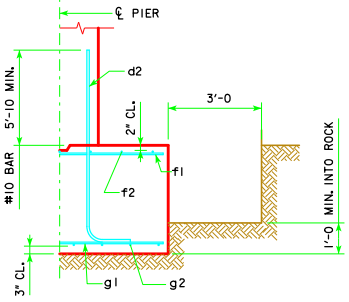
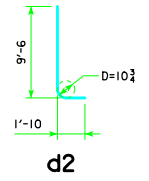


REVISED 04-12 - EXCAVATION LIMIT WAS CHANGED TO 3'-0".

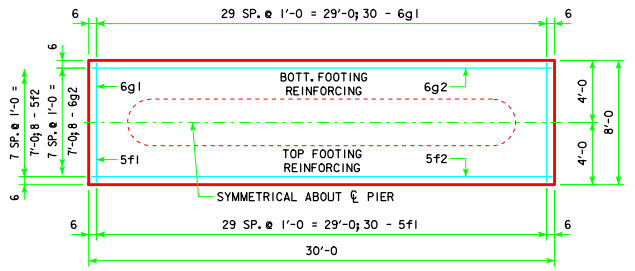
H IN FT.	CL. - CL. ABUT. BRG.	FOOTING SIZE
25 TO 27	138'-10"	4' x 8' x 30'
	151'-4"	
	163'-10"	
	176'-4"	4' x 9' x 30'
	188'-10"	
	201'-4"	4' x 9' x 32'
	213'-10"	
	226'-4"	4' x 10' x 32'
	243'-0"	
28 TO 30	138'-10"	4' x 8' x 30'
	151'-4"	
	163'-10"	
	176'-4"	4' x 9' x 30'
	188'-10"	
	201'-4"	4' x 9' x 32'
	213'-10"	
	226'-4"	4' x 10' x 32'
	243'-0"	
31 TO 33	138'-10"	4' x 9' x 30'
	151'-4"	
	163'-10"	
	176'-4"	4' x 9' x 32'
	188'-10"	
	201'-4"	4' x 9' x 32'
	213'-10"	
	226'-4"	4' x 10' x 32'
	243'-0"	
34 TO 36	138'-10"	4' x 9' x 30'
	151'-4"	
	163'-10"	
	176'-4"	4' x 9' x 32'
	188'-10"	
	201'-4"	4' x 10' x 32'
	213'-10"	
	226'-4"	4' x 10' x 34'
	243'-0"	
37 TO 40	138'-10"	4' x 9' x 30'
	151'-4"	
	163'-10"	
	176'-4"	4' x 9' x 32'
	188'-10"	
	201'-4"	4' x 10' x 32'
	213'-10"	
	226'-4"	4' x 10' x 34'
	243'-0"	



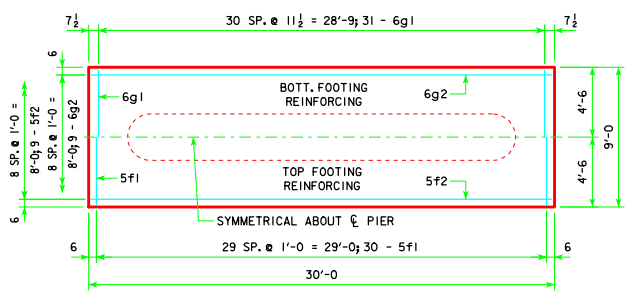
**TYPICAL SECTION**



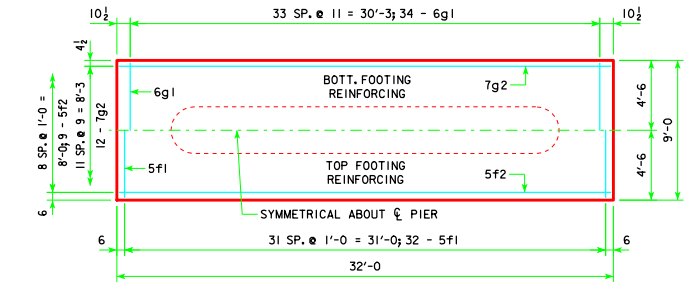
NOTE: D = PIN DIAMETER. DIMENSIONS ARE OUT TO OUT.



