Add a new SECTION in DIVISION 2200:

RAISED PAVEMENT MARKERS

1.0 DESCRIPTION

This specification covers temporary raised pavement markers for lane marking and delineation. This includes the bid items Pavement Marking (Temporary) (Flexible Raised Pavement Marker) and Temporary Raised Pavement Markers for use on both Portland cement concrete and asphalt surfaces.

2.0 REQUIREMENTS

a. General

   (1) Provide temporary reflective markers as shown in the Contract Documents. The markers shall be readily visible at night, from a minimum of 300 feet, when viewed with high beam automobile headlamps. Prior to use, markers must be approved by the Engineer. The marker shall be the same color as the reflective elements.

   (2) Provide Flexible temporary raised pavement markers which consist of an L-shaped flexible polyurethane body with prismatic reflective sheeting on both faces. The reflective sheeting shall be a minimum of 1 square inch spread over the 4” wide marker. The markers shall have minimum dimensions of 4 inches wide x 2 inches high with a 1 inch wide base leg. Thickness of the body shall be a minimum of 0.06 inches. The marker shall have an affixed pressure sensitive adhesive, protected by a release paper, for application to the pavement surface. Attach a clear flexible plastic cover to the vertical section of the marker to protect the reflective material during surfacing operations. The cover shall withstand the work and is easily removed after the operation. The markers shall not cause any damage to the automobile.

   (3) Provide Rigid (Type I) temporary raised pavement markers constructed of traffic bearing high impact plastic with prismatic reflective faces. The base of the markers shall have minimum dimensions of 2.5 inches wide, 4 inches long and 0.4 inches high. The base of the marker shall be flat. Markers shall be reflectorized with one or more reflective faces on each side using either an acrylic retroreflector, or retroreflective sheeting. Each face shall contain a minimum of 0.38 square inches of reflective surface. The adhesive used shall not stain the pavement and will allow the markers to be easily removed without damage to the roadway surface. If the marker is self adhesive, it shall be precoated with an affixed pressure sensitive adhesive, protected by a release paper.

   (4) Provide Rigid (Type II) or brick markers constructed of traffic bearing high impact plastic with prismatic reflective faces. The marker shall have minimum dimensions of 2.5 inches high, 7.5 inches wide and 13 inches long. The base of the marker shall be flat. Markers shall be reflectorized with two or more reflective faces on each side using either an acrylic retroreflector, or retroreflective sheeting. Each face shall contain a minimum of 3.75 square inches of reflective surface. The adhesive used will not stain the pavement and will allow the markers to be easily removed without damage to the roadway surface. If the marker is self adhesive, it shall be precoated with an affixed pressure sensitive adhesive, protected by a release paper.

b. Retroreflectivity. Provide markers in white or yellow which comply with the minimum requirements shown in TABLE 1:

<table>
<thead>
<tr>
<th>Color</th>
<th>Millicandels/sq m/lux (min.)&lt;sup&gt;a&lt;/sup&gt; (measured at 0.2°observation angle and 0°entrance angle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>3.0</td>
</tr>
<tr>
<td>Yellow</td>
<td>1.8</td>
</tr>
</tbody>
</table>

<sup>a</sup> Flexible markers must meet these requirements before and after durability testing
c. Color. Markers shall be white or yellow in color, solid throughout, and match the color of the lane line on which the marker will be placed under both daylight and nighttime conditions.

3.0 TEST METHODS
   Test for retroreflectivity in accordance with ASTM E 809.

4.0 PREQUALIFICATION
   None required.

5.0 BASIS OF ACCEPTANCE
   Receipt and approval of a Type D certification as specified in DIVISION 2600.
   Visual inspection for condition and dimensional requirements.

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