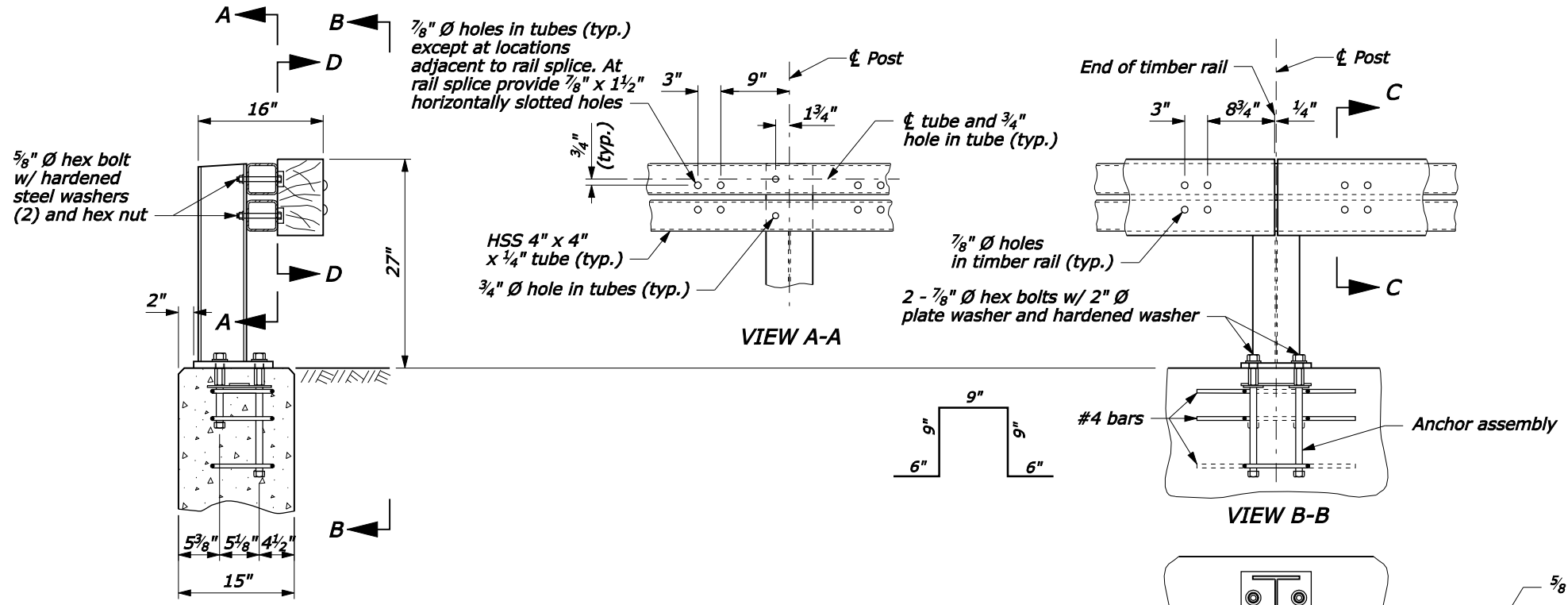


**HSS 4" x 4" x 1/4" TUBES ELEVATION**

**BRIDGE RAIL ELEVATION**

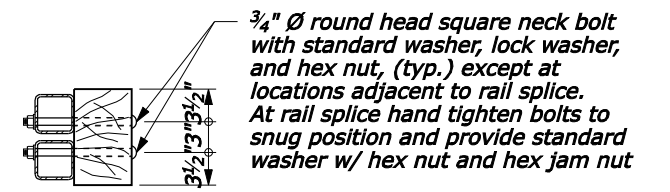
**NOTE:**

1. Steel for rail posts, base plates, shims, splice sleeves, and anchor assembly plates conforms to ASTM A36. Structural tubing for rails conforms to ASTM A500, Grade B. Paint all metal components of the bridge rail except post base shims, anchor assemblies, and rail splice sleeves. Galvanize post base shims, anchor assemblies, and rail splice sleeves. Hex bolts conform to AASHTO M164 (ASTM A325). Hex coupling nuts conform to ASTM A563, Grade C, D, or DH and shall have a center stop. All other fasteners conform to ASTM A307. See Special Contract Requirements for painting.
2. Shop fabricate structural steel. Submit shop drawings to the CO for approval before fabrication. Provide drawings showing rail section lengths, splice locations, rail post spacing, and fastener lengths. Welding conforms to ANSI/AASHTO/AWS D1.5. Use a certified welder. Fabricate all steel before galvanizing or painting.
3. Section lengths of HSS 4" x 4" rails shall be continuous over a minimum of three posts.
4. Provide neat cement grout consisting of a mixture of cement and water mixed to a smooth viscous paste.
5. Erect the rail parallel to grade.
6. Timber conforms to Subsection 710.08.

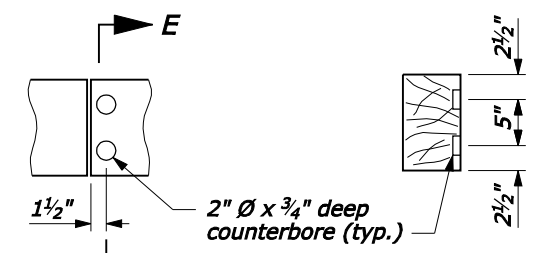


**TYPICAL SECTION @ POST**

**PLAN VIEW @ POST**



**SECTION C-C**



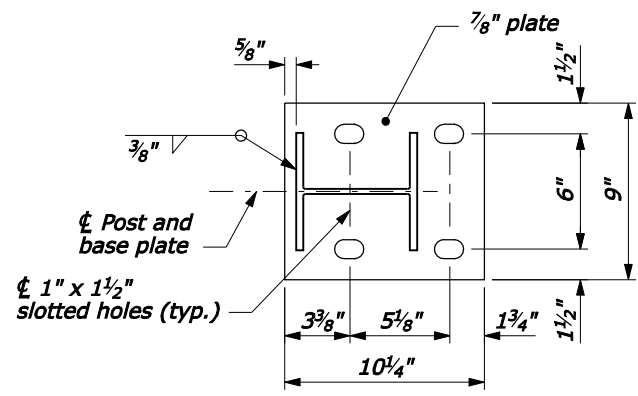
**VIEW D-D**

**SECTION E-E**

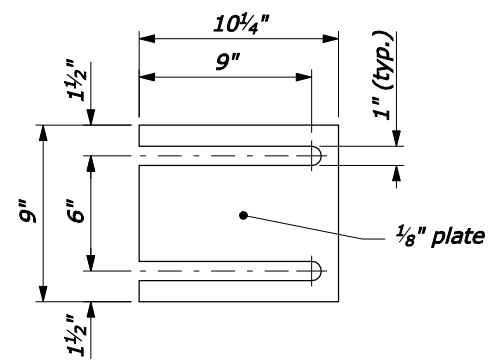
NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY	
U.S. CUSTOMARY STANDARD <b>TUBULAR STEEL-BACKED TIMBER BRIDGE RAIL</b> Sheet 1 of 2	
STANDARD APPROVED FOR USE --/----	STANDARD 556-1
REVISED: DRAFT: 5/2008	

