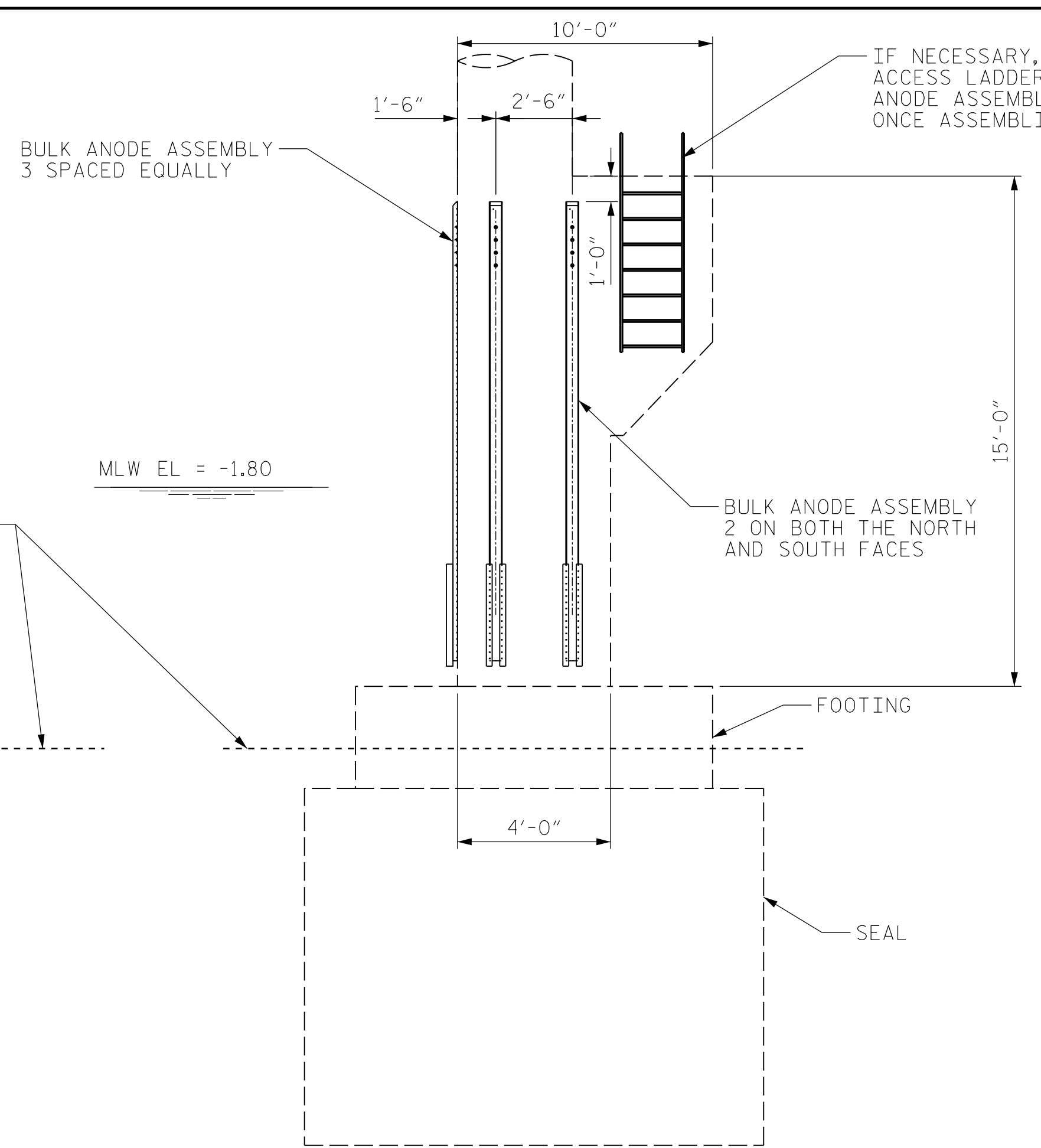


ELEVATION
(WEST FACE OF BENT 11)
(EAST FACE OF BENT 12)



