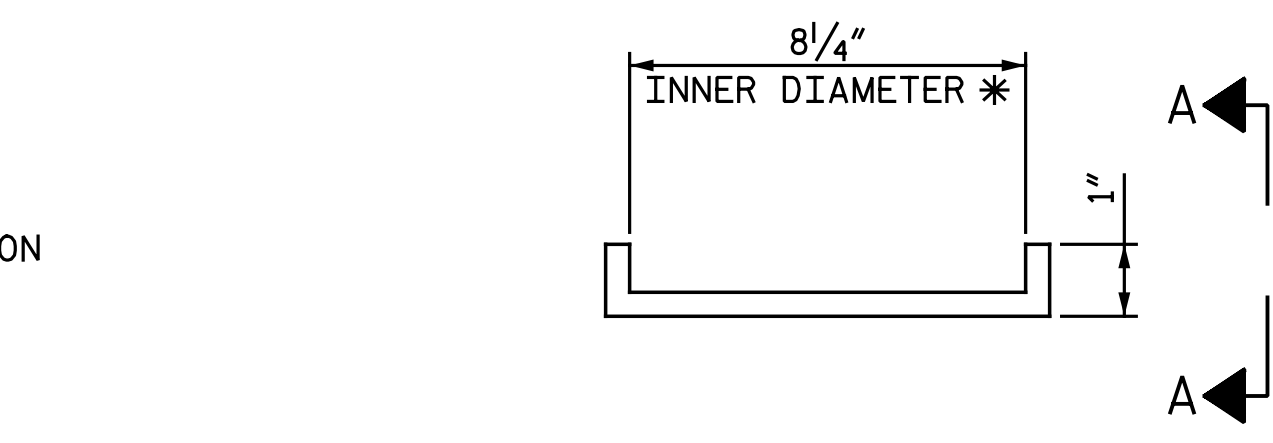
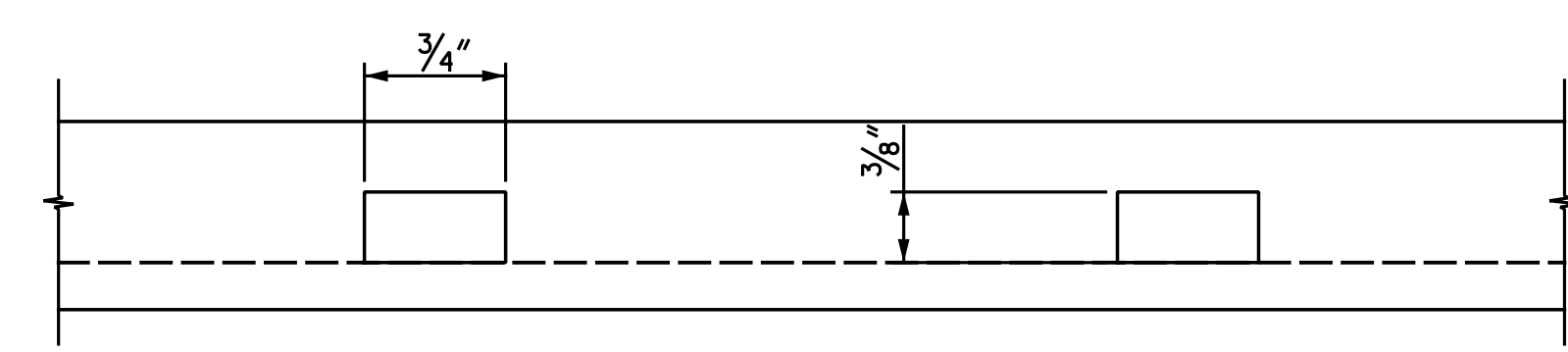


PLAN AT DOWNSPOUT



NOTES: PROVIDE 3/8" x 3/4" SLOTS IN LINE WITH HOLES IN PERFORATED PIPE.
 * CONFIRM PAN WIDTH AFTER PIPE SUPPLIER PROVIDES OUT-TO-OUT PIPE DIAMETER.



