# RECESSED REFLECTIVE PAVEMENT MARKERS

Revised: 01/24/2023

**Description:** This work shall include grooving, furnishing and installing all recessed reflective pavement markers at the locations identified by the Engineer and according to the detail shown in the plans. The recessed reflective pavement markers shall be used in addition to other pavement markings and follow requirements similar to the use of Raised Reflective Pavement Markers.

**Materials:** The reflective pavement marker shall be a 3M 190 series pavement marker; or Engineer approved equivalent. The reflector holder shall be a MarkerOne Series R100 reflector holder; or Engineer approved equivalent. The pavement marker shall have a breakaway tab that ensures marker is at least 0.10” below pavement surface. The epoxy used shall be as recommended by the pavement marker manufacturer. All material shall be approved by the Engineer in writing prior to installation.

**Installation:** Spacing and orientation of the pavement markers shall be as detailed in the plans, or as directed by the Engineer. The installation of markers shall be shown on the details in the plans and as follows:

1. Single/General Installation: A recessed groove shall be cut into the pavement 5.25” wide and 1.0” deep on a 15.5” diameter. An additional 3.5’ long groove shall taper from 0” (normal pavement) to 0.30”-.0.40” depth to a 0.90” depth (fully recessed) before and after the groove.
2. Multi-Lane Road – Centerline Lane Lines: A recessed groove shall be cut in the pavement 5.25” wide and 1.0” deep on a 15.5” diameter. An additional 3.5’ long groove shall taper from 0” (normal pavement) to 0.30”-0.40” depth to a 0.90” depth (fully-recessed) and a 3.5’ long groove shall taper from 0.30”-0.40” depth to 0” (normal pavement). For 1-way markers heading uphill, uphill grind taper may be omitted.

(c) Multi-Lane Road – Skip Dashes Tandem Markers Only: A recessed groove shall be cut in the pavement 5.25” wide and 1.0” deep on a 15.5” diameter, shall be placed in the center of the 30’ gap for 30’ by 10” skip dash lines. A 2.5’ to 3.5’ long groove shall taper from 0” (normal pavement) to 0.40” depth to a 1.0” depth at the center of the first reflector (fully-recessed) then 2.0’ from center of first reflector at 0.40” depth to the center of the second reflector then a 1.0” depth at the second reflector (fully-recessed), a 2.5’ to 3.5’ long groove shall taper from 0.40” depth to 0” (normal pavement) for a total groove of 8’ minimum to 9’ maximum. For 1-way markers heading uphill, uphill grind taper may be omitted.

The recessed groove shall be cleaned free of all loose material, and dry before the placement of the pavement marker. All excess material resulting from the construction of the recessed area shall be completely removed from the surface of the roadway by means of vacuum sweeper truck. The pavement marker shall be cemented with epoxy in the center of the recessed groove.

**Inspection:** The recessed reflective pavement marker shall be inspected following installation, but no later than November 30 of the year installed. Following a winter performance period (December 1 – May 31), a final inspection will be made and corrective action (if required) taken according to the requirements of Article 781.04 of the Standard Specifications. A straight edge shall be placed across the recess to check that the top of the marker is below the pavement.

**Basis of Payment:** This work will be paid for at the contract unit price each for RECESSED REFLECTIVE PAVEMENT MARKER, which price shall include the grooving, reflector, reflector holder, epoxy, installation, and any necessary labor, tools and equipment required to complete the work as described.