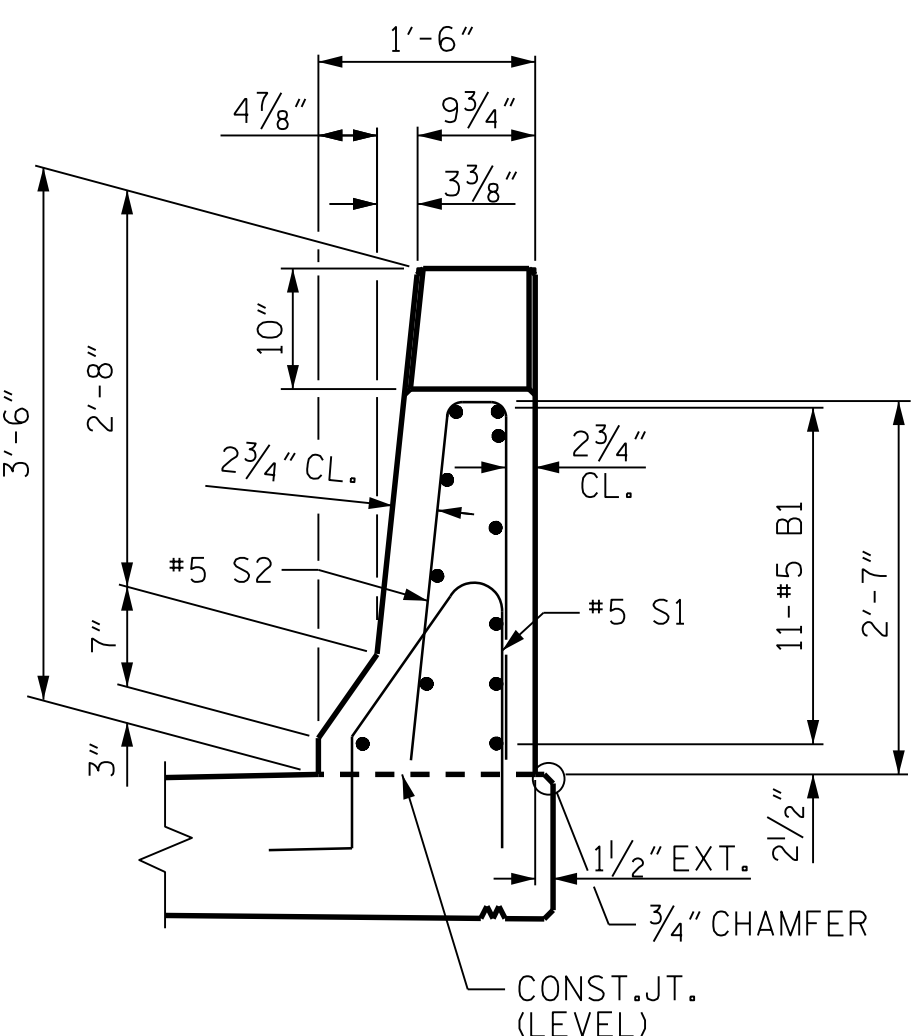
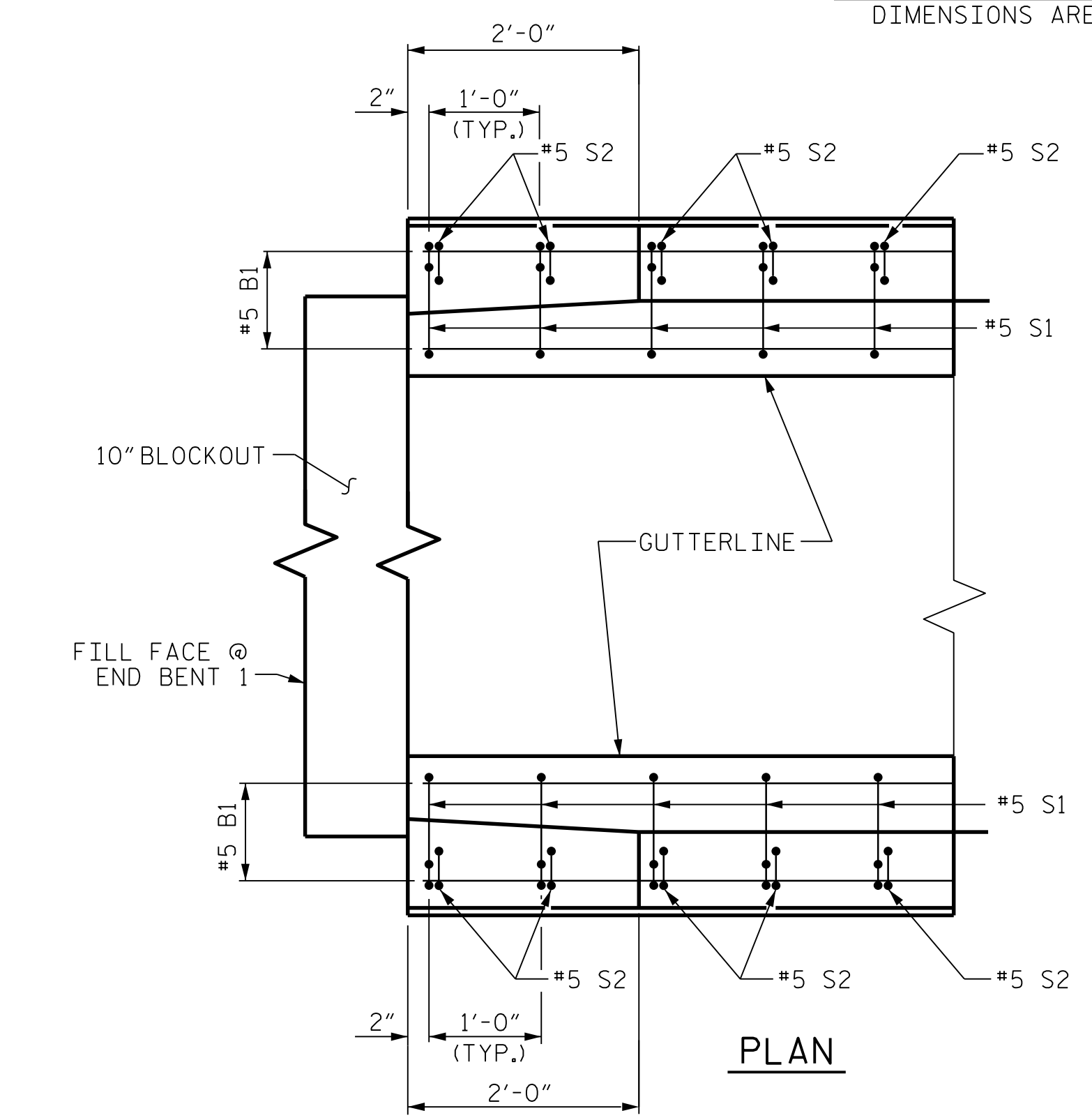
