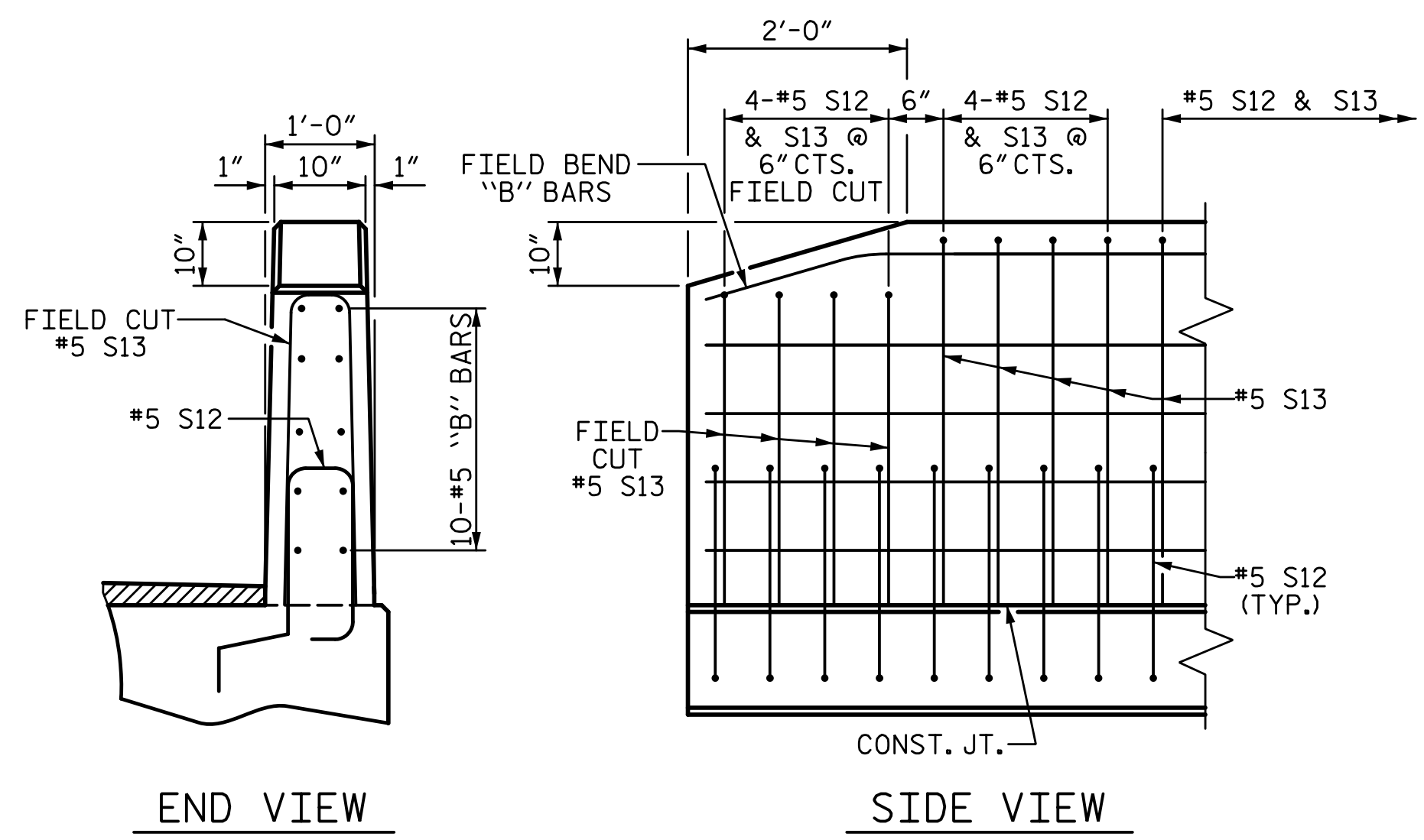
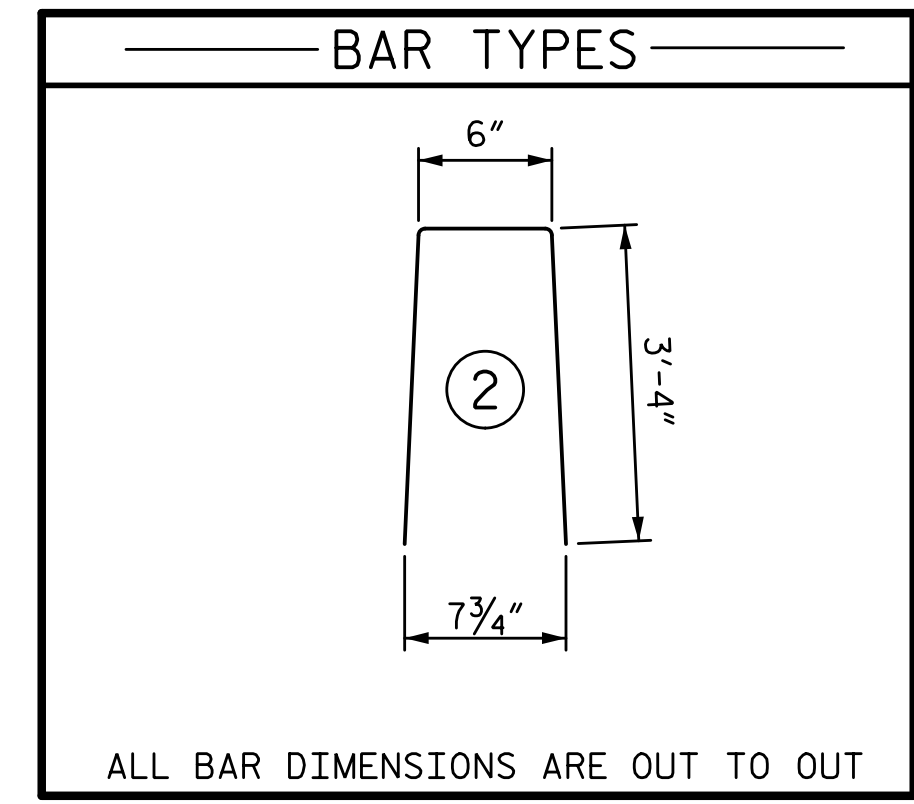


