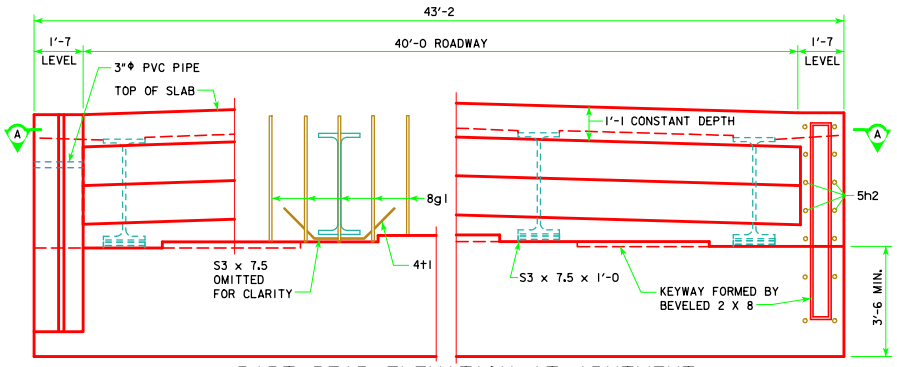
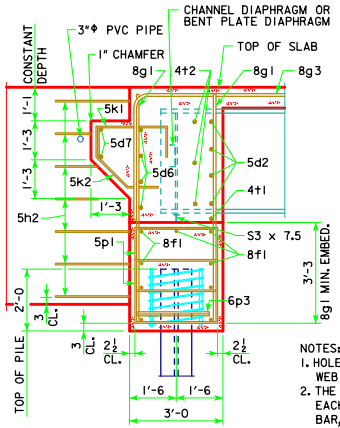



## PART REAR ELEVATION AT ABUTMENT

## ABUTMENT PILE SPACING

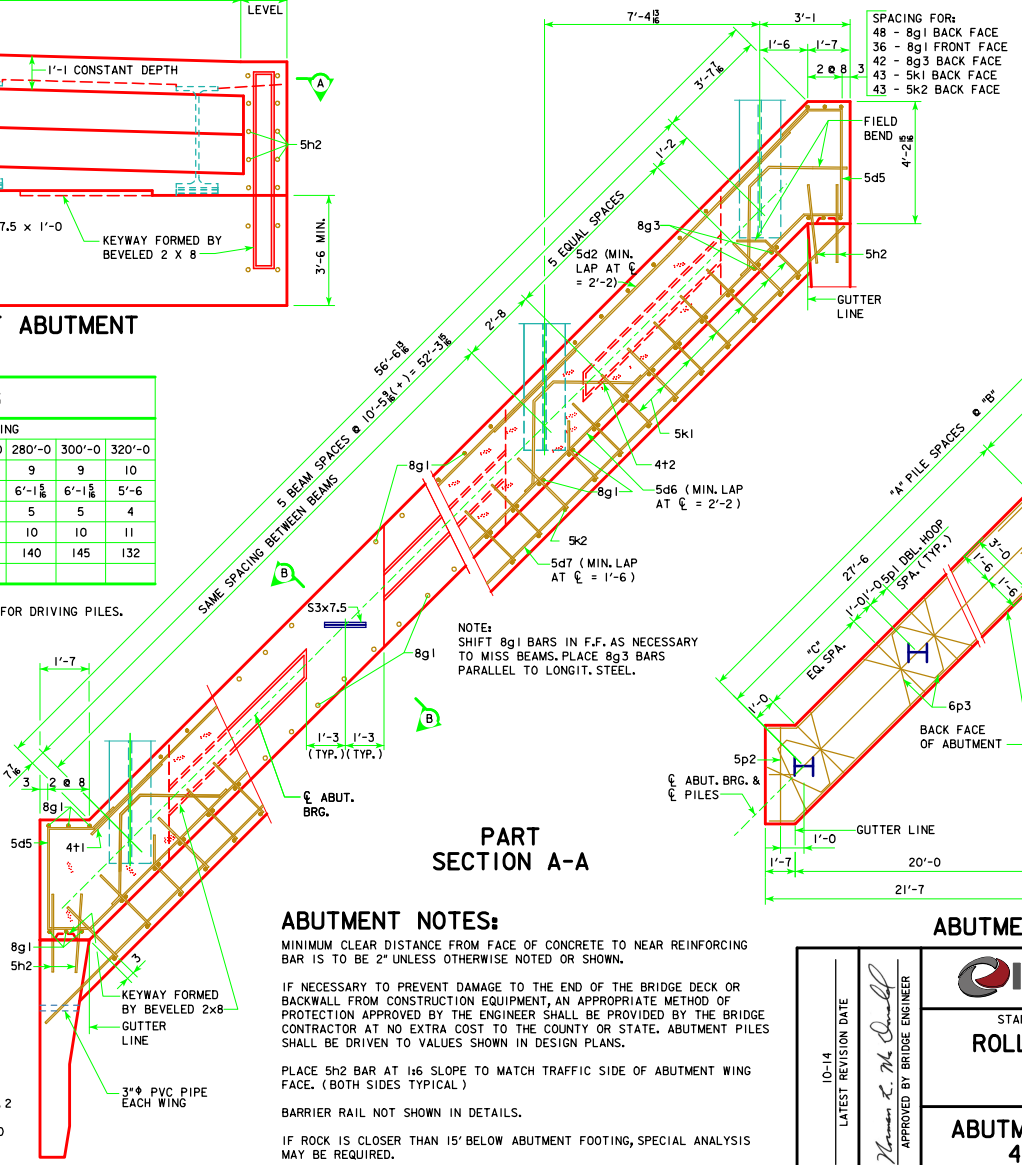
| DIMENSION OR NO. | ℄ TO ℄ ABUTMENT BEARING | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 160'-0 | 180'-0 | 200'-0 | 220'-0 | 240'-0 | 260'-0 | 280'-0 | 300'-0 | 320'-0 |
| "A" | 8 | 8 | 8 | 8 | 9 | 9 | 9 | 9 | 10 |
| "B" (FT-IN) | 6'-10½ | 6'-10½ | 6'-10½ | 6'-10½ | 6'-1 5/16 | 6'-1 5/16 | 6'-1 5/16 | 6'-1 5/16 | 5'-6 |
| "C" EQUAL SPACES | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 |
| NO. OF PILES PER ABUT. | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 11 |
| PU, STRENGTH I DESIGN LOAD (KIPS) | 124 | 129 | 135 | 141 | 130 | 136 | 140 | 145 | 132 |

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.




## 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, 21" DIAMETER, 3" PITCH WITH 3 - L 7/8 x 7/8 x 1/8 SPACERS PUNCHED TO HOLD SPIRAL.




## PART SECTION A-A




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

ALL STEEL PILES ARE TO BE ORIENTED WITH WEBS PERPENDICULAR TO ℄ OF ROADWAY AS SHOWN.

## ABUTMENT PILE PLAN

## 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.

10-14
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

IOWADOT Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES

# ROLLED STEEL BEAM BRIDGES

JUNE, 2010

## ABUTMENT DETAILS 45° SKEW

RS40-015-10

REVISED 10-14 - THE REFERENCE TO THE ABUTMENT STEP DIAGRAM SHEET WAS CHANGED TO GENERAL INFORMATION SHEET INSTEAD OF THE ESTIMATED BRIDGE QUANTITIES SHEET.