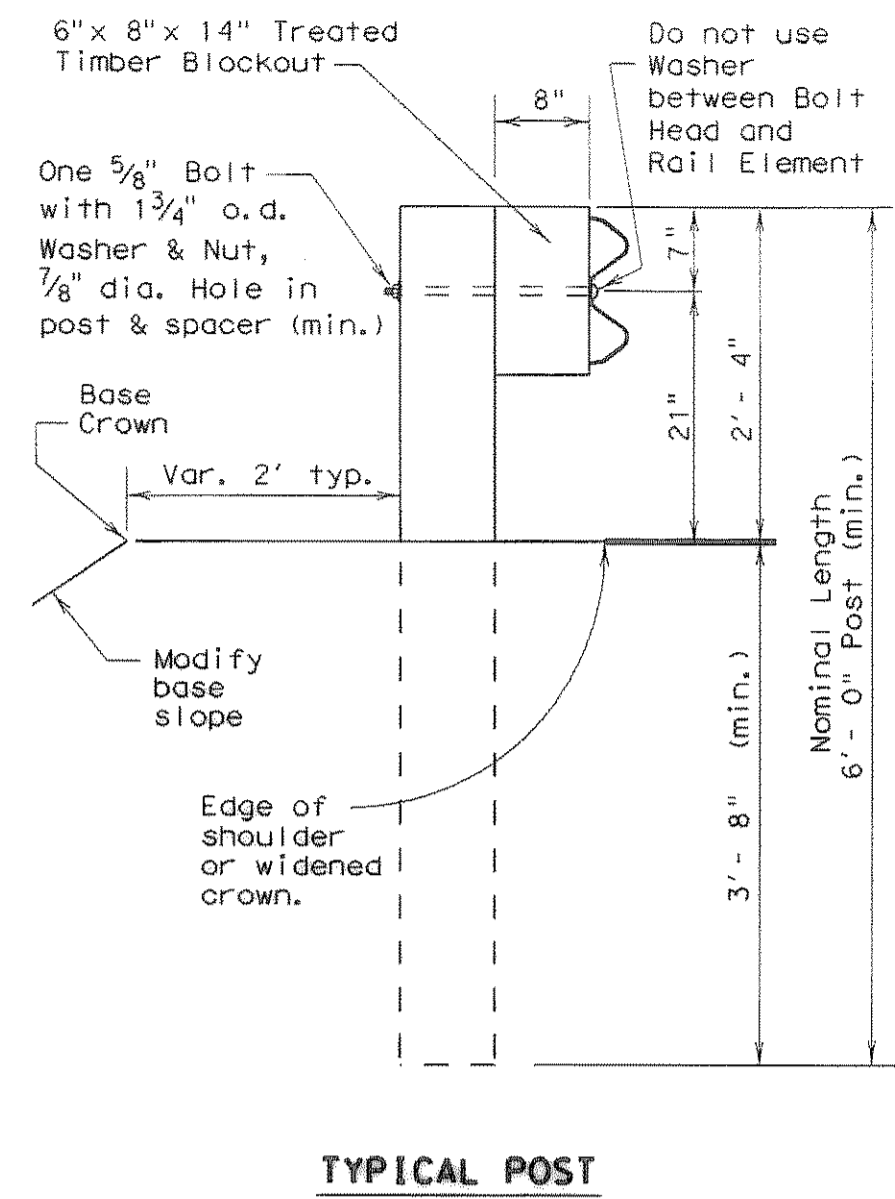
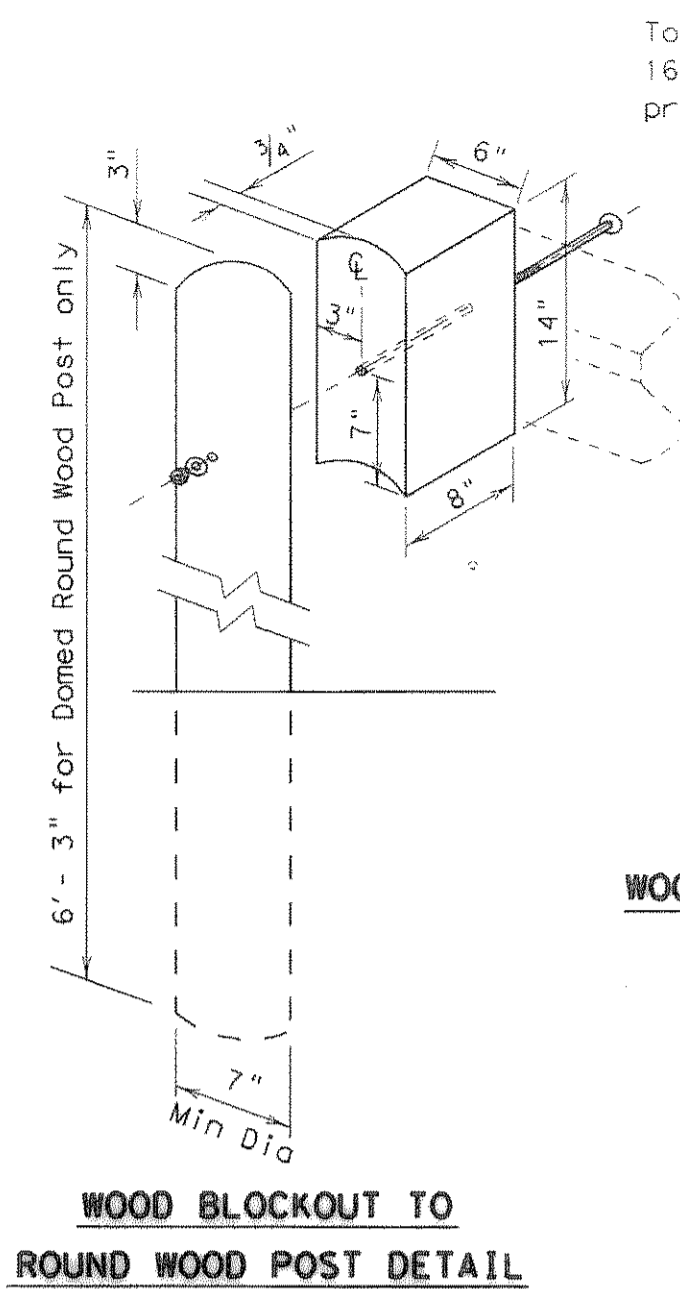


