

NOTES

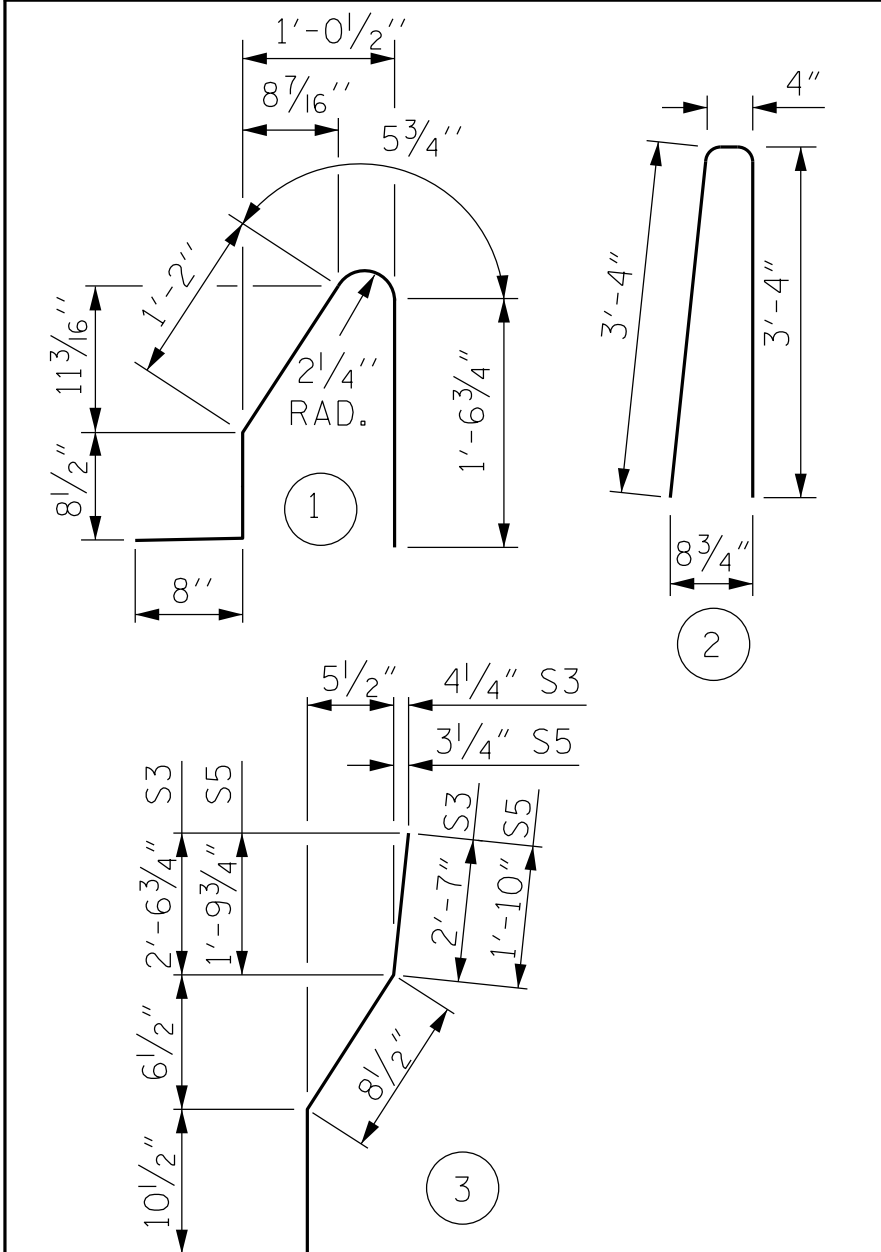
THE BARRIER RAIL IN SPAN "A" SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN SPAN "A" HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

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.

