

NOTES

POSTS May be round (single rail only) or 6"x8" square-sawn pressure-treated wood or W6x9 galvanized steel. The same type post shall be used throughout the length of the 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 driven to grade.

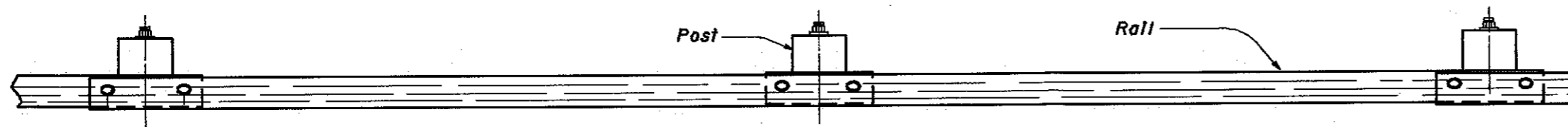
Wood post shall be fabricated with square ends. Post shall be pressure-treated as per 710.14. Bolt holes shall be bored and tops of posts trimmed, if required, after posts are set.

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

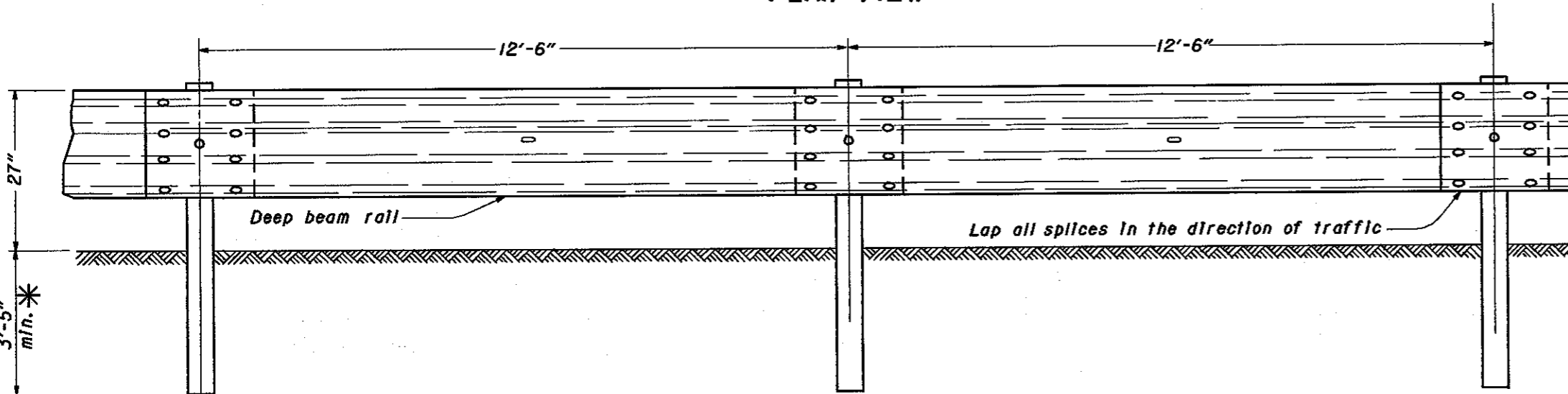
WELDED BEAM posts may be used. See note and dimensions on GR-2.1.

FOR DETAILS not shown see Std. Const. Dwgs. GR-1.1 and GR-1.2.

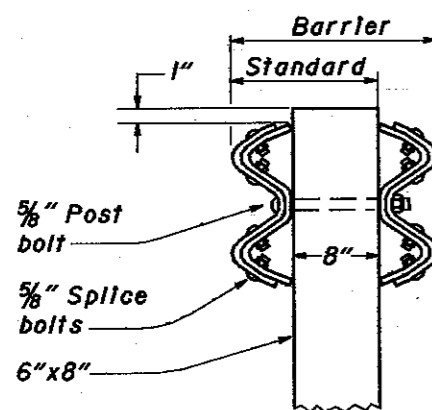
* **FOR SPECIFIC POST** embedment depth requirements see Std. Const. Dwg. GR-1.2.



