

PLAN OF BARRIER RAIL
 * ALONG OUTSIDE EDGE OF SUPERSTRUCTURE

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 20.7 MPa.

WHEN EVAZOTE JOINT SEAL IS REQUIRED, THE JOINT IN THE DECK SHALL BE SAWS PRIOR TO THE CASTING OF BARRIER RAIL.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

THE #16 S3 AND #16 S4 BARS SHALL BE INSTALLED, USING AN ADHESIVELY ANCHORED SYSTEM, AFTER SAWING THE JOINT. FOR ADHESIVELY ANCHORED ANCHOR BOLTS OR DOWELS, SEE SPECIAL PROVISIONS. THE YIELD LOAD FOR THE #16 S3 AND #16 S4 BARS IS 82.7 KN. FIELD TESTING FOR THE ADHESIVE BONDING SYSTEM IS NOT REQUIRED.

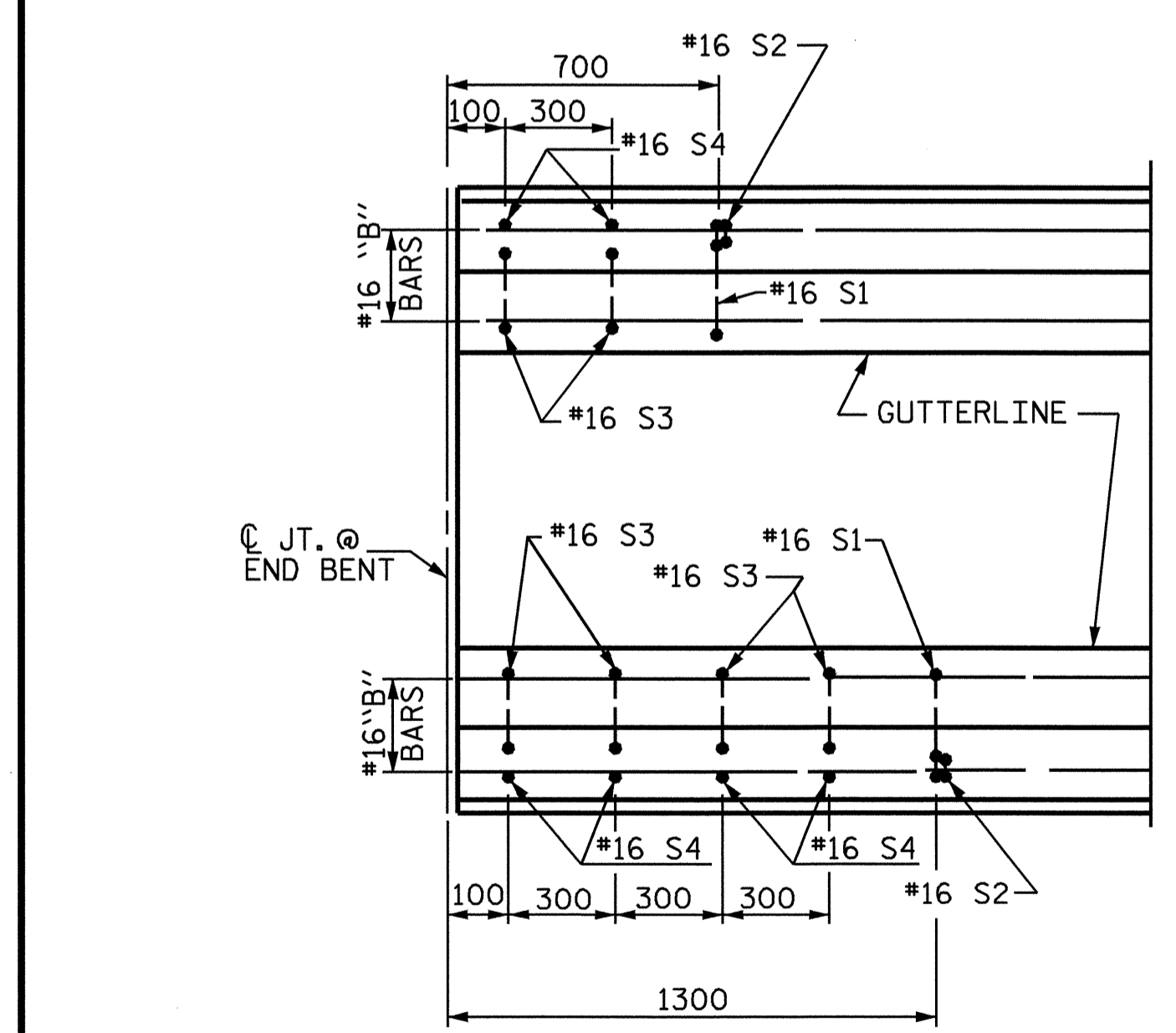
VERTICAL GROOVED CONTRACTION JOINTS, 12mm IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF BARRIER RAIL SEGMENTS LESS THAN 6.1m IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 3.5m IN LENGTH.

