Roadside Delineators (Post-Mounted Delineators)

Projects that should include roadside delineator items:

- Freeway and divided highway projects
  - Required for 3R/4R projects
  - Recommended for CPM projects after considering condition of the existing devices and the remaining pavement service life
- Two-lane, two-way roadways having curves with radii of 1,910’ or less
  - Required for 3R/4R projects
  - Recommended for CPM projects
- Signing upgrade projects (since the October 2016 letting)

Locations requiring roadside delineators:

<table>
<thead>
<tr>
<th>Delineator Placement Requirements</th>
<th>Freeways</th>
<th>Divided Highways</th>
<th>Two-Lane, Two-Ways</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Outside Shoulder</td>
<td>Inside Shoulder</td>
<td>Outside Shoulder</td>
</tr>
<tr>
<td>Through Roadway</td>
<td>All Locations</td>
<td>Curves to right, radii ≤ 1,900’</td>
<td>All Locations</td>
</tr>
<tr>
<td>Merge/Diverge Locations</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Median/Directional Crossovers</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

- Delineators are also required at:
  - Guardrail installations
  - Weigh stations
  - Roadside drainage structures (catch basins)
  - At curbed sections/intersections along 2-lane, 2-way roads

Items to use

- Rigid steel posts and flexible posts (ground mount) per R-127
- Use delineator reflectors for rigid post applications and reflective sheeting for flexible post applications
- All reflectors and reflective sheeting shall be 3”x12” size (as of July 2017 there are no longer “single” versus “double” sizes or a difference in size between freeway and non-freeway)

References

- Road Design Manual Section 7.05.02
- Roadway Standard Plan R-127 Series

Additional MDOT Resources

- Calculation spreadsheet
Guardrail and Barrier Delineators (Enhanced Linear Delineation)

Locations qualifying for enhanced delineators:

- Where the effective paved shoulder width (edge line to face of barrier/guardrail) is 2’ or more below the paved width specified for new construction or reconstruction in the Road Design Manual (Appendix 3A – Geometric Design Elements)
- Where a crash history exists that may be corrected/improved by enhanced delineation
- With approval of the Region Traffic & Safety Engineer

Delineator mounting options

- Guardrail – post mounted (block mounted with Engineer approval)
- Guardrail – channel mounted
- Barrier – top mounted
- Barrier – side mounted

General notes

- The enhanced delineation system can replace the standard guardrail and barrier reflectors
- There are product options for all mounting styles to accommodate bi-directional visibility and dual colors
- All pay items for enhanced delineation are by foot of guardrail or barrier to be delineated
- Side- and channel-mount delineators have tighter spacing and will create a more linear effect. Top-and post-mount delineators are more spaced out and act similar to much larger standard reflectors
- Carefully consider site locations when selecting a delineation type. For example, dual color post or top mounted delineation may not be ideal at the top of parclo ramps as the red would be clearly visible to vehicles correctly accessing the on-ramp in addition to those making wrong-way movements

References

- Enhanced Linear Delineation (SPs under Section 811)

Additional MDOT Resources

Enhanced delineation examples