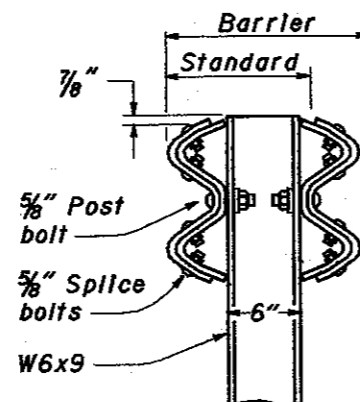
PLAN VIEW



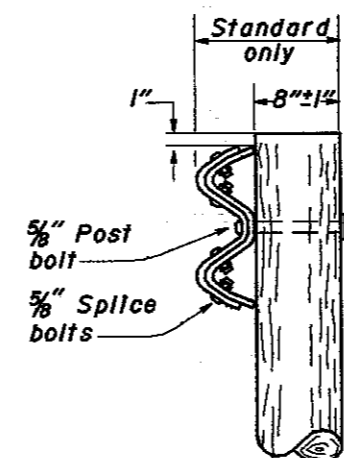
ELEVATION



SQUARE WOOD POST



STEEL POST



ROUND WOOD POST

1990

BUREAU OF LOCATION AND DESIGN
OHIO DEPARTMENT OF TRANSPORTATION

GUARDRAIL
TYPE 4

DATE
7-3-75
12-6-76
2-5-82

STANDARD
CONSTRUCTION
DRAWING

GR-2.3

APPROVED _____ ENGR., L. & D.

NOTES

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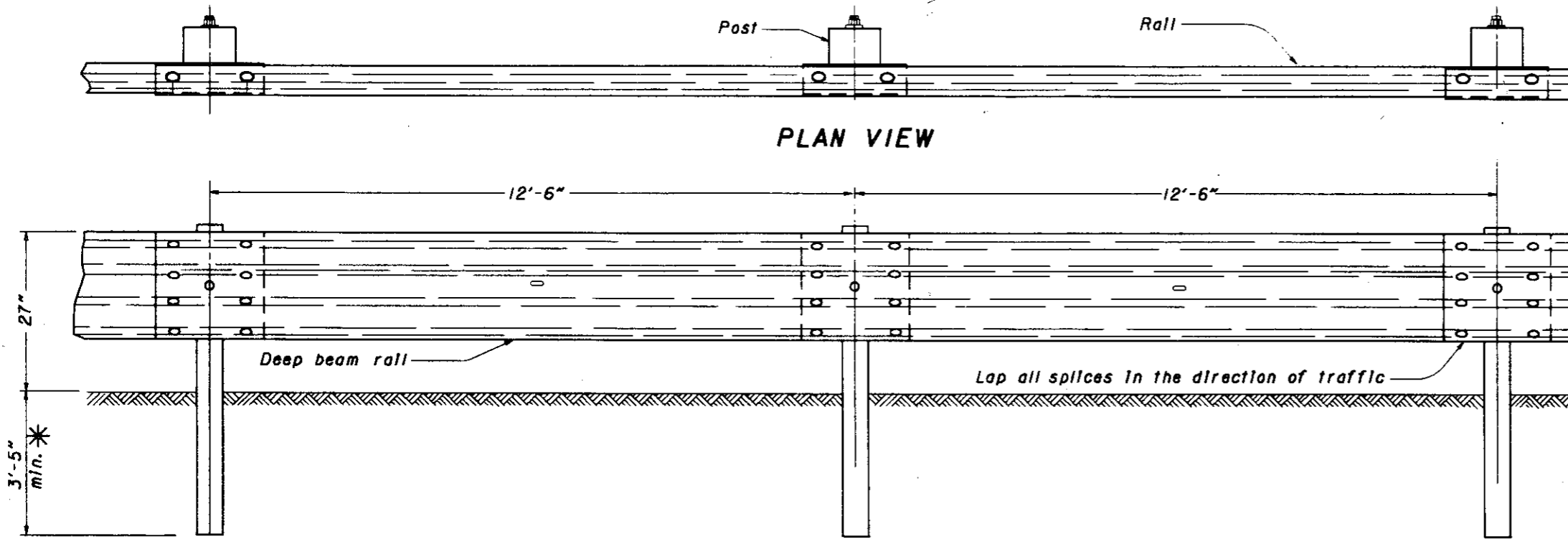
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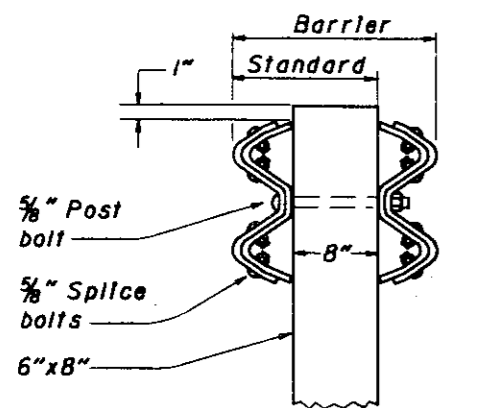
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FOR DETAILS not shown see Std. Const. Dwgs. GR-1.1 and GR-1.2.

