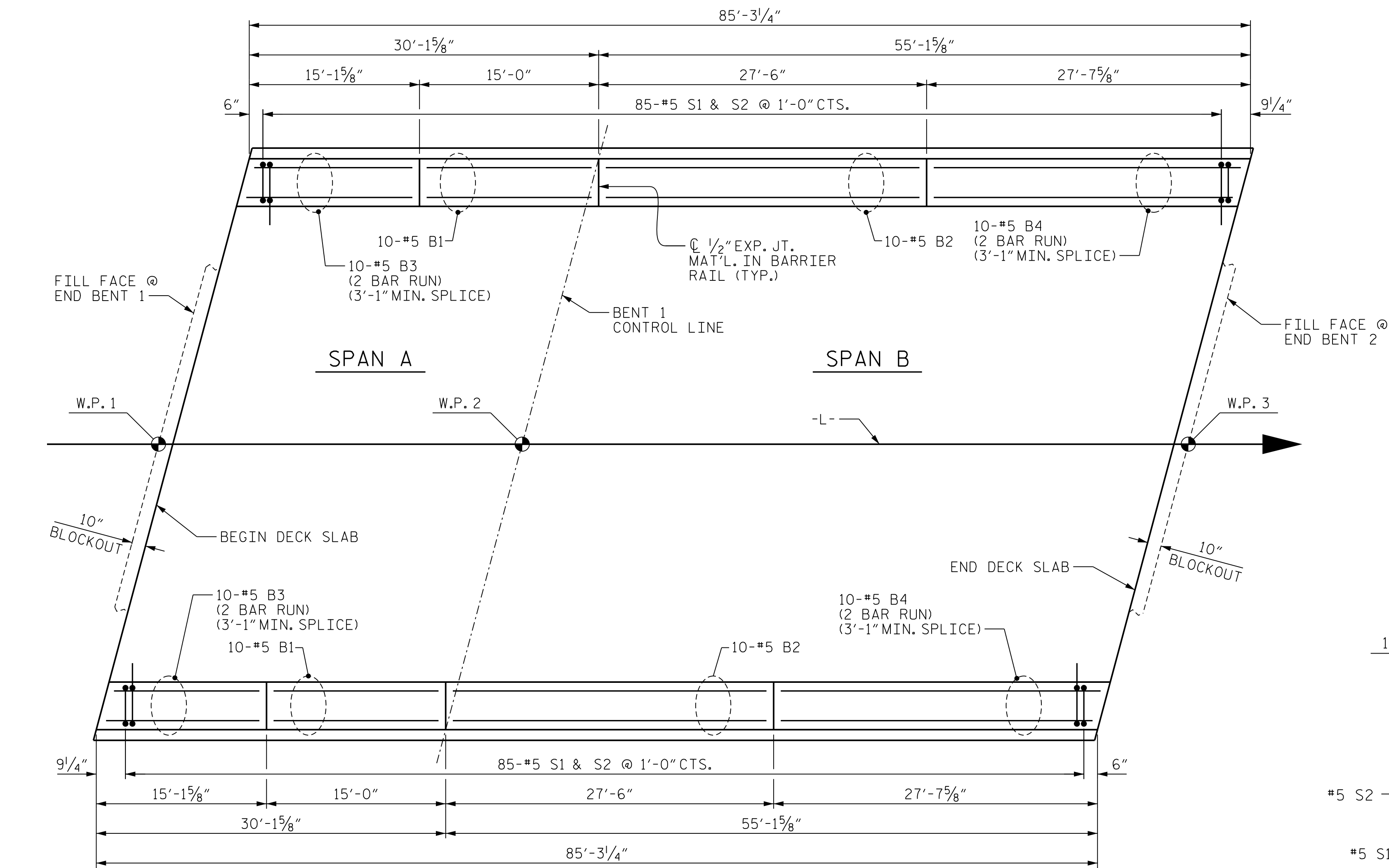