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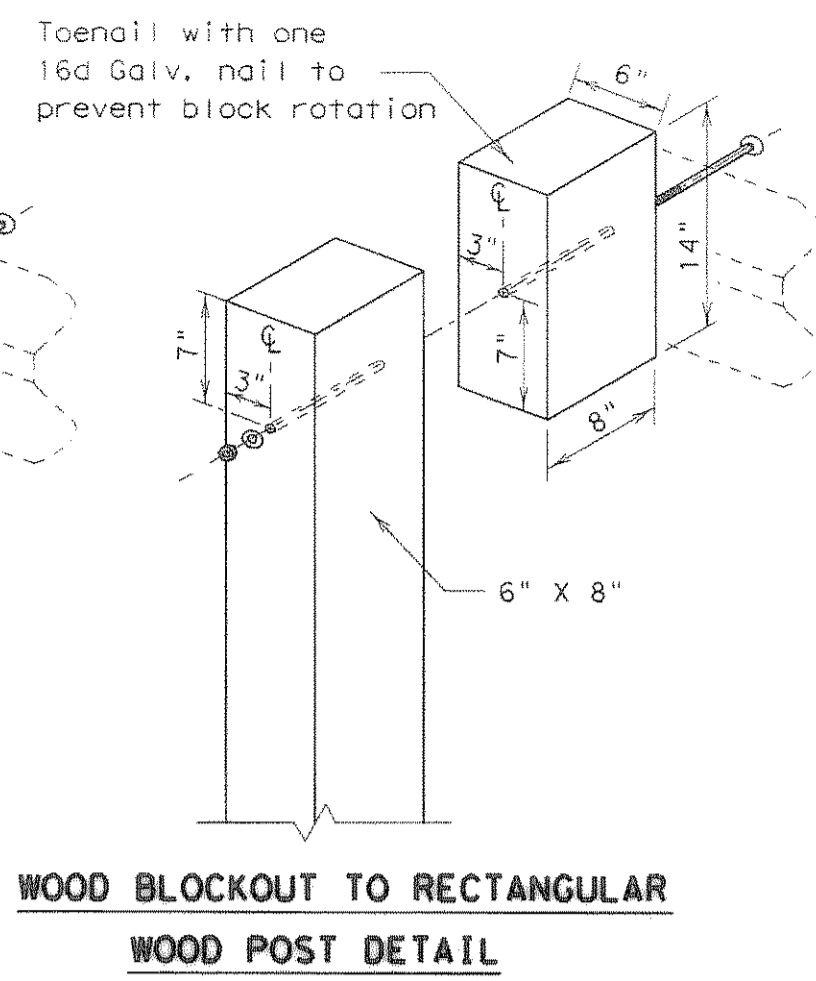
LEVELS DISPLAYED	
1	



