CITY OF SAN LEANDRO

REQUEST FOR QUOTATION

SUBMIT BID TO:	**FOR FURTHER INFORMATION CALL:**
City of San Leandro Purchasing Department 835 East 14th Street San Leandro, CA 94577	Darryl Sweet Purchasing Supervisor (510) 577-3377 fax (510) 577-3312 dsweet@ci.san-leandro.ca.us

BID NO:	**DATE MAILED:**	**THIS QUOTATION MUST BE DELIVERED TO THE CITY BEFORE:**
03-04.020	October 27, 2003	3:00 P.M. , Tuesday, November 18, 2003

QTY.	**DESCRIPTION**	**UNIT PRICE**	**EXTENSION**
1	ONE (1) EACH CURRENT MODEL YEAR TRAILER-MOUNTED THERMOPLASTIC PAVEMENT MARKING UNIT **Notice to Bidders** Provide one (1) Current Model Year Trailer-Mounted Thermoplastic Pavement Marking Unit in accordance with specifications abw/92903/9999/ADD. Make/Model: _____ Specify Warranty: _____ All bidders must submit with their proposal sufficient literature to show compliance with specifications. Any deviations from specifications must be clearly indicated in writing at the time the proposal is submitted. The City reserves the right to waive minor variations in specifications bid. Do not include sales tax in your bid. Sales tax will be added to the purchase order and remitted with invoice payment. State your earliest delivery date as requested. This date may be an important factor in award determination. The vehicle shall be completely serviced as recommended by the manufacturer prior to delivery to the City, and shall be delivered to the City with a *full tank of fuel*. The original report of sale shall accompany the vehicle upon delivery to the City. The name and address on the Dealer's report of sale shall read City of San Leandro, 835 E. 14th Street, San Leandro, California 94577. Sealed bids shall be received at the Purchasing Office, City Hall, 835 E. 14th Street, San Leandro, CA up to 3:00 p.m., on Tuesday, November 18, 2003 at which time they will be publicly opened and read.	$_____ Each	$_____ Total

Any bid may be withdrawn at any time prior to the time fixed for the opening of bids only by written request for the withdrawal of the bid filed with the City. The request shall be executed by the bidder or bidder's duly authorized representative. The withdrawal of a bid does not prejudice the right of the bidder to file a new bid. Whether or not bids are opened exactly at the time fixed in the public notice for opening bids, a bid will not be received after that time nor may any bid be withdrawn after the time fixed in the public notice for opening of bids.

As stated in Public Contract Code Section 5100 to 5108, inclusive (State Contract Act) concerning relief of bidders and in particular to the requirement therein, that if the bidder claims a mistake was made in his bid, the bidder shall give the City written notice within five (5) days after the opening of the bids of the alleged mistake, specifying in the notice, in detail how the mistake occurred.

All bidders shall verify if any addendum for this project has been issued by the City. It is the bidder's responsibility to ensure that all requirements of contract addendum are included in the bidder's submittal.

The successful bidder shall submit a certificate of insurance showing compliance with the enclosed insurance requirements. This insurance shall be maintained at all times during the course of any resulting agreement. In addition, the successful bidder shall have the proper City of San Leandro business license and all other applicable licenses and permits.

The award will be made to the lowest responsible bidder whose bid complies with the specifications in a manner satisfactory to the City's best interests as determined by the City. The right is reserved, as the interest of the City may require, to reject any or all bids, or to waive any informality or minor irregularity in the bids.

Payment shall be within 30 days following acceptance of bid items.

- Delivery shall be F.O.B. destination
- Complete delivery _____ days from order
- There shall be no charge(s) for delivery of bid items.
- Cash Discount _____in_____ days

To bid, complete and return a copy of the Request and the other required forms, sealed in the enclosed envelope. The envelope shall be marked with the project name and bid number. The bid must be received by the date and time shown in order to be considered. Please note that there is a one-day delay in mail delivery to City Hall by the U.S. Postal Service.