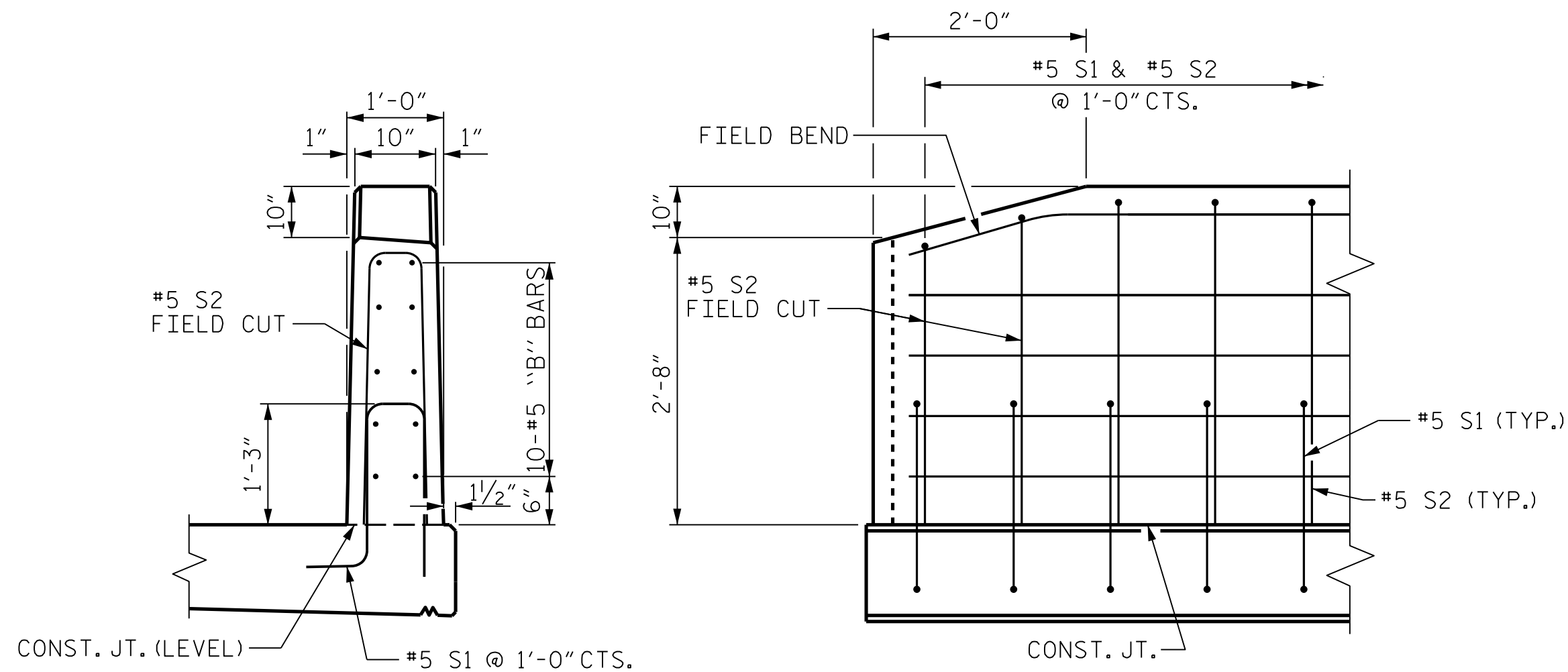


