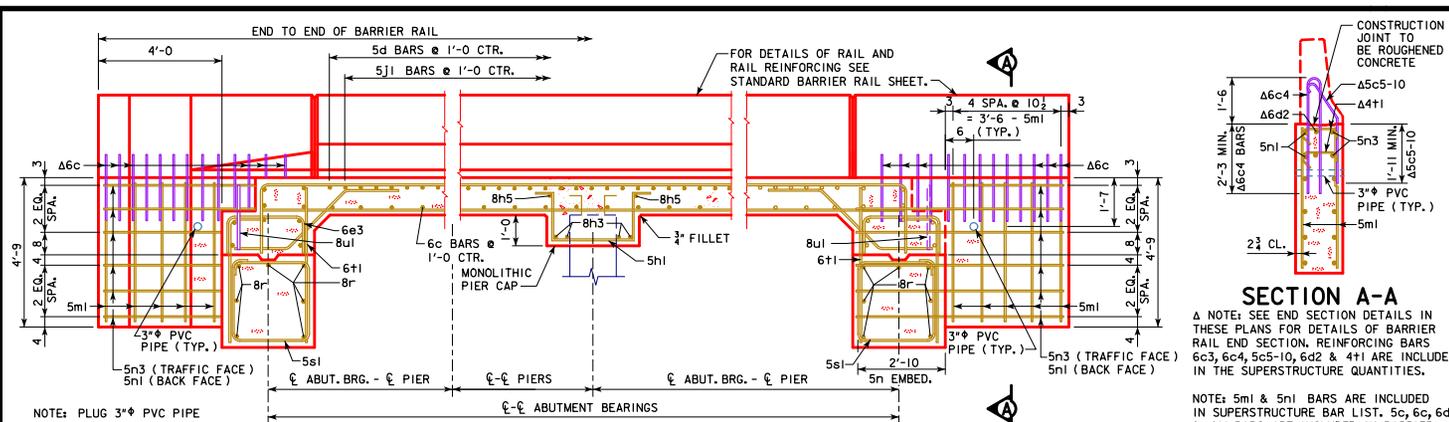
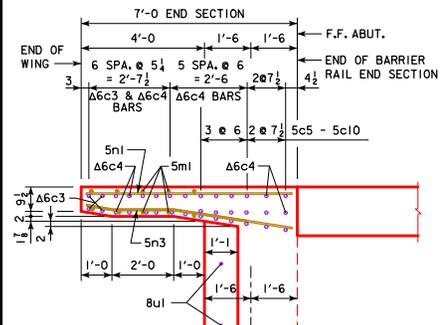


REVISED 03-2016 - REVISION FOR ADDITION OF PAVING NOTCH BAR 8u1.
REVISED 09-2016 - CORRECTED REFERENCE TO OPEN RAIL SHEET J40-48-14 (IT WAS J40-48-06 IN ERROR).

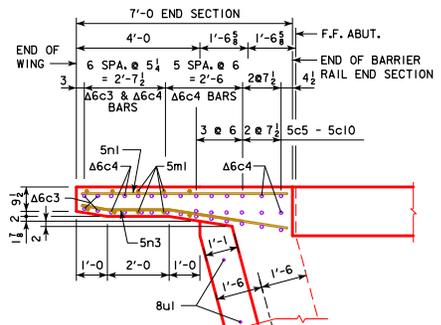


PART LONGITUDINAL SECTION NEAR GUTTER LINE

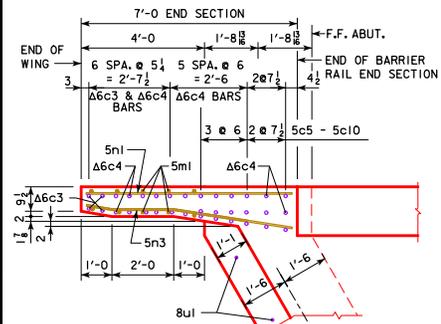
NOTE: PLUG 3" PVC PIPE WITH EXPANDING FOAM PRIOR TO BACKFILLING BEHIND ABUTMENTS.



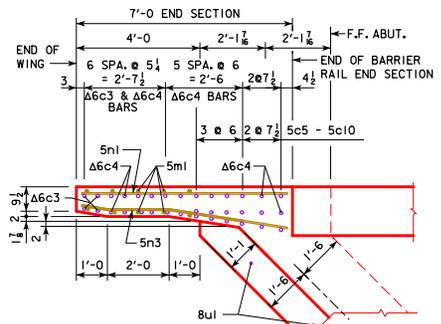
PART PLAN 0° SKEW
(RAILING NOT SHOWN)



PART PLAN 15° SKEW
(RAILING NOT SHOWN)

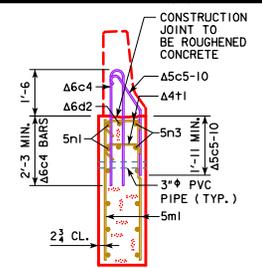


PART PLAN 30° SKEW
(RAILING NOT SHOWN)



PART PLAN 45° SKEW
(RAILING NOT SHOWN)

NOTE: REINFORCING LAYOUT IN PART PLANS 0°, 15°, 30° & 45° SKEWS ARE FOR BARRIER RAIL ONLY. SEE SHEET J40-48-14 FOR OPEN RAIL.



SECTION A-A

NOTE: SEE END SECTION DETAILS IN THESE PLANS FOR DETAILS OF BARRIER RAIL END SECTION. REINFORCING BARS 6c3, 6c4, 5c5-10, 6d2 & 4t1 ARE INCLUDED IN THE SUPERSTRUCTURE QUANTITIES.