Delivery shall be to:
Public Works Service Center
14200 Chapman Road
San Leandro, CA 94577.

Firm_____ Date: _____

Address_____ Phone:_____

_____ FAX:_____

By (Signature)_____ Print Name: _____

Title:_____

_____
Darryl Sweet
Purchasing Supervisor

SPECIFICATIONS FOR
ONE (1) CURRNET MODEL YEAR
TRAILER-MOUNTED THERMOPLASTIC PAVEMENT MARKING UNIT

THERMOPLASTIC APPLICATOR

General: The applicator will consist of an air jacketed and heated holding tank with a propane fired burner system. The tank will accommodate at least 200 pounds of thermoplastic material and will be mounted on a metal framework that will support the extrusion die, the propane supply and the bead delivery system. The framework will be mounted on wheels for application and operation.

Framework: The basic frame will be constructed of angular steel and will be able to support the active weight of the machine fully loaded.

Dimensions: Overall length – less than 48 inches (without pointer extended)

Width – less than 40 inches

Overall height – less than 42 inches (excluding pointer in the up position)

Wheels: The frame is to be supported by two (2) 10 x 2.75 inch main wheels and one (1) rear six inch (6") swivel caster with a straight track locking position. The rear caster wheel will include a brake to hold the applicator when working on an incline.

Pointer Guide: The applicator will be equipped with a front mounted pointer guide. The pointer will be adjustable to the right or left side for each die size to be used. The guide will be made of solid steel bar and be adjustable up to two inches (2") in working height above the pavement surface.

Controls: Also located convenient to the operator will be the shut-off valve on the propane bottle, the LP gas regulator, the die control handle, the control for the thermoplastic material gate and the bead control for starting and stopping the application of drop-on beads.

Propane System: The propane system will consist of a 20-pound cylinder, a system regulator and related hoses rated for use with LPG systems. The system will provide propane fuel to the main burner and the jet heaters on the applicator.

Heating System: The temperature of the molten thermoplastic will be maintained in the holding tank by a thermostatically controlled LPG heating system. The system will be equipped with a pilot light and pilot safety valve connected with a thermocouple. The burner system will be equipped so as to prevent gas flow to the main burner without sufficient pilot light presence. The system will have a main burner containing at least ten (10) jets and have a minimum rating of 25,000 B.T.U. The jets must be replaceable. The heating system main burner will be controlled by a

gas thermostat with adjustable range from 100 to 450 degrees F. The thermostat will be linked by a thermocouple to the hot thermoplastic in the holding tank. The system will use no battery. The thermometer will be provided to indicate the molten thermoplastic temperature. The thermometer will have a working range and readable scale from 50 to 500 degrees F.

The LPG heating system will be furnished with all necessary safety features, connections, fuel lines, regulators, etc., for connections to the frame-mounted propane tank. Heat shields will be installed to protect the flexible LPG lines and the die operating handle return spring.

Thermoplastic System: The tank will have a closeable opening near the bottom to transfer hot plastic to the extrusion die for application. Provide a manually operated mixer paddle mounted close to the bottom of the thermoplastic holding tank. The mixer paddle will be specially fabricated to prevent glass beads from settling out of the thermoplastic and accumulating on the bottom of the tank. The mixer paddle will have a close tolerance, 1/8" or less, to the bottom of the tank to move the thermoplastic on the bottom and help reduce thermoplastic scorching.

Glass Bead System: A bead box or tank with a capacity of at least 20 pounds of glass spheres will be mounted on the applicator. The tank will be connected to the dispenser with an on/off valve and a delivery hose. A semi-transparent bead hose with a ¾ inch inside diameter will connect the bead tank to the bead dispenser. This hose must allow for visual verification that beads are being dispensed. The glass spheres shall be spread on the road surface by a gravity flow type bead dispenser. This dispenser must be arranged so that variable width lines can be beaded without excessive use of beads. The beader must be capable of beading at least 4,6,8 and 12 inch lines. The bead dispenser must be adjustable from 1 ½ to 3 inches above the road surface and from 7 to 12 inches behind the extrusion die.