STEEL PAN DETAIL

NOTES:

ALL PIPES, FLANGES AND FITTINGS SHALL BE CLASS 53 DUCTILE IRON, UNLESS NOTED OTHERWISE.
 ALL BENDS TO BE SHORT RADIUS, INCLUDING FLANGE AND FLARE BENDS, UNLESS OTHERWISE NOTED.

MAKE FINAL PIPE ALIGNMENT AND TIGHTEN U-BOLTS AFTER RAILROAD TRACK HAS BEEN LAID ACROSS THE BRIDGE.

PAYMENT FOR ALL MATERIALS, FABRICATION, INSTALLATION AND ADJUSTMENTS RELATED TO STRUCTURE DRAINAGE SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE BID FOR "STRUCTURE DRAINAGE SYSTEM". NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE FOR ANY COMPONENT OF THE STRUCTURE DRAINAGE SYSTEM INCLUDING, BUT NOT LIMITED TO:

- DUCTILE IRON PIPE AND FITTINGS
- STANDARD PIPE
- GASKET AND PVC OR NEOPRENE COATED STRIPS
- STEEL SUPPORT ANGLES AND PLATES
- U-BOLTS AND H.S. BOLTS, WASHERS, AND NUTS
- OFFSET PIPE CLAMPS AND EXPANSION ANCHOR BOLTS

PROVIDE PVC OR NEOPRENE-COATED STRIPS, EPOXY-CEMENTED TO THE U-BOLT OR PIPE FOR STRAY CURRENT PROTECTION.

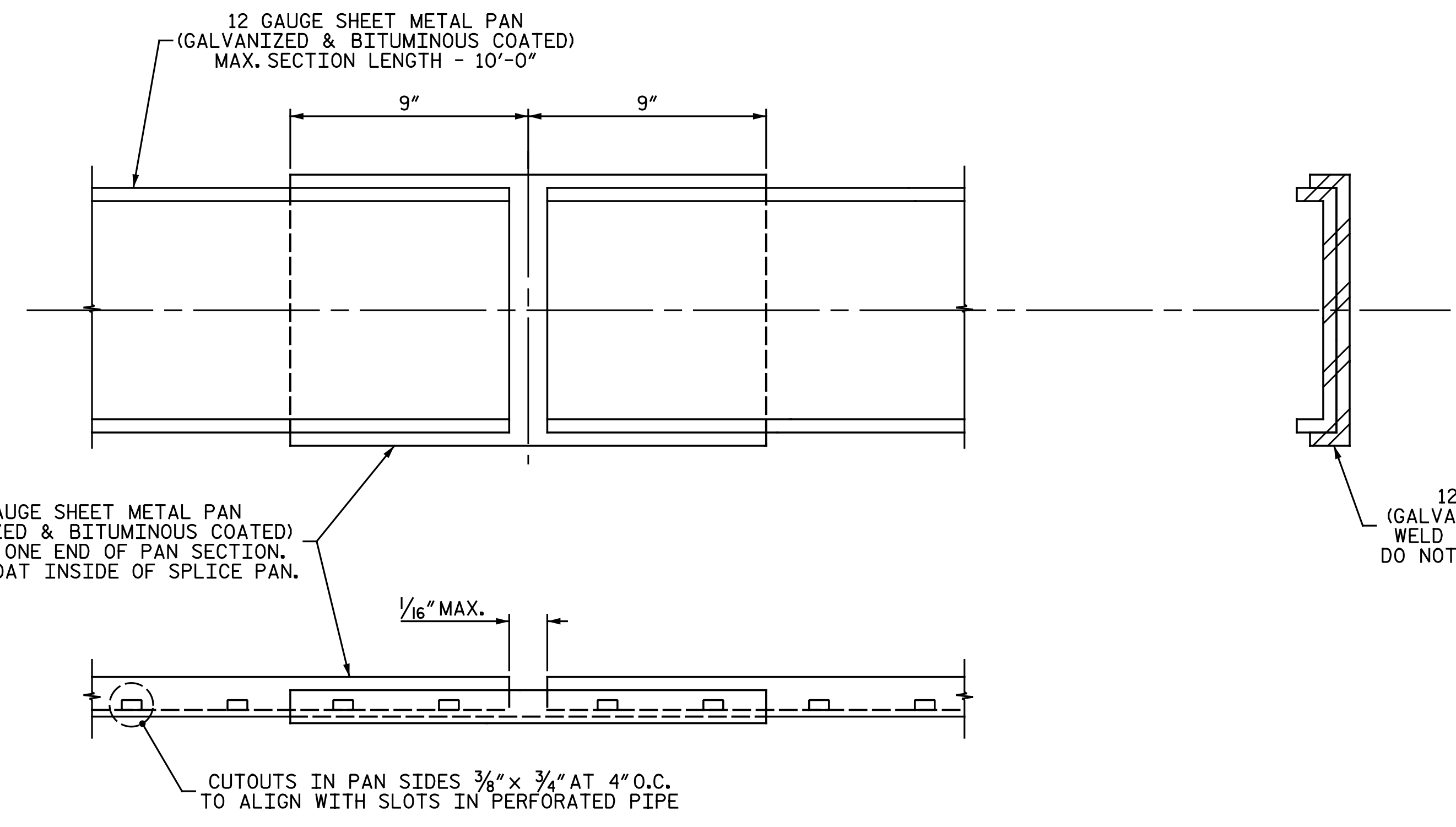
THE OUTSIDE COATING FOR D.I. PIPE MAY BE PAINTED WITH A SHOP PRIME COAT OF INORGANIC ZINC PRIMER AND A FINISH (FIELD) COATING OF VINYL PAINT AS SPECIFIED FOR THE STRUCTURAL STEEL.

FOR STRUCTURE DRAINAGE SYSTEM, SEE SPECIAL PROVISIONS.

D.I. = DUCTILE IRON

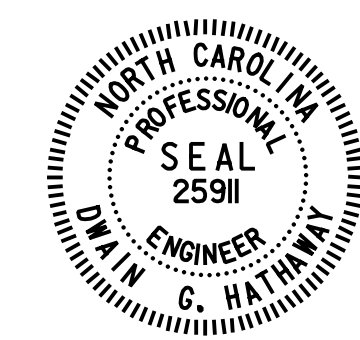
FOR WATERPROOFING SYSTEM, SEE SPECIAL PROVISION "WATERPROOFING (RAILROAD STRUCTURES)".

STRUCTURE DRAINAGE SYSTEM ESTIMATED QUANTITIES		
ITEM	QUANTITY	UNIT
8" I.D. DUCTILE IRON PIPE, CLASS 53 (FLANGED BOTH ENDS)	137.5	FT.
6" Ø STD PIPE (GALVANIZED, WITH 3/4" Ø x 6" HEADED STUDS)	57	FT.
6" & 8" I.D. DUCTILE IRON PIPE FLANGED FITTINGS, 250 P.S.I. P.R.	2760	LBS.
8" I.D. DUCTILE IRON BLIND FLANGES	420	LBS.
8" I.D. PERFORATED HALF ROUND PIPE, (GALVANIZED AND BITUMINOUS COATED)	314.5	FT.
STEEL PAN BELOW HALF ROUND PIPE, (GALVANIZED AND BITUMINOUS COATED)	314.5	FT.
8" I.D. OFFSET PIPE CLAMPS	240	LBS.



PAN SPLICE DETAIL

PROJECT NO. U-3308
DURHAM COUNTY
 STATION: 24+55.20 -LALT-
13+22.18 -CSXN-
 SHEET 7 OF 7



5/3/2016

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STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
 STRUCTURE DRAINAGE
 DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S4-51
1			3			TOTAL SHEETS
2			4			68

DRAWN BY : M. D. MAYHEW DATE : 1-20-14
 CHECKED BY : S. A. DENNEY DATE : 3-6-14

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