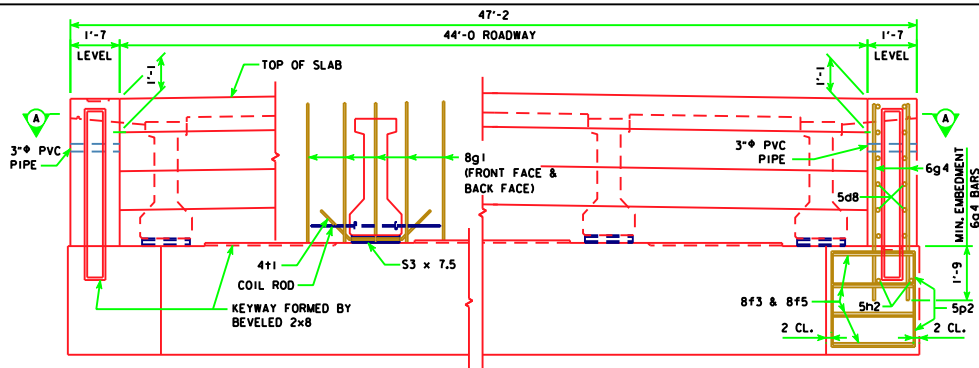
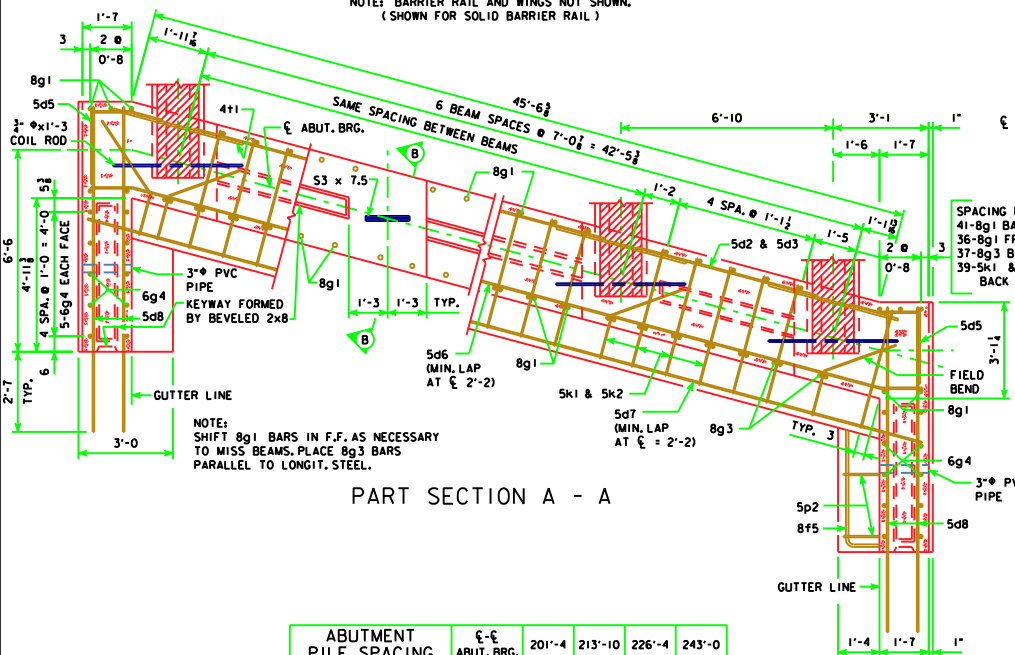




