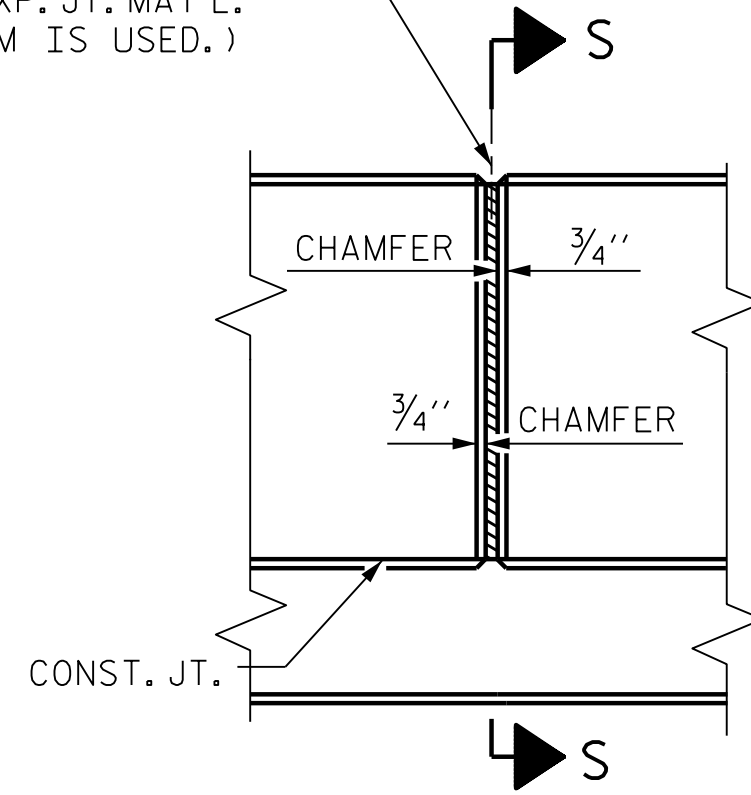


① 1/2" EXP. JT. MAT'L HELD IN PLACE WITH GALVANIZED NAILS.
 (NOTE: OMIT EXP. JT. MAT'L. WHEN SLIP FORM IS USED.)