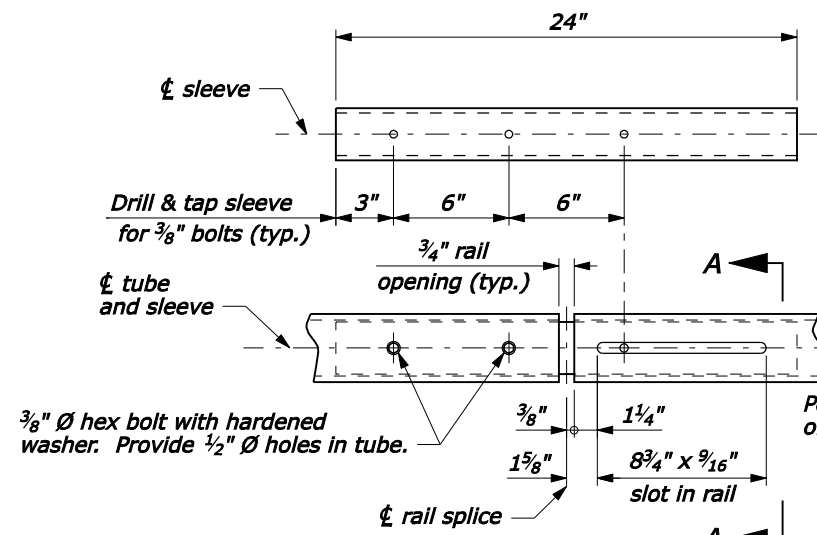
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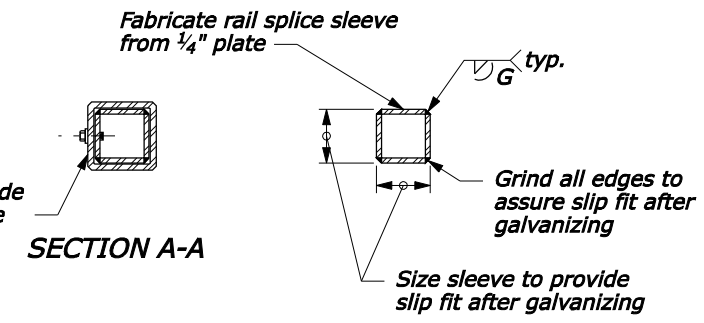
**BASE PLATE DETAIL**



