

28-1/2" HEIGHT GUARDRAIL

Splice locations for 28 1/2" Guardrail shall be on the post.

GUARDRAIL HEIGHT

Transitions in guardrail height shall be accomplished at a rate of 1" vertical distance in 12.5' (one element) of horizontal distance. Height transitions shall end before end treatments or connections begin.

Height transitions between 28 1/2" and 31" require moving the splice on/off the post by placing one additional post at half the normal spacing.

Guardrail height shall be as indicated on plans.

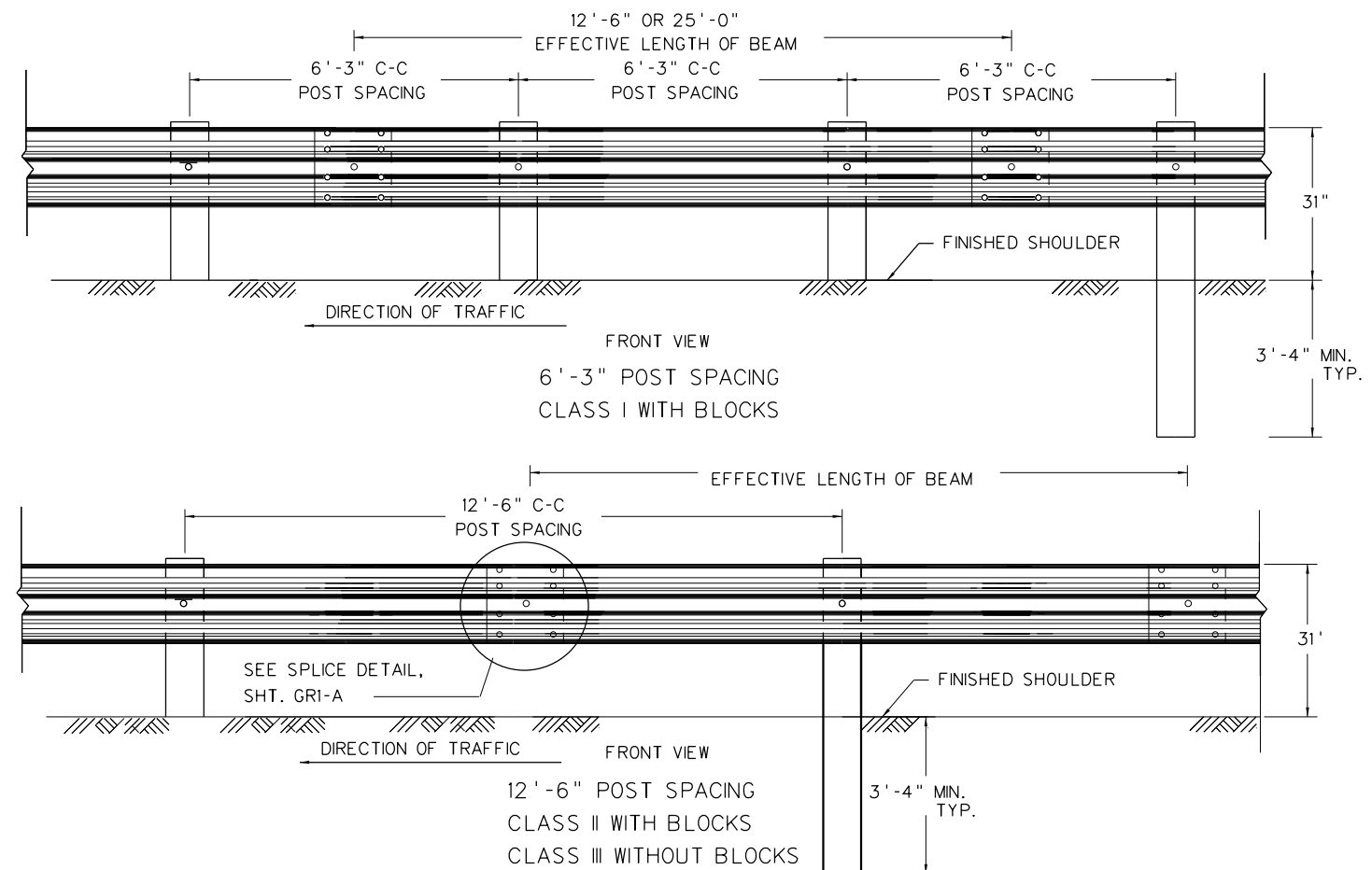
Construction tolerances for rail height is plus/minus 1".

The Standard Trailing End Treatment is acceptable for both 28 1/2" and 31" guardrail height.

Approach Terminals-Separate approved product lists will be maintained for both 28 1/2" & 31" terminal height.

