## ITEM 647 HEAT-FUSED PREFORMED THERMOPLASTIC PAVEMENT MARKING

647.01	Description
647.02	Materials
647.03	Equipment
647.04	Application
647.05	<b>Basis of Payment</b>

**647.01 Description.** This work consists of furnishing and applying heat-fused preformed thermoplastic for use as auxiliary pavement markings according to Item 641, 740.01, 740.08 and the additional requirements specified below.

647.02 Materials. Furnish materials from the City's QPL conforming to:

**647.03 Equipment.** Use manufacturer recommended equipment to apply the heat-fused preformed thermoplastic pavement marking material according to the appropriate type, as follows:

## A. Type A90 or Type A125 Material.

1. Propane torch to heat the pavement and material according to 647.04.B.

2. Infrared thermometer to ensure that both the pavement and the material are properly heated and do not exceed the manufacturer's specified application temperature.

## B. Type B90 or Type B125 Material.

1. Propane torch for ensuring no moisture is present on the pavement and heating the material according to 647.04.C.

2. A thermometer is not required.

## 647.04 Application.

**A. General.** Apply the heat-fused preformed thermoplastic pavement marking material to clean, dry pavement surfaces according to the appropriate type unless otherwise directed by the manufacturer's recommendation. Apply primer sealer on portland cement concrete pavements for proper adhesion only if the manufacturer requires its use.

Form lines 12 inches (300 mm) wide or less by one piece; form lines wider than 12 inches (300 mm) by no more than two pieces. Do not overlap individual pieces. Do not allow a gap greater than 1/4-inch (6 mm) between pieces.

B. Type A90 and Type A125 Material Application on Asphalt Concrete and Portland Cement Concrete Pavements. Uniformly pre-heat the pavement to 300 °F (149 °C) with a propane torch. Place the material on the warm surface as soon as practical, then uniformly post-heat to 400 °F (204 °C). Begin the post-heating process of material application as quickly as possible. The Contractor may have to extend postheating on concrete having a high moisture content. Allow the material to cool naturally and solidify before exposing it to traffic. Type A90 and A125 materials shall contain intermix beads throughout. Drop-on glass beads are not required unless using a non-surface beaded marking (i.e., for turn or combination arrows).

**C.** Type B90 and Type B125 Material Application on Asphalt Concrete and Portland Cement Concrete Pavements. Heat the pavement only to ensure no moisture is present. Place the material on the dry surface and then uniformly heat the material until it bubbles and changes color to off-white. Ensure material can be applied with no preheating of the pavement to a specified temperature and without the use of a thermometer. Allow the material to cool naturally and solidify before exposing it to traffic.

Type B90 and B125 material shall contain intermix glass beads throughout. Dropon glass beads are not required unless using a non-surface beaded marking (i.e., for turn or combination arrows).

**647.05 Basis of Payment.** The City will pay for accepted quantities at the contract prices, or prices adjusted according to 641.11, measured according to 641.12, with the provisions specified in 641.13, and as follows:

Unit	Description
Foot (Meter)	Channelizing Line, Type
Foot (Meter)	Stop Line, Type
Foot (Meter)	Crosswalk Line, Type
Foot (Meter)	Crosswalk Line Type II, Type
Foot (Meter)	Transverse/Diagonal Line, Type
Each	Handicap Symbol Marking, Type
Each	Railroad Symbol Marking, Type
Each	School Symbol Marking,
	inch ( mm), Type
Foot (Meter)	Parking Lot Stall Marking, Type
Each	Lane Arrow, Type
Each	Lane Drop Arrow
Each	Word on a Pavement,
	inch ( mm), Type
Foot (Meter)	Dotted Line, inch ( mm), Type
Each	Bike Marking, Type
Each	Speed Hump Marking, Type
Each, Foot, Square Foot (Meter, Square Meter)	Removal of Pavement Marking
	Foot (Meter) Foot (Meter) Foot (Meter) Foot (Meter) Each Each Each Each Each Each Each Each