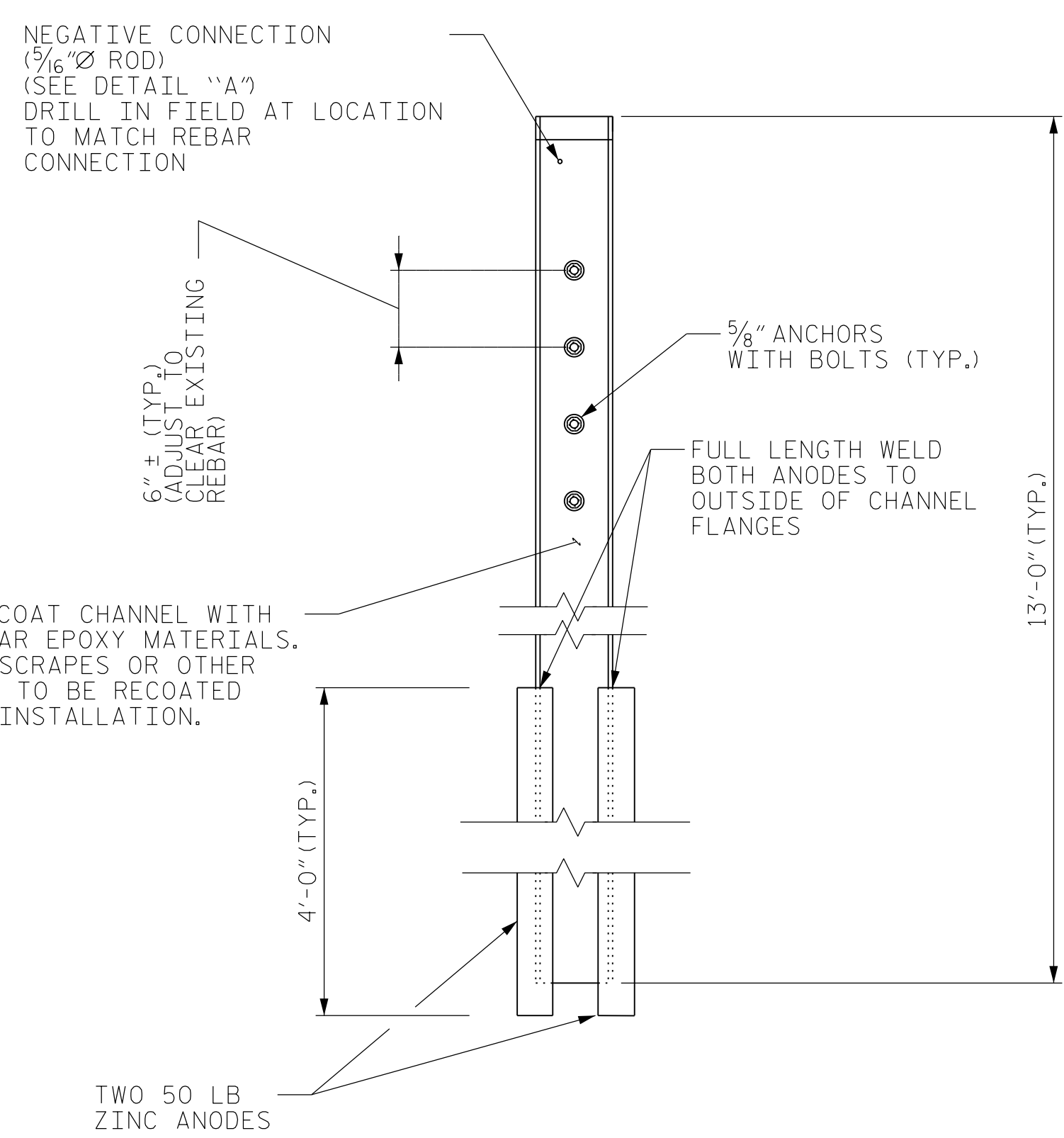
ELEVATION
(SOUTH FACE OF BENT 11)
(NORTH FACE OF BENT 12)
(ACCESS LADDER ON SOUTH FACES OF FOOTINGS ONLY)

