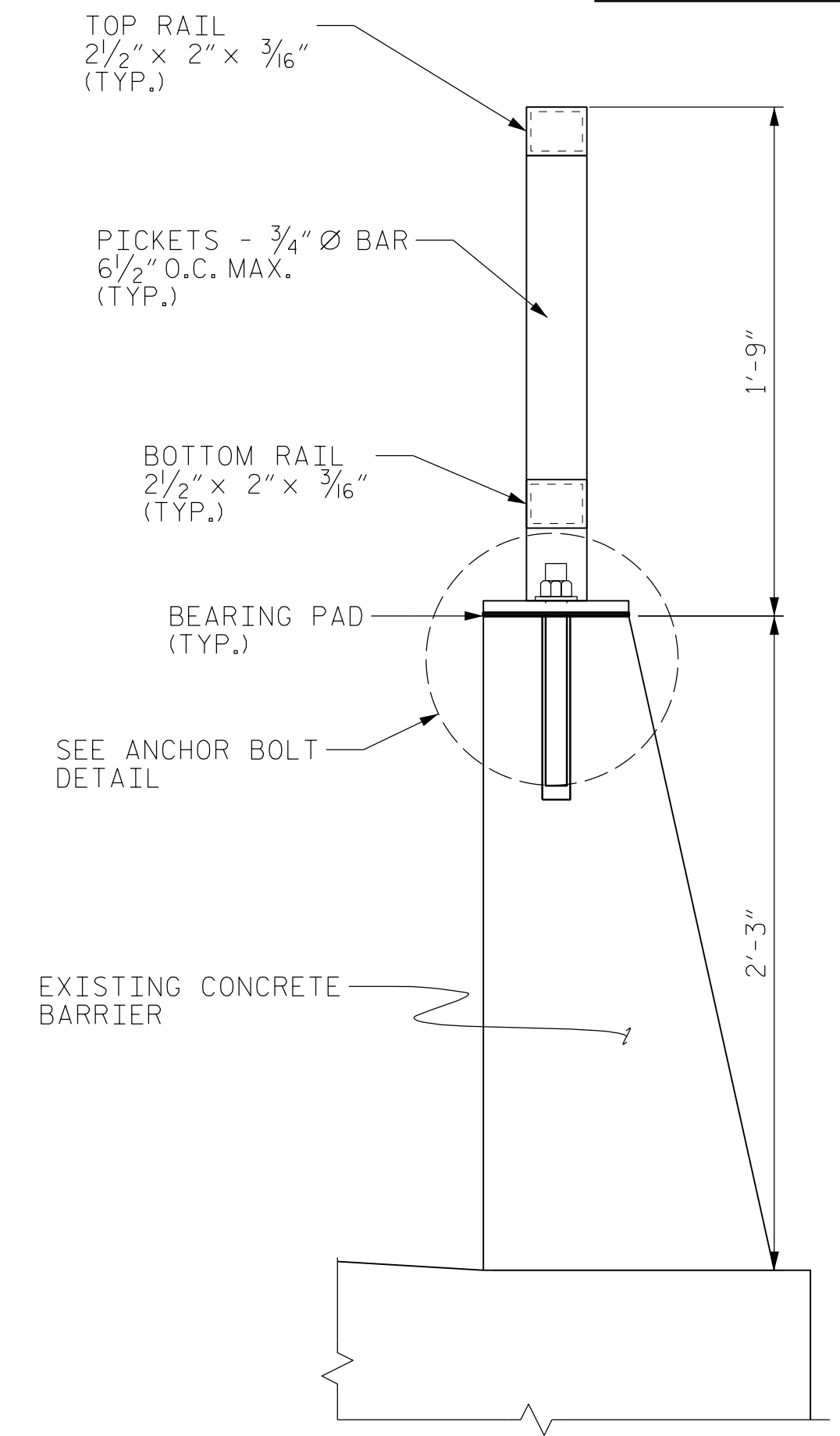


