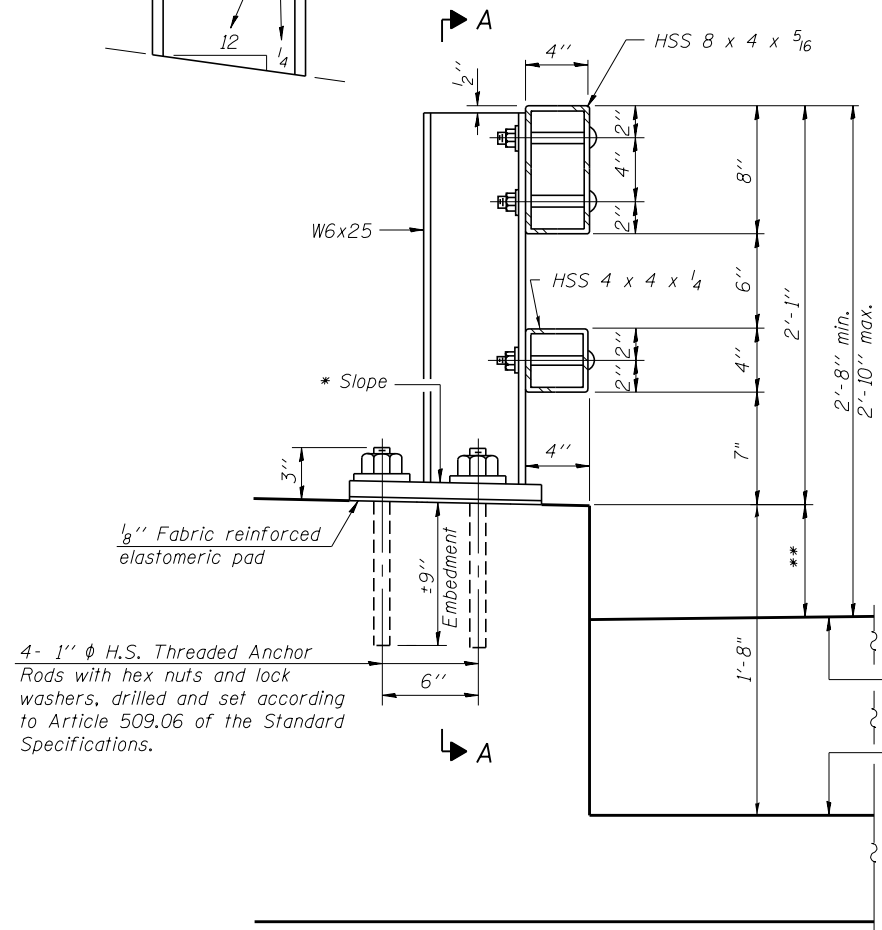
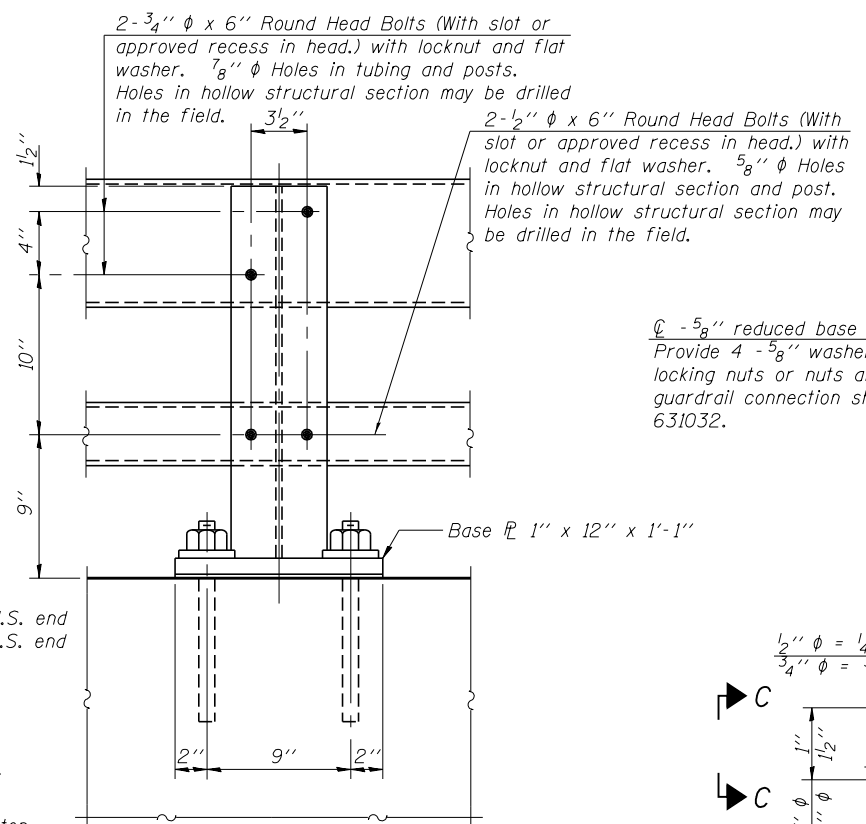


