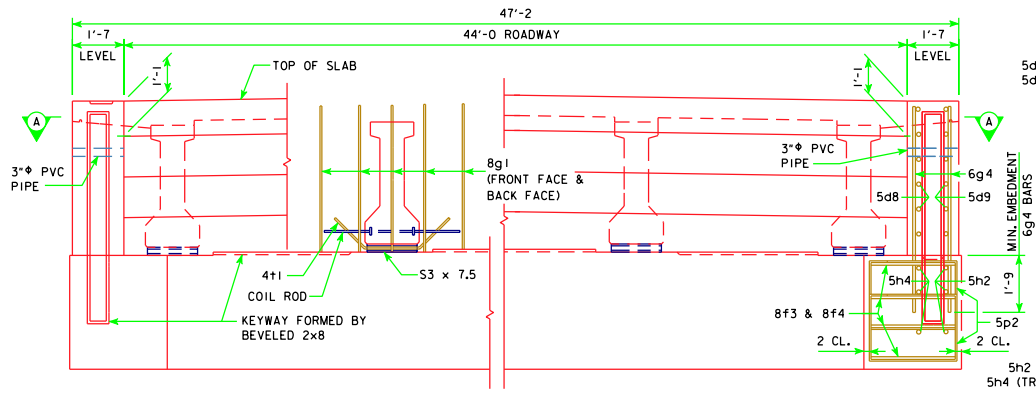
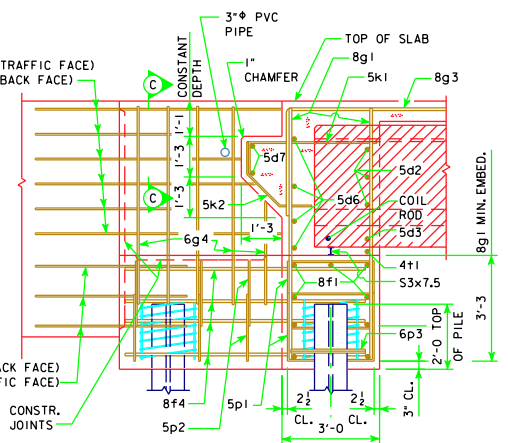


REVISED 11-09 - PILING NO. & DESIGN LOADS CHANGED TO LRFD. ABUT. WING SHAPE CHANGED.



PART REAR ELEVATION AT ABUTMENT
NOTE: TOP OF ABUTMENT SHOWN FOR SOLID BARRIER RAIL



PART SECTION B - B

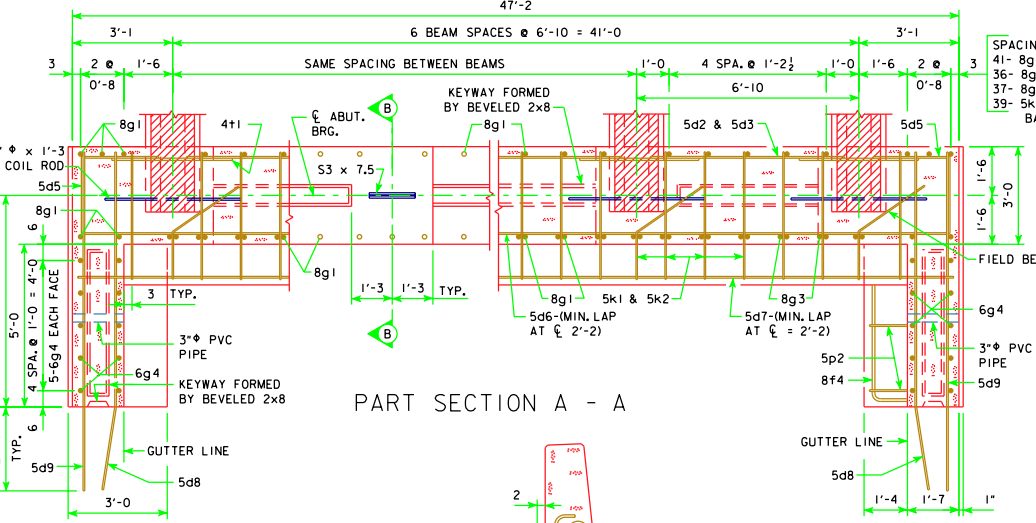
ABUTMENT NOTES:
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2" UNLESS OTHERWISE NOTED OR SHOWN.

