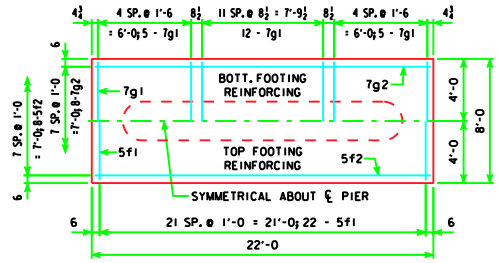
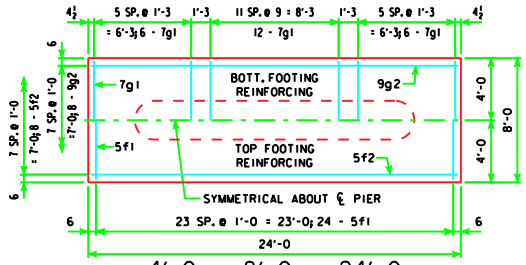
H IN FT.	℄ - ℄ ABUT. BRG.	FOOTING SIZE
25 TO 27	138'-10 151'-4 163'-10 176'-4	4' x 8' x 22'
	188'-10 201'-4	4' x 8' x 24'
	213'-10 226'-4 243'-0	4' x 9' x 24'
28 TO 30	138'-10 151'-4 163'-10	4' x 8' x 22'
	176'-4 188'-10 201'-4	4' x 8' x 24'
	213'-10 226'-4 243'-0	4' x 9' x 24'
31 TO 33	138'-10 151'-4 163'-10 176'-4	4' x 8' x 24'
	188'-10 201'-4 213'-10 226'-4 243'-0	4' x 9' x 24'
34 TO 36	138'-10 151'-4	4' x 8' x 24'
	163'-10 176'-4 188'-10 201'-4	4' x 9' x 24'
	213'-10 226'-4 243'-0	4' x 10' x 24'
37 TO 40	138'-10 151'-4	4' x 9' x 24'
	163'-10 176'-4 188'-10 201'-4 213'-10 226'-4 243'-0	4' x 10' x 24'

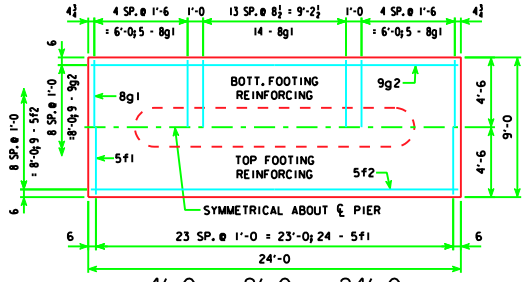
FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)					STRUCTURAL CONCRETE (CY)
	BAR	NO., SIZE & SPACING	LENGTH	WEIGHT (LB.)	TOTAL WEIGHT (LB.)	
4' x 8' x 22'	d2	46 - #9 AS SHOWN	9'-11	1551	2607	26.1
	f1	22 - #5 @ 1'-0	7'-8	176		
	f2	8 - #5 @ 1'-0	21'-8	181		
	g1	22 - #7 AS SHOWN	7'-8	345		
	g2	8 - #7 @ 1'-0	21'-8	354		
4' x 8' x 24'	d2	46 - #9 AS SHOWN	9'-11	1551	2960	28.4
	f1	24 - #5 @ 1'-0	7'-8	192		
	f2	8 - #5 @ 1'-0	23'-8	197		
	g1	24 - #7 AS SHOWN	7'-8	376		
	g2	8 - #9 @ 1'-0	23'-8	644		
4' x 9' x 24'	d2	46 - #9 AS SHOWN	9'-11	1551	3269	32.0
	f1	24 - #5 @ 1'-0	8'-8	217		
	f2	9 - #5 @ 1'-0	23'-8	222		
	g1	24 - #8 AS SHOWN	8'-8	555		
	g2	9 - #9 @ 1'-0	23'-8	724		
4' x 10' x 24'	d2	46 - #9 AS SHOWN	9'-11	1551	3634	35.6
	f1	24 - #5 @ 1'-0	9'-8	242		
	f2	10 - #5 @ 1'-0	23'-8	247		
	g1	24 - #9 AS SHOWN	9'-8	789		
	g2	10 - #9 @ 1'-0	23'-8	805		



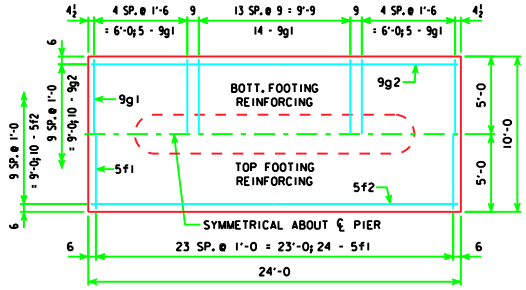
4'-0 x 8'-0 x 22'-0



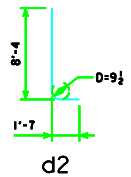
4'-0 x 8'-0 x 24'-0



4'-0 x 9'-0 x 24'-0

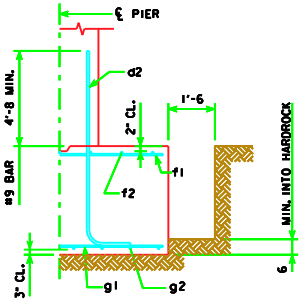


4'-0 x 10'-0 x 24'-0

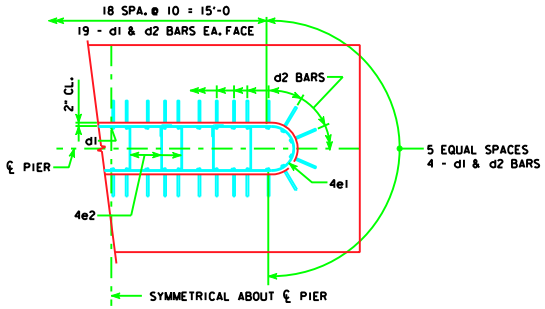


d2

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



TYPICAL SECTION



d2 BAR LAYOUT
(SEE SECTION A-A ON SHEET H40-59-06.)

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 H40-59-06.

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 AN ALLOWABLE BEARING VALUE OF AT LEAST 5 TONS PER SQUARE FOOT.

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

HL93 SUPERSTRUCTURE DECEMBER, 2006 HS25 SUBSTRUCTURE

TEE PIER - SPREAD FOOTINGS, H=25' TO 40'
15° SKEW

H40-64-06