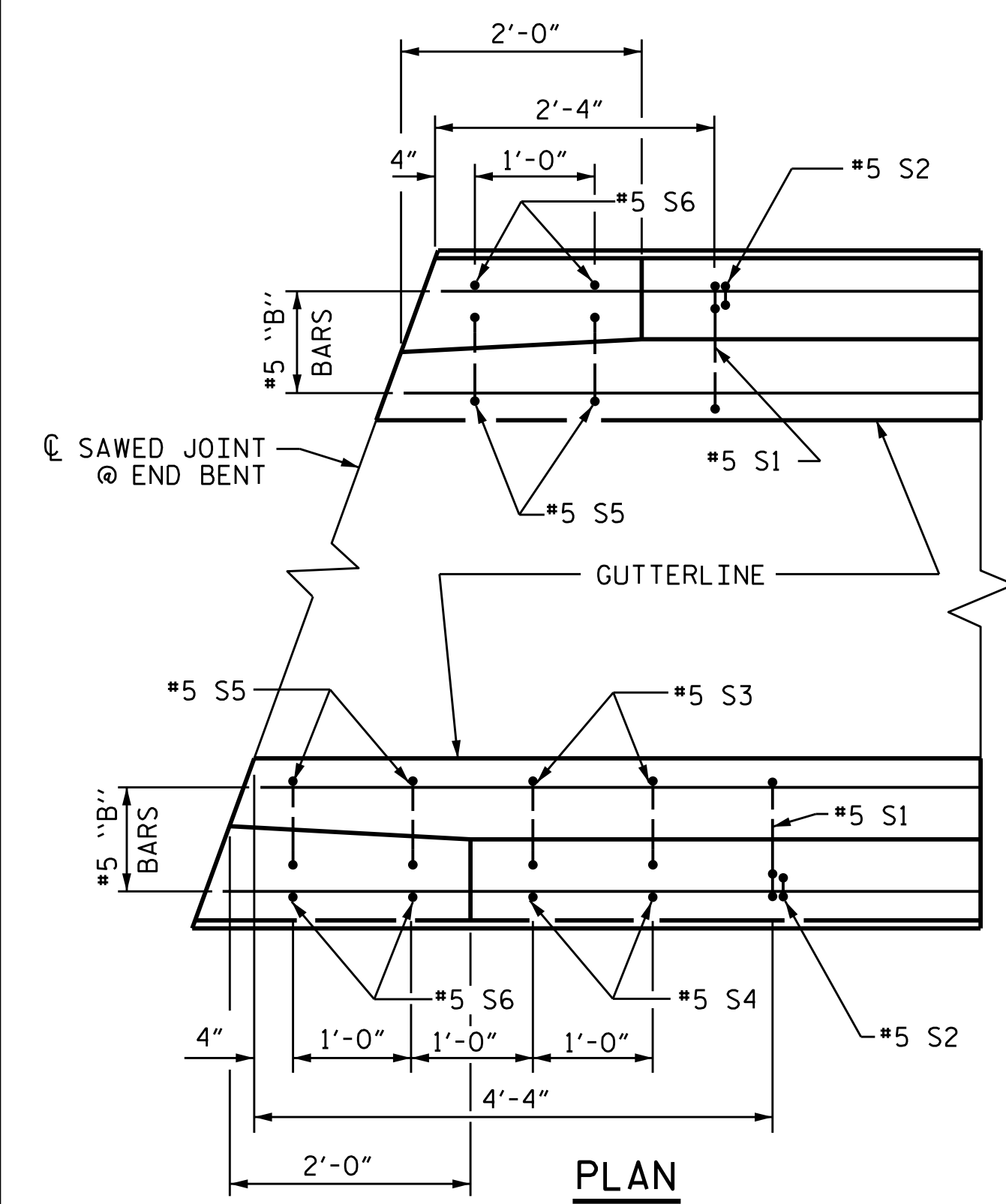