4/7/2020 4:10:49 PM G:\Projects\2018\Division 3 (SEA)\B-5639 (Duplin 36 NC11 over MaxwellCreek)\Structures\Drawings\Final\B5639\_SMU\_SUPER\_300036.dgn



END OF RAIL DETAILS

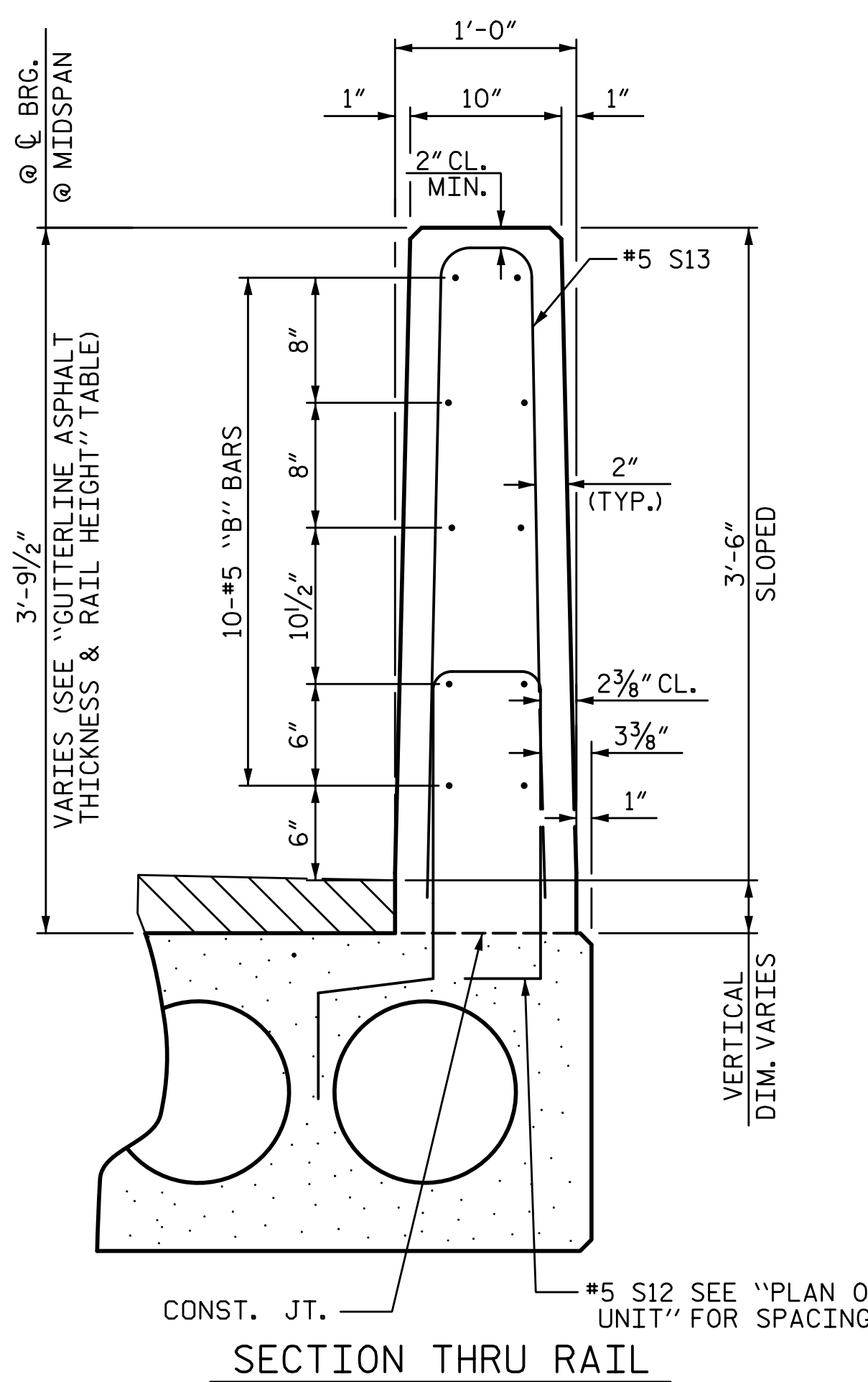


