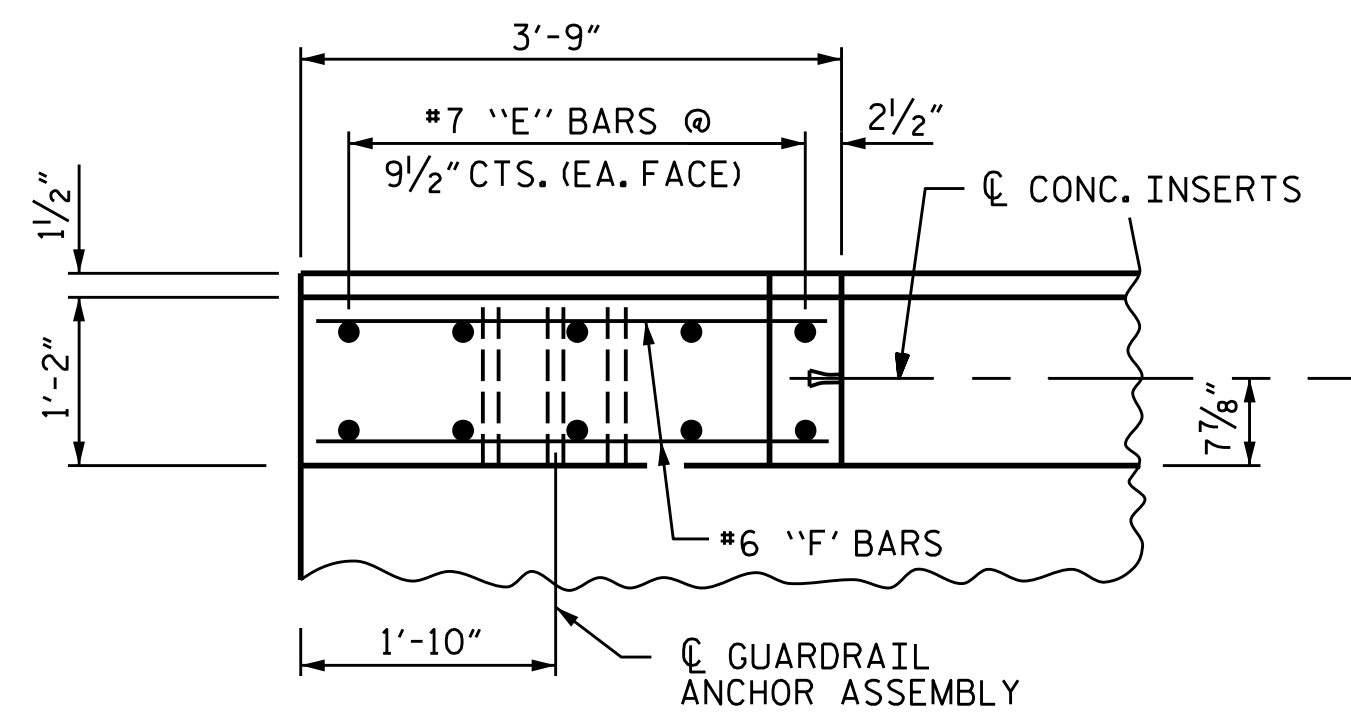