Guardrail that ties to Cut Slope Terminals (CST) must be transitioned per the standard details down to 28 1/2" height (the height of the CST).

Three Beam transitions shall be per Standard GR-11 dated 11-13-12 for 28 1/2" and dated 11-21-12 for 31".



31" HEIGHT GUARDRAIL

Splice location for 31" Guardrail are generally off the post. However, for tight post spacings, splices on the posts are necessary and acceptable.

NOTES

Guardrail systems on NHS routes must meet NCHRP 350 or the most current AASHTO Manual for Assessing Safety Hardware (MASH) crash testing criteria and have an eligibility letter to be used on WVDOH projects.

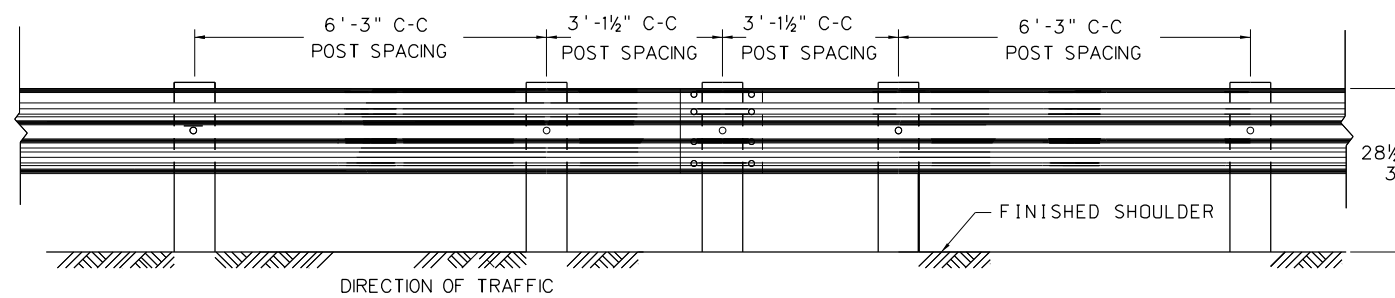
Guardrail shall be secured to the blocks, post and other elements by 5/8" dia. bolts and nuts conforming to the details herein and to the requirements of 712.4 of the Standard Specifications. Nuts shall conform to ASTM A563, Grade A or better.

Approach and Trailing End Treatments shall be as shown or specified on the Plans or directed by the Engineer.

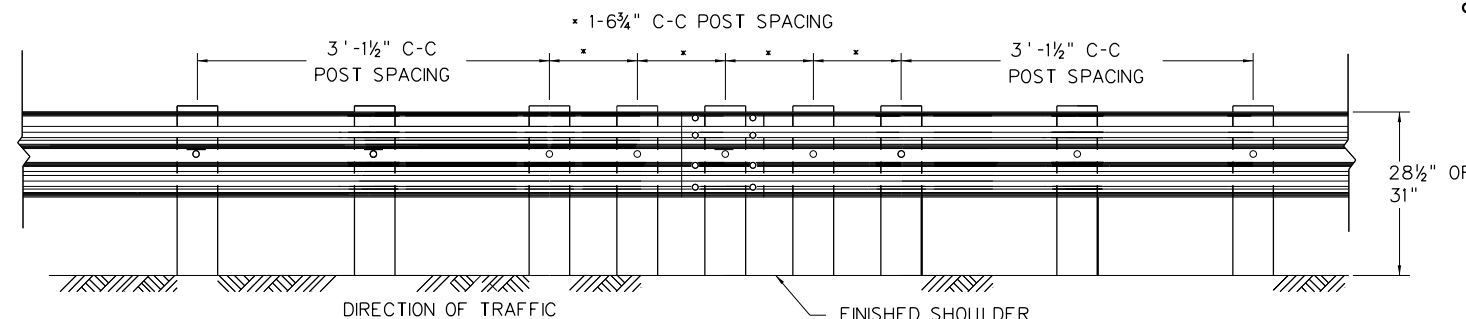
The pay quantity of guardrail will be the Linear Feet of guardrail measured along the face of the rail from center to center of end posts. Cost of the Terminal Section Buffer End shall be included in the cost of the Guardrail.

The approach slope to the face of all guardrail shall be 10:1 or flatter. The Type, Class and Height of Guardrail shall be as shown in the Plans.

Lap Guardrail in Direction of Traffic.



FRONT VIEW
3'-1 1/2" POST SPACING
CLASS IV WITHOUT BLOCKS
CLASS V WITH BLOCKS



FRONT VIEW
1'-6 3/4" POST SPACING

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

REVISED STANDARD DETAIL

PREPARED 7-1-99

REVISION DATE

11-13-12

GUARDRAIL CLASS
GUARDRAIL HEIGHT

REPLACES SHEET GR1