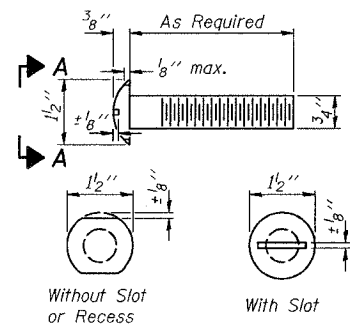


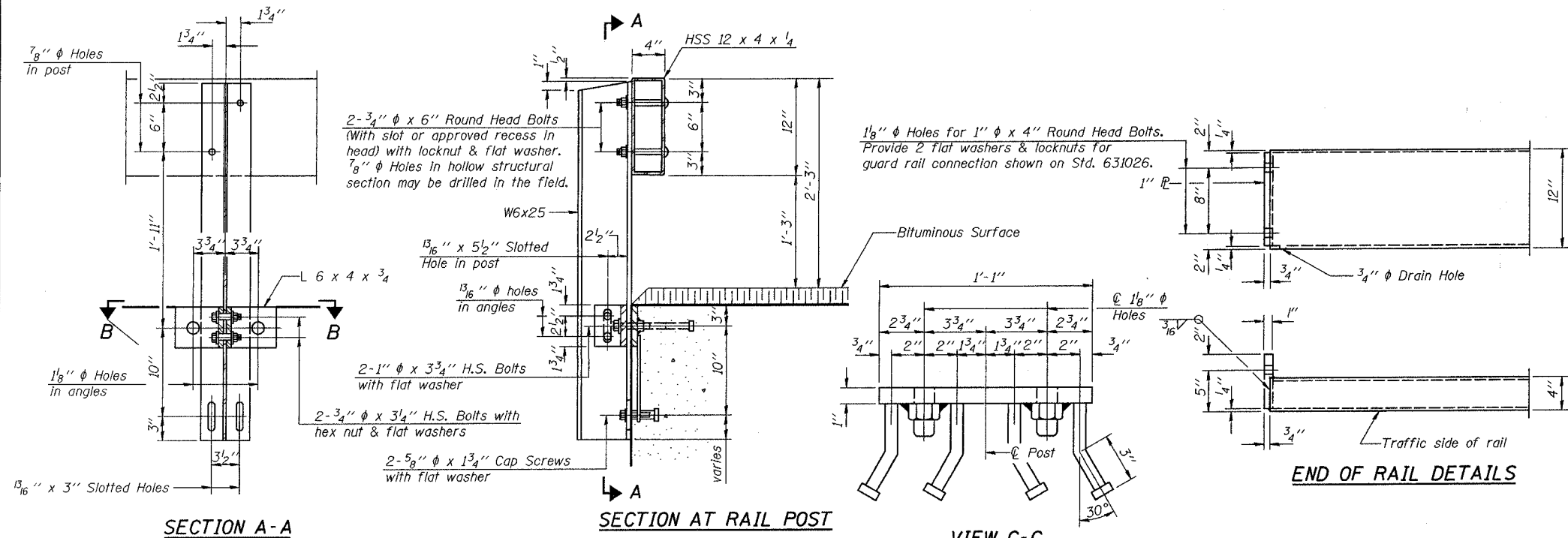
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		UNION	22	17
ILLINOIS Contract No. 99214				
* 03-01176-00-BR				

SHEET NO. 4
9 SHEETS



VIEW A-A
ROUND HEAD BOLT



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 S-1.