5/7/2025 7:23:54 PM
User: blanning
Filename: N:\NC Bridges\W3001.02_Polk 29\BP14-R041\Structures\01_031_BP14-R041_SMU_BRL_740029.dgn



PLAN



END VIEW

SIDE VIEW

END OF RAIL DETAILS

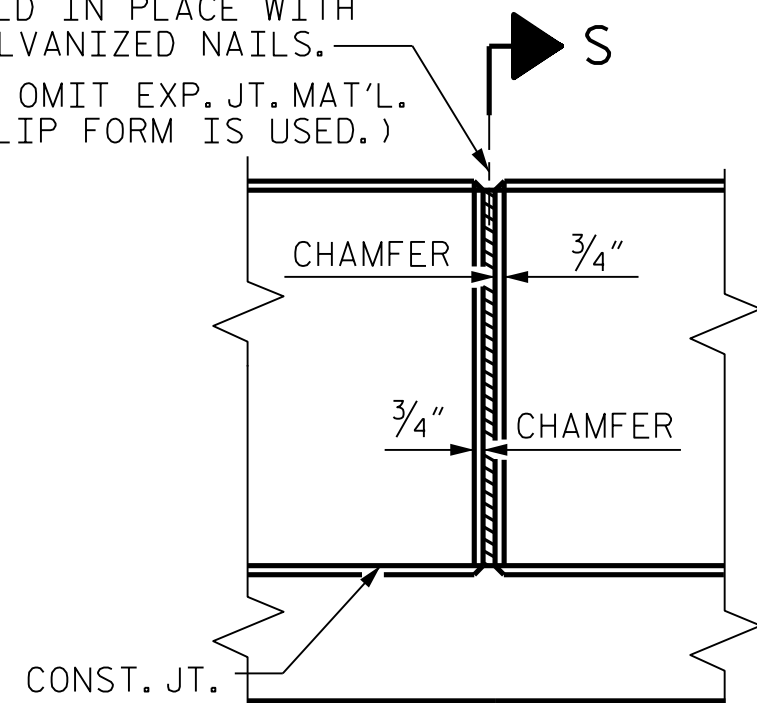
NOTES

THE BARRIER RAIL IN A CONTINUOUS 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.

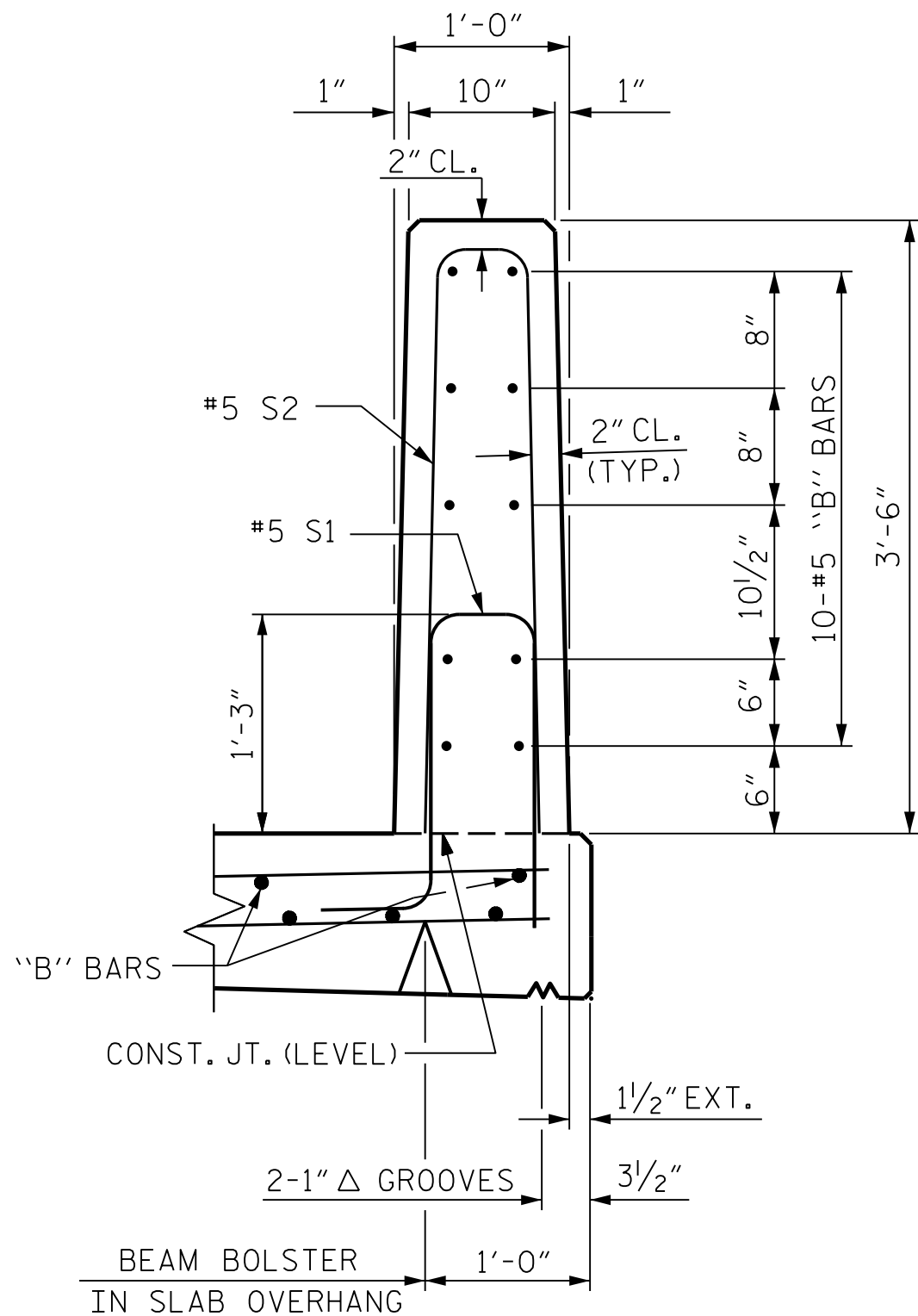
ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