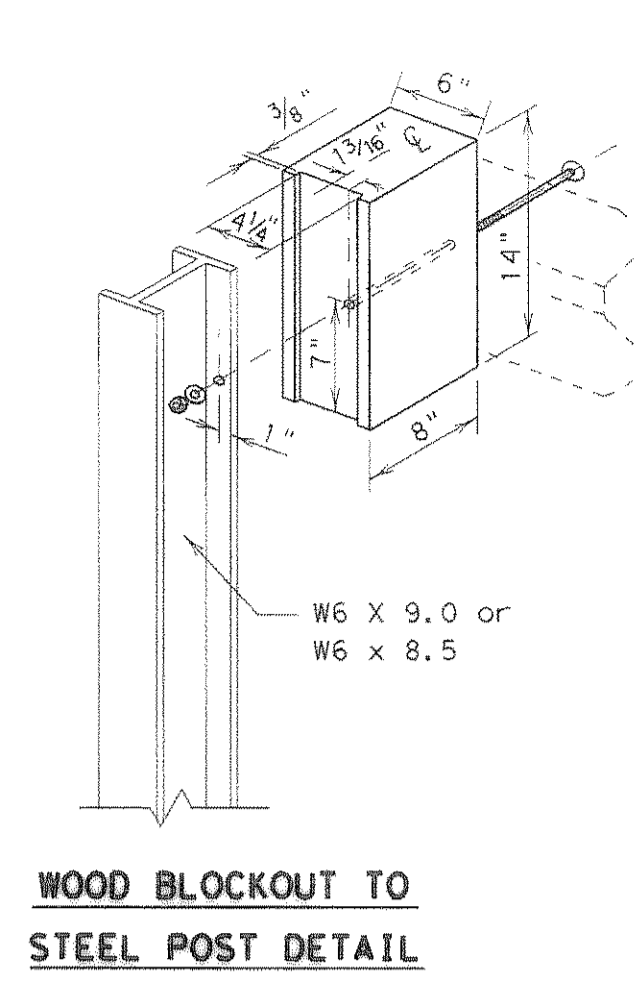
TYPICAL POST



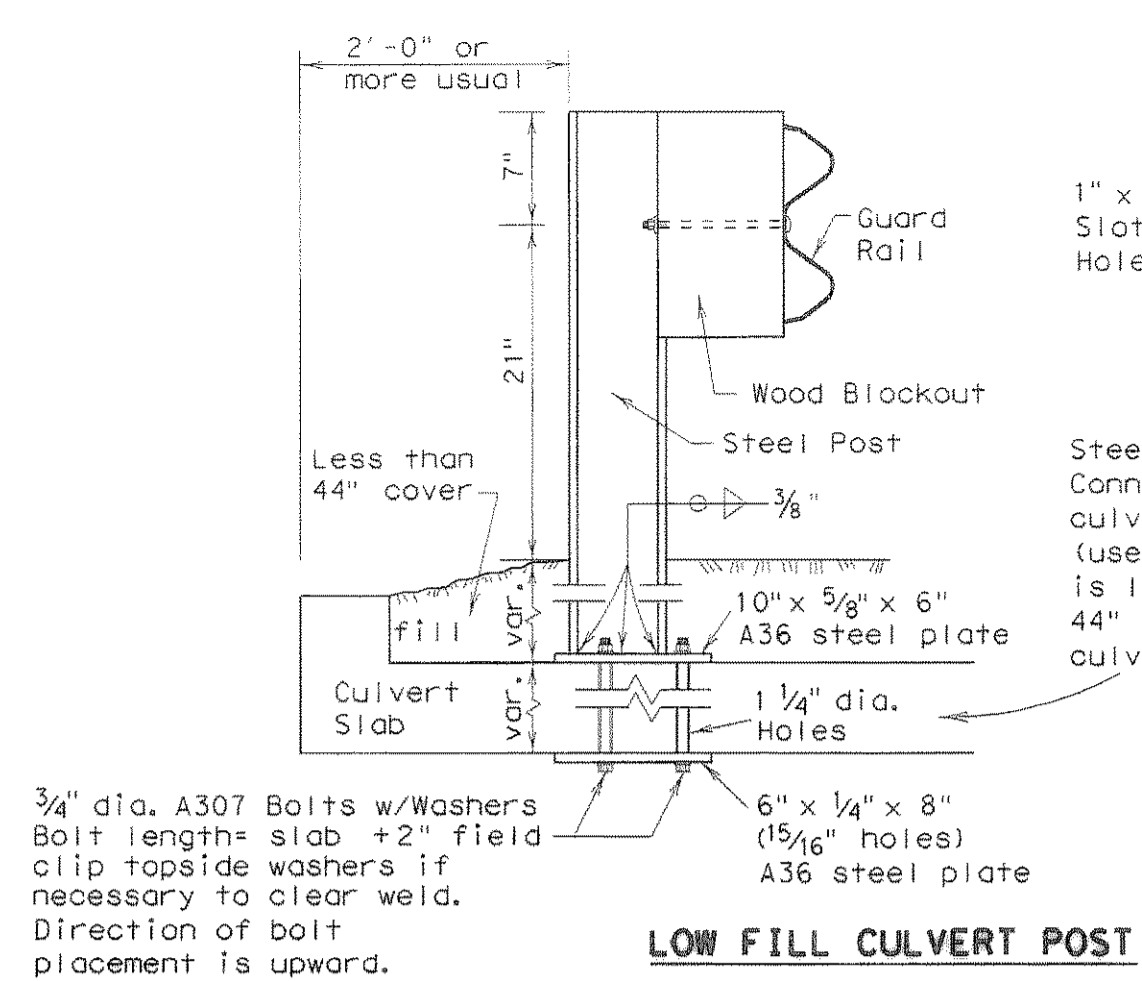
WOOD BLOCKOUT TO ROUND WOOD POST DETAIL