**ELEVATION AT EXPANSION JOINTS
 BARRIER RAIL DETAILS**

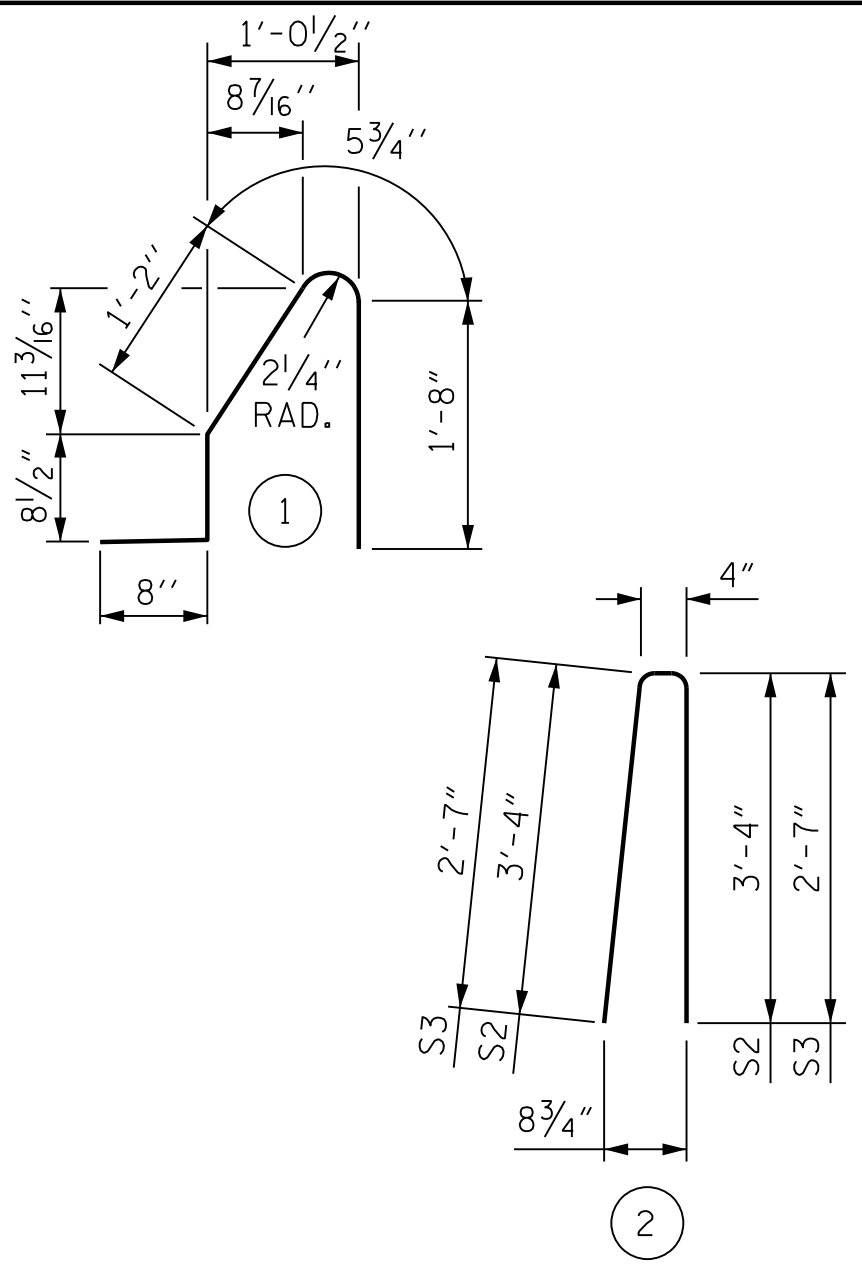
NOTES

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

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.