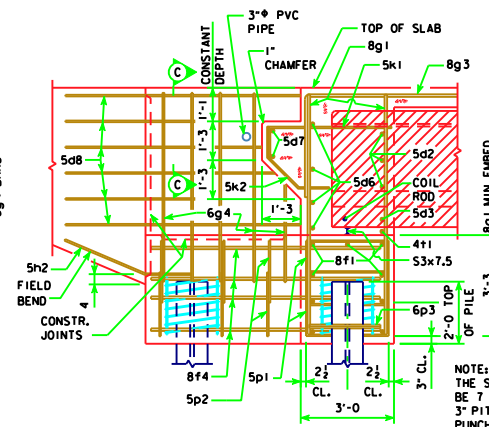
PART REAR ELEVATION AT ABUTMENT

NOTE: BARRIER RAIL AND WINGS NOT SHOWN.
(SHOWN FOR SOLID BARRIER RAIL)



PART SECTION A - A

ABUTMENT PILE SPACING		201'-4	213'-10	226'-4	243'-0
WITH STEEL H-PILES	"A" PILE SPACES	7	7	8	8
	"B" (FT. - IN.)	6'-4	6'-4	5'-6	5'-6
	"C" (FT. - IN.)	2'-4	2'-4	2'-6	2'-6
	"D" EQUAL SPACES	4	4	3	3
	NO. OF PILES PER ABUT.	10	10	11	11
DESIGN PILE LOAD (TONS)		49	50	46	49



PART SECTION B - B

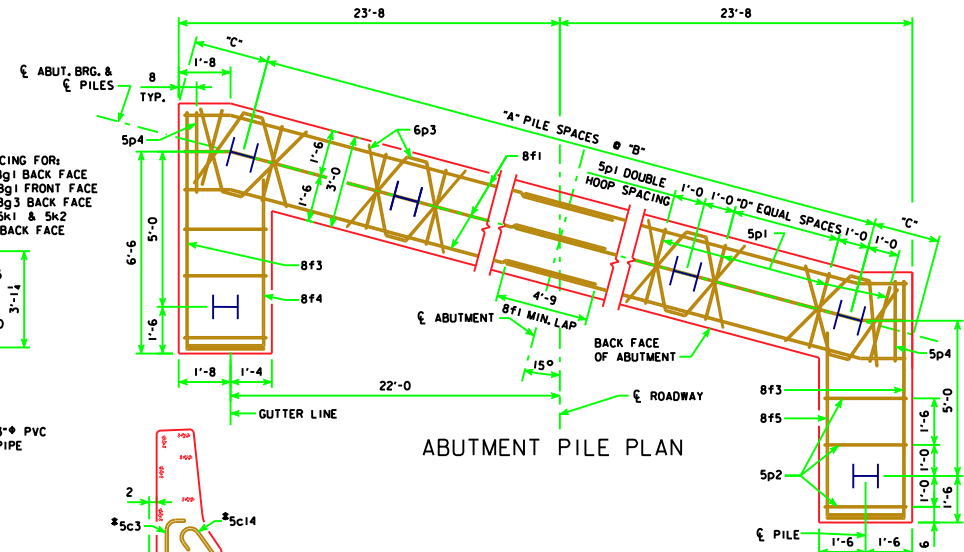
ABUTMENT NOTES:

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 ARE TO BE DRIVEN TO THE DESIGN BEARING VALUE AS GIVEN IN THE ABUTMENT PILE SPACING TABLE.

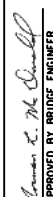
NOTE:
THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF NO. 2 BAR, 2" DIAMETER, 3" PITCH WITH 2 - 1/8" x 1/8" x 1/8" SPACERS PUNCHED TO HOLD SPIRAL.



ABUTMENT PILE PLAN

PART SECTION C-C

* NOTE: SEE BARRIER RAIL SHEET FOR DETAILS. REINFORCING BARS 5c3 AND 5c14 ARE INCLUDED IN SUPERSTRUCTURE QUANTITIES.

LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 Iowa Department of Transportation Highway Division	
		STANDARD DESIGN - 44' ROADWAY, THREE SPAN BRIDGE PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES	
		HL93 SUPERSTRUCTURE	HS25 SUBSTRUCTURE
		MARCH, 2007	
ABUTMENT DETAILS 15° SKEW C BEAMS		H44-12-07	