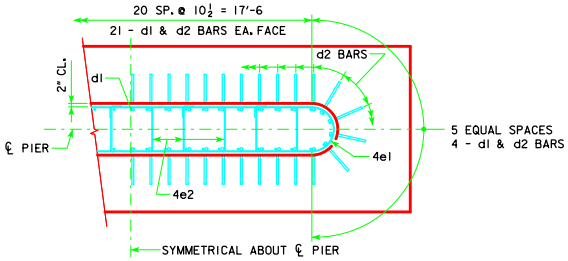
H IN FT.	℄ - ℄ ABUT. BRG.	FOOTING SIZE
16 TO 18	160'-0	4' x 8' x 26'
	180'-0	
	200'-0	4' x 8' x 28'
	220'-0	4' x 9' x 28'
	240'-0	
	260'-0	4' x 9' x 30'
	280'-0	4' x 10' x 30'
	300'-0	
	320'-0	
	340'-0	4' x 10' x 32'
19 TO 21	160'-0	4' x 8' x 26'
	180'-0	4' x 8' x 28'
	200'-0	
	220'-0	4' x 9' x 28'
	240'-0	
	260'-0	4' x 9' x 30'
	280'-0	4' x 10' x 30'
	300'-0	
	320'-0	4' x 10' x 32'
	340'-0	
22 TO 24	160'-0	4' x 8' x 26'
	180'-0	4' x 8' x 28'
	200'-0	
	220'-0	4' x 9' x 28'
	240'-0	4' x 9' x 30'
	260'-0	
	280'-0	4' x 10' x 30'
	300'-0	
	320'-0	4' x 10' x 32'
	340'-0	4' x 11' x 32'
25 TO 27	160'-0	4' x 8' x 28'
	180'-0	
	200'-0	4' x 9' x 28'
	220'-0	
	240'-0	4' x 9' x 30'
	260'-0	4' x 10' x 30'
	280'-0	
	300'-0	4' x 10' x 32'
	320'-0	
	340'-0	4' x 11' x 32'
28 TO 30	160'-0	4' x 8' x 28'
	180'-0	
	200'-0	4' x 9' x 28'
	220'-0	
	240'-0	4' x 9' x 30'
	260'-0	4' x 10' x 30'
	280'-0	
	300'-0	4' x 10' x 32'
	320'-0	
	340'-0	4' x 11' x 32'
31 TO 33	160'-0	4' x 8' x 28'
	180'-0	
	200'-0	4' x 9' x 28'
	220'-0	
	240'-0	4' x 9' x 30'
	260'-0	4' x 10' x 30'
	280'-0	
	300'-0	4' x 10' x 32'
	320'-0	
	340'-0	4' x 11' x 32'
34 TO 36	160'-0	4' x 8' x 28'
	180'-0	
	200'-0	4' x 9' x 28'
	220'-0	4' x 9' x 30'
	240'-0	
	260'-0	4' x 10' x 30'
	280'-0	
	300'-0	4' x 10' x 32'
	320'-0	
	340'-0	4' x 11' x 32'

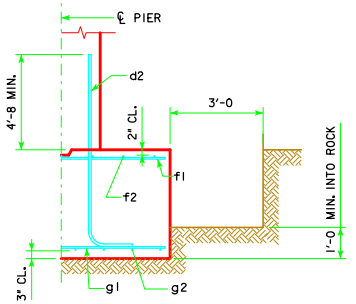
H IN FT.	℄ - ℄ ABUT. BRG.	FOOTING SIZE
37 TO 40	160'-0	4' x 9' x 28'
	180'-0	
	200'-0	4' x 9' x 30'
	220'-0	
	240'-0	4' x 10' x 30'
	260'-0	
	280'-0	4' x 10' x 32'
	300'-0	4' x 11' x 32'
	320'-0	
	340'-0	

FOOTING SIZE	REINFORCING STEEL (ONE FOOTING)					STRUCTURAL CONCRETE (CY)
	BAR	NO., SIZE & SPACING	LENGTH	WEIGHT (LB.)	TOTAL WEIGHT (LB.)	
4' x 8' x 26'	d2	50 - #9 AS SHOWN	9'-11	1686	2793	30.8
	f1	26 - #5 @ 1'-0	7'-8	208		
	f2	8 - #5 @ 1'-0	25'-8	214		
	g1	26 - #6 @ 1'-0	7'-8	299		
	g2	10 - #6 @ 0'-10	25'-8	386		
4' x 8' x 28'	d2	50 - #9 AS SHOWN	9'-11	1686	3202	33.2
	f1	28 - #5 @ 1'-0	7'-8	224		
	f2	8 - #5 @ 1'-0	27'-8	231		
	g1	28 - #6 @ 1'-0	7'-8	322		
	g2	10 - #8 @ 0'-10	27'-8	739		
4' x 9' x 28'	d2	50 - #9 AS SHOWN	9'-11	1686	3455	37.3
	f1	28 - #5 @ 1'-0	8'-8	253		
	f2	9 - #5 @ 1'-0	27'-8	260		
	g1	34 - #6 @ 0'-10	8'-8	443		
	g2	11 - #8 @ 0'-10	27'-8	813		
4' x 9' x 30'	d2	50 - #9 AS SHOWN	9'-11	1686	4028	40.0
	f1	30 - #5 @ 1'-0	8'-8	271		
	f2	9 - #5 @ 1'-0	29'-8	278		
	g1	37 - #6 @ 0'-9½	8'-8	482		
	g2	13 - #9 @ 0'-8½	29'-8	1311		
4' x 10' x 30'	d2	50 - #9 AS SHOWN	9'-11	1686	4362	44.4
	f1	30 - #5 @ 1'-0	9'-8	302		
	f2	10 - #5 @ 1'-0	29'-8	309		
	g1	45 - #6 @ 0'-8	9'-8	653		
	g2	14 - #9 @ 0'-8½	29'-8	1412		
4' x 10' x 32'	d2	50 - #9 AS SHOWN	9'-11	1686	4866	47.4
	f1	32 - #5 @ 1'-0	9'-8	323		
	f2	10 - #5 @ 1'-0	31'-8	330		
	g1	48 - #6 @ 0'-8	9'-8	697		
	g2	17 - #9 @ 0'-7	31'-8	1830		
4' x 11' x 32'	d2	50 - #9 AS SHOWN	9'-11	1686	5452	52.1
	f1	32 - #5 @ 1'-0	10'-8	356		
	f2	11 - #5 @ 1'-0	31'-8	363		
	g1	46 - #7 @ 0'-8	10'-8	1003		
	g2	15 - #10 @ 0'-9	31'-8	2044		

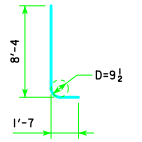


d2 BAR LAYOUT

(SEE SECTION A-A ON SHEET RS40-116-14.)



TYPICAL SECTION



d2

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

NOTE: THE REINFORCING STEEL QUANTITY IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

NOTE: THE CONCRETE QUANTITY IS TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

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 RS40-116-14.

THESE SPREAD FOOTINGS SHALL EXTEND AT LEAST 12 INCHES INTO SUITABLE FOUNDATION ROCK AND THE LAST 12 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 10 KIPS PER SQUARE FOOT).

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

IOWADOT Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES

ROLLED STEEL BEAM BRIDGES

OCTOBER, 2014

TEE PIER - SPREAD FOOTINGS

0° SKEW - SHEET 1

RS40-124-14