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.

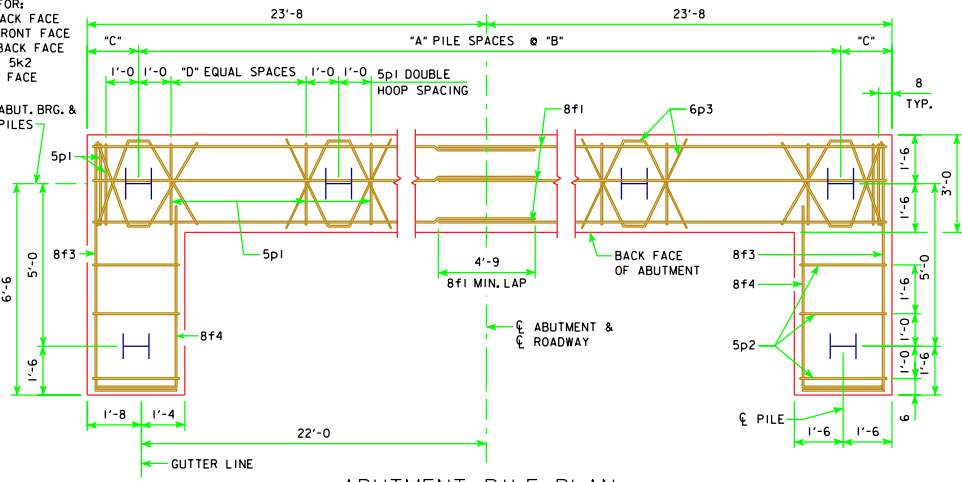
ABUTMENT PILES ARE TO BE DRIVEN TO THE DESIGN BEARING VALUE AS GIVEN IN THE ABUTMENT PILE SPACING TABLE.

BARRIER RAIL NOT SHOWN IN DETAILS.

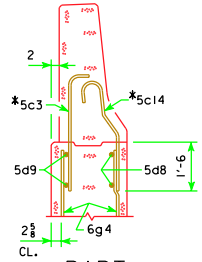
NOTE:
THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF NO. 2 BAR, 21" DIAMETER, 3" PITCH WITH 3 - $\frac{1}{8}$ x $\frac{1}{8}$ x $\frac{1}{8}$ SPACERS PUNCHED TO HOLD SPIRAL.



PART SECTION A - A



ABUTMENT PILE PLAN



PART SECTION C-C

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

ABUTMENT PILE SPACING		201'-4	213'-10	226'-4	243'-0
WITH STEEL H-PILES	*A* PILE SPACES	7	8	8	8
	B (FT. - IN.)	6'-1	5'-4	5'-4	5'-4
	C (FT. - IN.)	2'-4 1/2	2'-4	2'-4	2'-4
	D EQUAL SPACES	4	3	3	3
	NO. OF PILES PER ABUT.	10	11	11	11
①	PILE BEARING (TONS)	50	46	47	50
	STRENGTH I DESIGN LOAD (KIPS)	144	132	137	145

- ① FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
② FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.

11-09
LATEST REVISION DATE

Norman L. McQuinn
APPROVED BY BRIDGE ENGINEER

**Iowa Department of Transportation
Highway Division**

STANDARD DESIGN - 44' ROADWAY, THREE SPAN BRIDGE
**PRETENSIONED PRESTRESSED
CONCRETE BEAM BRIDGES**
MARCH, 2007

ABUTMENT DETAILS
0° SKEW C BEAMS

H44-06-07