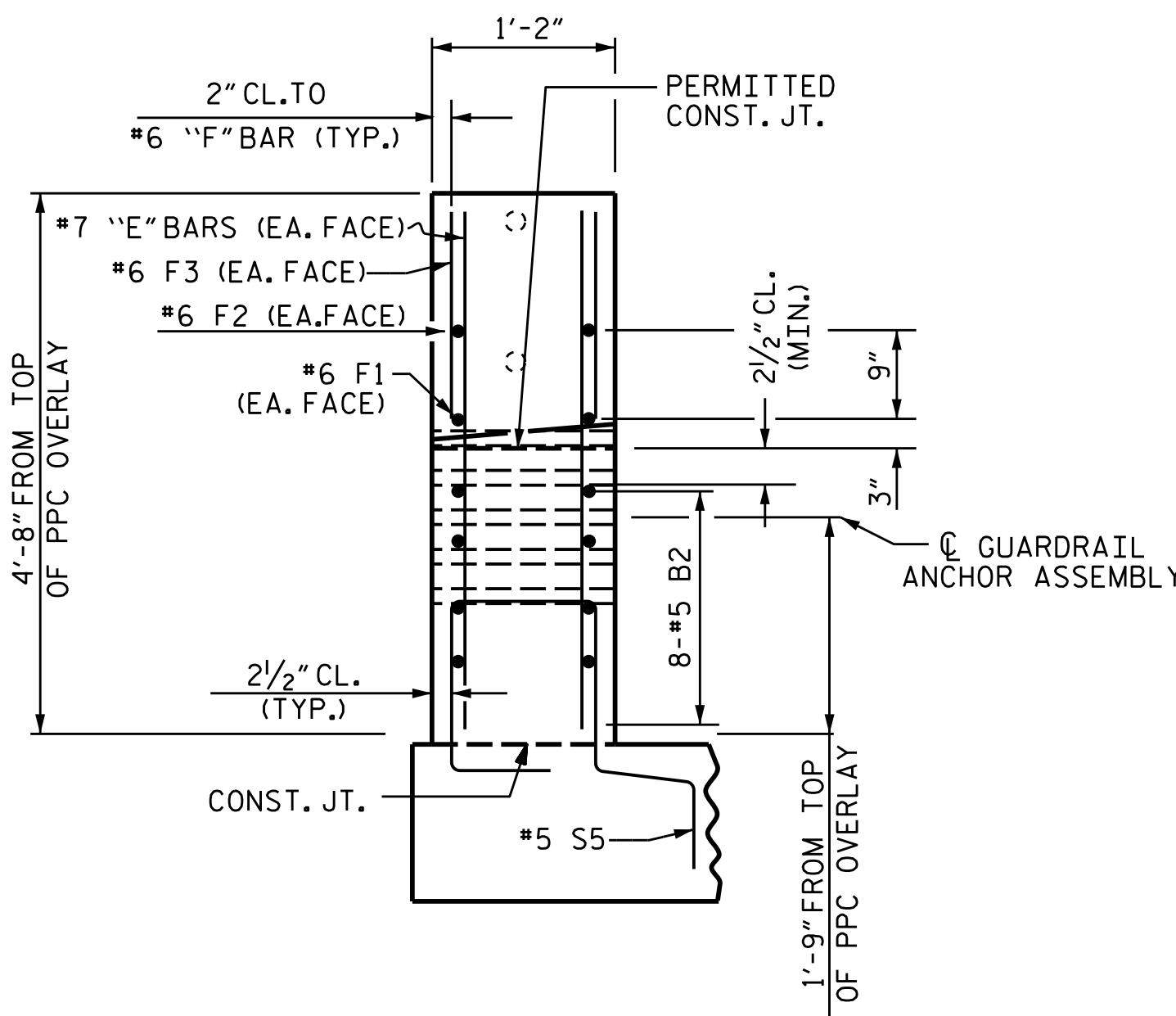