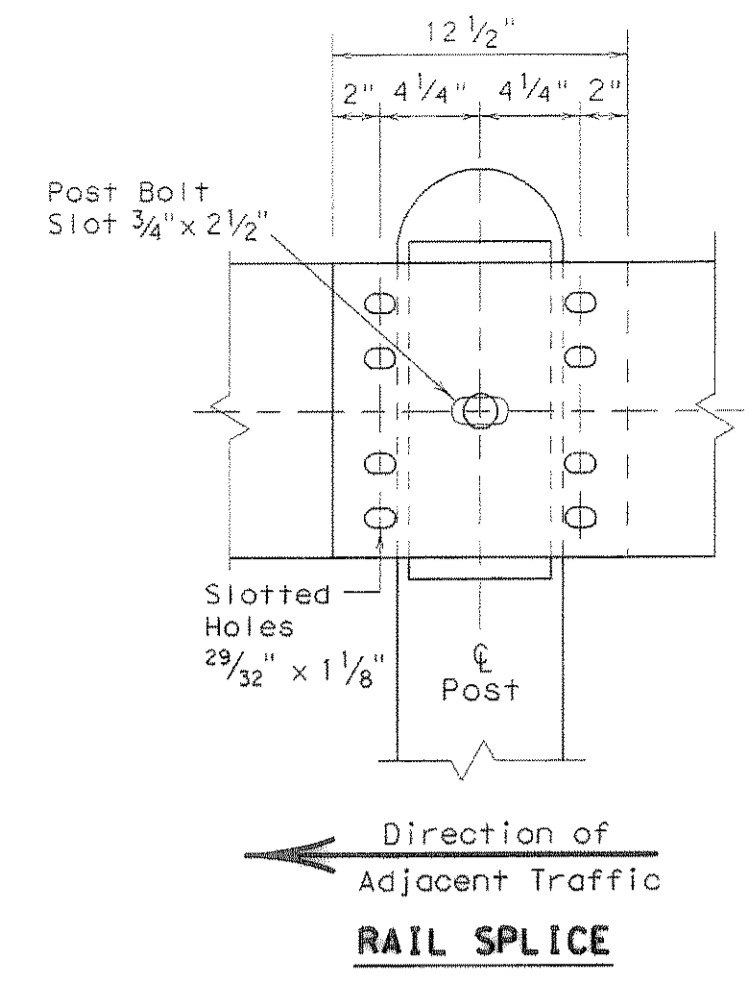
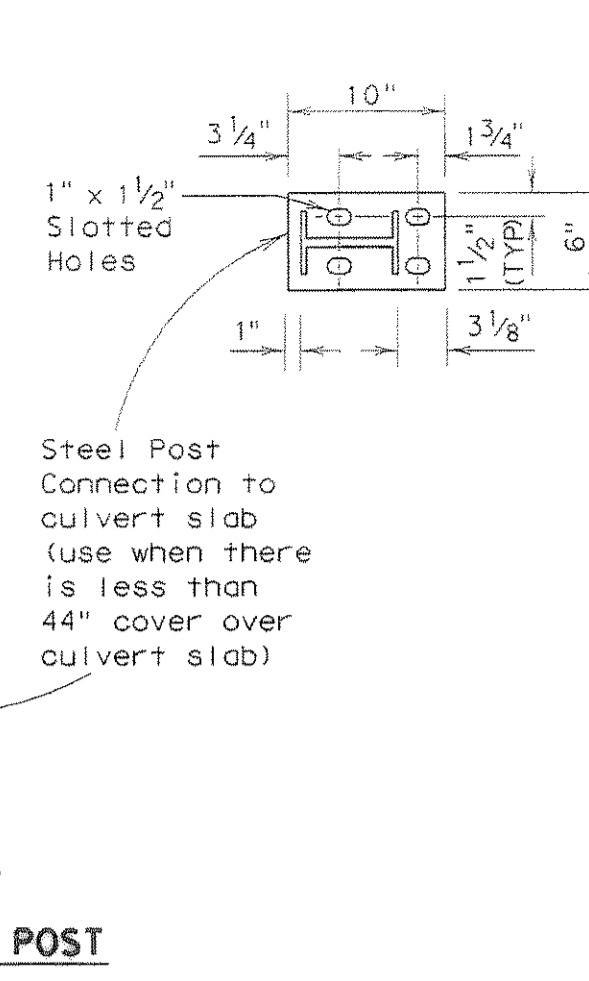
WOOD BLOCKOUT TO WOOD POST DETAIL



