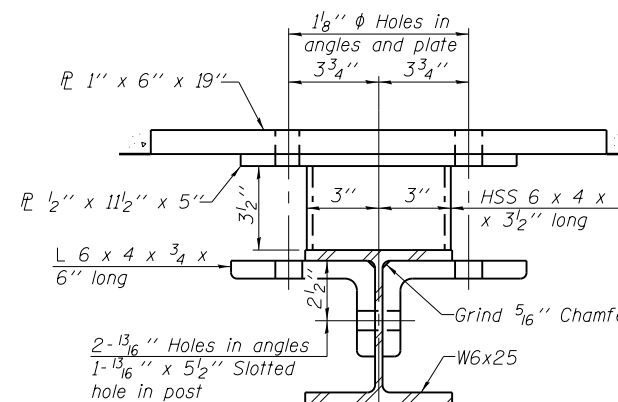
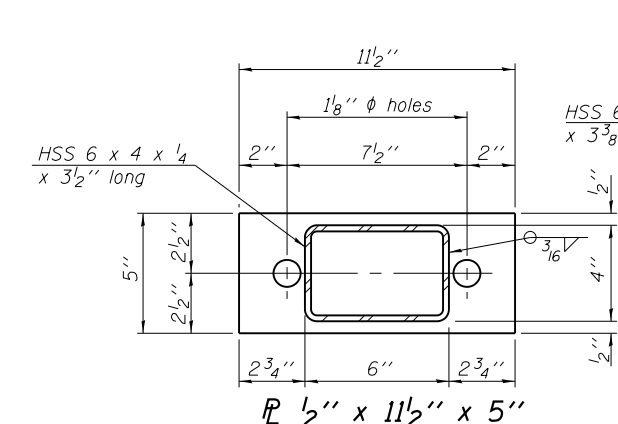


