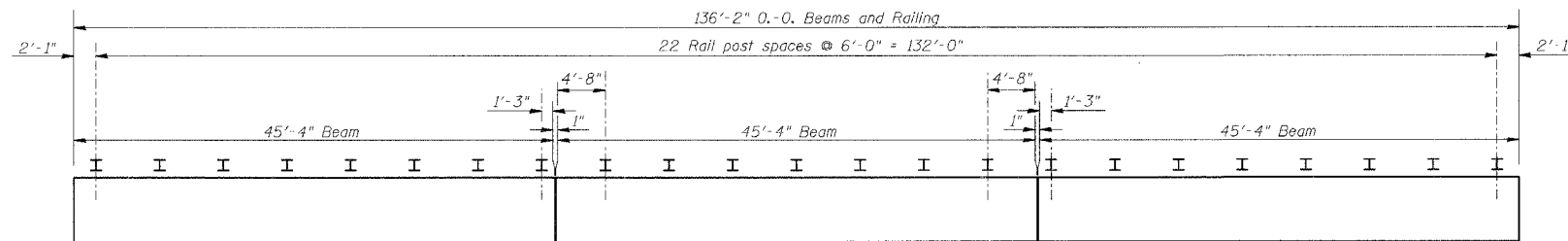
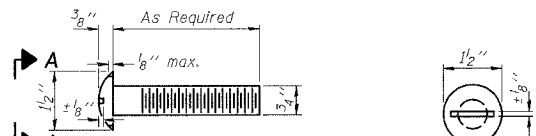


ROUTE NO.	SECTION	COUNTY	TOTAL SHEET NO.
F.A.U. 7359	09-00702-00-BR	MACON	12 II
FED. ROAD DIST. NO.	ILLINOIS PROJECT BHM-5169K371	CONTRACT NO. 95512	

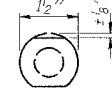


**PLAN VIEW - NORTH BEAMS**  
(Showing Rail Post Spacing)

**DETAIL OF 3/4" Ø ROUND HEAD BOLT**



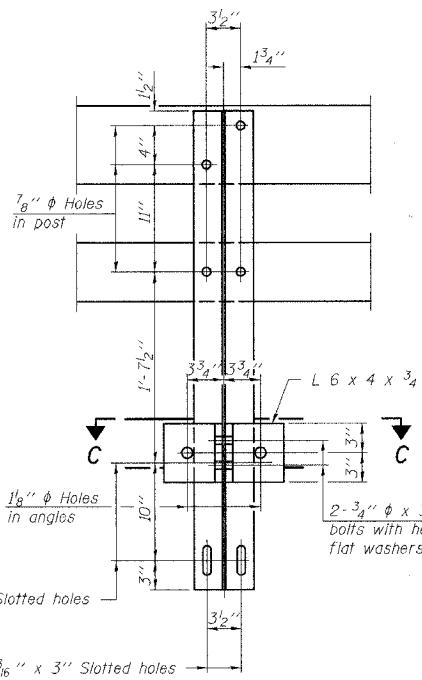
With Slot



Without Slot or Recess

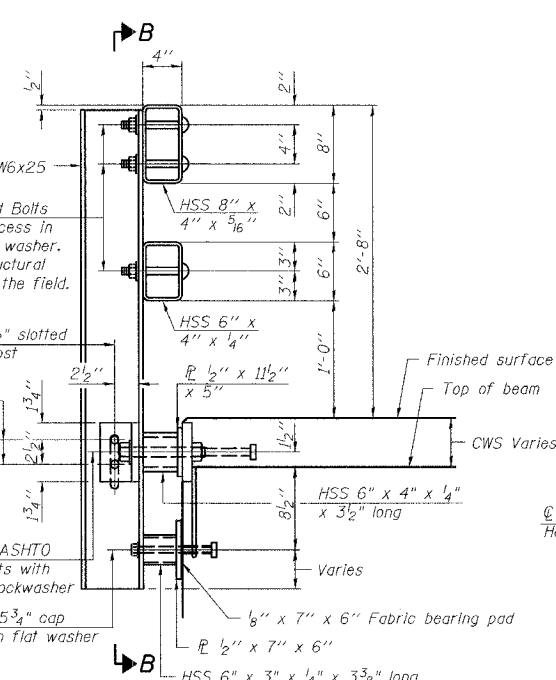
**VIEW A-A**

4-3/4" Ø x 6" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8" Ø holes in hollow structural section may be drilled in the field.