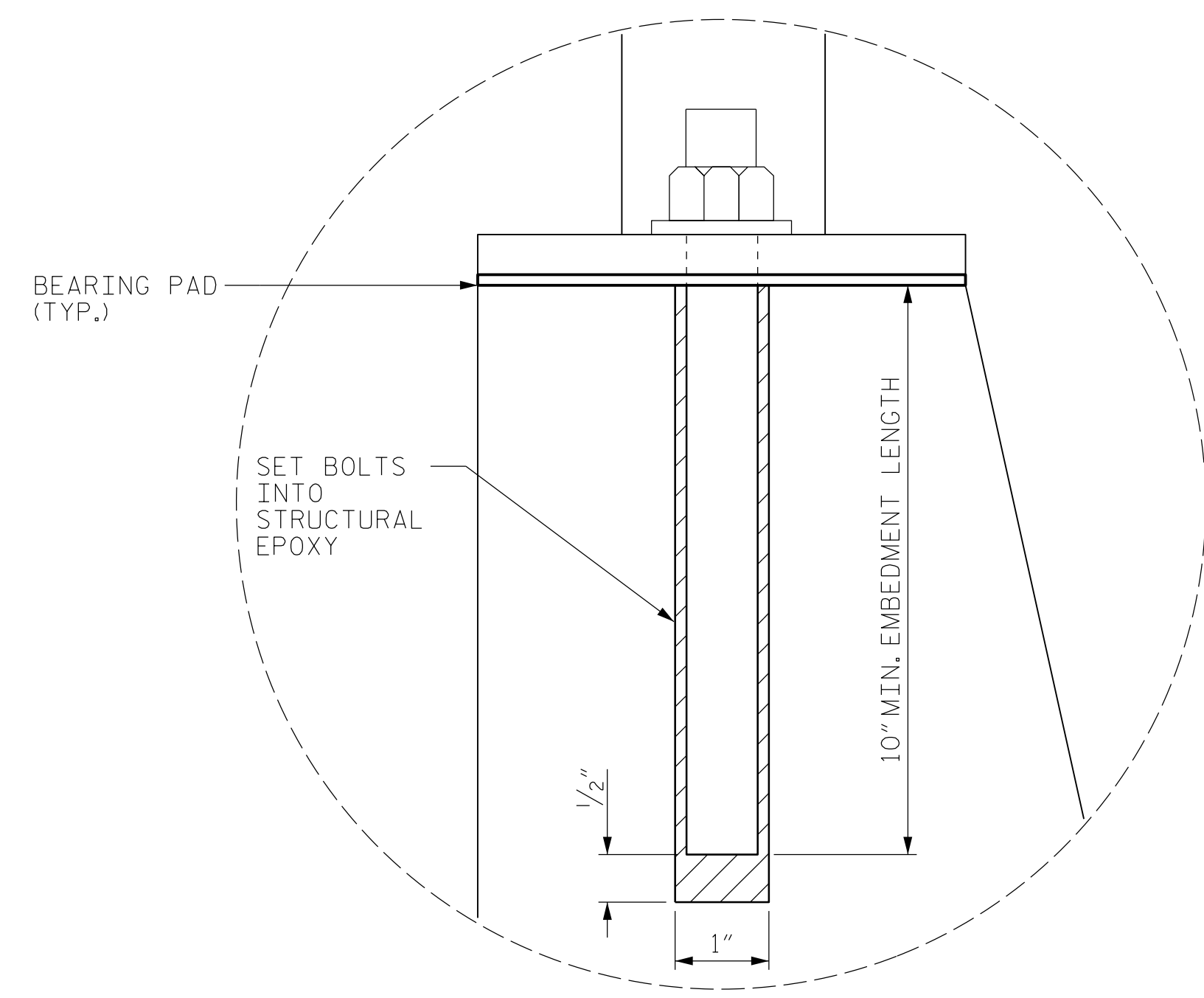
RAIL END ELEVATION

RAIL RETROFIT NOTES:

