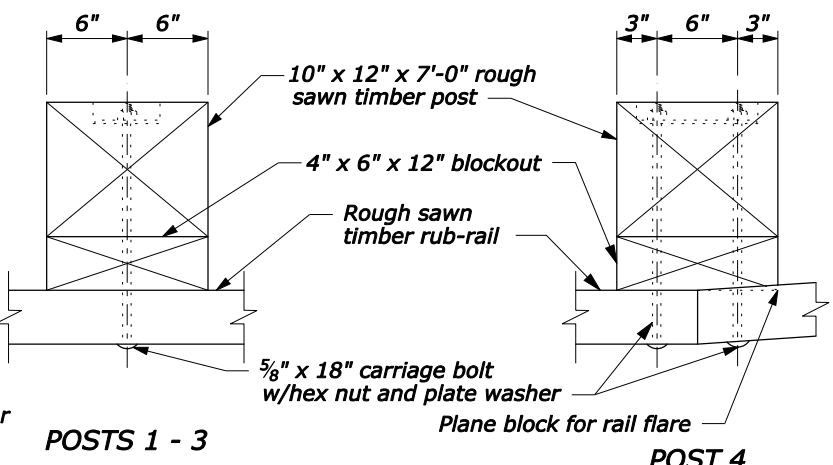
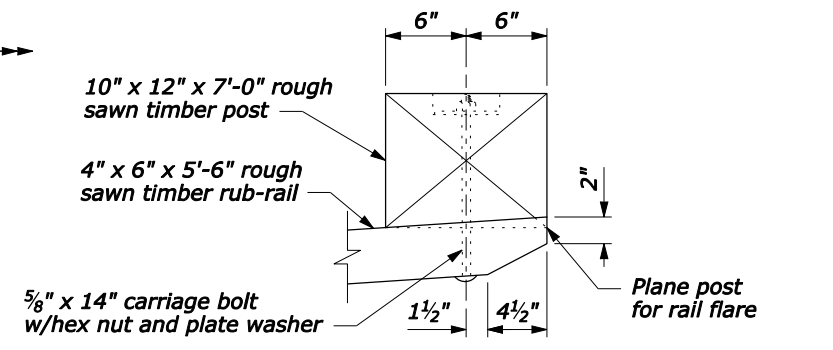
