

I:\Projects\255550\255550_L_0002\50_Deliverables & Submittals\255550\Structures\Site 6\LL\41L_017_R2514D_SMU_CBR01.dgn 4/10/2015 9:17:49 AM

NOTES

THE BARRIER RAIL IN EACH 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.

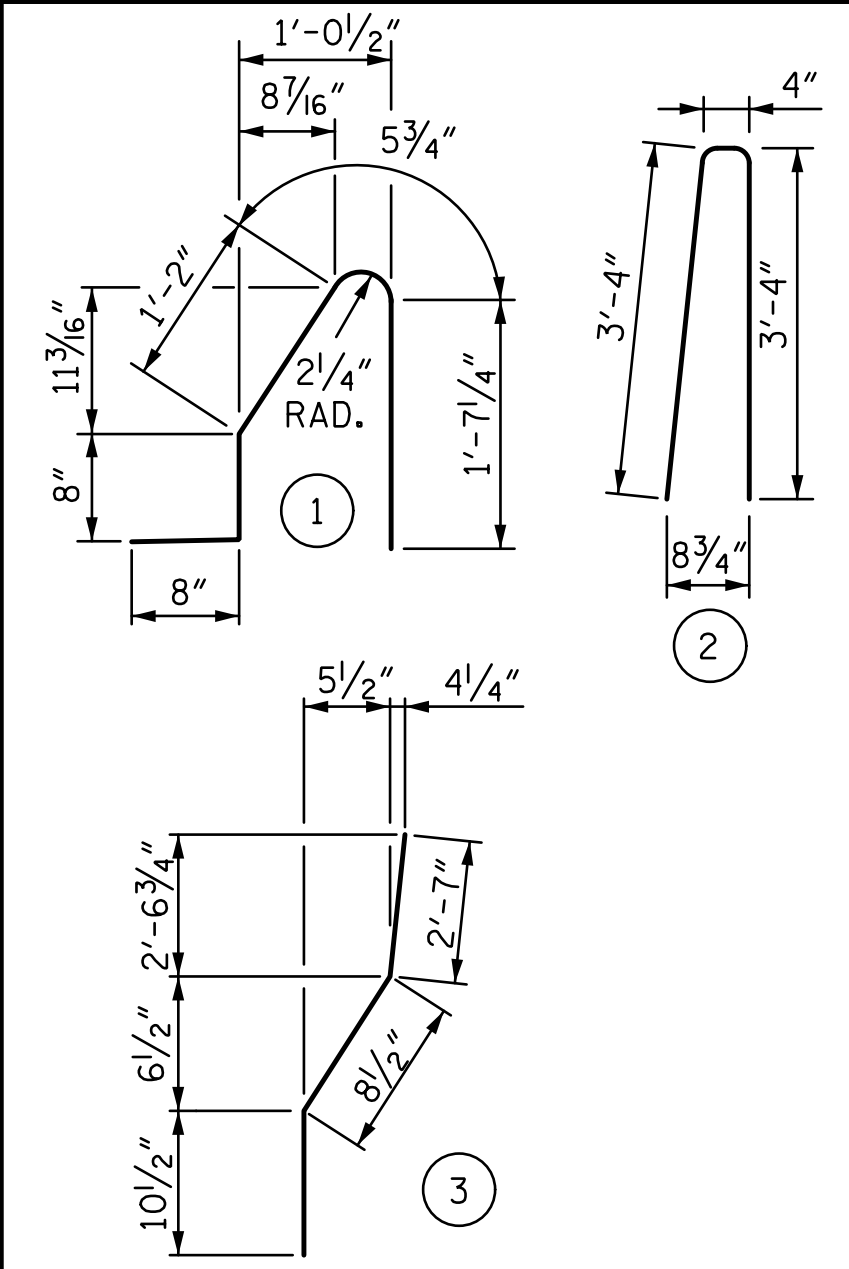
ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

THE #5S3 AND #5S4 BARS SHALL BE INSTALLED, USING AN ADHESIVE ANCHORING SYSTEM. THE YIELD LOAD FOR THE #5S3 AND #5S4 BARS IS 18.6 KIPS. FIELD TESTING FOR THE ADHESIVE BONDING SYSTEM IS NOT REQUIRED.

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.

CONCRETE BARRIER RAIL ON APPROACH SLAB, LENGTH AND QUANTITIES, NOT INCLUDED. SEE "BRIDGE APPROACH SLAB DETAILS" SHEETS.

