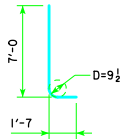


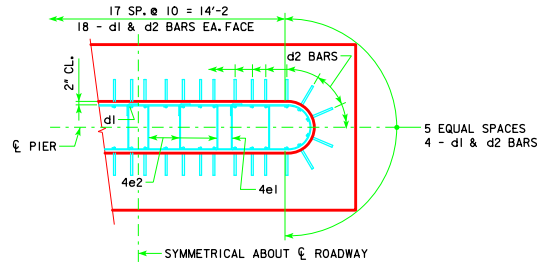
TYPICAL SECTION



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

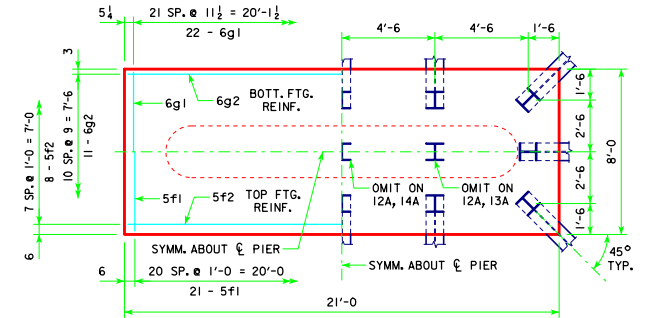
H IN FT.	PILING ABUT. BRG.	PILING (HP10x57)		FOOTING SIZE
		NO. & LAYOUT	LRFD P <sub>u</sub> STRENGTH I, DES. LOAD (KIPS)	
18 TO 21	201'-4	12A	138	3'-6 x 8' x 21'
	213'-10	12A	143	
	226'-4	13A	142	
21 TO 24	243'-0	14A	139	3'-6 x 8' x 21'
	201'-4	12A	143	
	213'-10	13A	141	
24 TO 28	226'-4	14A	138	3'-6 x 9' x 22'
	243'-0	14A	144	
	201'-4	13B	138	
	213'-10	13B	142	
28 TO 32	226'-4	14B	139	
	243'-0	14B	144	

FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)			TOTAL WEIGHT (LB.)	STRUCTURAL CONCRETE (CY)
	BAR NO., SIZE & SPACING	LENGTH	WEIGHT (LB.)		
3'-6 x 8' x 21'	d2 44 - #9 AS SHOWN	8'-7	1284	2218	21.8
	f1 21 - #5 @ 1'-0	7'-8	168		
	f2 8 - #5 @ 1'-0	20'-8	172		
	g1 22 - #6 @ 0'-11 1/2	7'-8	253		
	g2 11 - #6 @ 0'-9	20'-8	341		
3'-6 x 9' x 22'	d2 44 - #9 AS SHOWN	8'-7	1284	2607	25.7
	f1 22 - #5 @ 1'-0	8'-8	199		
	f2 9 - #5 @ 1'-0	21'-8	203		
	g1 22 - #7 @ 1'-0	8'-8	390		
	g2 12 - #7 @ 0'-9	21'-8	531		

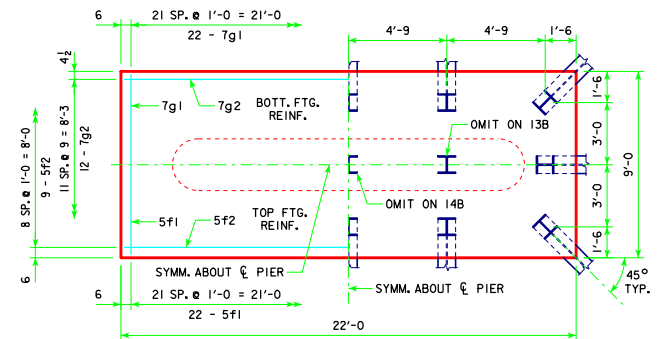


**d2 BAR LAYOUT**  
(SEE SECTION A-A ON SHEET H24-50-06.)

① NOTE: P<sub>u</sub>, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.



3'-6 x 8'-0 x 21'-0 FOR 12A, 13A & 14A



3'-6 x 9'-0 x 22'-0 FOR 13B & 14B

### 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 H24-50-06.

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.

05-13  
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER  
*Thomas E. M. Donald*



Iowa Department of Transportation  
Highway Division

STANDARD DESIGN - 24' ROADWAY, THREE SPAN BRIDGE  
**PRETENSIONED PRESTRESSED  
CONCRETE BEAM BRIDGES**  
DECEMBER, 2006

**TEE PIER-HP10x57 SRL-1  
STEEL PILE FOOTINGS**  
0° SKEW - H=16' TO 24'

**H24-51-06**