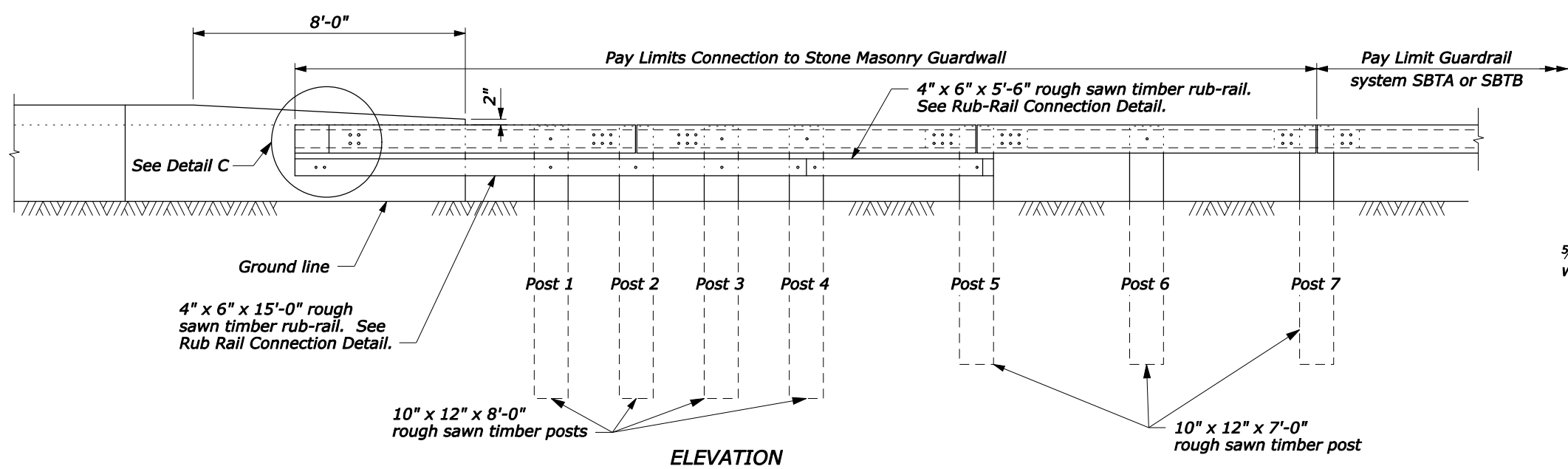
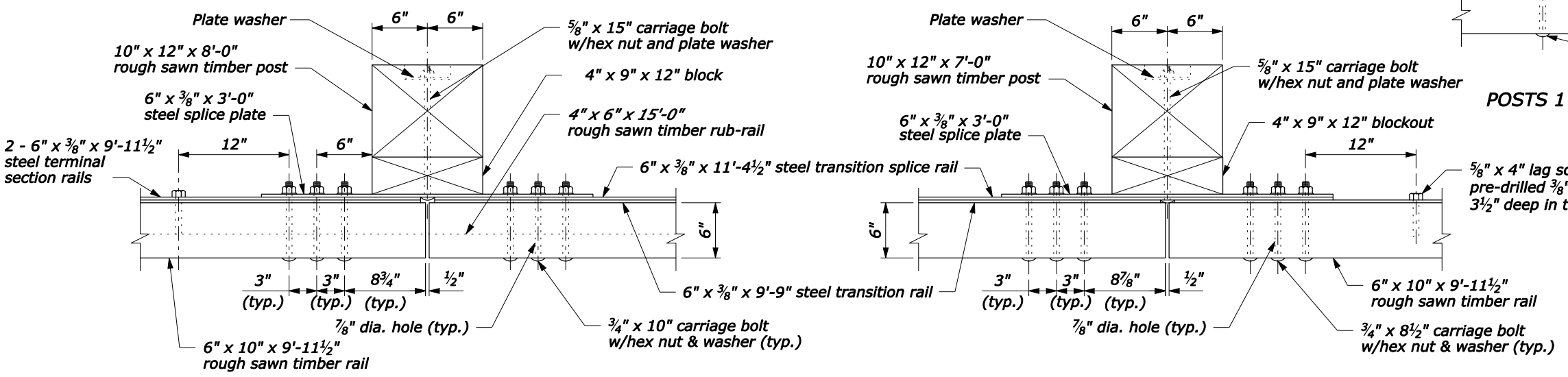


