883			
g2	15 - #8 @ 0'-9	27'-8	1108			
d2	50 - #9 AS SHOWN	9'-1	1544			5142
f1	30 - #5 @ 1'-0	11'-8	365			
f2	12 - #5 @ 1'-0	29'-8	371			
g1	34 - #9 @ 0'-10 1/2	11'-8	1349			
g2	15 - #9 @ 0'-9 1/2	29'-8	1513			
d2	50 - #9 AS SHOWN	9'-1	1544	5880	56.9	
f1	32 - #5 @ 1'-0	11'-8	389			
f2	12 - #5 @ 1'-0	31'-8	396			
g1	38 - #9 @ 0'-10	11'-8	1507			
g2	15 - #10 @ 0'-9 1/2	31'-8	2044			
d2	50 - #9 AS SHOWN	9'-1	1544			6681
f1	32 - #5 @ 1'-0	13'-8	456			
f2	14 - #5 @ 1'-0	31'-8	462			
g1	38 - #9 @ 0'-10	13'-8	1766			
g2	18 - #10 @ 0'-9 1/2	31'-8	2453			

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



TYPICAL SECTION



d2
NOTE: D = PIN DIAMETER.
DIMENSIONS ARE OUT TO OUT.

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 RS40-116-10.

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-1 STEEL PILE FOOTINGS 0° SKEW - SHEET 1	RS40-118-10