

**PLAN**

DIMENSIONS ARE TAKEN ALONG THE ARC OF THE OUTSIDE FACE OF BARRIER RAIL

**NOTES**

THE BARRIER RAIL IN A CONTINUOUS SPAN 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.

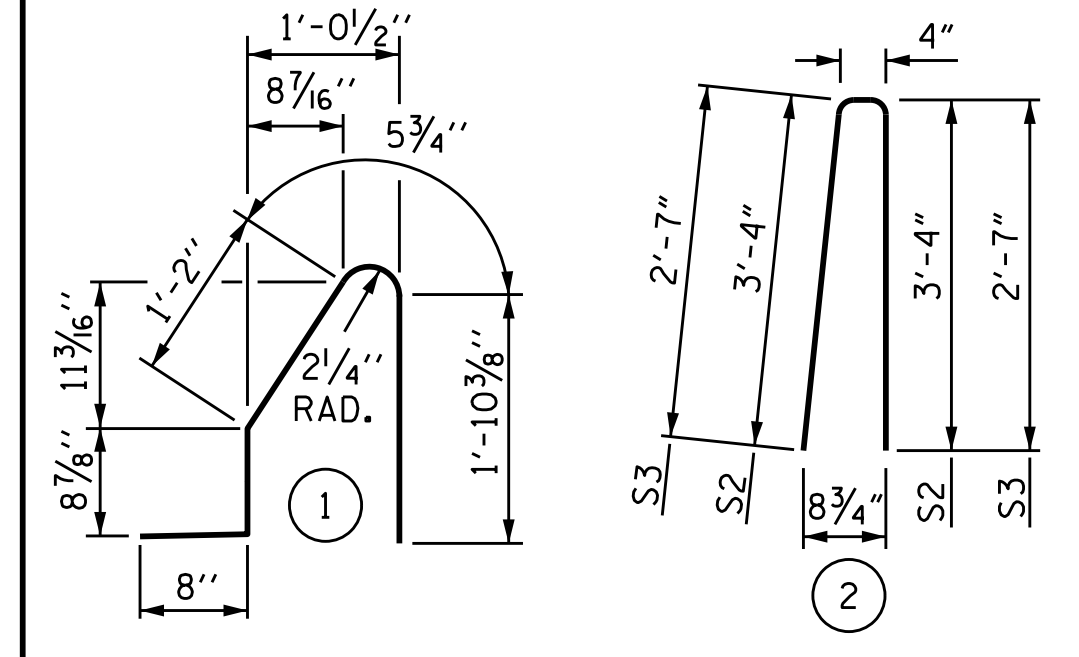
ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

THE #5 S1 AND #5 S2 BARS MAY BE SHIFTED SLIGHTLY IN ORDER TO MAINTAIN A 2" MINIMUM CLEARANCE TO 1/2" EXPANSION JOINT MATERIAL IN THE BARRIER RAIL.

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.

FOR FIBER OPTIC CONDUIT SYSTEM, SEE SPECIAL PROVISIONS.

