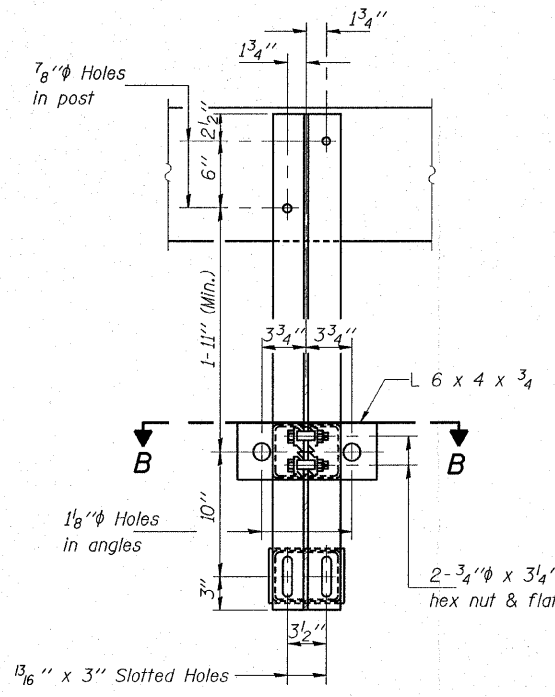


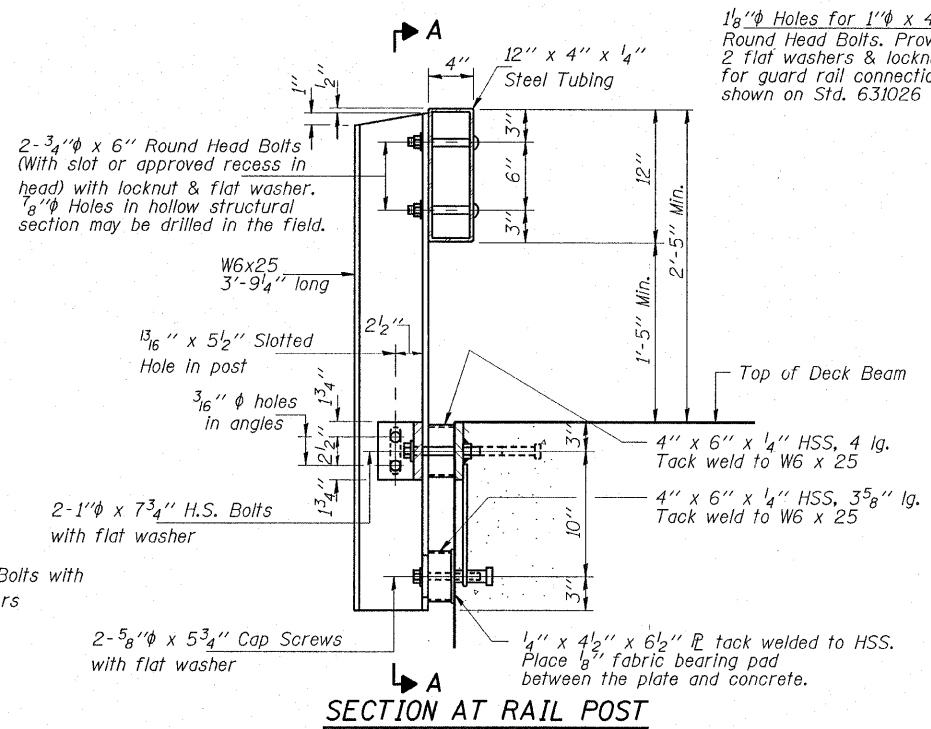
ELEVATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 50	98-02120-00-BR	DOUGLAS	26	22
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT - BR-08-041081	

