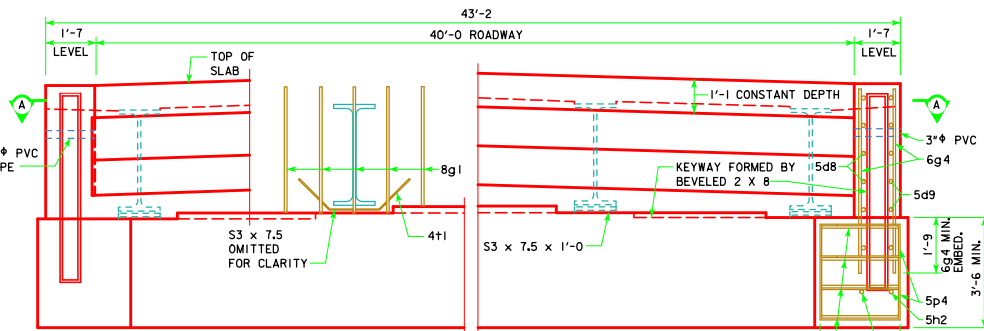
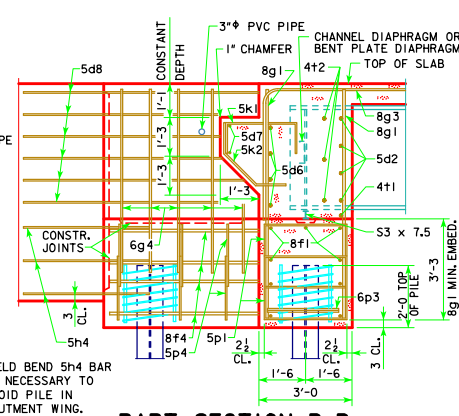


REVISED 10-14 - THE REFERENCE TO THE ABUTMENT STEP DIAGRAM SHEET WAS CHANGED TO GENERAL INFORMATION SHEET INSTEAD OF THE ESTIMATED BRIDGE QUANTITIES SHEET.



**PART REAR ELEVATION AT ABUTMENT**  
(WINGS NOT SHOWN)



**PART SECTION B-B**

**ABUTMENT NOTES:**

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.

IF NECESSARY TO PREVENT DAMAGE TO THE END OF THE BRIDGE DECK OR BACKWALL FROM CONSTRUCTION EQUIPMENT, AN APPROPRIATE METHOD OF PROTECTION APPROVED BY THE ENGINEER SHALL BE PROVIDED BY THE BRIDGE CONTRACTOR AT NO EXTRA COST TO THE COUNTY OR STATE.

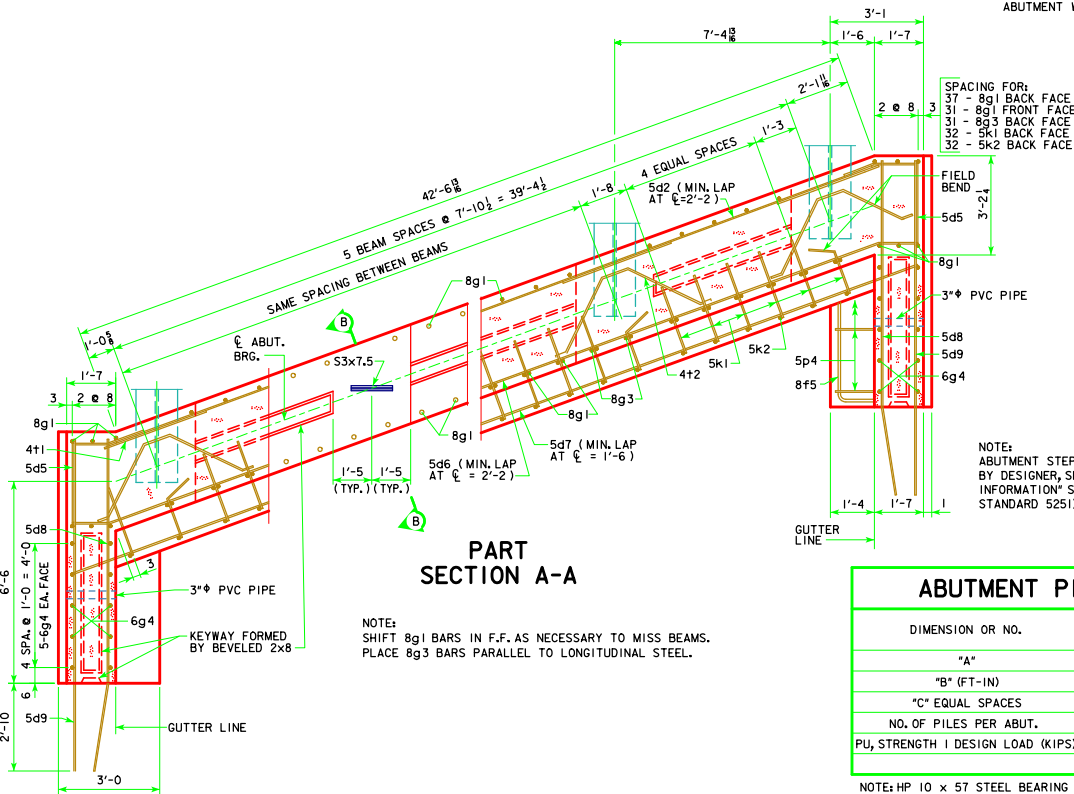
ABUTMENT PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.