- NOTE:**
1. See the following sheets for Sections A-A through C-C, steel rail layouts, and other details.
  2. Use weathering steel for all structural steel land fastener hardware.
  3. For posts 1, 3, and 4, use an 8" x 9" x 12" block for the blockout, and a 5/8" x 2'-1 1/2" carriage bolt with hex nut and plate washer.



**RUB-RAIL CONNECTION**



**DETAIL A**

**POST CONNECTION**

**DETAIL B**

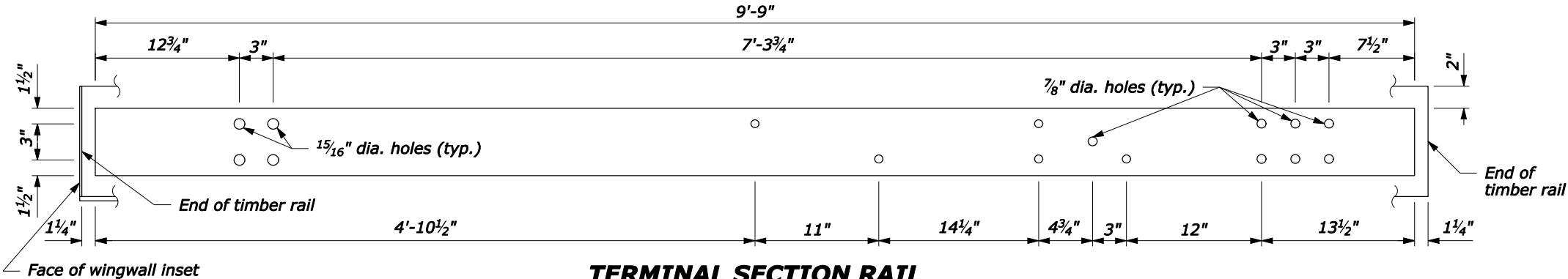
NO SCALE

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

U.S. CUSTOMARY STANDARD  
**STEEL-BACKED TIMBER GUARDRAIL  
TL-2 CONNECTION TO  
STONE MASONRY GUARDWALL**  
Sheet 1 of 3

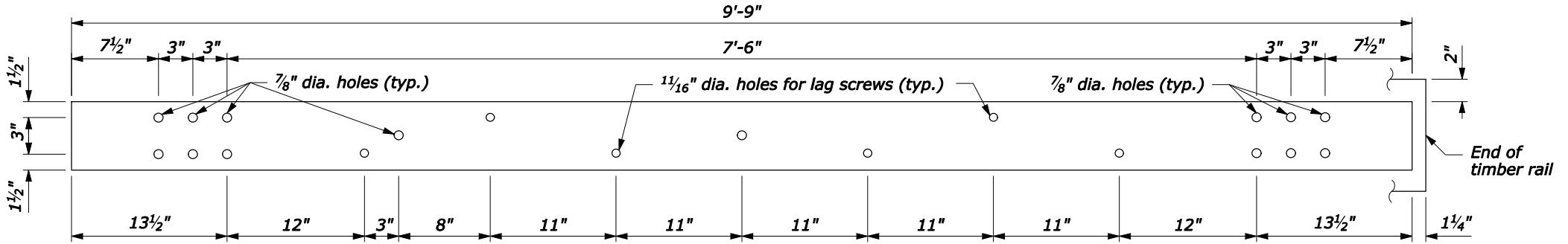
STANDARD APPROVED FOR USE --/----	STANDARD
REVISED: DRAFT: 9/2009	617-64

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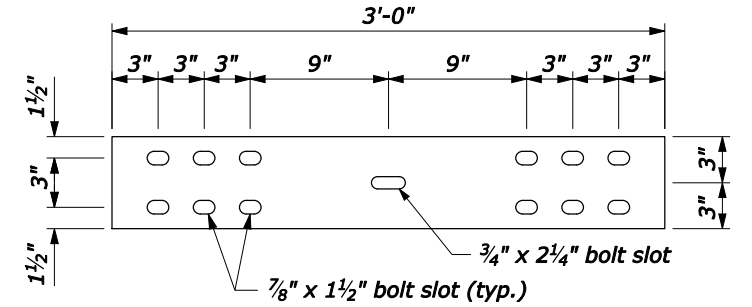


**TERMINAL SECTION RAIL**  
6" x 3/8" x 9'-9"

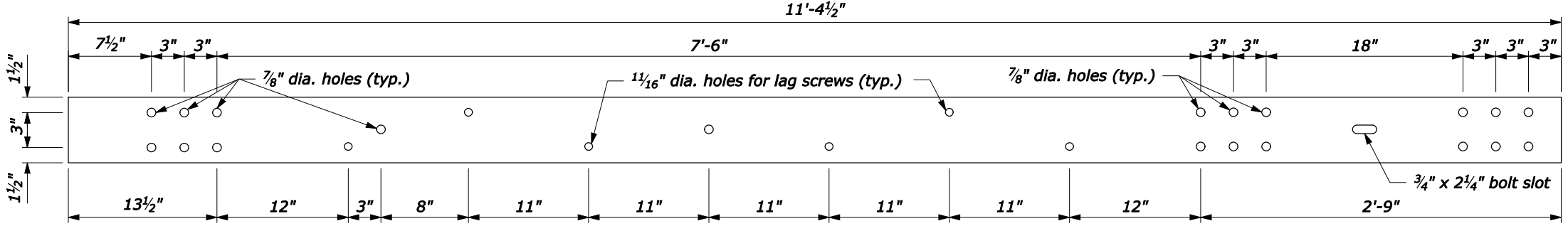
**NOTE:**  
1. Pre-drill 3/4" holes in blocks outs and posts.