**BAR TYPES**

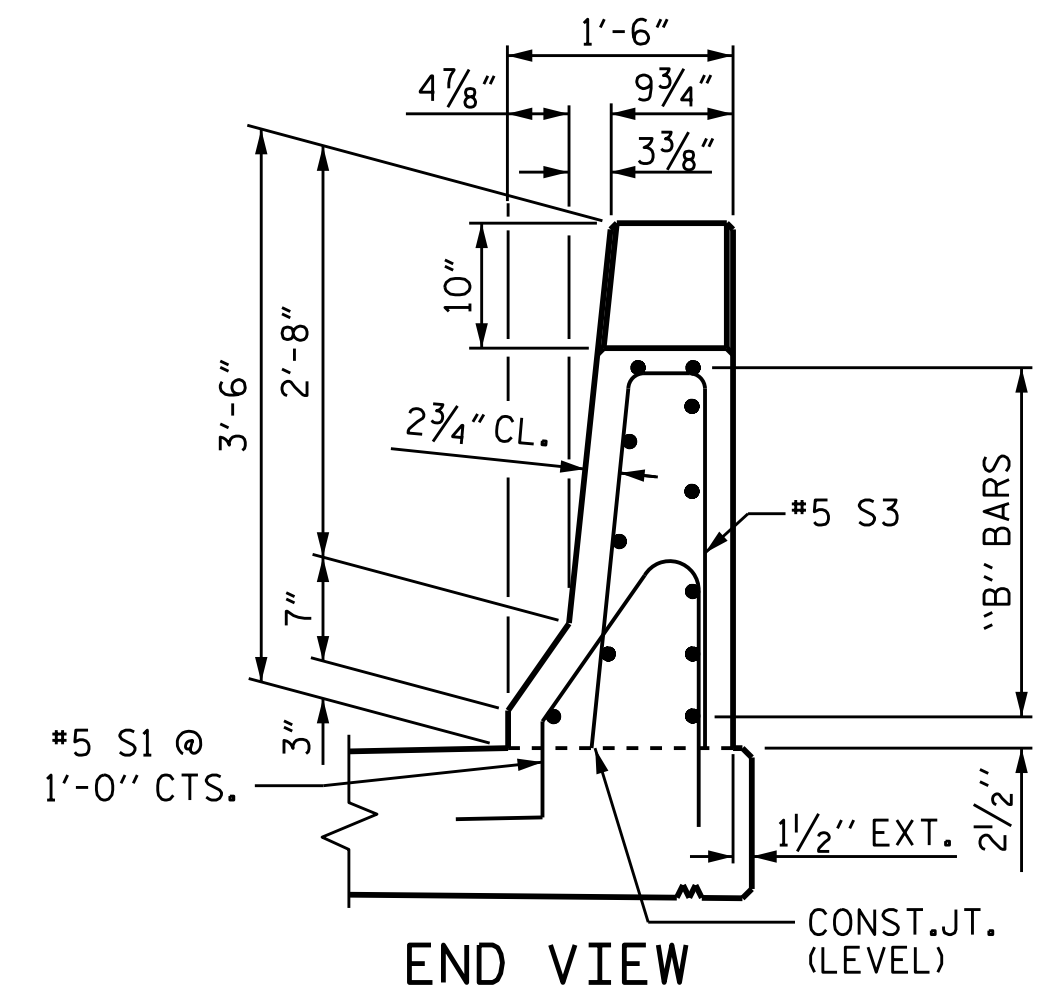


ALL BAR DIMENSIONS ARE OUT TO OUT

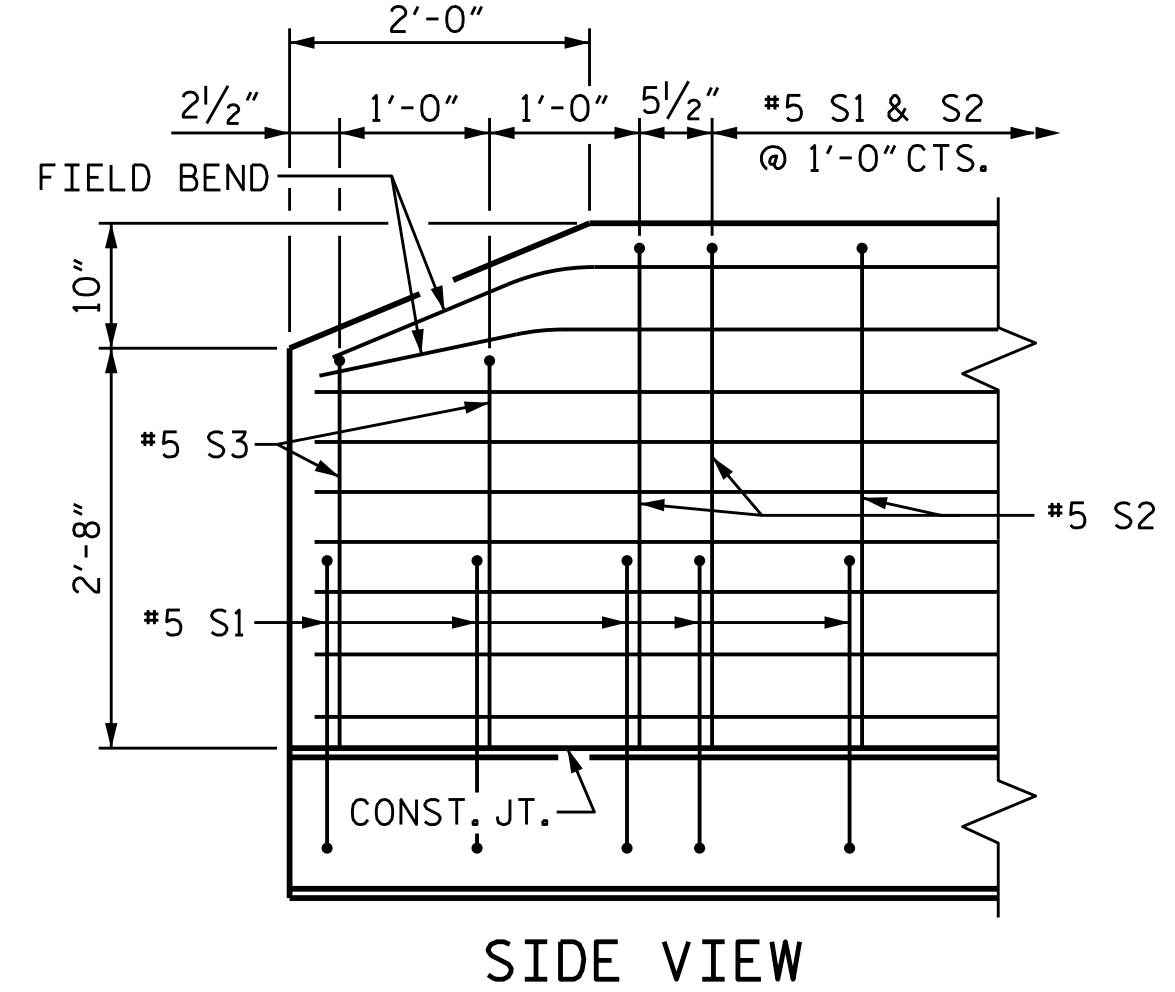
**BILL OF MATERIAL**

FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	88	#5	STR	26'-8"	2,448
* S1	220	#5	1	4'-11"	1,128
* S2	212	#5	2	7'-0"	1,548
* S3	8	#5	2	5'-6"	46
* EPOXY COATED REINFORCING STEEL					5,170 LBS.
CLASS AA CONCRETE					29.5 CU. YDS.
CONCRETE BARRIER RAIL					216.67 LIN. FT.

