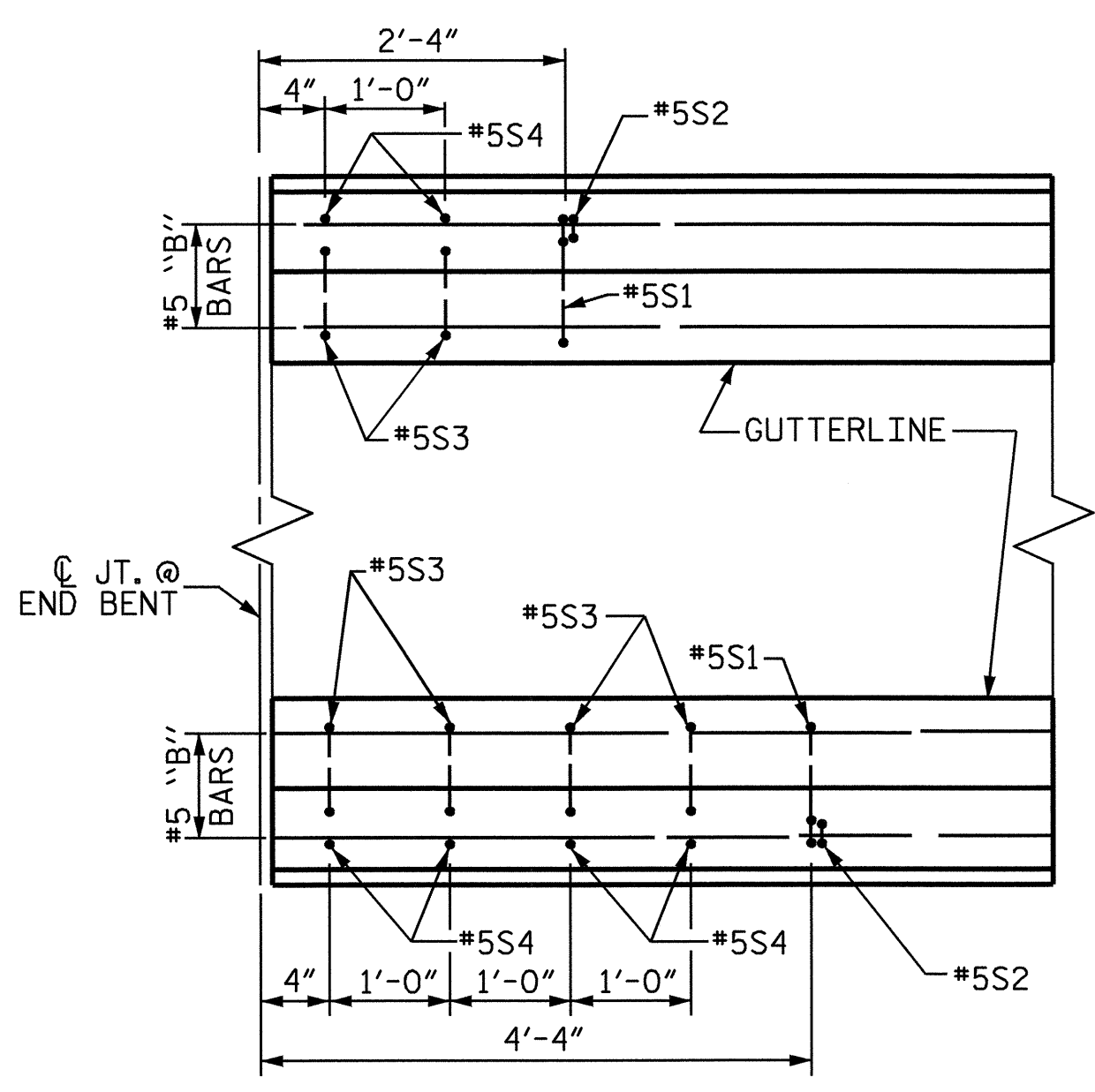