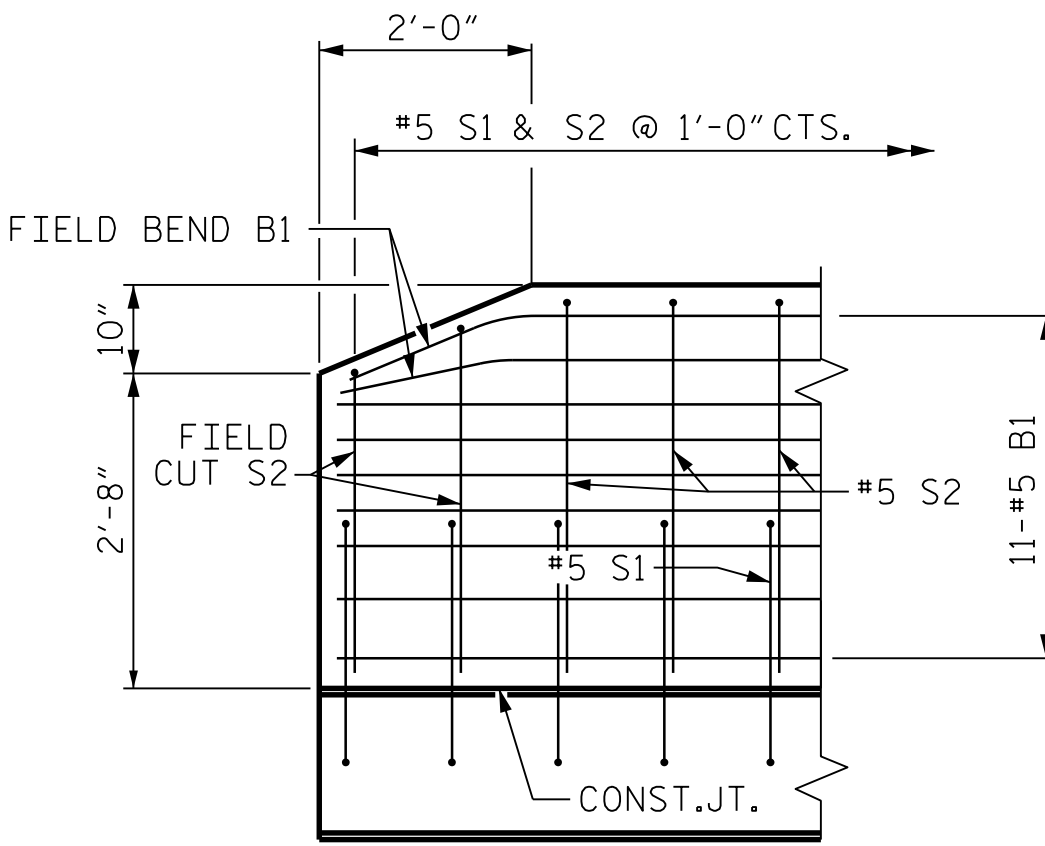