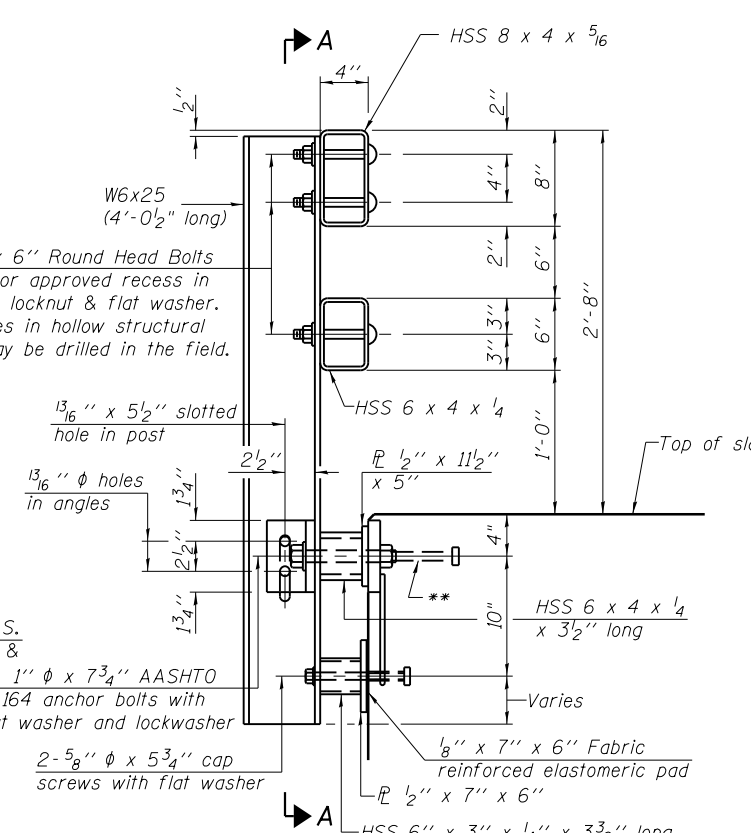
**SECTION A-A**



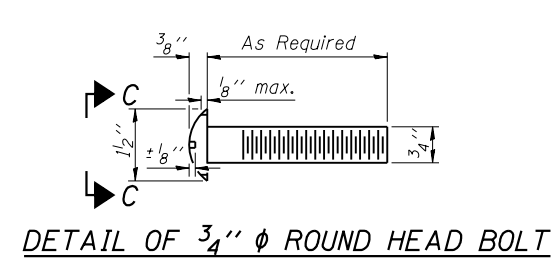
**SECTION B-B**



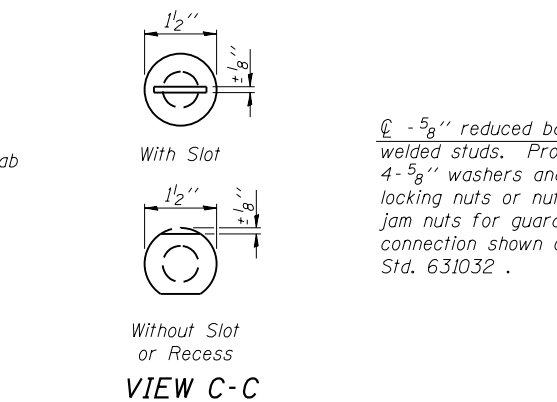
**SECTION C-C**



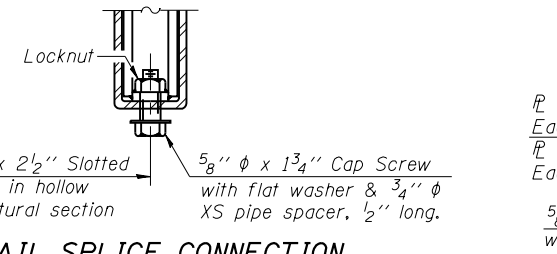
**SECTION AT RAIL POST**



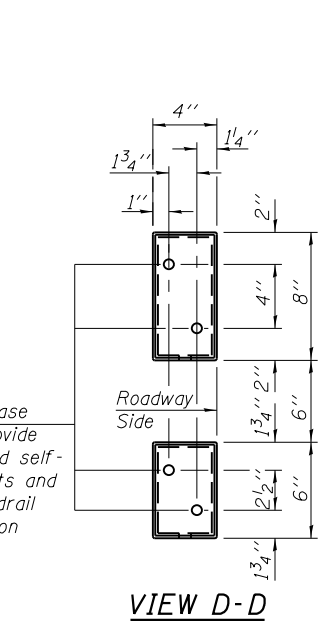
**DETAIL OF 3/4"  $\phi$  ROUND HEAD BOLT**



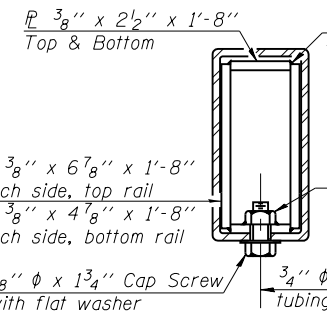
**VIEW C-C**



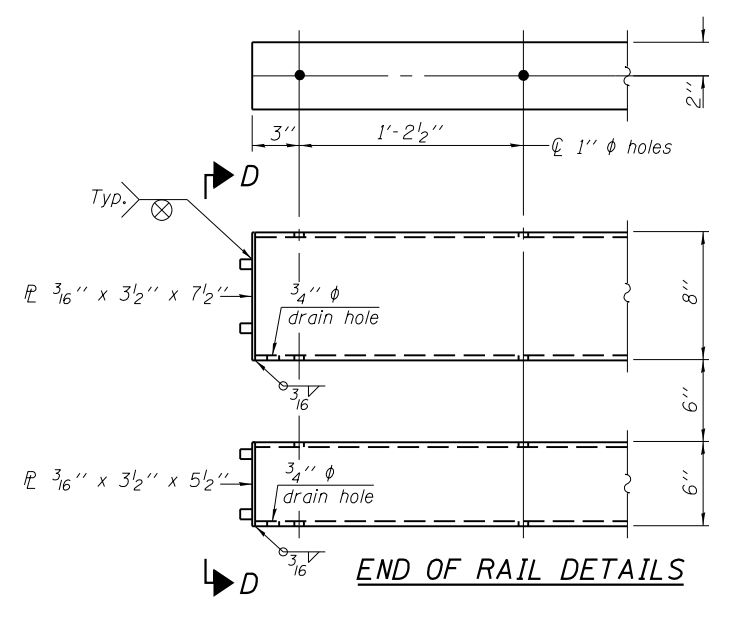
**RAIL SPLICE CONNECTION AT EXPANSION JT.**