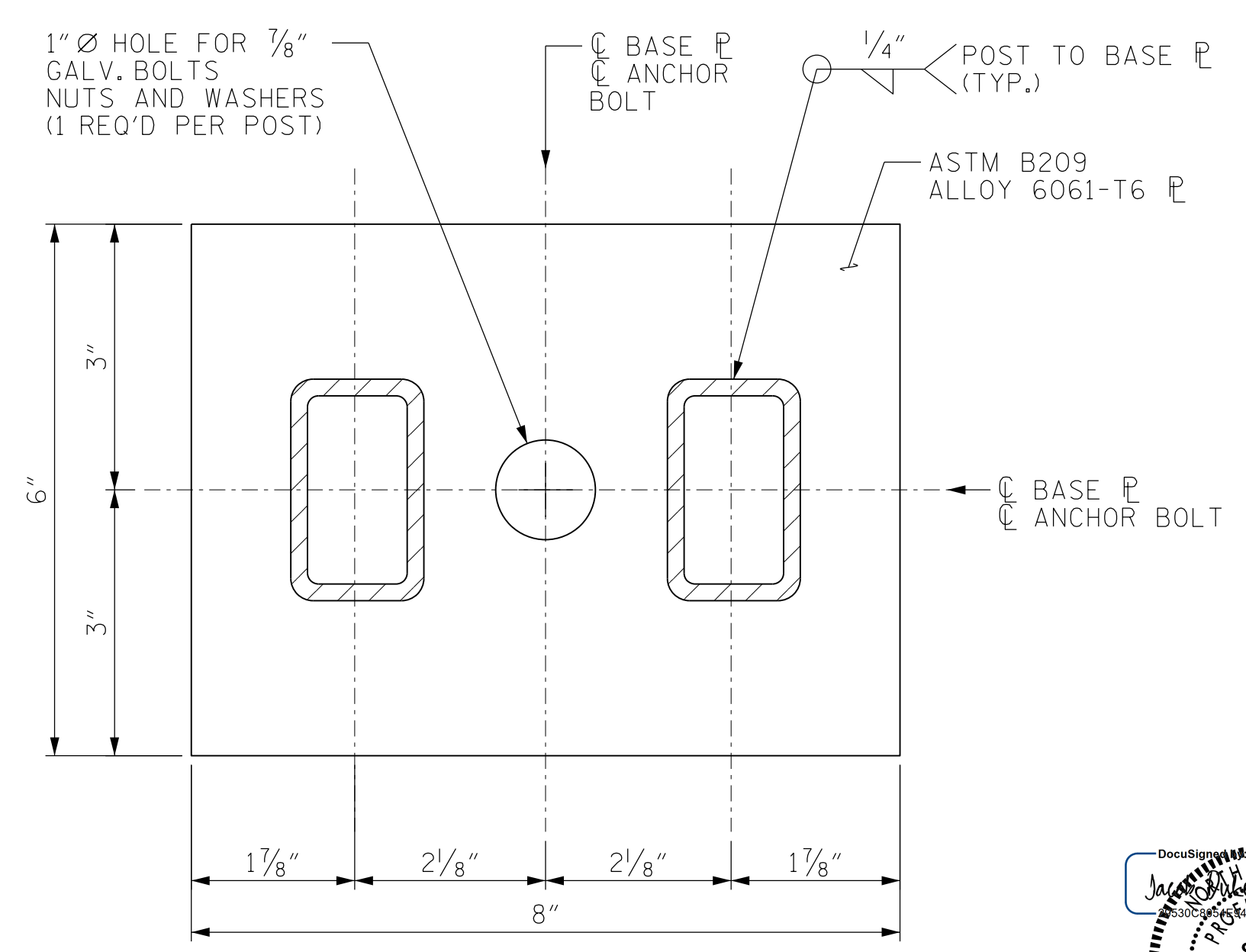
1. PROVIDE AN ALUMINUM RAIL RAIL SYSTEM IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
2. FOR RAIL RETROFIT, SEE SPECIAL PROVISIONS.
3. FOR RAIL POST LOCATIONS, SEE SHEET S-14.
4. ALL BARRIER RAIL POSTS ARE TO BE VERTICALLY PLUMB. PROVIDE SHORTER POSTS AT THE FOUR END LOCATIONS TO MAINTAIN LEVEL HORIZONTAL RAILS AS SHOWN IN THIS SHEET.
5. POSTS, BASES AND RAILS SHALL BE ASTM B-221 ALLOY-T6. THE CONTRACTOR SHALL USE SUITABLE HARDWARE. WELDING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 1074 OF THE STANDARD SPECIFICATIONS.
6. THE BASE OF RAIL POSTS, OR ANY OTHER ALUMINUM SURFACE IN CONTACT WITH CONCRETE, SHALL BE THOROUGHLY COATED WITH AN ALUMINUM IMPREGNATED CAULKING COMPOUND OF APPROVED QUALITY.
7. FOR ADHESIVELY ANCHORED BOLTS, SEE STANDARD SPECIFICATIONS SECTION 420-13.
8. FOR ADHESIVELY ANCHORED BOLTS, LEVEL ONE FIELD TESTING IS REQUIRED. THE REQUIRED PULLOUT STRENGTH IS 5 KIPS FOR THE SPECIFIED EMBEDMENT LENGTH.
9. BEARING PADS SHALL BE 1/8" THICK, PLAIN, FABRIC REINFORCED OR FABRIC LAMINATED BEARING PADS. FOR FURTHER DETAILS, SEE SPECIAL PROVISIONS FOR RAIL RETROFIT.



SECTION THROUGH RAIL



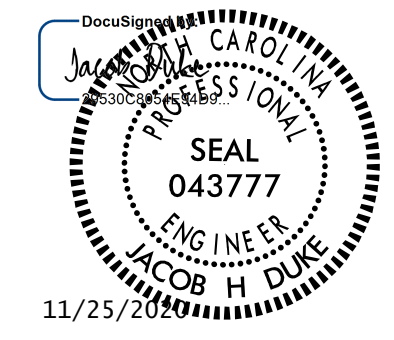
ANCHOR BOLT DETAIL



BASE PLATE DETAILS

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

SHEET 1 OF 2



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

RAIL
 RETROFIT

DRAWN BY : JACOB H. DUKE DATE : 10/2018
 CHECKED BY : SAMUEL L. CULLUM DATE : 10/2018
 DESIGN ENGINEER OF RECORD : JACOB H. DUKE DATE : 10/2018

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

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

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-13
1			3			TOTAL SHEETS
2			4			45