BAR TYPES

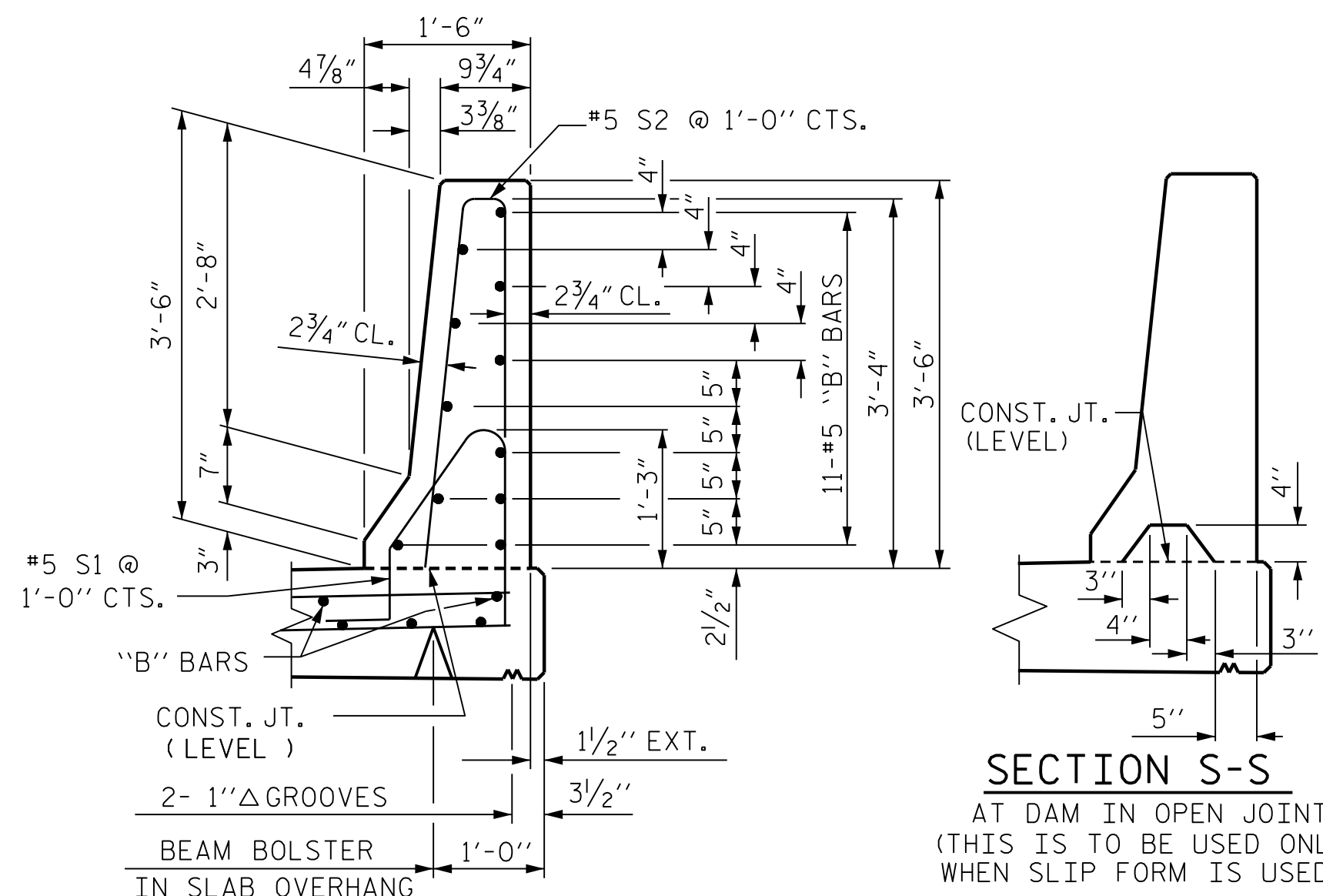


ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

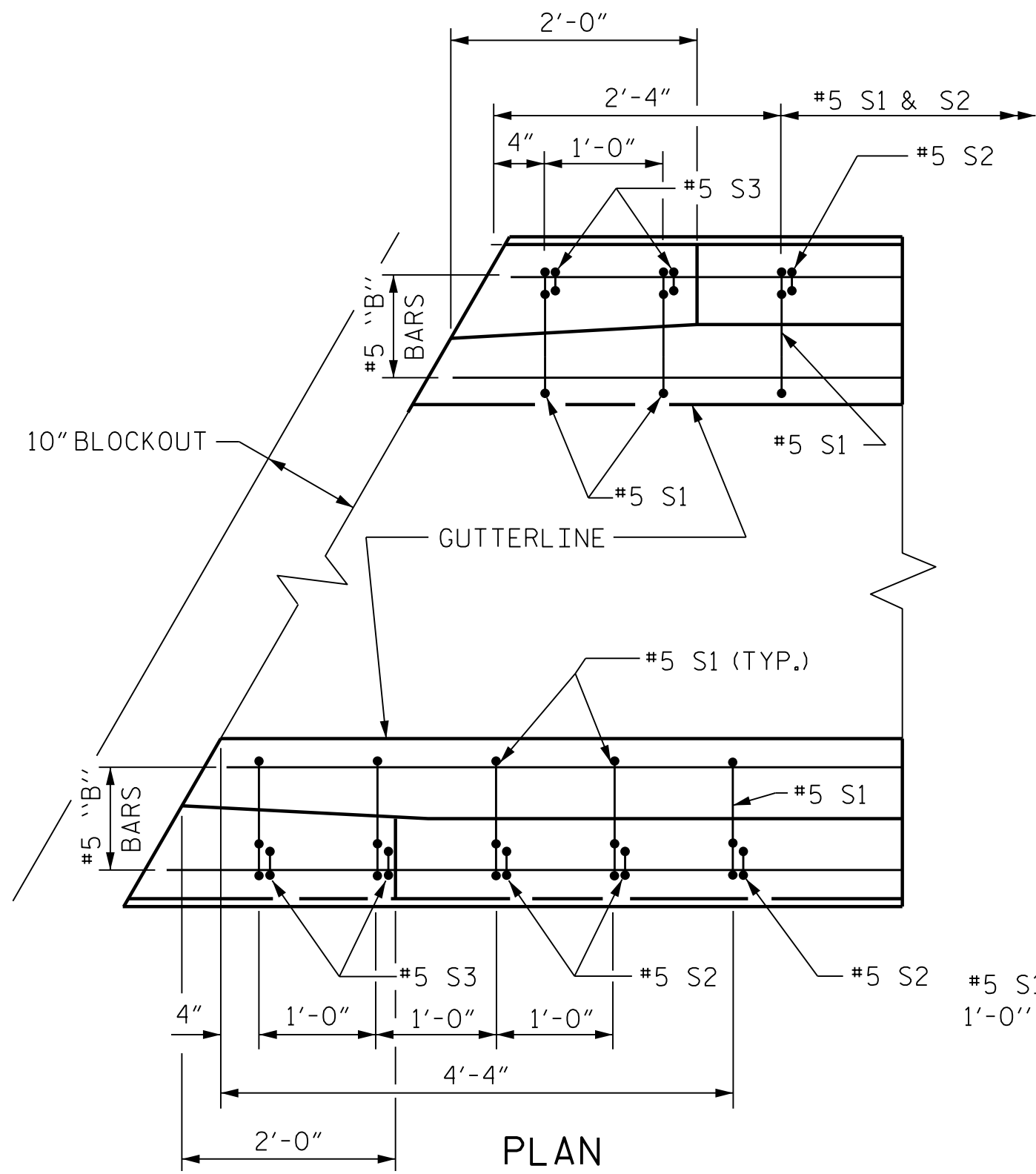
FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	22	5	STR	24'-5"	560
* B2	44	5	STR	25'-8"	1178
* B3	22	5	STR	24'-8"	566
* S1	204	5	1	4'-8"	993
* S2	196	5	2	7'-0"	1431
* S3	8	5	2	5'-6"	46
* EPOXY COATED REINFORCING STEEL					4,774 LBS.
CLASS AA CONCRETE					27.7 CU. YDS.
CONCRETE BARRIER RAIL					203.6 LIN. FT.

