

- ITEM 212 ********* **DECORATIVE CROSSWALK SURFACING 1 (WITH TEXT)****
- ITEM 213 ********* **DECORATIVE CROSSWALK SURFACING 2 (WITHOUT TEXT)****
- ITEM 214 ********* **DECORATIVE BIKE LANE SURFACING 1 (ON ROADWAY)****
- ITEM 215 ********* **DECORATIVE BIKE LANE SURFACING 4 (ON SIDEWALK)****
- ITEM 216 ********* **DECORATIVE BIKE LANE SURFACING 2 (ON ROADWAY, RETROREFLECTIVE SYMBOLS)****
- ITEM 217 ********* **DECORATIVE BIKE LANE SURFACING 5 (ON SIDEWALK, RETROREFLECTIVE SYMBOLS)****
- ITEM 218 ********* **DECORATIVE CROSSWALK SURFACING 3 (12” WHITE RETROREFLECTIVE STRIPE)****
- ITEM 219 ********* **DECORATIVE BIKE LANE SURFACING 3 (ON ROADWAY, 4” RETROREFLECTIVE STRIPE)****
- ITEM 220 ********* **DECORATIVE BIKE LANE SURFACING 6 (ON SIDEWALK, 4” RETROREFLECTIVE STRIPE/CENTER LINE)****
- ITEM 221 ********* **DECORATIVE BIKE LANE SURFACING 7 (ON ROADWAY THROUGH INTERSECTIONS, RETROREFLECTIVE)****

Description. Work under this item shall consist of providing all the labor, tools, equipment, and materials necessary to furnish, deliver, and install Decorative Crosswalk Surfacing and Decorative Bike Lane Surfacing treatment as shown on Contract Plans and as herein specified, all complete and subject to the terms and conditions of the Contract, and as directed by the Commissioner.

General Requirements.

Preferred Manufacturer: Traffic Grip as supplied by Traffic Calming USA, 317A, Northpoint Parkway, Acworth, Georgia 30102. 770-505-4044. (or approved equal)

Installer Qualifications: Contractor must provide evidence that his firm or other entity proposed for the installation work has specific experience meeting the following criteria:

Minimum 5 years of experience installing decorative paving materials on roadways in the Chicagoland Area

Familiarity and experience installing the specified products

If requested the installer must submit a list of comparable projects setting forth description, square footage, location and knowledgeable references with addresses and phone numbers.

Decorative Crosswalk Surfacing and Decorative Bike Lane Surfacing Patterns: Digital files of the Decorative Crosswalk Surfacing Patterns will be supplied to the Contractor by the Commissioner. The Contractor will develop finished Decorative Crosswalk Surfacing Patterns

Warranty: Contractor to provide 5 year warranty on installed Decorative Crosswalk Surfacing and Decorative Bike Lane Surfacing. Warranty shall cover color fading, substantial wear, chips and cracks in surface treatment.

Access to Businesses and Homes. During the installation of decorative surfacing the Contractor must keep driveways and entrances serving the businesses and homes clear and available to the Owner and the business' employees at all times. Customer access shall be maintained during normal business hours. Contractor is responsible for providing temporary structures such as wooden bridges, ramps, or walkways as required to provide the public safe, secure, and recognizable access ways to businesses during construction.

Submittals.

Product Data: For each product specified herein or on drawings.

Warranty Information: Provide detailed warranty information.

Samples:

- D. Provide a 48"x36" sample of the Decorative Crosswalk Surfacing pattern with text layout displaying full range of colors as indicated on drawings and as specified for approval by Commissioner.
- E. Provide samples of the each color and aggregate size specified on the plans for approval by the Commissioner.
- F. Shop Drawings: Provide shop drawings showing final layout of all Decorative Crosswalk Surfacing and Decorative Bike Lane Surfacing pattern with text layout and symbols in colors and materials as shown in Contract Plans and specified herein. Shop drawings to indicate all dimensions, colors, text heights and spacing, font styles and placement. Final Dimensions shall be verified in field by contractor before installation.

- D. Maintenance data: For installed products, including precautions against harmful cleaning materials and methods.

DECORATIVE CROSSWALK SURFACING 1 (WITH TEXT):

The materials used for the high friction surface treatment shall consist of a two-part binder and a hard, durable aggregate finish

Binder: The binder shall be a two-part cold applied modified exothermic epoxy resin treatment. The binder shall consist of a thermosetting compound which hold the aggregate firmly in position

The aggregate shall be .9-1.4mm coated bauxite in colors as specified. The aggregate shall be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter.