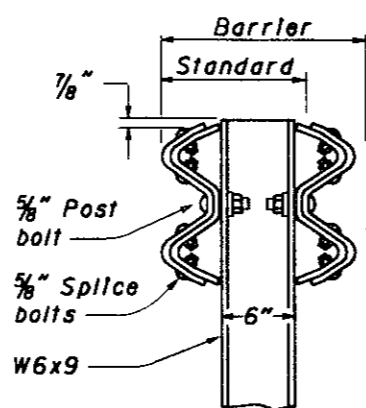
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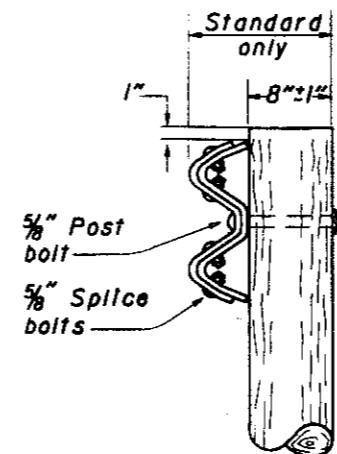
ELEVATION



SQUARE WOOD POST



STEEL POST



ROUND WOOD POST

BUREAU OF LOCATION AND DESIGN OHIO DEPARTMENT OF TRANSPORTATION	
GUARDRAIL TYPE 4	
STANDARD CONSTRUCTION DRAWING	GR-2.3
APPROVED <i>D.K. Newman</i> ENGR., L. & D.	
	DATE 5-6-91

NOTES

POSTS: May be round (single rail only) or 150x200 mm squared-sawn pressure-treated wood or W150x13.5 galvanized steel. The same type post shall be used throughout the length of the project unless otherwise required by the plans or permitted by the Engineer. Round posts shall be 200 mm plus or minus 25 mm in diameter at the top and not more than 75 mm larger at the butt with a uniform taper.

