

NOTES

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

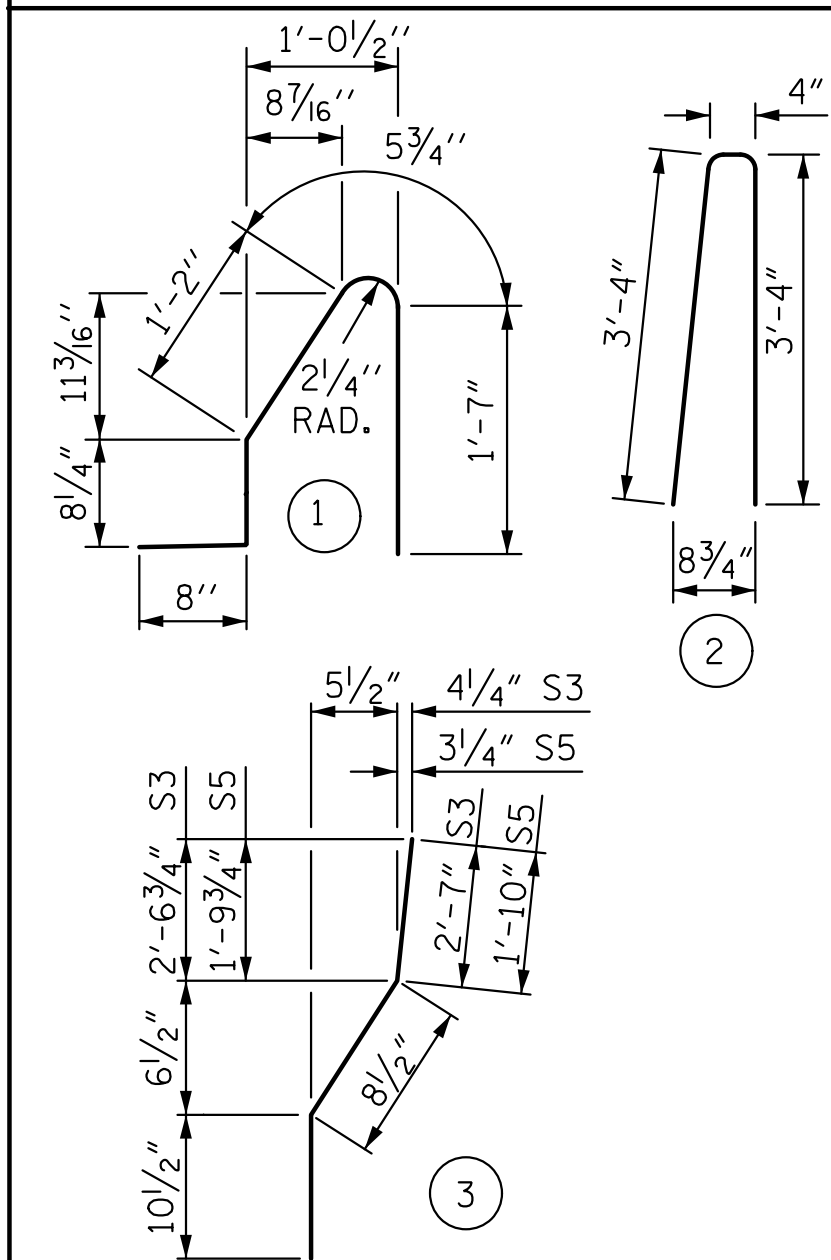
WHEN FOAM JOINT SEAL IS REQUIRED, THE JOINT IN THE DECK SHALL BE SAWED PRIOR TO THE CASTING OF BARRIER RAIL.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

THE #5 S3, S4, S5 AND S6 BARS SHALL BE INSTALLED, USING AN ADHESIVE ANCHORING SYSTEM, AFTER SAWING THE JOINT. THE YIELD LOAD FOR THE #5 S3, S4, S5 AND S6 BARS IS 18.6 KIPS. FIELD TESTING FOR THE ADHESIVE BONDING SYSTEM IS NOT REQUIRED.

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.

BAR TYPES



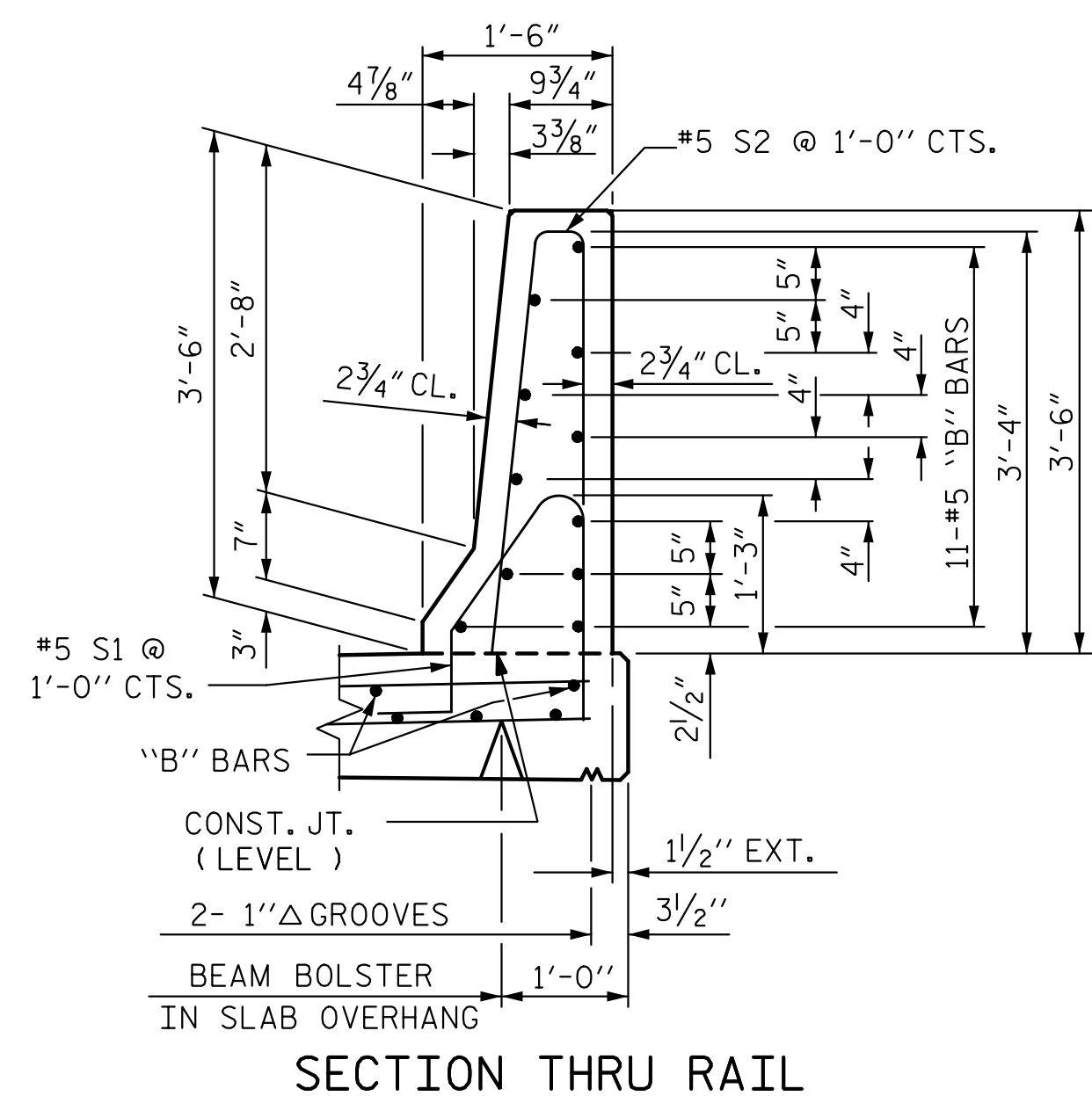
ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

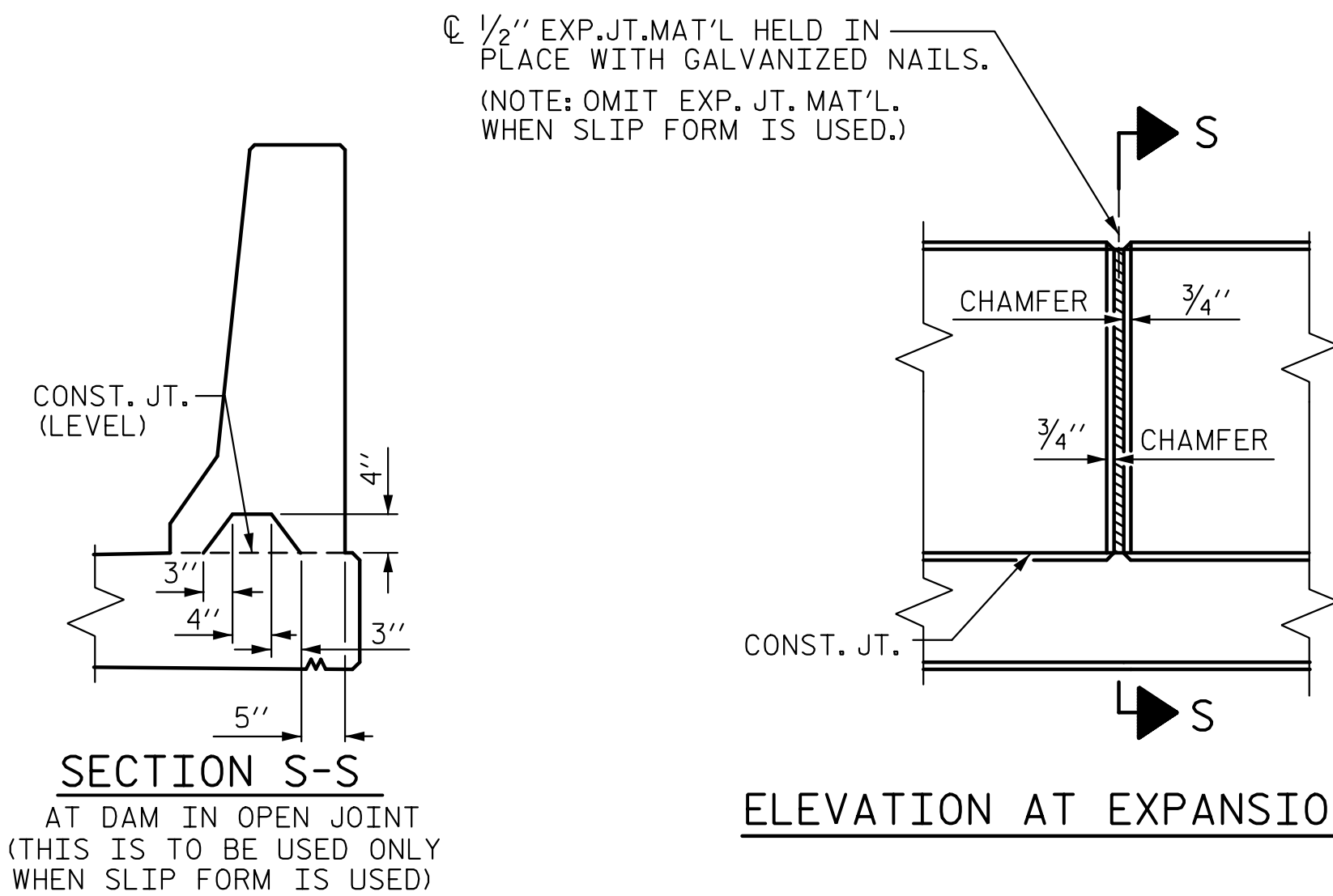
FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	22	#5	STR	25'-0"	574
* B2	374	#5	STR	28'-8"	11,182
* B3	22	#5	STR	9'-0"	207
* S1	1,046	#5	1	4'-7"	5,000
* S2	1,046	#5	2	7'-0"	7,637
* S3	4	#5	3	4'-2"	17
* S4	4	#5	STR	4'-0"	17
* S5	8	#5	3	3'-5"	29
* S6	8	#5	STR	3'-3"	27

* EPOXY COATED REINFORCING STEEL 24,690 LBS.
 CLASS AA CONCRETE 143.4 CU. YDS.
 CONCRETE BARRIER RAIL 1055.42 LIN. FT.

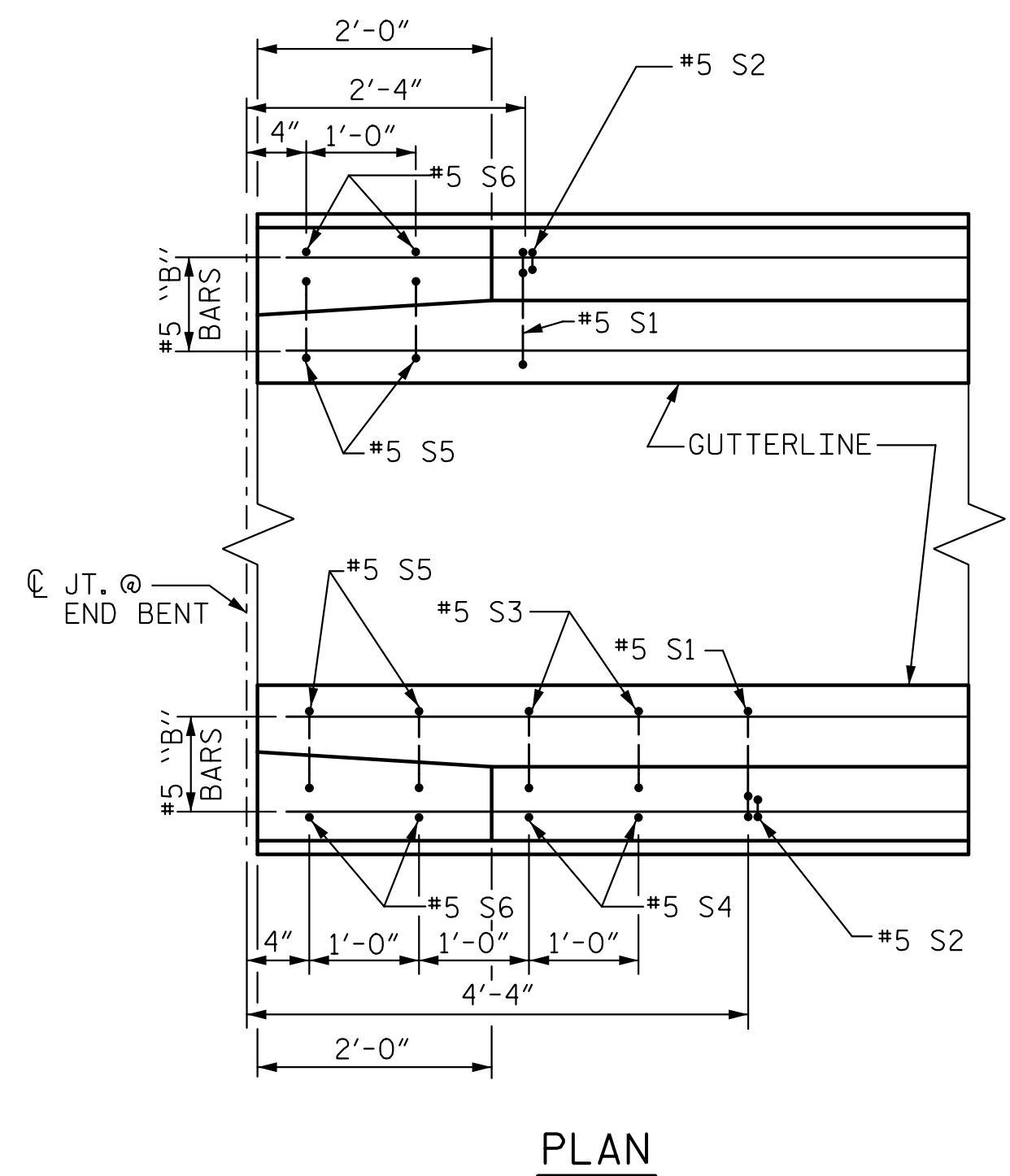


SECTION THRU RAIL

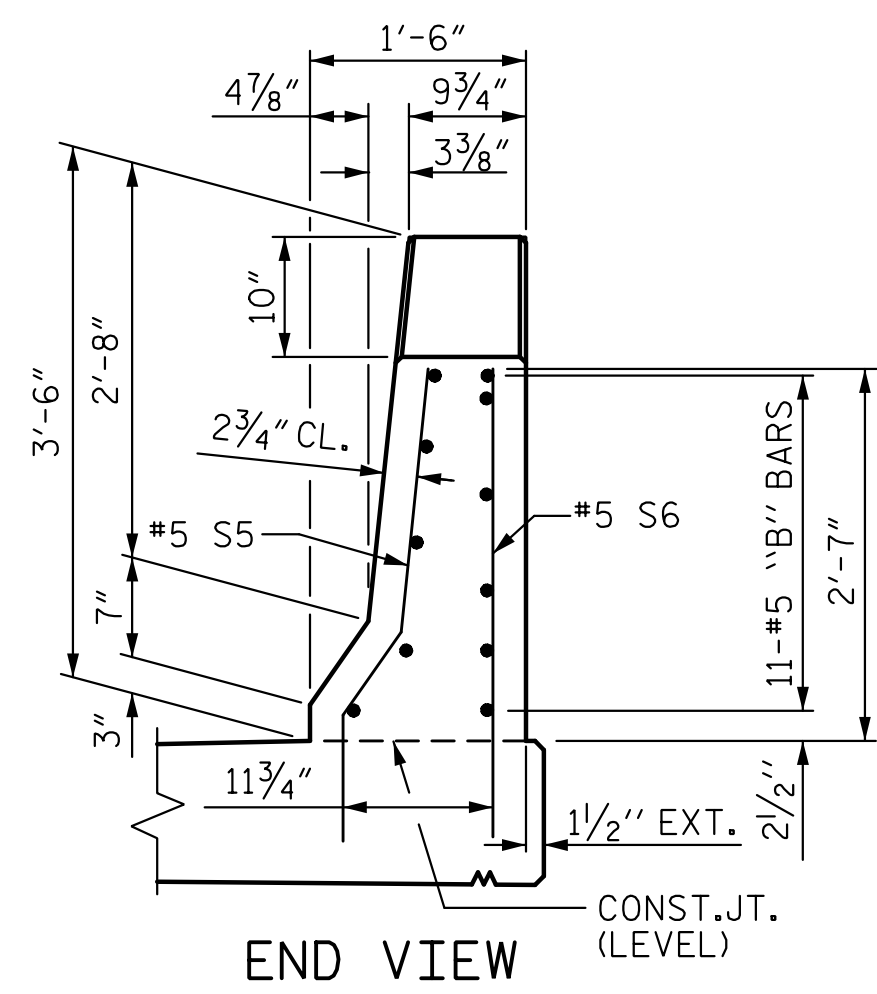


ELEVATION AT EXPANSION JOINTS

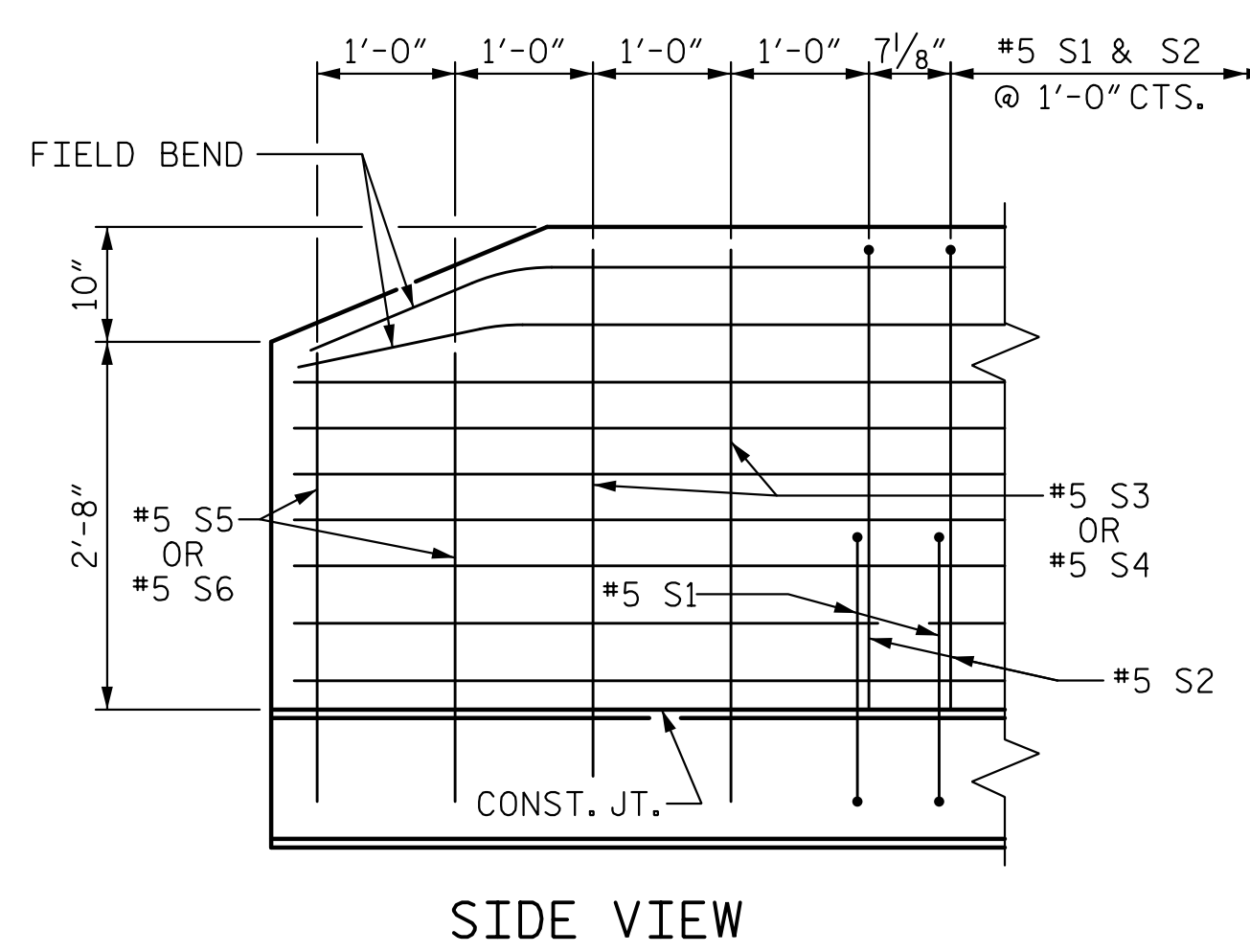
BARRIER RAIL DETAILS



PLAN



END VIEW



SIDE VIEW

RIGHT BARRIER SHOWN, LEFT BARRIER SIMILAR