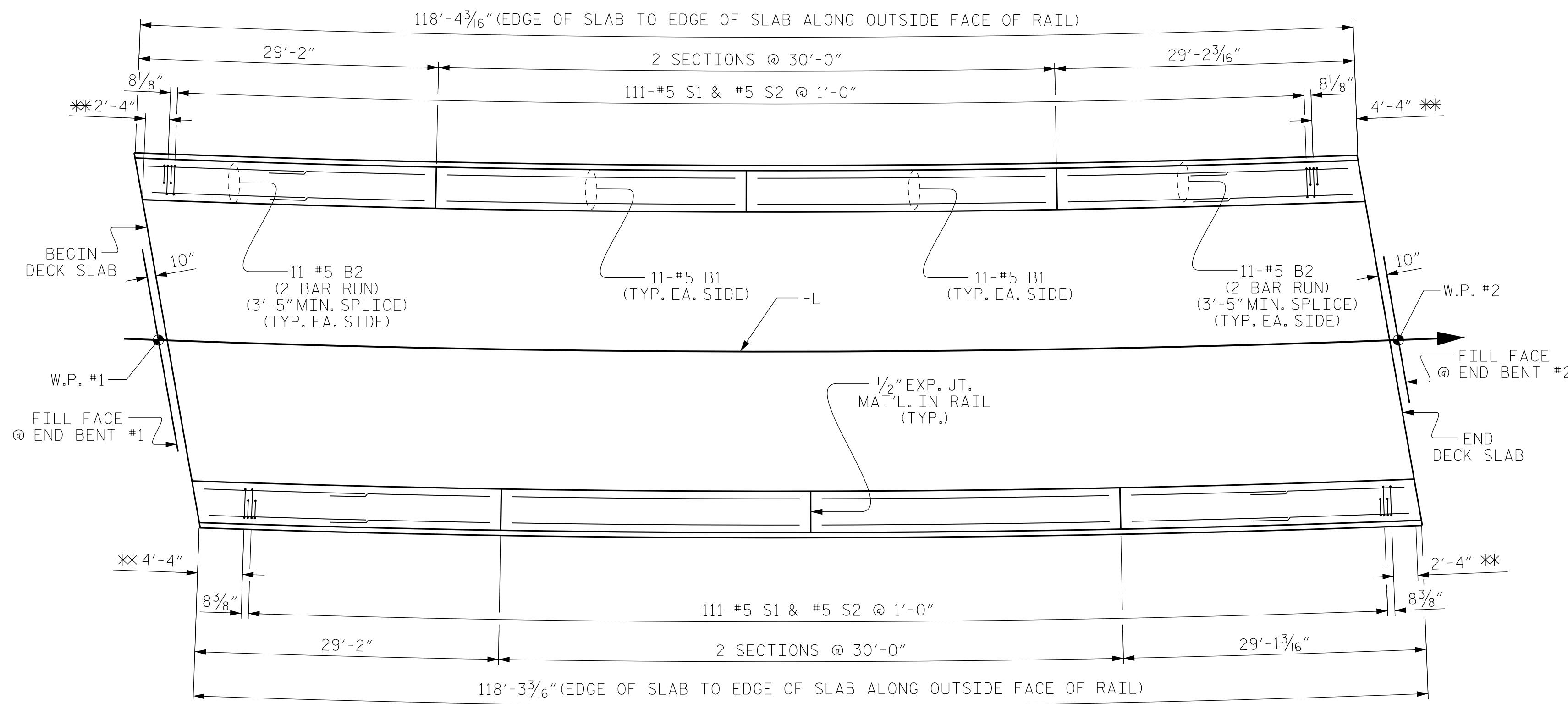
BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

