

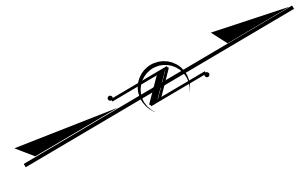
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

RUTHERFORD COUNTY

LOCATION: SR-1111 (JACK MCKINNEY RD) FROM THE SOUTH CAROLINA
STATE LINE TO SR-1116 (HOGAN RD)

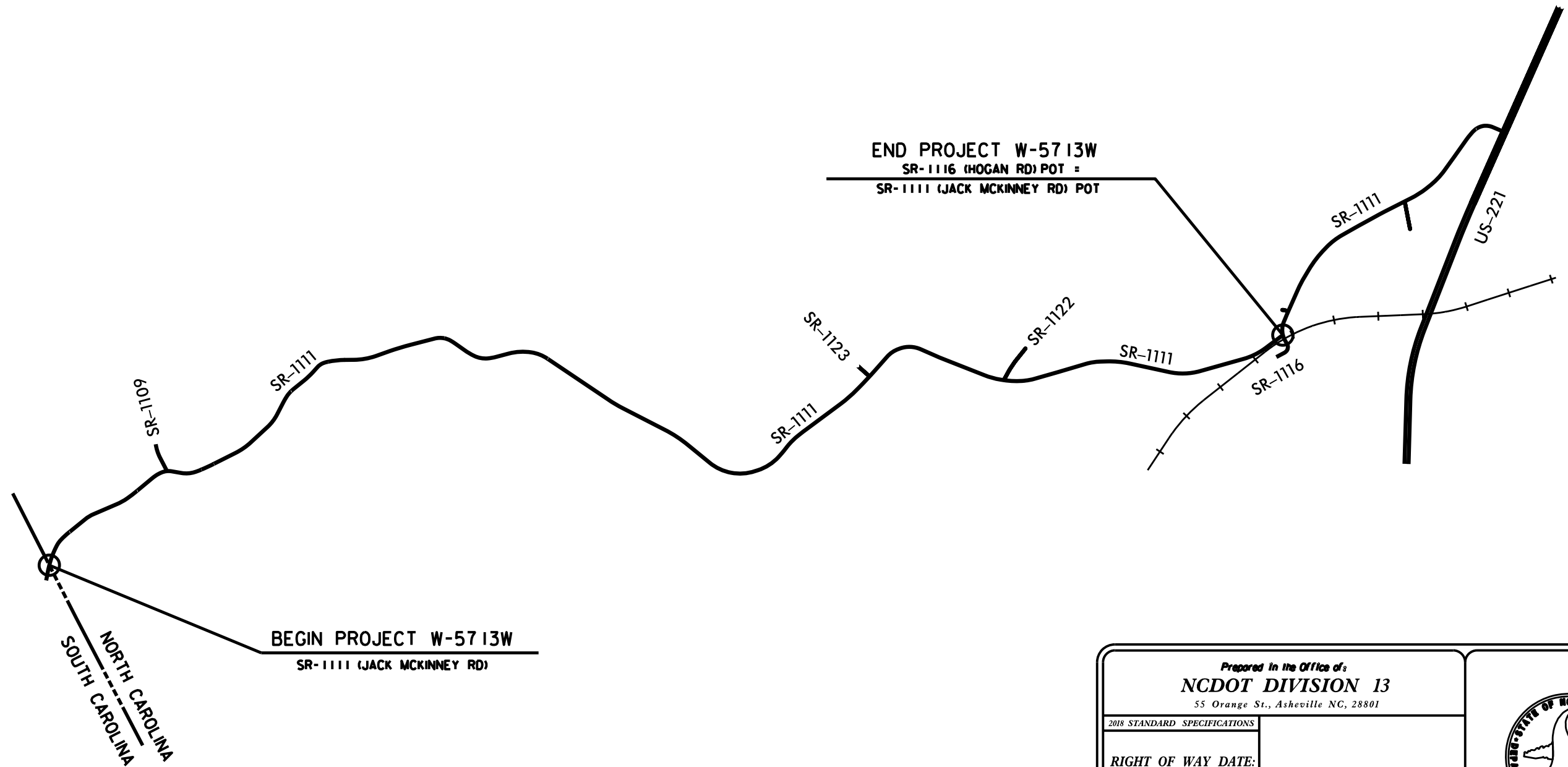
TYPE OF WORK: GUARDRAIL INSTALLATION AND REPLACEMENT

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5713W	1	3
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
44861.1.23	1111011	PE	
44861.3.23	1111011	CONST.	



TIP PROJECT: W-5713W

CONTRACT: DM00297

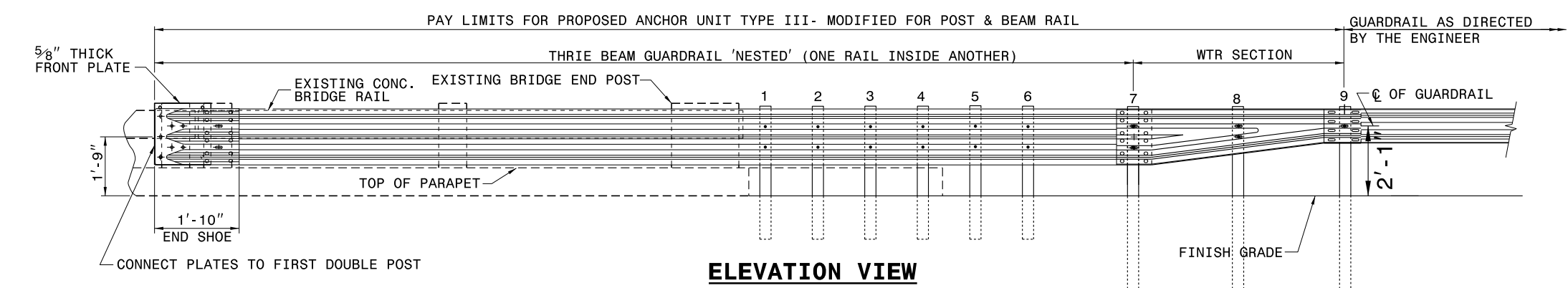


Prepared in the Office of: NCDOT DIVISION 13 55 Orange St., Asheville NC, 28801		
2018 STANDARD SPECIFICATIONS		
RIGHT OF WAY DATE: _____ _____ PROJECT ENGINEER	LETTING DATE: AUGUST 17, 2022 _____ PROJECT DESIGN ENGINEER	

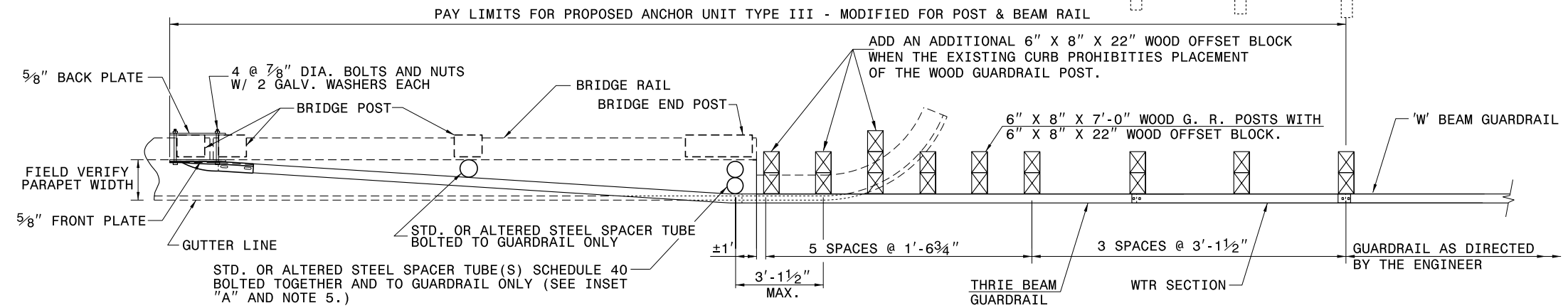
PROJECT NO.	SHEET NO.	TOTAL NO.
44861.3.23	2	3

