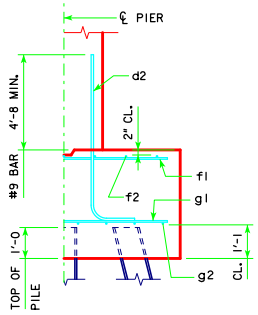
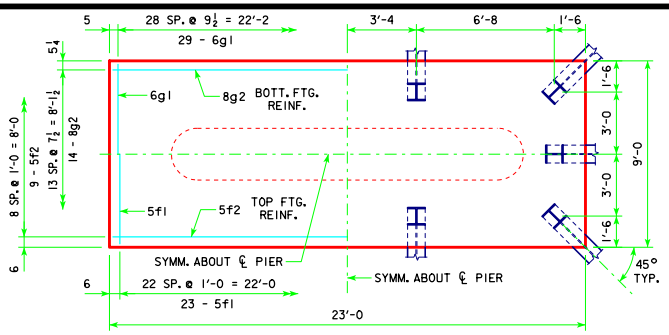
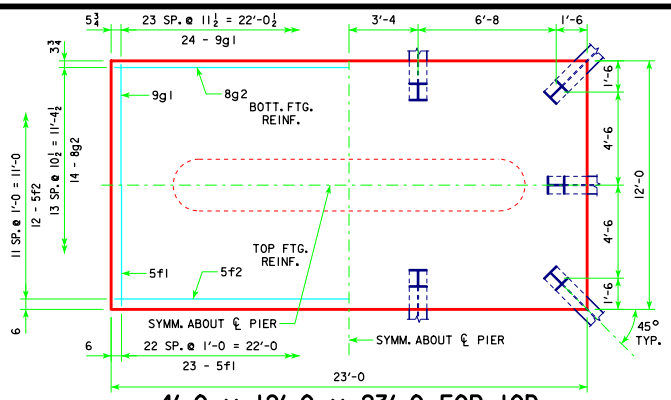


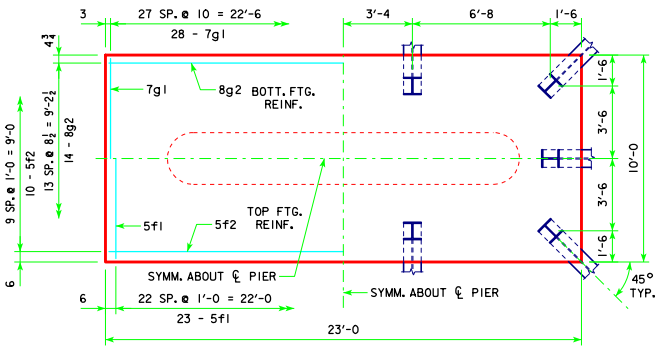
TYPICAL SECTION



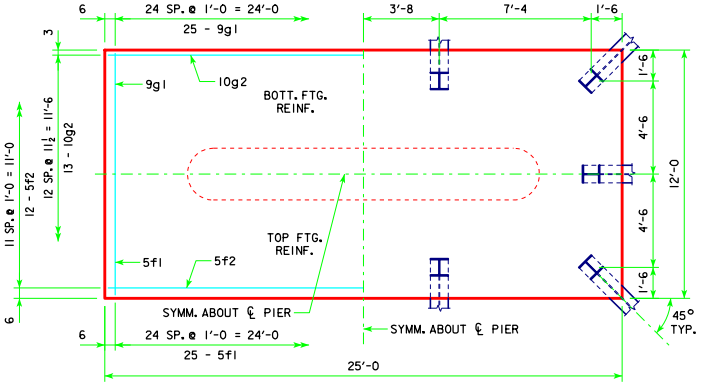
4'-0 x 9'-0 x 23'-0 FOR 10B



4'-0 x 12'-0 x 23'-0 FOR 10D



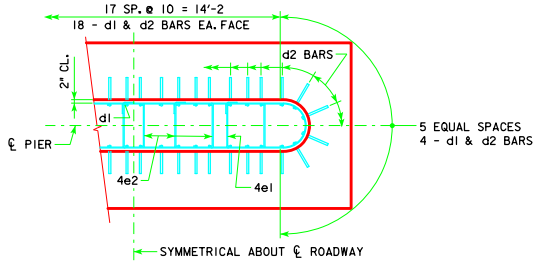
4'-0 x 10'-0 x 23'-0 FOR 10C



4'-0 x 12'-0 x 25'-0 FOR 10E

H IN FT.	℄ - ℄ ABUT. BRG.	PILING (HP10x57) NO. & LAYOUT	① LRFD Pu, STRENGTH I, DES. LOAD (KIPS)	FOOTING SIZE
25 TO 27	201'-4	10B	180	4' x 9' x 23'
	213'-10	10B	186	
	226'-4	10B	194	
	243'-0	10B	200	
28 TO 30	201'-4	10B	187	4' x 9' x 23'
	213'-10	10B	193	
	226'-4	10B	200	
	243'-0	10B	207	
31 TO 33	201'-4	10C	192	4' x 10' x 23'
	213'-10	10C	196	
	226'-4	10C	202	
	243'-0	10C	209	
34 TO 36	201'-4	10D	198	4' x 12' x 23'
	213'-10	10D	202	
	226'-4	10D	206	
	243'-0	10D	211	
37 TO 40	201'-4	10E	205	4' x 12' x 25'
	213'-10	10E	209	
	226'-4	10E	213	
	243'-0	10E	217	

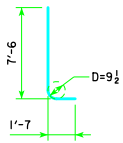
FOOTING SIZE	REINFORCING STEEL (ONE FOOTING) BAR	NO., SIZE & SPACING	LENGTH	WEIGHT (LB.)	TOTAL WEIGHT (LB.)	STRUCTURAL CONCRETE (CY)
4' x 9' x 23'	d2	44 - #9 AS SHOWN	9'-1	1359	3005	30.7
	f1	23 - #5 @ 1'-0	8'-8	208		
	f2	9 - #5 @ 1'-0	22'-8	213		
	g1	29 - #6 @ 0'-9½	8'-8	378		
	g2	14 - #8 @ 0'-7½	22'-8	847		
4' x 10' x 23'	d2	44 - #9 AS SHOWN	9'-1	1359	3227	34.1
	f1	23 - #5 @ 1'-0	9'-8	232		
	f2	10 - #5 @ 1'-0	22'-8	236		
	g1	28 - #7 @ 0'-10	9'-8	553		
	g2	14 - #8 @ 0'-8½	22'-8	847		
4' x 12' x 23'	d2	44 - #9 AS SHOWN	9'-1	1359	3722	40.9
	f1	23 - #5 @ 1'-0	11'-8	280		
	f2	12 - #5 @ 1'-0	22'-8	284		
	g1	24 - #9 @ 0'-11½	11'-8	952		
	g2	14 - #8 @ 0'-10½	22'-8	847		
4' x 12' x 25'	d2	44 - #9 AS SHOWN	9'-1	1359	4344	44.4
	f1	25 - #5 @ 1'-0	11'-8	304		
	f2	12 - #5 @ 1'-0	24'-8	309		
	g1	25 - #9 @ 1'-0	11'-8	992		
	g2	13 - #10 @ 0'-11½	24'-8	1380		



d2 BAR LAYOUT

(SEE SECTION A-A ON SHEET H24-50-06.)

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



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 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

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 24' ROADWAY, THREE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

DECEMBER, 2006

TEE PIER-HP10x57 SRL-2 STEEL PILE FOOTINGS

0° SKEW - H=25' TO 40'

H24-54-06

REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.