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.

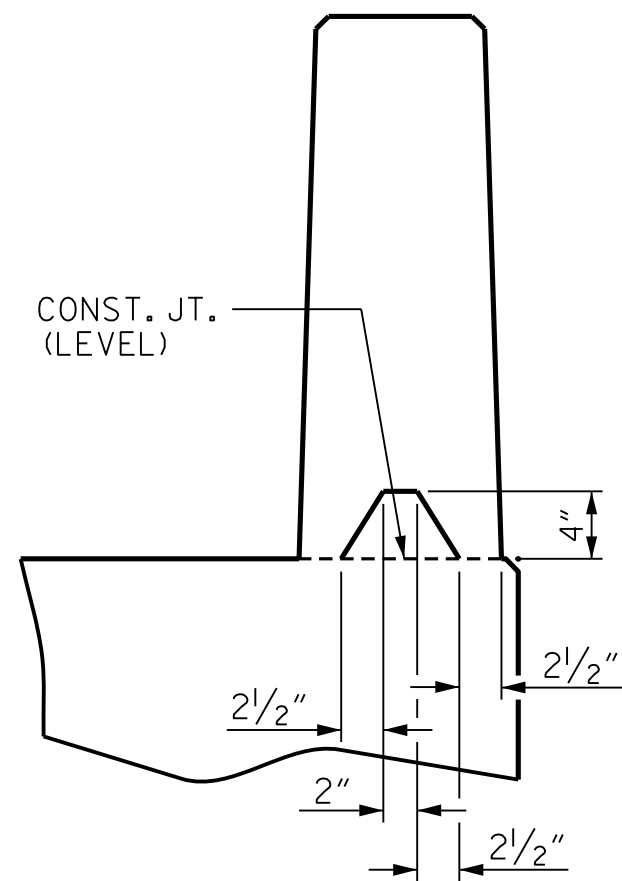
1/2" EXP. JT. MAT'L. HELD IN PLACE WITH GALVANIZED NAILS.
(NOTE: OMIT EXP. JT. MAT'L. WHEN SLIP FORM IS USED.)