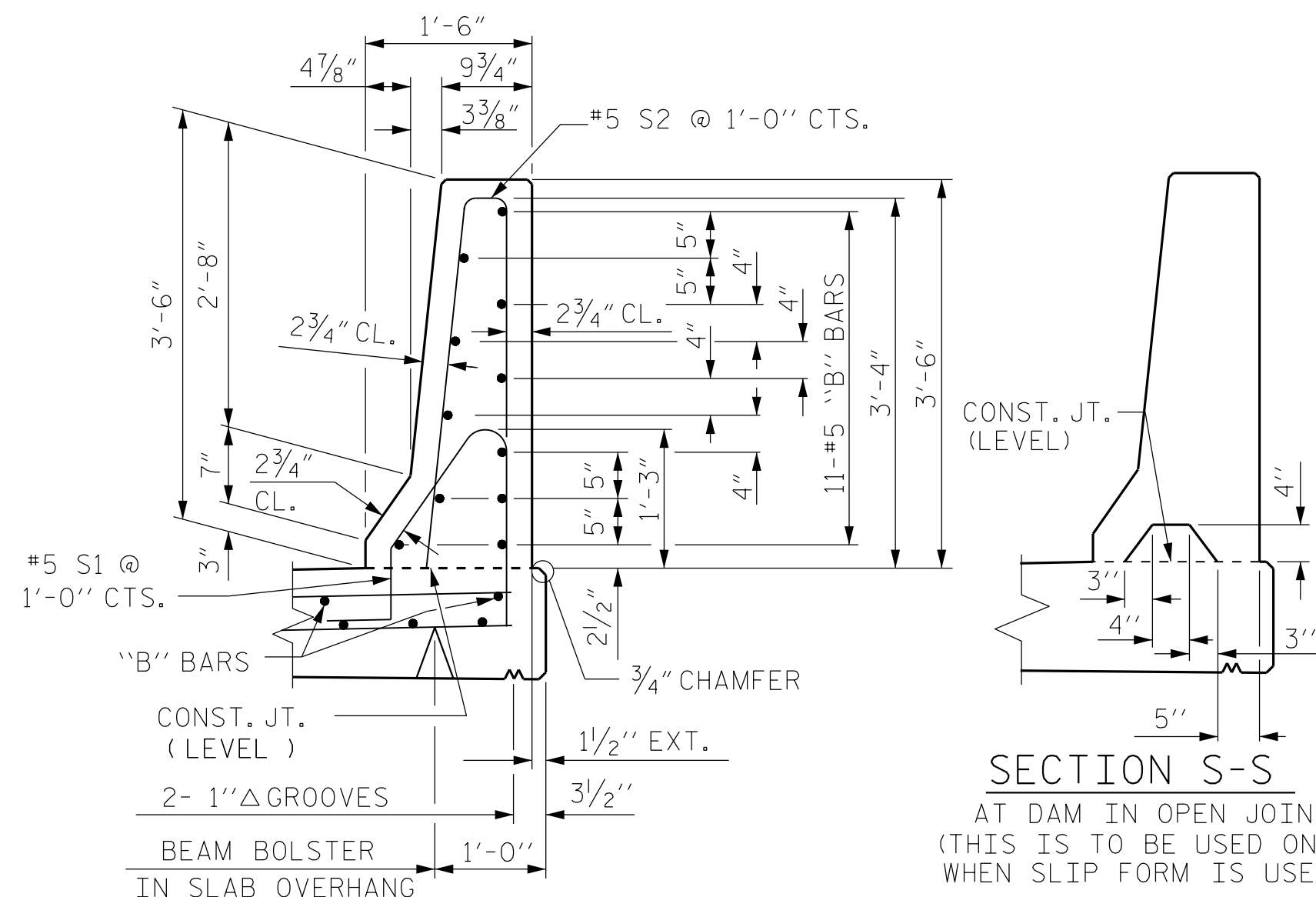
BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ONLY					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	44	#5	STR.	29'-7"	1358
* B2	88	#5	STR.	16'-3"	1491
* S1	226	#5	1	4'-7"	1080
* S2	226	#5	2	7'-0"	1650
* 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					5669 LBS.
CLASS AA CONCRETE					32.1 CU. YDS.
CONCRETE BARRIER RAIL					236.62 LIN. FT.