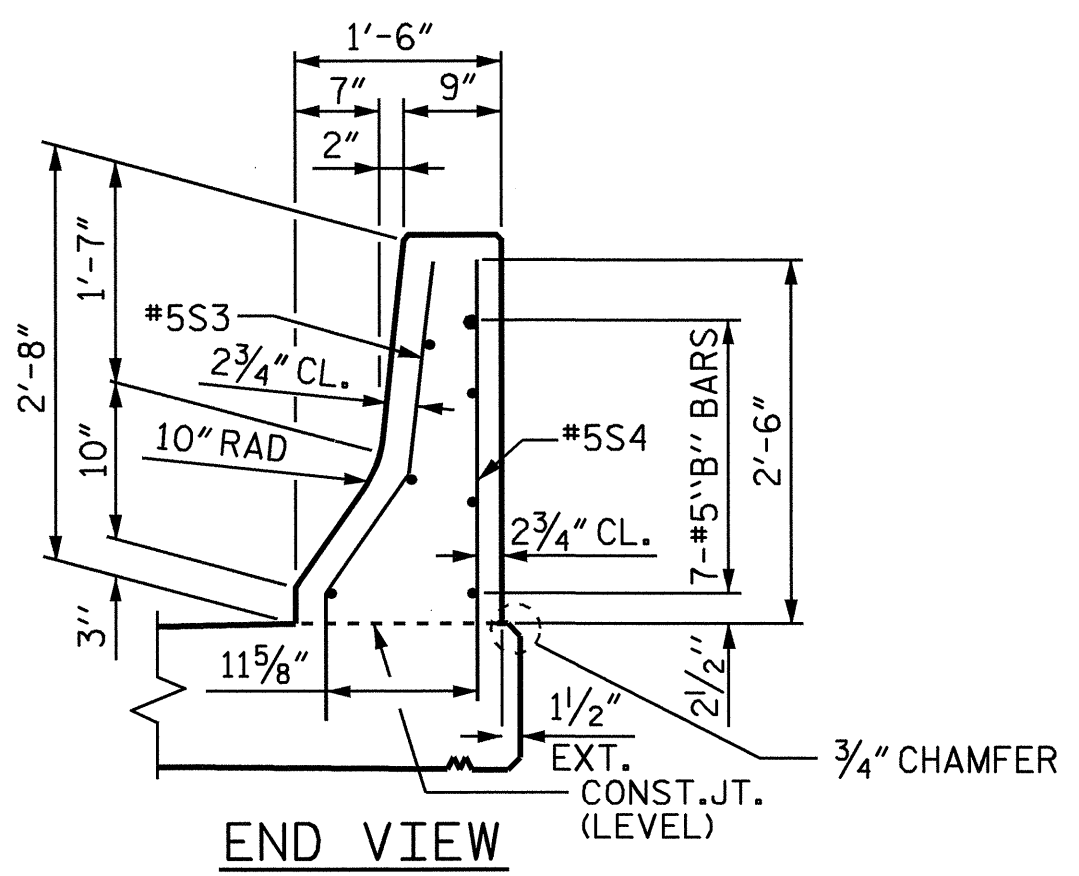


