SECTION 02722

PAVEMENT MARKING

02722.01 GENERAL

A. Description

This work will include, but not necessarily be limited to, the preparation of surfaces and furnishing and applying pavement marking paint, lead-free permanent thermoplastic or tape at locations indicated on the Plans or established by the Engineer and as specified in the Contract Documents. Pavement markings shall be installed according to Chapter 3B of the MUTCD. Details of pavement word and symbol markings shall meet the requirements of Section 3B.20 of the Manual on Uniform Traffic Control Devices (MUTCD). The Contractor shall furnish all supervision, labor, supplies, and equipment necessary for the proper conduct and completion of the work.

B. Related Work Included Elsewhere

- 1. Traffic control plan; Section 01411.
- 2. Temporary painted stripe marking for maintenance of traffic; Section 01450.
- 3. Temporary pavement tape marking for maintenance of traffic; Section 01451.

C. Quality Assurance

- 1. The Engineer will inspect all materials and work before and/or after installation to ensure compliance with the Contract Documents.
- 2. All paint shall be furnished in original containers from the paint manufacturer. The containers shall be legibly marked with the manufacturer's name, paint color, and manufacture date.
- 3. Pavement marking tape shall be of good appearance, free from cracks, and shall have true, straight, and unbroken edges. The materials, when installed, shall have no more than three splices per 50 yards of length. The material shall be packaged in accordance with acceptable commercial standards. The tape shall be suitable use for a period of at least one year after purchase when stored under normal conditions.
- 4. Repair or remove and reapply any pavement markings that fail to satisfy the requirements indicated. Submit proposed means of cleaning, removing, or obliterating unsatisfactory markings to the Engineer for approval prior to commencing corrective work. Use materials for cleaning pavement of spills, spatter, or overspray that will not injure the paved surface.

D. Submittals

1. Shop Drawings

Shop drawings shall be submitted as specified in the "General Provisions" for all paint and tape supplied. The shop drawings shall include general product description and storage and application recommendations.

2. Certificates of Compliance

Certificates of compliance shall be submitted as specified in the "General Provisions" for all paint and tape supplied stating that the paint and tape meets the requirements specified in Section 01450.01 and 01451.02 respectively.

02722.02 MATERIALS

A. Materials Furnished by the County

The County will not furnish any materials for pavement marking.

B. Contractor's Options

Contractor may utilize pavement markings listed on the Maryland Department of Transportation's (MDOT) Qualified Product List.

C. Detailed Material Requirements

1. Paint

Paint for pavement marking shall be as specified in Section 01450.02.

2. Tape

Tape for pavement marking shall be as specified in Section 01451.02.

3. Guides and Templates

Guides and templates shall be specifically designed to apply strips, symbols, and letters of uniform size and cross section.

02722.03 EXECUTION

A. Preparation

1. Surfaces to receive pavement marking shall be generally clean and dry. The recommendations of the paint or tape manufacturer shall be strictly adhered to by the Contractor.

- 2. Provide sufficient control points to permit application of stripes, directional arrows, messages, crosswalk marking, and parking space delineations as shown on the Plans, within the tolerances specified.
- 3. Furnish, install, and maintain traffic cones, barricades, lights, and other protective devices required to protect traffic, workmen, and completed pavement marking and striping, and remove when marking and striping, including painted sections of curbing, have set and hardened to such degree that they will not be damaged.

B. Tolerance

- 1. Width of Lines: Minus zero, plus 1/8 inch.
- 2. Lengths of Skip or Lane Lines and Unpainted Surface Between the Skip Lines: Plus or minus 3 inches.
- 3. Wet Film Thickness (paint): Minimum 15 mils.
- 4. Location of Directional Arrows, Messages, and Stripes: Within 2 inches of indicated location.
- 5. Size of Letters and Arrows: Plus or minus 2 inches.

C. Installation

1. Location

The location of the lines shall be as shown on the Plans or as directed by the Engineer.

2. Paint

- a. Paint shall be applied in accordance with the manufacturer's directions. Newly applied paint shall be dry so as not to track when crossed by a vehicle 20 seconds after application.
- b. Do not apply to new bituminous pavement until 24 hours after pavement has been placed. On new Portland cement concrete pavement, do not apply paint until the pavement has been allowed to cure for a minimum of 7 days.
- c. Apply traffic paint only when the ambient air temperature is 40°. For higher and the temperature of the surface to be painted is 45°F or higher. If pavement is wet, allow the surface to dry for a minimum of 8 hours after it appears surface dry.
- d. Exercise care to prevent paint from dripping on the pavement, curb, and sidewalks, and remove any drippings or spillage before they harden. Protect

adjoining surfaces against over-spray or paint splash stains, throughout painting operations.

3. Tape

Tape may be installed either by hand application or by mechanical applicator in accordance with the manufacturer's recommendations.

02722.04 METHOD OF MEASUREMENT

A. Striping

Measurement for pavement striping will be made of the length for each classification of striping applied.

B. Other Pavement Marking

Measurement for other pavement marking: directional arrows, messages, crosswalk marking, etc. will be made on a per each basis.

02722.05 BASIS OF PAYMENT

A. General

Payments will be made at the unit prices bid. The prices bid shall include surface preparation, providing control points, templates, and guides, and shall cover furnishing all labor, tools, equipment, and materials necessary to complete the work as shown and specified, in strict accordance with the Contract Documents and accepted by the Engineer.

B. Striping

Payment for pavement striping will be made at the prices bid per linear foot for each classification of striping applied.

C. Other Pavement Marking

Payment for other pavement marking will be made on a per each basis for each type of marking applied.

END OF SECTION