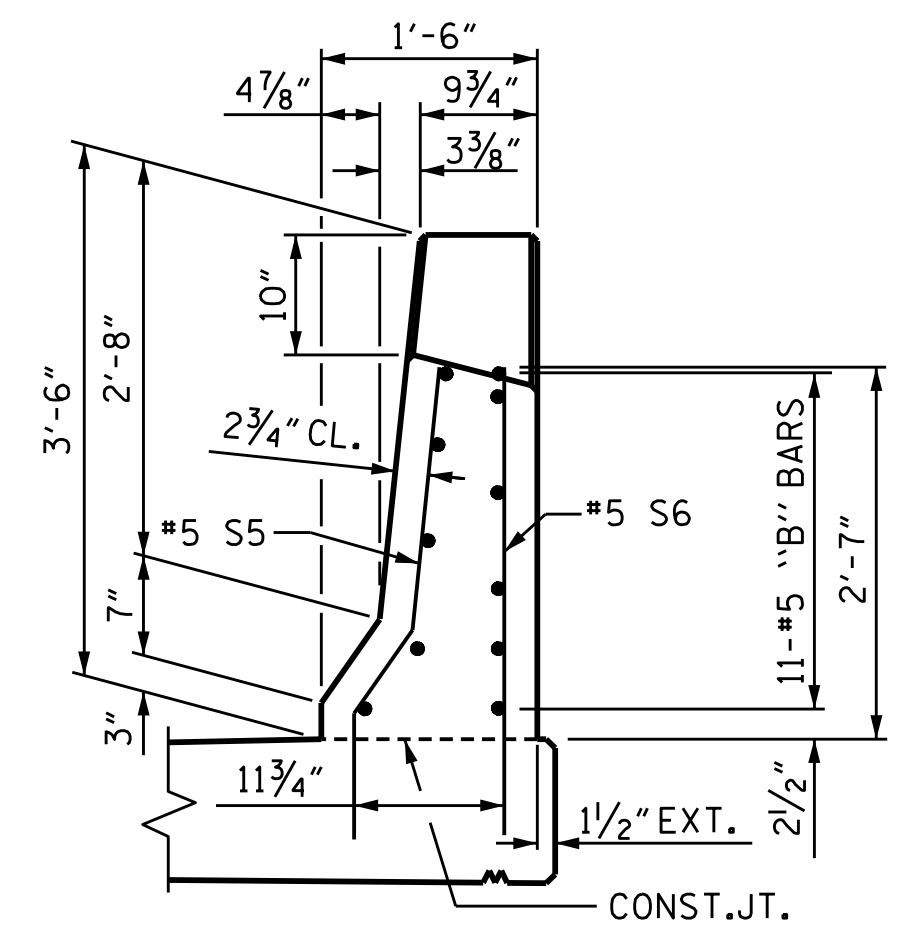