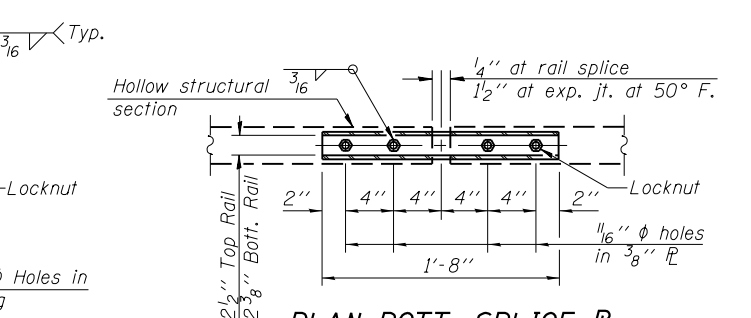
**VIEW D-D**



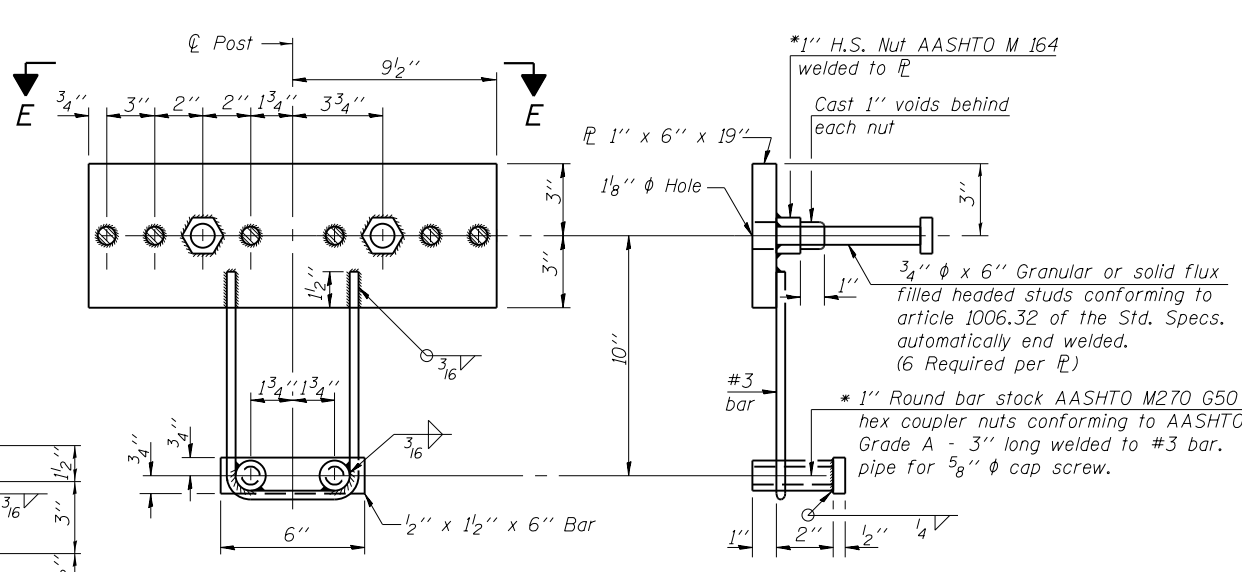
**SECTION AT RAIL SPLICE**



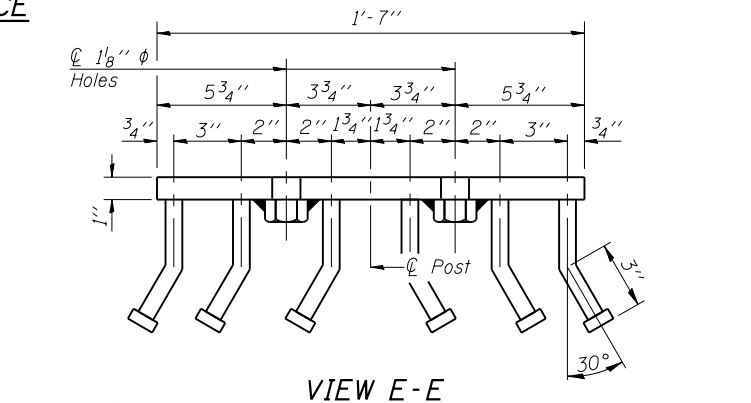
**END OF RAIL DETAILS**



**PLAN-BOTT. SPLICE TYPICAL**



**ANCHOR DEVICE**



**VIEW E-E**

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 SM.  
 Steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.  
 \*\* 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.

**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing, Type SM	Foot	167



Cummins Engineering Corporation  
 JOB = 2223.8  
 FILE = 0150065-74167-14-Rail.dgn  
 DATE = 7/24/2014

DESIGNED - AAN  
 CHECKED - MDC  
 DRAWN - SJS  
 CHECKED - MDC

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE SM  
 STRUCTURE NO. 015-0065  
 SHEET NO. 14 OF 17 SHEETS

F.A.S. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.  
 673 2BR COLES 24 21  
 CONTRACT NO. 74167  
 ILLINOIS FED. AID PROJECT