Index 546-001 Raised Rumble Strips

Design Criteria

NCHRP Report 500, Volume 5: *Guidance for Addressing Unsignalized Intersection Collisions;* ***Traffic Engineering Manual*** *(**TEM**);* ***Manual on Uniform Traffic Control Devices*** **(*MUTCD*)**, *Section 3J.02*

Design Assumptions and Limitations

Index 546.001 provides standard details for the construction *Permanent Raised Rumble Strips* (A.K.A., Transverse Rumble Strips) and *Short-Term Raised Rumble Strips*.

The Department has no criteria requiring the use of *Permanent Raised Rumble Strips*. They are typically used as a crash reduction countermeasure to improve safety at unsignalized intersections. Additional guidance for consideration of permanent raised rumble strips can be found in the following documents:

- ***NCHRP Report 500, Volume 5:*** *Guidance for Addressing Unsignalized Intersection Collisions*
- ***Innovative Operational Safety Improvements at Unsignalized Intersections***
- ***TEM***, *Section 5.2* provides additional consideration for use at pedestrian crosswalks.

For requirements on the use of *Short-Term Raised Rumble Strips*, See ***FDM 240***.

Raised rumble strip limits encroaching into curves, and resulting in limited site distance, can be extended in 200’ increments to provide a prolonged Alert/Reaction Zone when specified in the Plans. Additional signage can also be considered in this scenario.

Plan Content Requirements

Include a call-out for each installation of *Permanent Raised Rumble Strips* in the Signing and Pavement Marking Plans and in the Plan Views of the Roadway Plan-Profiles.

Include a call-out for each installation of *Short-Term Raised Rumble Strips* in the Temporary Traffic Control (TTC) Plans.

Payment

Item number	Item Description	Unit Measure
546-71-1	Raised Rumble Strip Set, Permanent	EA
546-71-2	Raised Rumble Strip Set, Short-Term	EA

See the ***BOE*** and ***Specifications 546*** for additional information on payment, pay item use and compensation.