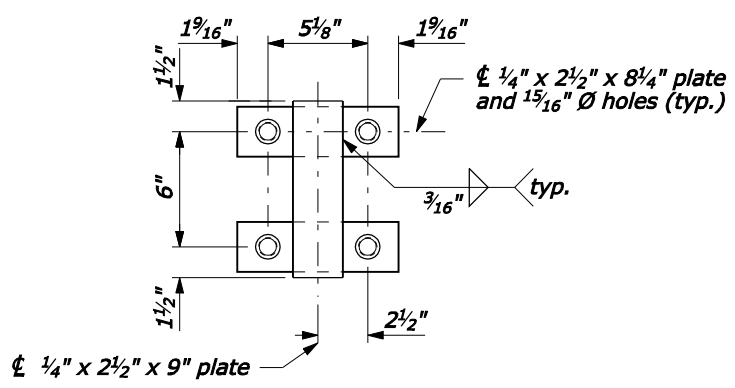
**RAIL POST BASE SHIM**



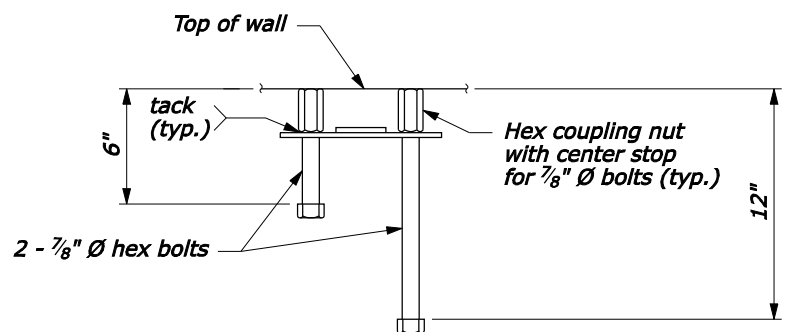
**RAIL SPLICE DETAIL**



**SLEEVE**

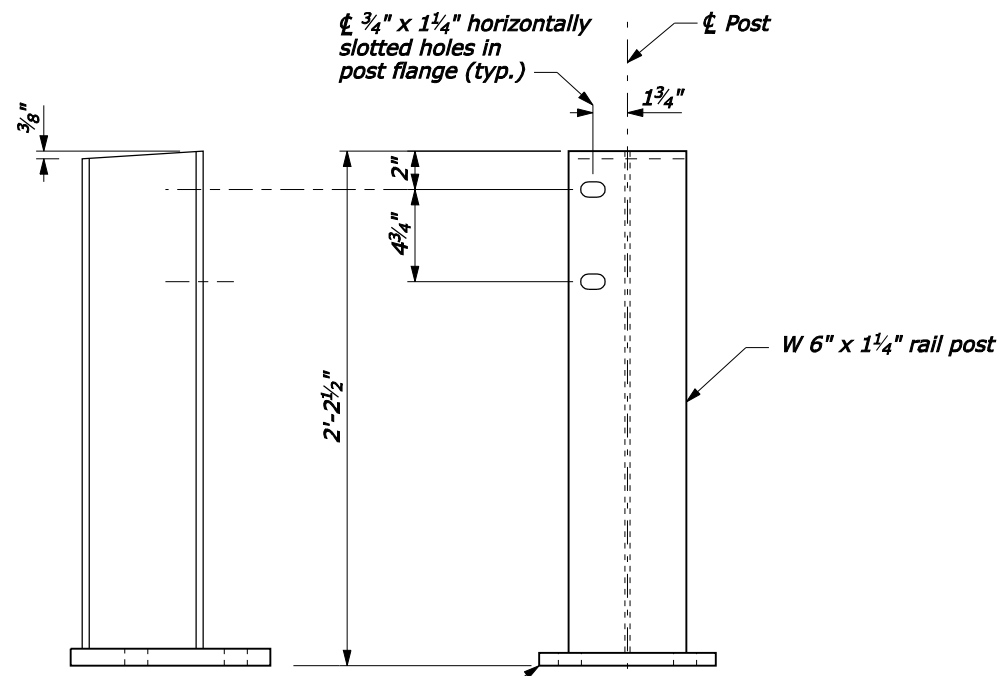


**PLAN**

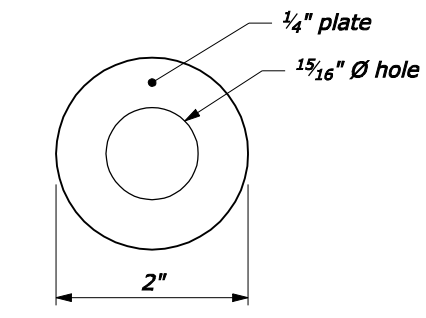