#16 S1 AND #16 S2 MAY BE SHIFTED SLIGHTLY AS NECESSARY TO MAINTAIN 50mm COVER AT 13mm EXPANSION JOINTS IN RAIL.

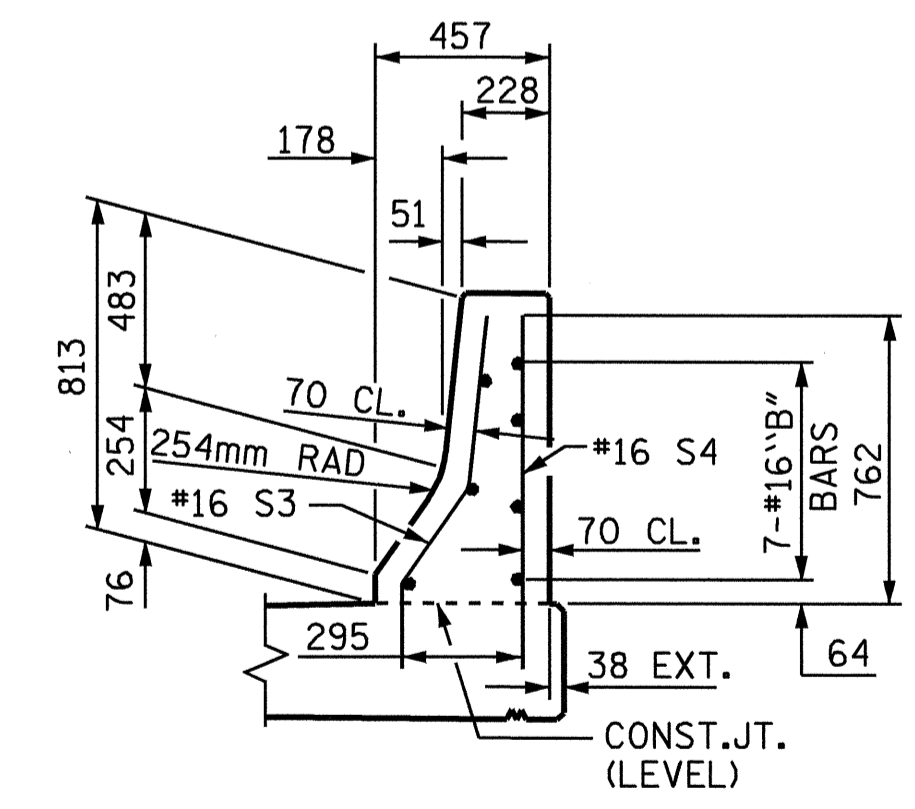
BAR TYPES

BILL OF MATERIAL
 FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*B1	126	#16	STR	8460	1654
*S1	504	#16	1	1440	1126
*S2	504	#16	2	1580	1236
*S3	12	#16	3	1020	19
*S4	12	#16	STR.	960	18
* EPOXY COATED REINFORCING STEEL					4053 kg
CLASS AA CONCRETE					38.8 CU. METER
CONCRETE BARRIER RAIL					154.730 METERS

