

H IN FT.	ℓ - ℓ ABUT. BRG.	FOOTING SIZE
16 TO 18	138'-10"	3'-6" x 9' x 22'
	151'-4"	
	163'-10"	
	176'-4"	3'-6" x 9' x 24'
	188'-10"	
19 TO 21	201'-4"	3'-6" x 9' x 26'
	213'-10"	
	226'-4"	3'-6" x 10' x 26'
	243'-0"	
	138'-10"	3'-6" x 9' x 22'
22 TO 24	151'-4"	
	163'-10"	3'-6" x 9' x 24'
	176'-4"	
	188'-10"	3'-6" x 9' x 26'
	201'-4"	
	213'-10"	
	226'-4"	3'-6" x 10' x 26'
	243'-0"	
	138'-10"	3'-6" x 9' x 22'
	151'-4"	
	163'-10"	3'-6" x 9' x 24'
	176'-4"	
	188'-10"	3'-6" x 9' x 26'
	201'-4"	
	213'-10"	
	226'-4"	3'-6" x 10' x 26'
	243'-0"	

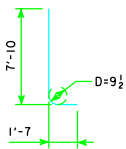


Diagram illustrating the reinforcement details for a rectangular pier cross-section. The pier is 22'-0" wide and 9'-0" high. The reinforcement layout is as follows:

- Top Reinforcement:** 6g1 (left), 6g2 (right), and 8 SP. # 1'-0" = 8'-0" 9 = 52.
- Bottom Reinforcement:** 5f1 (left), 5f2 (right), and 21 SP. # 1'-0" = 21'-0" 22 = 5 f1.
- Vertical Dimensions:** 4'-6" (top section), 4'-5" (bottom section), and 10'-6" (total height).
- Horizontal Dimensions:** 21 SP. # 9 1/2 = 21'-4 1/2" (width of the central reinforcement area).
- Reinforcement Labels:** BOTT. FOOTING REINFORCING, TOP FOOTING REINFORCING, and SYMMETRICAL ABOUT C. PIER.

Diagram illustrating the reinforcement details for a rectangular pier cross-section. The pier is 24'-0" wide and 9'-0" high. The reinforcement layout includes:

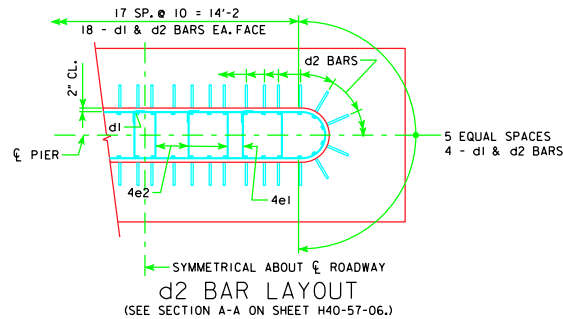
- Top Reinforcement:** 30 SP, 6 9 = 22'-6" 3I - 6g I
- Bottom Reinforcement:** 23 SP, 6 1'-0 = 23'-0" 24 - 5f I
- Reinforcement Labels:** 6g I, 8g 2, 5f I, 5f 2
- Dimensions:**
 - Overall width: 24'-0"
 - Overall height: 9'-0"
 - Top concrete cover: 9"
 - Bottom concrete cover: 9"
 - Clear height (top): 4'-6"
 - Clear height (bottom): 4'-5"
 - Clear width: 10'-8g 2
- Symmetry:** SYMMETRICAL ABOUT C_L PIER

Diagram illustrating the reinforcement details for a rectangular pier cross-section. The pier is 26'-0" wide and 9'-0" high. The reinforcement is distributed as follows:

- Top Reinforcement:** 28 SP. $\varnothing$ 10 $\frac{1}{2}$ = 24'-6"; 29 - 7g1
- Bottom Reinforcement:** 25 SP. $\varnothing$ 1" = 25'-0"; 26 - 5f1
- Vertical Dimensions:** 9'-0" total height, with 4'-6" for the top and bottom sections, and 9'-0" for the central section.
- Horizontal Dimensions:** 26'-0" total width, with 24'-6" for the top reinforcement and 25'-0" for the bottom reinforcement.
- Reinforcement Labels:** 7g1, 10g2, 5f1, 5f2
- Notes:** BOTT. FOOTING REINFORCING, TOP FOOTING REINFORCING, SYMMETRICAL ABOUT C. PIER

Diagram of a rectangular footing showing reinforcement details. The footing is 26'-0" wide and 10'-0" deep. It has 33 top bars (9 #9 and 24 #9) and 25 bottom bars (5 #1 and 20 #5). The diagram shows the distribution of bars, including 7 #1 bars on the left, 10 #2 bars on the right, and 5 #1 bars on the left. The footing is symmetrical about the centerline of the pier.

FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)				TOTAL WEIGHT (LB.)	STRUCTURAL CONCRETE (CY)
	BAR	NO., SIZE & SPACING	LENGTH	WEIGHT (LB.)		
3'-6 x 9' x 22'	d2	44 - #9 AS SHOWN	9'-5	1409	2500	25.7
	f1	22 - #5 @ 1'-0	8'-8	199		
	f2	9 - #5 @ 1'-0	21'-8	203		
	g1	28 - #6 @ 0'-9 1/2	8'-8	364		
	g2	10 - #6 @ 0'-11	21'-8	325		
3'-6 x 9' x 24'	d2	44 - #9 AS SHOWN	9'-5	1409	2884	28.0
	f1	24 - #5 @ 1'-0	8'-8	217		
	f2	9 - #5 @ 1'-0	23'-8	222		
	g1	31 - #6 @ 0'-9	8'-8	404		
	g2	10 - #8 @ 0'-11	23'-8	632		
3'-6 x 9' x 26'	d2	44 - #9 AS SHOWN	9'-5	1409	3503	30.3
	f1	26 - #5 @ 1'-0	8'-8	235		
	f2	9 - #5 @ 1'-0	25'-8	241		
	g1	29 - #7 @ 0'-10 1/2	8'-8	514		
	g2	10 - #10 @ 0'-10	25'-8	1104		
3'-6 x 10' x 26'	d2	44 - #9 AS SHOWN	9'-5	1409	3826	33.7
	f1	26 - #5 @ 1'-0	9'-8	262		
	f2	10 - #5 @ 1'-0	25'-8	268		
	g1	34 - #7 @ 0'-9	9'-8	672		
	g2	11 - #10 @ 0'-11	25'-8	1215		



10-09 LATEST REVISION DATE <i>Norman E. McDaniel</i> APPROVED BY BRIDGE ENGINEER	Iowa Department of Transportation Highway Division	
	STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES AUGUST, 2009	
	TEE PIER - SPREAD FOOTINGS 0° SKEW - H=16' TO 24'	H40-63-06