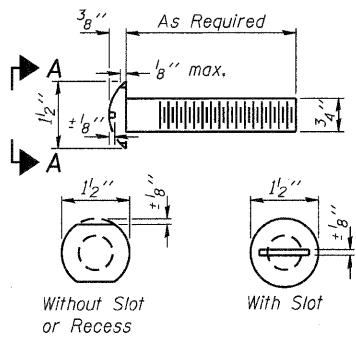
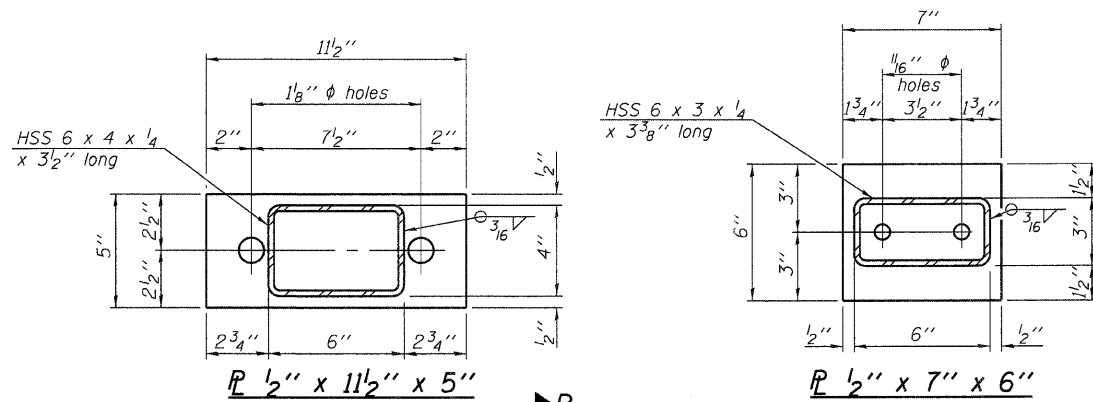


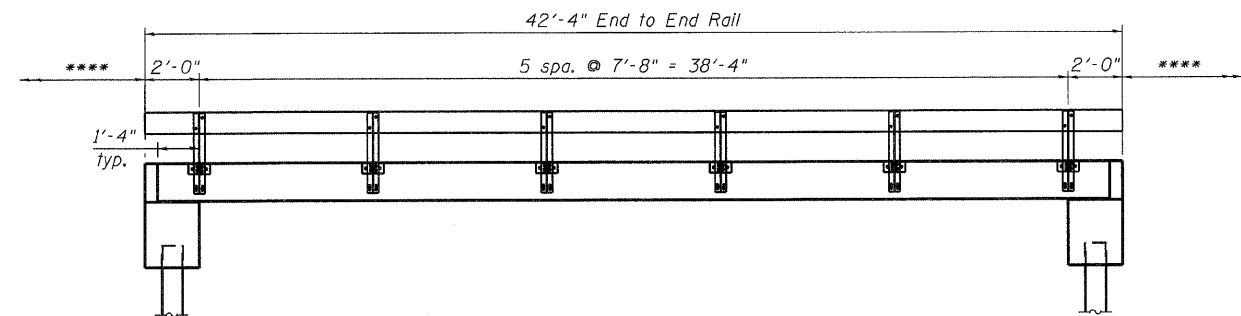
FILENAME: I:\jobs\christiancounty\7166 tr 126 over buckhart creek\cadd\sheet\0113418-00000.dgn



**VIEW A-A  
ROUND HEAD BOLT**



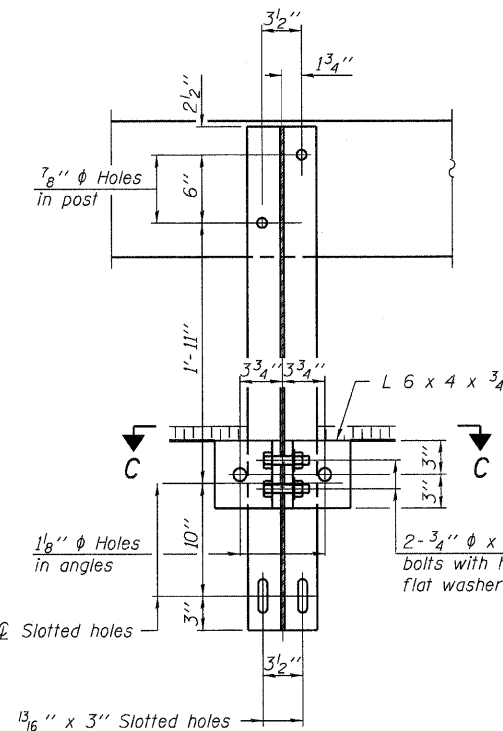
**SECTION AT RAILING POST**



**ELEVATION**

\*\*\*\* Traffic Barrier Terminal Type 5A or Curled End Section See sheet 1 of 9 for locations.

