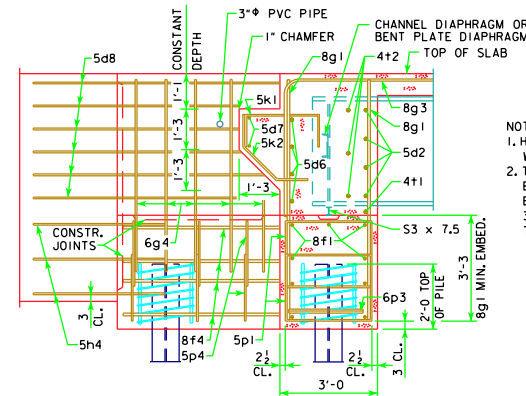
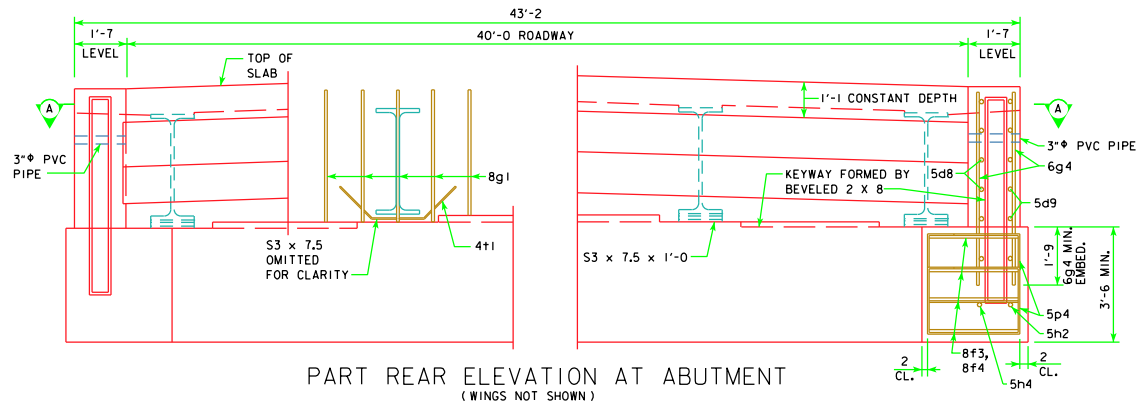
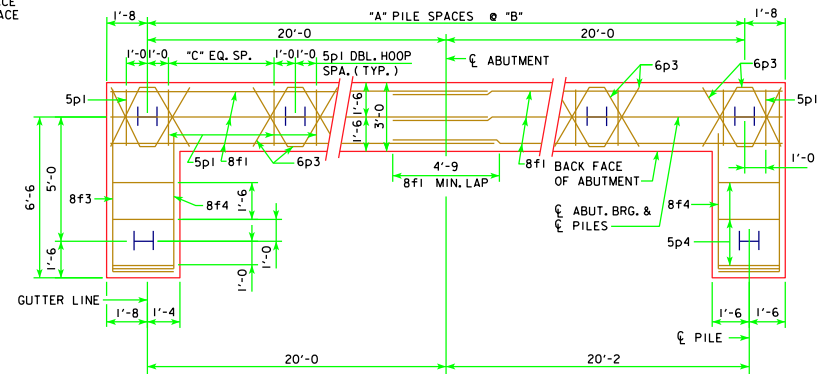
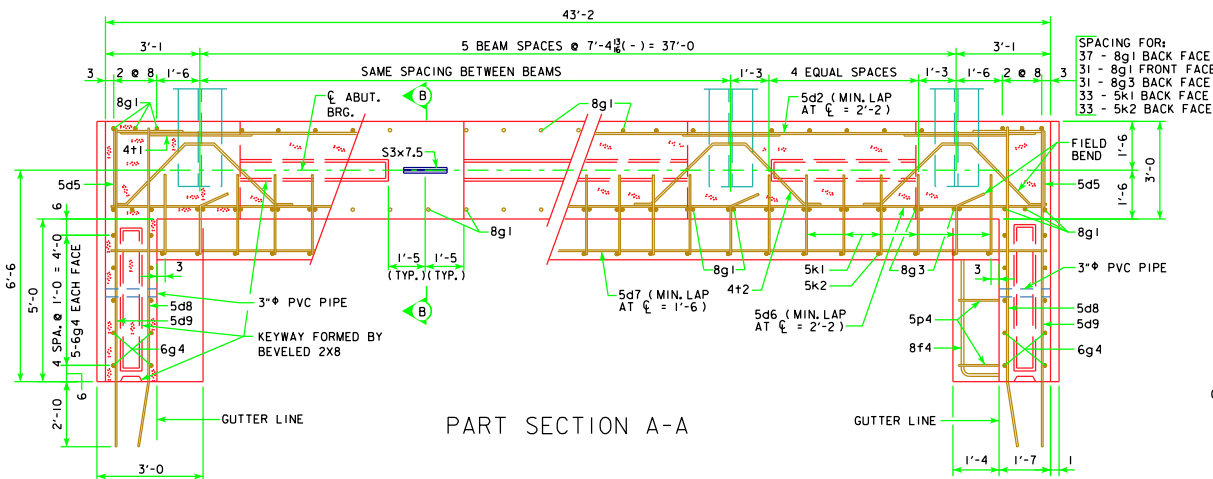




- NOTES:
1. HOLES DRILLED THROUGH BEAM WEB FOR 5d2 AND 4t2 BARS.
 2. THE SPIRAL AT THE TOP OF EACH PILE TO BE 7 TURNS OF No. 2 BAR, 21\"



ABUTMENT NOTES:

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR IS TO BE 2\"

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.

ABUTMENT PILE SPACING

DIMENSION OR NO.	℄ TO ℄ ABUTMENT BEARING
"A"	340'-0
"B" (FT-IN)	9
"C" EQUAL SPACES	4'-5 1/8
NO. OF PILES PER ABUT.	12
① DESIGN PILE LOAD (TONS)	49
② STRENGTH I DESIGN LOAD (KIPS)	143

NOTE: HP 10 x 57 STEEL BEARING PILING REQUIRED.
 ① FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
 ② FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.

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



Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES
ROLLED STEEL BEAM BRIDGES

JUNE, 2010

ABUTMENT DETAILS
 0° SKEW

RS40-008-10

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER
Thomas L. McDaniel