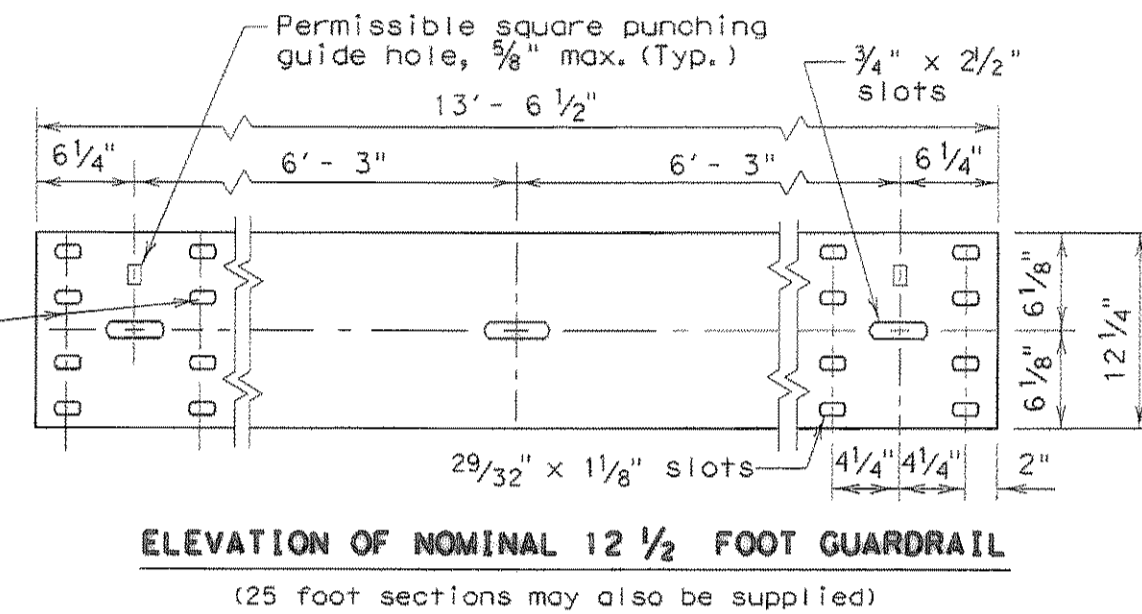
WOOD BLOCKOUT TO STEEL POST DETAIL



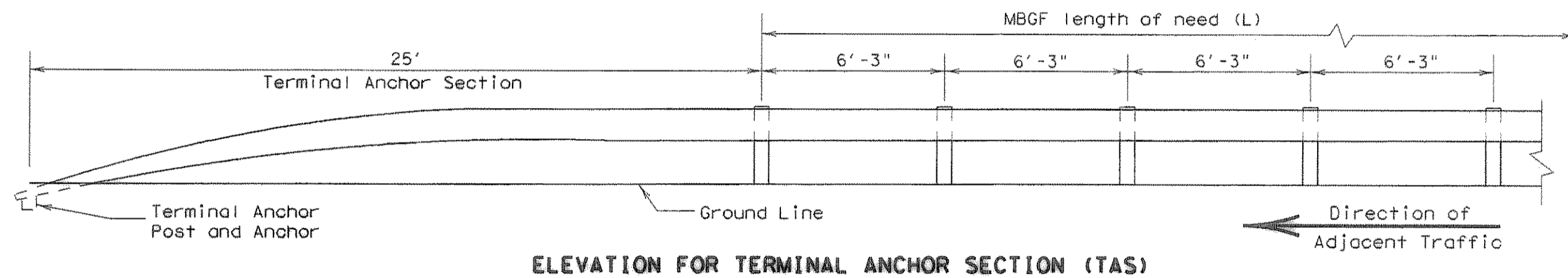
LOW FILL CULVERT POST MOUNTING OPTION



RAIL SPLICE

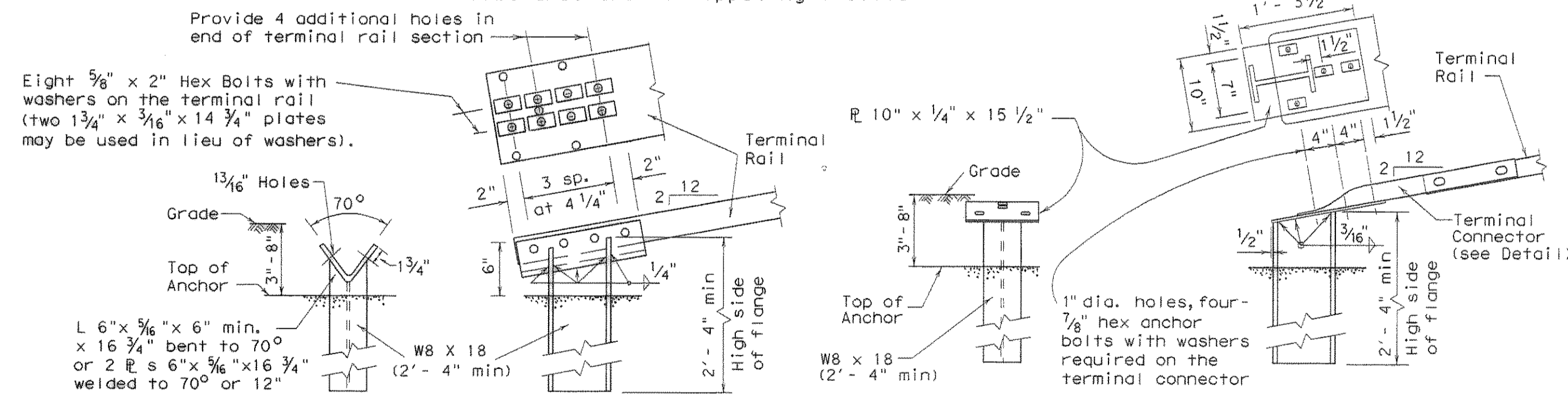


ELEVATION OF NOMINAL 12 1/2 FOOT GUARDRAIL
