

ALL BAR DIMENSIONS ARE OUT TO OUT

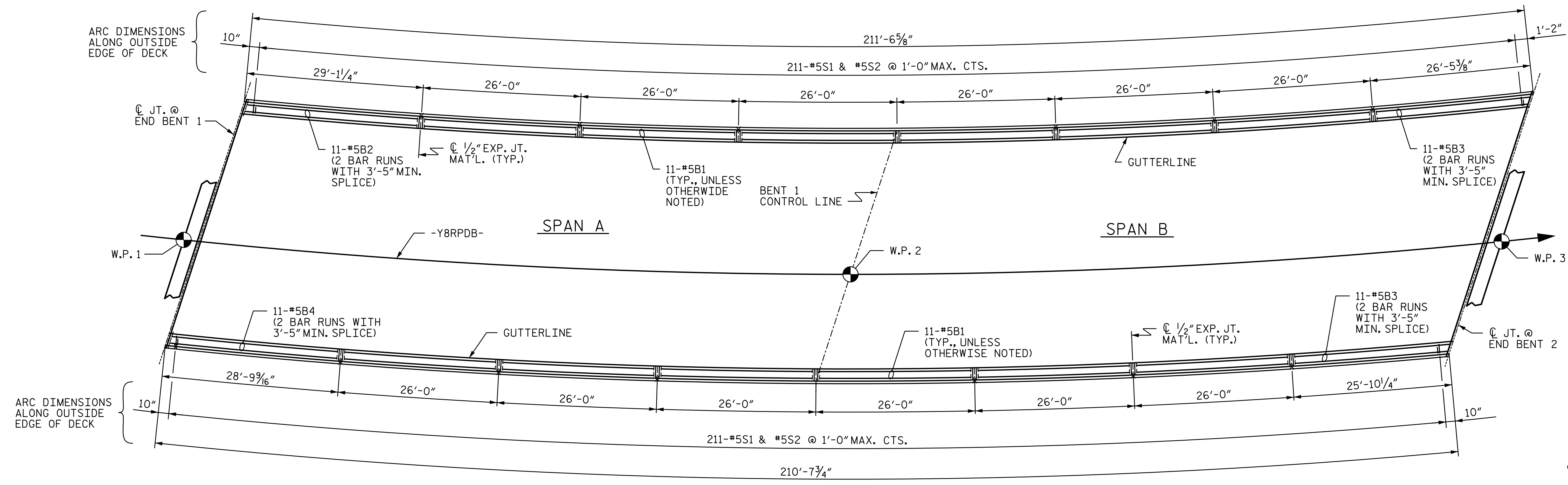
BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	132	#5	STR	25'-6"	3511
* B2	22	#5	STR	16'-3"	373
* B3	44	#5	STR	14'-9"	677
* B4	22	#5	STR	15'-11"	365
* S1	422	#5	1	4'-9"	2091
* S2	422	#5	2	7'-0"	3081

* EPOXY COATED REINFORCING STEEL	10098 LBS.
CLASS AA CONCRETE	57.4 CU. YDS.
CONCRETE BARRIER RAIL SUPERSTRUCTURE	422.20 LIN. FT.
● APPROACH SLABS	41.01 LIN. FT.
TOTAL	463.21 LIN. FT.

● FOR EPOXY COATED REINFORCING STEEL AND CLASS AA CONCRETE IN THE BARRIER RAIL ON THE APPROACH SLABS, SEE "BRIDGE APPROACH SLAB DETAILS" SHEET.



PLAN

NOTES

THE BARRIER RAIL IN EACH UNIT 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.

