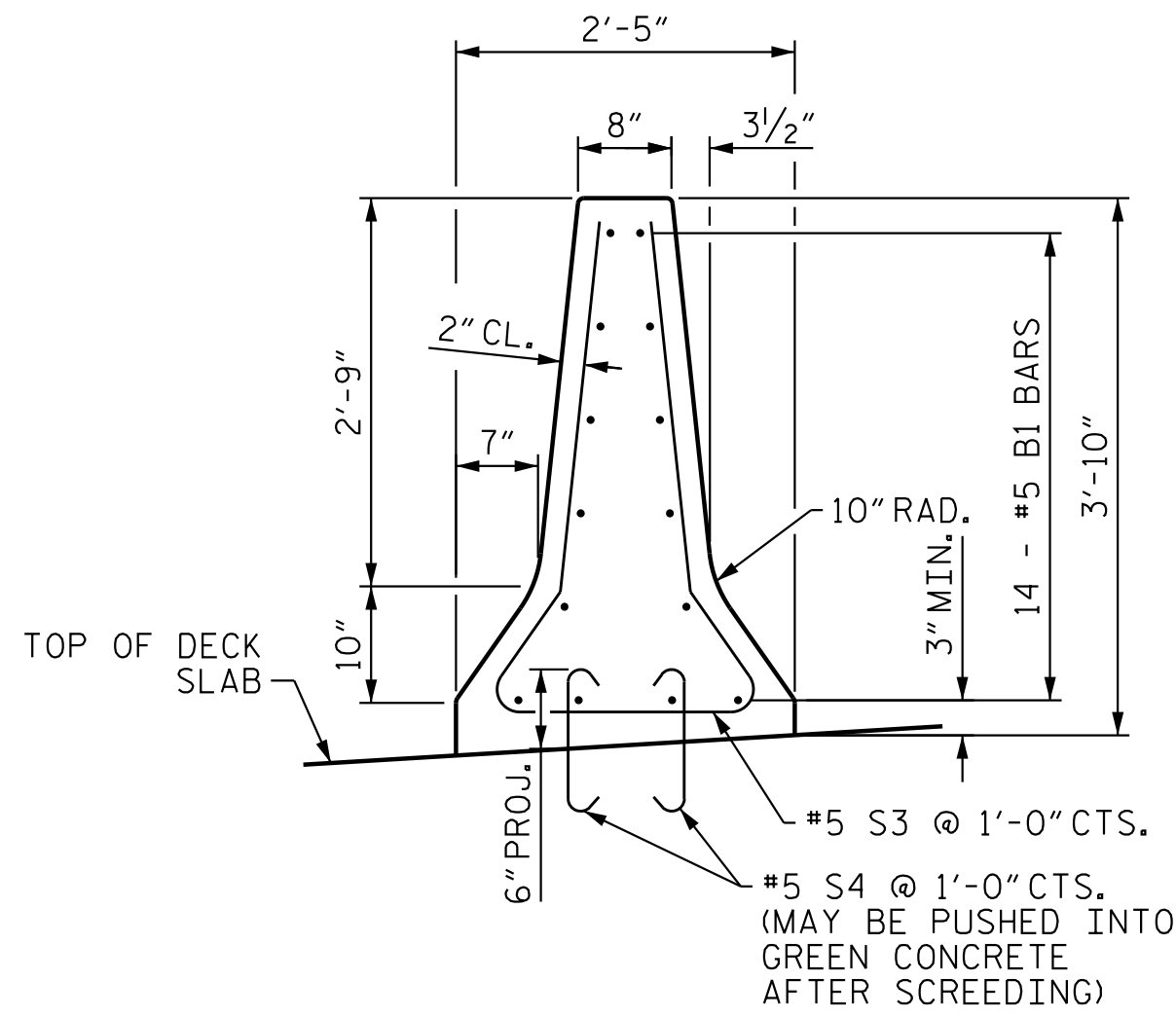


NOTES

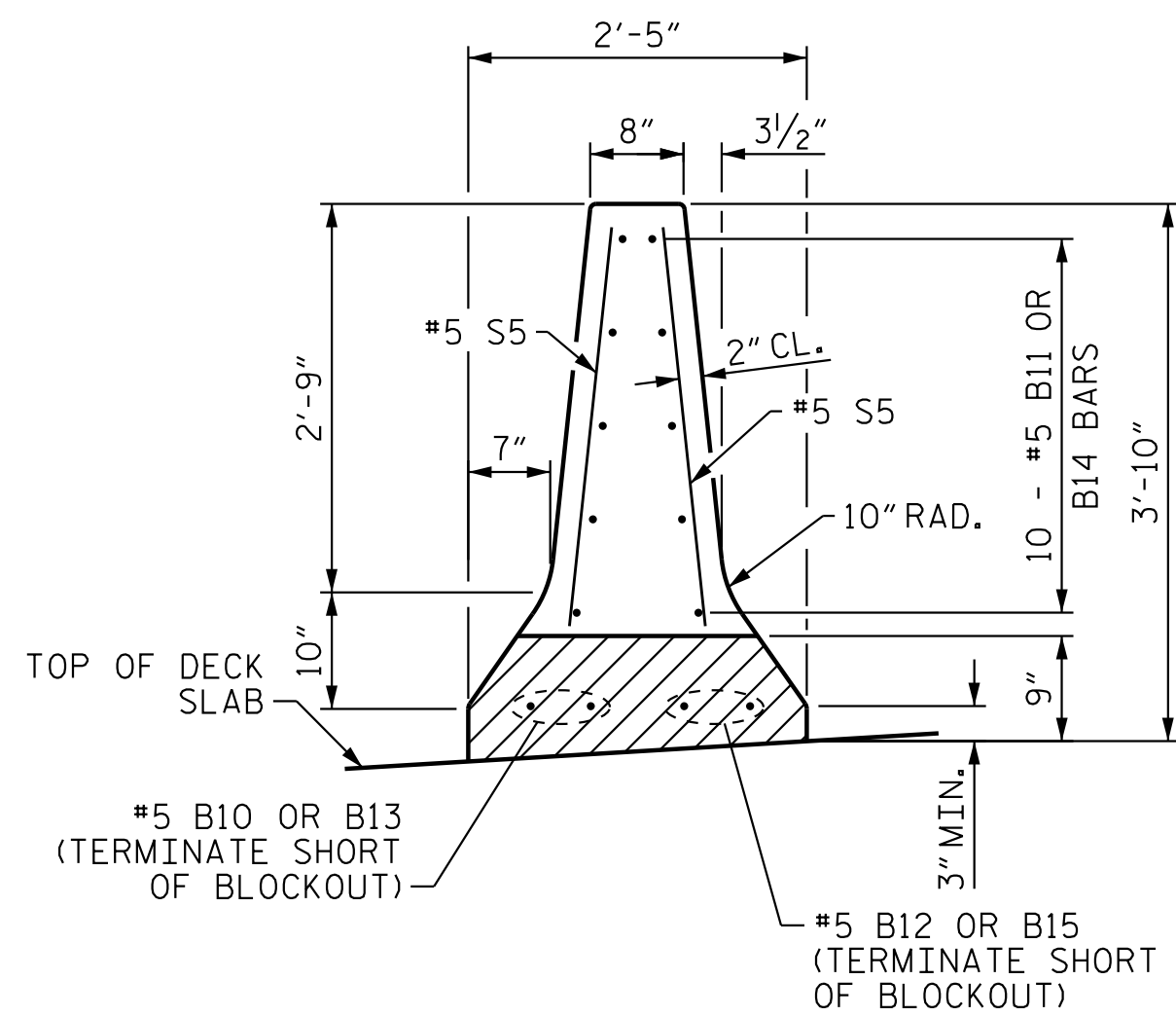
THE BARRIER RAIL AND MEDIAN RAIL IN EACH SPAN SHALL NOT BE CAST UNTIL ALL SLAB CONCRETE IN THAT SPAN HAS BEEN CAST AND HAS REACHED A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI.

ALL REINFORCING STEEL IN BARRIER RAILS SHALL BE EPOXY COATED.