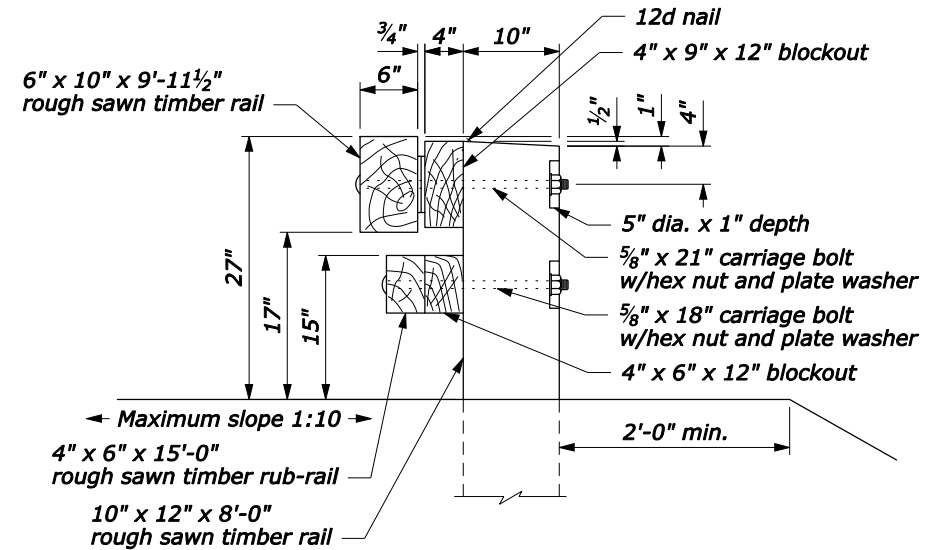
**TRANSITION RAIL**  
6" x 3/8" x 9'-9"



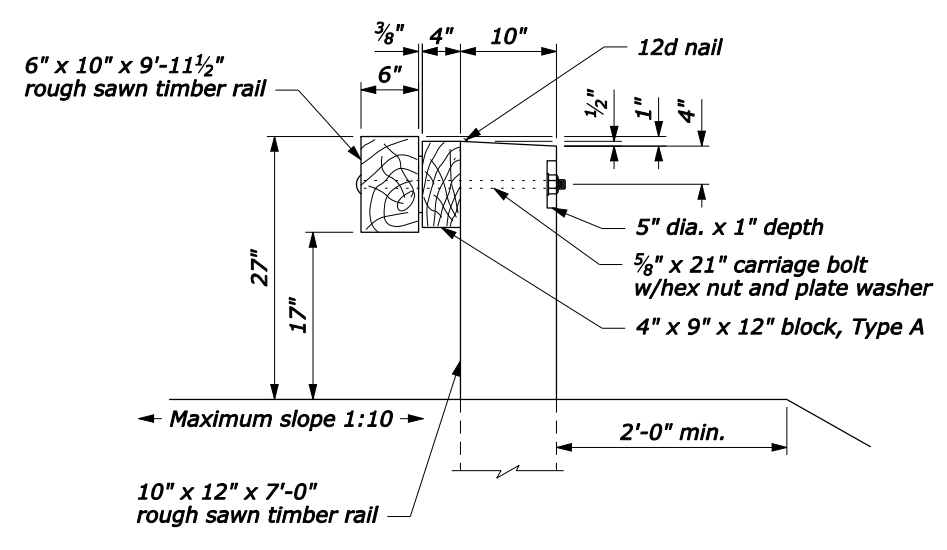
**SPLICE PLATE**  
6" x 3/8" x 3'-0"