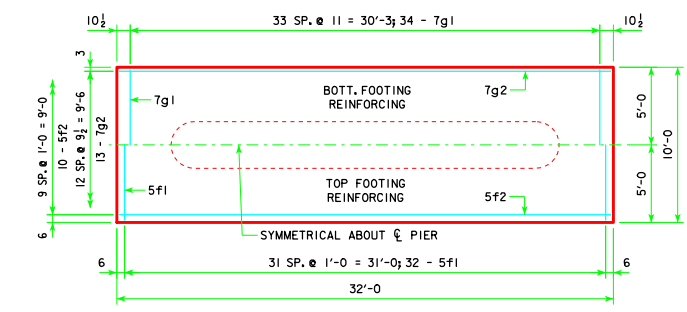
**4'-0 x 8'-0 x 30'-0**



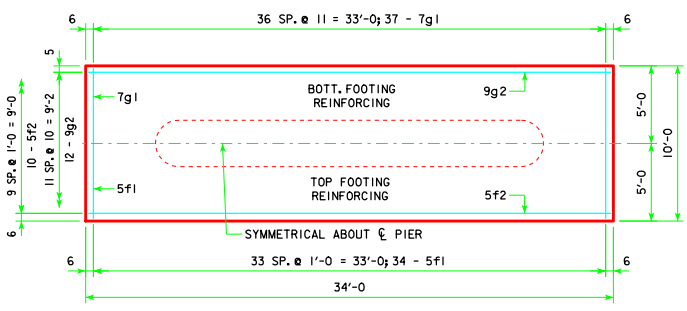
**4'-0 x 9'-0 x 30'-0**



**4'-0 x 9'-0 x 32'-0**



**4'-0 x 10'-0 x 32'-0**

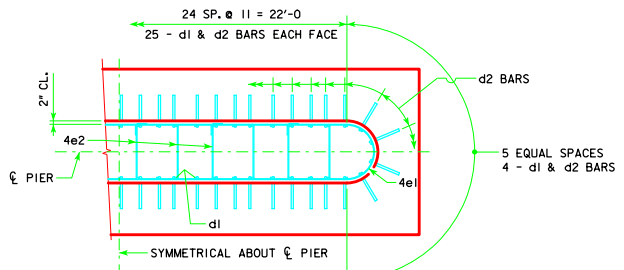


**4'-0 x 10'-0 x 34'-0**

**FOOTING NOTES:**

THESE SPREAD FOOTINGS ARE DESIGNED AND DETAILED TO BE USED WITH THE CAP AND COLUMN DETAILS OF THE TEE PIERS AS SHOWN ON SHEET H40-81-06.

THESE SPREAD FOOTINGS SHALL EXTEND AT LEAST 6 INCHES INTO SUITABLE FOUNDATION ROCK AND THE LAST 6 INCHES OF ROCK EXCAVATION SHALL BE TO NEAT LINES OF MASONRY. THE FOUNDATION ROCK SHALL HAVE A MINIMUM LRFD NOMINAL BEARING RESISTANCE OF 30 kips PER SQUARE FOOT (ALLOWABLE BEARING VALUE OF AT LEAST 5 TONS PER SQUARE FOOT).



**d2 LAYOUT**  
(SEE SECTION A-A ON SHEET H40-81-06.)

FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)				TOTAL WEIGHT (LB.)	STRUCTURAL CONCRETE (CY)
	BAR	NO., SIZE & SPACING	LENGTH	WEIGHT (LB.)		
4' x 8' x 30'	d2	58 - #10 AS SHOWN	11'-4"	2828	4017	35.6
	f1	30 - #5 @ 1'-0"	7'-8"	240		
	f2	8 - #5 @ 1'-0"	29'-8"	248		
	g1	30 - #6 @ 1'-0"	7'-8"	345		
	g2	8 - #6 @ 1'-0"	29'-8"	356		
4' x 9' x 30'	d2	58 - #10 AS SHOWN	11'-4"	2828	4182	40.0
	f1	30 - #5 @ 1'-0"	8'-8"	271		
	f2	9 - #5 @ 1'-0"	29'-8"	278		
	g1	31 - #6 @ 0'-11 1/2"	8'-8"	404		
	g2	9 - #6 @ 1'-0"	29'-8"	401		
4' x 9' x 32'	d2	58 - #10 AS SHOWN	11'-4"	2828	4634	42.7
	f1	32 - #5 @ 1'-0"	8'-8"	289		
	f2	9 - #5 @ 1'-0"	31'-8"	297		
	g1	34 - #6 @ 0'-11"	8'-8"	443		
	g2	12 - #7 @ 0'-9"	31'-8"	777		
4' x 10' x 32'	d2	58 - #10 AS SHOWN	11'-4"	2828	4994	47.4
	f1	32 - #5 @ 1'-0"	9'-8"	323		
	f2	10 - #5 @ 1'-0"	31'-8"	330		
	g1	34 - #7 @ 0'-11"	9'-8"	672		
	g2	13 - #7 @ 0'-9"	31'-8"	841		
4' x 10' x 34'	d2	58 - #10 AS SHOWN	11'-4"	2828	5627	50.4
	f1	34 - #5 @ 1'-0"	9'-8"	343		
	f2	10 - #5 @ 1'-0"	33'-8"	351		
	g1	37 - #7 @ 0'-11"	9'-8"	731		
	g2	12 - #9 @ 0'-10"	33'-8"	1374		

Iowa Department of Transportation  
Highway Division

STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE  
**PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES**  
AUGUST, 2009

TEE PIER - SPREAD FOOTINGS 45° SKEW - H=25' TO 40'	<b>H40-88-06</b>
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LATEST REVISION DATE

04-12

APPROVED BY BRIDGE ENGINEER

Thomas E. Mc Donnell