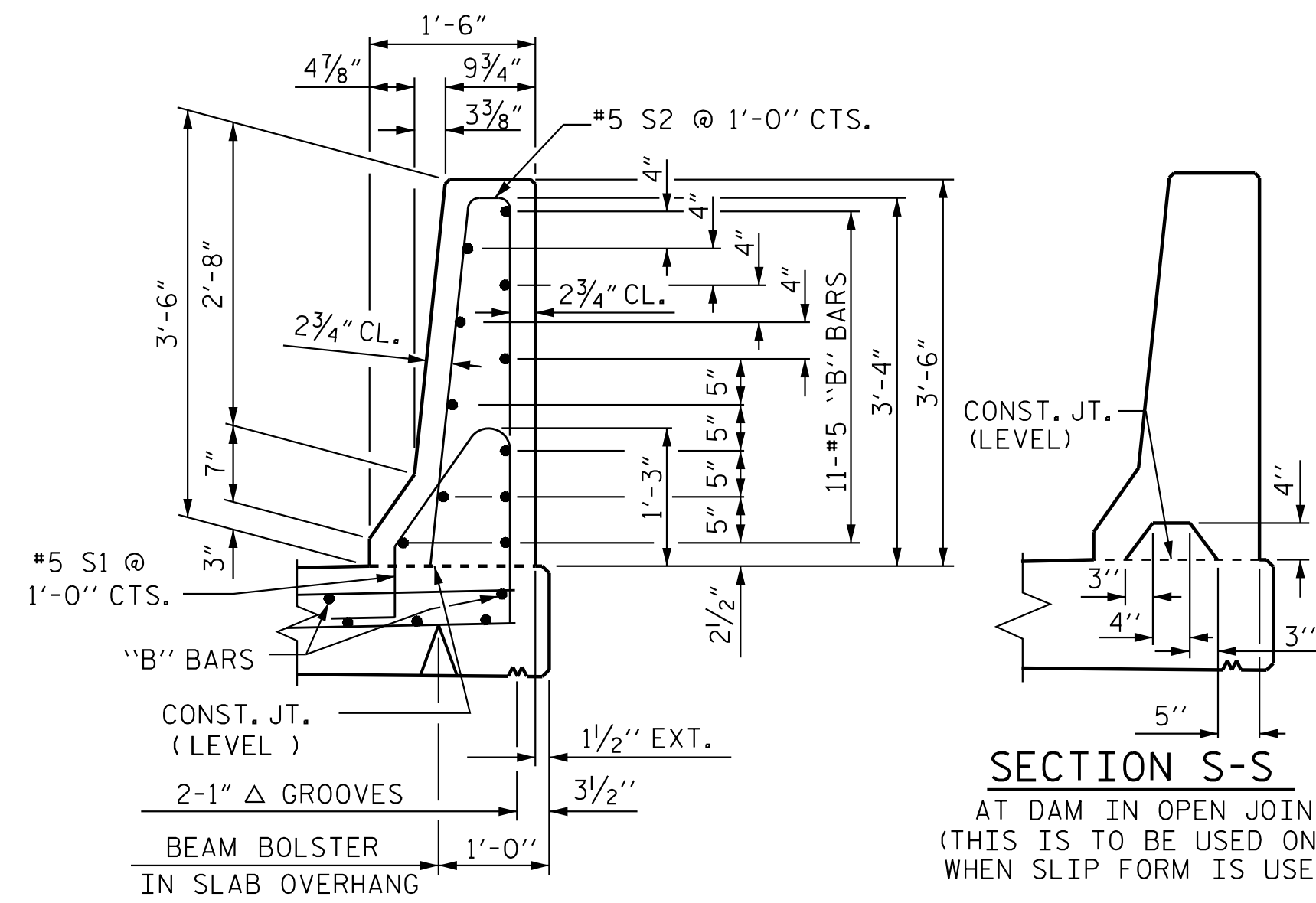
GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE BARRIER RAIL AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS, THE CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN BARRIER RAIL EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS 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.



