

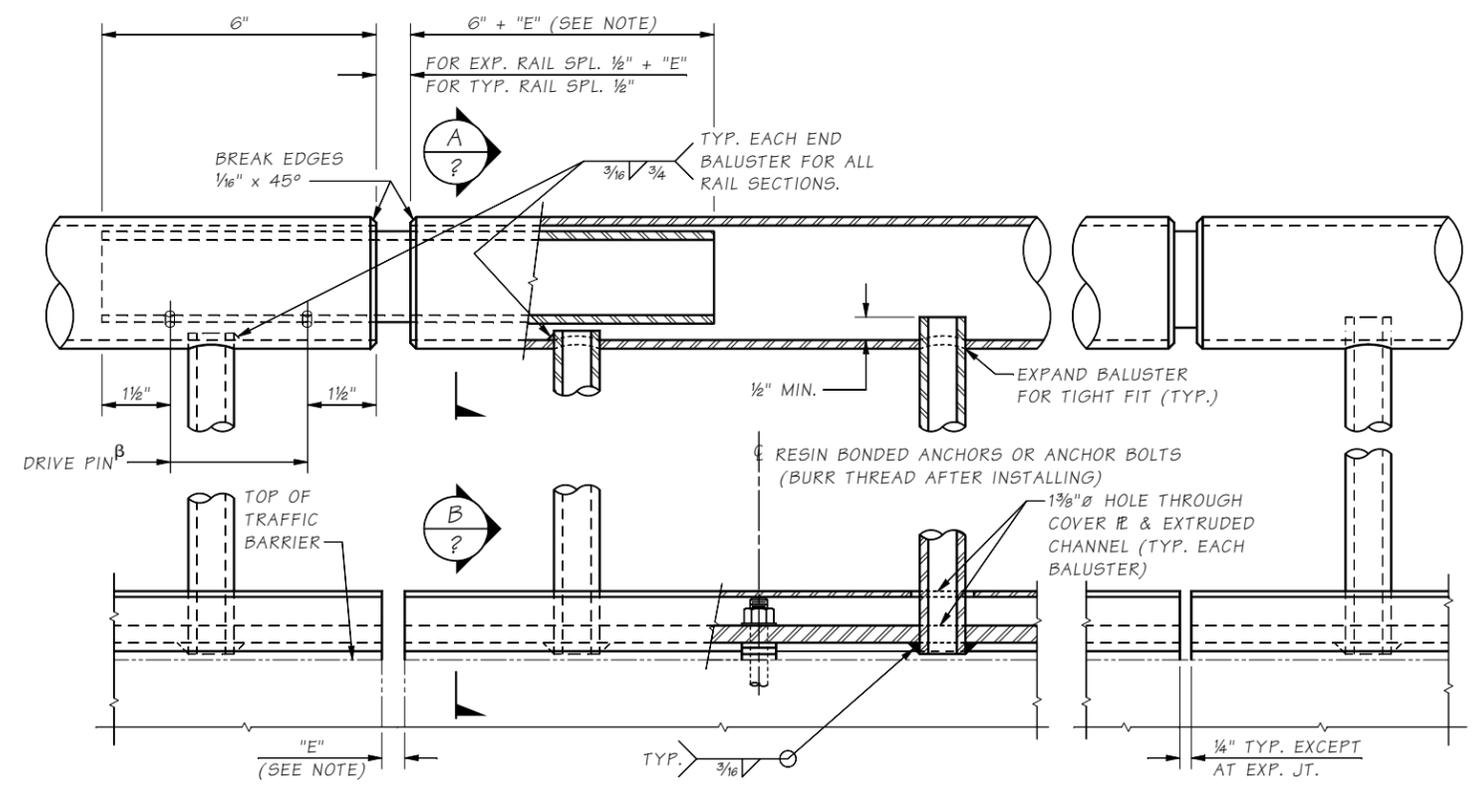
**ELEVATION**

BALUSTER AND GUARDRAIL SECTION  
ATTACHMENT DETAILS NOT SHOWN.

**NOTES**

- PIPE RAILING, PIPE RAILING SPLICES, COVER PLATES AND BOTTOM EXTRUDED CHANNELS SHALL BE BENT TO THE HORIZONTAL CURVE WHERE THE RADIUS OF CURVATURE IS LESS THAN 200'. THESE ITEMS MAY BE HEATED TO NOT MORE THAN 400°F FOR A PERIOD NOT TO EXCEED 30 MINUTES TO FACILITATE FORMING OR BENDING TO HORIZONTAL CURVATURE.
- 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 ALUMINUM SHALL CONFORM TO STD. SPEC. SECTION 9-28.14(3).
- ALL ALUMINUM PARTS SHALL BE GIVEN A \*[CLEAR OR BRONZE] ANODIC COATING OF AT LEAST 0.0006" THICK AND SEALED TO MEET THE REQUIREMENTS OF ASTM B 580 WITH A UNIFORM FINISH.
- PIPE RAILING, PIPE BALUSTERS AND PIPE RAILING SPLICES SHALL BE ADEQUATELY WRAPPED TO INSURE SURFACE PROTECTION DURING HANDLING AND TRANSPORTATION TO THE JOB SITE.

\* NOTE TO DESIGNER:  
Designer to choose color for their project in consultation with the Bridge Architect.



**GENERAL DETAIL**

- α** PROVIDE EXPANSION RAIL SPLICE AT TRAFFIC BARRIER EXPANSION JOINTS. RAIL SPLICE JOINTS ARE NOT REQUIRED AT TRAFFIC BARRIER DUMMY JOINTS.
- β** LOCATE ON OPPOSITE SIDE OF TRAFFIC. DRIVE PINS SHALL BE DRIVEN FLUSH WITH THE OUTSIDE FACE OF THE RAILING.
- NOTE:  
"E" DIMENSION SHALL BE EQUAL TO OPENING OF TRAFFIC BARRIER EXPANSION JOINTS.

Last revised on : 11/19/2019

JOB NO. 10.5-A2-1  
SR SHEET

Bridge Design Engr.	M:\STANDARDS\BP Rail\BP1.man	REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
Supervisor		10	WASH.			
Designed By		JOB NUMBER				
Checked By						
Detailed By						
Bridge Projects Engr.						
Prelim. Plan By						
Architect/Specialist	DATE	REVISION	BY	APPD		

**BRIDGE AND STRUCTURES OFFICE**



**STANDARD RAILINGS**

BRIDGE RAILING TYPE BP-22  
DETAILS 1 OF 2