



ADDENDUM # 1

**CITY OF MILPITAS
MILPITAS, CALIFORNIA
ENGINEERING DIVISION**

**CONTRACT DOCUMENTS AND SPECIFICATIONS
FOR**

**STREET RESURFACING 2016
PROJECT NO. 4280**

Date: July 7, 2016

To: Plan Holders - Prospective Bidders of the subject project

From: Steve M. Chan, Traffic Engineer

Attached is Addendum # 1 for the subject project. This addendum forms a part of the Contract Documents and modifies the Bid Documents as noted below. Acknowledgement of receipt of this addendum in the space provided in the Proposal is required. Failure to acknowledge an addendum may subject the bidder to disqualification.

At 2:00 PM on July 13, 2016, all bidders will submit their bids as set forth in bid documents and as amended by the following:

ADDENDUM # 1

REFER TO SPECIFICATIONS:

1. Section E-20, Miscellaneous Concrete Construction

Clarification: for the Retaining Wall for New Sidewalk:

The height of the 90 LF concrete curb wall behind the new sidewalk varies between 0.5' and 3'.

2. Section E-24, THERMOPLASTIC TRAFFIC STRIPE AND PAVEMENT MARKING

Delete the 4th and 8th paragraphs relating to Bike Lane Green and replace with below:

For the green bike lanes, Contractor shall install high-friction surface treatment (HFST) which is a colorized lane demarcation that is specified as Ruby Lake Glass, LLC, "Bike Green," Product No. "PAO.8-1.2BGG" or an approved equal. The HFST consists of a polymer resin binder with a one hundred percent (100%) pigmented recycled glass aggregate topping.

SUBMITTALS

- Submit a Material Safety Data Sheet (MSDS) of HFST components before use.
- Submit a certificate of compliance for the polymer resin binder and the one hundred percent (100%) pigmented recycled glass aggregate.
- Have the polymer resin binder and the one hundred percent (100%) pigmented recycled glass aggregate tested at a certified independent testing laboratory and then furnish the verifications to the Engineer that the materials meet all requirements listed in these specifications.

MATERIALS

Polymer Resin Binder

Contractor to provide a polymer resin binder which holds the one hundred percent (100%) pigmented recycled glass aggregate firmly in place, and which meets the requirements in the following table:

Polymer Resin Binder Requirements

Property	Requirement	Test Method
Ultimate Tensile Strength	2650 psi min.	ASTM D638
Elongation at Break Point	30% min.	ASTM D638
Compressive Strength	1600 psi min.	ASTM D695
Water Absorption	1.0% max.	ASTM D570
Shore D Hardness, min. 77°F	65-75	ASTM D2240
Viscosity	1000-3000 mPa	ASTM D2393
Gel Time, Minutes	15-45	ASTM C881
Cure Rate	3 hrs. max.	ASTM D1640, 0.2" Thickness

Aggregate Topping

Contractor to furnish a post one hundred percent (100%) pigmented recycled glass aggregate. The aggregate topping is to be clean, dry, and free from deleterious matter. The aggregate topping must meet the requirements in the following table:

**Aggregate Topping Requirements
(100% Pigmented Recycled Glass Aggregate) Technical Data**

Characteristic	100% Recycled Pigmented Aggregate	Available Sizes	(mm): 0.8-1.5, 1.5-3, 0.8-3, 3-6, 6-9, 9+
Color Retention	100%	Specific Gravity:	2.5
		Bulk Density:	Avg 86 lb/ft3
		Volume/Ton:	Avg 26.5 ft3
		Softening Point: Shape: Sub-Angular, Non-Porous	~1350°F
		Hardness: Physical Composition: Panel Glass Non-Leaded	6.0 Mohs
		Chemical Composition	Sodium Oxide: 12-15%
		Aluminum/Other Oxides:	Oxide: 1-2%

Additional Aggregate Topping Requirements:

- Recycled Material = One Hundred Percent (100%)
- Color Selection = Varied, Customized
- Size Range Available (mm) = Sizes 0.8-1.5, 1.5-3, 0.8-3, 3-6, 6-9, 9+
- Environmentally Sound = One Hundred Percent (100%) Green Postrecycled Material
- Density = 86 lb/ft3

CONSTRUCTION

HFST Foreman Attendance during construction activities is mandatory.

Prior to work, all surfaces must be clean, dry, and free of all dust, oil, debris, and any other material that might interfere with the bond between the polymer resin binder material and existing surfaces. Adequate cleaning of all surfaces will be determined by the Engineer.

Remove striping, pavement markings, pavement markers, and buttons within the area to receive HFST, prior to placing polymer resin binder. Perform street sweeping before placing pavement markers and delineation. Temporary or permanent pavement markers and delineation must be in place before lanes are open to public traffic.

The HFST must conform to the following:

- Do not apply the polymer resin binder on a wet surface or when the ambient temperature is below 55° F or when the anticipated weather conditions would prevent the proper application of the surface treatment as determined by the Engineer.
- Surface preparation work, surface temperature, and placement of the HFST must be in conformance with the binder supplier's specifications, the Special Provisions, these Technical Specifications, and as approved by the Engineer.
- The minimum spread rate of retained aggregate is 13 to 20 lb./sq. yd.
- HFST must be allowed to cure for the minimum duration as recommended by the supplier's specifications and during that time the application area must be closed to all vehicle and contractor equipment traffic.

The contract unit price paid per square feet for Bike Lane Green HFST shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all work involved in installing Bike Lane Green HFST, complete in place, as shown on the plans, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

3. **Section E-30, RELOCATE BACK FLOW DEVICE AND SIGN**

Delete the 1st paragraph under the Procedure section and replace with paragraphs below:

Relocation of backflow device shall be on Saturday or Sunday. Shut off of water is not allowed during week days. Contractor shall coordinate with affected owner/tenants regarding this work.

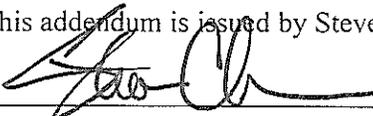
Relocation of backflow device shall conformed to City Standard Drawing No. 734

END OF ADDENDUM #1

This addendum shall be signed by each bidder and kept for their files. Acknowledgement of receipt of this addendum in the space provided in the Proposal is required. Failure to acknowledge an addendum may subject the bidder to disqualification.

I, _____
representing _____ have carefully
read this addendum, understand it, acknowledge receipt of this addendum and will comply its terms.

This addendum is issued by Steve M. Chan, Traffic Engineer

 for the City of Milpitas, on July 7, 2016.