Extrusion Dies: Thermoplastic extrusion dies in four (4), six (6), eight (8) and twelve (12) inch sizes will be supplied with the unit. The dies will be equipped with fixed mount skids. Adjustable skids are not acceptable. The die walls are to be constructed of 3/8 inc steel plate. Each die is to be controlled by a single handle convenient to the operator. This handle will serve the function of setting or removing the die on the pavement and opening and closing the die to extrude material. The die will be securely fastened to the applicator frame yet quickly and easily removed to change die size or color. Each die will be heated with its own set of jet burners to maintain the material and ie. temperature during applications. The die burners will be connected to the frame, LPG supply by flexible gas hoses and quick disconnect fittings. The die jet burners will be individually controlled by frame mounted control valve.

THERMOPLASTIC HEATING KETTLE

General: The thermoplastic marking systems will include a vertically mounted thermoplastic heating kettle (pre-melter) equipped with a gasoline fueled engine, and hydraulically driven agitator. The tank will be surrounded by a insulated oil jacket heated by a diesel-fueled burner.

Capacity: The thermoplastic tank on the kettle will be cylindrical in shape, vertically mounted and have a minimum capacity of 1,000 pounds. The tank will be capable of heating block and granulated thermoplastic material.

Weight: The entire unit, when loaded to capacity, will not weight more than 2,200 pounds. The unladen unit not to weigh more than 1,200 pounds.

Heating: The tank will be heated indirectly by a diesel fueled burner with a minimum rating of 250,000 B.T.U. The burner will be vented at the top of the kettle. Each vent will be provided with a rain cap to prevent rain from entering the heating chamber.

Heat Transfer: Heat transfer will be accomplished by Chevron heat transfer oil #46 contained by an insulated jacket surrounding the thermoplastic tank. The heat transfer fluid tank will be equipped with a level indicator to indicate the proper level of heat transfer oil and will be properly vented to prevent pressure build up.

Agitation: The agitator will be driven by a hydraulic motor rotating at a minimum of 30 RPM. The clearance between the agitator blades and the side of the tank will not exceed one-quarter inch (1/4”). Each agitator will be equipped with two (2) or more blades. The agitator will be controlled by a directional control valve which will start, stop and reverse the agitator. A flow control valve will be provided to adjust the spped of the agitator without changing the speed of the engine.

Thermometers: Provide a direct reading thermometer to indicate the thermoplastic temperature. This thermometer will be marked “thermoplastic.” Provide a direct reading thermometer to indicate the heat transfer fluid temperature. This thermometer will be marked “heat transfer fluid”.

Burner: The burner will be controlled by an adjustable thermostat with a low setting not less than 50 degrees F., and an upper setting of not more than 550 degrees F. A safety shut-off valve will be installed to shut off the flow of diesel fuel in the event that the pilot light is extinguished.

Valve Handle: Furnish an extended handle on the discharge valve at least twelve inches (12”) in length.

Discharge Trough: Provide a material discharge trough of at least twelve inches (12”) in length. The trough should be as short as possible, while long enough to deliver liquid

thermoplastic to the applicator. The area below the discharge trough will be covered by a flat sheet-metal surface for easy clean-up.

Engine: A gasoline fueled engine, four cycle, air cooled with sufficient horsepower to operate the agitator will be supplied (Honda GX390 or approved equal) The engine will be equipped with electric and recoil starters, an approved air cleaner, muffler and a variable speed governor.

Mounting: The pre-melter unit will consist of two assemblies. The kettle and agitator will be mounted on a steel pallet, and the engine, hydraulic unit and batter box (power unit) will be mounted together on a separate subframe locate on the tongue area of trailer. The kettle pallet will be bolted to the deck of the trailer unit.

Hydraulic System: The hydraulic system will consist of a positive displacement pump, directional control valve, hydraulic reservoir, filter, hydraulic motor and the necessary hoses, lines and fittings to actuate the agitator. Machine crimped hose fittings are the only type acceptable.