**ELEVATION**

**ANCHOR ASSEMBLY**



**POST ASSEMBLY**

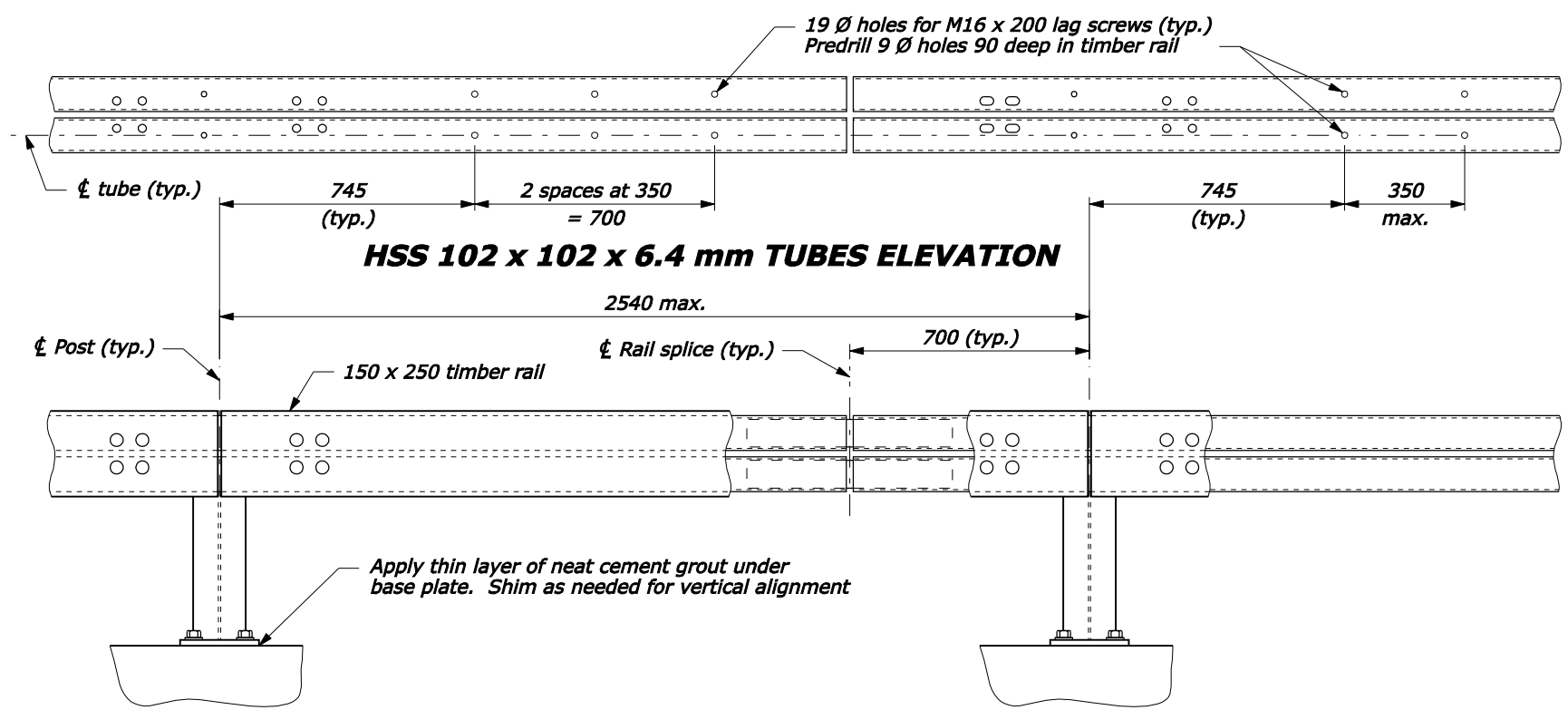


**PLATE WASHER**

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY	
U.S. CUSTOMARY STANDARD <b>TUBULAR