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ONLY						
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	
* B1	44	#5	STR.	12'-10"	589	
* B2	88	#5	STR.	27'-11"	2,562	
* B3	44	#5	STR.	29'-7"	1,358	
* B4	44	#5	STR.	14'-7"	669	
* S1	434	#5	①	4'-7"	2,075	
* S2	434	#5	②	7'-0"	3,169	
* S3	4	#5	③	4'-2"	17	
* S4	8	#5	STR.	4'-0"	33	

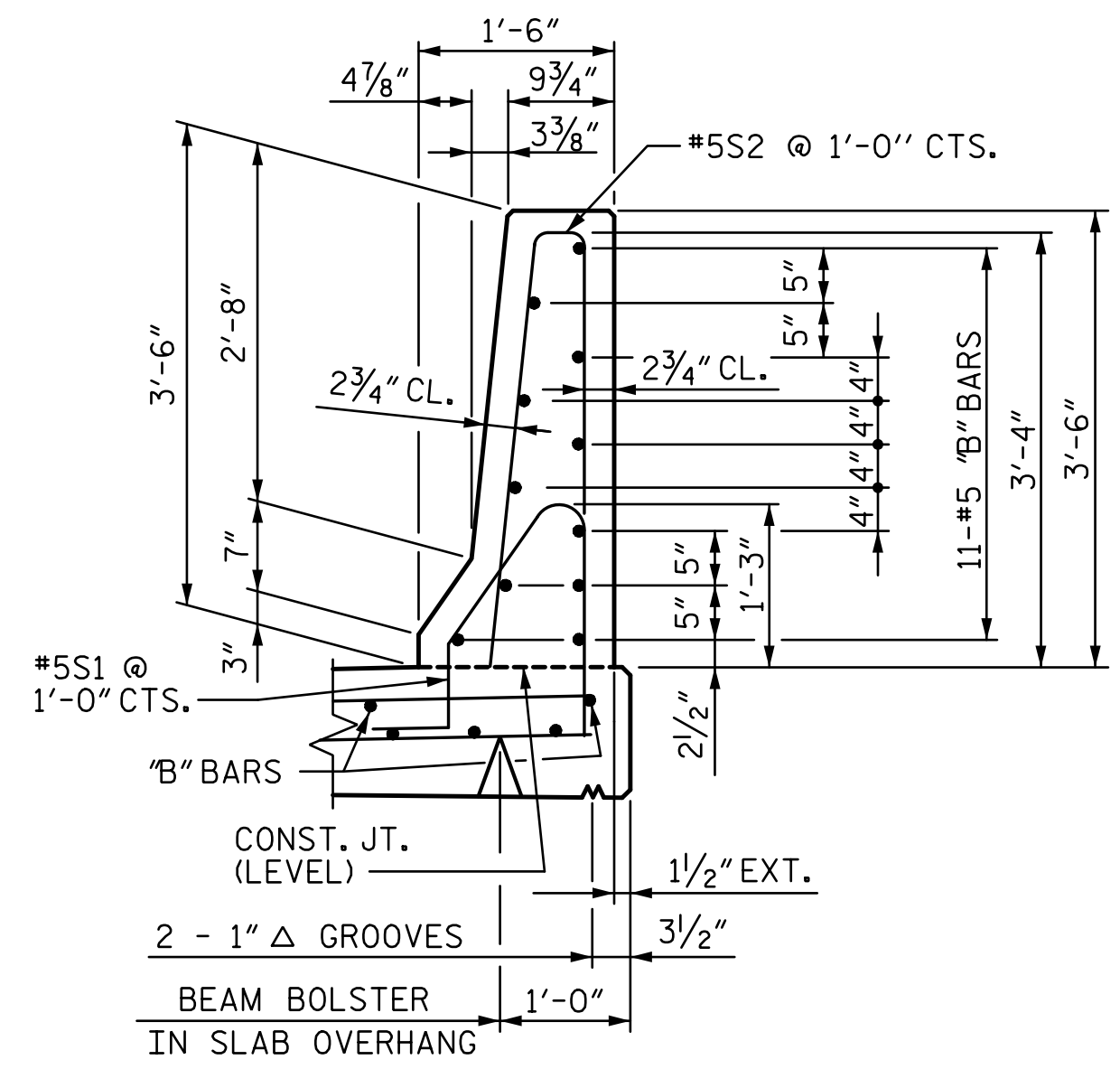
* EPOXY COATED REINFORCING STEEL	10,472 LBS.
CLASS AA CONCRETE	60.0 CU. YDS.
CONCRETE BARRIER RAIL	441.2 LIN. FT.