PLAN

** SEE "END OF RAIL DETAILS-PLAN VIEW" FOR ADDITIONAL REINFORCING STEEL.



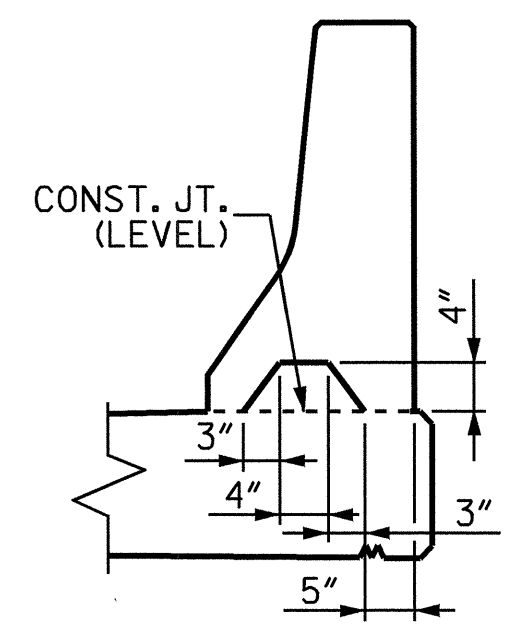
PLAN



END VIEW

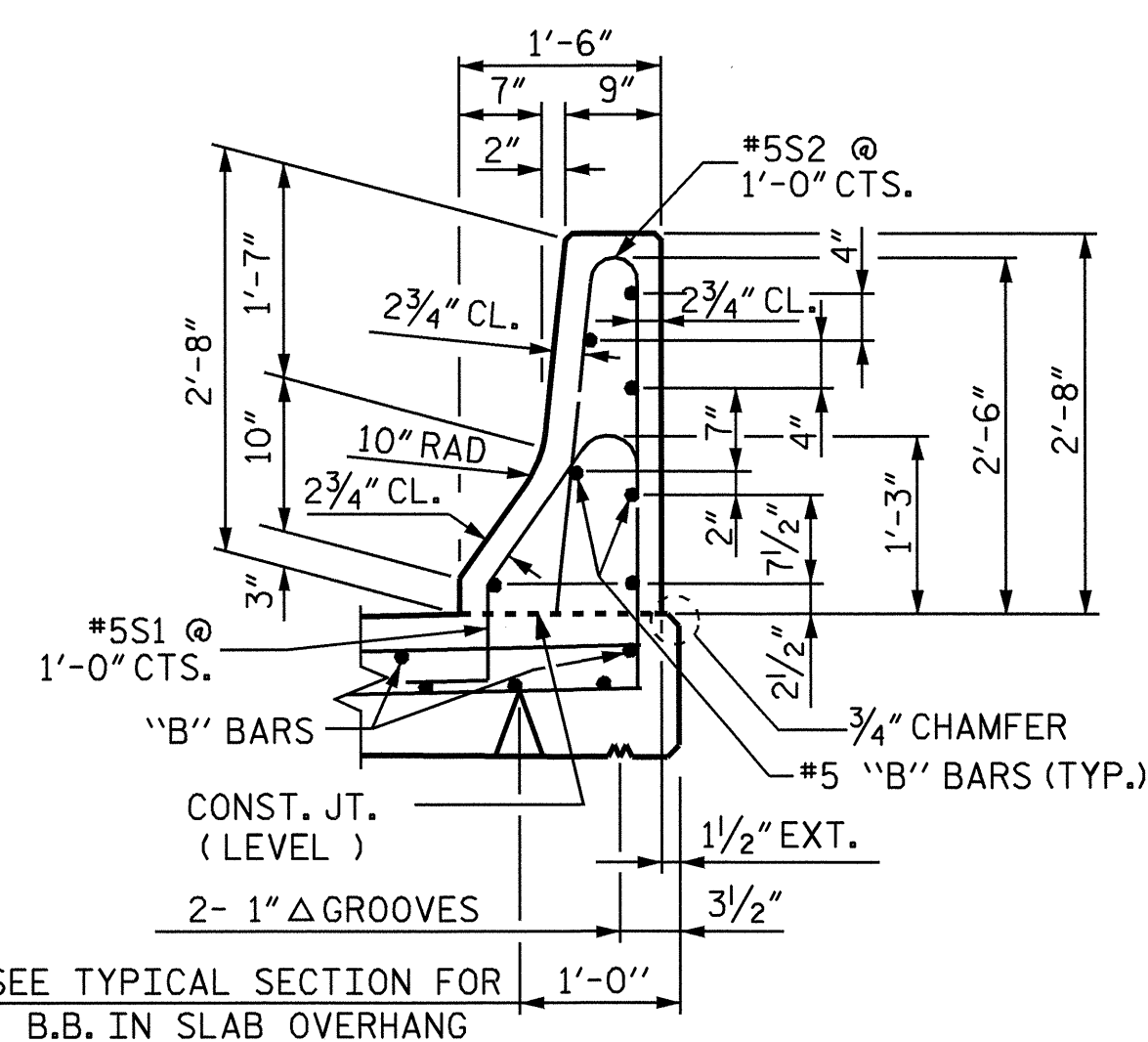
END OF RAIL DETAILS

FOR ADHESIVE ANCHORING AT SAWED JOINTS



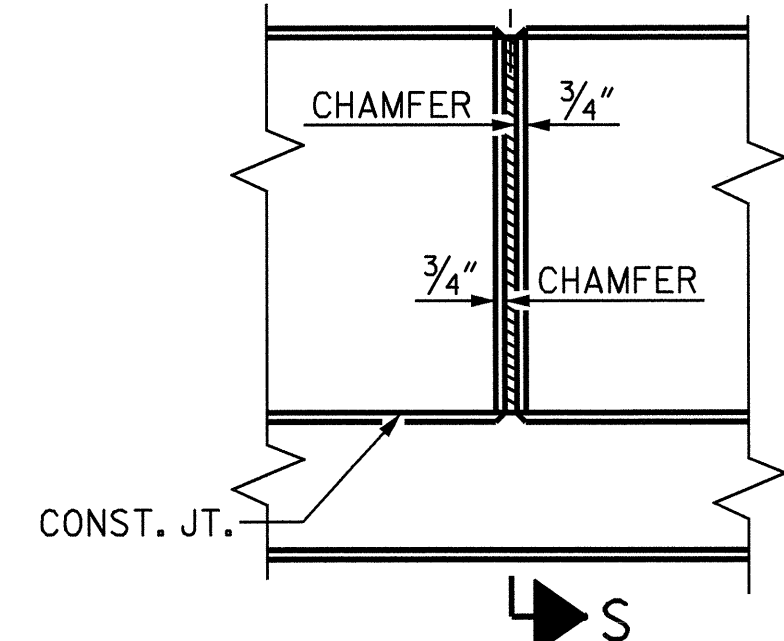
SECTION S-S

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



SECTION THRU RAIL

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



ELEVATION @ EXPANSION JOINTS

BARRIER RAIL DETAILS

NOTES

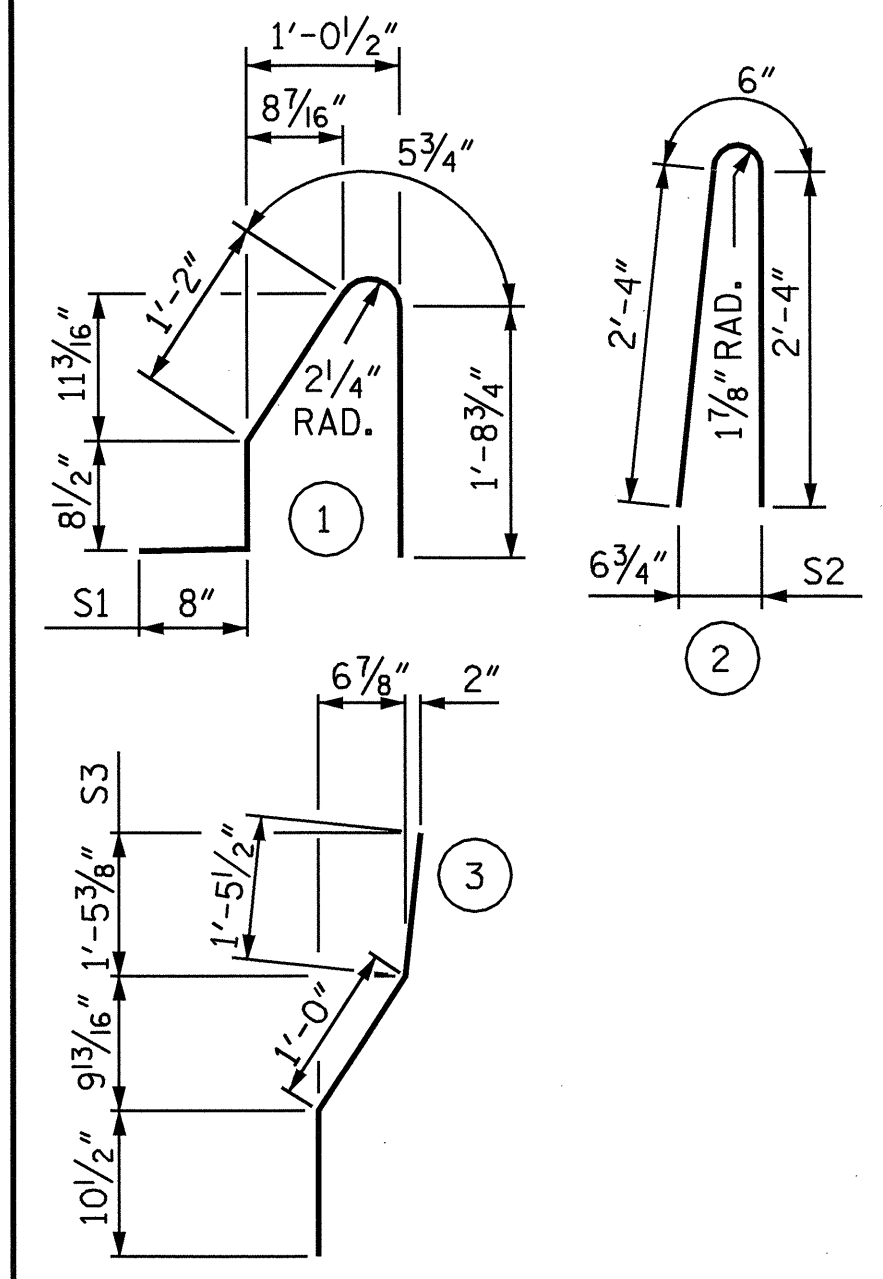
THE BARRIER RAIL IN EACH CONTINUOUS UNIT SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THAT UNIT HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