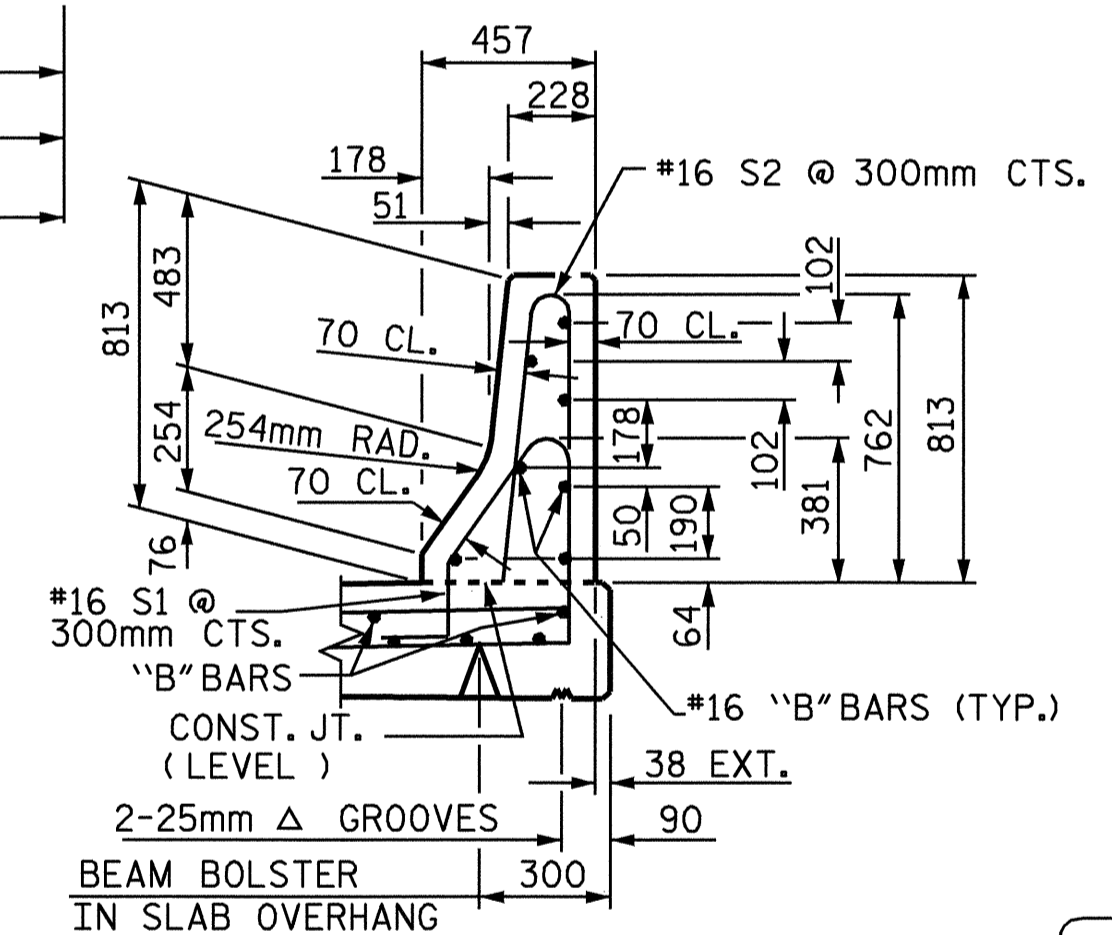


PLAN

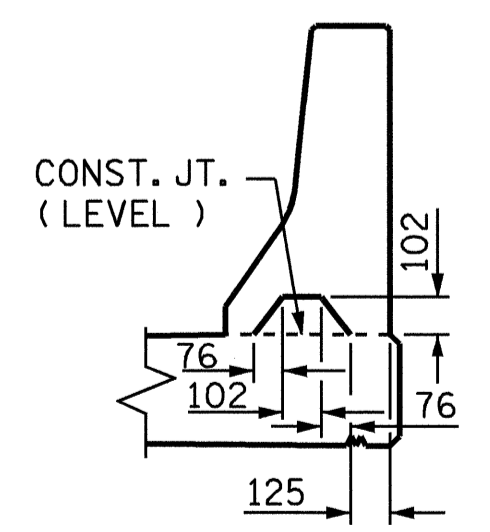


END VIEW

END OF RAIL DETAILS

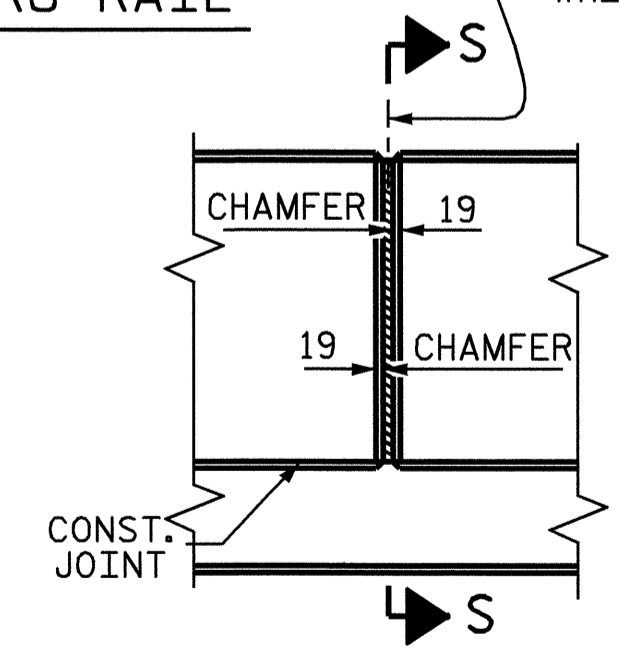


SECTION THRU RAIL



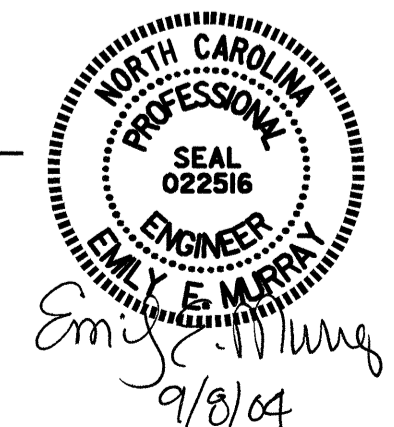
SECTION S-S

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



ELEVATION AT EXPANSION JOINTS

13mm EXP. JT. MAT'L HELD IN PLACE WITH GALVANIZED NAILS.
 (NOTE: OMIT EXP. JT. MAT'L WHEN SLIP FORM IS USED)



PROJECT NO. R-2206C
 LINCOLN-CATAWBA COUNTY
 STATION: 199+48.000-L-

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

ASSEMBLED BY: M.D.PISO	DATE: 9/03
CHECKED BY: M.M.PARSONS	DATE: 9/03
DRAWN BY: ARB 5/87	REV. 8/16/99 RWW/LES
CHECKED BY: SJD 9/87	REV. 10/17/00 RWW/LES
	REV. 5/7/03 RWW/JTE

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

TOTAL SHEETS: 374