ANODE PLACEMENT

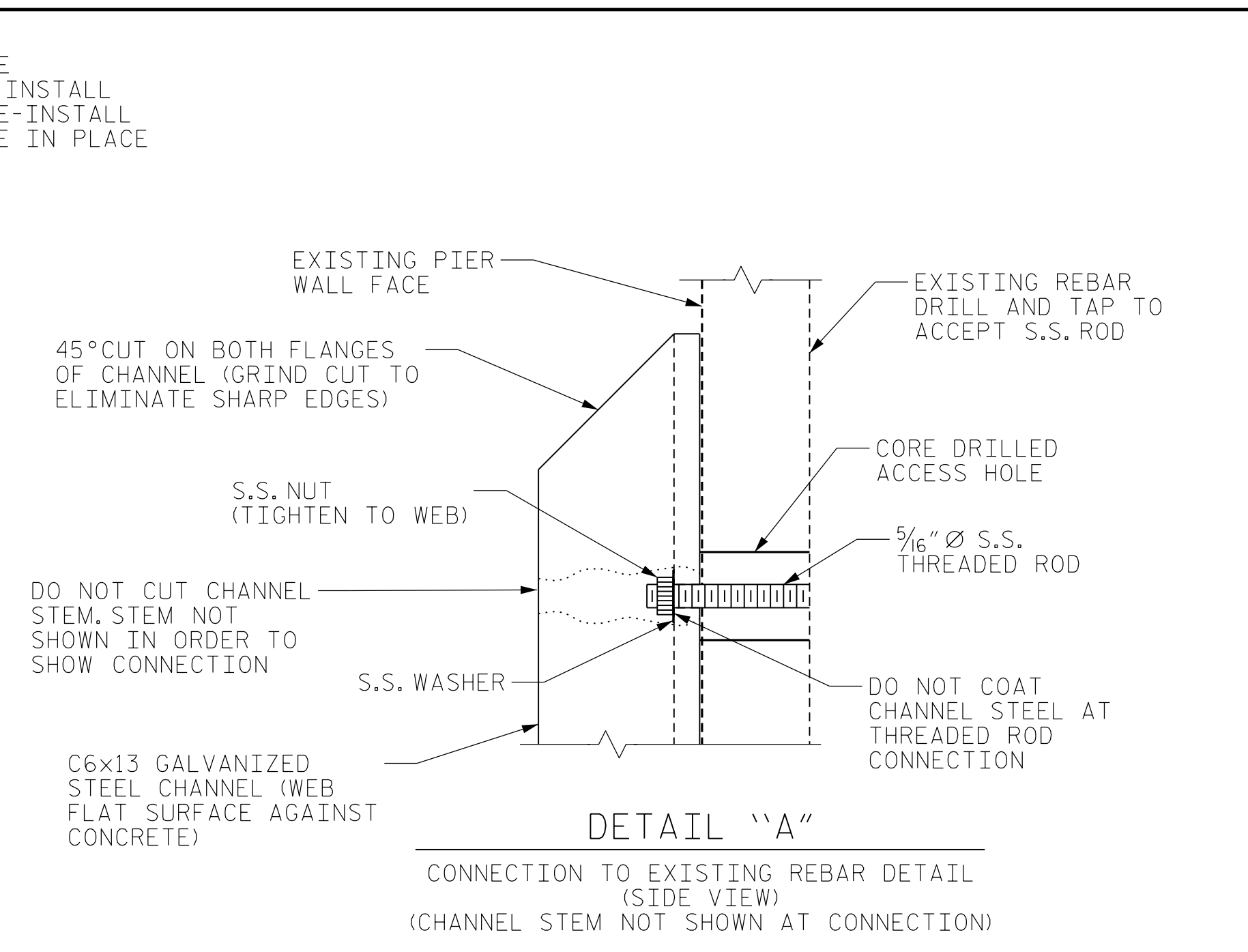
SEE DETAIL "A" FOR CONNECTION TO EXISTING REBAR
SEE DETAIL "B" FOR MONITORING JUNCTION BOX