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

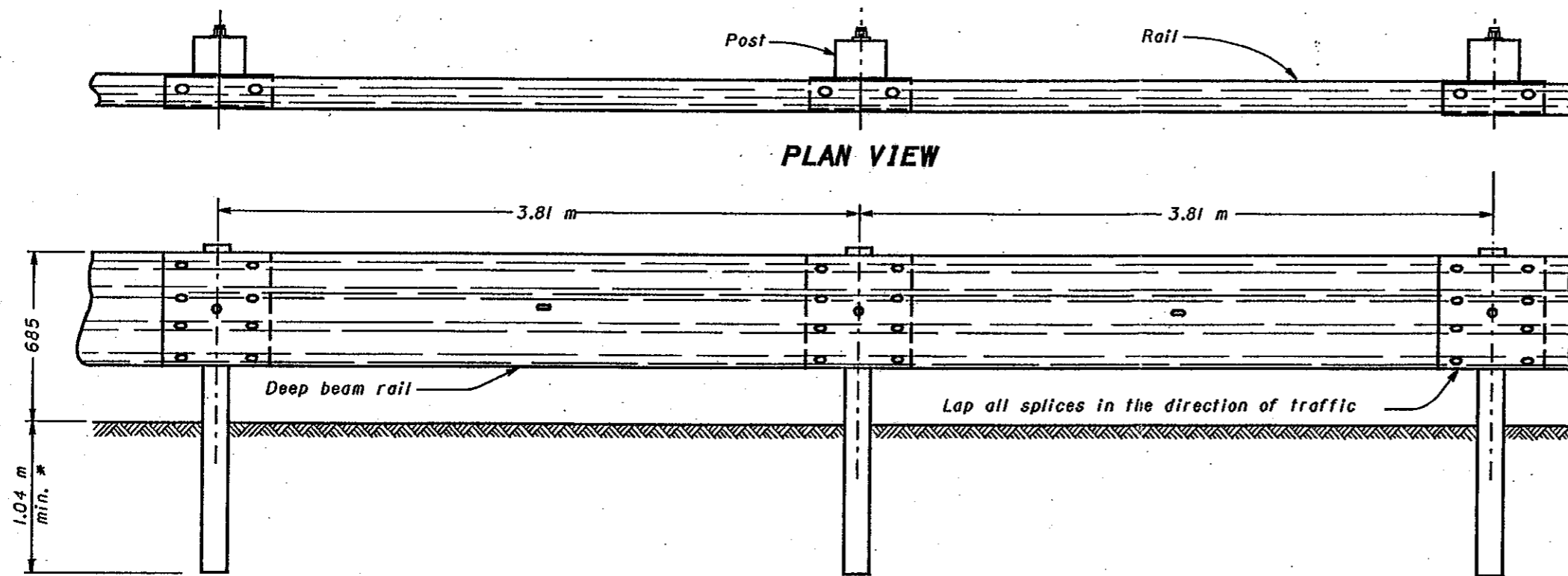
Wood post shall be fabricated with square ends. Post shall be pressure-treated as per CMS 710.14. Bolt holes shall be bored and tops of posts trimmed, if required, after posts are set.

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

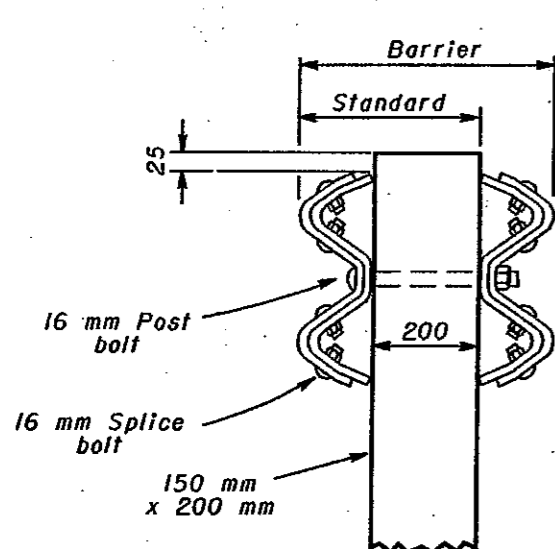
WELDED BEAM POSTS: May be used. See note and dimensions on Std. Constr. Dwg. GR-2.1M.

FOR DETAILS NOT SHOWN: See GR-1.1M and GR-1.2M.

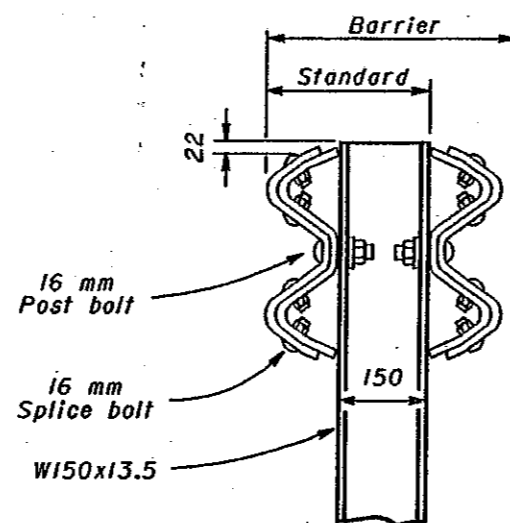
*** POST EMBEDMENT:** For specific depth requirements, see GR-1.2M.



