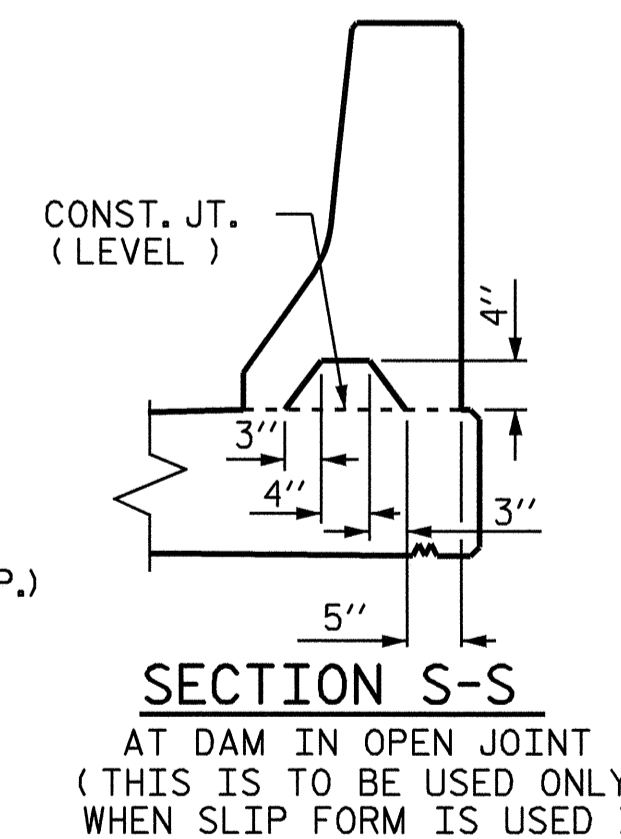
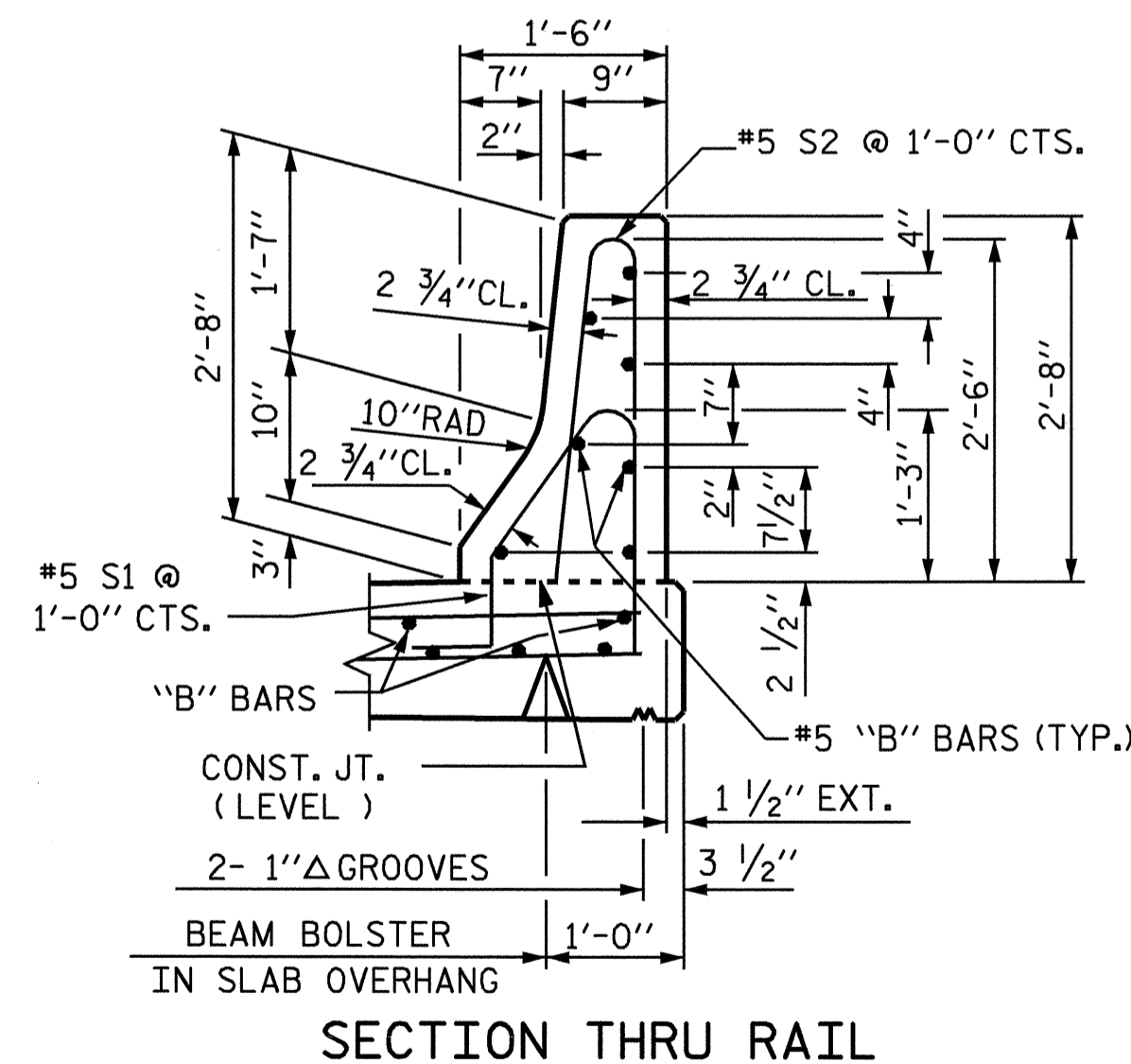