NOTE: 5m1 & 5n1 BARS ARE INCLUDED IN SUPERSTRUCTURE BAR LIST. 5c, 6c, 6d & 4t1 BARS ARE INCLUDED IN BARRIER RAIL BAR LIST.

SUPERSTRUCTURE NOTES:
THIS BRIDGE IS DESIGNED FOR HL-93 LOADING PLUS AN ALLOWANCE OF 20 POUNDS PER SQUARE FOOT OF ROADWAY FOR FUTURE WEARING SURFACE.

THE SLAB AS SHOWN INCLUDES A 1/2 INCH INTEGRAL WEARING SURFACE.

THE MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN. ALL REINFORCING STEEL IS TO BE SECURELY WIRED IN PLACE. SEE "BAR CHAIR NOTE".

ALL REINFORCING SHALL BE GRADE 60.

THE CONCRETE SLAB IS TO BE PLACED WITH A MINIMUM OF CONSTRUCTION JOINTS. PROCEDURES FOR PLACING SLAB CONCRETE SHALL BE SUBMITTED FOR APPROVAL TOGETHER WITH A STATEMENT OF THE PROPOSED METHOD AND EVIDENCE THAT THE CONTRACTOR POSSESSES THE NECESSARY EQUIPMENT AND FACILITIES TO ACCOMPLISH THE REQUIRED RESULT. SLAB FALSEWORK SHALL BE REMOVED PRIOR TO CONSTRUCTION OF THE BARRIER RAILS.

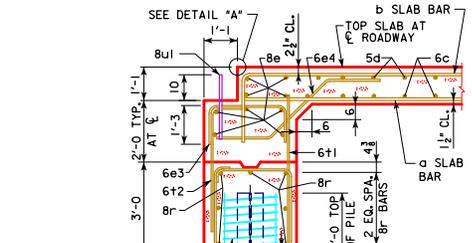
NOTE THAT WHEN PORTLAND CEMENT APPROACH PAVEMENT IS PLACED, COMPRESSIBLE JOINT MATERIAL MUST BE USED BETWEEN PAVEMENT AND END OF BRIDGE.

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 STATE.

COST OF FURNISHING AND PLACING 3" PVC PIPE IN EACH WING IS INCLUDED IN THE PRICE BID FOR STRUCTURAL CONCRETE.

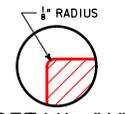
BAR CHAIR NOTE:

TOP MAT OF REINFORCING STEEL IS TO BE SUPPORTED BY INDIVIDUAL BAR CHAIRS SPACED AT NOT MORE THAN 3'-0" CENTERS LONGITUDINALLY AND TRANSVERSELY. THE BOTTOM MAT OF REINFORCING STEEL IS TO BE SUPPORTED BY INDIVIDUAL BAR CHAIRS SPACED AT NOT MORE THAN 3'-0" CENTERS LONGITUDINALLY AND TRANSVERSELY, OR BY CONTINUOUS ROWS OF BAR HIGH CHAIRS OR SLAB BOLSTERS SPACED 4'-0" APART. I.M. 451-01 REQUIREMENTS SHALL APPLY FOR BAR CHAIRS, BAR HIGH CHAIRS, AND SLAB BOLSTERS.

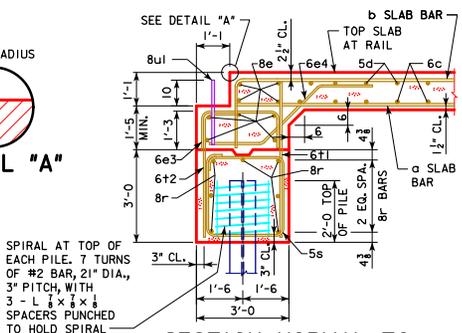


SECTION NORMAL TO ABUTMENT AT C
(BRIDGE LENGTHS 70'-110')

SPIRAL AT TOP OF EACH PILE. 7 TURNS OF #2 BAR, 21" DIA., 3" PITCH, WITH 3 - L 1/4 x 1/4 x 1/4 SPACERS PUNCHED TO HOLD SPIRAL

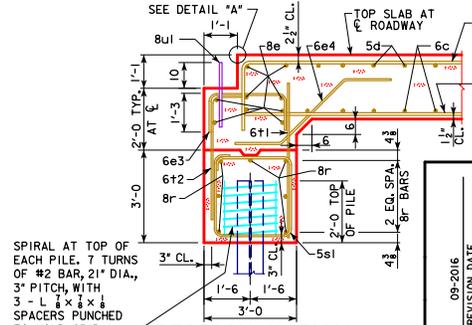


DETAIL "A"



SECTION NORMAL TO ABUTMENT AT GUTTERLINE

SPIRAL AT TOP OF EACH PILE. 7 TURNS OF #2 BAR, 21" DIA., 3" PITCH, WITH 3 - L 1/4 x 1/4 x 1/4 SPACERS PUNCHED TO HOLD SPIRAL



SECTION NORMAL TO ABUTMENT AT C
(BRIDGE LENGTHS 120'-150')

SPIRAL AT TOP OF EACH PILE. 7 TURNS OF #2 BAR, 21" DIA., 3" PITCH, WITH 3 - L 1/4 x 1/4 x 1/4 SPACERS PUNCHED TO HOLD SPIRAL

LATEST REVISION DATE	08-2016
APPROVED BY BRIDGE ENGINEER	<i>Thomas E. McQuill</i>

IOWA DOT Highway Division	
STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES	
CONTINUOUS CONCRETE SLAB BRIDGES	
JULY, 2014	
SUPERSTRUCTURE DETAILS ALL BRIDGES	J40-20-14