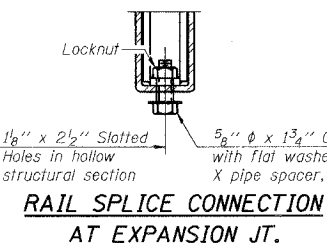


**SECTION B-B**

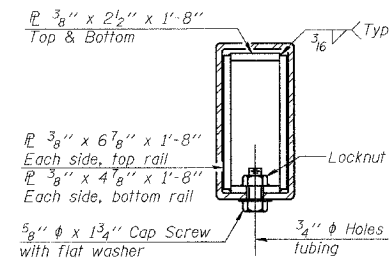
**SECTION C-C**



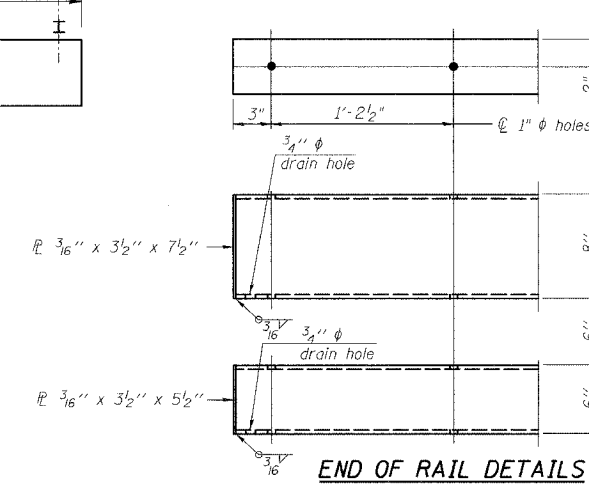
**SECTION AT RAIL POST**



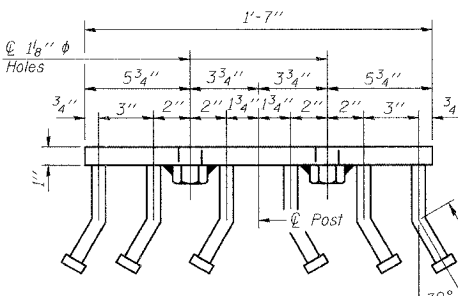
**RAIL SPLICE CONNECTION AT EXPANSION JT.**



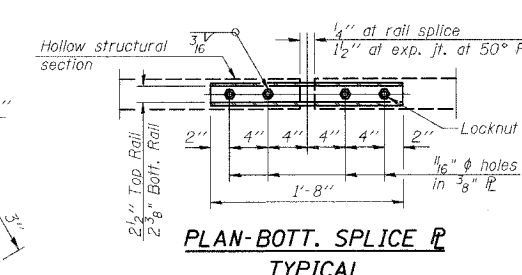
**SECTION AT RAIL SPLICE**



**END OF RAIL DETAILS**



**VIEW D-D**



**PLAN-BOTT. SPLICE TYPICAL**

**NOTES**

Hollow structural sections shall conform to the requirements of ASTM designation A 500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft-lbs at 0° F. All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36 except posts and angles shall conform to AASHTO M 270, Grade 50. Bolts, cap screws, and nuts shall conform to the requirements of ASTM designation A 307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164. All bolts, nuts, cap screws, washers and lock washers shall be galvanized according to AASHTO M 232. All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM A 385. Galvanized rail shall not be painted. Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per foot for Steel Railing, Type SM. 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. The 3/4" Ø high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened according to Article 505.041(X2) of the Standard Specifications. The 1" Ø high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/6 turn. The 5/8" Ø cap screws in bottom of posts shall be tightened to a snug fit only. The rail anchorage shall be cast with the beam and the wearing surface shall be cast in the field. Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam. Drilling into the beam will not be permitted.

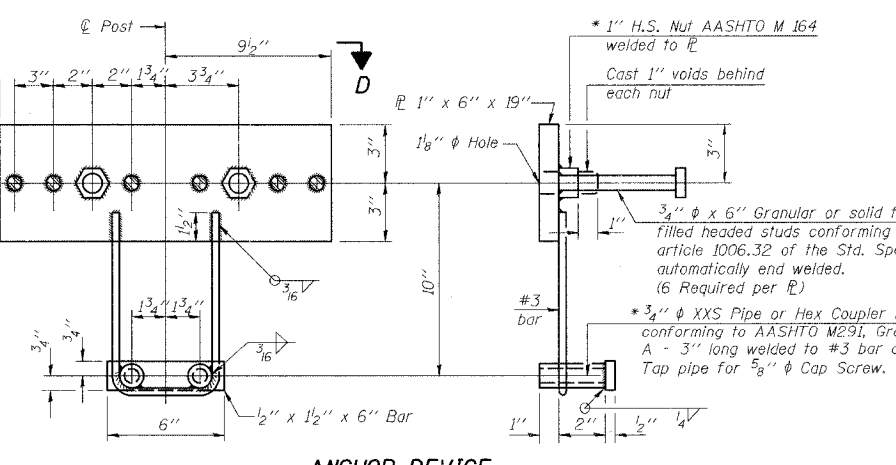
**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing, Type SM	Foot	137

**TYPE SM STEEL BRIDGE RAIL SIDE MOUNTED WITH CONCRETE WEARING SURFACE**

Date	Designed DCS	F.A.U. 7359 (MOUND RD.) OVER STEVENS CREEK CITY OF DECATUR STA. 15+00.00 PROP. STR. NO. 058-3062	Sheet No.
Revisions	Drawn BKN		<b>8</b>
	Checked TDN		
	Approved KWB		
Prepared by:	<b>URS</b> 345 East Ash Avenue Decatur, IL 62526		

\* Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.



**ANCHOR DEVICE**