

NOTES

POSTS: Post may be round (single roll only) or 6"x8" square-sawn pressure-treated wood or W6x9 galvanized steel. The same type post shall be used throughout the length of project unless otherwise required by the plans or permitted by the Engineer. Round posts shall be 8" plus or minus 1" in diameter at the top and not more than 3" larger at the butt with a uniform taper.

Post may be set in drilled holes or may be driven to grade.

Wood posts shall be fabricated with square ends. Posts and spacer blocks shall be pressure-treated as per 710.14. Bolt holes shall be bored and tops of posts trimmed as shown, if required, after posts are set.

SPACER BLOCKS: When wood spacer blocks are used with the steel post, a 10d nail shall be driven through the hole in the adjacent flange to prevent blocks from turning.

WASHERS: All washers indicated are standard galvanized steel of the appropriate size.

WELDED BEAMS: Welded beam guardrail posts and spacer blocks may be used for Item 606, Guardrail, provided the web and flange sizes are as shown hereon. Welding of the web to the flanges shall conform to ASTM A769, Class 1 using Grade 36 steel with the following exceptions:

7.2 Test reports of tensile properties for each lot shall accompany each shipment.

12. Beams which have imperfections repaired by welding shall not be accepted for use in Item 606.

13. Random samples shall be tested by the Department from materials delivered to the project site or other locations designated by the Laboratory.

* **FOR SPECIFIC POST** embedment depth requirements see Std. Const. Dwg. GR-1.2.

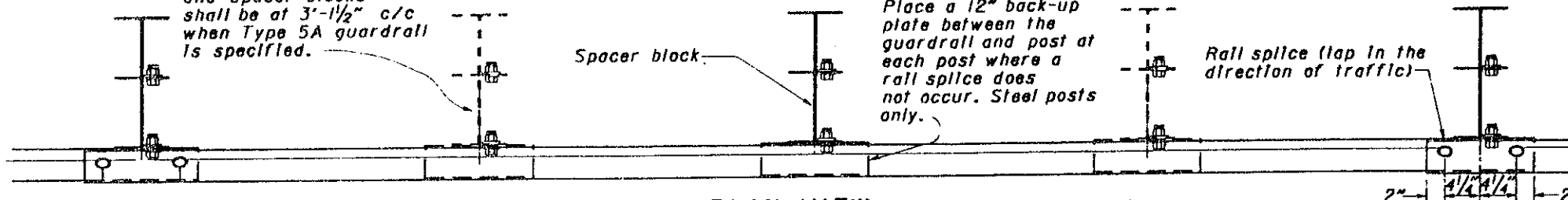
STEEL BEAM POSTS & BLOCKS				
Size	Beam depth	Flange width	Flange thickness	Web thickness
Rolled W 6x8.5	5.83"	3.94"	.194"	.170"
Rolled W 6x9	5.90"	3.94"	.215"	.170"
Rolled W 8x10	7.89"	3.94"	.205"	.170"
Welded 6x8.5	6.0"	3.94"	.194"	.170"
Welded 6x9	6.0"	3.94"	.215"	.170"
Welded 8x10	8.0"	3.94"	.205"	.170"

MISCELLANEOUS: For details not shown see Standard Construction Drawings GR-1.1 and GR-1.2.

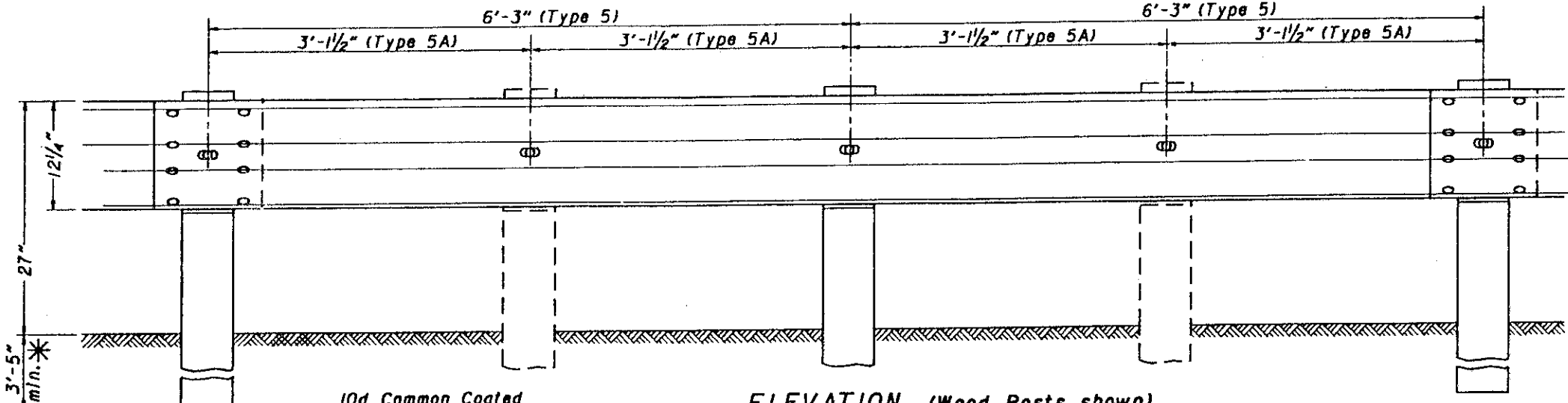
Installation of posts and spacer blocks shall be at 3'-1/2" c/c when Type 5A guardrail is specified.

Place a 12" back-up plate between the guardrail and post at each post where a rail splice does not occur. Steel posts only.

