

**STATE**

**OF**

**TENNESSEE**

(Rev. 02-01-2003)  
(Rev. 04-16-2003)  
(Rev. 07-12-2005)

March 1, 2006

**SPECIAL PROVISION**

**REGARDING**

**WET REFLECTIVE PAVEMENT MARKING LINE**

**Description.** This work shall consist of the placement of a wet reflective pavement marking line and shall be accomplished in accordance with Subsections 716.01, 07 and 08 of the Standard Specifications for Road and Bridge Construction except as modified herein and in accordance with the requirements of this specification.

**Performance Requirements**

	<u>Yellow</u>		<u>White</u>	
	<u>Dry</u>	<u>Wet</u>	<u>Dry</u>	<u>Wet</u>
Int. Reflectivity, mcd/lux/m <sup>2</sup>	350	175	450	200
48 Mos. Retained Reflectivity	150	75	150	75
Yellowness index	N/A		0.15	
Impact Resistance, in lb min.	1.13(10)		1.13(10)	

**Wet Night Test Procedure:** Testing of this product's performance shall be in accordance with the ASTM test E2176-01.

**Color:** The color of the **white** marking material shall be pure white and conform to Federal standard 595-17778. The color of the **yellow** marking material shall conform to Federal Standard 595-33538 and meet the following chromaticity specifications.

**X** and **Y** coordinates shall fall in an area bordered by these coordinates:

<b>X</b>	0.470	0.510	0.490	0.537
<b>Y</b>	0.455	0.489	0.432	0.462

**Compensation:** Wet Reflective Pavement Markings shall be measured and paid for in accordance with **Section 716** of the **Standard Specifications**. The bid price for Wet Reflective Pavement Marking shall be full compensation for all labor, materials, profit, overhead, bond and other incidentals necessary for the satisfactory completion of the work.

**Warranty and Bond:** The wet reflective pavement marking line shall perform in an adequate fashion as specified herein and shall be warranted for the time frame specified in the table above. A bond shall be posted by the General Contractor in the amount of the total contract amount for this product so that if the product fails to perform for the full period specified, the Department will have the Contractor of the product re-install, in kind, satisfactory pavement markings in keeping with the plans and specifications herein. This replacement shall normally occur within 15 days, (unless prohibited by weather or other conditions determined by the Engineer), but not more than 90 days. Notification will be by certified mail to the address specified by the Contractor indicated on the warranty.

**Adequacy** will be determined by an average brightness reading over a zone minimum marking length of 300 L.F. in accordance with ASTM Standard Test Method E2176-01. The zone of measurement referred to includes: 1) center lines, 2) edge lines, and 3) skip lines, which ever are appropriate,

The **measurement procedure** for this warranty will entail a visual night inspection by a system supplier representative and a D.O.T. representative to identify areas of the installation which appear to be below the specified minimum warranted reflectance values.

**Measurements for installations with lengths less than three (3) miles** which appear to be below the minimum specifications, should be made at a minimum of three (3) check points for each Zone. These should include the start point, approximate min-point and the end point.

**Measurements for installations with lengths greater than three (3) miles** which appear to be below the minimum specifications, should be made at the start point, the end point of the areas in question with additional measurements spaced at three (3) mile intervals between the start and end points.

The **number of measurements** at each check-point for each zone will be as follows:

- A. Skip lines: Eighteen (18) measurements, distributed over 6 skip lines, should be made at each check-point.
- B. Center lines and/or edge lines: Eighteen (18) measurements should be made and the measurements should be distributed over 300 L.F. of continuous stripe.
- C. If the stripes are more than 6" wide, the cross-sections should be determined by one third (1/3) of the measurements on the right edge, one third (1/3) of the measurements on the axis and one third (1/3) of the measurements on the left edge. In addition, the reflectivity values at each check point shall be averaged by zone to determine conformance to the minimum warranted reflectivity values