PLAN

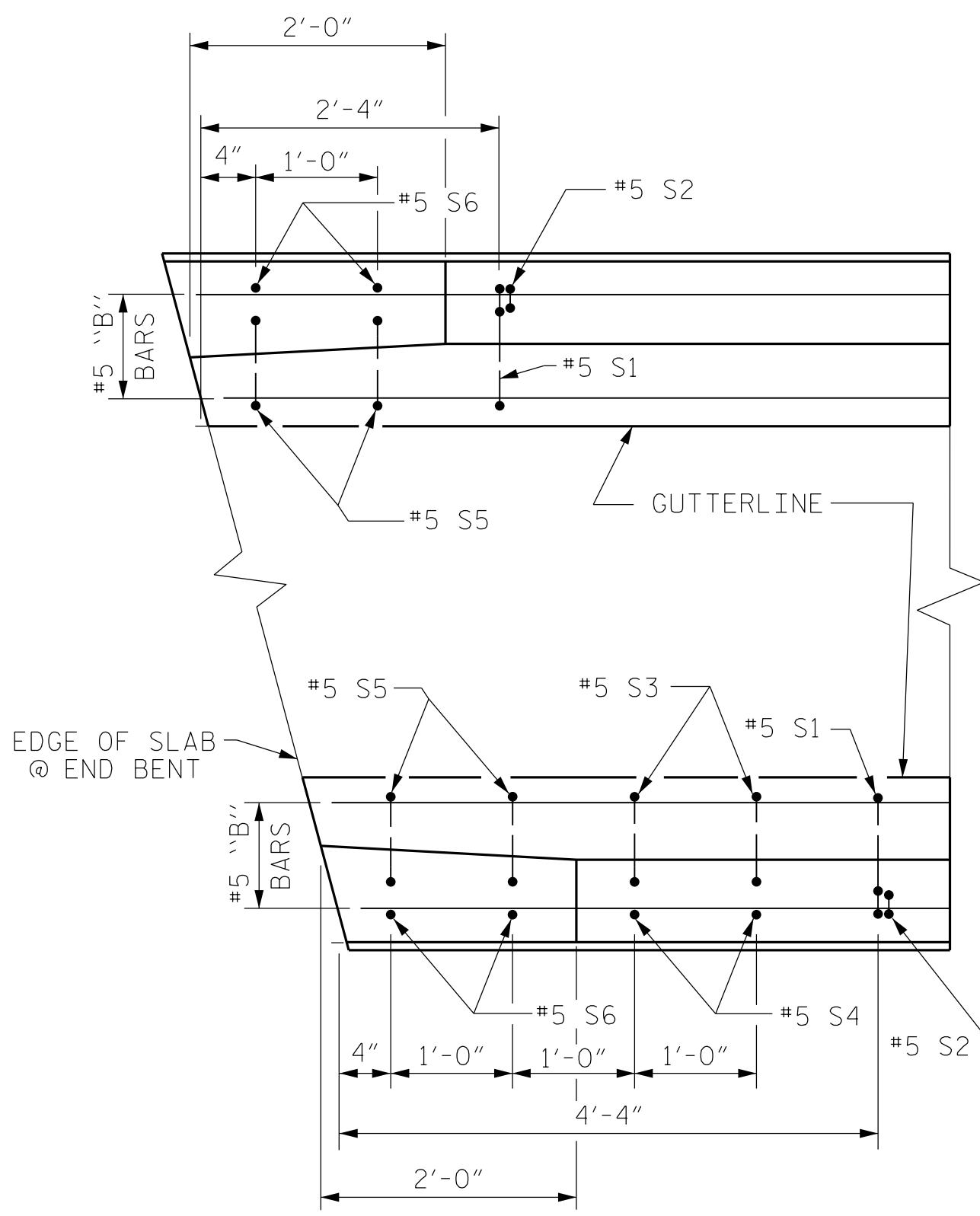
(ALL DIMENSIONS ALONG ARC)
* SEE "END OF RAIL DETAILS - PLAN VIEW" FOR ADDITIONAL REINFORCING STEEL.