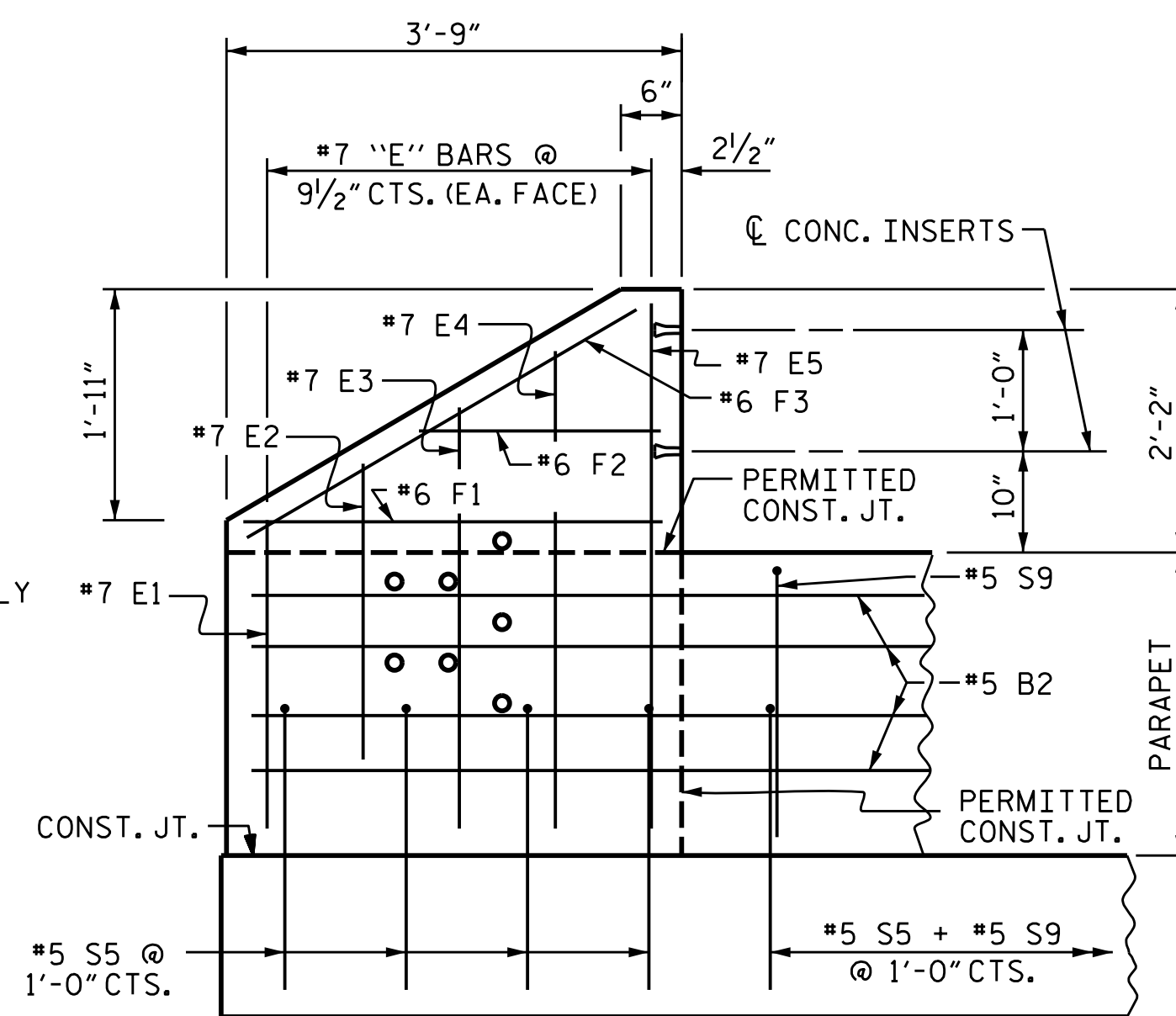
PLAN OF PARAPET



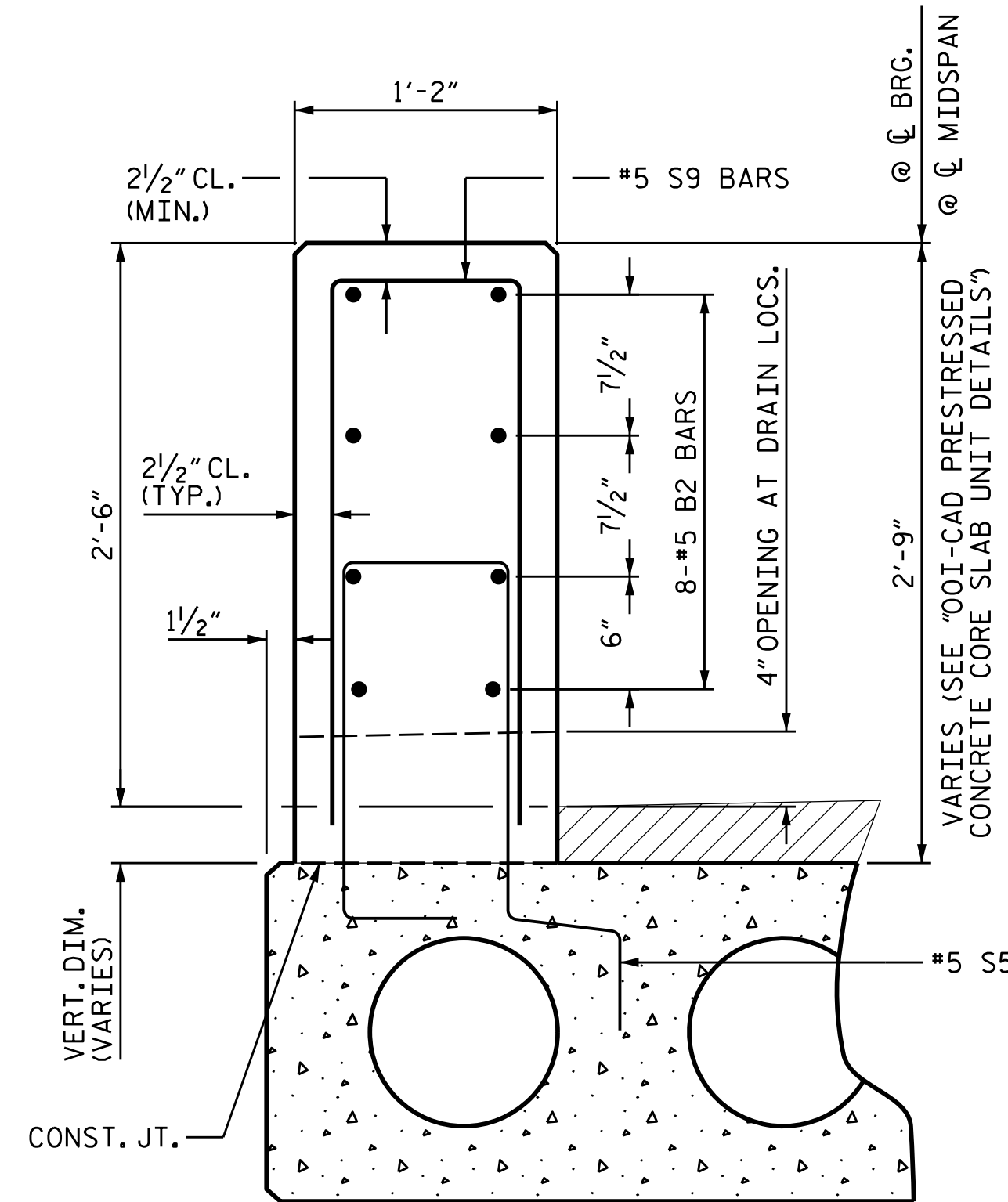
PLAN OF END POST



END VIEW

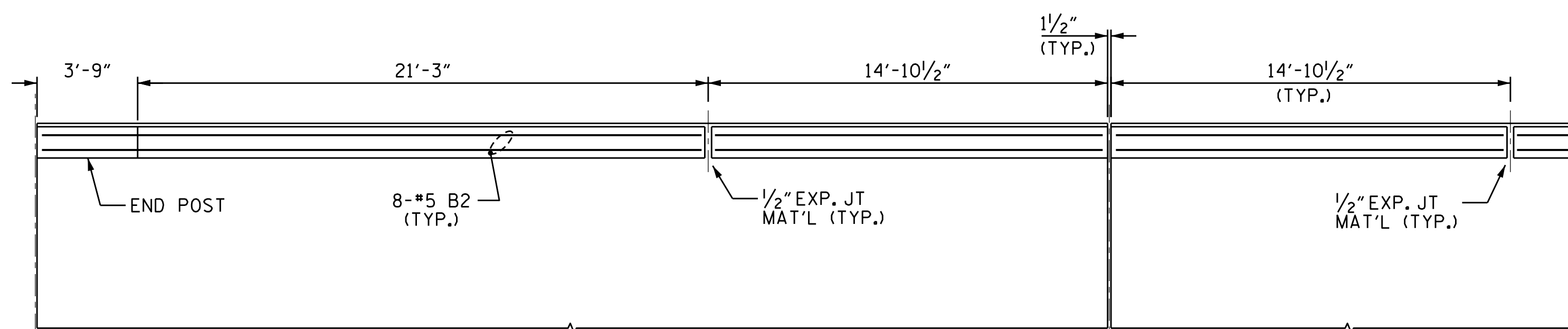


ELEVATION

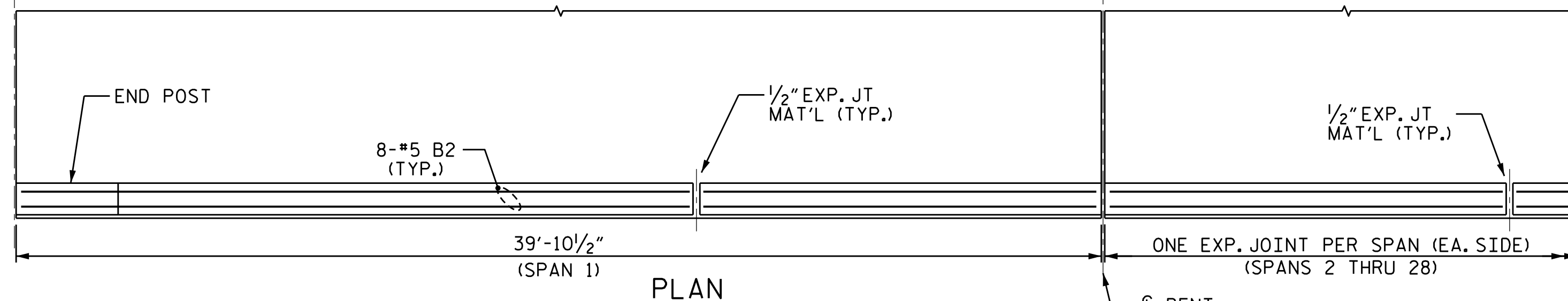


SECTION THRU PARAPET

PARAPET AND END POST FOR TWO BAR RAIL



PLAN



PLAN

** SEE "PLAN OF PARAPET" FOR SPACING OF #5 S5 BARS

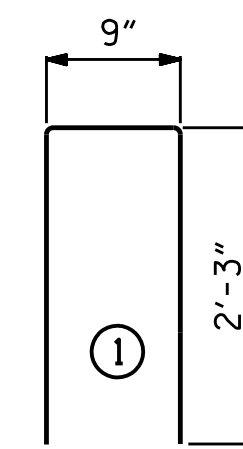
BILL OF MATERIAL FOR CONCRETE PARAPET FOR SPAN 1

BAR	BARS PER PAIR OF EXTERIOR UNITS	TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
39'-10 1/2" OOI-CAD UNIT						
* B2	16	16	#5	STR.	14'-5 1/2"	241
* B2	16	16	#5	STR.	24'-7"	410
* S9	72	72	#5	1	5'-3"	394
* EPOXY COATED REINFORCING STEEL						LBS. 1046
CLASS AA CONCRETE						CU.YDS. 9.0
TOTAL CONCRETE PARAPET FOR 2-BAR METAL RAIL						LN. FT. 82.08

BILL OF MATERIAL FOR CONCRETE PARAPET FOR ONE SPAN (SPANS 2 THRU 28)

