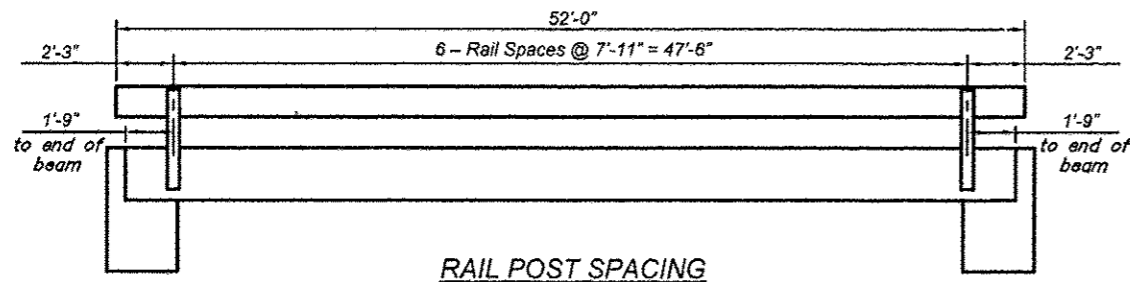
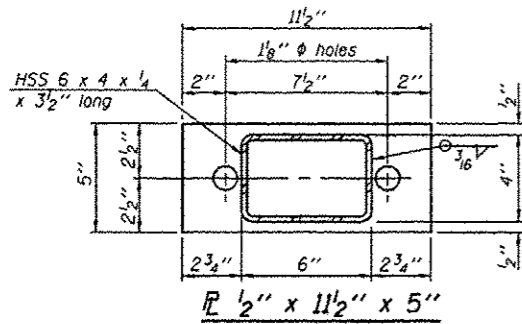


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 44	11-01164-00-BR	ALEXANDER	12	9
PROJECT NO. BROS-0003(126)			CONTRACT NO. 99461	

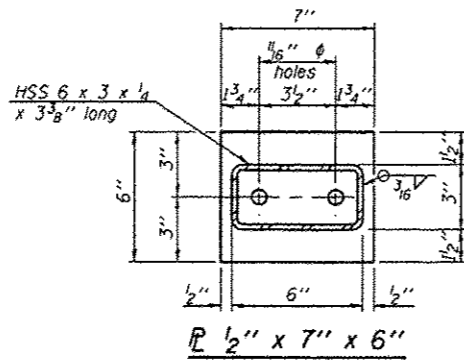


RAIL POST SPACING

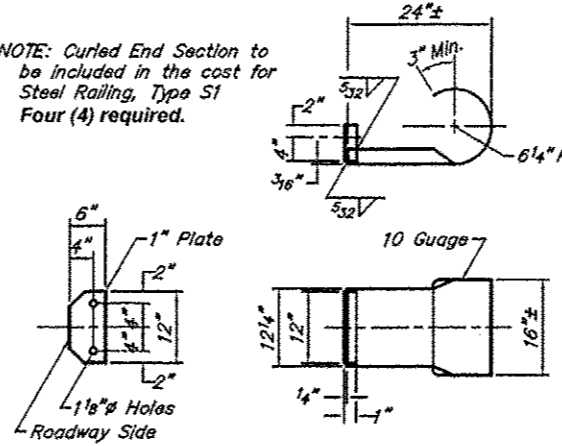
NOTE: Curled End Section to be included in the cost for Steel Railing, Type S1 Four (4) required.



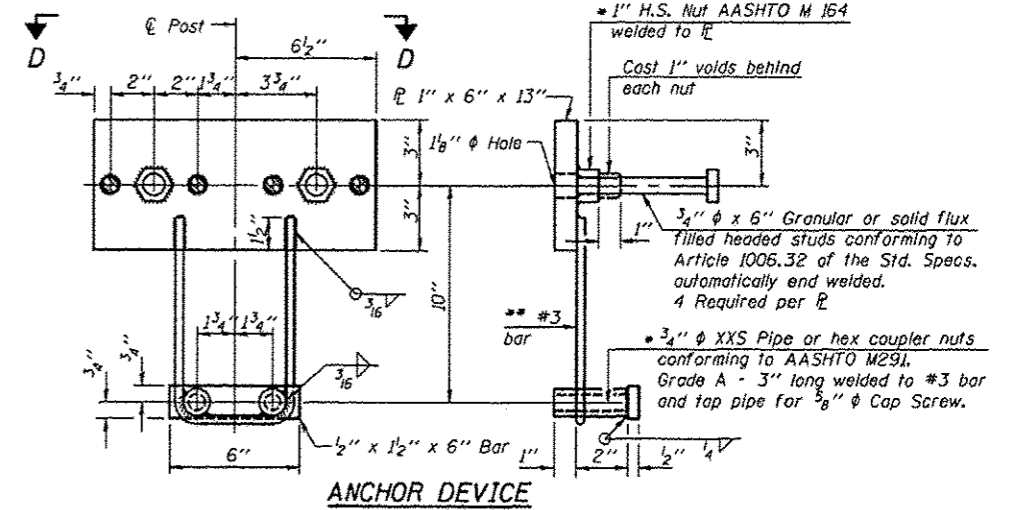
1 1/2" x 11 1/2" x 5"