**NOTES:**

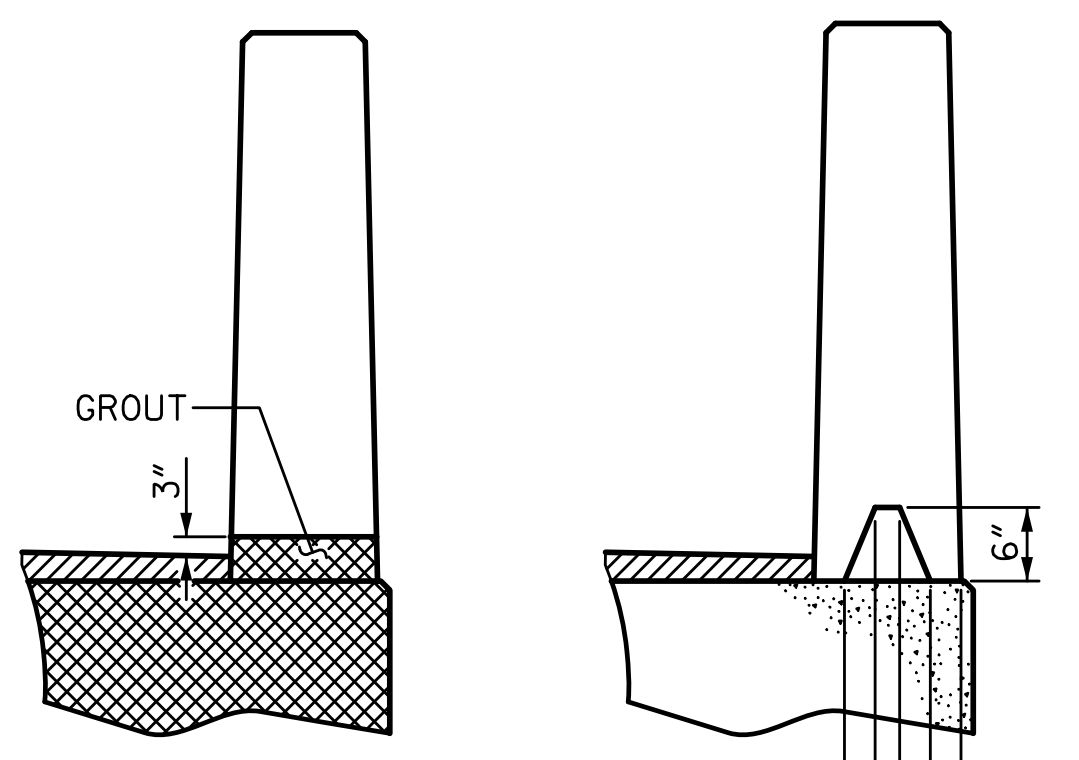
GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. A CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED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