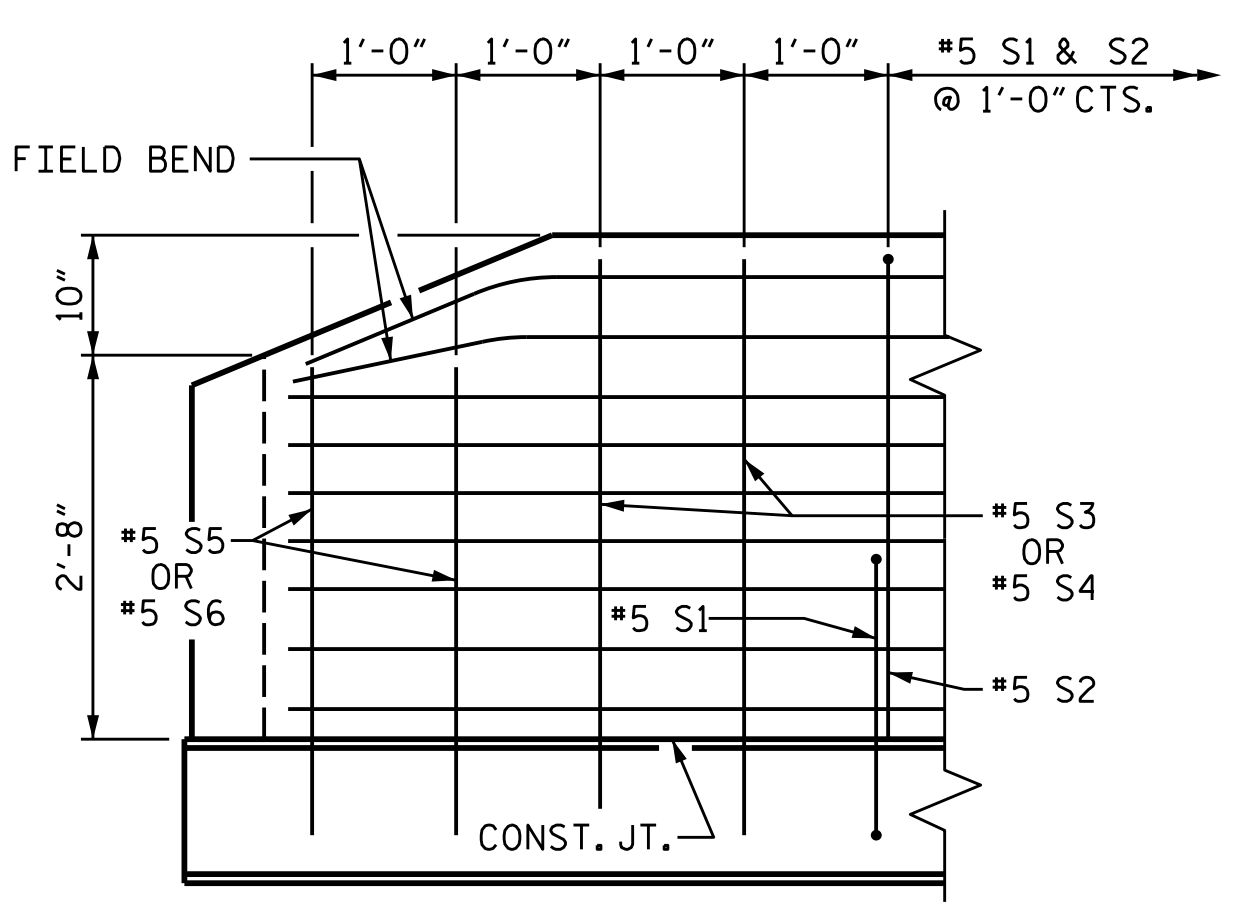
PLAN



PLAN



END VIEW



SIDE VIEW

**END OF RAIL DETAILS
FOR ADHESIVE ANCHORING AT SAWED JOINTS**

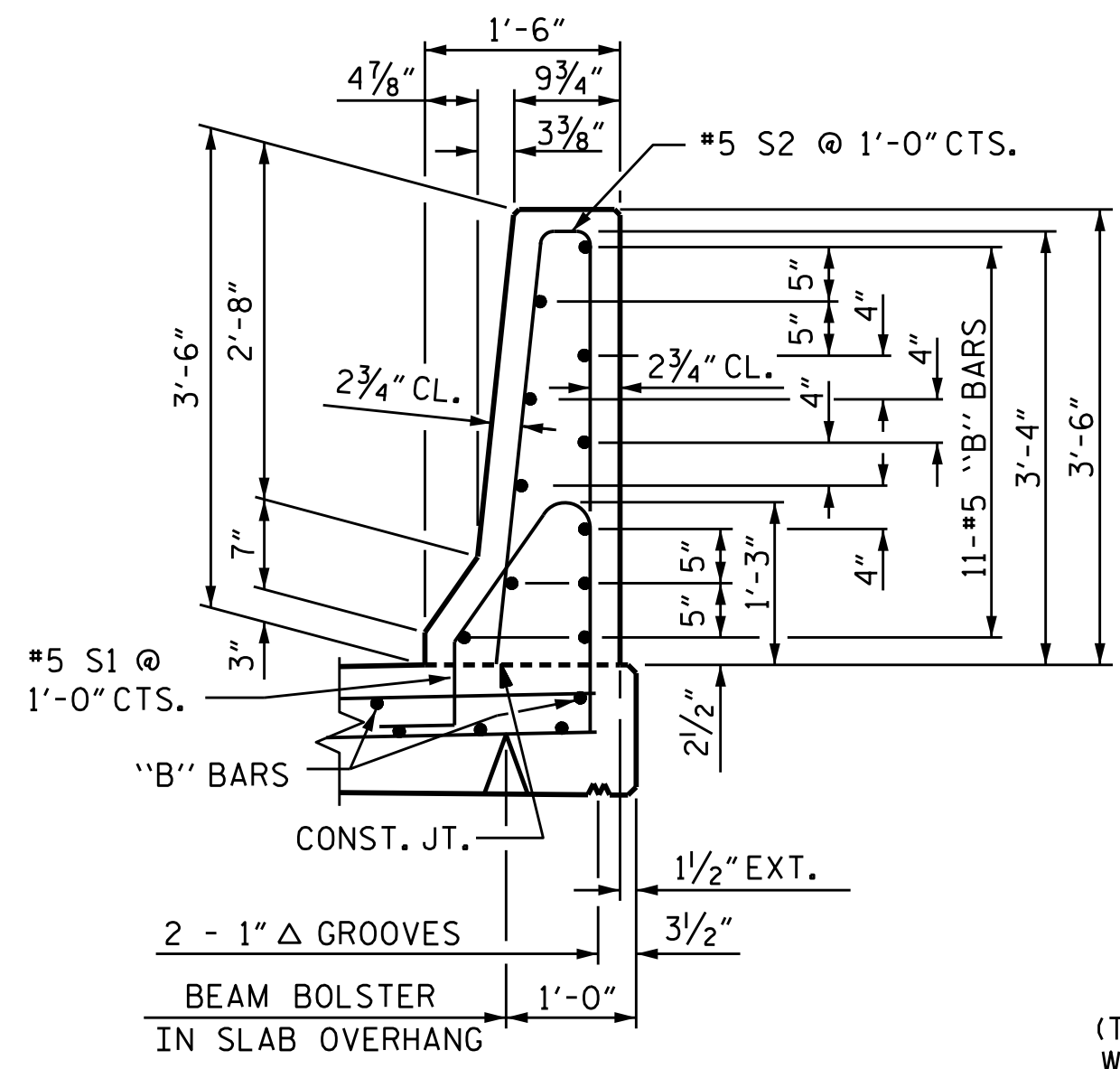
NOTES