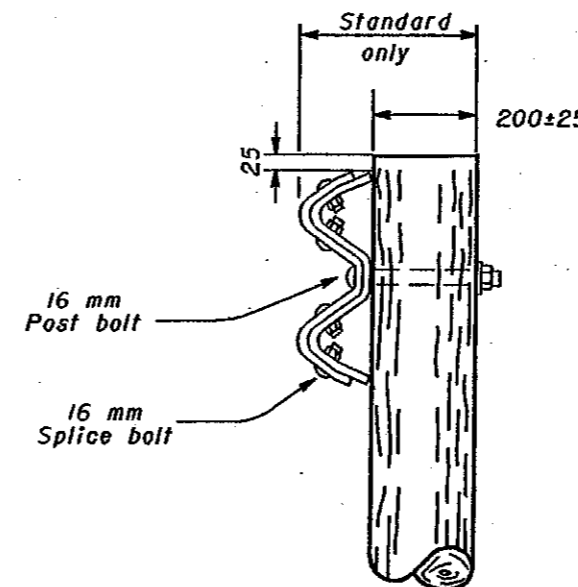
ELEVATION



SQUARE WOOD POST



STEEL POST



ROUND WOOD POST

All dimensions are in millimeters unless otherwise noted.



BUREAU OF LOCATION AND DESIGN OHIO DEPARTMENT OF TRANSPORTATION	
GUARDRAIL TYPE 4	DATE 11-30-94
STANDARD CONSTRUCTION DRAWING GR-2.3M	
APPROVED <u>D.K. Ahlman</u> ENGR., I & D	

NOTES

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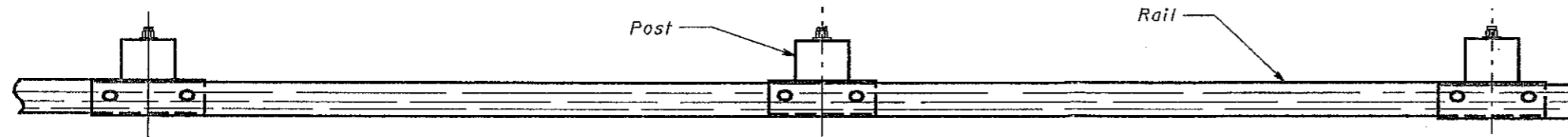
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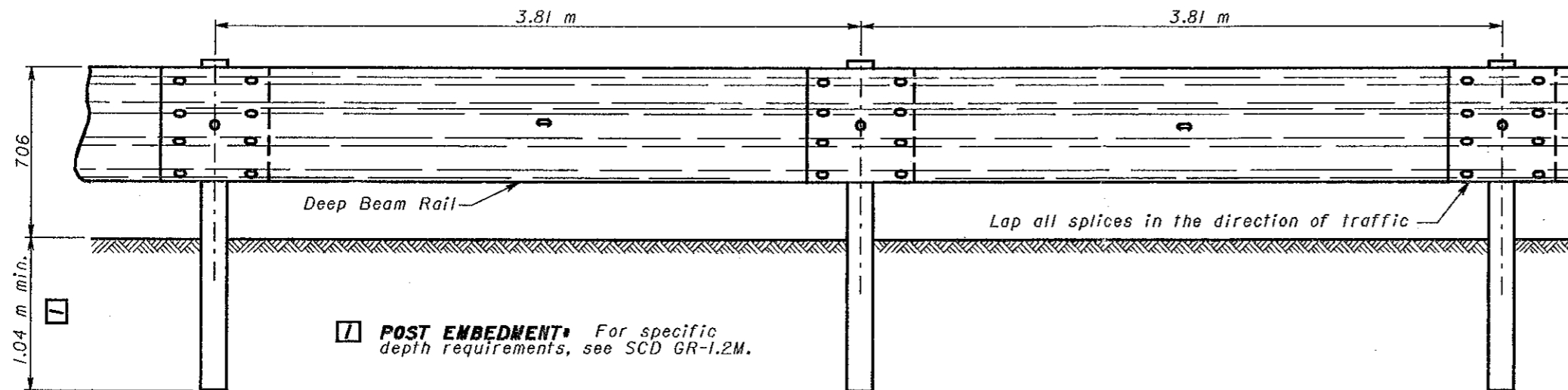
WASHERS: All washers shown are standard galvanized steel of the appropriate size.