THE #5 S3 AND #5 S4 BARS SHALL BE INSTALLED, USING AN ADHESIVE ANCHORING SYSTEM, AFTER SAWING THE JOINT. FOR ADHESIVELY ANCHORED ANCHOR BOLTS OR DOWELS, SEE SPECIAL PROVISIONS. THE YIELD LOAD FOR THE #5 S3 AND #5 S4 BARS IS 18.6 KIPS. FIELD TESTING FOR THE ADHESIVE BONDING SYSTEM IS NOT REQUIRED.

VERTICAL 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.

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ONLY

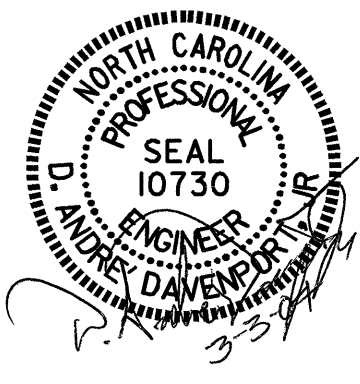
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* S1	646	#5	1	4'-9"	3200
* S2	646	#5	2	5'-2"	3481
* S3	12	#5	3	3'-4"	42
* S4	12	#5	STR	3'-2"	40
* B1	28	#5	STR	29'-1"	849
* B2	126	#5	STR	29'-7"	3898

* EPOXY COATED REINFORCING STEEL	11510 LBS.
CLASS AA CONCRETE	65.8 CU. YDS.
CONCRETE BARRIER RAIL	657.94 LIN. FT.

PROJECT NO. B-3865
JOHNSTON COUNTY
 STATION: 21+48.00 -L-

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

CONCRETE BARRIER RAIL



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

TOTAL SHEETS: 33

ASSEMBLED BY : H. TOM BARBOUR	DATE : 3-28-03
CHECKED BY : D. G. ELY	DATE : 5-03
DRAWN BY : ARB 5/87	REV. 7/17/98 RWW/LES
CHECKED BY : SJD 9/87	REV. 8/16/99 RWW/LES
	REV. 10/17/00R RWW/LES