PROJECT NO. **R-2514D**
JONES & CRAVEN COUNTY
 STATION: **526+71.12 -L-**
 = **16+08.07 -Y6-**
 SHEET 1 OF 2

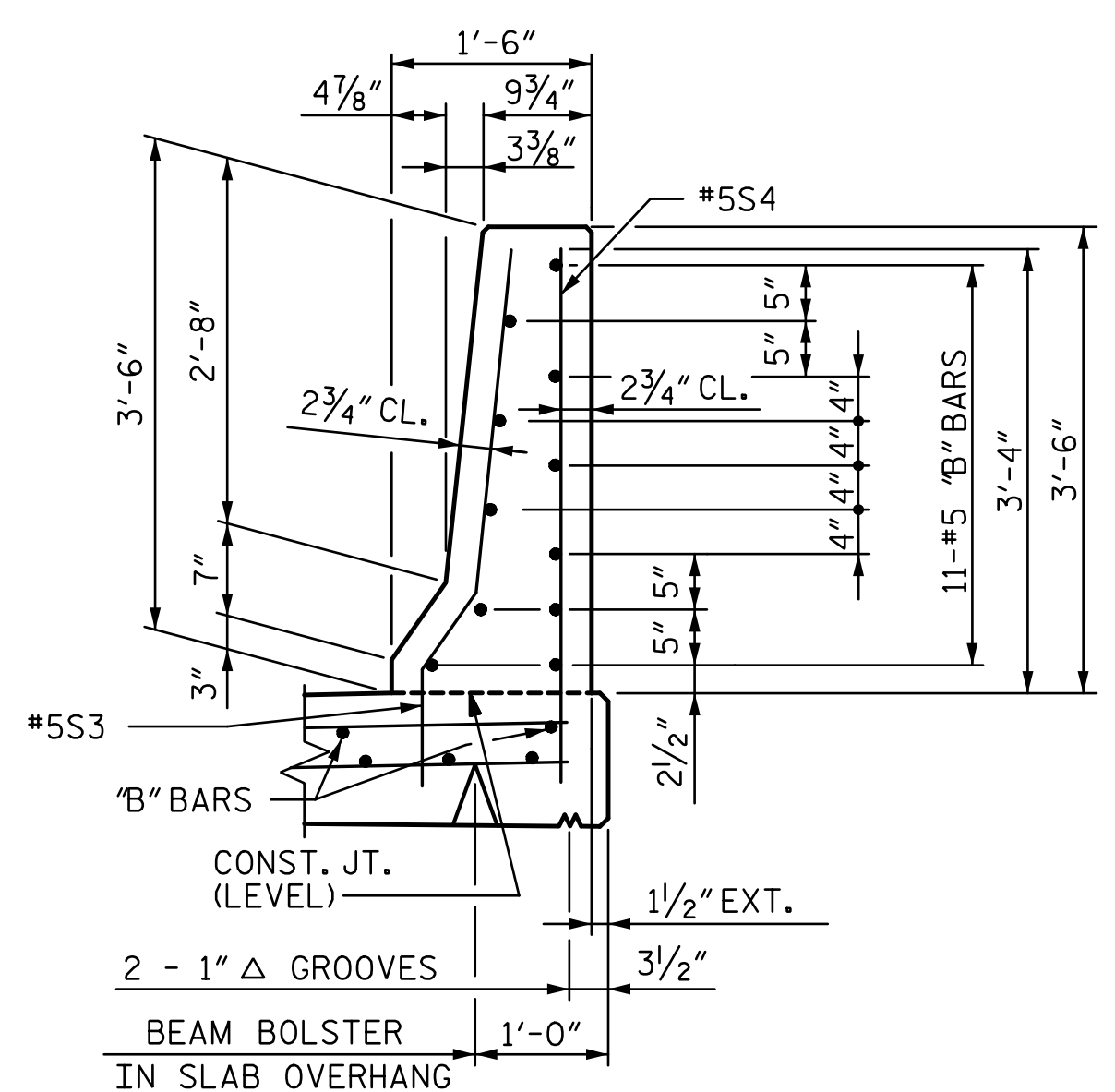
STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUPERSTRUCTURE
CONCRETE BARRIER RAIL
-LEFT LANE-

