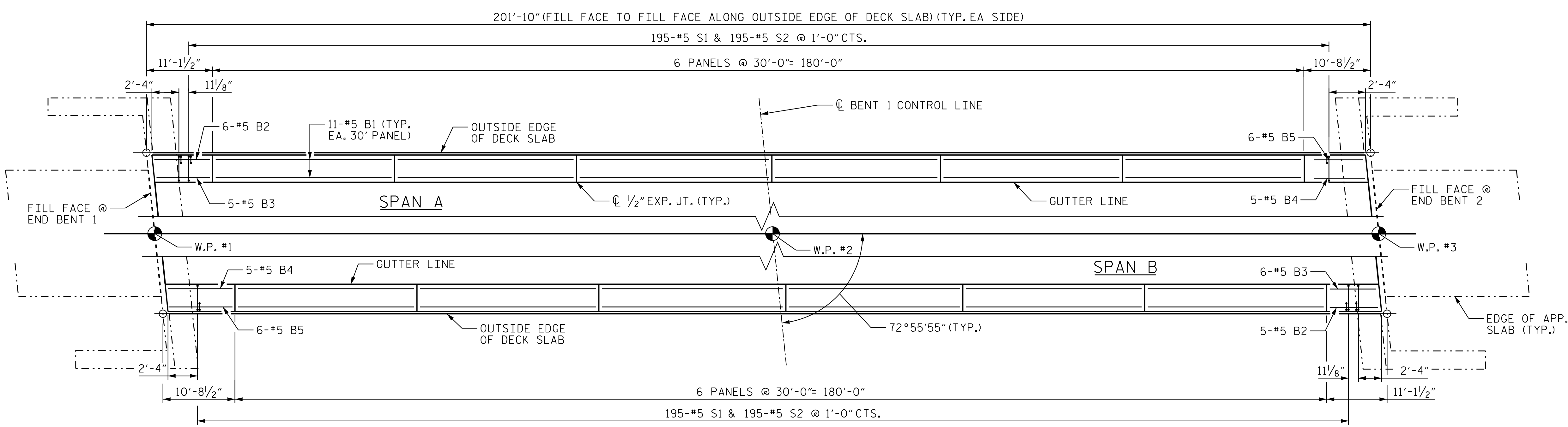


jHagenbush

4/27/2023

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### BARRIER RAIL PLAN

#### NOTES

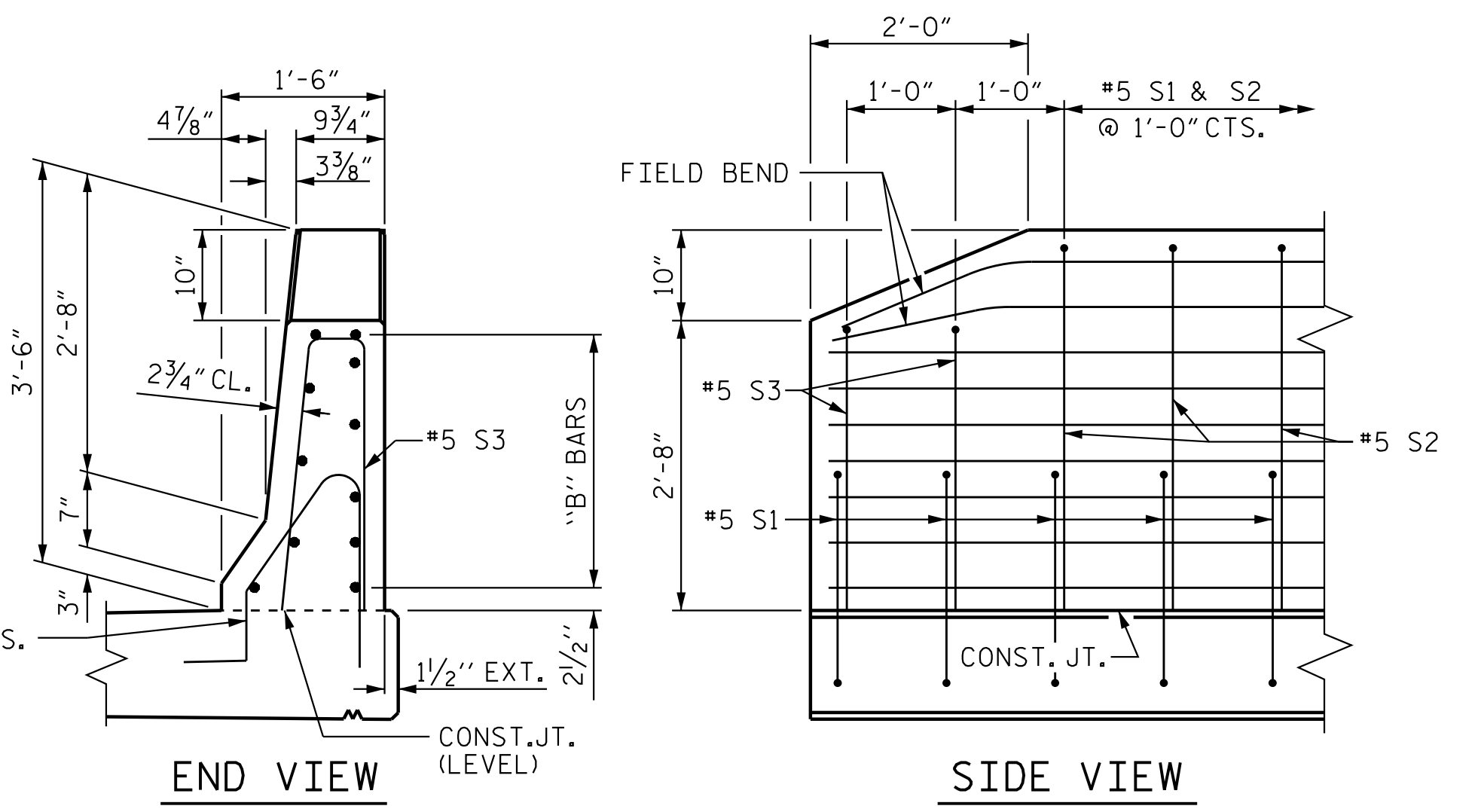
