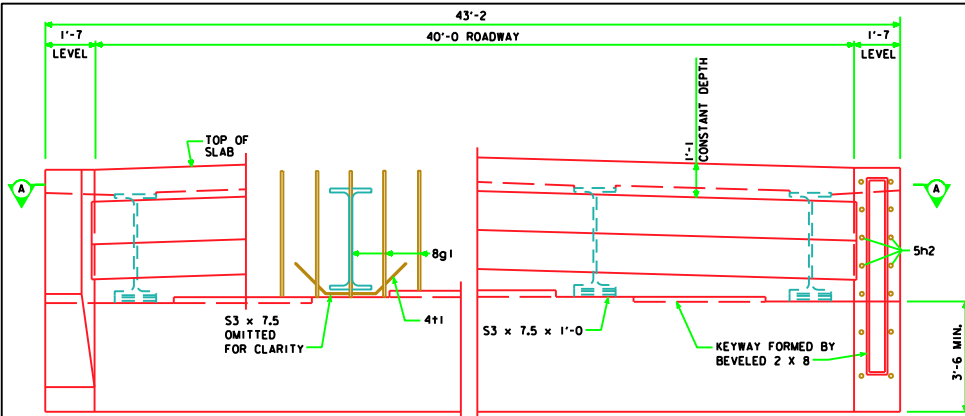


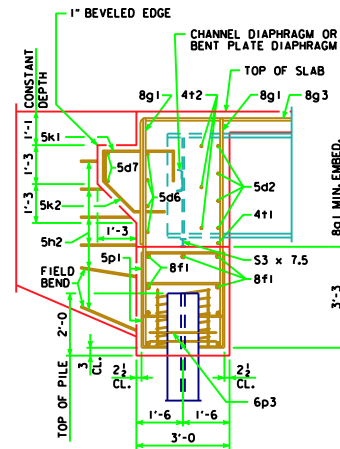
REVISION - 03-07 - CHANGED TO ALL EPOXY, PAVING NOTCH EXTENDED. PILE SIZE NOTE AND BARRIER RAIL NOTE ADDED.



PART REAR ELEVATION AT ABUTMENT

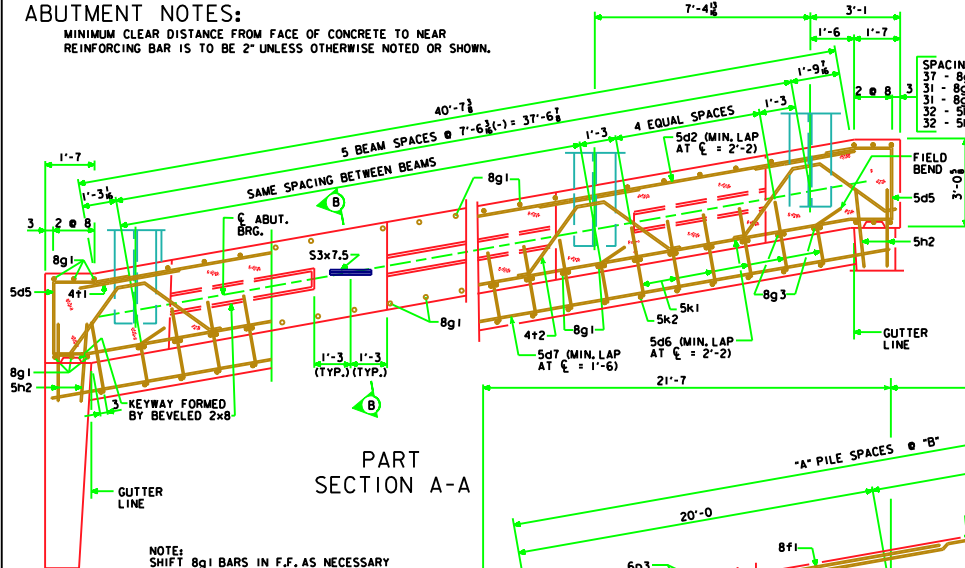
ABUTMENT NOTES:

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



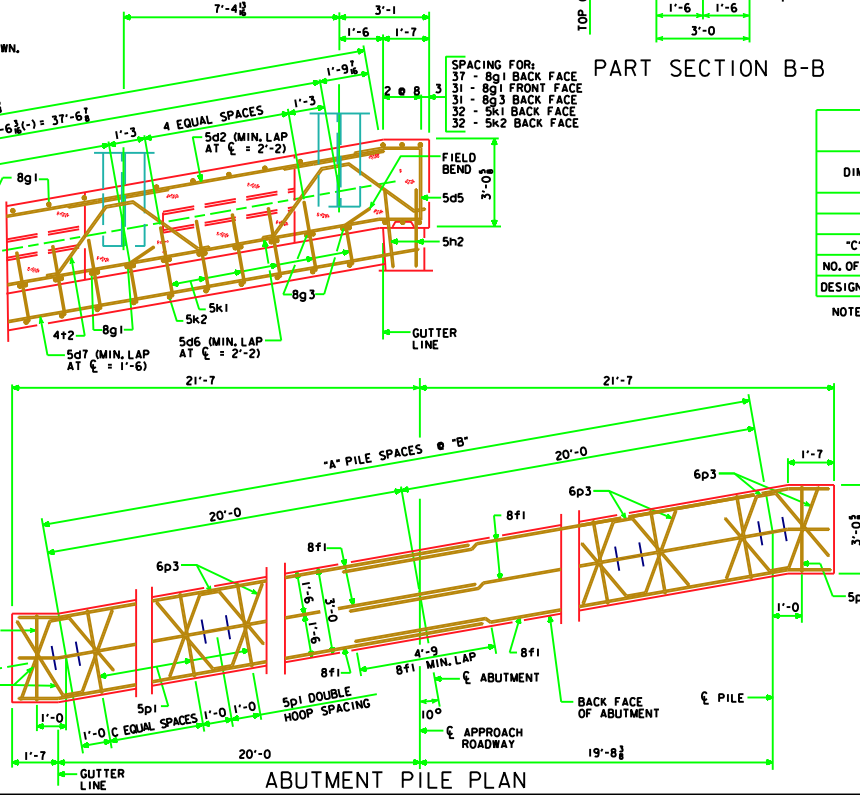
PART SECTION B-B

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



PART SECTION A-A

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



ABUTMENT PILE PLAN

ABUTMENT PILE SPACING

DIMENSION OR NO.	E TO E ABUTMENT BEARING						
	160'-0"	180'-0"	200'-0"	220'-0"	240'-0"	260'-0"	300'-0"
"A" (IN)	6	6	7	7	7	8	8
"B" (FT-IN)	6'-8	6'-8	5'-8 1/2	5'-8 1/2	5'-8 1/2	5'-0	5'-0
"C" EQUAL SPACES	5	5	4	4	4	3	3
NO. OF PILES PER ABUT.	7	7	8	8	8	9	9
DESIGN PILE LOAD (TONS)	34	36	33	35	36	37	35

NOTE: HP 10 x 42 STEEL BEARING PILING REQUIRED.

NOTE: ABUTMENT STEP DIAGRAM PROVIDED BY DESIGNER, SEE "ESTIMATED BRIDGE QUANTITIES" SHEET.

NOTE: BARRIER RAIL NOT SHOWN IN DETAILS.

03-07 LATEST REVISION DATE <i>Thomas L. M. Duff</i> APPROVED BY BRIDGE ENGINEER	 Iowa Department of Transportation Highway Division
	STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES ROLLED STEEL BEAM BRIDGES FEBRUARY, 2004
	ABUTMENT DETAILS 10° SKEW

RS40-22-04