



UDOT Test Level 5 Barrier Warrants/Approval Request Form

This form is for non-column protection Test Level 5 barrier use approval. The following warrants define the minimum conditions under which further consideration of the installation of Test Level 5 barrier instead of Test Level 3 barrier is appropriate for the reviewed roadway segment. All three warrants must be met.

Test Level 5 barrier may be installed when it does not meet these minimum warrants after consultation with and approval of UDOT Division of Traffic and Safety.

If you propose to use Test Level 5 barrier, complete the following form, attach a plan view of the location, supporting data and/or crash analysis (if applicable), and then route for signatures:

Route: _____ PIN: _____ Prepared By: _____
Milepost or Station: _____ Project Description: _____

Warrants for Test Level 5 Barrier (Median and Shoulder Applications)

1. Geometrics Warrant - One of the following is met:

A. Advisory speed is 15 mph or more below the speed (for new construction use design speed, for an existing facility use posted speed).

Speed = _____ mph Advisory Speed = _____ mph

B. In locations where vertical grade is a contributing factor in median barrier hits, the vertical downgrade meets the requirements of MUTCD 2C.16 for hill sign placement.

Grade % = _____ Length of Grade = _____ ft

Warrant Met Warrant Not Met

2. Truck Percentage and AADT Warrant - One of the following is met:

A. The truck percentage is greater than 10% and the roadway segment AADT is greater than 30,000.

AADT = _____ Truck % = _____

B. The truck percentage is greater than 30% and the roadway segment AADT is greater than 3,000.

AADT = _____ Truck % = _____

C. In ramp locations, the truck percentage is greater than 10% on mainline preceding the ramp and the ramp AADT is greater than 4,500.

AADT = _____ Truck % = _____

Warrant Met Warrant Not Met

3. Crash History Warrant - One of the following is met:

A. Large vehicles have penetrated barrier in this location.

Yes No N/A If yes, attach supporting data and/or crash analysis.

B. Large vehicles have penetrated barrier in a location with similar site characteristics.

Yes No Unknown If yes, attach supporting data and/or crash analysis and image of site location.

Roadway: _____ Milepost: _____

Warrant Met Warrant Not Met

4. Further Considerations

When the above warrants are met, the following considerations may further substantiate the need to use Test Level 5 barrier:

Yes No 1. The roadway segment has a lower speed posted for trucks than other vehicles.

Yes No 2. The roadway segment has one or more runaway truck ramps.

Yes No 3. The roadway segment's posted speed limit is below adjoining roadway segments due to horizontal and/or vertical geometry.

Yes No 4. Exposure to maintenance personnel and/or traffic impacts are greater than would normally be anticipated.

Justification of Proposed Use of Test Level 5 Barrier Installation

Justification of Proposed Use of Test Level 5 Barrier Installation Despite Not Meeting Warrants

Approval/Signatures for Test Level 5 Barrier Use

Prepared by

Comments

Region Preconstruction Engineer

Comments

Traffic and Safety Operations
Engineer

Comments