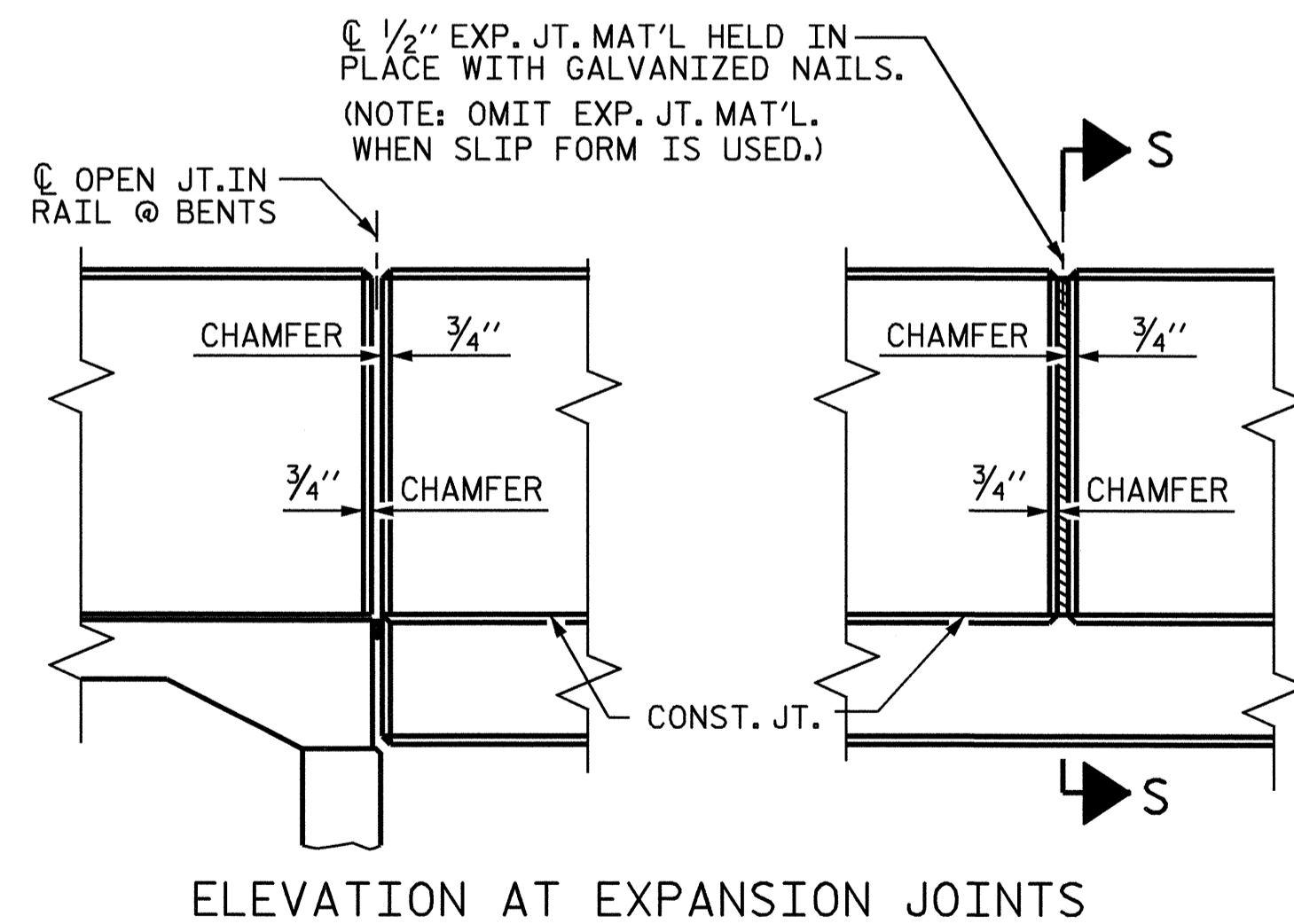


