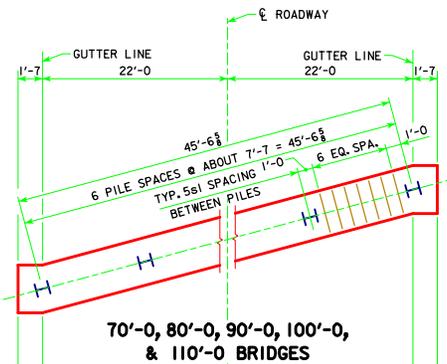
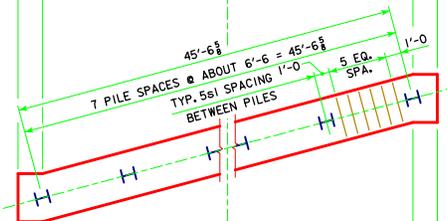


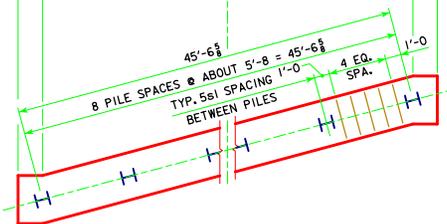
REVISED 06-13 - REVISION FOR LRFD PILE DESIGN.



**70'-0, 80'-0, 90'-0, 100'-0,
& 110'-0 BRIDGES**



120'-0 & 130'-0 BRIDGES



140'-0 & 150'-0 BRIDGES

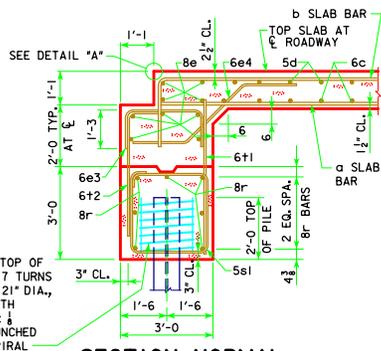
**PILE PLAN - 15° SKEW
STEEL PILING**



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	7	7	7	7	7	8	8	9	9
PU, STRENGTH I DESIGN LOAD - KIPS	509	544	577	618	658	705	749	Δ 875	Δ 927

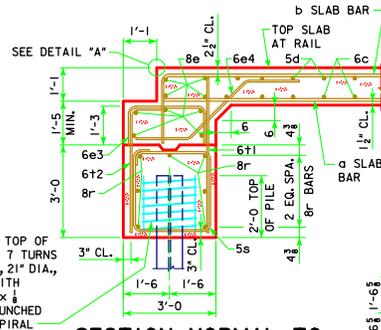
Δ INCLUDES DYNAMIC LOAD ALLOWANCE
NOTE: PU, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.

SPIRAL AT TOP OF EACH PILE. 7 TURNS OF #2 BAR, 21" DIA., 3" PITCH, WITH 3 - L₈ × 7/8 × 1/2 SPACERS PUNCHED TO HOLD SPIRAL.



SECTION NORMAL TO ABUTMENT AT ROADWAY

SPIRAL AT TOP OF EACH PILE. 7 TURNS OF #2 BAR, 21" DIA., 3" PITCH, WITH 3 - L₈ × 7/8 × 1/2 SPACERS PUNCHED TO HOLD SPIRAL.



SECTION NORMAL TO ABUTMENT AT GUTTERLINE

ABUTMENT NOTES:

ALL PILING HP10x42.

THE CONCRETE AND REINFORCING STEEL FOR THE WINGS IS INCLUDED WITH THE SUPERSTRUCTURE.

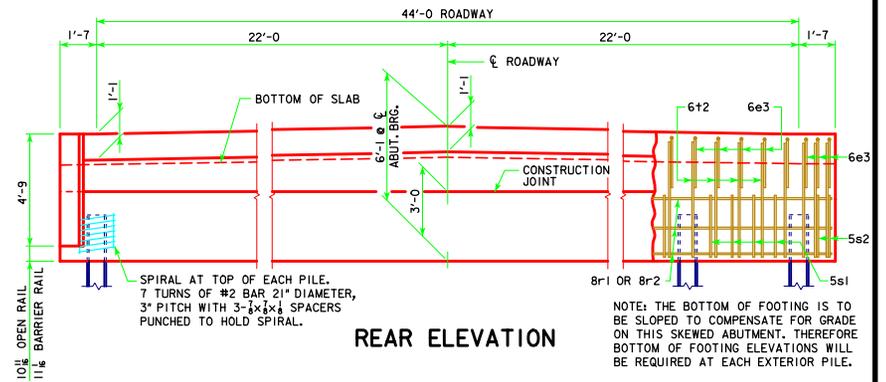
DETAILS ON THIS SHEET ARE TO BE USED ONLY WHEN ABUTMENTS ARE PLACED ON STEEL PILES. IF ROCK IS ENCOUNTERED CLOSER THAN 12' BELOW ABUTMENT FOOTING, SPECIAL ANALYSIS MAY BE REQUIRED.

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.

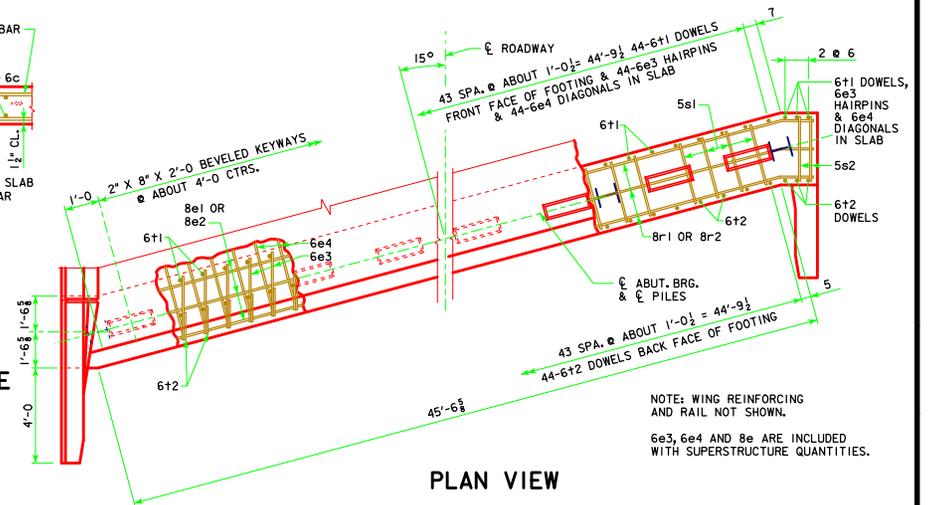
ALL REINFORCING STEEL IS TO BE GRADE 60.

ABUTMENT PILING WAS DESIGNED FOR HL-93 LOADING WITH AN ALLOWANCE FOR 20 LBS. PER SQ. FT. FUTURE WEARING SURFACE.



REAR ELEVATION

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: WING REINFORCING AND RAIL NOT SHOWN.
6e3, 6e4 AND 8e ARE INCLUDED WITH SUPERSTRUCTURE QUANTITIES.

LATEST REVISION DATE 06-13 APPROVED BY BRIDGE ENGINEER <i>Thomas E. M. Donnell</i>	
	STANDARD DESIGN - 44' ROADWAY, 3 SPAN BRIDGES CONTINUOUS CONCRETE SLAB BRIDGES NOVEMBER, 2006
	ABUTMENT DETAILS 15° SKEW - STEEL PILING
J44-40-06	