**TRANSITION SPLICE RAIL**  
6" x 3/8" x 11'-4 1/2"



**SECTION A-A**



**SECTION B-B**

NO SCALE

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FEDERAL LANDS HIGHWAY

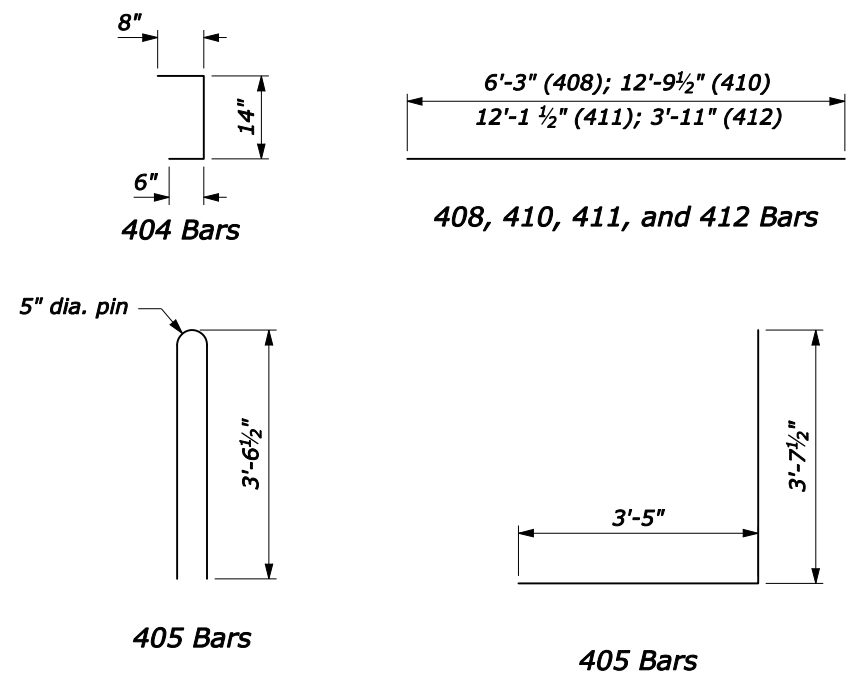
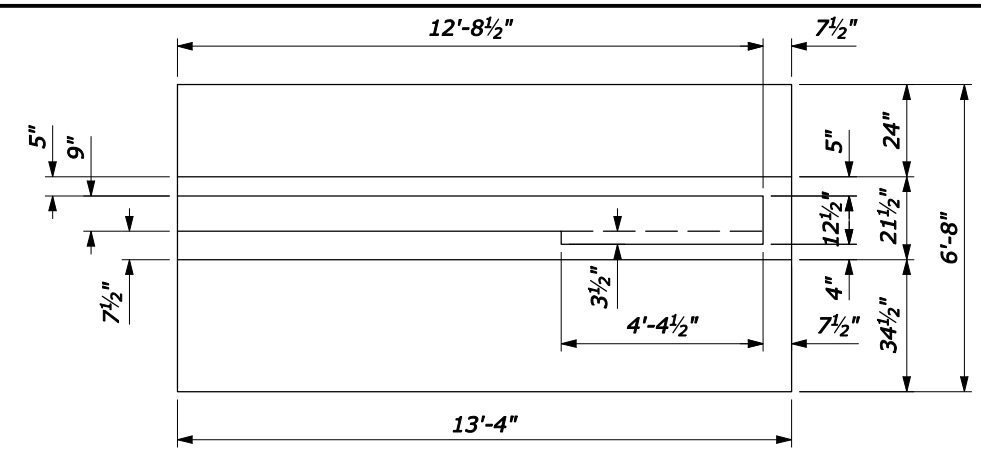
U.S. CUSTOMARY STANDARD  
**STEEL-BACKED TIMBER GUARDRAIL  
TL-2 CONNECTION TO  
STONE MASONRY GUARDWALL**  
Sheet 2 of 3