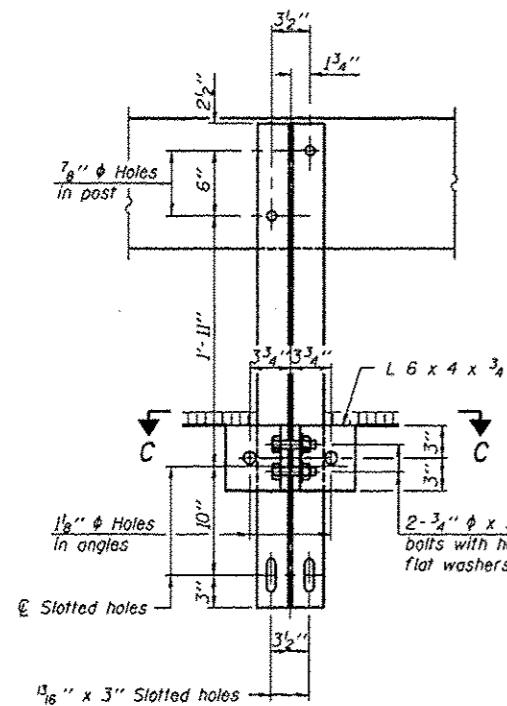
1 1/2" x 7" x 6"