BAR	BARS PER PAIR OF EXTERIOR UNITS	TOTAL NO.	SIZE	TYPE	LENGTH	WEIGHT
39'-10 1/2" OOI-CAD UNIT						
* B2	16	16	#5	STR.	14'-5 1/2"	241
* B2	16	16	#5	STR.	24'-7"	410
* S9	80	80	#5	1	5'-3"	438
* EPOXY COATED REINFORCING STEEL						LBS. 1090
CLASS AA CONCRETE						CU.YDS. 9.0
TOTAL LENGTH OF PARAPET AND 2-BAR METAL RAIL						LN. FT. 80.0

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT

BILL OF MATERIAL FOR END POSTS - SPAN 1

BAR	NUMBER	SIZE	TYPE	LENGTH	WEIGHT
* E1	4	#7	STR.	2'-6"	20
* E2	4	#7	STR.	3'-0"	25
* E3	4	#7	STR.	3'-6"	29
* E4	4	#7	STR.	4'-0"	33
* E5	4	#7	STR.	4'-4"	35
* F1	4	#6	STR.	3'-0"	18
* F2	4	#6	STR.	1'-11"	19
* F3	4	#6	STR.	3'-7"	50
* EPOXY COATED REINFORCING STEEL					LBS. 229
CLAS AA CONCRETE					CU. YDS. 0.5
END POSTS					No. 2

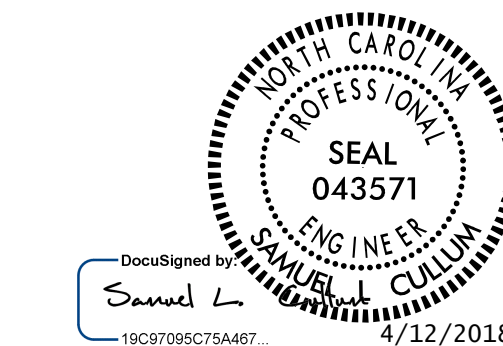
NOTES:

ALL REINFORCING STEEL IN PARAPETS AND END POSTS SHALL BE EPOXY COATED.

FOR DETAIL OF CONCRETE INSERT AND GUARDRAIL ANCHOR ASSEMBLY, SEE "RAIL POST SPACING AND END OF RAIL DETAILS".

GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE PARAPET AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. A CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN PARAPET EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF PARAPET SEGMENTS LESS THAN 20 FEET IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

PROJECT NO. 15BPR.25
BRUNSWICK COUNTY
BRIDGE NO. 14



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

CONCRETE PARAPET AND END POST DETAILS

KCA 4800 SIX FORKS ROAD SUITE 120
KISINGER CAMPO & ASSOCIATES RALEIGH, NC 27609
(919) 882-7839

DRAWN BY : DIEGO A. AGUIRRE DATE : 03-2018
CHECKED BY : JACOB H. DUKE DATE : 03-2018
DESIGN ENGINEER OF RECORD : SAMUEL L. CULLUM DATE : 03-2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-13
1			3			TOTAL SHEETS 111
2			4			