ROADWAY DESIGN BULLETIN 15-03
ESTIMATES BULLETIN 15-02
(FHWA Approved: January 21, 2015)

DATE: January 22, 2015

TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Design Engineers, District Consultant Project Management Engineers, District Roadway Design Engineers, District Construction Engineers, District Maintenance Engineers, District Traffic Operations Engineers and Program Management Engineers

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SUBJECT: Rumble Striping

This bulletin introduces a new method of creating an audible and vibratory effect that is used on asphalt pavements as a countermeasure for lane departures and center line crossover crashes. The new method is called “rumble striping”. Rumble striping will be used for the center line and edge line pavement markings on all rural, two-lane and multi-lane, flush shoulder, non-limited access facilities where the posted speed is 50 mph or greater. Rumble striping is created by utilizing the same shoulder grinding process as used on limited access facilities. However, with rumble striping, the ground-in rumble strips are in line with the center line and edge line pavement markings. Pavement markings are installed over the ground-in rumble strips producing “rumble striping”.

REQUIREMENTS

1. Meet the requirements of Roadway Design Bulletin 15-02

2. The following Design Standards Revisions (DSR) are released:
   A. The new Design Standards Index 519 (Rumble Striping) is released.
   B. The new IDS-519 (Rumble Striping) is released.
3. The following Developmental Design Standards are released:
   A. The new Index D519 (Rumble Striping) is released.
   B. The new IDDS-519 (Rumble Striping) is released.

4. The Basis of Estimates Manual pay item structure for Rumble Strips, 546-72-AB has been revised to include:
   
   \[ 
   \begin{array}{|c|c|}
   \hline
   A &= \text{Type} \\
   5 \text{ (Ground-in)} &= 2 \text{ (16” Center Line)} \\
   3 \text{ (8” Edge Line)} &= 4 \text{ (Non Standard)} \\
   4 \text{ (Non Standard)} &= 5 \text{ (16” Shoulder)} \\
   \hline
   \end{array} 
   \]

**COMMENTARY**

The *Design Standards* Index 519 and its associated *Instructions for Design Standards* (IDS-519) is to be used for rumble striping on dense-graded friction courses on an unrestricted basis. The DDS Index D519 is to be used for rumble striping on open-graded friction courses. The Roadway Design Office will monitor the installations for a period of time to ensure the specified milling depth produces the desired field depths when used with various FC-5 design mixes.

*Standard Specification* Section 546 has been revised to address construction of rumble striping. The revised specification will be implemented with the July 2015 Workbook.

**IMPLEMENTATION**

The requirements of this bulletin are effective for all projects with LET dates after July 1, 2015.

To meet the requirements of this bulletin, when rumble striping is to be used on the project insert the revised *Design Standards* Index drawings or the Developmental Design Standards Index drawings in the Plans as described in the *PPM, Vol. 2, Section 3.8*.

**CONTACT**

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