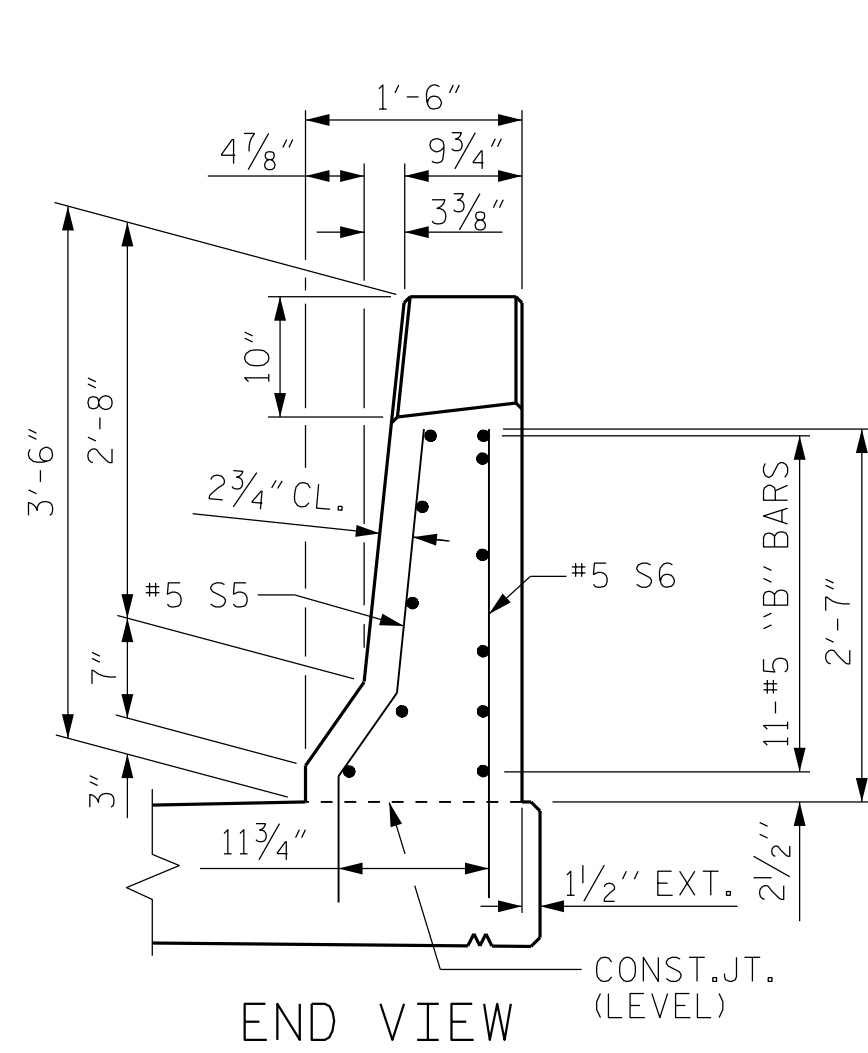
SECTION THRU RAIL

SECTION S-S

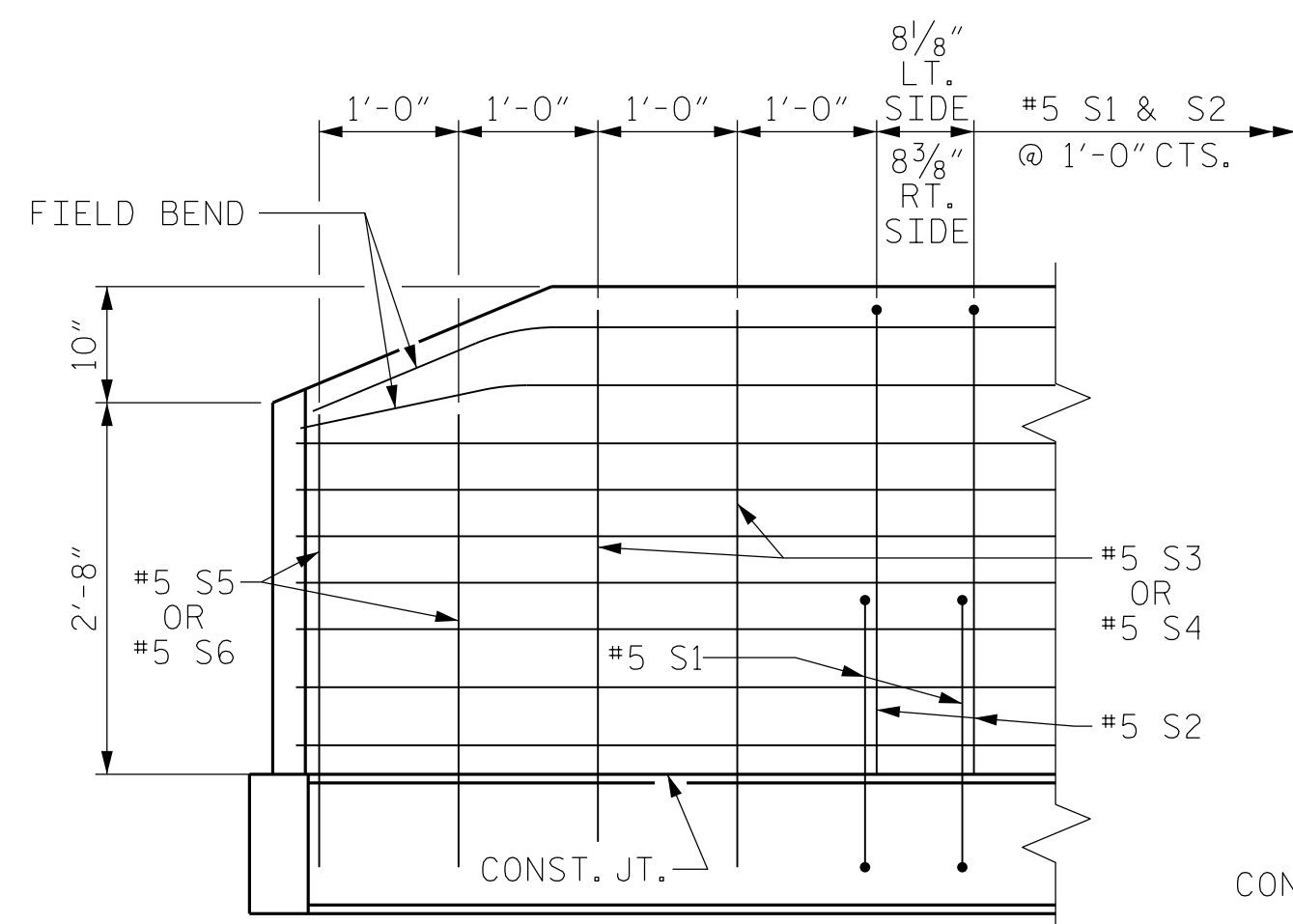
AT DAM IN OPEN JOINT
(THIS IS TO BE USED ONLY WHEN SLIP FORM IS USED)



