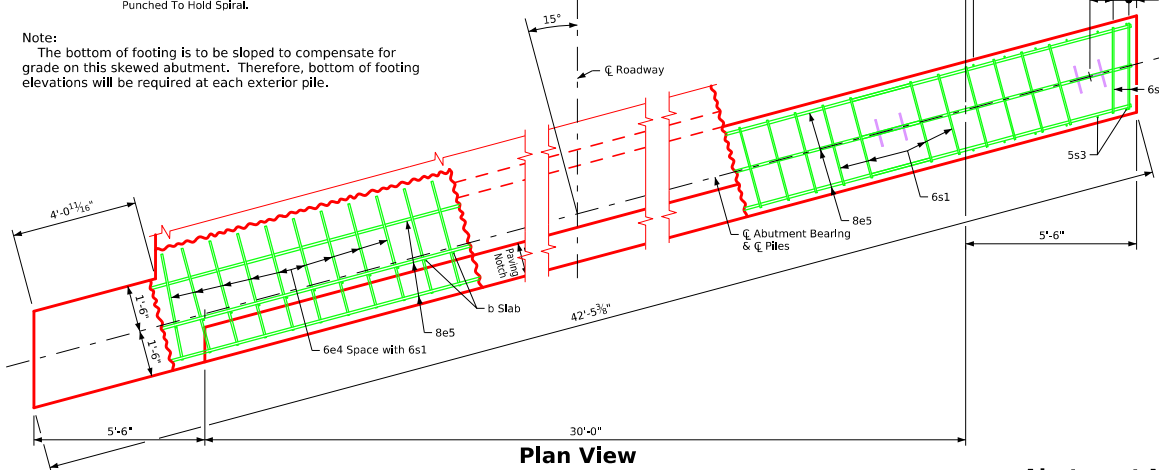


Rear Elevation

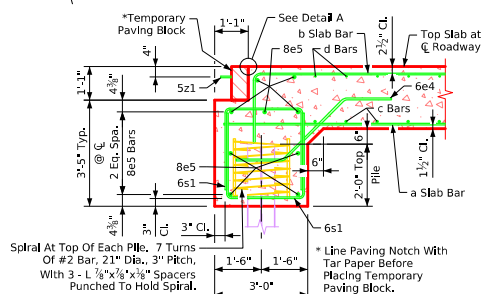
Spiral At Top Of Each Pile, 7 Turns Of #2 Bar, 21" Dia., 3" Pitch, With 3 - L 1/8"x1/8"x1/8" Spacers Punched To Hold Spiral.

Note: The bottom of footing is to be sloped to compensate for grade on this skewed abutment. Therefore, bottom of footing elevations will be required at each exterior pile.

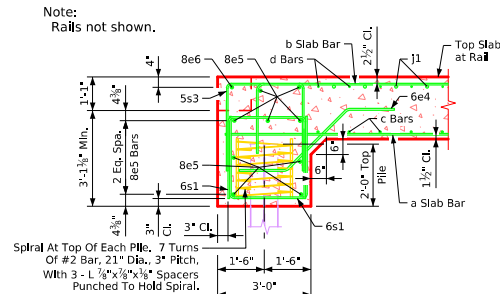


Plan View

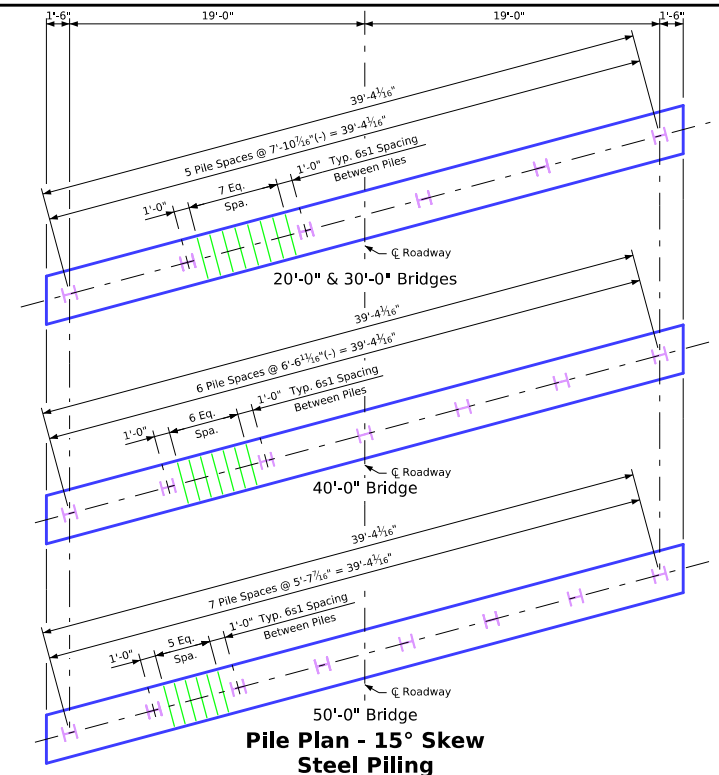
Note: Rails not shown.



Section Normal to Abutment at C



Section Normal to Abutment at Gutterline



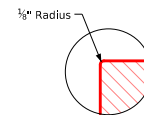
Pile Plan - 15° Skew Steel Piling

Number of Piles and Abutment Design Loads				
Bridge Length	20'-0"	30'-0"	40'-0"	50'-0"
Number of Piles	6	6	7	8
Pu, strength I design load for each abutment (kips)	491	598	712	851

Note: Pu, strength I design load for each abutment (kips) is not the value used in the field for driving piles.

Abutment Notes:

All piling HP 10x42.
The minimum clear distance from the face of the concrete to near reinforcing bar is to be 2 inches unless otherwise noted or shown.
Steel abutment piles shall be driven to full penetration if practicable but in no case to a bearing value less than specified in the design plans.
Abutment piling was designed for HL-93 loading with an allowance for 20 lbs. per sq. ft. future wearing surface.
All reinforcing bars are included with the superstructure quantities.



Detail A

Latest Revision Date Approved by Bridge Engineer	IOWA DOT Standard Design - 30'-0" Roadway, Single Span Bridge	
	Single Span Concrete Slab Bridges July, 2025	
	High Abutment Details 15° Skew	J30S-21-25