STEEL-BACKED TIMBER BRIDGE RAIL</b> Sheet 2 of 2	
STANDARD APPROVED FOR USE --/----	STANDARD 556-1
REVISED: DRAFT: 5/2008	

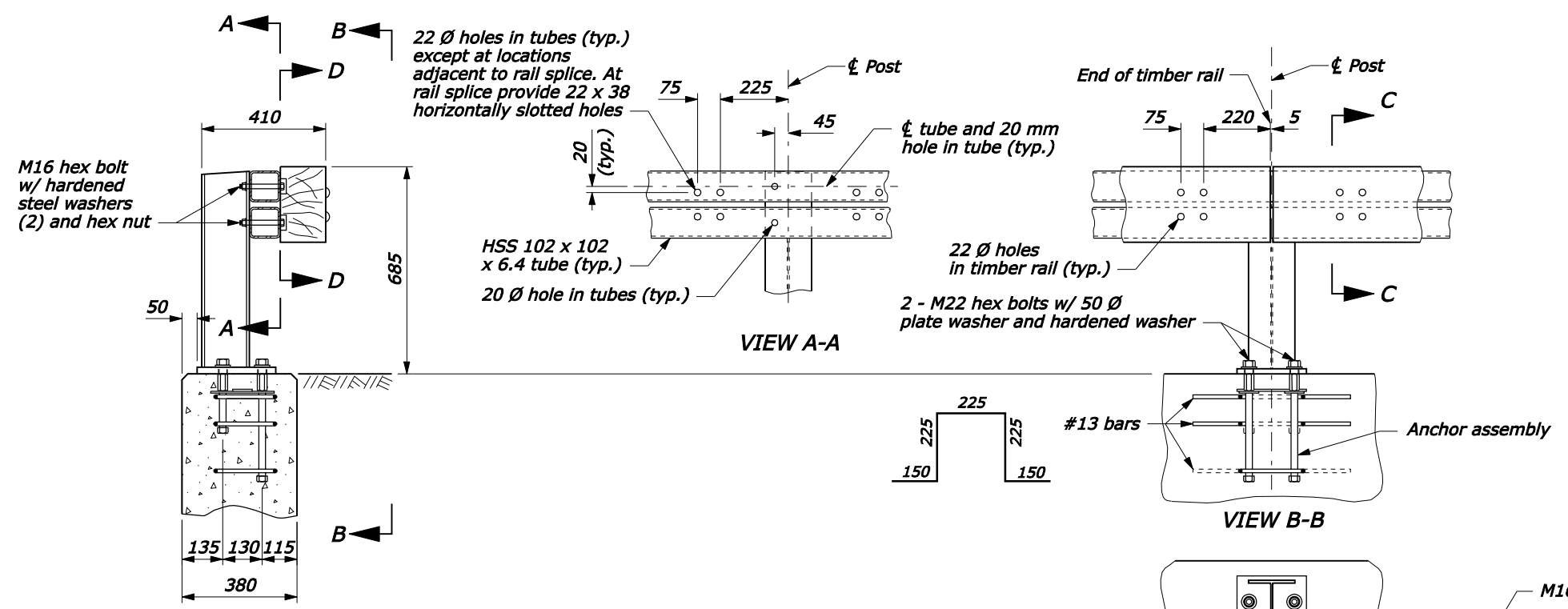
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**NOTE:**