END OF RAIL DETAILS

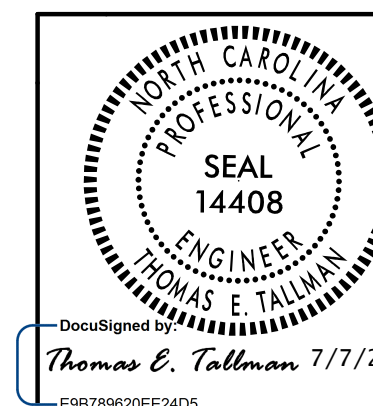
FOR ADHESIVE ANCHORING AT SAWED JOINTS

ASSEMBLED BY : D. H. CARTER DATE :MAY 2015
 CHECKED BY : M. T. NEIHEISEL DATE :MAY 2015
 DRAWN BY : ARB 5/87
 CHECKED BY : SJD 9/87

REV. 10/1/11 MAA/GM
 REV. 7/12 MAA/GM
 REV. 6/13 MAA/GM



5121 Kingdom Way, Suite 100 Raleigh, NC 27607
 NC License No. P-0295



PROJECT NO. W-5516
 ROWAN COUNTY
 STATION: 61+79.40 -L-
 SHEET 2 OF 2

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

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-21
1			3			TOTAL SHEETS 41
2			4			