NOTES:

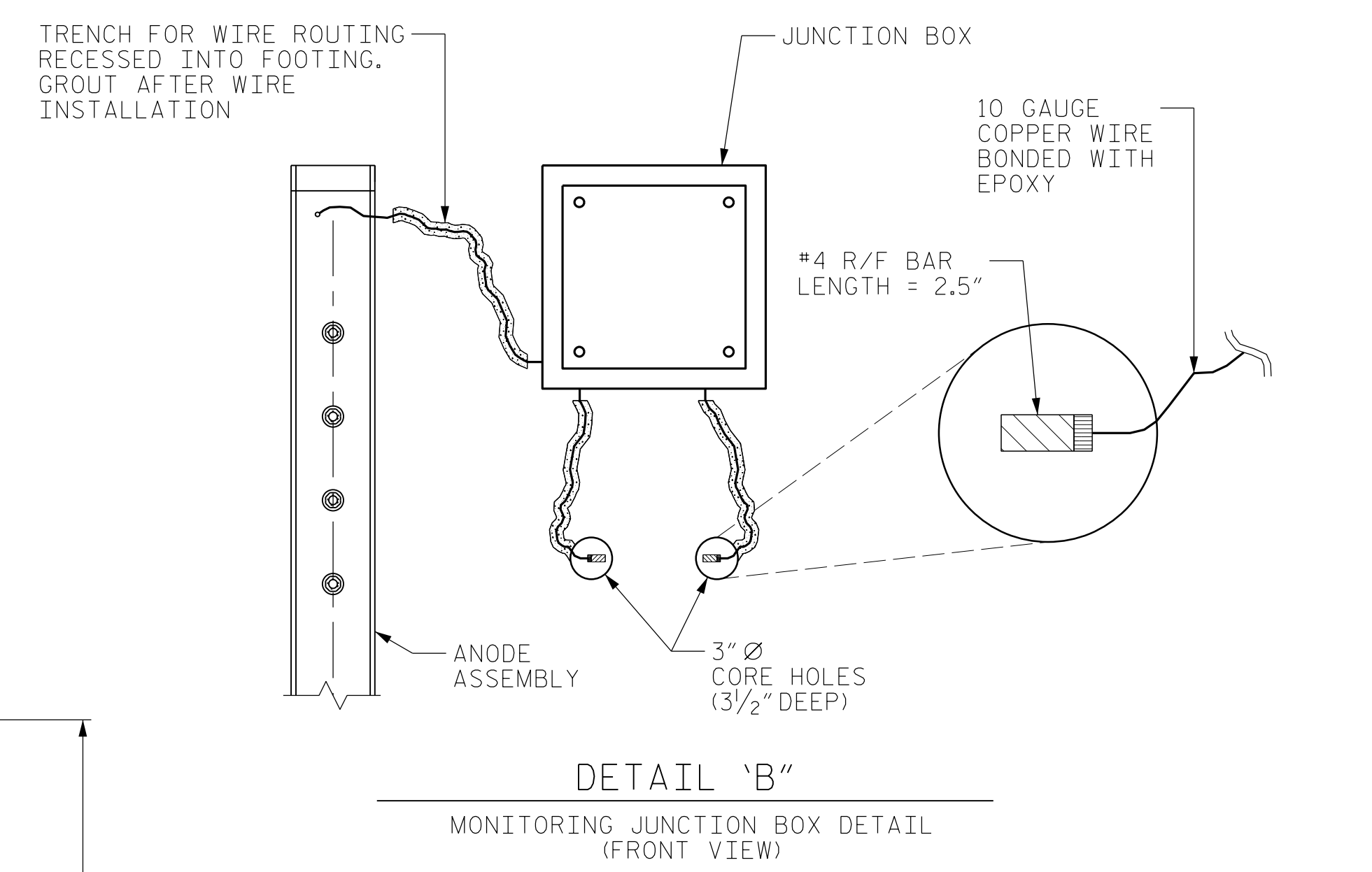
1. THOROUGHLY CLEAN THE FOOTINGS OF MARINE GROWTH AND DEBRIS BEFORE PERFORMING ANY WORK ASSOCIATED WITH THE INSTALLATION OF THE PROPOSED BULK ANODES.
2. ANODES SHALL BE ASTM B418-01 TYPE I.
3. EXCEPT FOR ANODE WELDING, ALL CHANNEL MANUFACTURING SHALL BE PERFORMED PRIOR TO GALVANIZING.
4. ANCHORS TO BE DROP-IN TYPE 5/8" x 2 7/32" GALVANIZED HILTI HDI 243262 OR APPROVED EQUAL.
5. SEAL ACCESS HOLE WITH APPROVED EPOXY GROUT MATERIAL AFTER S.S. ROD INSTALLATION.
6. ANODE ASSEMBLIES SHALL BE PLACED SUCH THAT THE ANODE BE SUBMERGED A MINIMUM OF 3'-0" BELOW MEAN LOW WATER ELEVATION AT ALL TIMES. SPACING AND ELEVATION ADJUSTMENTS SHALL BE APPROVED BY THE ENGINEER.
7. PER EXISTING PLANS, TYPICAL CONCRETE COVER ON EXISTING PIER WALL IS 4".
8. WELDING OF S.S. ROD TO THE REBAR IN LIEU OF DRILL AND TAP MAY BE APPROVED AT THE DISCRETION OF THE ENGINEER.
9. ELECTRICAL CONTINUITY OF REINFORCING STEEL BETWEEN AT LEAST TWO OTHER CONNECTIONS SHALL BE PERFORMED PER CONNECTION PRIOR TO AND AFTER ANODE ASSEMBLY INSTALLATION.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE REINFORCING STEEL AND PATCH ALL CORES WITH APPROVED CONCRETE REPAIR MATERIAL.
11. PAYMENT FOR ALL WORK AND HARDWARE DESCRIBED ASSOCIATED WITH FURNISHING AND INSTALLING OF THE ZINC ANODES SHALL BE INCIDENTAL TO THE PAY ITEM FOR "CP SYSTEM (ZINC BULK ANODES)".
12. SEE PROJECT SPECIAL PROVISIONS FOR ADDITIONAL REQUIREMENTS AND ACCEPTANCE CRITERIA. (PSP: CATHODIC PROTECTION SYSTEM - SUBMERGED ZINC BULK ANODE)



