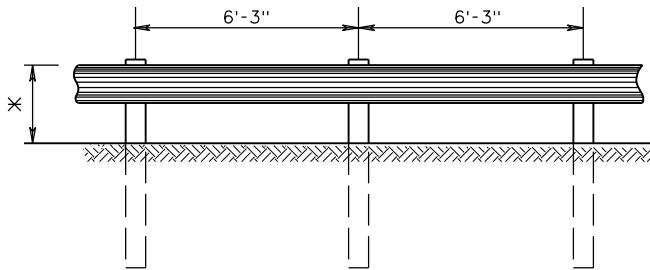
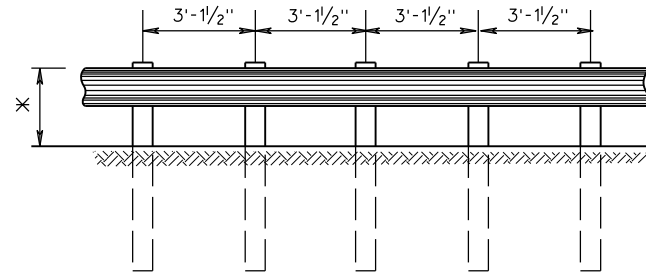


* 27³/₄" MIN - 28³/₄" MAX RAIL HEIGHT



GR-2

(6'-3" POST SPACING)
MAX DYNAMIC DEFLECTION = 3'



GR-2A

(3'-1/2" POST SPACING)
MAX DYNAMIC DEFLECTION = 2'

NOTES:

GUARDRAIL LOCATIONS SHOWN ON PLANS ARE APPROXIMATE ONLY AND CAN BE ADJUSTED DURING CONSTRUCTION IF AND AS DIRECTED BY THE ENGINEER.

FOR DETAILS OF POST AND BLOCKOUTS SEE SHEET NO. 501.05.

FOR DETAILS OF RAIL ELEMENT, RAIL SPLICE JOINT, AND ASSOCIATED HARDWARE SEE SHEET NOS. 501.01 AND 501.02.

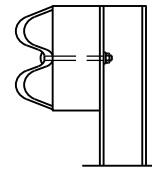
RAIL ELEMENTS ARE FURNISHED SHOP CURVED FOR RADII BETWEEN 5 FEET AND 150 FEET.

ALL GUARDRAIL POSTS SHALL BE SET PLUMB. POST SHALL NOT BE SET WITH A VARIATION OF MORE THAN 1/8" PER FOOT FROM VERTICAL. W-BEAM, BLOCKOUTS, AND POSTS SHALL BE SET AND ALIGNED WITHOUT ALTERATION OR FORCE, AS PER SECTION 505 OF THE SPECIFICATIONS.

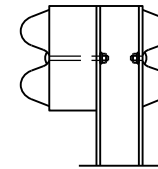
ALL GR-2 AND GR-2A RAIL SHALL BE MAINTAINED AT A HEIGHT OF 27³/₄" MIN - 28³/₄" MAX AS MEASURED PER STANDARD GR-INS.

ALL W-BEAM RAILS SHALL BE LAPPED IN THE DIRECTION OF VEHICULAR TRAVEL FOR THE FINISHED ROADWAY.

THE OPTIONAL GR-2A METHODS OF NESTING THE RAIL OR USE OF AN ADDITIONAL RAIL ON THE BACK OF THE POST FOR STANDARD GR-2A SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.



* OPTIONAL GR-2A METHOD USING NESTED RAIL



* OPTIONAL GR-2A METHOD USING ADDITIONAL RAIL ON BACK OF POST

* WHEN NESTED RAIL OR ADDITIONAL RAIL IS PLACED ON BACK OF POST FOR GR-2A THE POST SPACING WILL BE 6'-3".

| DESIGN SPEED | FLARE RATES | | |
|--------------|-----------------|-----------------|------------|
| | INSIDE SHY LINE | BEYOND SHY LINE | |
| MPH | SHY LINE LS | FLARE RATE | FLARE RATE |
| 70 | 9' | 30:1 | 15:1 * |
| 60 | 8' | 26:1 | 14:1 * |
| 50 | 6.5' | 21:1 | 11:1 * |
| 40 | 5' | 16:1 | 8:1 * |
| 30 | 4' | 13:1 | 7:1 * |

* SUGGESTED MAXIMUM FLARE RATE FOR SEMI-RIGID BARRIER SYSTEMS.



ROAD AND BRIDGE STANDARDS

A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.
STANDARD BLOCKED-OUT W-BEAM GUARDRAIL
(STRONG POST SYSTEM)
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

221
505

SHEET 1 OF 2

REVISION DATE

501.04

08/14