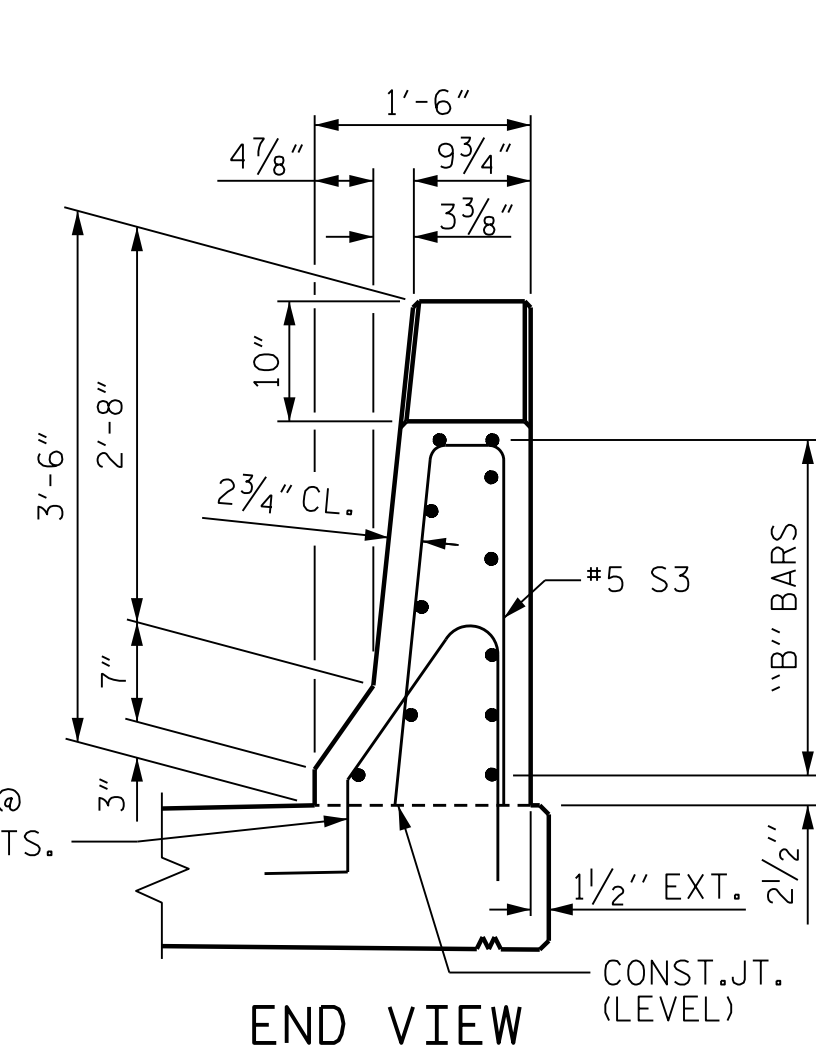


SECTION THRU RAIL

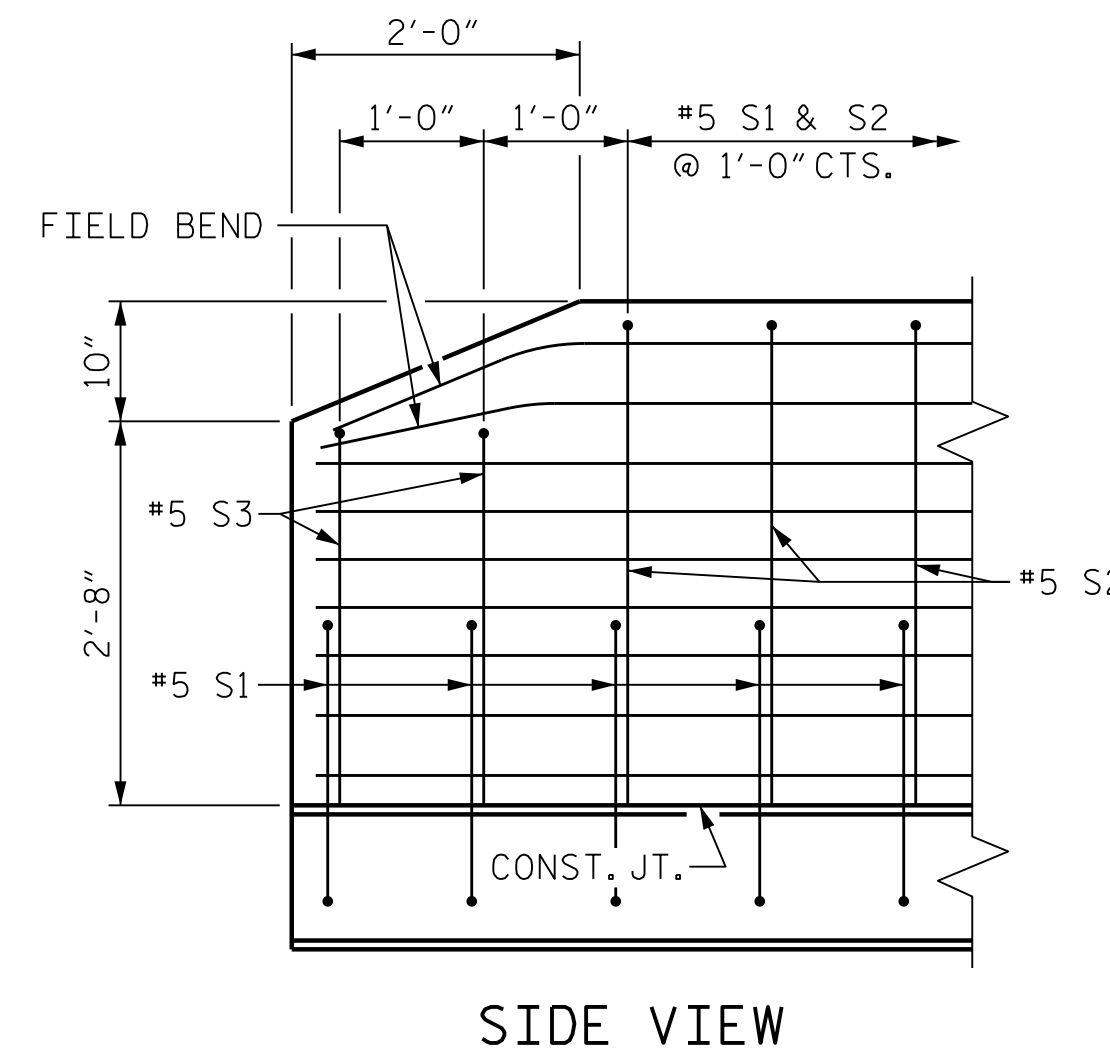
SECTION S-S
 AT DAM IN OPEN JOINT
 (THIS IS TO BE USED ONLY WHEN SLIP FORM IS USED)



PLAN



END VIEW



SIDE VIEW

END OF RAIL DETAILS

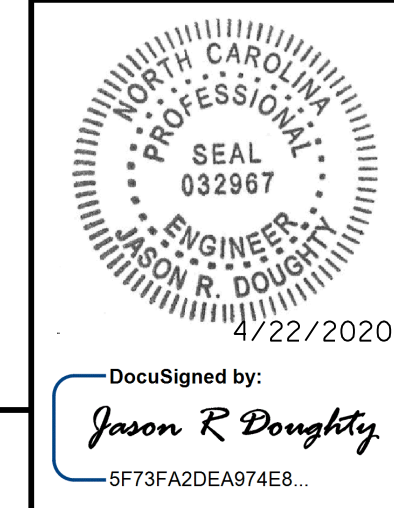
4/22/2020 401_033_R2233BB_SML_BRD_80060.DGN

DESIGNED BY: C. CORMAN DATE: JULY 2019
 DRAWN BY: K. WHITE DATE: APR 2019
 CHECKED BY: J. BORUTA DATE: JULY 2019
 DESIGN ENGINEER OF RECORD: J. DOUGHTY DATE: NOV 2019

DRAWN BY: ARB 5/87
 CHECKED BY: SJD 9/87
 REV. 7/12 MAA/GM
 REV. 6/13 MAA/GM
 REV. 12/17 MAA/THC



333 FAYETTEVILLE STREET, SUITE 500
 RALEIGH, NC 27601
 NC LICENSE NO. C-2979



**DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED**

PROJECT NO. R-2233BB
RUTHERFORD COUNTY
 STATION: 774+41.49 -L3-

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:	SHEET NO.
1			3			17
2			4			28

STR. #1

CBR1