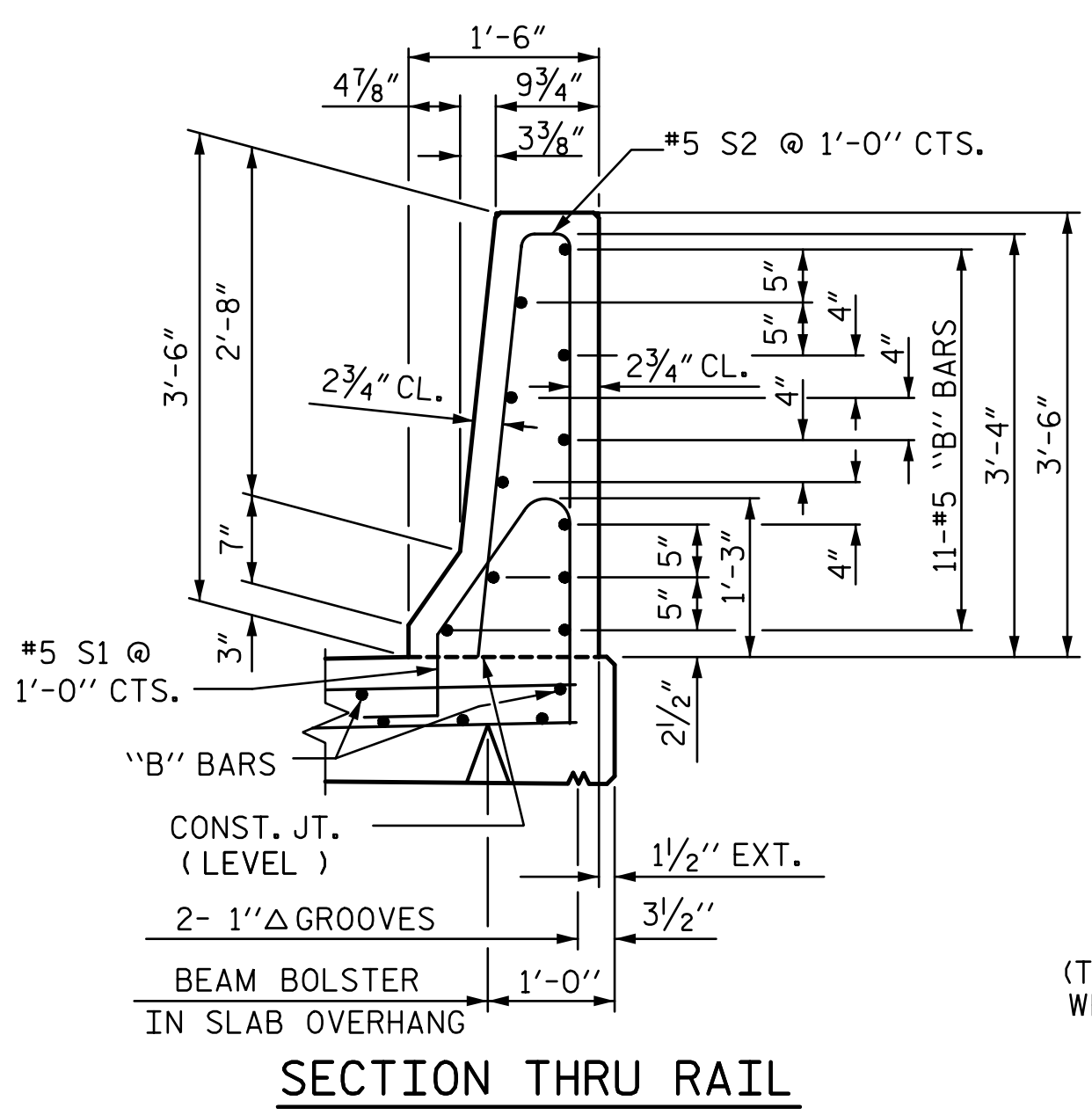
ALL REINFORCING IN BARRIER RAIL SHALL BE EPOXY COATED.

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.

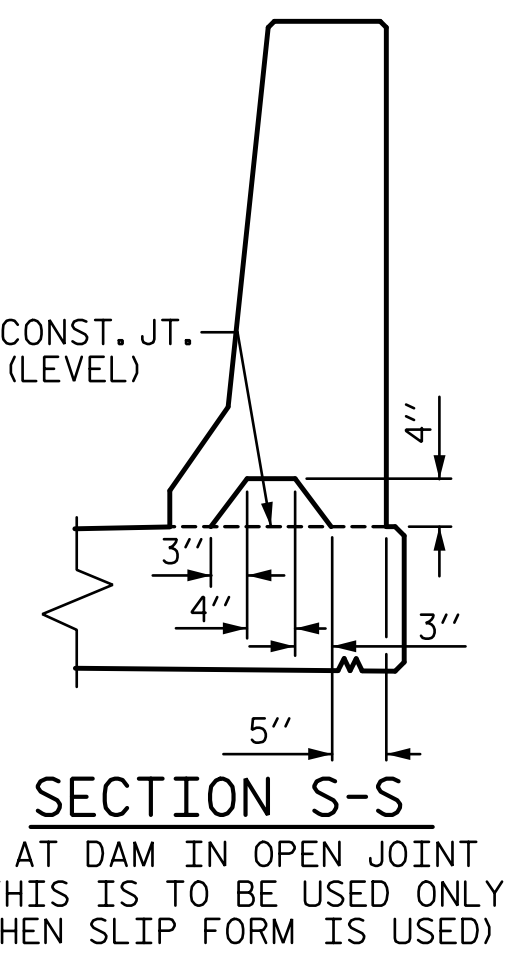
GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS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