Background Color: Light Blue

Bar color: Grey to match existing asphalt road surfacing

Text of same aggregate shall be included in this item and layout shall be as indicated on the drawings

Text color: White

DECORATIVE CROSSWALK SURFACING 2 (WITHOUT TEXT):

The materials used for the high friction surface treatment shall consist of a two-part binder and a hard, durable aggregate finish

Binder: The binder shall be a two-part cold applied modified exothermic epoxy resin treatment. The binder shall consist of a thermosetting compound which hold the aggregate firmly in position

The aggregate shall be .9-1.4 mm coated bauxite in colors as specified. The aggregate shall be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter.

Background Color: Light Blue

Bar color: Grey to match existing asphalt surfacing

DECORATIVE CROSSWALK SURFACING 3 (12" WHITE RETROREFLECTIVE STRIPE):

The aggregate shall be .9-1.4mm coated Bauxite mixed with retroreflective beads. The mix shall meet a minimum retroreflectivity of 150 millicandelas per square meter per lux. The aggregate will be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter.

Markings shall be 12” wide stripes as indicated on drawings

Color: White

DECORATIVE BIKE LANE SURFACING 1 (ON ROADWAY)

The materials used for the high friction surface treatment shall consist of a two-part binder and a hard, durable aggregate finish

Binder: The binder shall be a two-part cold applied modified exothermic epoxy resin treatment. The binder shall consist of a thermosetting compound which hold the aggregate firmly in position

The aggregate shall be Bauxite. The aggregate shall be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter.

Overall Color: Light Green

DECORATIVE BIKE LANE SURFACING 2 (ON ROADWAY, RETROREFLECTIVE SYMBOLS)

The materials used for the high friction surface treatment shall consist of a two-part binder and a hard, durable aggregate finish

Binder: The binder shall be a two-part cold applied modified exothermic epoxy resin treatment. The binder shall consist of a thermosetting compound which hold the aggregate firmly in position

The aggregate shall be Bauxite with retroreflective beads. The mix shall meet a minimum retroreflectivity of 150 millicandelas per square meter per lux. The aggregate shall be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter.

Color: White

The bike lane shall be laid in accordance with Symbols as shown in drawings.

DECORATIVE BIKE LANE SURFACING 3 (ON ROADWAY, 4” RETROREFLECTIVE STRIPE)

The aggregate shall be Bauxite mixed with retroreflective beads. The mix shall meet a minimum retroreflectivity of 150 millicandelas per square meter per lux. The aggregate will be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter.

Markings shall be 4” wide stripes as indicated on drawings

Color: White

DECORATIVE BIKE LANE SURFACING 4 (ON SIDEWALK)

The materials used for the high friction surface treatment shall consist of a two-part binder and a hard, durable aggregate finish

Binder: The binder shall be a two-part cold applied modified exothermic epoxy resin treatment. The binder shall consist of a thermosetting compound which hold the aggregate firmly in position

The aggregate shall be quartz, mesh size 28. The aggregate shall be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter.

Overall Color: Light Green

DECORATIVE BIKE LANE SURFACING 5 (ON SIDEWALK, RETROREFLECTIVE SYMBOLS)

The materials used for the high friction surface treatment shall consist of a two-part binder and a hard, durable aggregate finish

Binder: The binder shall be a two-part cold applied modified exothermic epoxy resin treatment. The binder shall consist of a thermosetting compound which hold the aggregate firmly in position

The aggregate shall be quartz with retroreflective beads. The mix shall meet a minimum retroreflectivity of 150 millicandelas per square meter per lux. The aggregate shall be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter.

Color: White

The bike lane symbols shall be laid in accordance with symbols as shown in drawings.

DECORATIVE BIKE LANE SURFACING 6 (ON SIDEWALK, 4" RETROREFLECTIVE STRIPE/CENTER LINE)

The aggregate shall be quartz, mesh size 28, mixed with retroreflective beads. The mix shall meet a minimum retroreflectivity of 150 millicandelas per square meter per lux. The aggregate will be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter.

Markings shall be 4" wide stripes as indicated on drawings

Color: White

DECORATIVE BIKE LANE SURFACING 7 (ON ROADWAY THROUGH INTERSECTIONS, RETROREFLECTIVE)

The materials used for the high friction surface treatment shall consist of a two-part binder and a hard, durable aggregate finish

Binder: The binder shall be a two-part cold applied modified exothermic epoxy resin treatment. The binder shall consist of a thermosetting compound which hold the aggregate firmly in position

The aggregate shall be Bauxite mixed with retroreflective beads. The mix shall meet a minimum retroreflectivity of 150 millicandelas per square meter per lux. The aggregate shall be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter.

Overall Color: Dark Green Green

Construction Methods

The application of the surface treatment shall be in accordance with the manufacturer's recommendations

The two-part modified epoxy binder material shall not be applied on a wet surface, when the ground/surface temperature is below 40°F or above 105°F.

