# **SECTION S691 – BIKE LANE**

# S691-1 DESCRIPTION

Work consists of coloring bike lanes and installing bike lane logos/symbols as required in Contract Documents and as directed by Project Manager.

References to NYSDOT specifications are to be in accordance with latest edition of NYSDOT Standard Specifications (US Customary Units).

#### S691-2 MATERIALS

#### S691-2.01 General

Individual components used to form completed system are to be congruous, supplied by same manufacturer, and designed to withstand AASHTO HS-20-44 Wheel Loading.

Color bike lane green is to be used for coloring of bike lane, color of bike lane logos/symbols is to be white. Color must be homogeneous throughout thickness of material, and must be such that end result of finished product visually provides surface which is uniform in color over entire surface area and which is an approximate match to specified color.

#### S691-2.02 Coloring Bike Lane - MMA Liquid

MMA liquid for coloring of bike lane is to be done with bike lane green colored methyl methacrylate (MMA) based resin system that provides durable skid-resistant surface, has long-lasting color retention, and is for use in low to high vehicular traffic areas.

MMA liquid is to be CycleGrip MMAX as manufactured by Ennis-Flint, Color-Safe as manufactured by Transpo Industries, Inc., Pathway Perceptions as manufactured by ANGCO Striping, or approved equivalent.

Characteristic	Unit of Measure	Test Specification		
Neat Resin				
Tensile Strength	500-1000 psi (3.4-6.9 MPa)	ASTM D638 Type 1		
Elongation	70%	ASTM D638 Type 1		
Hardness	55-60 Shore D	ASTM 2240		
Water Absorption	< 0.25%	ASTM D570		
Pot Life @ 72°F	15 Minutes	AASHTO T237		
Flash Point	50°F	ASTM D1310		
Solids Content	100%	ASTM D1634		
Aggregate				
Hardness	7.0	Mohs Scale		

Typical physical properties:

Manufacturer is to demonstrate in writing, and by providing references, that MMA liquid material has been satisfactorily used for minimum period of 2 years in areas where weather conditions are similar to those experienced in Rochester, New York area.

## S691-2.03 Coloring Bike Lane - Preformed Thermoplastic

Preformed thermoplastic material for coloring bike lane is to be bike lane green colored preformed thermoplastic provided in solid colored sheets of uniform size and standard thickness of 125 mils.

Preformed thermoplastic material that is to be aggregate reinforced, retro-reflective, and specifically designed to adhere to pavement surface. Preformed thermoplastic material is to be highly durable, crack, fade, skid and slip resistant, one that has long-lasting color retention, and is for use in low to high vehicular traffic areas.

Preformed thermoplastic is to be PreMark with ViziGrip as manufactured by Ennis-Flint, Inc.; as manufactured by RAE Products and Chemicals Corp.; as manufactured by Swarco Industries, LLC; or approved equivalent.

## S691-2.04 Bike Lane Logo/Symbol – Preformed Thermoplastic

Bike lane logo/symbol is to be white colored preformed thermoplastic that is aggregate reinforced, retroreflective, provided in solid colored sheets with standard thickness of 180 mils, and specifically designed to adhere to pavement surface. Preformed thermoplastic material is to be highly durable, crack, fade, skid and slip resistant, one that has long-lasting color retention, and is for use in low to high vehicular traffic areas.

# S691-3 CONSTRUCTION DETAILS

Preparation of pavement surface, equipment, materials, and method of application and repair of pavement marking material, will be as required by manufacturer.

# S691-4 METHOD OF MEASUREMENT

## S691-4.01 Coloring Bike Lane

Quantity to be measured for payment will be number of square feet of pavement area colored, as originally constructed or repaired.

## S691-4.02 Bike Lane Logo/Symbol

Quantity to be measured for payment will be number of each bike lane logo/symbol installed or repaired.

## S691-5 BASIS OF PAYMENT

## S691-5.01 General All Items

Unit price bid for all items includes cost of: preparation of pavement surface; layout; coloring bike lane including furnishing and applying coloring material; furnishing and installing bike lane logo/symbol; repairing damaged or improperly installed material; protecting completed work from traffic; site cleanup; and furnishing all labor, material and equipment necessary to complete work.

## S691-5.02 Repair Existing Bike Lane Coloring, Logo/Symbol

Unit price bid also includes cost of: removing damaged materials.

Payment will be made under:

ITEM NO.	ITEM	PAY UNIT
S691.0102	Coloring Bike Lane – MMA Liquid	Square Foot
S691.0103	Coloring Bike Lane – Preformed Thermoplastic	Square Foot
S691.0202	Repair Existing Bike Lane Coloring – MMA Liquid	Square Foot
S691.0202	Repair Existing Bike Lane Coloring – Preformed Thermoplastic	Square Foot
S691.03	Bike Lane Logo/Symbol	Each
S691.04	Repair Bike Lane Logo/Symbol	Each

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