(25 foot sections may also be supplied)

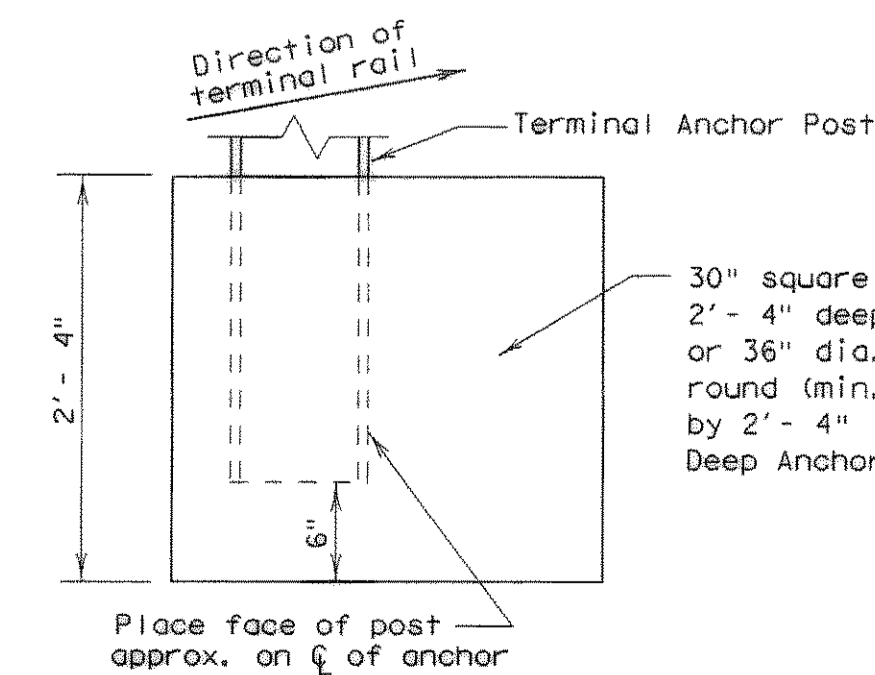


ELEVATION FOR TERMINAL ANCHOR SECTION (TAS)

(Terminal anchor sections are only for downstream guardrail end anchorage usage outside the horizontal clearance area of opposing traffic)