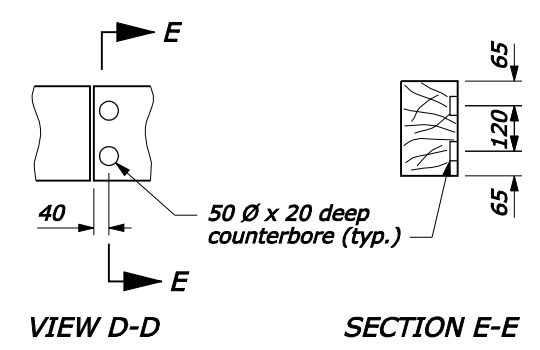
1. Steel for rail posts, base plates, shims, splice sleeves, and anchor assembly plates conforms to ASTM A36. Structural tubing for rails conforms to ASTM A500, Grade B. Paint all metal components of the bridge rail except post base shims, anchor assemblies, and rail splice sleeves. Galvanize post base shims, anchor assemblies, and rail splice sleeves. Hex bolts conform to AASHTO M164 (ASTM A325). Hex coupling nuts conform to ASTM A563, Grade C, D, or DH and shall have a center stop. All other fasteners conform to ASTM A307. See Special Contract Requirements for painting.
2. Shop fabricate structural steel. Submit shop drawings to the CO for approval before fabrication. Provide drawings showing rail section lengths, splice locations, rail post spacing, and fastener lengths. Welding conforms to ANSI/AASHTO/AWS D1.5. Use a certified welder. Fabricate all steel before galvanizing or painting.
3. Section lengths of HSS 102 x 102 rails shall be continuous over a minimum of three posts.
4. Provide neat cement grout consisting of a mixture of cement and water mixed to a smooth viscous paste.
5. Erect the rail parallel to grade.
6. Timber conforms to Subsection 710.08.
7. Dimensions without units are millimeters.