**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.  
\*\*\* 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.

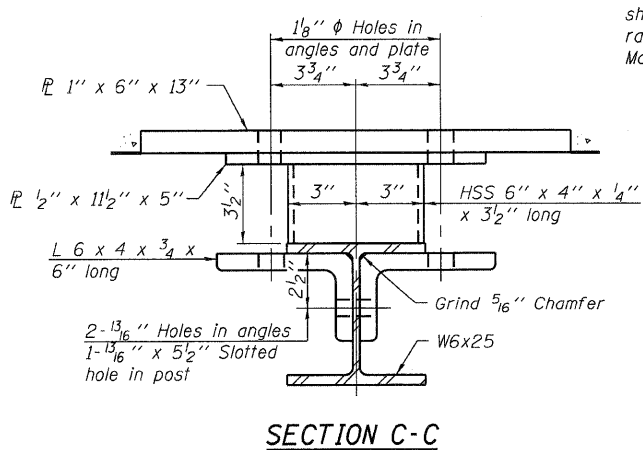


**SECTION C-C**

2- 3/4"  $\phi$  x 5" Round Head Bolts (With slot or approved recess in head) with locknut & flat washer. 7/8"  $\phi$  holes in hollow structural section may be drilled in the field.

2- 1"  $\phi$  x 7 3/4" AASHTO M-164 anchor bolts with flat washer and lock washer  
2- 5/8"  $\phi$  x 5 3/4" cap screws with flat washer

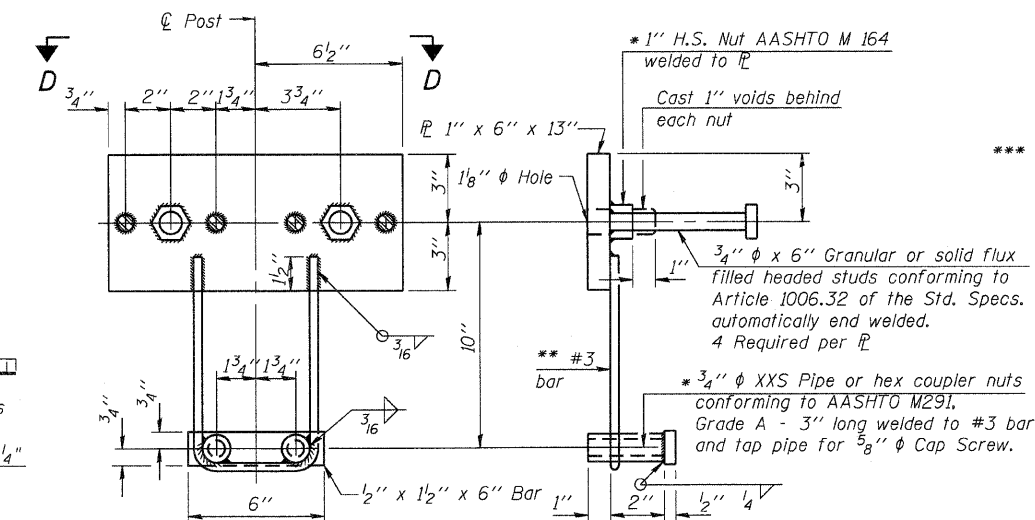
\*\* Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".



**SECTION B-B**

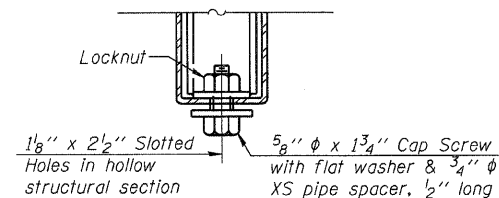
**SECTION AT RAILING POST**

**SECTIONS AT RAIL SPlice**

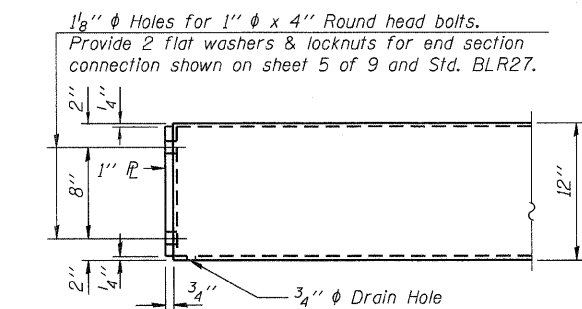


**ANCHOR DEVICE**

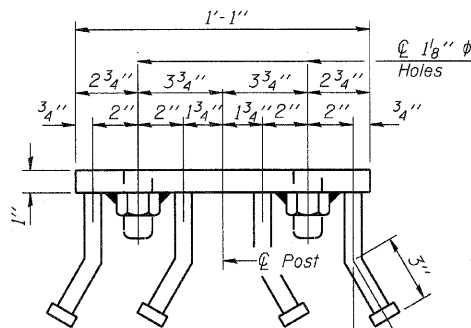
\* Threaded areas shall be plugged or blocked off during casting of beam.



**RAIL SPlice CONNECTION AT EXPANSION JT.**



**END OF RAIL DETAILS**



**VIEW D-D**

**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing, Type S-1	Foot	85

USER NAME = dherbering	DESIGNED - TJZ	REVISED
	DRAWN - DLH	REVISED
PLOT SCALE = 0.10000' / IN.	CHECKED - SDS	REVISED
PLOT DATE = 11/14/2011	DATE - 8/25/11	REVISED

**WHKS & CO.**  
ENGINEERING  
7018 KINGSMILL CT.,  
SPRINGFIELD, IL  
(217) 483-9457  
DESIGN FIRM #184001036

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SCALE:	STEEP
STEELED RAILING, TYPE S-1	
TR 216 OVER BUCKHART CREEK	
SHEET NO. 4 OF 9 SHEETS	STA.

T.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
216	08-16112-00-BR	CHRISTIAN	26	8
S.N. - 011-3418		CONTRACT 93559		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		