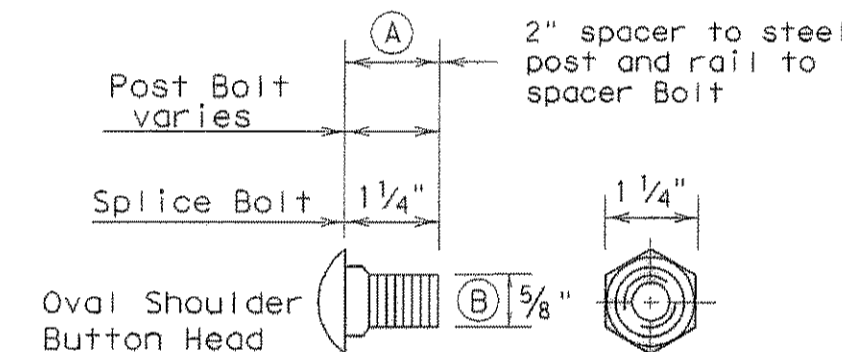
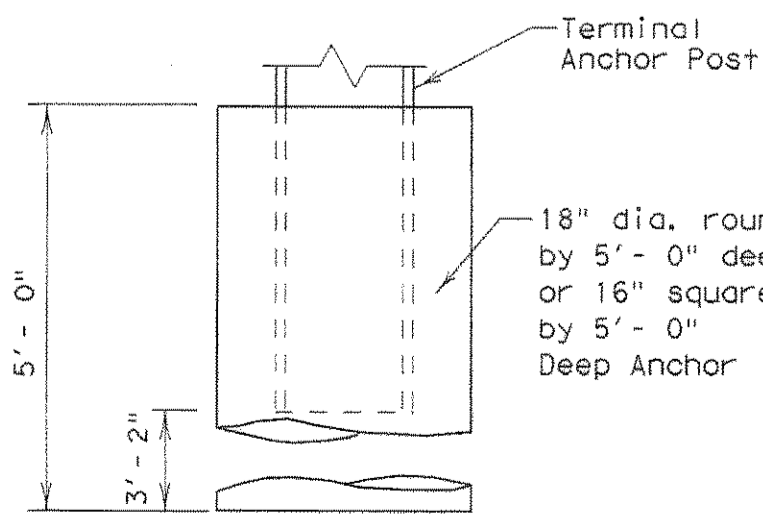


TERMINAL ANCHOR POST OPTIONS



TERMINAL CONCRETE ANCHOR OPTIONS

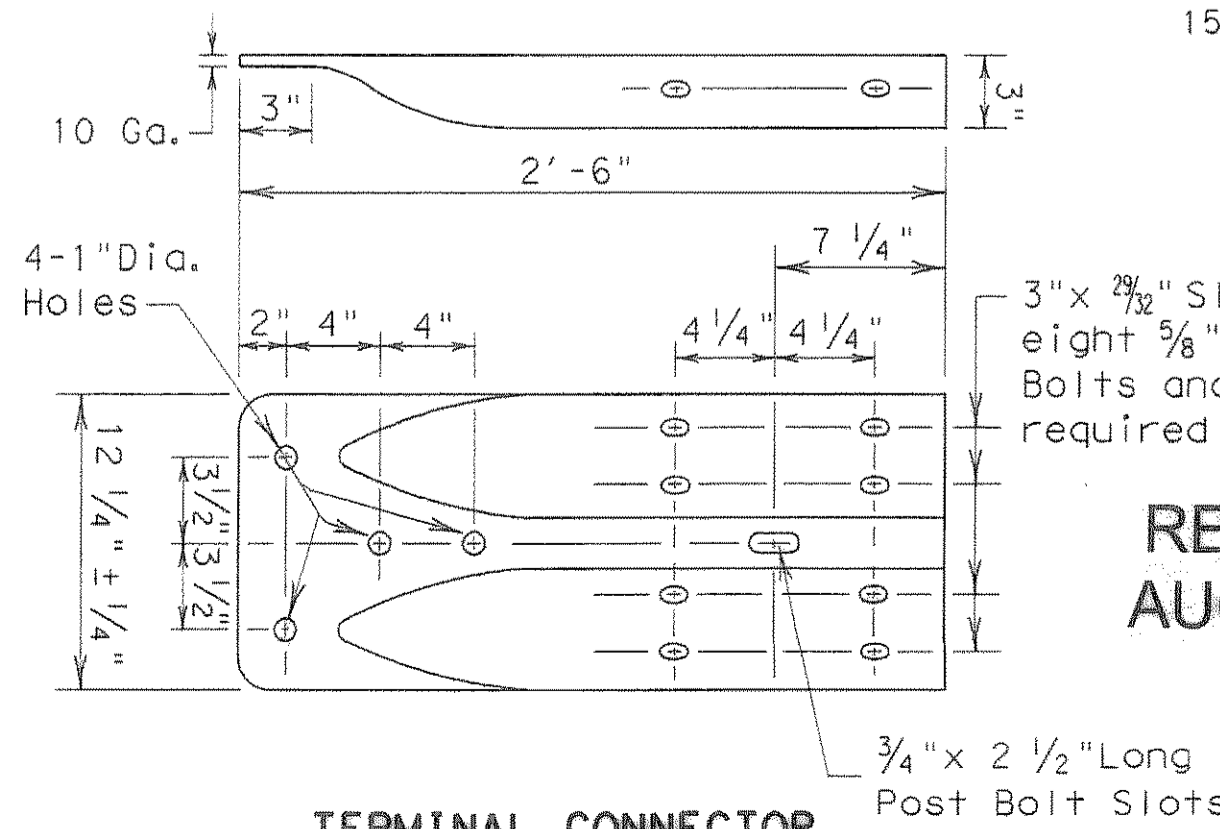
Notes:
Either post may be used with either anchor.
No construction joint is allowed in the concrete anchor.
Terminal rail may be bolted to post and in twist position prior to placing concrete anchor.
If concrete anchor is precast, the area should be compacted as directed by the Engineer, when placed in the field.