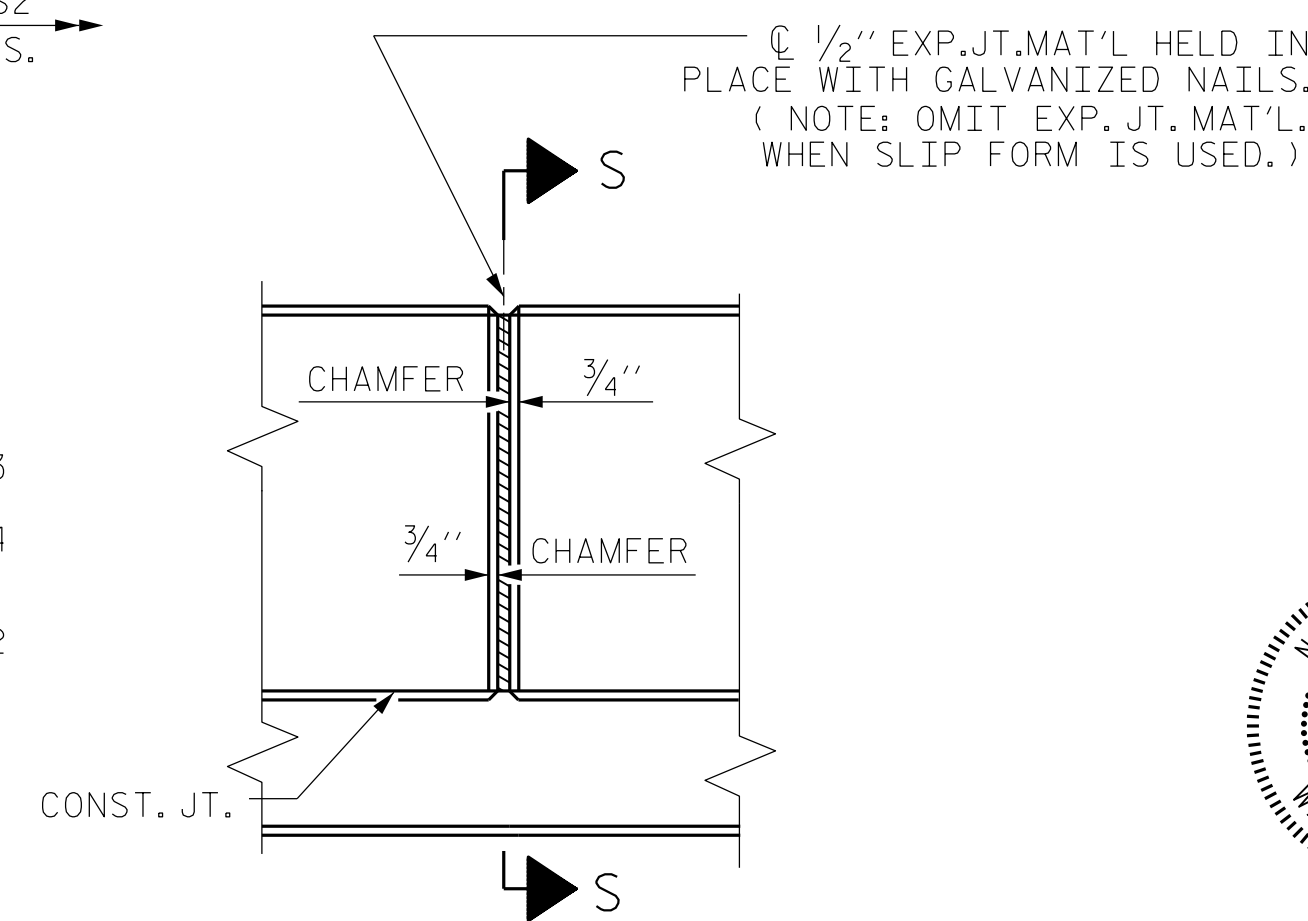
PLAN



END VIEW



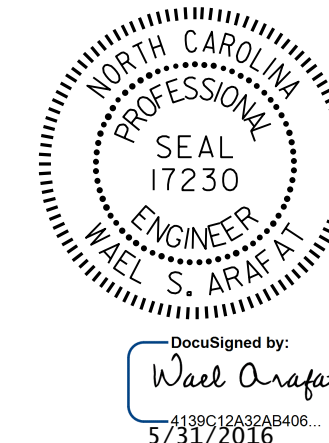
SIDE VIEW



ELEVATION AT EXPANSION JOINTS

BARRIER RAIL DETAILS

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



PROJECT NO. R-4060
ALLEGHANY COUNTY
STATION: 36+45.00 -L-

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

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO.
S-15
TOTAL SHEETS
26

ASSEMBLED BY : H. T. BARBOUR DATE : 11-20-14
CHECKED BY : V. X. NGUYEN DATE : 11-15
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