**BRIDGE RAIL ELEVATION**



**TYPICAL SECTION @ POST**

**PLAN VIEW @ POST**



NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
FEDERAL LANDS HIGHWAY

METRIC STANDARD

**TUBULAR STEEL-BACKED  
TIMBER BRIDGE RAIL**

Sheet 1 of 2

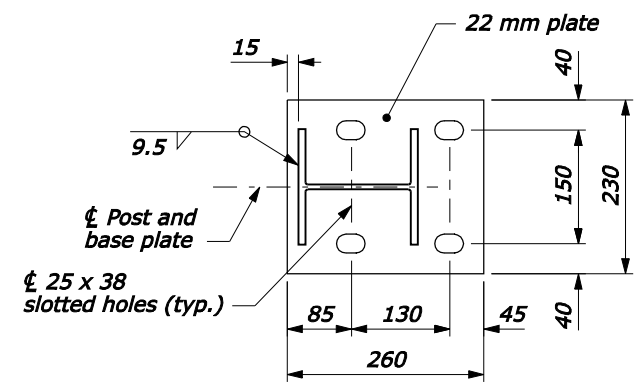
STANDARD APPROVED FOR USE --/----

REVISED: DRAFT: 5/2008

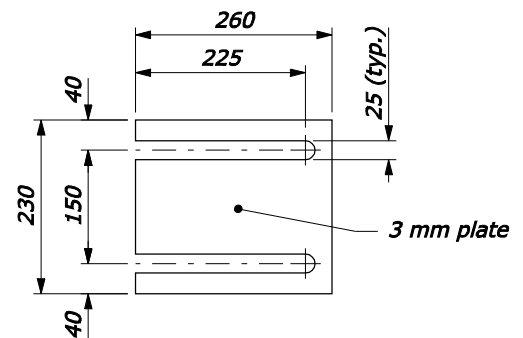
STANDARD M556-1

02-Jun-2008 02:18 PM  
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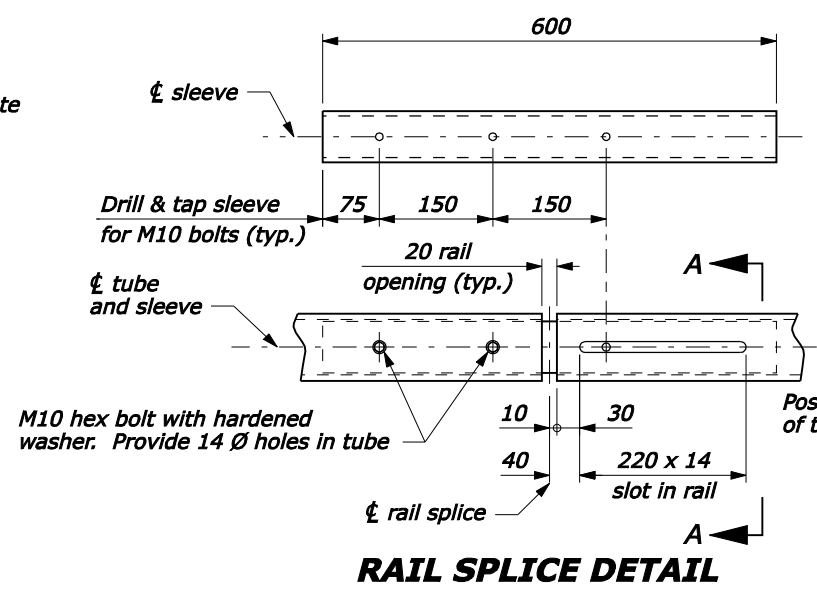
**NOTE:**  
1. Dimensions without units are millimeters.



