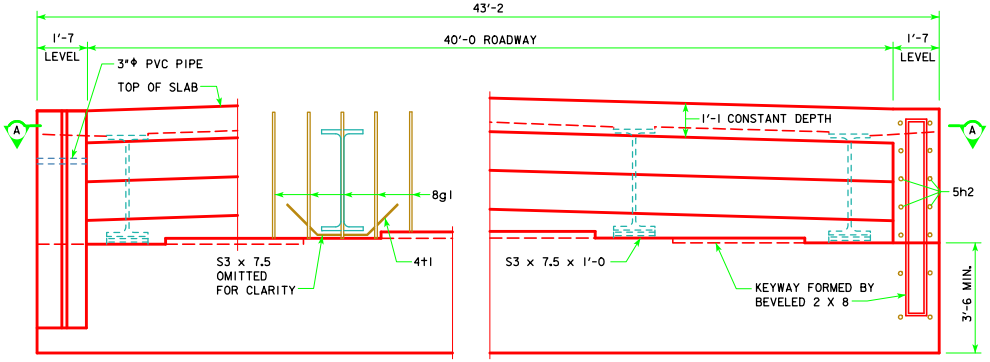
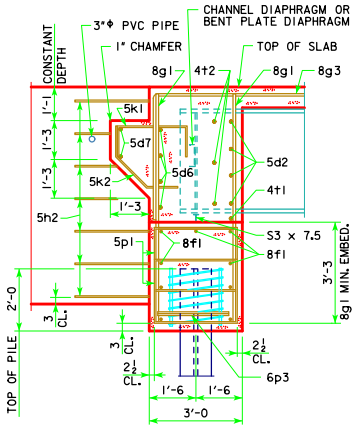
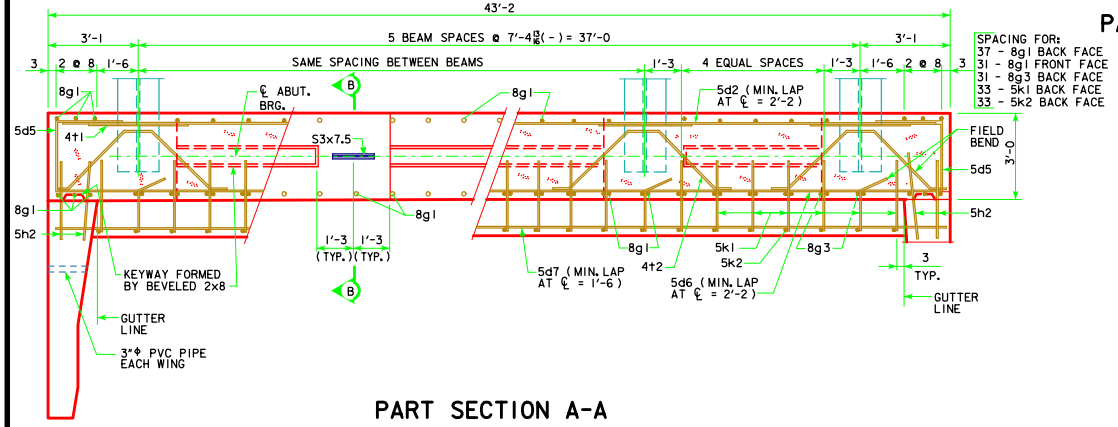


PART REAR ELEVATION AT ABUTMENT

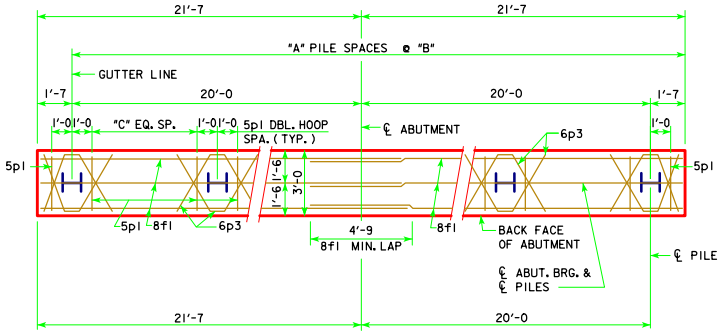


NOTES:
1. HOLES DRILLED THROUGH BEAM WEB FOR 5d2 AND 4t2 BARS.
2. THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF No. 2 BAR, 21" DIAMETER, 3" PITCH WITH 3 - L $\frac{7}{8}$ x $\frac{7}{8}$ x $\frac{1}{8}$ SPACERS PUNCHED TO HOLD SPIRAL.

PART SECTION B-B



PART SECTION A-A



ABUTMENT PILE PLAN

NOTE:
ABUTMENT STEP DIAGRAM PROVIDED BY DESIGNER, SEE "GENERAL INFORMATION" SHEET (WORKING STANDARD 5251).

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.

PLACE 5h2 BAR AT 1:6 SLOPE TO MATCH TRAFFIC SIDE OF ABUTMENT WING FACE. (BOTH SIDES TYPICAL)

BARRIER RAIL NOT SHOWN IN DETAILS.

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

ABUTMENT PILE SPACING

DIMENSION OR NO.	℄ TO ℄ ABUTMENT BEARING								
	160'-0	180'-0	200'-0	220'-0	240'-0	260'-0	280'-0	300'-0	320'-0
"A"	7	7	7	8	8	8	9	9	9
"B" (FT-IN)	5'-8 9/16	5'-8 9/16	5'-8 9/16	5'-0	5'-0	5'-0	4'-5 5/16	4'-5 5/16	4'-5 5/16
"C" EQUAL SPACES	4	4	4	3	3	3	3	3	3
NO. OF PILES PER ABUT.	8	8	8	9	9	9	10	10	10
PU, STRENGTH I DESIGN LOAD (KIPS)	131	137	144	132	137	143	131	136	137

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.

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

IOWA DOT Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES

ROLLED STEEL BEAM BRIDGES

OCTOBER, 2014

ABUTMENT DETAILS 0° SKEW

RS40-007-14