BARRIER RAIL NOT SHOWN IN DETAILS.

IF ROCK IS CLOSER THAN 15' BELOW ABUTMENT FOOTING, SPECIAL ANALYSIS MAY BE REQUIRED.

**NOTES:**

- HOLES DRILLED THROUGH BEAM WEB FOR 5d2 AND 4t2 BARS.
- THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF No. 2 BAR, 2" DIAMETER, 3" PITCH WITH 3 - 1/2" x 1/2" x 1/2" SPACERS PUNCHED TO HOLD SPIRAL.



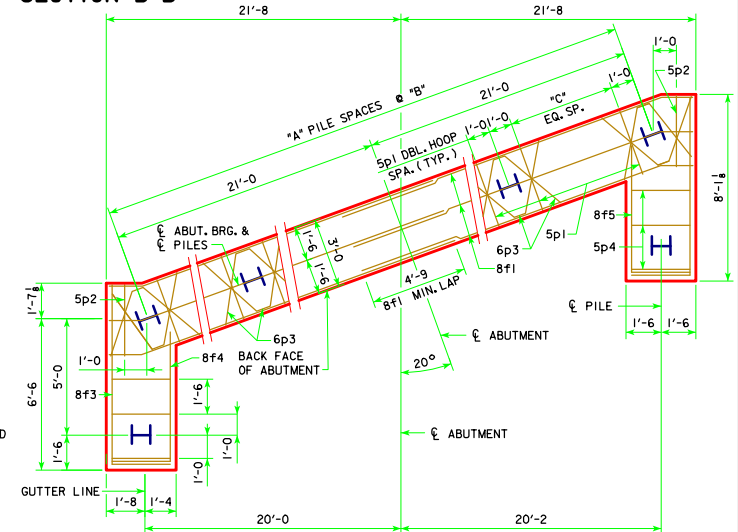
**PART SECTION A-A**

NOTE:  
SHIFT 8g1 BARS IN F.F. AS NECESSARY TO MISS BEAMS.  
PLACE 8g3 BARS PARALLEL TO LONGITUDINAL STEEL.

**ABUTMENT PILE SPACING**

DIMENSION OR NO.	ℓ TO ℓ ABUTMENT BEARING
"A"	340'-0
"B" (FT-IN)	9
"C" EQUAL SPACES	3
NO. OF PILES PER ABUT.	12
PU, STRENGTH I DESIGN LOAD (KIPS)	144

NOTE: HP 10 x 57 STEEL BEARING PILING REQUIRED.  
NOTE: PU, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.



**ABUTMENT PILE PLAN**

LATEST REVISION DATE 10-14 APPROVED BY BRIDGE ENGINEER <i>Norman E. Mc Donald</i>	
	STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES <b>ROLLED STEEL BEAM BRIDGES</b> JUNE, 2010
	<div style="text-align: center;"> <b>ABUTMENT DETAILS</b>  <b>20° SKEW</b> </div> <div style="text-align: right;"> <b>RS40-012-10</b> </div>