**MLTRFSEP**

**Managed Lane Separator**

Roadside: R/L  
HPMS: 37  
Feature Type: Length

**Definition/Background:** Denotes type of separator between a managed lane and a mainline in the same direction. Effective April 2013.

**Responsible Party for Data Collection:** District Planning

**Required For:** All managed lanes

**Who/What uses this Information:** Central Planning, District Planning, District Office of Maintenance

**How to Gather this Data:** Record the type of separator between the managed lane and mainline through lane(s) in the same direction.

**Offset Direction:** 2-right and 3-left

**Codes:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Flexible Posts</td>
</tr>
<tr>
<td>2</td>
<td>Guardrail</td>
</tr>
<tr>
<td>3</td>
<td>Barrier Wall</td>
</tr>
</tbody>
</table>

**Examples:**

1 – Flexible Posts  
2 – Guardrail  
3 – Barrier Wall

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**SHLDTYPE**

**Highway Shoulder Type**

Roadside: C/R/L  
HPMS: 37  
Feature Type: Length

**Definition/Background:** Denotes type of outside shoulder located adjacent to the outside travel lane. Outside shoulders provide for the accommodation of stopped vehicles, emergency use, and lateral support of the roadbed. SHLDTYPE is the shoulder adjacent to the roadway centerline. The intent is to code outside shoulder, not the right of way.

**Responsible Party for Data Collection:** District Planning

**Required For:** All functionally classified roadways on the SHS, all HPMS standard samples off the SHS, and on Active Exclusive roadways, and all SIS related roadways

**Who/What uses this Information:** Central Planning, District Planning, District Office of Maintenance

**How to Gather this Data:** Record the highway shoulder type starting with the first shoulder adjacent to the outside travel lane. Collect information for up to three types of shoulders (SHLDTYPE, SHLDTYP2, and SHLDTYP3). Each shoulder type is independently measured. A lawn shoulder type should only be measured up to 12’ in width. Do not record shoulder types less than 1 foot in width.

**Offset Direction:** 1-right and left, 2-right, 3-left

**Special Situations:** No additional shoulder type is required if the first shoulder type is curb & gutter or a raised curb. Also, no additional shoulder type is required after any physical barriers, i.e. guardrails, barrier walls, or noise walls. These are inventoried by the Office of Maintenance.

**Other Coding Requirements:** For designated bike lanes, also code Feature 216. For bike slots, the bike lane between a through lane (see Feature 216) and a right turn lane (see Feature 213).
Codes: Effective July 2013.

0 – Raised Curb (no shoulder or width exists)
1 – Paved (including paved parking and bike lanes)
2 – Paved with Warning Device (any device that serves to warn, guide, or regulate the motorist)
3 – Lawn (number of feet to support roadbed)
4 – Gravel/Marl
5 – Valley Gutter (not a barrier)
6 – Curb & Gutter
7 – Other (Managed Lane)
8 – Curb with Resurfaced Gutter
9 – None

Examples: Arrows depict where measurements are taken.
SLDWIDTH | Highway Shoulder Width
SHLDWTHx | Highway Shoulder Width (x=2,3)

Roadside: C/R/L  HPMS: 38  Feature Type: Length

**Definition/Background:** Width of either SHLDTYP, SHLDTYP2, or SHLDTYP3. Should be separately entered for each shoulder type.

**Responsible Party for Data Collection:** District Planning

**Required For:** All functionally classified roadways on the SHS, all HPMS standard samples off the SHS, on Active Exclusive roadways, and all SIS related roadways

**Who/What uses this Information:** Central Planning, District Planning

**Quality Check: Cross-Reference/Tolerance:** Dimensional Accuracy: 1 foot

**How to Gather this Data:** Effective January 2012.
1. Record shoulders that are 1 foot or greater.
2. Measurements should be rounded to the nearest 6 inches*, excluding lawn shoulders.
3. Lawn shoulders should be measured in increments of 1 foot**, up to 12 feet.

*Measure widths of shoulders that are 1 foot wide or wider and code to the nearest 6-inch accuracy.

**Lawn shoulder type should be rounded to the nearest foot accuracy (Effective January 2012).

Lawn shoulder type should only be collected to a maximum of 12 feet, if it is safely traversable and on a slope that is 1v:4h or flatter. All other shoulder types are to be collected according to their physical attributes. See the roadside terrain diagram below. Effective January 2012.

**Offset Direction:** 1-right and left, 2-right, 3-left  
**Offset Units:** Feet  
**Offset Distance:** XXX

**Special Situations:** If the shoulder slopes, i.e. a ditch exists, extend the measuring tape horizontally until it is over the end of the slope and then take the measurement.

Other Coding Requirements: For paved shoulder, include the width of the designated bike lane in the shoulder width. And code curb with resurfaced gutter width as 2 feet regardless of where the lane striping is.

**NOTE:** Paved shoulders that are 1 foot or less are not considered shoulders, because they are incidental since they exist primarily due to the necessary spacing required for the 1 foot width of the wheel of the striping equipment. Shoulders are required to be at least 1 foot wide or wider before they are collected.

Reference the diagram on outside shoulder width for more information.

**Value for Shoulder Width:** 3 Bytes: XX.X – Record number of feet. Enter to nearest 6 inches (0.5 feet)
Example:

Record and code curb with resurfaced gutter width as 2 feet, regardless of where the lane striping is.

Diagram for Curb & Gutter

In the Technical Task Force meeting held August 23, 2012, the decision was to use the default value of 2 feet for curb & gutter.