SECTION B-B

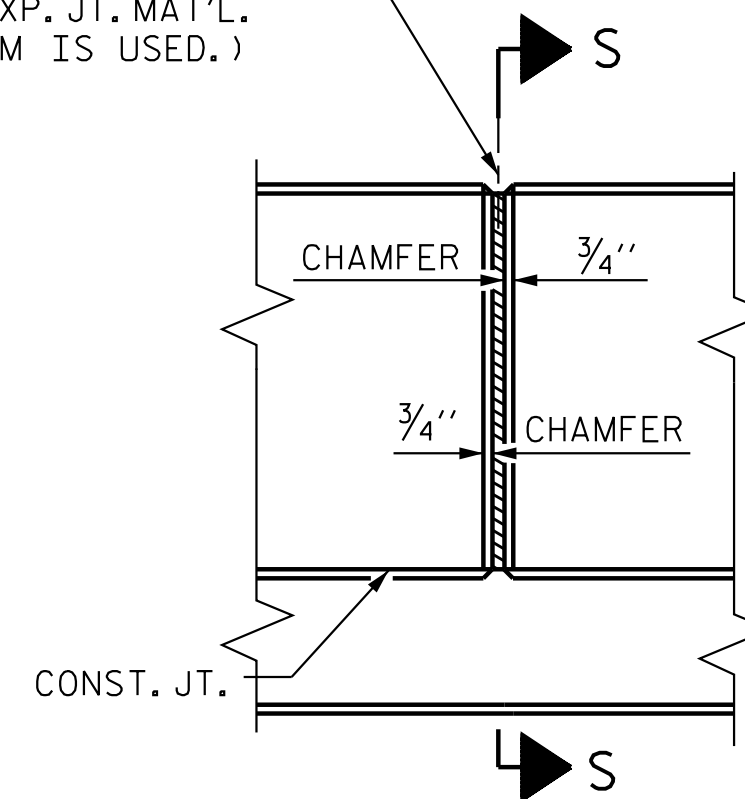


SECTION C-C

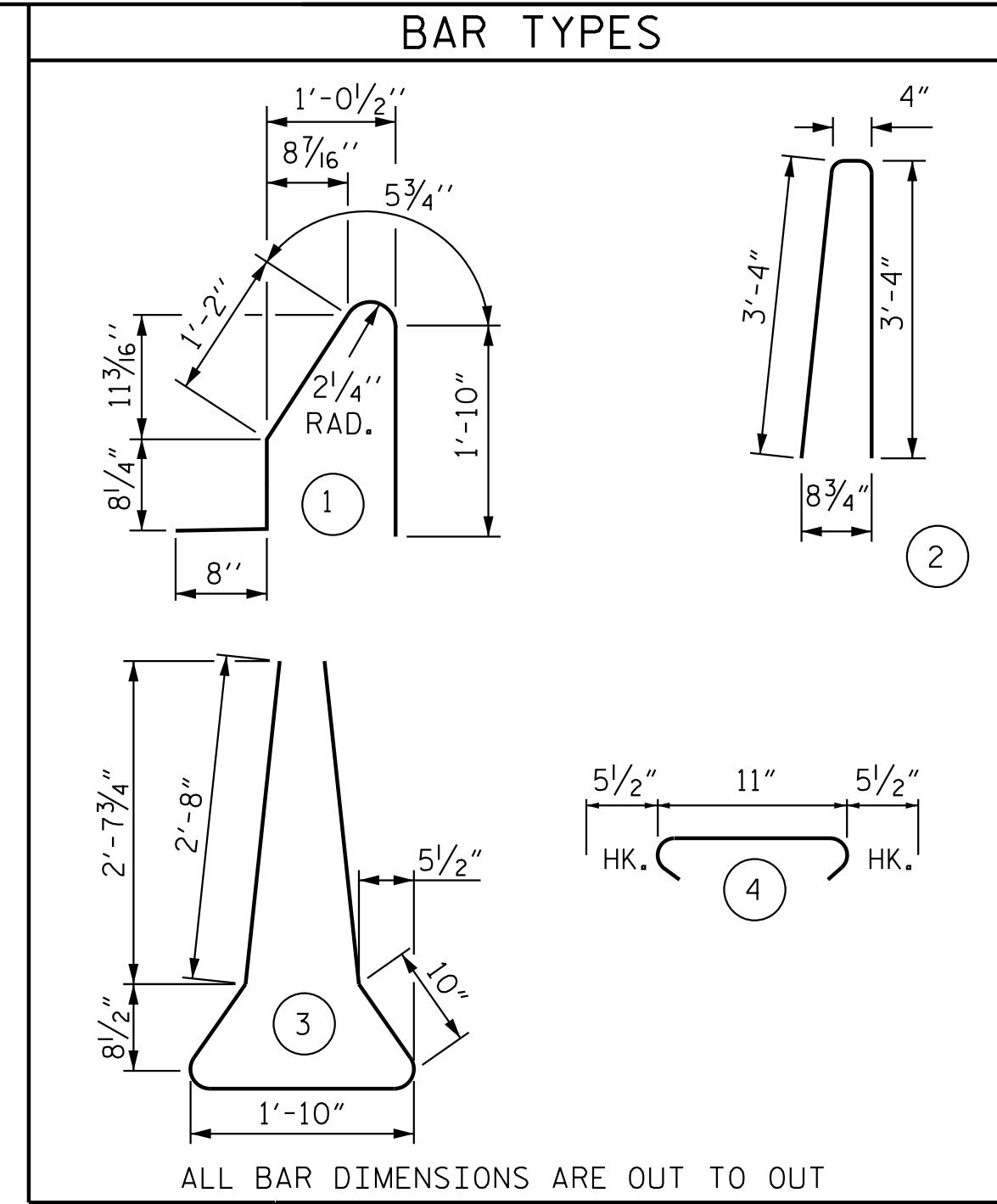


SECTION A-A

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
BARRIER RAIL DETAILS



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL

FOR CONCRETE BARRIER RAIL AND MEDIAN						
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	
* B1	288	#5	STR	24'-6"	7,359	
* B2	6	#5	STR	14'-3"	89	
* B3	5	#5	STR	13'-9"	72	
* B4	5	#5	STR	12'-9"	66	
* B5	6	#5	STR	12'-6"	78	
* B6	6	#5	STR	16'-5"	103	
* B7	5	#5	STR	16'-6"	86	
* B8	5	#5	STR	15'-5"	80	
* B9	6	#5	STR	15'-7"	98	
* B10	2	#5	STR	12'-8"	26	
* B11	10	#5	STR	13'-5"	140	
* B12	2	#5	STR	12'-1"	25	
* B13	2	#5	STR	15'-0"	31	
* B14	10	#5	STR	16'-0"	167	
* B15	2	#5	STR	15'-3"	32	
* S1	461	#5	1	4'-10"	2,324	
* S2	462	#5	2	7'-0"	3,373	
* S3	229	#5	3	8'-10"	2,110	
* S4	458	#5	4	1'-10"	876	
* S5	4	#5	STR	2'-10"	12	