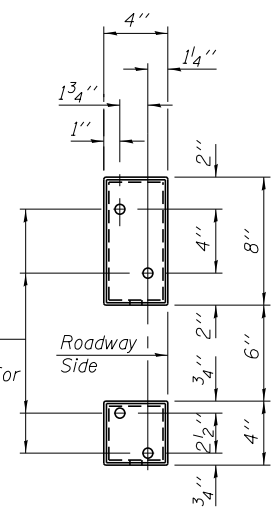
\* Cut bottom end of post to curb slope.



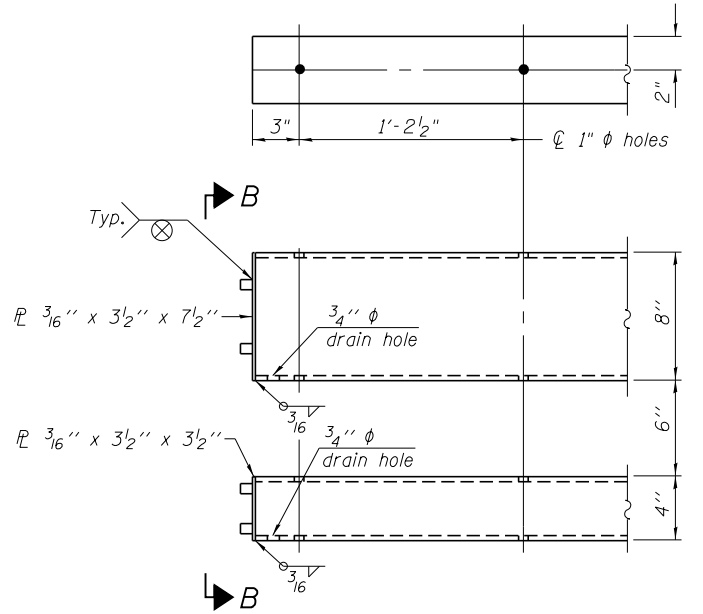
SECTION AT RAIL POST



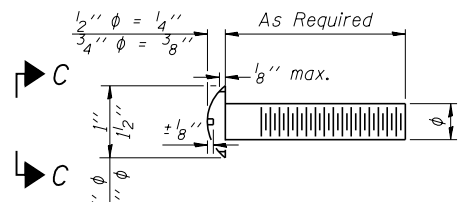
SECTION A-A



VIEW B-B

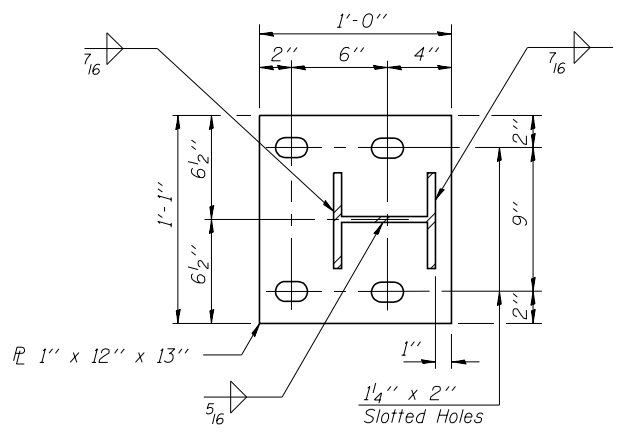


END OF RAIL DETAILS

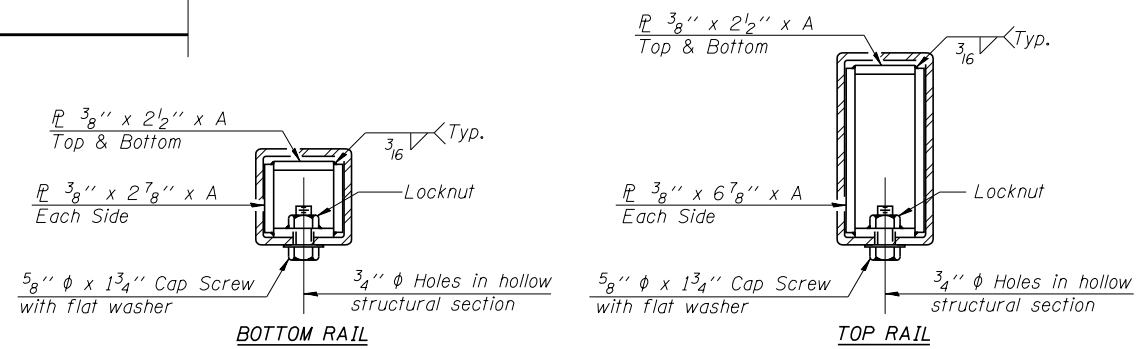


DETAIL OF 1/2"  $\phi$  & 3/4"  $\phi$  ROUND HEAD BOLTS

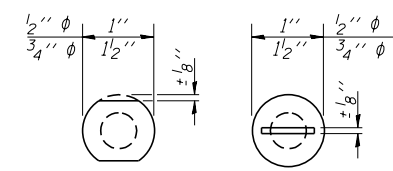
Notes:  
 All field drilled holes shall be coated with an approved zinc rich paint before erection.  
 Posts shall not be located closer than 1'-3" to an existing bridge expansion joint or end of bridge.  
 Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.  
 Provide one 1/8" and two 1/16" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.  
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.



BASE PLATE DETAIL



SECTIONS AT RAIL SPLICE

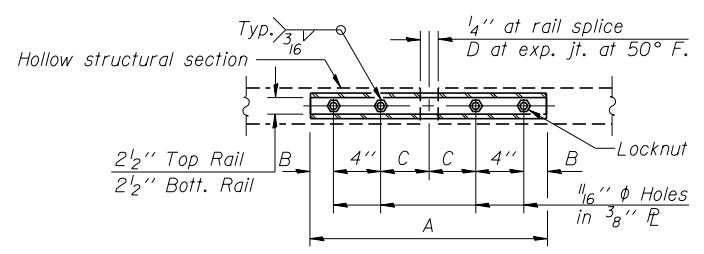


VIEW C-C

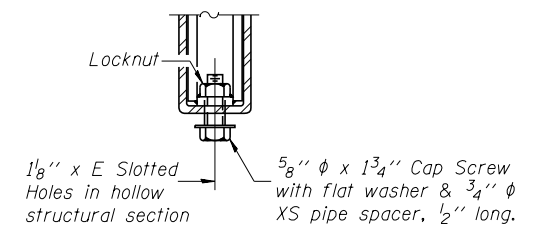
SPLICE DIMENSIONS

T	D	A	B	C	E
≤ 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4" ≤ 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
> 6 1/2" ≤ 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
> 9" ≤ 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1/4"	1'-8"	2"	4"	—

T = Total movement at expansion joint as shown on the design plans.



PLAN-BOTT. SPLICE R TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

(6'-3" Maximum Post Spacing)

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	53

FILE NAME = 0412019-78148-006-RL.dgn  
 CB PROJECT NO. 07855-5

USER NAME = \*USER\*  
 DESIGNED GB  
 CHECKED RM  
 PLOT SCALE = \*SCALE\*  
 DRAWN MML  
 CHECKED MCB  
 PLOT DATE = 10/4/2012

DESIGNED GB  
 CHECKED RM  
 DRAWN MML  
 CHECKED MCB  
 REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

STEEL RAILING, TYPE 2399  
 STRUCTURE NO. 041-2019

SHEET NO. 6 OF 9 SHEETS

**CB** Coombe-Bloxdorf P.C.  
 - CIVIL ENGINEERS -  
 - STRUCTURAL ENGINEERS -  
 - LAND SURVEYORS -  
 Design Firm License No. 184-002703

F.A. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2869	2B-1	JEFFERSON	36	27

CONTRACT NO. 78148  
 ILLINOIS FED. AID PROJECT