

### **GR-3 LOW TENSION CABLE GUARDRAIL**

For GR-3, the minimum height is 27" to the top cable with a **maximum height of 28"**. Measure the height at the posts in increments of 48 feet.

When GR-3 is hit, the cable will typically drop rendering the entire run nonfunctioning until it is repaired. GR-3 should be placed to avoid nuisance hits.

Cable guardrail should normally be used only on Limited Access projects which provide "Recoverable Areas" exceeding 14 feet in width.

### **GR-8 WEAK POST W-BEAM GUARDRAIL**

For GR-8, the minimum height is 31 1/2" to the top of the rail with a **maximum height of 33"**. When checking the height on a length of GR-8, measure at increments of 50' where there is a rail splice. Refer to the GR-INS Standard for measuring w-beam guardrail based on location on a slope.

When resetting or reusing rail, the height of the rail shall be installed to meet the current VDOT Road and Bridge Standards. If the particular site conditions are appropriate, a Standard GR-2 system can be used.

The latest GR-8 design can be used even for speeds greater than 45 mph.

When upgrading existing weak post guardrail to the current weak post Standard GR-8, curb shall be removed. If curb cannot be removed see Section 3 for guardrail installation adjacent to curb.

Proper transitions **MUST** be incorporated when GR-8 transitions to the current standard height. Splice locations and backup plates for the GR-8, and for the GR-2 transitions from GR-8, 8A, 8B to the GR-2 must be done in accordance with current Standard designs.

At transitions, measure the height at the posts at the beginning and end of the transition between standard systems.

### **GR-10 GUARDRAIL OVER CULVERT IN LOW FILLS**

For GR-10, the height is the same as GR-2.

Standard GR-10, Type I, II, or III is the preferred method of installing guardrail over culverts where fills are less than 4'-0" above the culvert top slab.