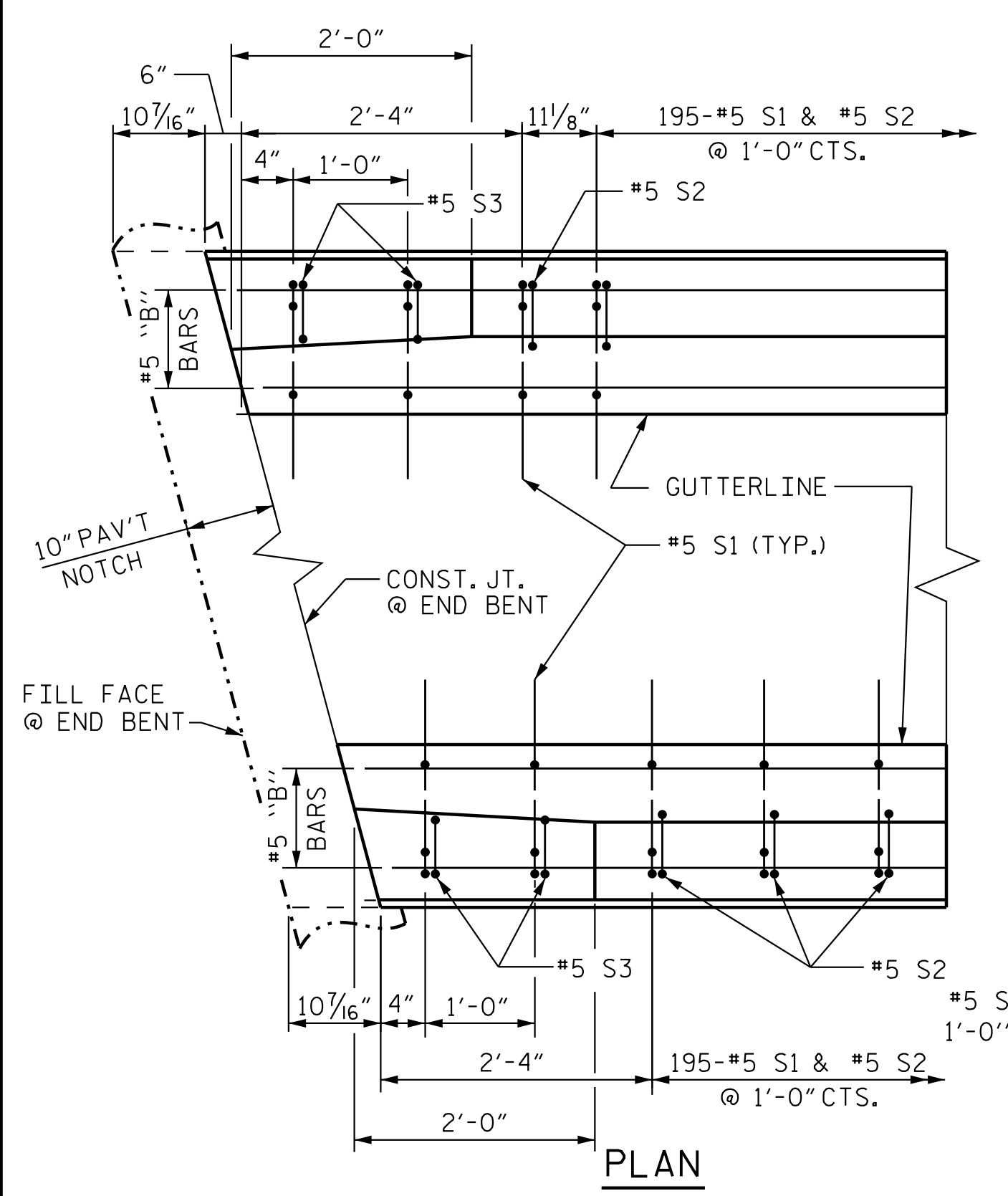
THE BARRIER RAIL IN THE CONTINUOUS UNIT SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN ALL SPANS HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

