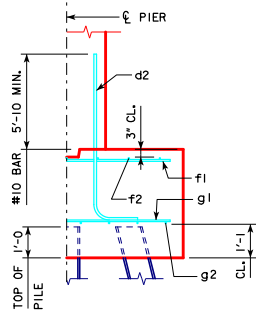
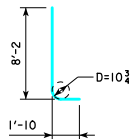


REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.  
REVISED 09-2016 - CHANGED VERTICAL CLEARANCE OF REBAR - f2\* TO TOP OF PIER FOOTING TO 3" (WAS 2").

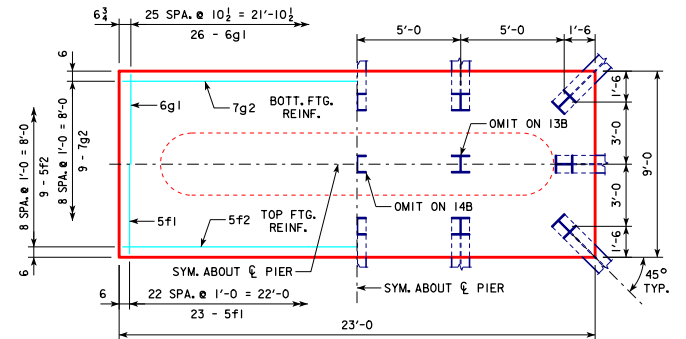
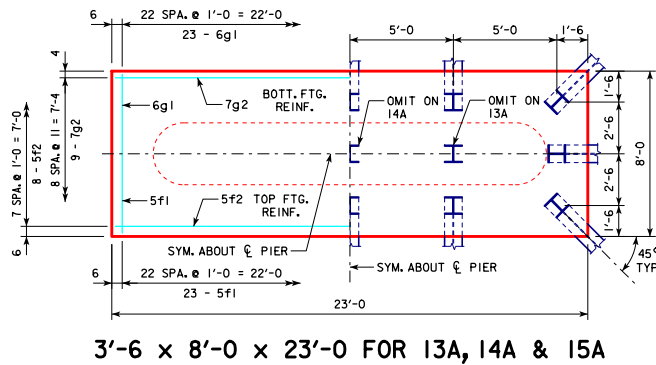


**TYPICAL SECTION**

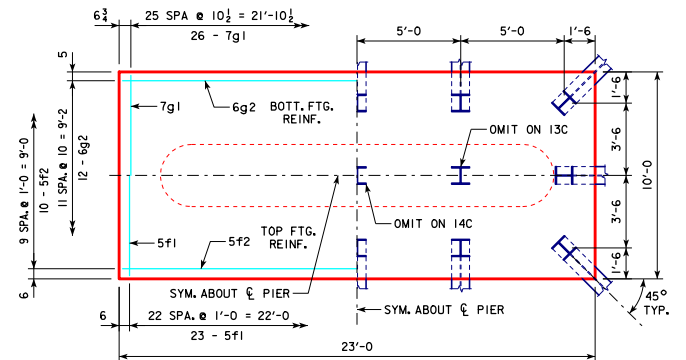


**d2**

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



**3'-6 x 9'-0 x 23'-0 FOR 13B, 14B & 15B**



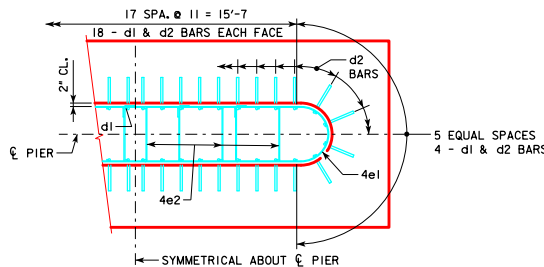
**3'-6 x 10'-0 x 23'-0 FOR 13C, 14C & 15C**

**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 H24-64-06.
- BATTER PILES IN EXTERIOR ROWS I4 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.

H IN FT.	CL ABUT. BRG.	PILING (HP10x57)		FOOTING SIZE
		NO. & LAYOUT	(1) LRFD P <sub>u</sub> STRENGTH DES. LOAD (KIPS)	
18	201'-4	13A	139	3'-6 x 8' x 23'
	213'-10	13A	145	
	226'-4	14A	141	
	243'-0	15A	140	
16	201'-4	13B	143	3'-6 x 9' x 23'
	213'-10	14B	139	
	226'-4	14B	145	
	243'-0	15B	143	
14	201'-4	13C	147	3'-6 x 10' x 23'
	213'-10	14C	142	
	226'-4	15C	141	
	243'-0	15C	146	

FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)			TOTAL WEIGHT (LB.)	STRUCTURAL CONCRETE (CY)	
	BAR	NO., SIZE & SPACING	LENGTH			
3'-6 x 8' x 23'	d2	44 - #10 AS SHOWN	10'-0	1893	2948	23.9
	f1	23 - #5 @ 1'-0	7'-8	184		
	f2	8 - #5 @ 1'-0	22'-8	189		
	g1	23 - #6 @ 1'-0	7'-8	265		
	g2	9 - #7 @ 0'-11	23'-8	417		
3'-6 x 9' x 23'	d2	44 - #10 AS SHOWN	10'-0	1893	3069	26.8
	f1	23 - #5 @ 1'-0	8'-8	208		
	f2	9 - #5 @ 1'-0	22'-8	213		
	g1	26 - #6 @ 0'-10 1/2	8'-8	338		
	g2	9 - #7 @ 1'-0	22'-8	417		
3'-6 x 10' x 23'	d2	44 - #10 AS SHOWN	10'-0	1893	3284	29.8
	f1	23 - #5 @ 1'-0	9'-8	232		
	f2	10 - #5 @ 1'-0	22'-8	236		
	g1	26 - #7 @ 0'-10 1/2	9'-8	514		
	g2	12 - #6 @ 0'-10	22'-8	409		



**d2 BAR LAYOUT**  
(SEE SECTION A-A ON SHEET H24-64-06.)

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

LATEST REVISION DATE 09-2016	APPROVED BY BRIDGE ENGINEER <i>Thomas E. McQuill</i>	<p><b>Iowa Department of Transportation</b> Highway Division</p>	<p>STANDARD DESIGN - 24' ROADWAY, THREE SPAN BRIDGE</p> <p><b>PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES</b></p> <p>DECEMBER, 2006</p>