STANDARD APPROVED FOR USE --/----

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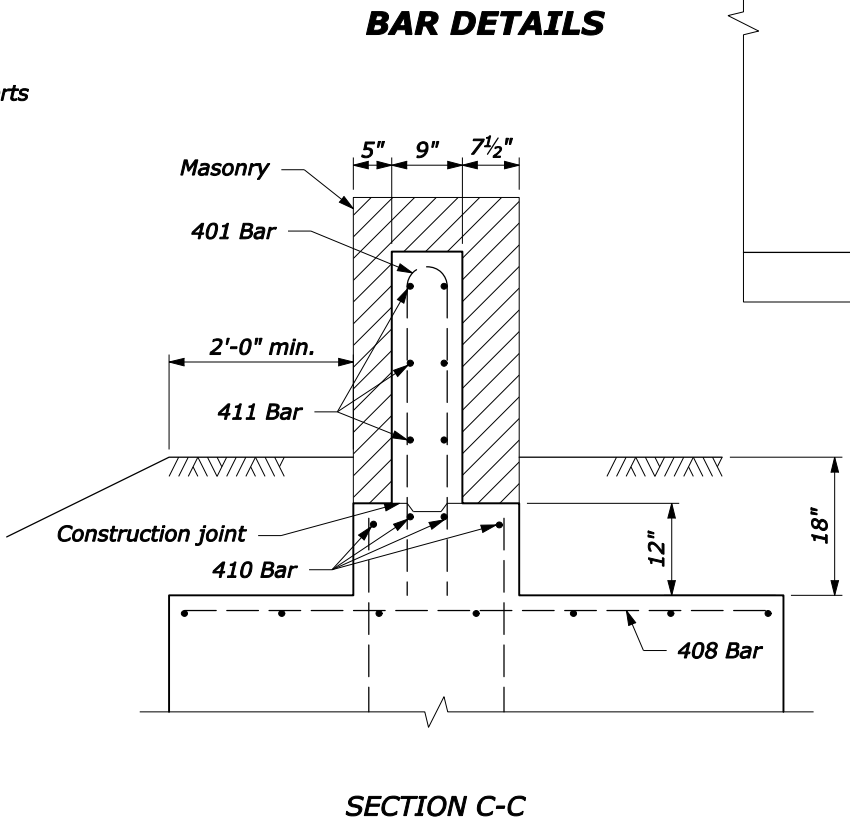
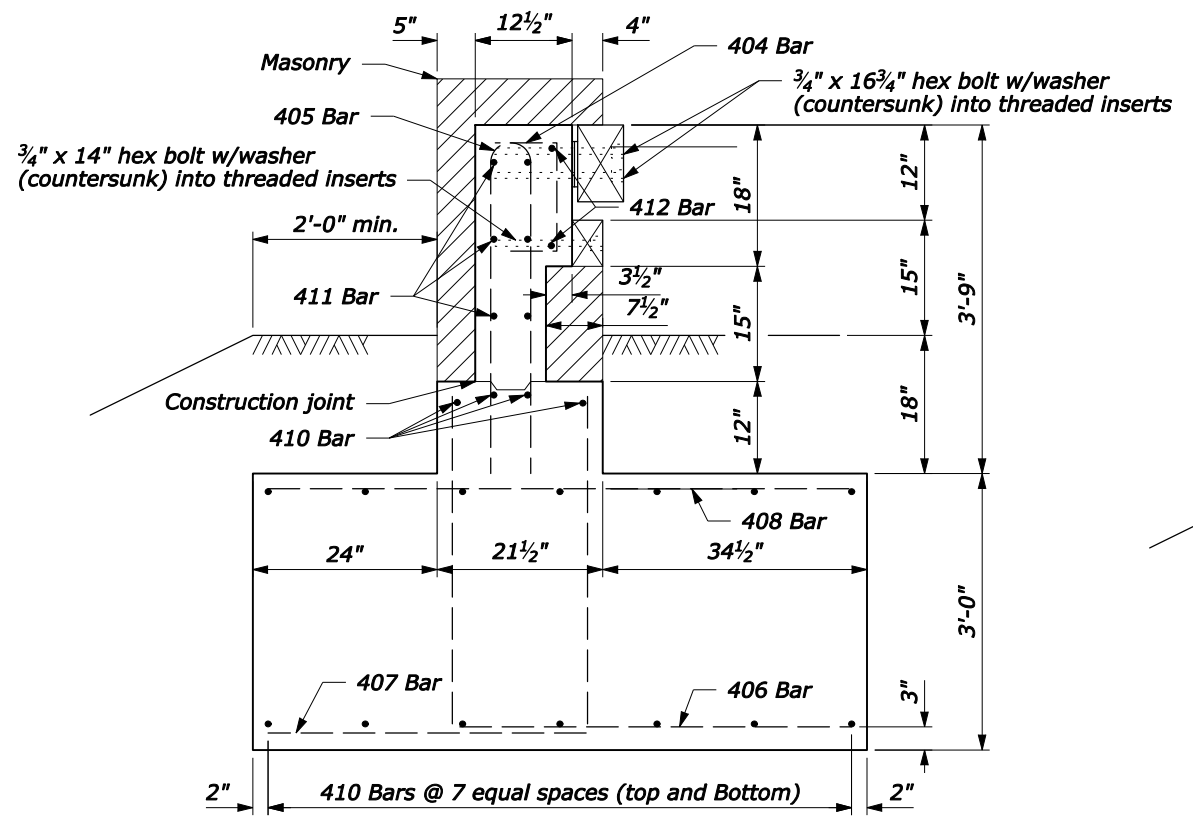
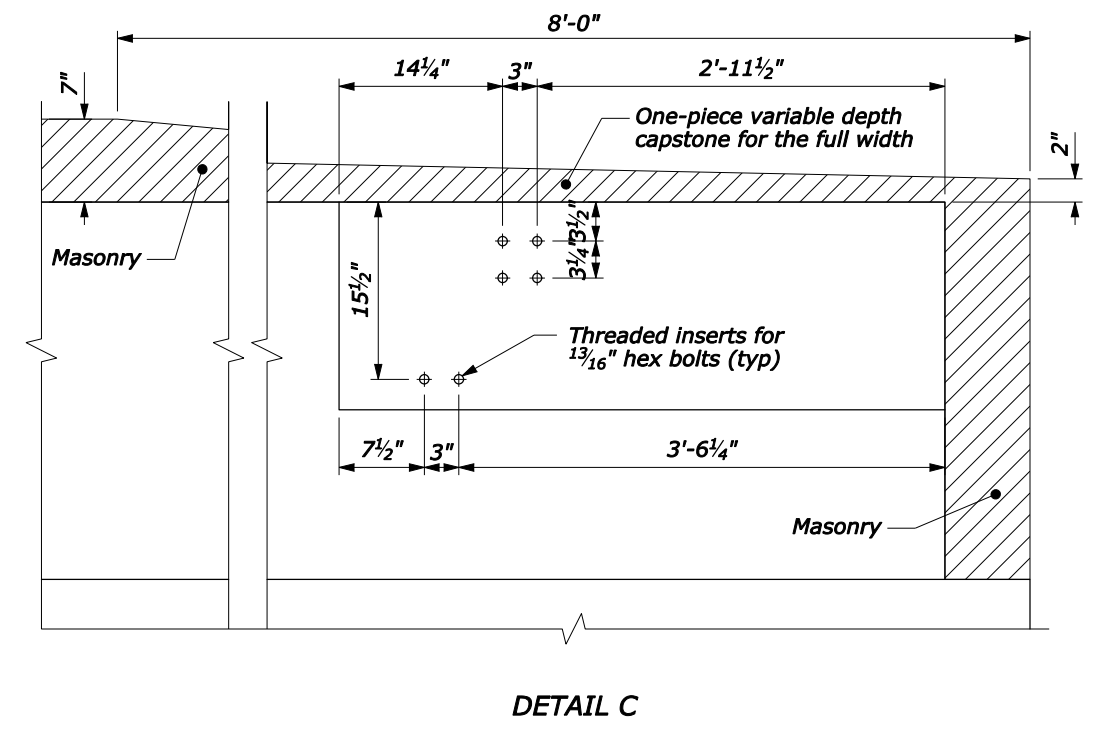
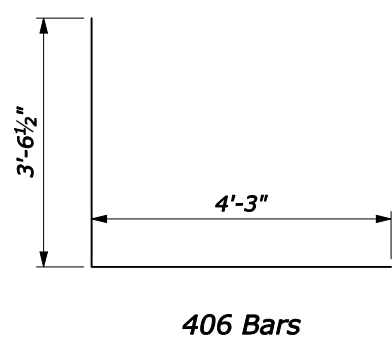
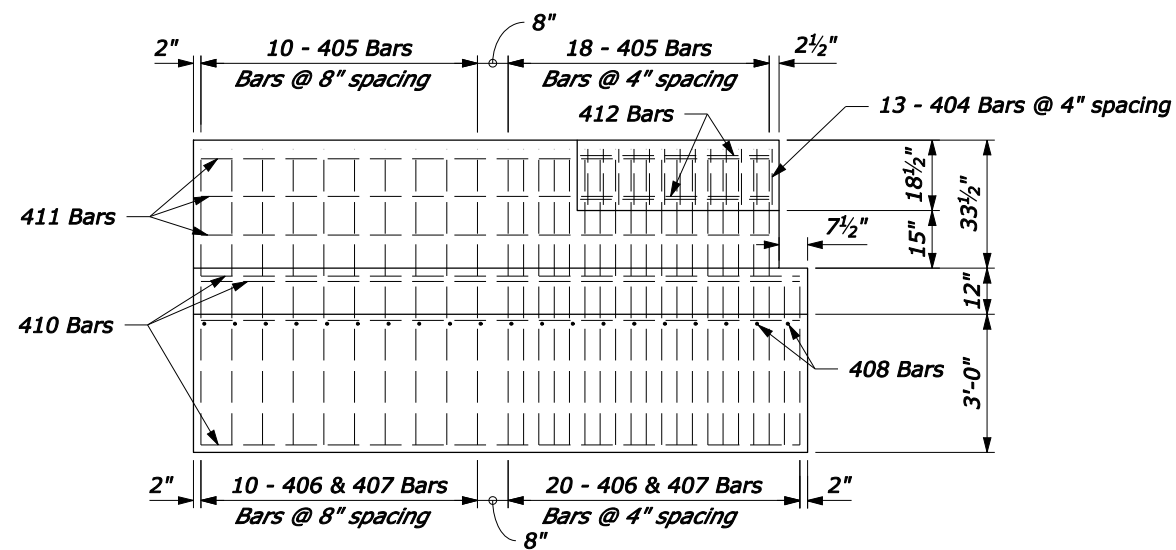
STANDARD 617-64

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**NOTE:**

- CONCRETE:** Structural concrete Class A(AE), with a specified minimum 28-day compressive strength  $F_c=4350$  psi. Vibrate all concrete. Chamfer exposed edges 3/4" unless otherwise shown. Do not use calcium chloride additives in the concrete.
- REINFORCING STEEL:** Reinforcing steel Grade 420 (ASTM A615M-96a, Grade 420) deformed billet steel bars conforming to AASHTO M31M. The minimum concrete covering to the face of any bar is 2" unless otherwise shown. All bars are US Customary size #5.
- Construct footing against undisturbed material or backfill with well compacted granular material.



**SECTION D-D  
PARAPET END BLOCK**

NO SCALE

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FEDERAL LANDS HIGHWAY

U.S. CUSTOMARY STANDARD  
**STEEL-BACKED TIMBER GUARDRAIL  
TL-2 CONNECTION TO  
STONE MASONRY GUARDWALL**  
Sheet 3 of 3

STANDARD APPROVED FOR USE --/----	STANDARD
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