ELEVATION AT EXPANSION JOINTS



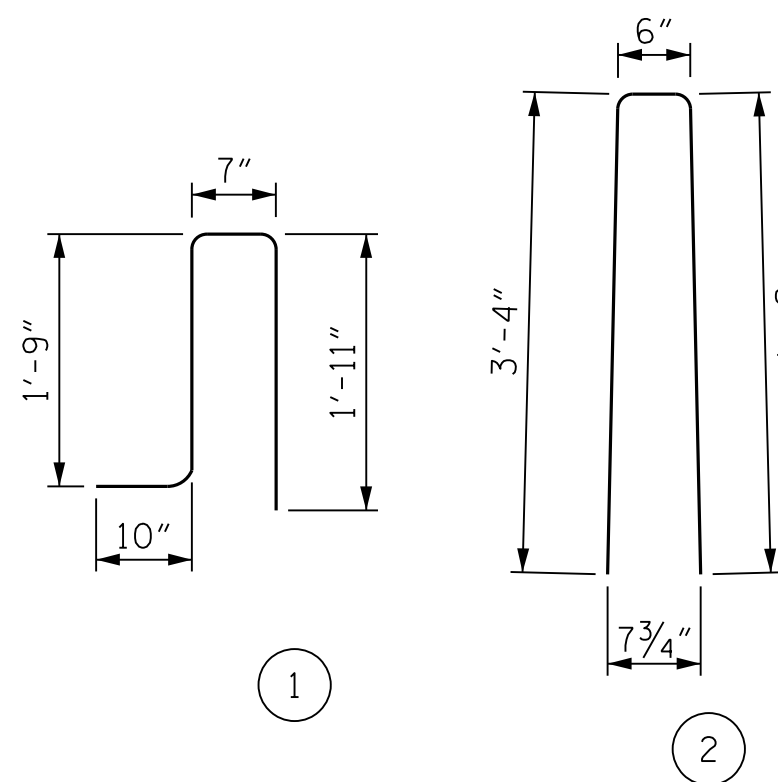
SECTION THRU RAIL



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

BARRIER RAIL DETAILS

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

FOR VERTICAL CONCRETE BARRIER RAIL ONLY

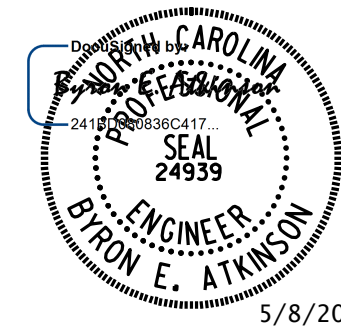
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	20	#5	STR	14'-7"	304
* B2	20	#5	STR	27'-1"	565
* B3	40	#5	STR	9'-3"	386
* B4	40	#5	STR	15'-6"	647
* S1	170	#5	1	5'-1"	901
* S2	170	#5	2	7'-2"	1271

* EPOXY COATED REINFORCING STEEL 4074 LBS.
CLASS AA CONCRETE 20.2 CU. YDS.
VERTICAL CONCRETE BARRIER RAIL 170.54 LIN. FT.

PROJECT NO. BP14.R041
POLK COUNTY
STATION: 20+97.50 -L-

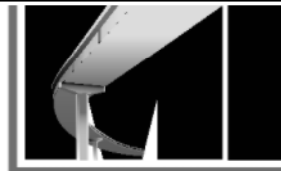
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

VERTICAL
CONCRETE
BARRIER RAIL



5/8/2025

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



MI ENGINEERING
1011 SCHAUB DRIVE, SUITE 100
RALEIGH, NC 27606
(919) 851-6606
FIRM PE NUMBER : P-0671

REVISIONS						SHEET NO. S-16
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 29
2			4			

DRAWN BY : B.E. LANNING DATE : 03/25
CHECKED BY : B.E. ATKINSON DATE : 03/25
DESIGN ENGINEER OF RECORD : B.E. ATKINSON DATE : 04/25