

(Old) Type 1 Beam Guardrail Transitions

*Previously, WSDOT standard practice was to install W-beam guardrail at a rail height of 27 to 28 inches, referred to as “Type 1” guardrail. WSDOT introduced Type 31 guardrail in 2009 as the replacement for Type 1 guardrail. Type 1 guardrail is no longer used by WSDOT for new installations. **The following information and plans are provided for information only.***

When there is an abrupt change from one barrier type to a more rigid barrier type, a vehicle hitting the more flexible barrier may be caught in the deflected barrier pocket and directed into the more rigid barrier. This is commonly referred to as “pocketing.” A transition stiffens the more flexible barrier by decreasing the post spacing, increasing the post size, and using stiffer beam elements to reduce the possibility of pocketing.

Note: WSDOT introduced Type 31 guardrail in 2009 as the replacement for Type 1 guardrail. The guidance in the Design Manual regarding guardrail transitions was updated in 2009 to show Type 31 guardrail transitions instead of Type 1 guardrail transitions. As such, the May 2008 version of the Design Manual was the last Design Manual version to show complete guidance regarding transitions for Type 1 guardrail (Exhibit 710-10).

The Transitions listed below correspond to the transition types referenced in the May 2008 Design Manual Figure 710-10, and were shown on the following Standard Plans:

Transition Types 1, 1A	Standard Plan C-3
Transition Types 2, 4, 5, 6	Standard Plan C-3a
Transition Types 10, 11, 12	Standard Plan C-3b
Transition Type , 13, 14, 15	Standard Plan C-3b
Transition Type , 16, 17, 18	Standard Plan C-3c