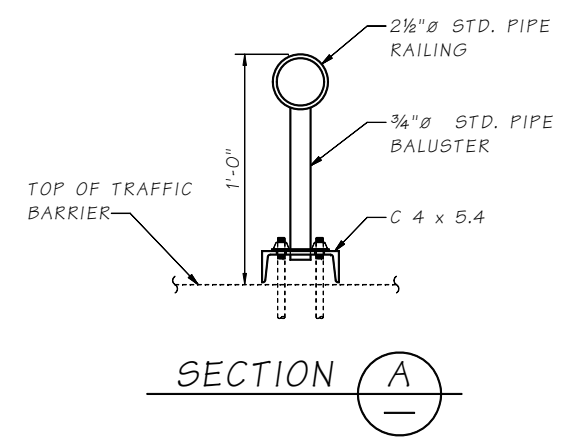
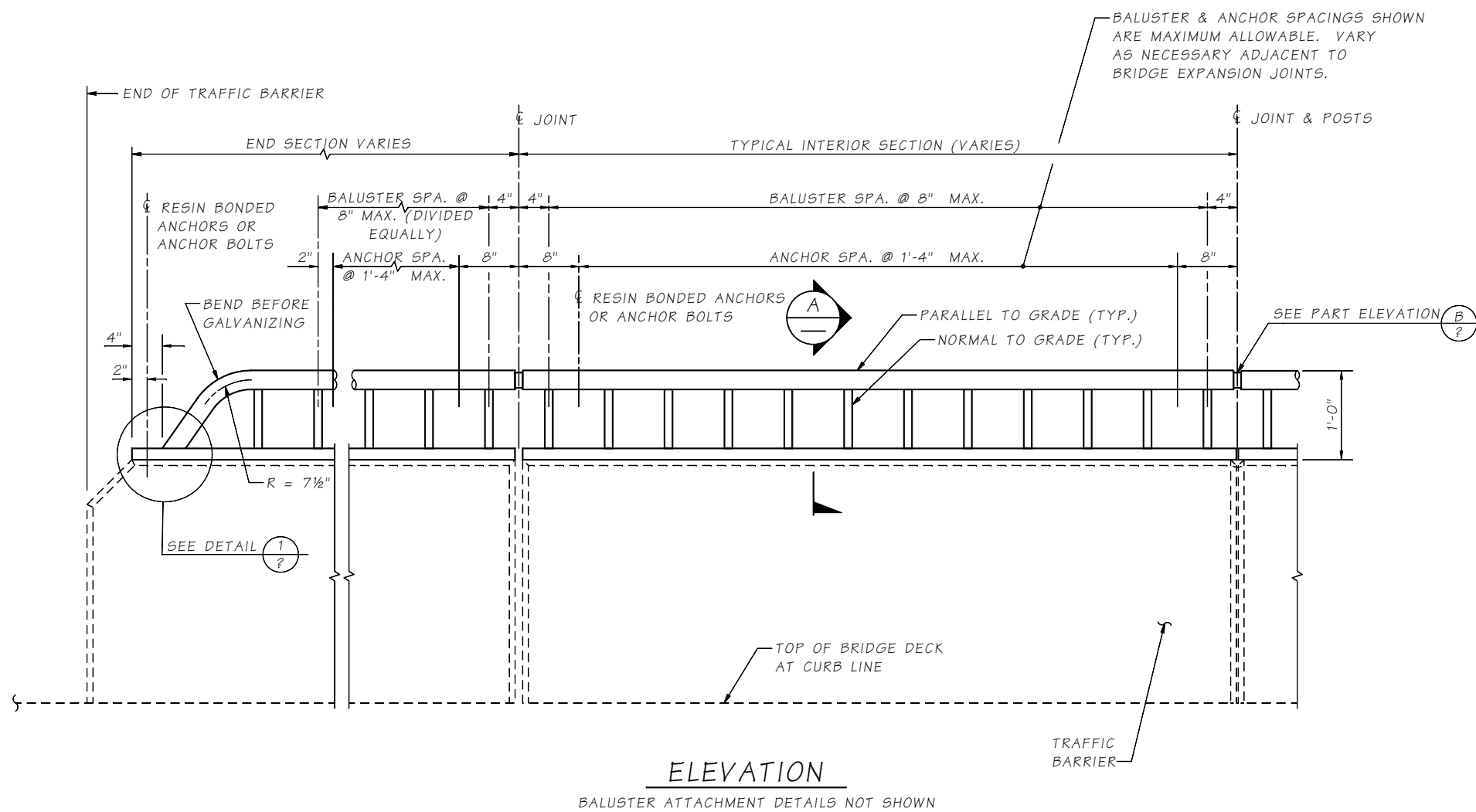


MAT'L	PART	MATERIAL SPECIFICATION
STEEL	RILAS & BALUSTERS	ASTM A53 GRADE B OR ASTM A500 GRADE C SCHEDULE 40 (STD. PIPE). GALVANIZED IN ACCORDANCE WITH AASHTO M 111.
	WASHERS	ASTM A193 GRADE B7 GALVANIZED IN ACCORDANCE WITH AASHTO M 232.
	PLATES/BAR CHANNELS	ASTM A36 GALVANIZED IN ACCORDANCE WITH AASHTO M 111
	DRIVE PINS	ASTM A276 OR A240 TYPE 302 STAINLESS STEEL
	ANCHOR BOLTS & WASHERS	STANDARD SPECIFICATION SECTION 9-06.5(4) GR. 36 (GALVANIZE IN ACCORDANCE WITH AASHTO SPECIFICATION M 232)
	NUTS	TAMPER-PROOF TYPE ZINC ALLOY SEE SPECIAL PROVISIONS SECTION 6-06.2

NOTES

- PIPE RAILING, PIPE RAILING SPLICES AND BOTTOM CHANNELS SHALL BE BENT TO THE HORIZONTAL CURVE WHERE THE RADIUS OF CURVATURE IS LESS THAN 200'.
- SHOP DRAWINGS OF RAILING SHALL BE SUBMITTED AS A TYPE 2 WORKING DRAWING SHOWING COMPLETE DIMENSIONS AND DETAILS OF FABRICATION AND INCLUDING AN ERECTION DIAGRAM. MATERIAL SPECIFICATIONS SHALL BE PROVIDED IN THE SHOP DRAWINGS FOR ALL COMPONENTS.
- CUTTING SHALL BE DONE BY SAWING OR MILLING AND ALL CUTS SHALL BE TRUE AND SMOOTH. FLAME CUTTING WILL NOT BE PERMITTED.
- WELDING OF STEEL SHALL CONFORM TO THE LATEST EDITION OF AWS D1.1.
- PIPE RAILING, PIPE BALUSTERS AND PIPE RAILING SPLICES SHALL BE ADEQUATELY WRAPPED TO INSURE SURFACE PROTECTION DURING HANDLING AND TRANSPORTATION TO THE JOB SITE.



Last revised on : 11/19/2019

0 SHEETS
10.5-A7-1

Bridge Design Engr.	M:\STANDARDS\BP Rail\10.5-A7-1 BRIDGE RAILING TYPE S-BP-12 DET 1 OF 2.MAN				
Supervisor		REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.
Designed By		10	WASH.		TOTAL SHEETS
Checked By		JOB NUMBER			
Detailed By					
Bridge Projects Engr.					
Prelim. Plan By					
Architect/Specialist	DATE	REVISION	BY	APPD	

BRIDGE AND STRUCTURES OFFICE



STANDARD RAILINGS
BRIDGE RAILING TYPE S-BP-12
DETAILS 1 OF 2