THE JOINT IN THE DECK SHALL BE SAWS PRIOR TO THE CASTING OF BARRIER RAIL.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

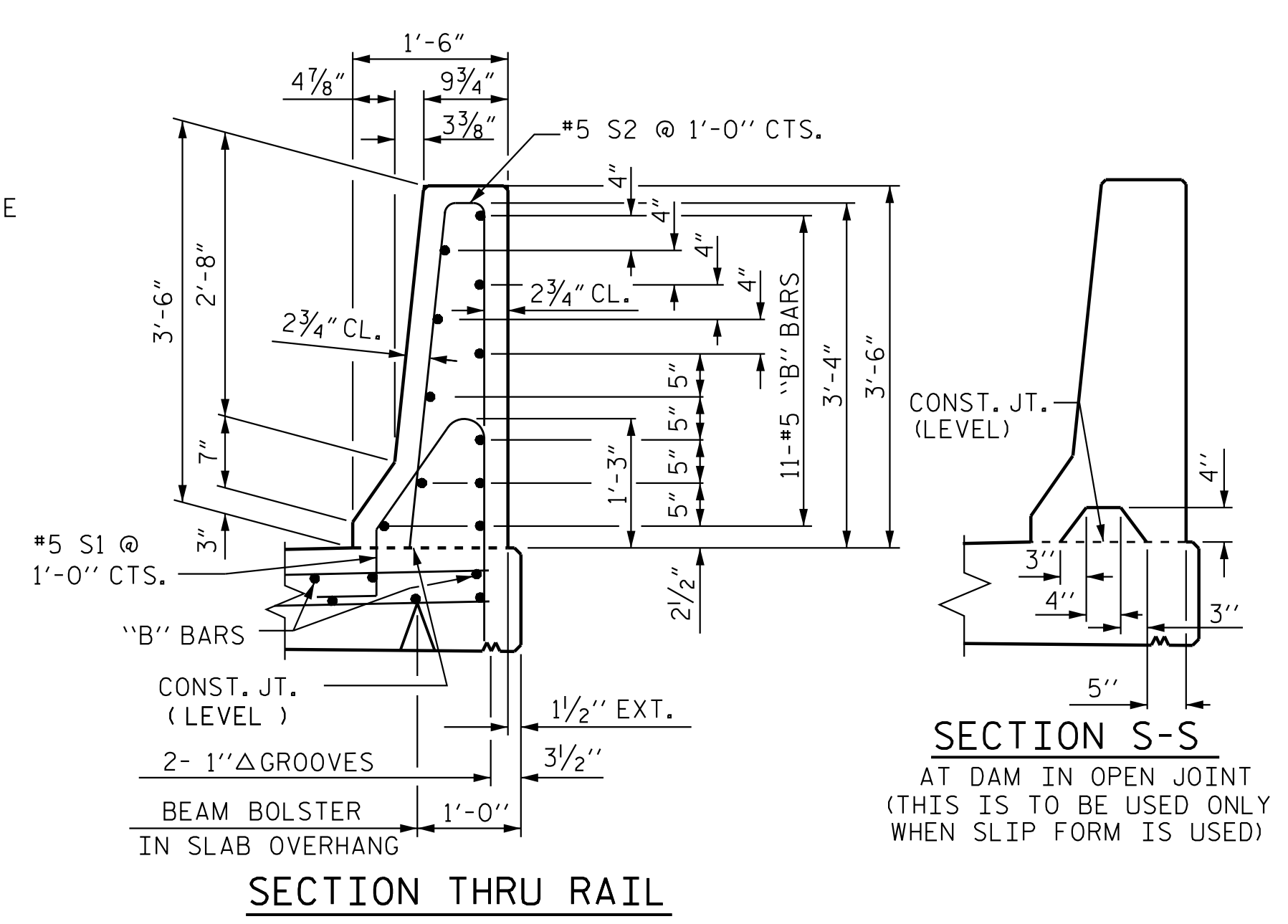
GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF BARRIER RAIL SEGMENTS LESS THAN 20 FEET IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