WELDED BEAM POSTS: May be used. See note and dimensions on SCD GR-2.1M.

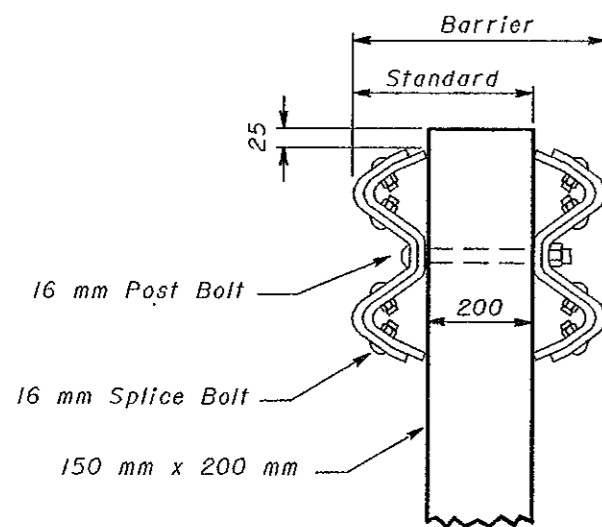
FOR DETAILS NOT SHOWN: See SCD's GR-1.1M and GR-1.2M.



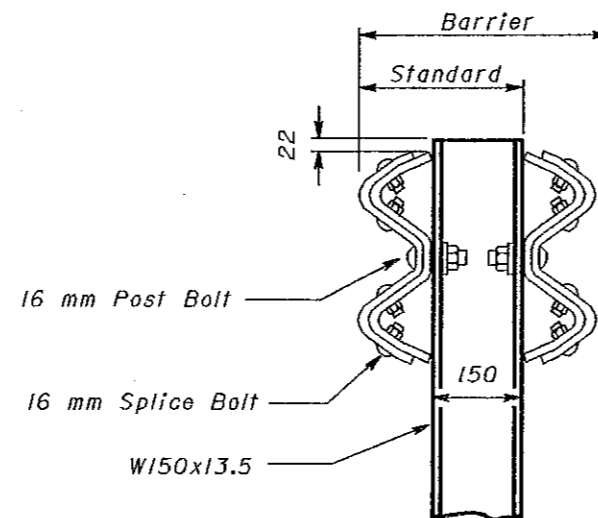
PLAN VIEW (Wood Posts shown)



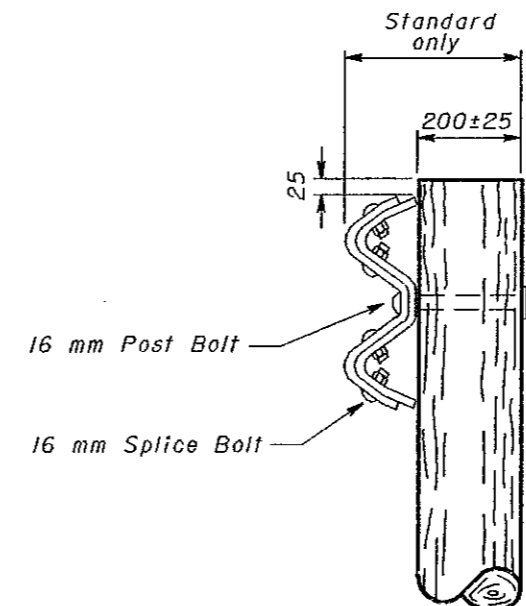
ELEVATION (Steel Posts shown)



SQUARE WOOD POST



STEEL POST



ROUND WOOD POST

All dimensions are in millimeters unless otherwise noted.



OHIO DEPARTMENT OF TRANSPORTATION

**GUARDRAIL
TYPE 4**

DATE
11-30-94
10-21-97

STANDARD
CONSTRUCTION
DRAWING **GR-2.3M**

APPROVED *[Signature]*