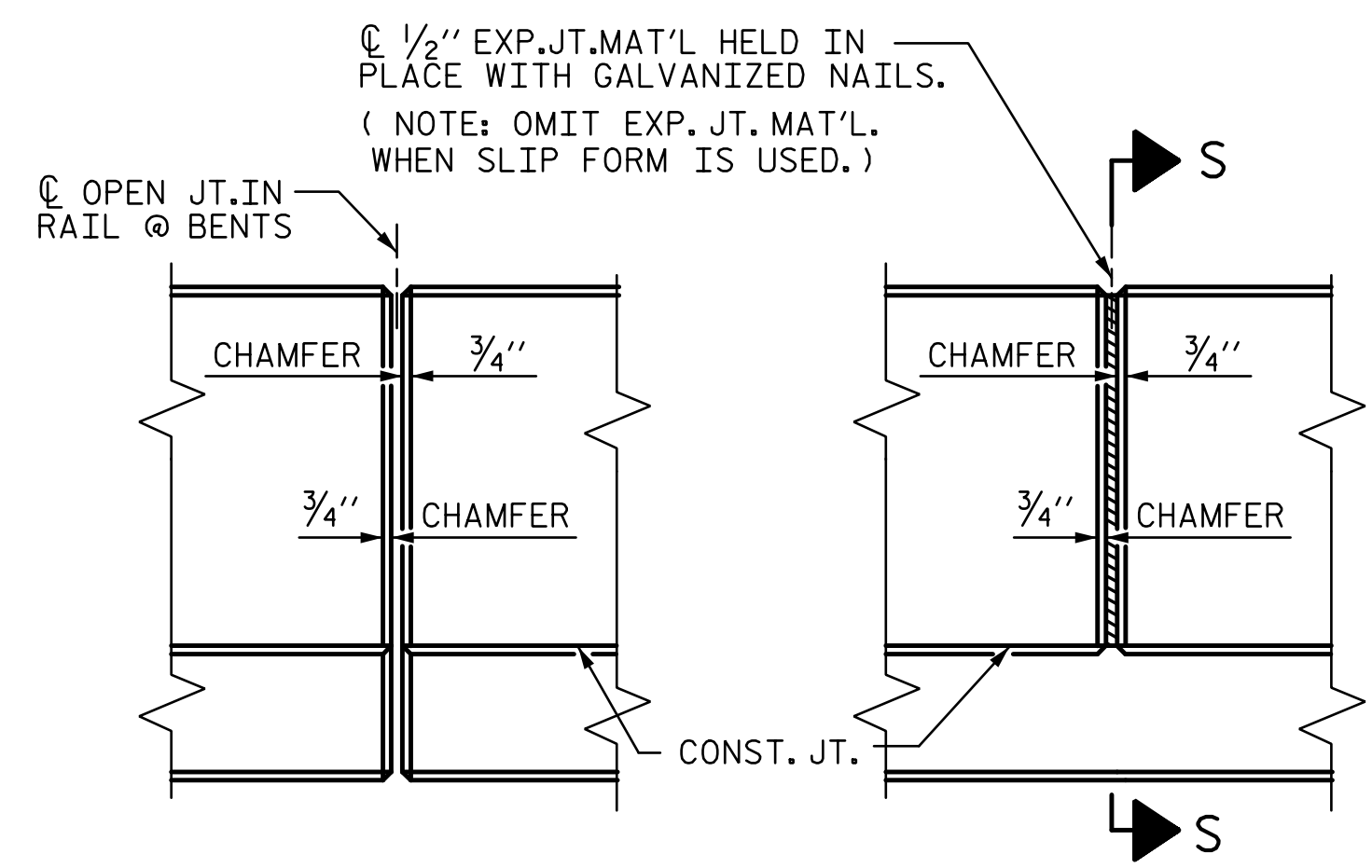
PROJECT NO. U-4751
 NEW HANOVER COUNTY
 STATION: 35+12.05 -Y8RPDB-



SECTION THRU RAIL



SECTION S-S



**ELEVATION AT EXPANSION JOINTS
 BARRIER RAIL DETAILS**

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SEAL
 40317
 ENGINEER
 T. LAWS, JR.
 6/30/2017

STV 100 years
 STV ENGINEERS, INC.
 900 West Trade St., Suite 715
 Charlotte, NC 28202
 NC License Number F-5991

REVISIONS

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

SHEET NO. S4-19
 TOTAL SHEETS 36

DRAWN BY: <u>MBC</u>	DATE: <u>3-17</u>	DESIGN ENGINEER OF RECORD: <u>T. LAWS</u>	DATE: <u>5-17</u>
CHECKED BY: <u>TRL</u>	DATE: <u>4-17</u>		

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