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

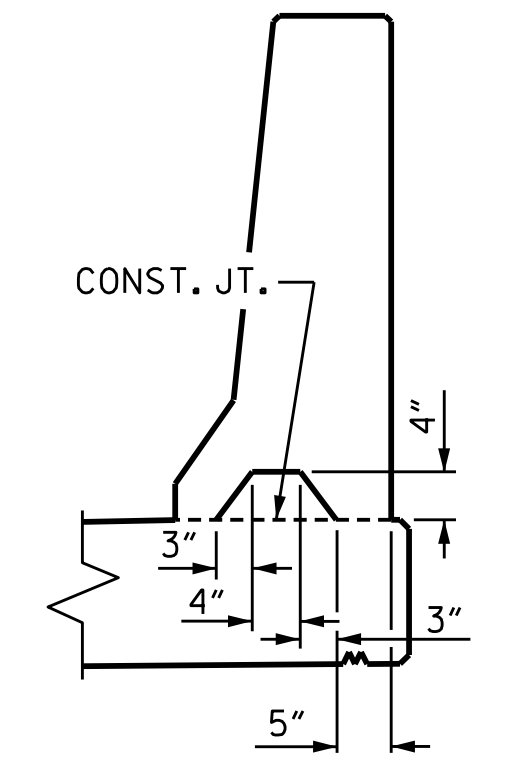
ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

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.