**PLAN OF CONCRETE BARRIER RAIL**  
DIMENSIONS ARE MEASURED ALONG OUTSIDE FACE OF BARRIER RAIL.



**END VIEW**  
**END OF RAIL DETAILS**



**SIDE VIEW**

**NOTES**

THE BARRIER RAIL 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.

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.

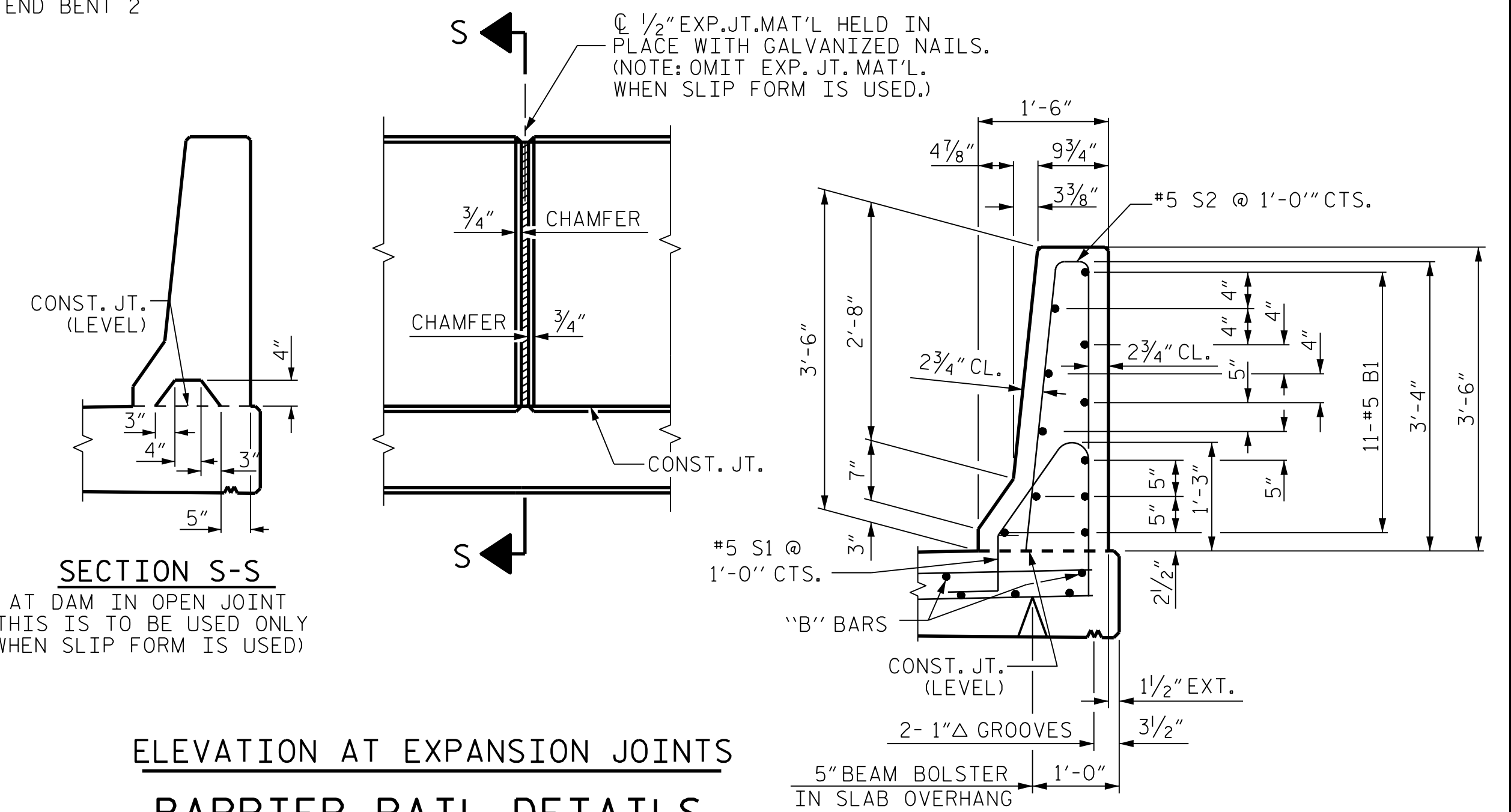
**BAR TYPES**

ALL BAR DIMENSIONS ARE OUT TO OUT

**BILL OF MATERIAL**  
FOR CONCRETE BARRIER RAIL ONLY

BAR NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	#5	STR	20'-6"	1882
* S1	#5	1	4'-8"	818
* S2	#5	2	7'-0"	1226

\* EPOXY COATED REINFORCING STEEL 3,926  
CLASS AA CONCRETE 22.6 CU. YDS.  
CONCRETE BARRIER RAIL 166.67 LIN. FT.