BILL OF MATERIAL FOR VERTICAL CONCRETE BARRIER RAIL						
BAR	BARS PER PAIR OF EXTERIOR UNITS	TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
55' UNIT						
*B37	40	80	#5	STR	27'-1"	2260
*S13	128	256	#5	2	7'-2"	1914
* EPOXY COATED REINFORCING STEEL				LBS.	4174	
CLASS AA CONCRETE				CU.YDS.	28.6	
TOTAL VERTICAL CONCRETE BARRIER RAIL					LN. FT.	220.50
FIBER OPTIC CONDUIT SYSTEM					LN. FT.	216.50

BILL OF MATERIAL FOR VERTICAL CONCRETE BARRIER RAIL						
BAR	BARS PER PAIR OF EXTERIOR UNITS	TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
60' UNIT						
*B38	40	40	#5	STR	29'-7"	1234
*S13	136	136	#5	2	7'-2"	1017
* EPOXY COATED REINFORCING STEEL				LBS.	2251	
CLASS AA CONCRETE				CU.YDS.	15.6	
TOTAL VERTICAL CONCRETE BARRIER RAIL					LN. FT.	120.25
FIBER OPTIC CONDUIT SYSTEM					LN. FT.	120.25

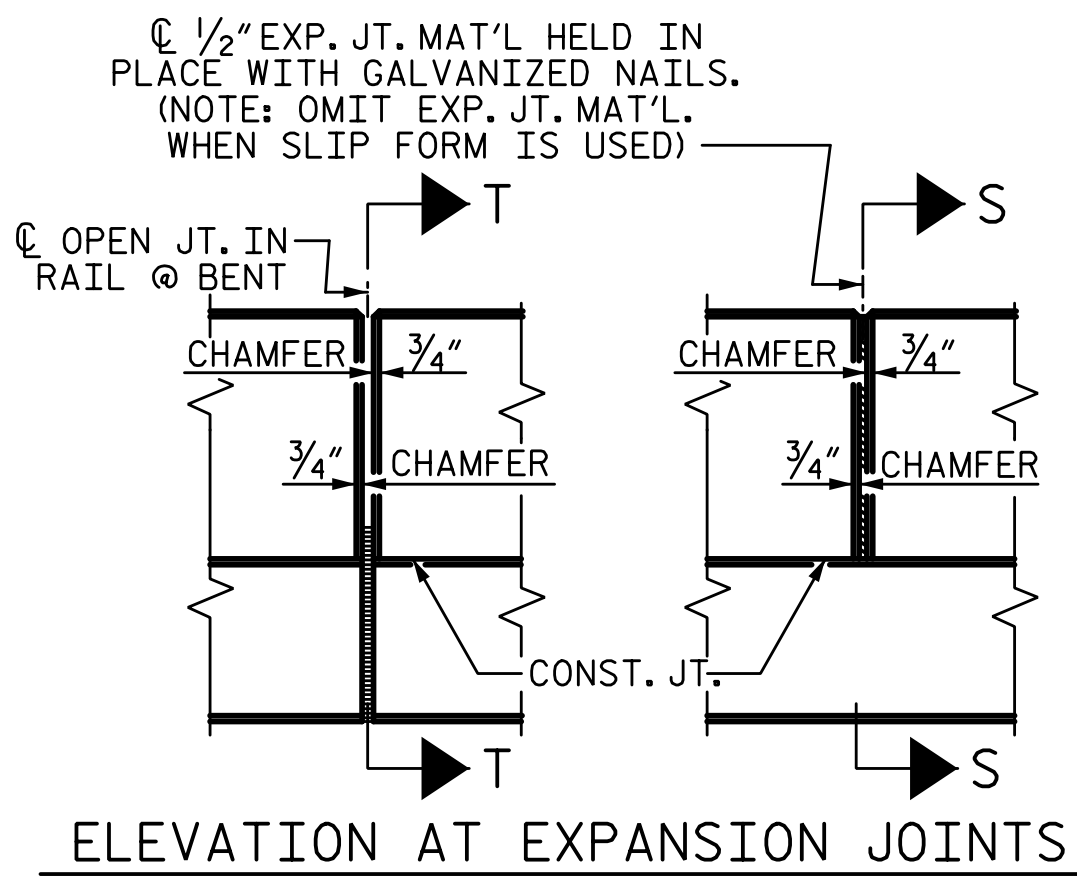


VERTICAL CONCRETE BARRIER RAIL DETAILS

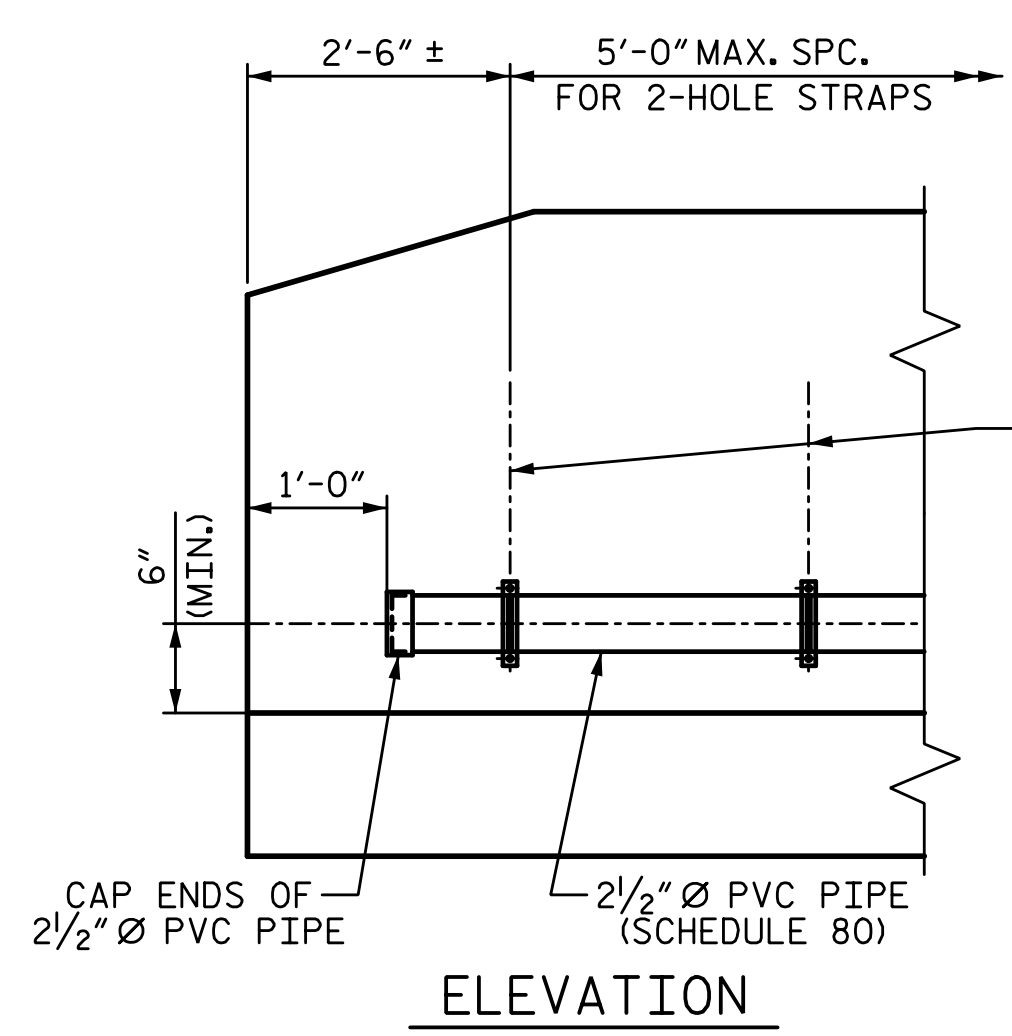


**SECTION T-T**  
AT OPEN JOINT AT BENT  
(THIS IS TO BE USED WHERE FOAM JOINT IS NOT USED)

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

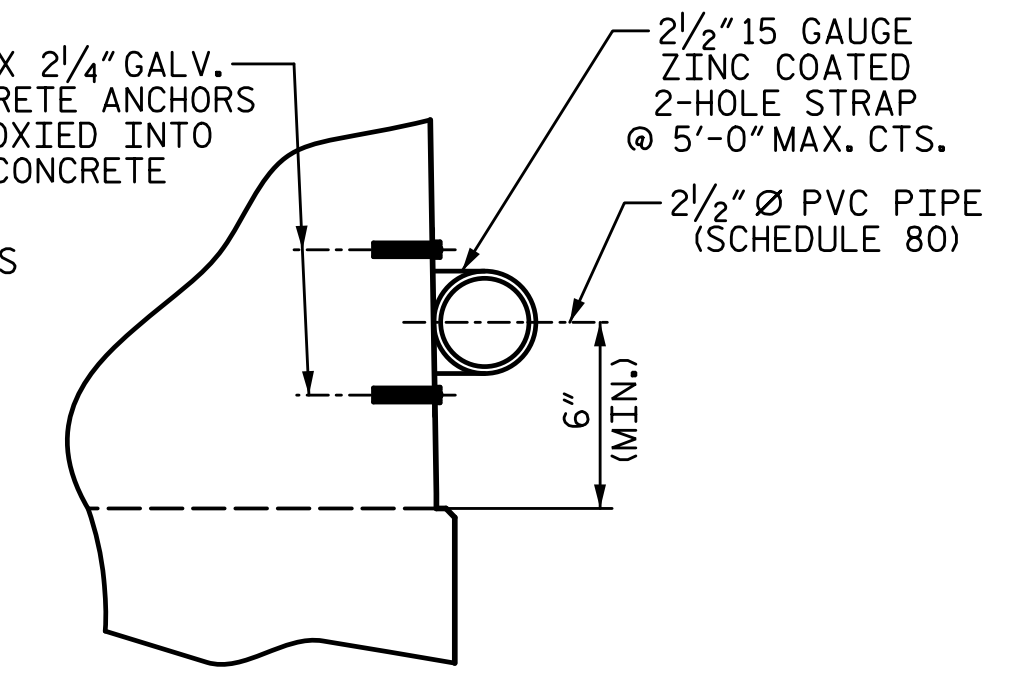


ELEVATION AT EXPANSION JOINTS



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.



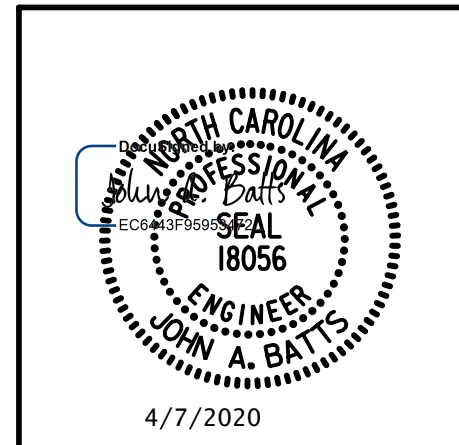
SECTION

GUTTERLINE ASPHALT THICKNESS & RAIL HEIGHT		
	ASPHALT OVERLAY THICKNESS @ MID-SPAN	RAIL HEIGHT @ MID-SPAN
55' UNITS	2"	3'-8"
60' UNITS	1 5/8"	3'-7 5/8"

PROJECT NO. B-5639  
DUPLIN COUNTY  
STATION: 23+55.00 -L-

SHEET 5 OF 5

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
SUPERSTRUCTURE  
3'-0" X 2'-0"  
PRESTRESSED CONCRETE  
CORED SLAB UNIT  
90° SKEW



PLANS PREPARED BY:  
**SEA & ASSOCIATES**  
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Suite 200  
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(919) 852-0468  
(919) 852-0538 (Fax)  
www.slmpsonengr.com  
LICENSURE NO. C-2521

DRAWN BY: T. BANKOVICH DATE: 2-20  
CHECKED BY: J.A. BATTS DATE: 2-20  
DESIGN ENGINEER OF RECORD: J.A. BATTS DATE: 2-20

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			TOTAL SHEETS
2			4			25

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED