

All Regional Engineers

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Special Provision for Wet Reflective Thermoplastic Pavement  
Marking

September 30, 2011

This special provision was developed by the Bureau of Materials and Physical Research as a response to the degradation of the retro-reflective properties of pavement marking materials under wet conditions. Use of this special provision should be according to Departmental Policy TRA-14: Guidelines for the Use of Pavement Marking Materials on State Highways.

It should be included in all projects involving wet reflective thermoplastic pavement marking.

The districts should include the BDE Check Sheet marked with the applicable special provisions for the January 20, 2012 and subsequent lettings. The Project Development and Implementation Section will include a copy in the contract.

This special provision will be available on the transfer directory September 30, 2011.

80289m

## WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING (BDE)

Effective: January 1, 2012

Description. This work shall consist of furnishing and applying thermoplastic pavement markings with a wet reflective media. Work shall be according to Section 780 of the Standard Specifications, except as modified herein.

Revise the seventh paragraph of Article 780.05 of the Standard Specifications to read:

“Thermoplastic marking shall be placed with drop on glass beads and wet reflective media uniformly applied to ensure adequate dry and wet retroreflectivity. The combination of thermoplastic material, glass beads, and wet reflective media used shall preclude the surface beads and wet reflective media from sinking deeply into the thermoplastic.”

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) of applied line width, as specified, for WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING – LINE; and/or per square foot (square meter) for WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING – LETTERS AND SYMBOLS.

Delete the last sentence of Article 1095.01(f) of the Standard Specifications.

Add the following to Article 1095.01 of the Standard Specifications.

“(g) Wet Reflective Media. The wet reflective media shall be according to the manufacturer’s specifications. Once applied, the wet reflective thermoplastic pavement markings shall meet the following retroreflectivity requirements when tested according to ASTM E2177 and ASTM E2176. The readings shall be obtained with a portable retroreflectometer meeting ASTM E1710.

Wet Retroreflectivity Requirements $R_L$ (mcc/lx/m <sup>2</sup> )		
	White	Yellow
Wet Recovery (ASTM E2177)	350	275
Wet Continuous (ASTM E2176)	100	75”