

SECTION I-4 FIXED OBJECT ATTACHMENTS (FOA) AND BRIDGE GUARDRAIL ATTACHMENTS (BRGR)

When substandard FOA's or BR-GR's exist within the limits of construction projects; both FOA's and BR-GR's shall be upgraded or replaced in accordance with the current VDOT Road and Bridge Standard or Special Design BRGR.

FOA

GR-FOA's 1, 2, 3, and 4 are designed to help prevent potential vehicular snagging at the immediate upstream end of a rigid fixed object such as a vertical or safety-shaped bridge railing. These Standards use tighter post spacing and nested rail to achieve this. A rubrail is also provided to aid in the prevention of wheel snag.

A GR-FOA-3 is used as a retrofit on existing flared bridge rail terminals.

BRGR

When the proposed design calls for the utilization of an existing bridge having an older type of parapet walls or rails, an appropriate detail showing the "Recommended Method for Attaching Guardrail to Bridge Rails" (BRGR) is to be obtained from the [Standards/Special Design Section](#) for inclusion in plans. Details of the existing bridge rail should accompany the request.

ENTRANCES OR CONNECTIONS ADJACENT TO A BRIDGE

When entrances or connections cannot be relocated or eliminated and are located adjacent to a bridge in areas with dense entrance locations, it may be necessary to install an impact attenuator since an FOA or a BRGR with a standard guardrail terminal may not fit. Plans fitting this criteria are to be submitted to the [Standards/Special Design Section](#) for review, approval and details. Additional guardrail upstream of an entrance may provide some protection for secondary hazards such as bodies of water.

Also refer to the Section 3 which discusses the use of radial guardrail off of a bridge into a connecting roadway.