NOTE: ALL HORIZONTAL DIMENSIONS SHOWN ARE ALONG OUTSIDE EDGE OF DECK SLAB

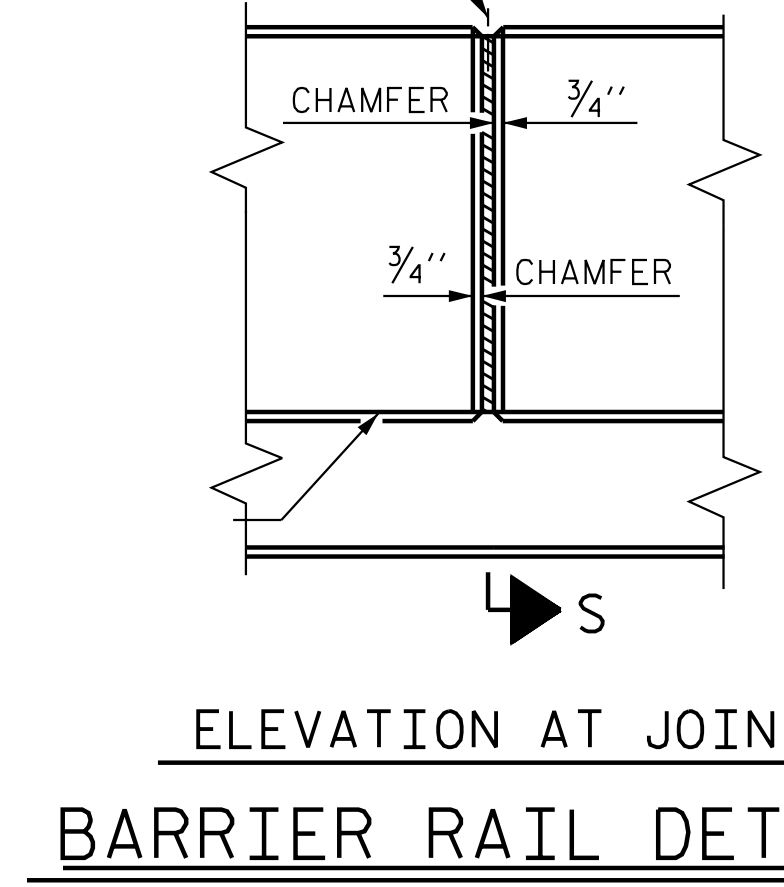


### END OF RAIL DETAILS

END BENT 1 SHOWN, END BENT 2 TYP. BY ROTATION

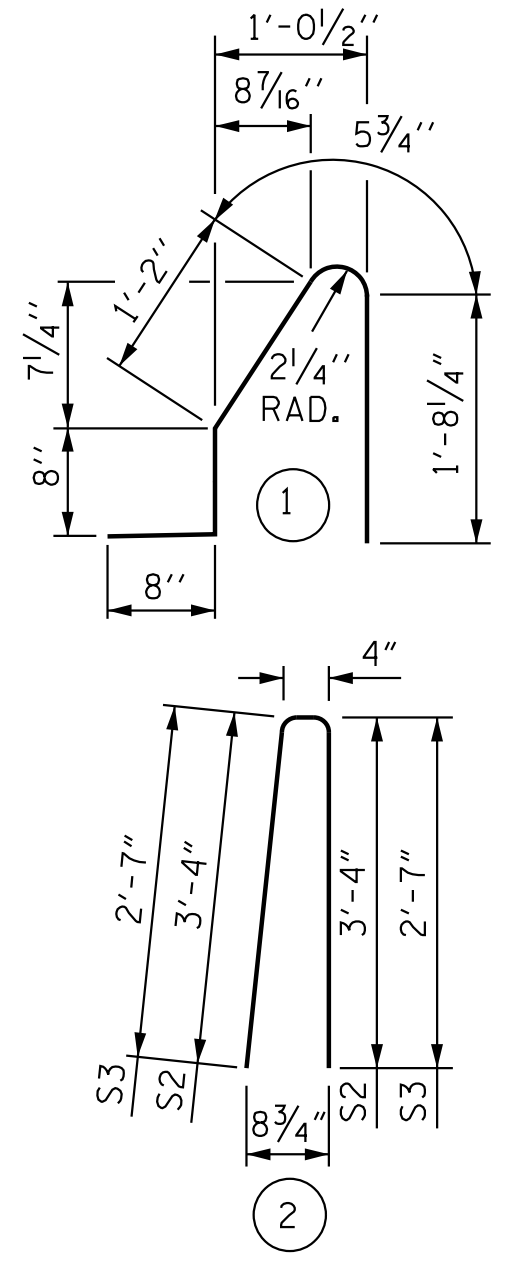


1/2" EXP. JT. MAT'L HELD IN PLACE WITH GALVANIZED NAILS.  
(NOTE: OMIT EXP. JT. MAT'L. WHEN SLIP FORM IS USED.)



### BARRIER RAIL DETAILS

#### BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

#### BILL OF MATERIAL

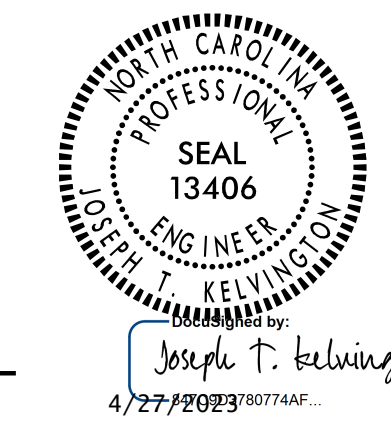
FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	132	#5	STR	29'-6"	4061
* B2	12	#5	STR	9'-8"	121
* B3	10	#5	STR	9'-5"	98
* B4	10	#5	STR	9'-10"	103
* B5	12	#5	STR	9'-7"	120
* S1	400	#5	1	4'-8"	1947
* S2	392	#5	2	7'-0"	2862
* S3	8	#5	2	5'-6"	46

* EPOXY COATED REINFORCING STEEL	9,358 LBS.
CLASS AA CONCRETE	54.3 CU. YDS.
CONCRETE BARRIER RAIL	400.2 LIN. FT.

PROJECT NO. R-2707D  
CLEVELAND COUNTY  
STATION: 20+16.72 -Y2-

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
SUPERSTRUCTURE  
CONCRETE BARRIER RAIL



REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S2-21
1			3			TOTAL SHEETS
2			4			35

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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DRAWN BY: M. B. ISENHOUR DATE: 10/31/18  
CHECKED BY: V. E. FRAGA DATE: 11/19/18  
DESIGN ENGINEER OF RECORD: J.T. KELVINGTON DATE: 04/27/22