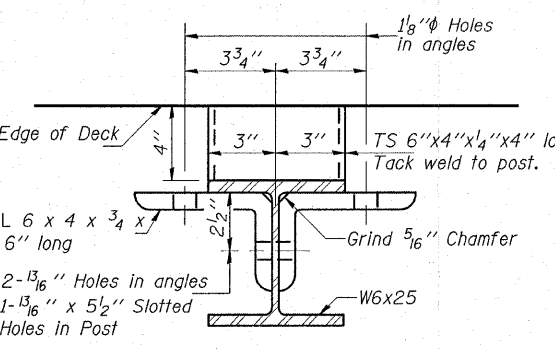
CONTRACT NO. 91314



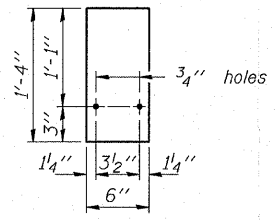
SECTION A-A



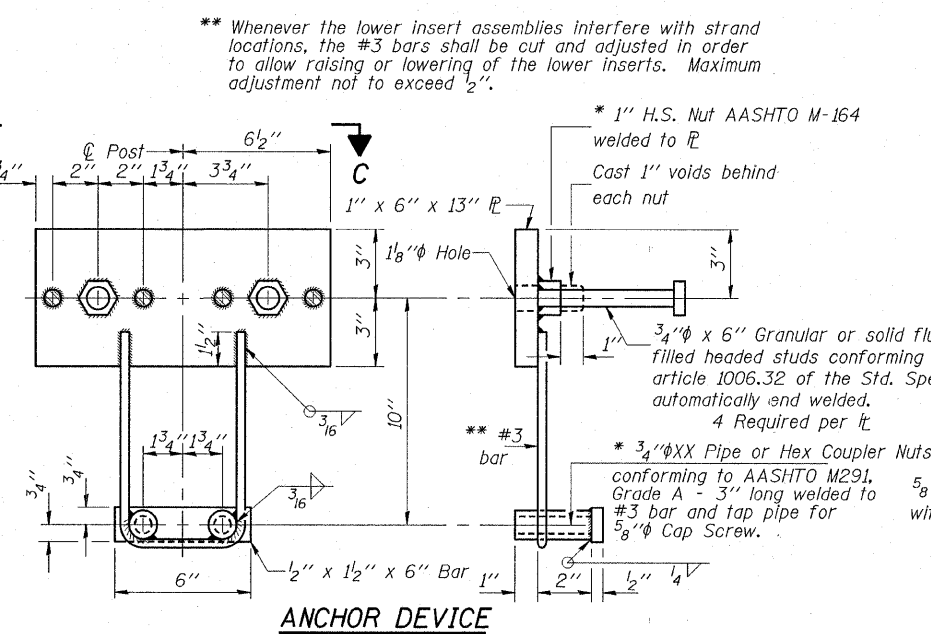
SECTION AT RAIL POST



SECTION B-B

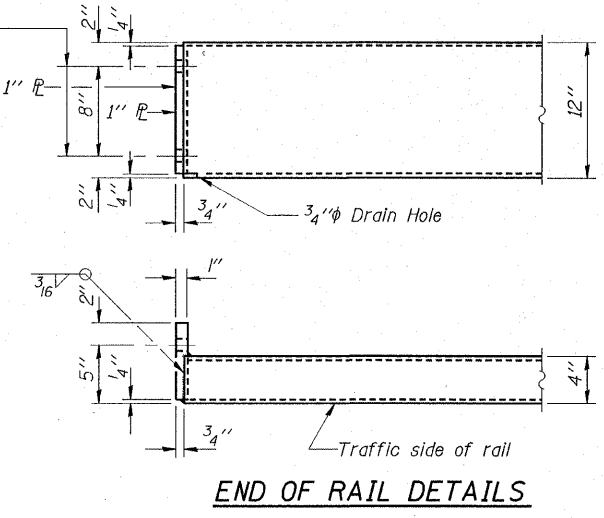


SHIM DETAIL

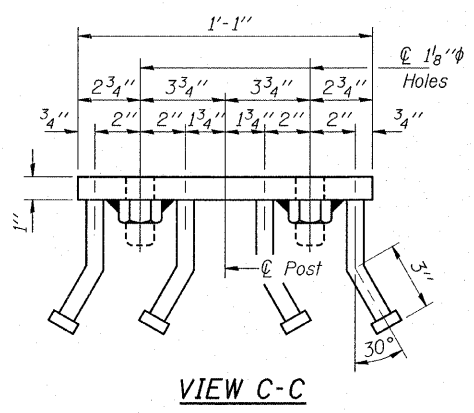


ANCHOR DEVICE

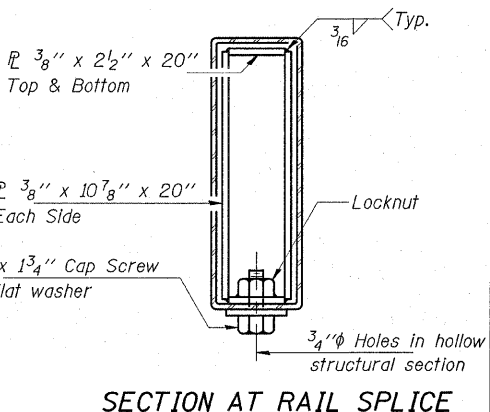
* Threaded areas shall be plugged or blocked off during casting of beam.