GUARDRAIL ITEM SUMMARY

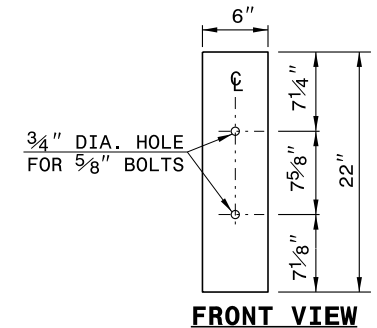
LOCATION NO	ROUTE	DESCRIPTION	SHOULDER LT/RT	3030000000-E	3045000000-E	3180000000-N	3195000000-N	3215000000-N	3287000000-N	3360000000-E	NOTES
				STEEL BEAM GUARDRAIL LF	STEEL BEAM GUARDRAIL, SHOP CURVED LF	GUARDRAIL ANCHOR UNITS, TYPE (III, MODIFIED) EA	GUARDRAIL END UNITS, TYPE AT-1 EA	GUARDRAIL ANCHOR UNITS, TYPE III EA	GUARDRAIL END UNITS, TYPE TL-3 EA	REMOVE EXISTING GUARDRAIL LF	
1	SR 1111 (JACK MCKINNEY RD)	APPROXIMATELY 0.10 MILES FROM THE SC STATE LINE	RT	782.5					1	50	Tie to existing guardrail.
2	SR 1111 (JACK MCKINNEY RD)	APPROXIMATELY 0.52 MILES FROM THE SC STATE LINE	RT	100.0					2		
3	SR 1111 (JACK MCKINNEY RD)	APPROXIMATELY 0.70 MILES FROM THE SC STATE LINE	RT	400.0					2		
4	SR 1111 (JACK MCKINNEY RD)	APPROXIMATELY 1.0 MILES FROM THE SC STATE LINE	RT/LT	462.5				4	4	400	
5	SR 1111 (JACK MCKINNEY RD)	APPROXIMATELY 1.14 MILES FROM THE SC STATE LINE	LT	1,300.0					2		
6	SR 1111 (JACK MCKINNEY RD)	APPROXIMATELY 2.05 MILES FROM THE SC STATE LINE	RT/LT	1,012.5		4			4	1,238	
7	SR 1111 (JACK MCKINNEY RD)	APPROXIMATELY 2.56 MILES FROM THE SC STATE LINE	RT	250.0	50.0		1		1		
8	SR 1111 (JACK MCKINNEY RD)	APPROXIMATELY 3.62 MILES FROM THE SC STATE LINE	RT/LT	175.0	25.0		1		3		
9	SR 1111 (JACK MCKINNEY RD)	APPROXIMATELY 3.69 MILES FROM THE SC STATE LINE	RT	550.0					2		
10	SR 1111 (JACK MCKINNEY RD)	APPROXIMATELY 3.85 MILES FROM THE SC STATE LINE	RT	2,312.5					2		
11	SR 1111 (JACK MCKINNEY RD)	APPROXIMATELY 4.28 MILES FROM THE SC STATE LINE	RT/LT	365.0					4		
12	SR 1111 (JACK MCKINNEY RD)	APPROXIMATELY 4.7 MILES FROM THE SC STATE LINE	LT	400.0					2		
GRAND TOTAL				8,110.0	75.0	4	2	4	29	1,688	



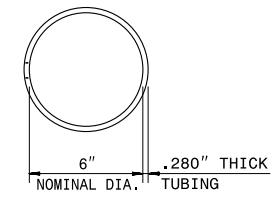
ELEVATION VIEW



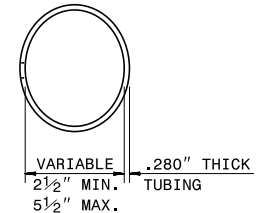
PLAN VIEW



FRONT VIEW

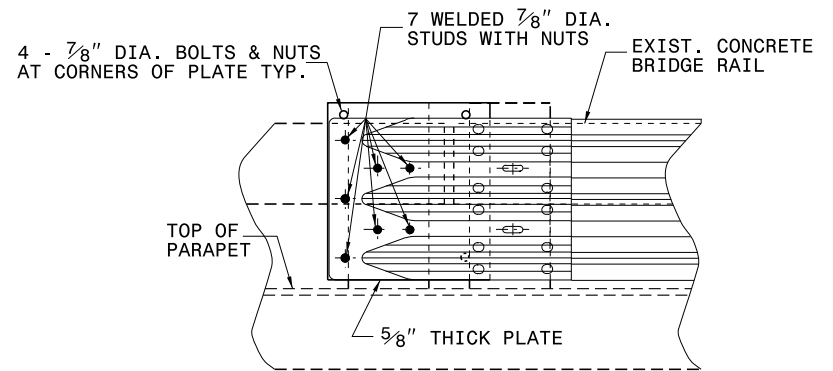


PLAN VIEW

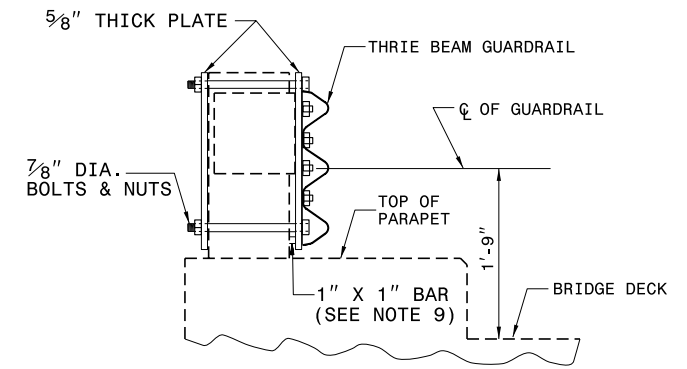


PLAN VIEW INSET "A"