SPLICE BOLT

- A) 1/4" spacer to steel post hex bolt, 2" rail to spacer button head bolt.
- B) 7/8" hex bolts required for terminal connector

TERMINAL CONNECTOR: The terminal connector may also be used on the MBGF (TL2) transition (See MBGF (TL2) Standard Sheet), or on the downstream end of a concrete rail located outside the horizontal clearance area of opposing traffic. (See BED Standard Sheet)



TERMINAL CONNECTOR

RECORD PLANS
AUGUST 29, 2008

R = Radius
D = Diameter

1. The exact position of guard fence shall be as shown elsewhere on the plans or as directed by the Engineer. Guard fence shall be transitioned to a smooth connection with other guard fence or structure railing as shown elsewhere on plans.
2. Rail element shall meet all requirements of AASHTO M-180 except as modified on the plans. The terminal connectors shall be of the same material, but shall not be less than 10 gauge. Contractor shall verify that the locations of bolt holes match those in the Terminal Connector prior to ordering of materials.
3. Unless otherwise shown in the plans, guard fence placed in the vicinity of curbs shall be blocked out so that the face of curb is located directly below or behind the face of the blockout. Rail placed over curbs shall be installed so that the post bolt is located approximately 21-inches above the gutter pan or roadway surface.
4. Unless otherwise shown in the plans, MBGF shall be placed with the face of rail directly above the shoulder edge (or curbface) except for upstream end treatments.
5. At the option of the Contractor, the rail elements for the guard fence may be furnished in either 12 1/2 or 25 foot nominal lengths with post bolt slots for connection to posts.
6. The terminal anchor post shall be set in Class "A" concrete in (unless otherwise shown on plans) in accordance with Item, "Portland Cement Concrete". Concrete shall be subsidiary to the bid item requiring construction of the terminal rail section and anchorage system.
7. An anchor other than to a terminal anchor post shall consist of a connection similar to the rail splice or similar to the terminal connector.
8. Galvanized washers used with the eight 5/8" splice bolts and nuts that are provided for terminal connectors and/or terminal anchor posts shall be 1 3/4" x 3" x 3/16", or 1" i.d. and 2" o.d. x 0.134" (ANSI B27.2) narrow Type A plain washers.
9. Special fabrication will be required at installations having a curvature of less than 150' radius.
10. Button head post bolts (A307) shall be of sufficient length to extend through the full thickness of the nut and no more than 3/4" beyond it. Button head splice bolts (A307) are 5/8" x 1 1/4" with a 5/8" double recessed nut. Fittings (bolts, nuts, and washers) shall be in accordance with Item, Metal for Structures". Fittings shall be subsidiary.
11. Crown will be widened to accommodate guard fence.
12. If guardrail is placed on a side slope away from the pavement edge, then the slope rate between the edge of the pavement and the face of the barrier will be 1V:10H or flatter.
13. Posts shall not be set full depth in concrete.
14. Where solid rock is encountered or where shown on the plans, the diameter of the holes shall be approximately 12 inches, the backfilling shall be with a cohesionless material, and embedment depth shall be 1'-6" or more as directed by the Engineer.
15. Unless otherwise directed by the Engineer, a composite material post and/or blockout from the Department approved list of suppliers may be substituted for a post and/or blockout of similar dimensions. The list of approved suppliers of posts and blockouts will be maintained by the Construction Division, TxDOT.

Texas Department of Transportation
Design Division (Roadway)

METAL BEAM GUARD FENCE

MBGF-03A

FILE: mbgf03a.dgn	DN: MAM	CS: MAM	DW: RAR	CK: MAM
© TxDOT JULY 1994	DIST	FEDERAL AID PROJECT		SHEET
REVISIONS	COUNTY	CONTROL	SECT	JOB HIGHWAY