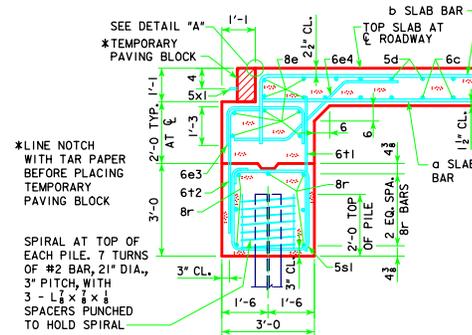
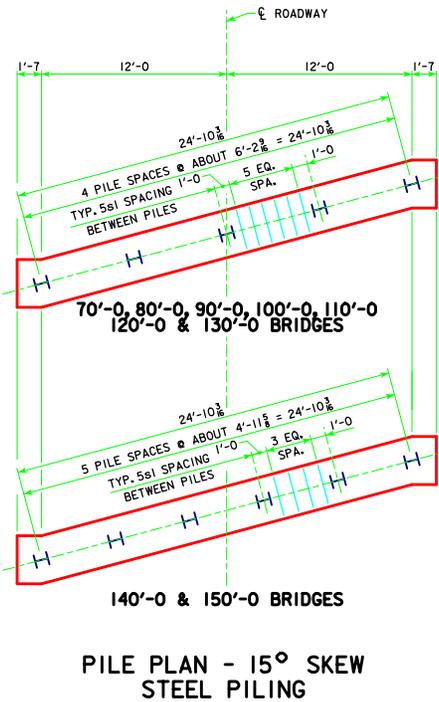
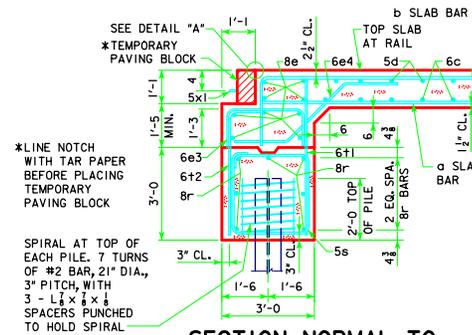


REVISED 06-13 - REVISION FOR LRFD PILE DESIGN.



**SECTION NORMAL TO ABUTMENT AT CL**

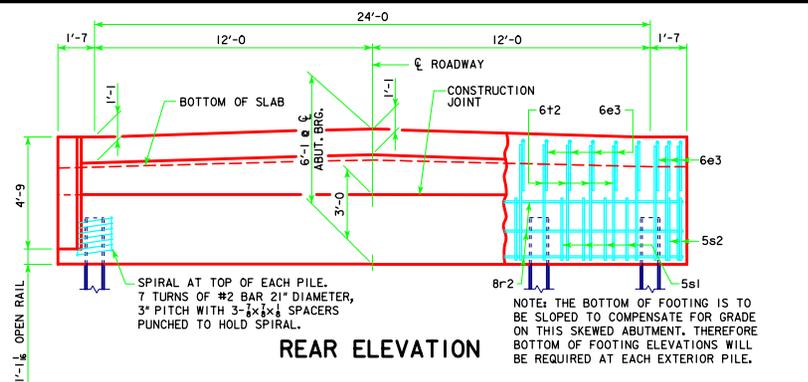


**SECTION NORMAL TO GUTTERLINE**

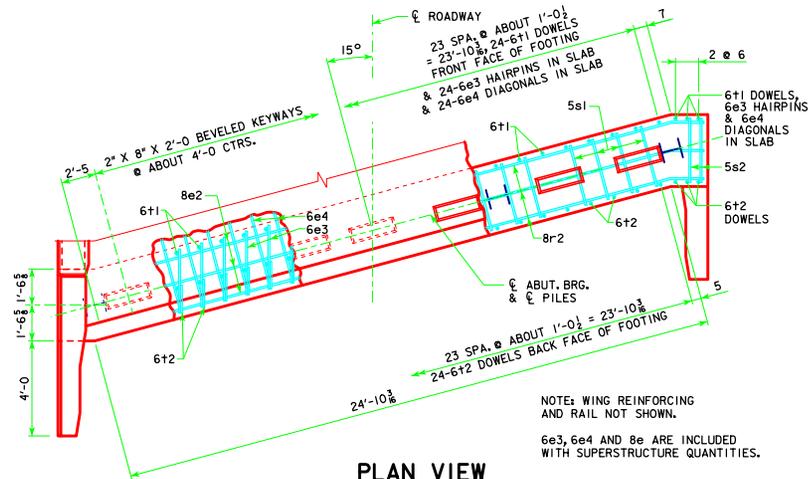


**ABUTMENT NOTES:**

- ALL PILING HP10x42.
- THE CONCRETE AND REINFORCING STEEL FOR THE WINGS IS INCLUDED WITH THE SUPERSTRUCTURE.
- DETAILS ON THIS SHEET ARE TO BE USED ONLY WHEN ABUTMENTS ARE PLACED ON STEEL PILES. IF ROCK IS ENCOUNTERED CLOSER THAN 12' BELOW ABUTMENT FOOTING, SPECIAL ANALYSIS MAY BE REQUIRED.
- 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 SHOWN IN DESIGN PLANS.
- ALL REINFORCING STEEL IS TO BE GRADE 60.
- ABUTMENT PILING WAS DESIGNED FOR HL-93 LOADING WITH AN ALLOWANCE FOR 20 LBS. PER SQ. FT. FUTURE WEARING SURFACE.



**REAR ELEVATION**



**PLAN VIEW**

NUMBER OF PILES AND ABUTMENT DESIGN LOADS									
BRIDGE LENGTH	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0
PILING - NUMBER	5	5	5	5	5	5	5	6	6
PU, STRENGTH I DESIGN LOAD - KIPS	348	369	390	417	442	471	499	Δ 590	Δ 622

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

06-13 LATEST REVISION DATE  <i>Thomas E. M. Dwyer</i> APPROVED BY BRIDGE ENGINEER	
	STANDARD DESIGN - 24' ROADWAY, 3 SPAN BRIDGES <b>CONTINUOUS CONCRETE SLAB BRIDGES</b> NOVEMBER, 2006
	<div style="text-align: center;"> <b>ABUTMENT DETAILS 15° SKEW - STEEL PILING</b> </div> <div style="text-align: center;"> <b>J24-35-06</b> </div>