STEEL SPACER TUBE

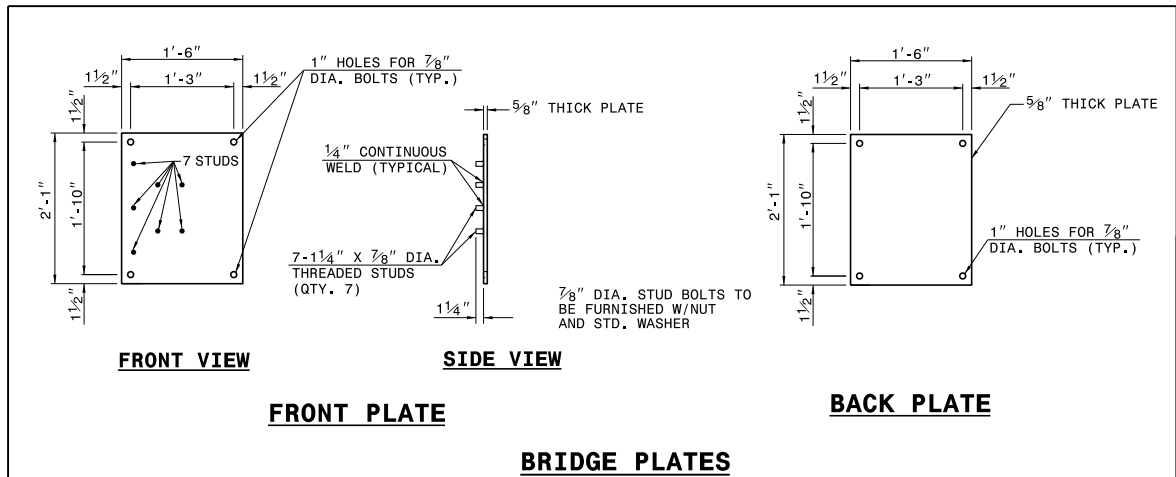


ELEVATION VIEW



SECTION VIEW

- GENERAL NOTES:**
1. USE NUTS, BOLTS, AND WASHERS CONFORMING TO THE REQUIREMENTS OF A.S.T.M. A-307 AND GALVANIZED IN ACCORDANCE WITH SECTION 1076 OF STAND. SPECS.
 2. TAP NUTS FOR THE 7/8\" DIA. STUDS AND BOLTS AFTER GALVANIZING SEE A.S.T.M. A-563.
 3. USE PLATES AND TUBES CONFORMING TO THE REQUIREMENTS OF A.S.T.M. A-36 AND GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH SECTION 1076 OF STAND. SPECS.
 4. ADDITIONAL FIELD HOLES MAY BE DRILLED IN STEEL RAIL AS DIRECTED BY THE ENGINEER.
 5. INSTALL FACE OF GUARDRAIL AS NEAR AS POSSIBLE TO PLUMB WITH THE PARAPET FACE AT BRIDGE END POST SPACER TUBE LOCATION BY USING STANDARD OR ALTERED SPACER TUBES OR A COMBINATION THEREOF OR AS DIRECTED BY THE ENGINEER. FOR VERY SMALL PARAPET WIDTHS, GUARDRAIL MAY BE INSTALLED AGAINST BRIDGE RAIL WITHOUT SPACER TUBES.
 6. DO NOT DRILL BRIDGE RAIL IN ORDER TO INSTALL GUARDRAIL ANCHOR UNIT.
 7. USE THIS DETAIL ONLY FOR BRIGES WITH POST AND BEAM TYPE RAIL.
 8. ATTACH 1\" X 1\" BAR AND THREADED STUDS TO PLATE WITH 1/4\" WELDS ALL AROUND.
 9. 1\" X 1\" BAR MAY NOT BE NEEDED ON BRIDGE RAILS WHERE FACE OF RAIL DOES NOT PROJECT BEYOND FACE OF POST.
 10. PROVIDE SHOP DRAWINGS OF THE PLATES TO THE ENGINEER FOR APPROVAL BEFORE FABRICATING THE PLATES.
 11. LAP JOINTS IN THE DIRECTION OF TRAFFIC FLOW.
 12. SEE ROADWAY STANDARD DRAWING 862.03 SHEET 3 FOR ADDITIONAL INFORMATION ON THE TYPE III ANCHOR UNIT



FRONT VIEW

SIDE VIEW

FRONT PLATE

BACK PLATE

BRIDGE PLATES



DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

**CONTRACT STANDARDS
AND DEVELOPMENT UNIT**
Office 919-707-6950 FAX 919-250-4119

**TYPE III MODIFIED
FOR POST AND BEAM RAIL**

ORIGINAL BY: E.E. WARD DATE: 01-03
 MODIFIED BY: JS Howerton DATE: 01-18
 CHECKED BY: DATE:
 FILE SPEC.: s:details\stand\bpii original.dgn

24-JAN-2018 14:51 S:\Contracts\Special\Details\stand\usr\details\stand\bp 111 original.dgn J:\power ton AT CSO-212595