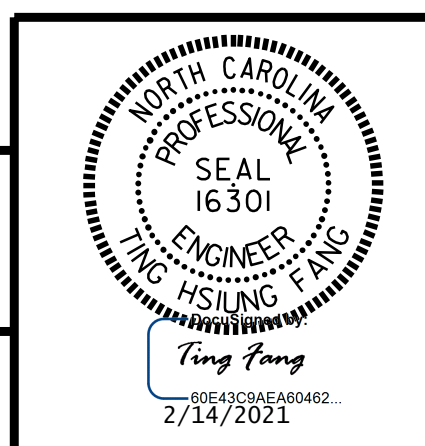
**ELEVATION AT EXPANSION JOINTS**  
**BARRIER RAIL DETAILS**

**SECTION THRU RAIL**

PROJECT NO. B-5624  
BRUNSWICK COUNTY  
STATION: 17+46.00 -L-

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

STANDARD  
CONCRETE  
BARRIER RAIL



**CDM Smith**  
CDM SMITH  
5400 Glenwood Avenue, Suite 400  
Raleigh, NC 27612-3228  
NC COA No. F-1255

DRAWN BY : JJR DATE : 9/20  
CHECKED BY : THF DATE : 10/20  
DESIGN ENGINEER : J.B. WALKOR DATE : 11/20

DWG. No.

REVISIONS

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

SHEET NO. **S-11**  
TOTAL SHEETS **20**

FILE: SFILES DATE: SDATES

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED