NOTES:

1. When friction course extends more than 8' beyond the edge of the traveled way, blade off the extended friction course to the 8’ line prior to rumble strip grinding.

2. Use the continuous array on both inside and outside shoulders 1,000 feet in advance of bridge ends or back to the gore recovery area for mainline interchange bridges. Use the skip array for all other locations.

3. Exclude rumble strips at the following locations:
   A. At mainline tolling areas, terminate rumble strips at the end of the mainline normal section.
   B. At All Electronic Tolling (AET) facilities, terminate rumble strips within 50 feet of the centerline of the overhead gantry.
   C. On outside shoulders of entrance ramp terminates, terminate rumble strips at the point of the physical gore and resume at the end of the acceleration lane taper.
   D. On outside shoulders of exit ramp terminates, terminate rumble strips at the start of the deceleration lane taper and resume at the point of the physical gore.
   E. On approaches to bridges, terminate rumble strips at the approach slab joint.
   F. On either side of median crossover openings, terminate rumble strips within 400 feet.

4. Use the continuous array on both inside and outside shoulders 1,000 feet in advance of bridge ends or back to the gore recovery array for mainline interchange bridges. Use the skip array for all other locations.

5. Rumble Strip Details:

   - Rumble Strip Depth Table
   - Rumble Strip Array Details
   - Plan View
   - Section A-A

RUMBLE STRIP DEPTH TABLE

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>DEPTH FROM SURFACE (IN.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>3/8 (±1/2)</td>
</tr>
</tbody>
</table>

RUMBLE STRIP ARRAY DETAILS

- Continuous Array
- Skip Array

LIMITED ACCESS ROADWAYS

GROUNDED IN RUMBLE STRIPS

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FY 2020-21

STANDARD PLANS

REV 04/04/18

DESCRIPTION:

REV 04/04/18

REV 10/14/19

REV 04/04/18
Rumble Strip (Typ.)

6" Pavement Marking

TYPE "A1" (Plan View)

Rumble Strip (Typ.)

6" Pavement Marking

TYPE "B1" (Plan View)

6" White

Rumble Strip (Typ.)

TYPE "C1" (Plan View)

Rumble Strip (Typ.)

6" Double Yellow

TYPE "D1" - PASSING (Plan View)

Rumble Strip (Typ.)

6" Yellow

PLAN VIEW

SECTION B-B

Section B-B

RUMBLE STRIP DEPTH TABLE

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>DEPTH FROM SURFACE (IN.)</th>
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</thead>
<tbody>
<tr>
<td>C</td>
<td>0</td>
</tr>
<tr>
<td>D</td>
<td>12&quot; (±1&quot;)</td>
</tr>
</tbody>
</table>

EDGE LINE RUMBLE STRIP PLACEMENT TYPES

CENTERLINE RUMBLE STRIP PLACEMENT TYPES

SKIP ARRAY

(Outside Shoulder Edge Lines)

CONTINUOUS ARRAY

(Shoulder and Inside Shoulder Edge Lines)

NOTE: See the Plans for the Placement Type to be used.

GROUNDED RUMBLE STRIPS

CYLINDRICAL FOR ARTERIALS AND COLLECTORS

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Rumble Strip Details

<table>
<thead>
<tr>
<th>Edge of Traveled Way</th>
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<tbody>
<tr>
<td>6&quot; Pavement Marking</td>
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<tr>
<td>Rumble Strip (Typ.)</td>
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<tr>
<td>Traffic Lane Blurred Line</td>
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<tr>
<td>6&quot; White</td>
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<tr>
<td>Rumble Strip (Typ.)</td>
</tr>
</tbody>
</table>

**Type "B2" (Plan View)**

**Type "C2" (Plan View)**

**Type "D2" - No Passing (Plan View)**

**Type "D2" - Passing (Plan View)**

**Rumble Strip Depth Table**

<table>
<thead>
<tr>
<th>Location</th>
<th>Depth from Surface (IN.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>E</td>
</tr>
<tr>
<td>F</td>
<td>F</td>
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<tr>
<td>H</td>
<td>H</td>
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<tr>
<td>I</td>
<td>I</td>
</tr>
</tbody>
</table>

**Rumble Strip Array Details**

**Edge Line Rumble Strip Placement Types**

**Centerline Rumble Strip Placement Types**

**Skip Array**

(Outside Shoulder Edge Lines)

**Continuous Array**

(Centerlines and Inside Shoulder Edge Lines)

**Plan View**

**Section C-C**

**Rumble Strip Details**

**Continuous Grinding**

12'-6" (±6") Gap

48'-0" (±1'-0") Grinding

12'-6" (±6") Gap

Rumble Strip (Typ.)

Continuous Grinding

Rumble Strip (Typ.)

Rumble Strip (Typ.)

**Type "B2"**

**Type "D2"** - PASSING

**Type "D2"** - NO PASSING

**Surface**

| 24" |
| 12" |

**NOTE:**

See the Plans for the Placement Type to be used.

**SINUSOIDAL FOR ARTERIALS AND COLLECTORS**

**DESCRIPTION:**

See the Plans for the Placement Type to be used.

**REVISION:**

04/04/18

**GROUND-IN RUMBLE STRIPS**

**INDEX:**

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**SHEET:**

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