END OF RAIL DETAILS
FOR ADHESIVE ANCHORING AT SAWED JOINTS



BARRIER RAIL DETAILS

NOTES

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

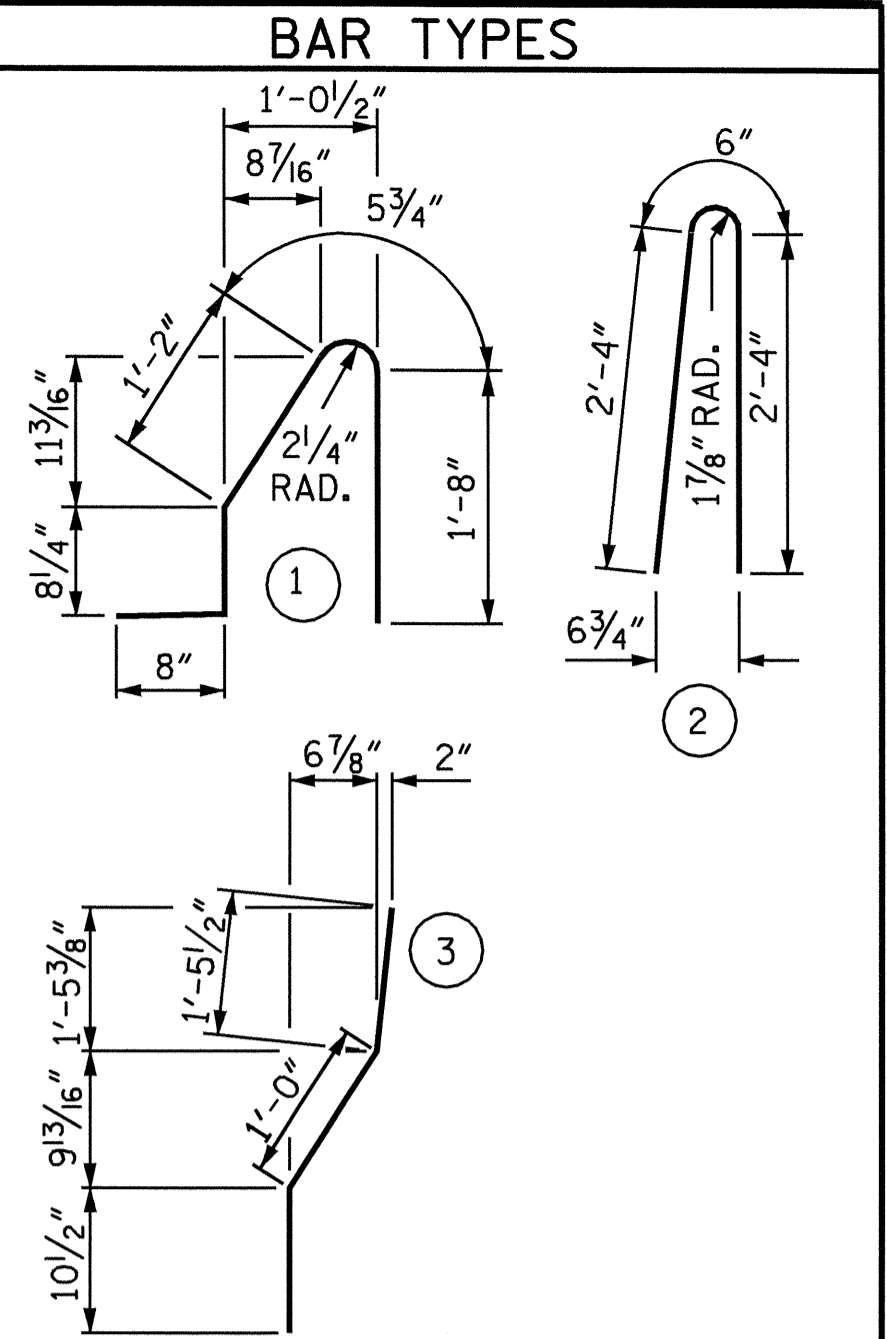
WHEN EVAZOTE JOINT SEAL IS REQUIRED, THE JOINT IN THE DECK SHALL BE SAWED PRIOR TO THE CASTING OF BARRIER RAIL.

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.

THE #5 "S" BARS MAY BE SHIFTED SLIGHTLY IN ORDER TO MAINTAIN A 2" MINIMUM CLEARANCE TO EXPANSION JOINT SEAL AND TO 1/2" EXPANSION JOINT MATERIAL IN THE BARRIER RAIL.

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.



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL ONLY

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
* B1	28	#5	STR	14'-2"	414
* B2	56	#5	STR	24'-3"	1416
* B3	56	#5	STR	24'-11"	1455
* B4	28	#5	STR	14'-7"	426
* S1	489	#5	1	4'-8"	2380
* S2	489	#5	2	5'-2"	2635
* S3	12	#5	3	3'-4"	42
* S4	12	#5	STR	3'-2"	40

* EPOXY COATED REINFORCING STEEL	8808 LBS.
CLASS AA CONCRETE	50.2 CU. YDS.
CONCRETE BARRIER RAIL	500.82 LIN. FT.

PROJECT NO. R-2417BB
LEE COUNTY
STATION: 519+42.20 -L-

SHEET 2 OF 2

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

OCTOBER		REVISIONS		1987	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. S-17
TOTAL SHEETS 78



ASSEMBLED BY : M. ALLEN	DATE : 9/03
CHECKED BY : B.N. GRADY	DATE : 11/03
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