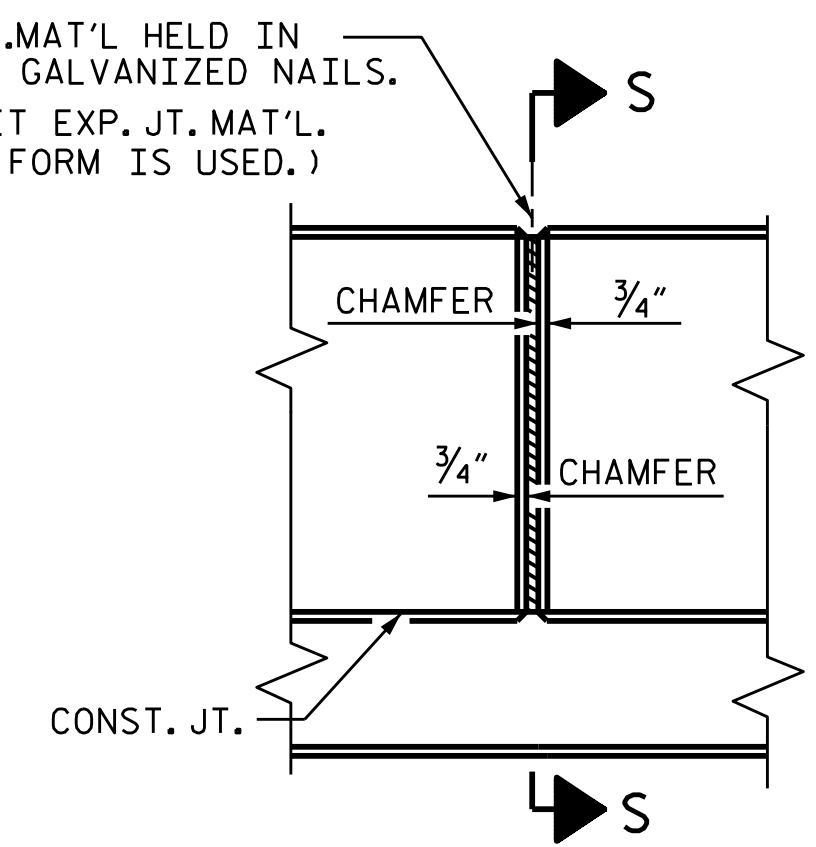
GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS 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.



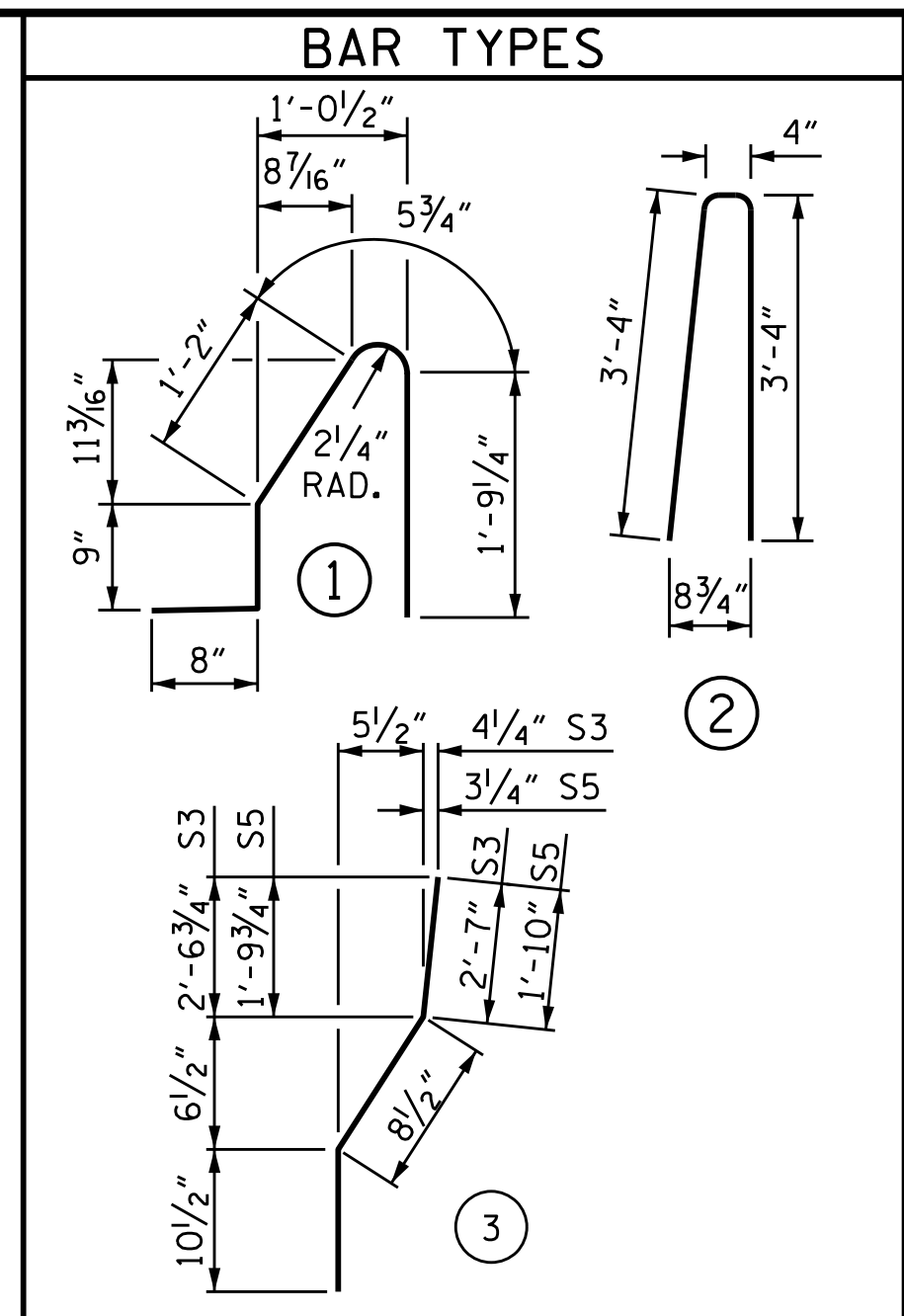
SECTION THRU RAIL



**SECTION S-S
AT DAM IN OPEN JOINT
(THIS IS TO BE USED ONLY
WHEN SLIP FORM IS USED)**



**ELEVATION AT EXPANSION JOINTS
BARRIER RAIL DETAILS**

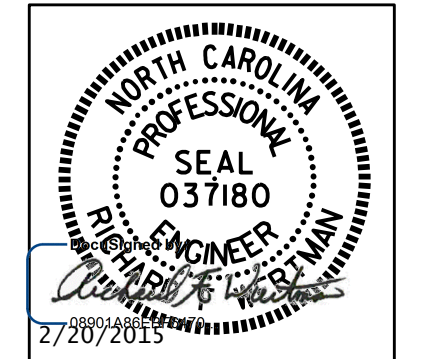


ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL
FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	154	#5	STR	24'-7"	3949
* B2	44	#5	STR	15'-10"	727
* B3	44	#5	STR	14'-2"	650
* B4	22	#5	STR	29'-6"	677
* S1	504	#5	1	4'-10"	2541
* S2	504	#5	2	7'-0"	3680
* 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 12,314 LBS.
CLASS AA CONCRETE 70.2 CU. YDS.
CONCRETE BARRIER RAIL 516.5 LIN. FT.



PROJECT NO. R-2915B
ASHE COUNTY
STATION: 242+67.42 -L-

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

REVISIONS						SHEET NO. S05-20
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 35
2			4			

ASSEMBLED BY : T.J. KIRSCHBAUM DATE : 4/25/14
CHECKED BY : R.F. WERTMAN DATE : 8/22/14
DRAWN BY : ARB 5/87 REV. 10/1/11 MAA/GM
CHECKED BY : SJD 9/87 REV. 7/12 MAA/GM
REV. 6/13 MAA/GM

PLANS PREPARED BY:
Gannett Fleming
Excellence Delivered As Promised
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Suite 170
Raleigh NC 27606-4279
(919) 859-4880
NC Lic. No. F-0270

THESE PLANS HAVE BEEN PROPERLY EXAMINED BY THE UNDERSIGNED. I HAVE DETERMINED THAT THEY COMPLY WITH EXISTING NORTH CAROLINA CODES, AND HAVE BEEN PROPERLY ADAPTED FOR USE IN THIS AREA.