Miscellaneous:

The pre-melter unit will include the following features and accessories.

The diesel fuel hold tank (kettle heating system) will conform to all State/Federal requirements.

Adequate guards to cover moving parts.

Access to service the battery, engine, hydraulic filter and hydraulic reservoir.

Placards, stencils and decals indicating potential hazards.

All maintenance, service, parts and operator manuals.

TRANSPORT TRAILER

General: This section of these specifications will describe the minimum requirements of an equipment trailer used as a working platform for the applicator and pre-melter. The trailer will also be used to transport thermoplastic material and miscellaneous supplies. The trailer deck will incorporate fold-down ramps located on both sides to ramp up applicators. Ramps will be six feet (6') height x 56 inches long located on the front section of trailer deck. Ramps to be constructed of steel frame and steel mesh and be sturdy enough plus lightweight.

Elevated platform for extra thermoplastic material shall be the width of trailer x 42 inches long. Platform will have a backstop (opposite side of kettle). Platform area shall have side rails 20 inches high on both sides and be hinged or removable to allow ease of loading a pallet of thermo material with a fork lift from either left or right side. The wheels of the applicator will sit in sections of steel channel. A positive tie-down system will be provided.

Type:	Provide a two (2) axle trailer (deck between wheels) (Zieman model 1150 or approved equal)
GVWR:	9,900 pound minimum
Trailer Weight:	To be 2,000 pound (maximum)
Dimensions:	Deck length to be 144 inches, width to be 76 inches and height not to exceed 20 inches from ground level, loaded. Overall length not to exceed twenty feet, six inches (20'6") and overall width not to exceed 100 inches.
Frame:	Deck and draw frames will be constructed from bi-tensile structural steel. Deck side rail/draw frame rails will be one piece channels from hitch to cross member.
Deck:	Decking to be 10-gauge tread plate steel.
Springs:	Multi-leaf type, with load equalizers to meet G.V.W.R.
Wheels/Tires:	Five (5) total (one for spare, to be mounted on trailer), Standard steel wheels, 15" x 6.0";tires to be ST225/75R15.
Brakes:	Hydraulic surge type on all wheels; 10" x 2.25". Brake system will include breakaway protection.
Lights:	All clearance light and turn signal assemblies will be sealed units, flush mounted to minimize potential for accidental damage. Conform to State/Federal regulations.
Coupling Device:	To be 2 ½" pintle style hitch eye (ring) , adjustable 22 ½ - 28 ½ inches from ground level. Safety chain will be 3/8" high test type to include a pin-on grab hook with safety clasp. The trailer jack leg will have a 10,000 pound capacity with 17" screw travel. The leg will include a 1,000 pound capacity swivel castor with five inch (5") diameter polyurethane wheel. Jack leg to swivel to horizontal position for travel.
Stencil Rack:	Provide rack that will include five (5) slots at two inches wide mounted on right side of trailer.

Miscellaneous:

A. Color of trailer, pre-melter and applicator to be manufacturer's standard color. The pre-melter and applicator kettle will be finished with heat resistant paint.

B. All switches and controls will be labeled with permanently mounted, engraved plastic tags. "Dymo" type labels are not acceptable.

C. Fire extinguishers to be furnished and installed – one (1) 20 pound ABC-type extinguisher.

D. Standard manufacturer's warranty.

E. Furnish one (1) copy each of parts and service manuals, and two (2) copies of all operation manuals pertaining to the thermoplastic applicator, pre-melter, trailer and all major components. The service manuals will include all electrical, hydraulic and pavematic schematics and diagrams applicable to the unit.

Training: A minimum of one (1) day of job site training will be provided to Public Works Department staff. Arrangements for this training will be made through the supervisor responsible for the operation of this unit.

Licensing:

A. The following documentation will be delivered with unit.

B. A certificate of origin.

C. A completed DMV form 397, "Application for Registration of New Vehicle"

D. A weight certificate showing the unladen weight of the completed vehicle.