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

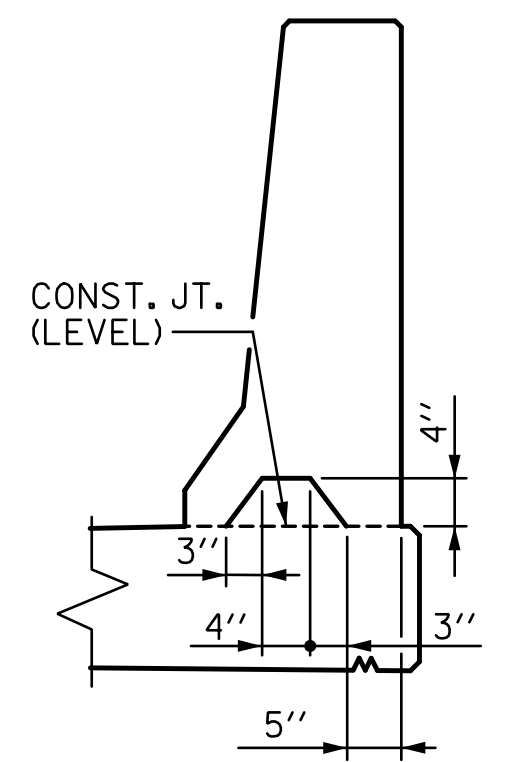
TOTAL SHEETS: 38



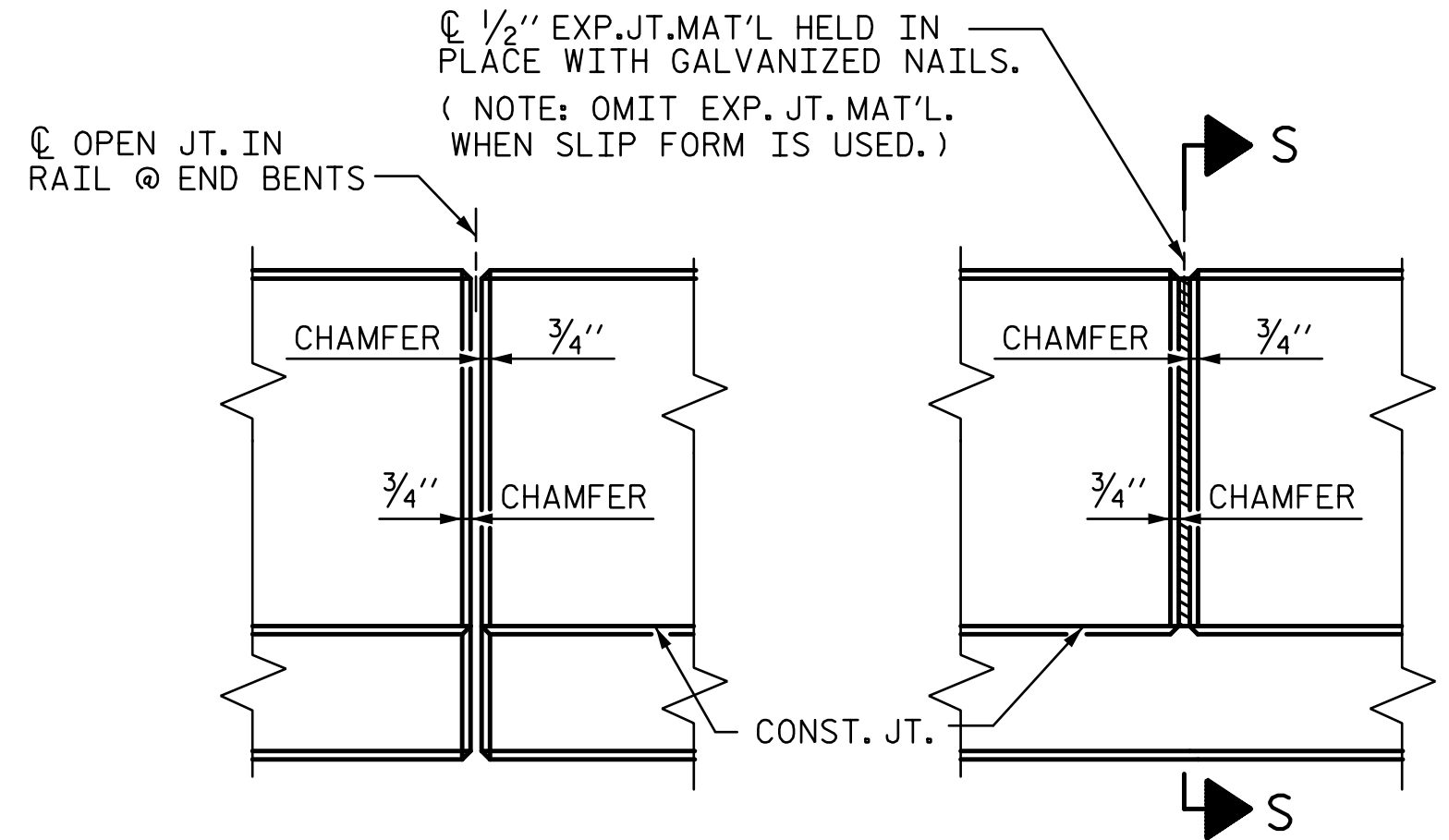
TYPICAL SECTION THRU RAIL



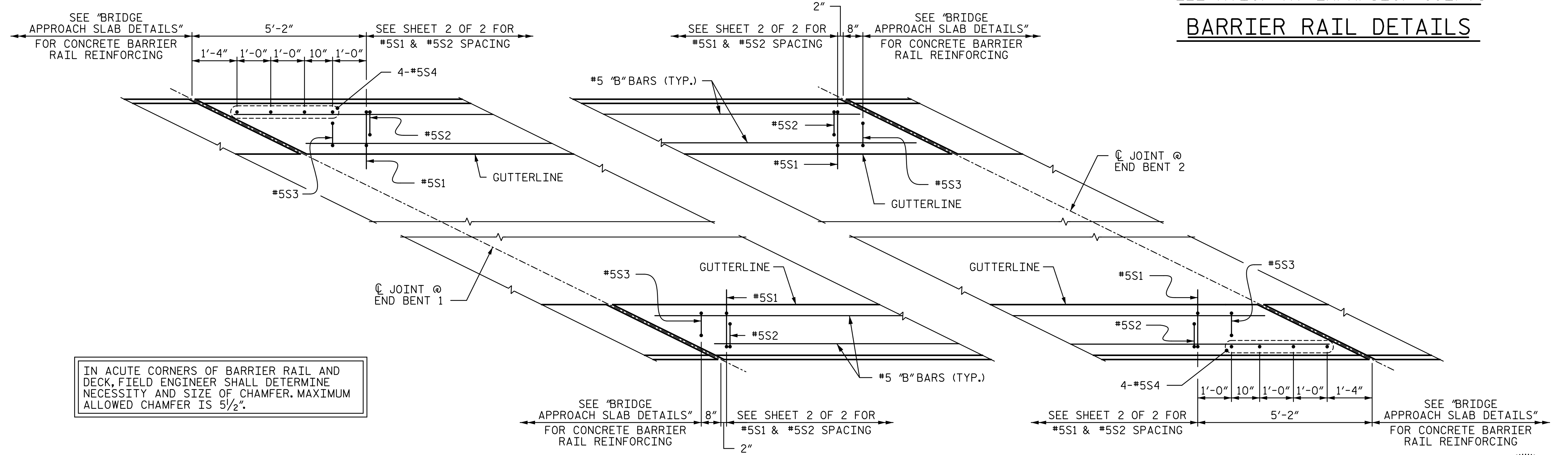
TYPICAL SECTION AT JOINT



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



ELEVATION AT EXPANSION JOINTS
BARRIER RAIL DETAILS

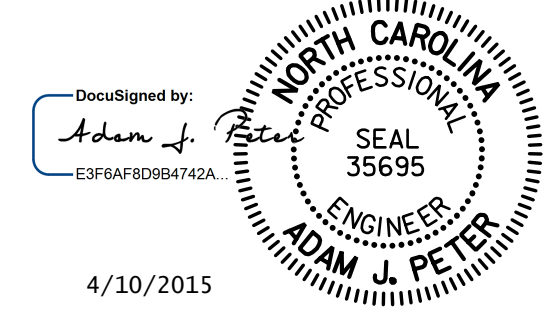


END BENT 1

END BENT 2

PLAN AT JOINTS

IN ACUTE CORNERS OF BARRIER RAIL AND DECK, FIELD ENGINEER SHALL DETERMINE NECESSITY AND SIZE OF CHAMFER. MAXIMUM ALLOWED CHAMFER IS 5/2".



4/10/2015

DRAWN BY: <u>CLG</u>	DATE: <u>6-14</u>	DESIGN ENGINEER OF RECORD: <u>A. PETER</u>	DATE: <u>6-14</u>
CHECKED BY: <u>AJP</u>	DATE: <u>6-14</u>		

STV / Ralph Whitehead Associates, Inc.
 900 West Trade Street, Suite 715
 Charlotte, NC 28202
 NC License Number F-0991