ANODE ASSEMBLY DETAIL
(FRONT VIEW)

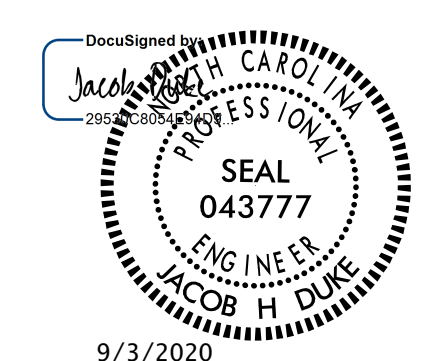


DETAIL "A"
CONNECTION TO EXISTING REBAR DETAIL
(SIDE VIEW)
(CHANNEL STEM NOT SHOWN AT CONNECTION)



DETAIL "B"
MONITORING JUNCTION BOX DETAIL
(FRONT VIEW)

PROJECT NO. 15BPR.24
BRUNSWICK COUNTY
BRIDGE NO. 090013



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
CHANNEL BENT FOOTING RESTORATION					
BULK ANODE DETAILS BENT 11 & 12					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		
					SHEET NO. S-23
					TOTAL SHEETS 45

DRAWN BY : OMAR M. KHALAFALLA DATE : 10/2018
CHECKED BY : DIEGO A. AGUIRRE DATE : 10/2018
DESIGN ENGINEER OF RECORD : JACOB H. DUKE DATE : 10/2018

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

301 FAYETTEVILLE ST., SUITE 1500
RALEIGH, NC 27601
(919) 882-7839
LICENSE # : C-1506