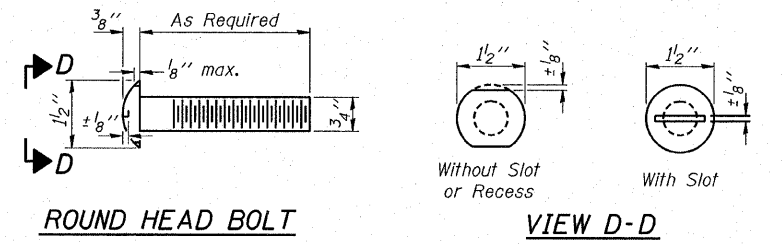
END OF RAIL DETAILS



VIEW C-C



SECTION AT RAIL SPLICE



ROUND HEAD BOLT

VIEW D-D

NOTES

Hollow structural sections shall conform to the requirements of A.S.T.M. designation A-500 Grade B Structural Steel Tubing.

All other steel shapes and plates shall conform to the requirements of A.A.S.H.T.O. designation M-270 Grade 36 except posts and angles shall conform to A.A.S.H.T.O. M-270 Grade 50.

Bolts, cap screws, and nuts shall conform to the requirements of A.S.T.M. designation A-307 except for high strength bolts, nuts and washers noted which shall conform to A.A.S.H.T.O. designation M-164.

All bolts, nuts, cap screws, washers and lockwashers shall be galvanized in accordance with A.A.S.H.T.O. designation M-232.

All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication in accordance with A.S.T.M. A-385 and A.A.S.H.T.O. M-111. Galvanized rail shall not be painted.

Railing shall be in accordance with Section 509 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per foot for STEEL RAILING, TYPE S1.

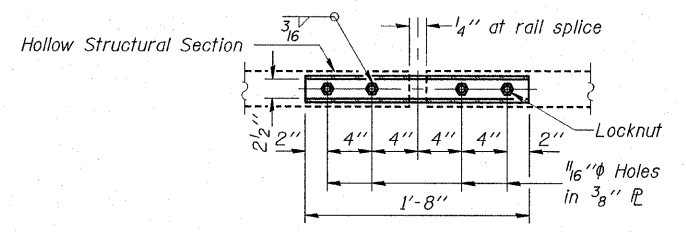
All field drilled holes shall be coated with an approved zinc rich paint before erection.

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" fabric bearing pad between the post and concrete.

The 3/4" high strength bolts used to connect the 6 x 4 x 3/4 angles to the post shall be tightened in accordance with Art. 505.04(f)(3) of the Standard Specifications. The 1" 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" cap screws in bottom of posts shall be tightened to a snug fit only, after the 1" high strength bolts have been tightened in accordance with Article 505.04(f)(3).

Hollow structural sections shall meet the longitudinal C.V.N. requirements of 15 Ft.-Lbs at 0° F.

For multi-span bridges, sufficient 1/4" x 6" x 1'-4" galvanized steel shims shall be provided to align rail between adjacent spans. Cost incidental to Steel Railing.



PLAN-BOTT. SPLICE TYPICAL

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type S1	Foot	641

HLR

Rice, Berry and Associates
A Division of Hampton,
Lenzini and Renwick, Inc.
Civil & Structural Engineers
3085 Stevenson Drive
Suite 201
Springfield, Illinois 62703
217-546-3400

Account Number
12-30-0008-1
Date: 01-05-06
DESIGNED: S.W.M. CHECKED: T.P.L. DRAWN: D.B.

RAILING DETAILS
SECTION 98-02120-00-BR
BOURBON ROAD DISTRICT
DOUGLAS COUNTY
STATION 15+05