Existing surfaces shall be cleaned by use of mechanical sweepers, high pressure air or other methods approved by the Commissioner prior to the installation. Asphalt surfaces shall be scarified to create a rough textured surface if smooth or less than 20 FN 40 friction value

Receiving surfaces must be clean, dry and free of all dust, oil, debris and any other material that might interfere with the bond between the epoxy binder material and existing surfaces.

A manufacturer's representative shall be on site to provide technical assistance during the start-up operations and as necessary during the surface preparation, material placement and during any necessary remedial work

Application of Binder: The epoxy (Part A) and the Amine Hardener (Part B) are proportioned one to one ratio The two-part modified epoxy binder components shall be proportioned to the correct ratio, and mixed using a trailer mounted application machine Once mixed the epoxy binder shall be applied onto the asphalt or concrete and uniformly spread by means serrated-edged squeegees.

The in-place thickness of the mixed epoxy shall be approximately 60-80 mils above the pavement surface. For irregular surfaces, the application rate may be adjusted, as determined by the manufacturer's representative.

Application of Aggregate: The dry aggregate shall be immediately applied onto the epoxy binder prior to the epoxy binder reaching its gel time coverage. Application of the stone aggregate is achieved by vertical drop stone applicators. Complete coverage of the "wet"

epoxy binder with aggregate is necessary to achieve a uniform surface. No exposed wet spots shall be visible once the aggregate is placed.

Curing: The treatment shall be allowed to cure typically approximately three hours at an ambient temperature of 75°F and rising. Excess aggregate shall be removed by mechanical sweeping, or suction sweeping before opening to traffic. The treated surfaces shall be protected from traffic and environmental effects until the area has cured.

Method of Measurement. The following items shall be measured per square yard installed:

DECORATIVE CROSSWALK SURFACING 1 (WITH TEXT)

DECORATIVE CROSSWALK SURFACING 2 (WITHOUT TEXT)

DECORATIVE BIKE LANE SURFACING 1 (ON ROADWAY)

DECORATIVE BIKE LANE SURFACING 4 (ON SIDEWALK)

DECORATIVE BIKE LANE SURFACING 7 (ON ROADWAY THROUGH INTERSECTIONS, RETROREFLECTIVE)

The following items shall be measured per linear foot installed:

DECORATIVE CROSSWALK SURFACING 3 (12" WHITE RETROREFLECTIVE STRIPE):

DECORATIVE BIKE LANE SURFACING 3 (ON ROADWAY, 4" RETROREFLECTIVE STRIPE)

DECORATIVE BIKE LANE SURFACING 6 (ON SIDEWALK, 4" RETROREFLECTIVE STRIPE/CENTER LINE)

The following items shall be measured per each installed:

DECORATIVE BIKE LANE SURFACING 2 (ON ROADWAY, RETROREFLECTIVE SYMBOLS)

DECORATIVE BIKE LANE SURFACING 5 (ON SIDEWALK, RETROREFLECTIVE SYMBOLS)

Basis of Payment. This item of DECORATIVE CROSSWALK SURFACING 1 (WITH TEXT), DECORATIVE CROSSWALK SURFACING 2 (WITHOUT TEXT), DECORATIVE BIKE LANE SURFACING 1 (ON ROADWAY), DECORATIVE BIKE LANE SURFACING 4 (ON SIDEWALK) AND DECORATIVE BIKE LANE SURFACING 7 (ON ROADWAY THROUGH INTERSECTIONS, RETROREFLECTIVE) will be paid for at the Contract Unit Price per square yard which will include all labor, furnishing, placing and installation, equipment, materials and any incidental work necessary to complete work as specified.

This item of DECORATIVE CROSSWALK SURFACING 3 (12" WHITE RETROREFLECTIVE STRIPE), DECORATIVE BIKE LANE SURFACING 3 (ON ROADWAY, 4" RETROREFLECTIVE STRIPE), DECORATIVE BIKE LANE SURFACING 6 (4" RETROREFLECTIVE STRIPE/CENTER LINE) work will be paid for at the Contract Unit Price per liner foot which will include all labor, furnishing, placing and installation, equipment, materials and any incidental work necessary to complete work as specified.

This item of DECORATIVE BIKE LANE SURFACING 2 (ON ROADWAY, RETROREFLECTIVE SYMBOLS), DECORATIVE BIKE LANE SURFACING 5 (ON SIDEWALK, RETROREFLECTIVE SYMBOLS) work will be paid for at the Contract Unit Price per each which will include all labor, furnishing, placing and installation, equipment, materials and any incidental work necessary to complete work as specified.