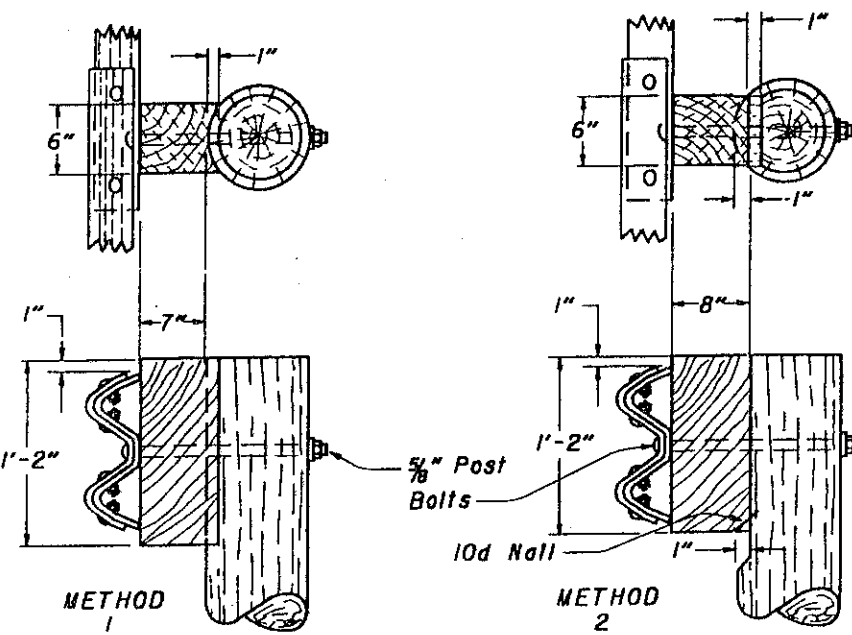
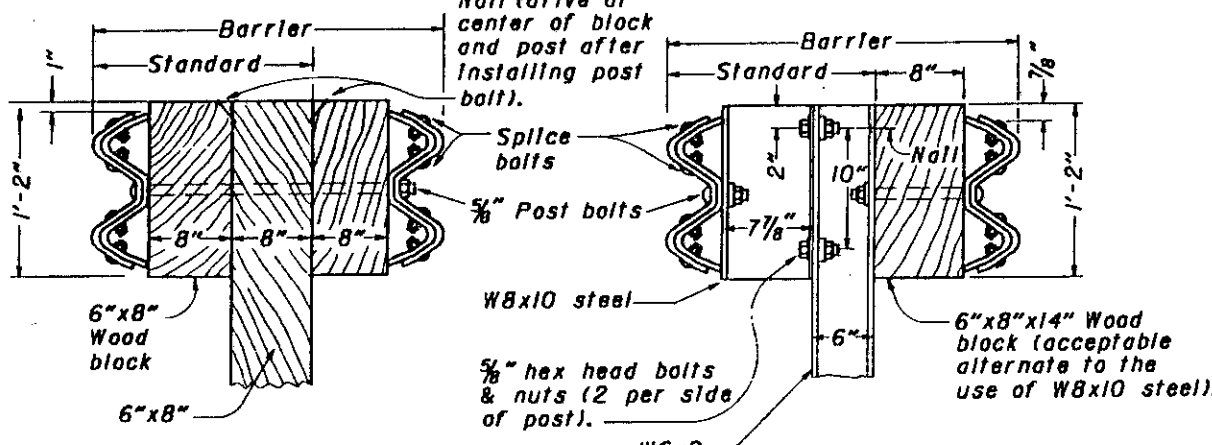
Rail splice (lap in the direction of traffic)



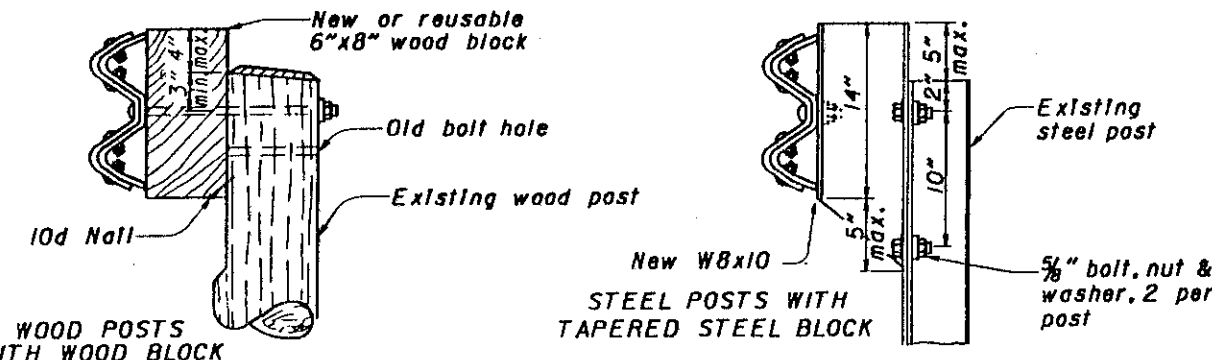
PLAN VIEW (Steel Posts shown)



ELEVATION (Wood Posts shown)



Alternate methods of placing the spacer blocks on round posts may be submitted for consideration and approval by the Engineer.



When the guardrail height is to be raised, wood blocks shall not be used on existing steel post.

RAISING EXISTING GUARDRAIL HEIGHT

ROUND WOOD POSTS

BUREAU OF LOCATION AND DESIGN
OHIO DEPARTMENT OF TRANSPORTATION

**GUARDRAIL
TYPE 5 & 5A**

STANDARD CONSTRUCTION DRAWING **GR-2.1**

APPROVED *R.K. Hulman* ENGR., L. & D.

DATE 5-6-91