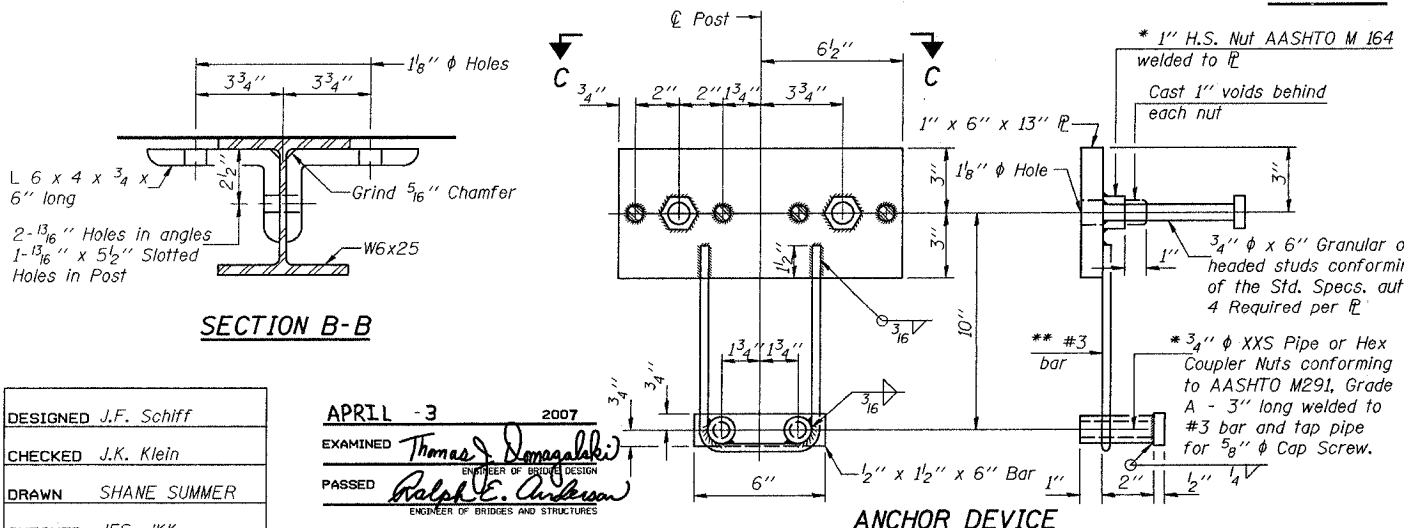
All field drilled holes shall be coated with an approved zinc rich paint before erection.

The lower portion of the post flange in contact with concrete shall receive two coats of asphalt paint conforming to Section 1060.07 Type II or place 1/8 inch fabric bearing pad between the post and concrete.

The 3/4 inch diameter high strength bolts used to connect the 6 x 4 x 3/4 inch angles to the post shall be tightened according to Article 505.04(f)(2) of the Standard Specifications. The 1 inch diameter high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/8 turn. The 5/8 inch diameter cap screws in bottom of posts shall be tightened to a snug fit only.

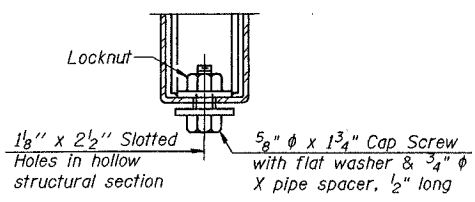
For multi-span bridges, sufficient 1/4 inch x 6 inch x 1-2 inch galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with STEEL RAILING, TYPE S-1.

END OF RAIL DETAILS

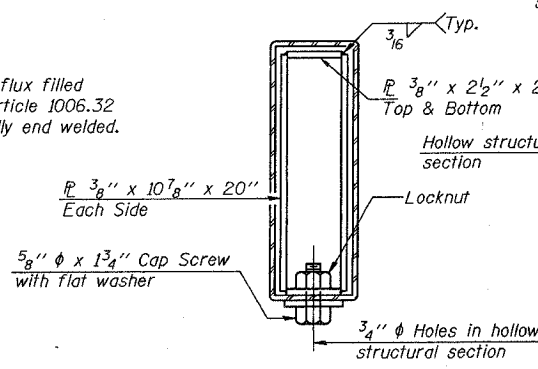


ANCHOR DEVICE

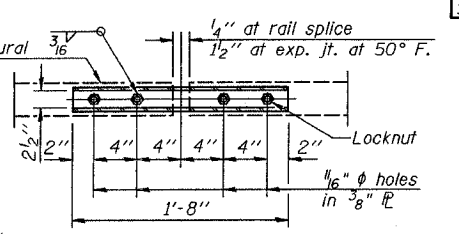
** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2 inch.



RAIL SPLICE CONNECTION
AT EXPANSION JT.



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE
TYPICAL

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	220

STEEL RAILING
STR. NO. 091-3221
MORGAN SCHOOL ROAD
OVER CANY CREEK
SECTION 03-01176-00-BR
UNION COUNTY
STATION 9+27.00

DESIGNED	J.F. Schiff
CHECKED	J.K. Klein
DRAWN	SHANE SUMMER
CHECKED	JFS, JKK

APRIL -3 2007
EXAMINED *Thomas J. Demagallaki*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

10-22-04 (10'-9" Maximum Post Spacing)

* Threaded areas shall be plugged or blocked off during casting of beam.