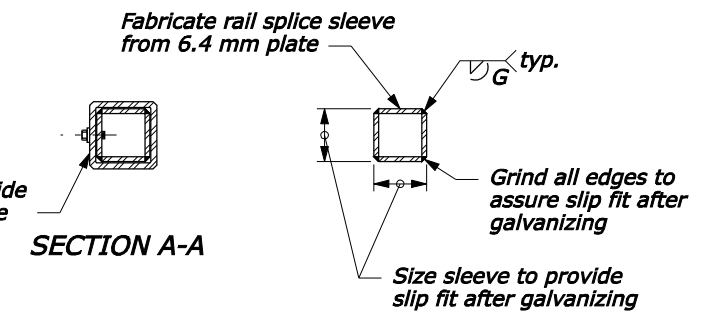
**BASE PLATE DETAIL**



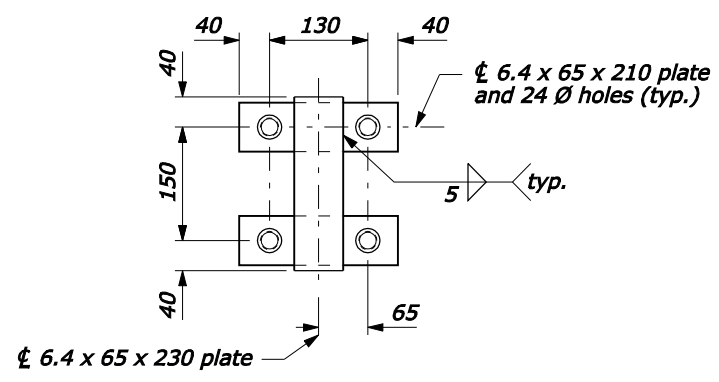
**RAIL POST BASE SHIM**



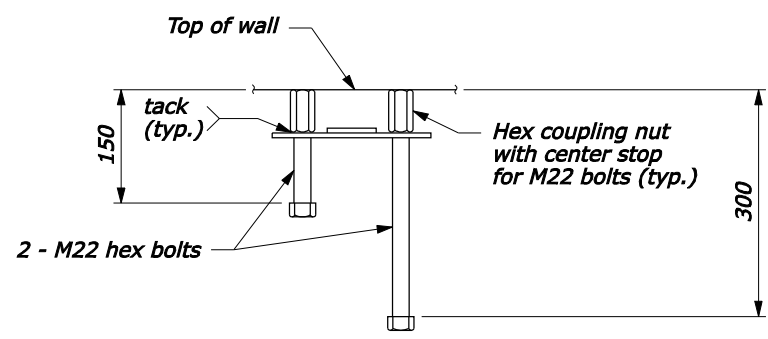
**RAIL SPLICE DETAIL**



**SLEEVE**

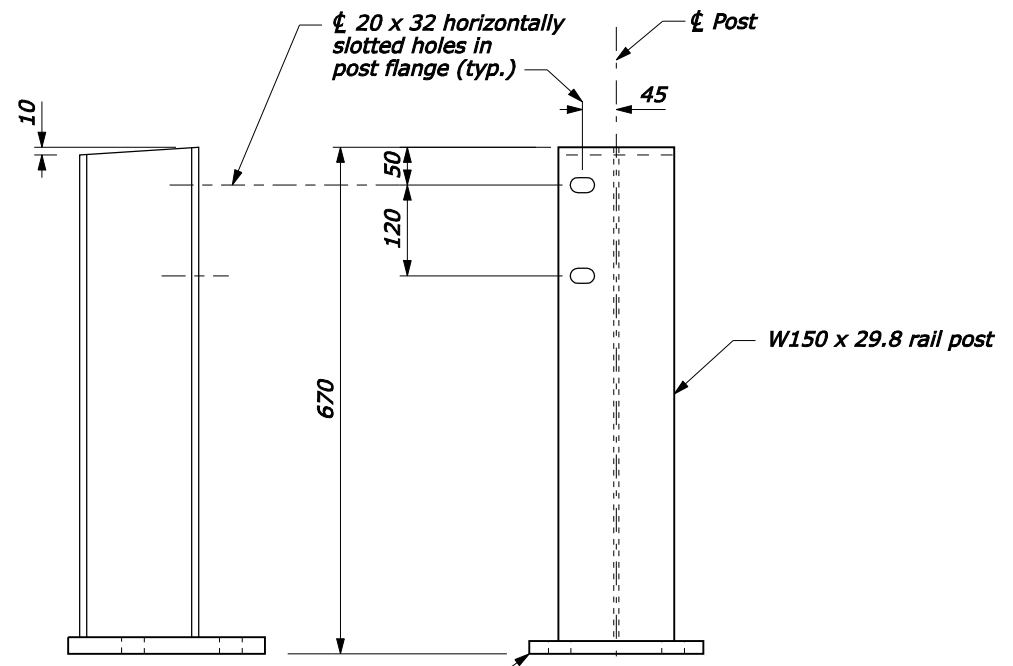


**PLAN**

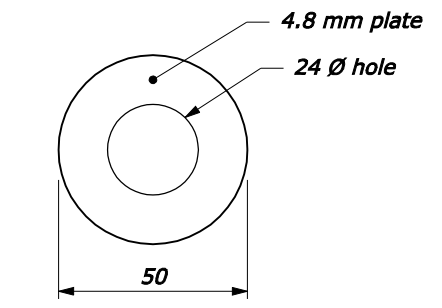


**ELEVATION**

**ANCHOR ASSEMBLY**



**POST ASSEMBLY**



**PLATE WASHER**

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION  
FEDERAL LANDS HIGHWAY

METRIC STANDARD

**TUBULAR STEEL-BACKED  
TIMBER BRIDGE RAIL**

Sheet 2 of 2

STANDARD APPROVED FOR USE --/----

REVISED: DRAFT: 5/2008

STANDARD M556-1

NO SCALE

02-Jun-2008 01:00 PM  
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