* EPOXY COATED REINFORCING STEEL	17,147	LBS.
CLASS AA CONCRETE	104.9	CU. YDS.
CONCRETE BARRIER RAIL	461.1	LIN. FT.
CONCRETE MEDIAN RAIL	230.7	LIN. FT.

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

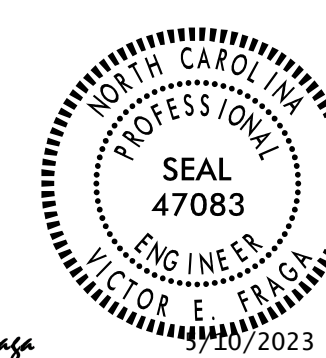
PROJECT NO. R-2707D

CLEVELAND COUNTY

STATION: 36+78.38 -RAMP A-

SHEET 2 OF 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUPERSTRUCTURE
CONCRETE BARRIER RAIL
DETAILS



DocuSigned by:
Victor E. Fraga
10/20/2023
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S4- 22
1			3			TOTAL SHEETS 43
2			4			



ASSEMBLED BY : J. B. GEILE DATE : 05/23/18
CHECKED BY : V. E. FRAGA DATE : 01/23/23

DRAWN BY : ARB 5/87
CHECKED BY : SJD 9/87

REV. 7/12 MAA/GM
REV. 6/13 MAA/GM
REV. 12/17 MAA/THC

DESIGN ENGINEER OF RECORD: V. E. FRAGA DATE : 05/09/23

c:\Users\svfraga\Documents\p_w_working\jms5432\R2707D_SML_BR02.220491.dgn 2023-05-05 16:20:38 vfraga