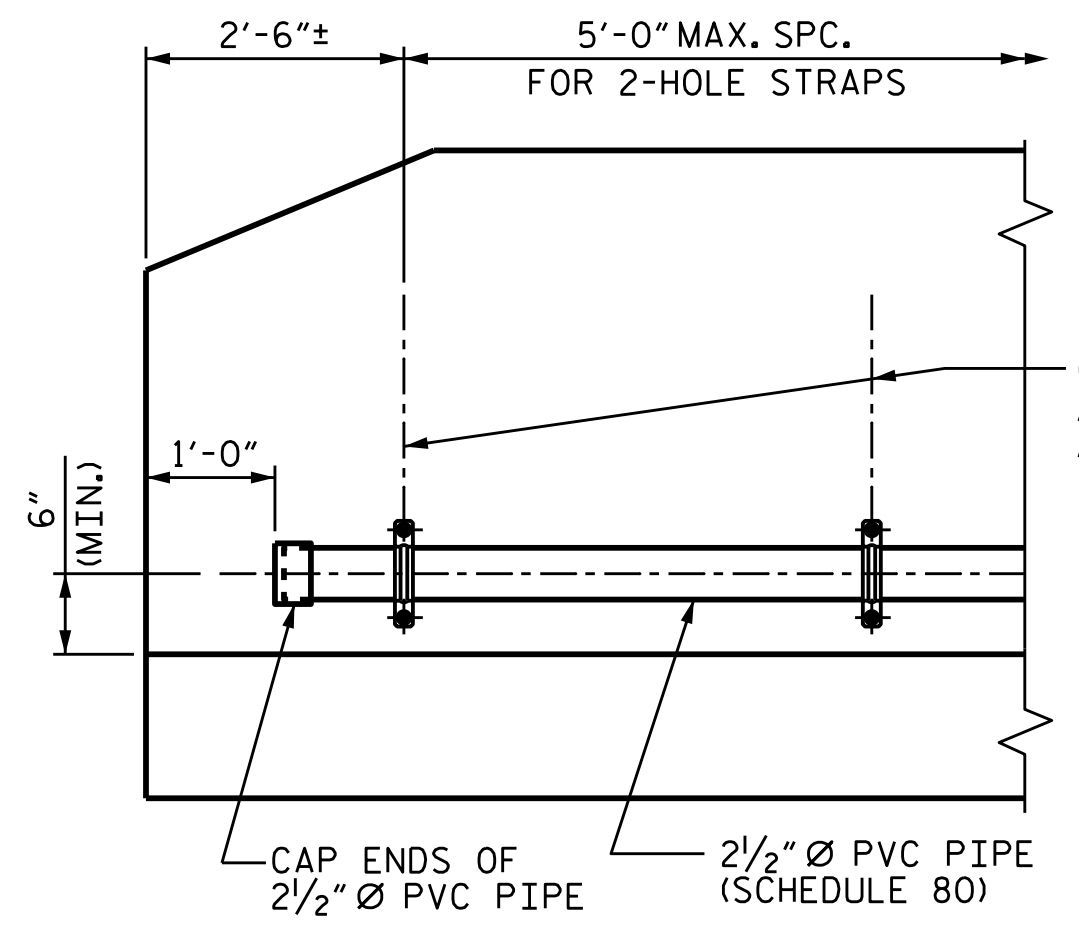


**END VIEW**

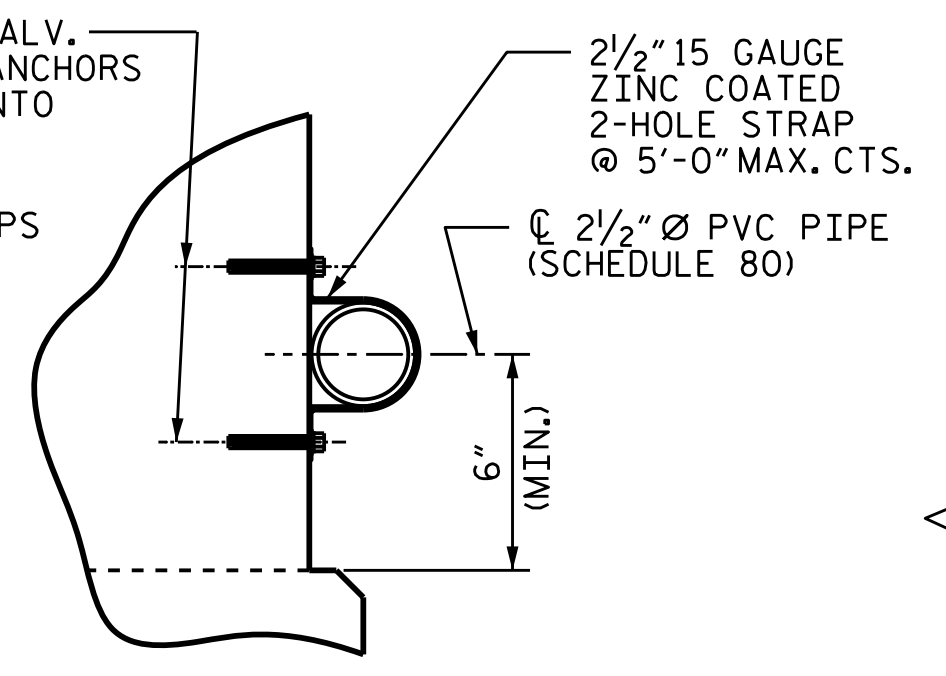


**SIDE VIEW**

**END OF RAIL DETAILS**



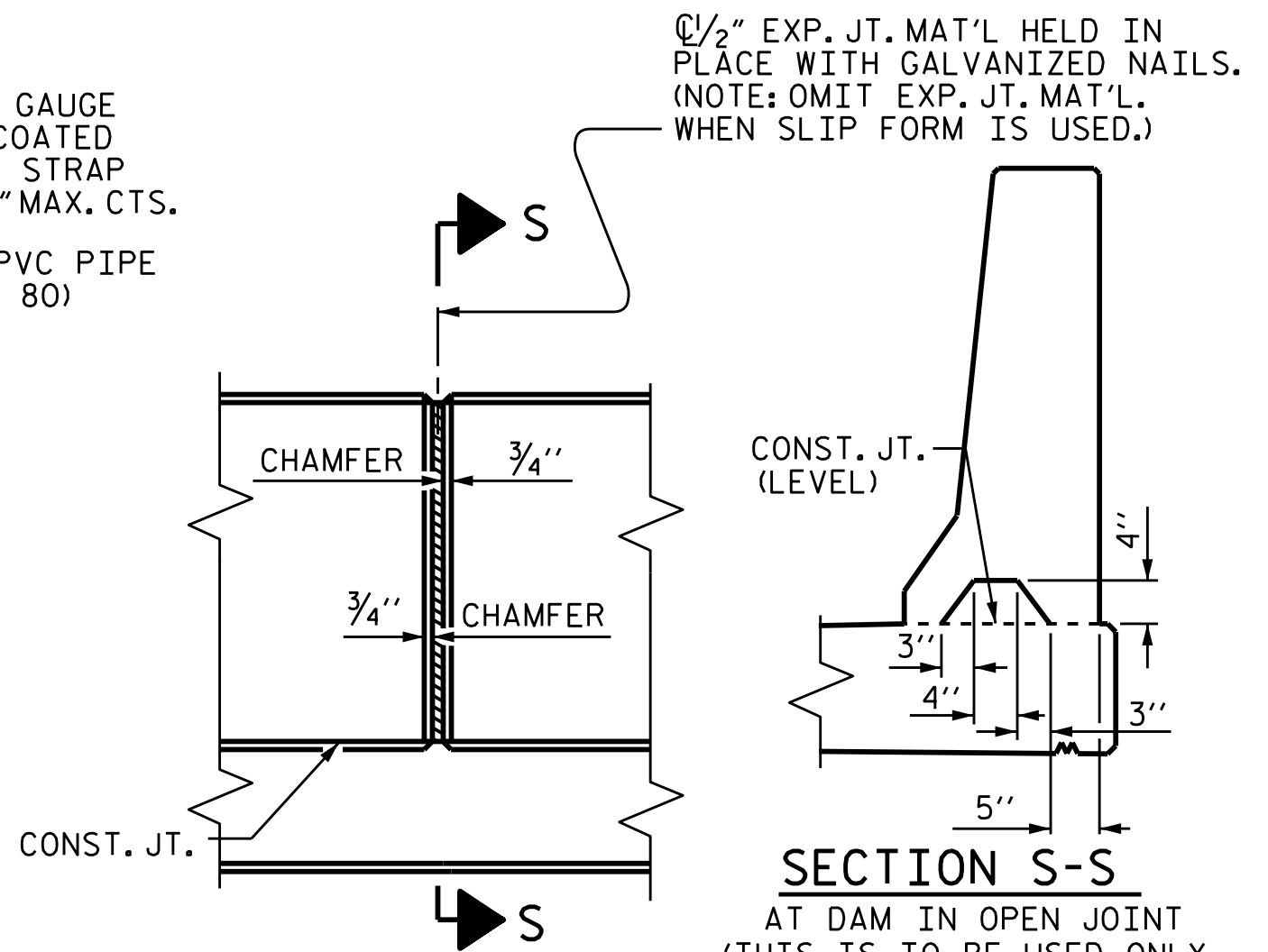
**ELEVATION**



**SECTION**

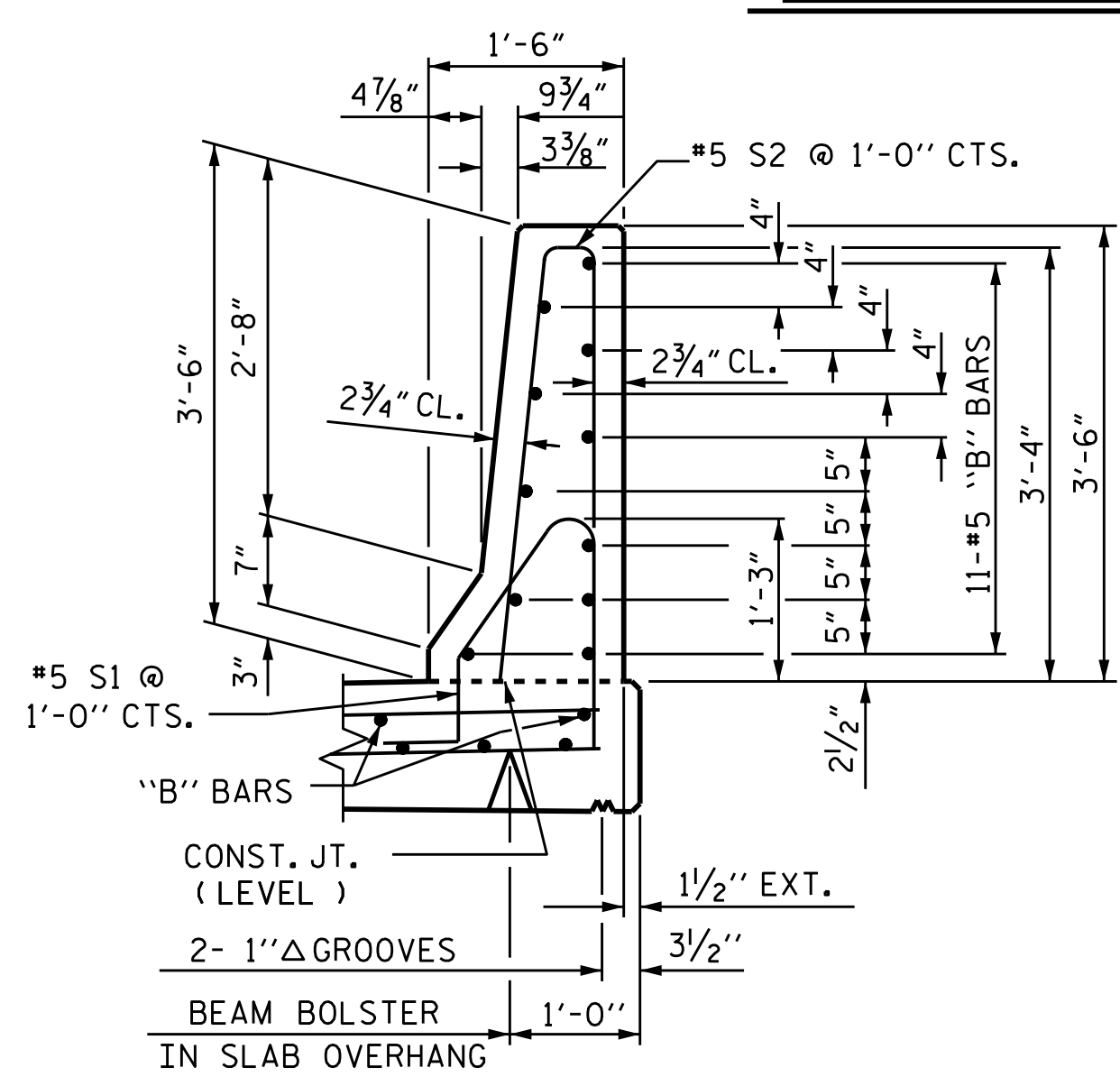
**FIBER OPTIC CONDUIT SYSTEM DETAILS**

2 1/2" Ø SCHEDULE 80 PVC PIPE ATTACHED TO THE BACK OF BOTH RAILS FOR FUTURE FIBER OPTIC CABLE.



**ELEVATION AT EXPANSION JOINTS**

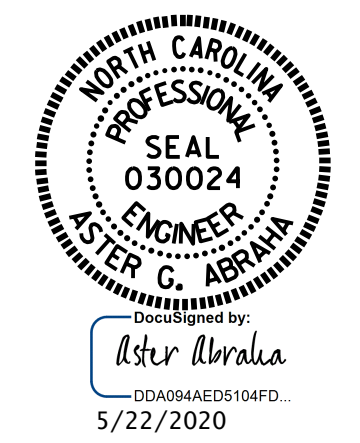
**BARRIER RAIL DETAILS**



**SECTION THRU RAIL**

PROJECT NO. B-5662  
 HALIFAX COUNTY  
 STATION: 15+61.00 -L-

SHEET 1 OF 2



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

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-16
1			3			TOTAL SHEETS
2			4			30

DRAWN BY: A. Y. GODFREY DATE: 03/2020  
 CHECKED BY: M. M. AHMED DATE: 04/2020  
 DESIGN ENGINEER OF RECORD: M. M. AHMED DATE: 10/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED