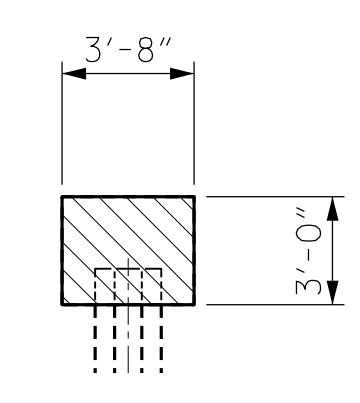
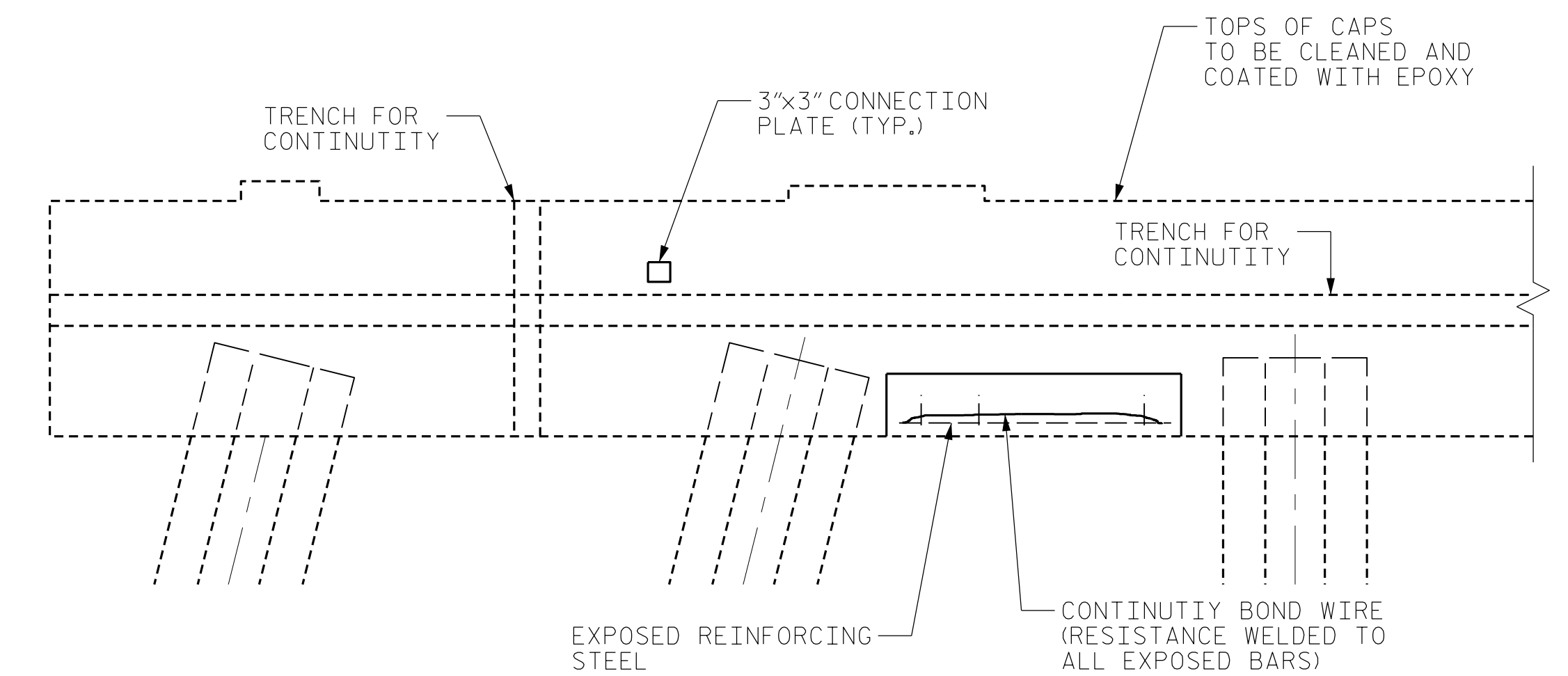


ELEVATION

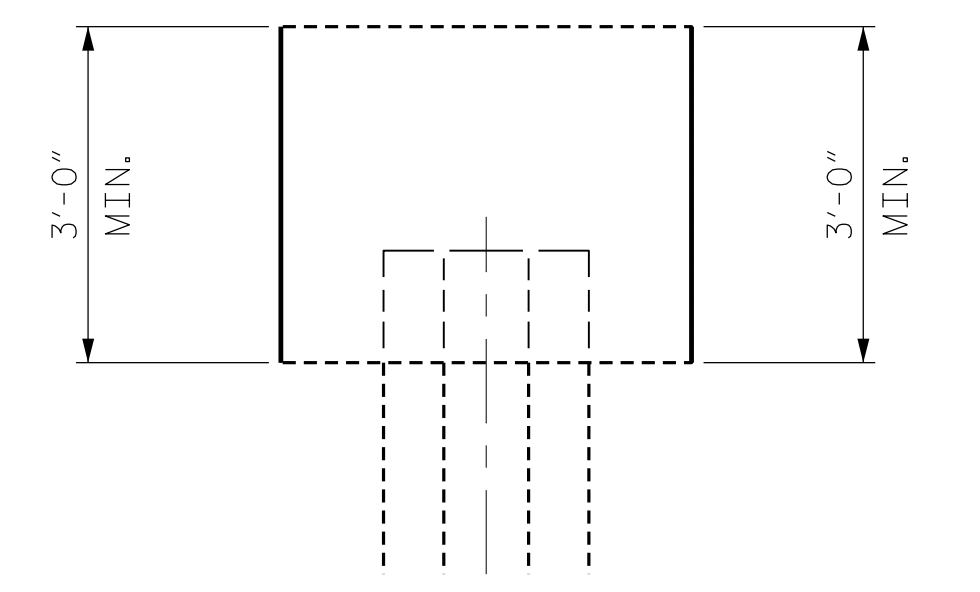
NUMBER OF CONNECTION PLATES REQUIRED PER BENT: 3



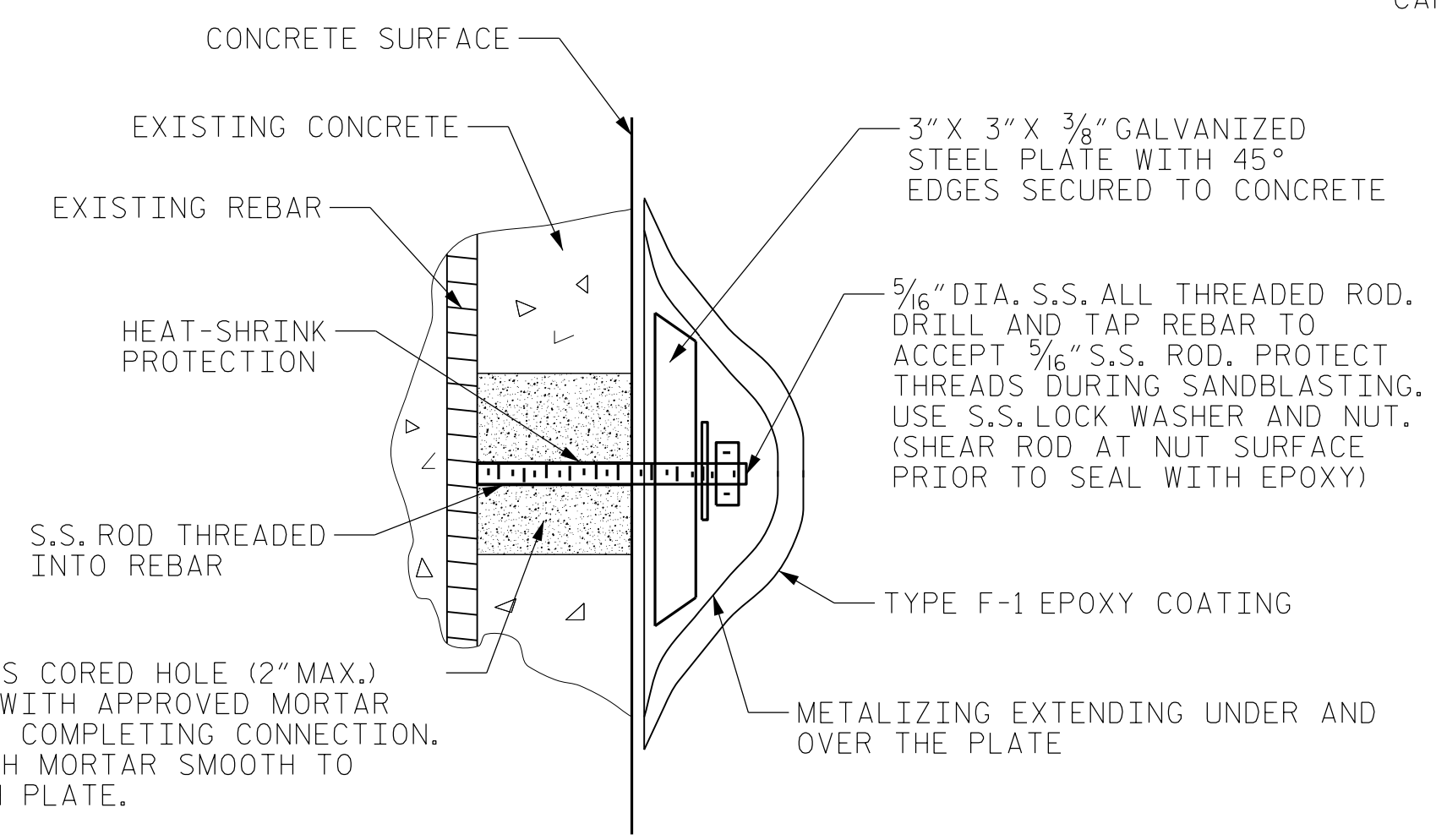
VIEW A-A



CONTINUITY DETAIL



LIMITS OF METALIZATION



CONNECTION PLATE DETAIL FOR REBARS

METALIZING NOTES:

- NO METALIZING SHALL BE PERFORMED UNTIL THE CONCRETE RESTORATION HAS BEEN APPROVED BY THE ENGINEER. METALIZE AT NO LESS THAN 10 (TEN) DAYS AFTER PLACING CONCRETE, BUT NO MORE THAN 90 (NINETY) DAYS. CONNECT METALIZING CONNECTION PLATE IMMEDIATELY AFTER COMPLETING METALIZING.
- APPLY A ZINC SILICATE OVERCOAT AT NO MORE THAN 72 HOURS AFTER METALIZING.
- COAT CONNECTION PLATE WITH EPOXY AT NO MORE THAN 96 HOURS AFTER APPLICATION OF ZINC SILICATE OVERCOAT.

NOTES:

- REMOVE ALL UNSOUND CONCRETE FROM THE BENT CAPS IN ACCORDANCE WITH CONCRETE RESTORATION DETAILS AND PROJECT SPECIAL PROVISIONS FOR CONCRETE REPAIR.
- THE CONTRACTOR SHALL SUBMIT A PLAN FOR CONTROL AND DISPOSAL OF DEBRIS TO THE ENGINEER FOR APPROVAL.
- FOR SPALLS OR DELAMINATIONS ON THE BENT CAPS GREATER THAN 2'-0" WIDE OR LONG AND GREATER THAN 1" DEEP, RESTORE CONCRETE TO ORIGINAL PROFILE IN ACCORDANCE WITH CONCRETE RESTORATION DETAILS SHEET AND PROJECT SPECIAL PROVISIONS FOR CONCRETE REPAIR.
- FOR ANY CONCRETE AREAS THAT WOULD BE ISOLATED FROM PROPOSED CONTINUITY BY EXISTING SUPERFICIAL CRACKING, FILL CRACKS WITH EPOXY PRIOR TO METALIZING PER PROJECT SPECIAL PROVISIONS FOR EPOXY INJECTION OF CRACKS.
- ALL VERTICAL FACES OF THE CAPS SHALL BE METALIZED. CONNECTION BETWEEN PLATE AND REINFORCING STEEL SHALL BE PROVIDED VIA A 3/16" DIAMETER STAINLESS STEEL ALL THREADED ROD AS DESCRIBED IN THE CONNECTION PLATE DETAIL. THE CONNECTION PLATES SHALL BE LOCATED IN AREAS OF SOUND CONCRETE AS DETAILED IN THE PROJECT SPECIAL PROVISIONS FOR CATHODIC PROTECTION AND SHALL BE INSTALLED ON DIFFERENT BARS.
- CHECK INTERBAR CONTINUITY. REINFORCING BARS REQUIRING CONTINUITY CORRECTION SHALL BE MADE CONTINUOUS USING STEEL WIRE RESISTANCE WELDED OR BRAZED TO EVERY REBAR. ALL EXPOSED BARS SHALL BE MADE CONTINUOUS. COAT ALL CONTINUITY CORRECTION WELDS WITH NON-CONDUCTIVE EPOXY.
- CHECK ELECTRICAL CONTINUITY BETWEEN ALL PLATES IN ACCORDANCE WITH THE PROJECT SPECIAL PROVISIONS FOR CATHODIC PROTECTION.
- METALIZE AND PLACE CONNECTION PLATES IN ACCORDANCE WITH PROJECT SPECIAL PROVISIONS FOR CATHODIC PROTECTION.
- APPLY A ZINC SILICATE OVERCOAT TO THE METALIZED AREAS AS DESCRIBED IN THE PROJECT SPECIAL PROVISIONS FOR CATHODIC PROTECTION-ZINC ALUMINUM SPRAY. THE ENGINEER MUST APPROVE THE METALIZING PRIOR TO THE OVERCOAT APPLICATION.
- SEE PROJECT SPECIAL PROVISIONS FOR ADDITIONAL METALIZING REQUIREMENTS AND ACCEPTANCE CRITERIA.
- SEQUENCE CLEANING AND COATING IN ORDER TO AVOID DELETERIOUS SUBSTANCES INHIBITING PROPOSED COATINGS.
- ALL HARDWARE AND MATERIAL ITEMS ON THIS SHEET ARE INCIDENTAL TO PAY ITEM FOR ZINC ALUMINUM SPRAY.
- THOROUGHLY CLEAR THE ALL VERTICAL FACES OF THE CAPS OF ANY MARINE GROWTH AND DEBRIS BEFORE ALL PERFORMING ANY OF THE ASSOCIATED WORK FOR CAP METALIZATION.

AS-BUILT REPAIR QUANTITY TABLE

ZINC ALUMINUM SPRAY FOR BENT CAPS				
		SF/BENT	TOTAL	
ELEMENT(S)	NO.	RATE	ESTIMATE	ACTUAL
BENTS 34-72	39	380 SF	14,820 SF	

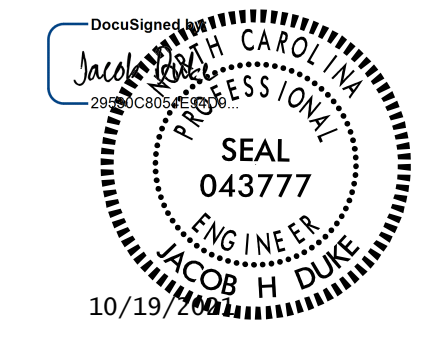
LEGEND



DRAWN BY : JACOB H. DUKE DATE : 9/30/2020
 CHECKED BY : DIEGO A. AGUIRRE DATE : 10/1/2020
 DESIGN ENGINEER OF RECORD: JACOB H. DUKE DATE : 10/1/2020

10/5/2020
 15BPR.46.SMU.CP02.270012.dgn
 jduke

PROJECT NO. 15BPR.46
DARE COUNTY
 BRIDGE NO. 270012



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
CATHODIC PROTECTION
 ZINC ALUMINUM SPRAY
 FOR BENTS 34-72

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-57
1			3			TOTAL SHEETS
2			4			137