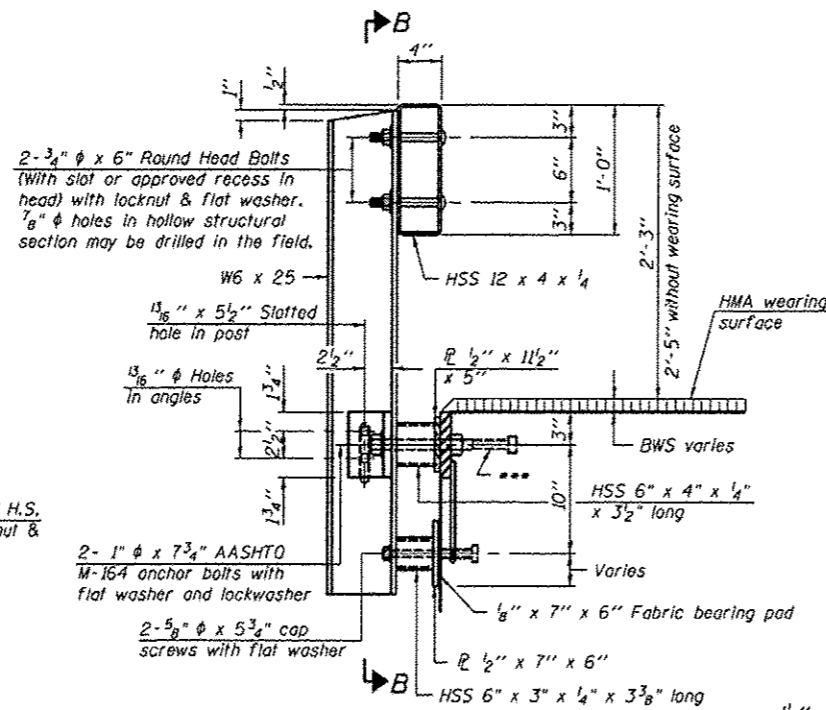
CURLLED END SECTION DETAILS



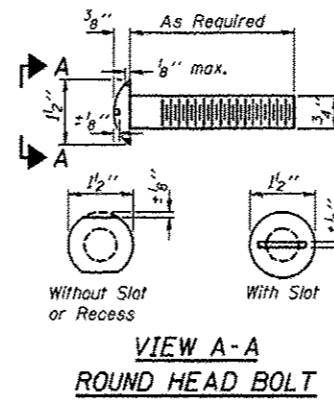
ANCHOR DEVICE



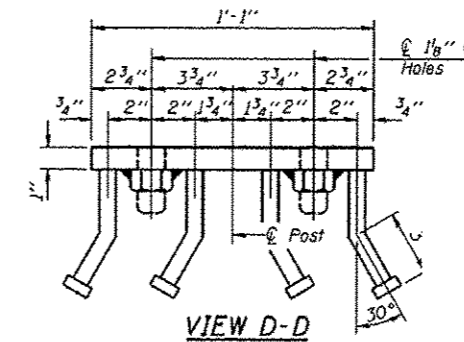
SECTION B-B



SECTION AT RAILING POST



VIEW A-A ROUND HEAD BOLT

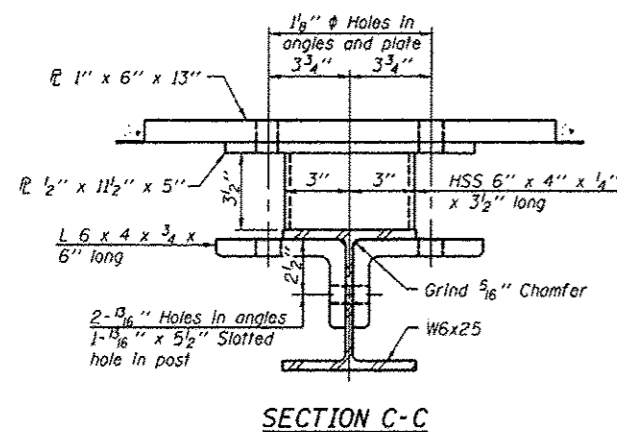


VIEW D-D

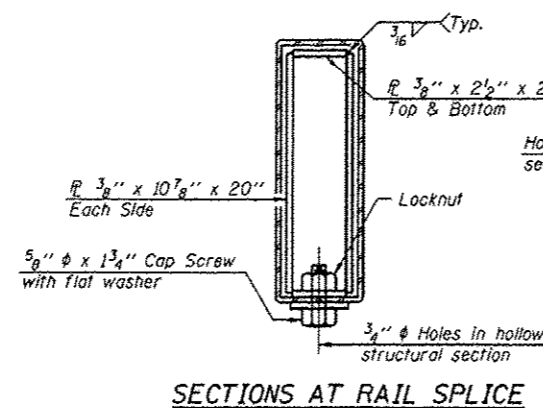
- Notes:
- All field drilled holes shall be coated with an approved zinc rich paint before erection.
 - For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
 - All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 - Threaded areas shall be plugged or blocked off during casting of beam.
 - Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".
 - The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.
 - 10'-9" Maximum Post Spacing

BILL OF MATERIAL

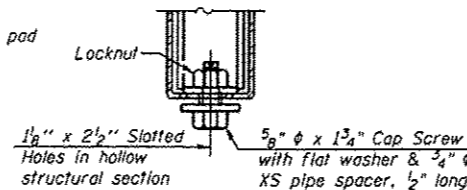
Item	Unit	Quantity
Steel Railing, Type S-1	Foot	104



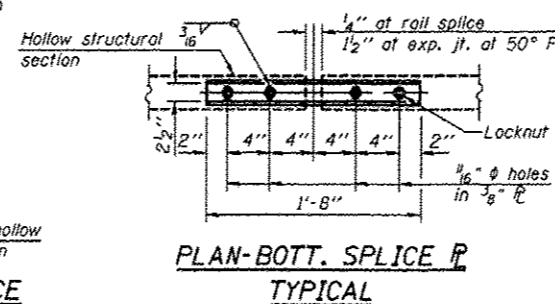
SECTION C-C



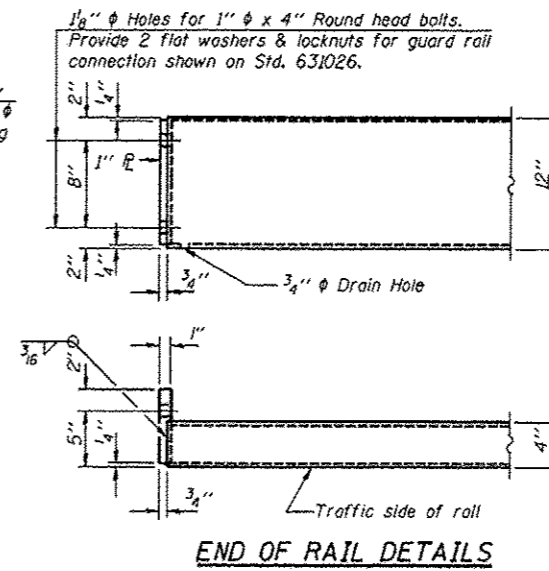
SECTIONS AT RAIL SPLICE



RAIL SPLICE CONNECTION AT EXPANSION JT.



PLAN-BOTT. SPLICE P TYPICAL



END OF RAIL DETAILS

STEEL RAILING, TYPE S-1
 TOWNSHIP ROUTE 44 (TWENTY CROSSING ROAD)
 TRIBUTARY TO CIRCLE DITCH
 SECTION 11-01164-00-BR
 ALEXANDER COUNTY
 STRUCTURE NO. 002-3110