

Maintenance Advisory

MA 2024-02

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CAT-350 Guardrail Terminal: Addition of Square Post Bolt Washers

The CAT-350 guardrail approach terminal is a double-sided, NCHRP 350 compliant guardrail approach terminal manufactured by Valtir (formerly Trinity Highway Products). It was one of the MDOT-approved, double-sided, NCHRP 350 compliant guardrail terminals previously identified in Standard Plan R-63 Series.



Maintenance forces are being asked to identify existing CAT-350 terminals along roadways within existing closures and/or undergoing routine maintenance activities and determine if rectangular post bolt washers are present at posts #7 and #8 of the terminal. If rectangular washers are not present, install rectangular washers at posts #7 and #8 as prescribed herein. Additional hardware, besides the rectangular washers, should not be required in cases where the existing hardware is in good condition. However, additional hardware may be required if the existing hardware is damaged and/or in poor condition.

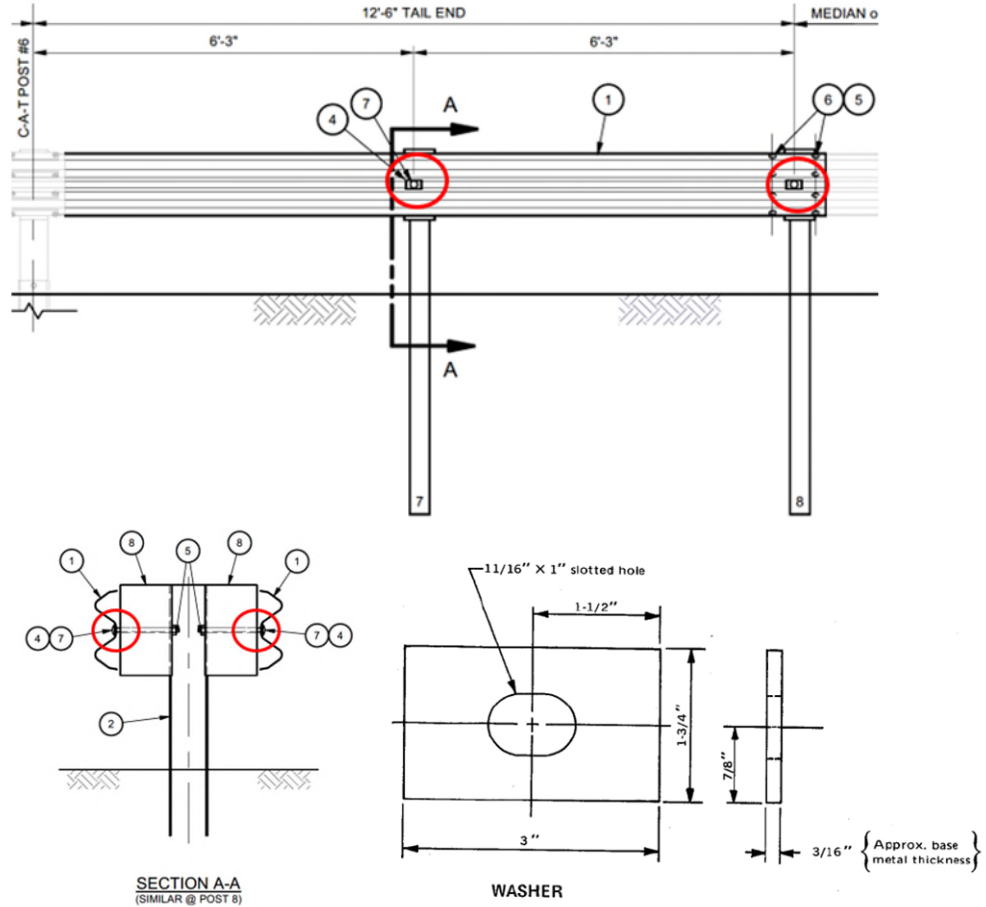
Posts #7 and #8 represent the seventh and eighth posts downstream of post #1, which is the first post of the terminal (refer to picture below).



Each rectangular washer consists of a 3/16" x 1.75" x 3" galvanized steel washer. These are the same washers that were used in guardrail installations from the 1980s and earlier.



A rectangular washer is required on each side of posts #7 and #8. Therefore, a total of four rectangular washers are required per terminal (rectangular washers circled below).



The rectangular washers are standard guardrail hardware. The washer is detailed in AASHTO M180 (Standard Specification for Corrugated Sheet Steel Beams for Highway Guardrail), and also designated by Task Force 13's *Guide to Standardized Roadside Hardware* as FWR03. The washers are non-proprietary and should be available from various guardrail suppliers. Therefore, it is not necessary to procure the washers from Valtir or any of its authorized vendors. Also, the washers can be purchased individually, so it is not necessary to purchase the washers as part of a kit or package.

Parts may also be purchased off the MDOT Guardrail parts contract. Please see TSMO Maintenance Guardrail page: [Guardrail \(sharepoint.com\)](http://sharepoint.com)