ATTACHMENT 3

CITY OF COSTA MESA

CALIFORNIA 92628-1200 P.O. BOX 1200

FROM THE OFFICE OF THE TRANSPORTATION SERVICES MANAGER

June 30, 2005

PoliceOne.com
200 Green Street, 2nd. Floor
San Francisco, CA 94111

SUBJECT: CHANGEABLE RADAR SPEED SIGNS – REQUEST FOR PROPOSALS

Dear Sirs:

The City of Costa Mesa is accepting proposals to furnish and install six (6) electronic changeable radar speed signs. Traffic conditions are increasingly demanding for school children and necessitate a greater awareness from motorists. National studies have documented that displaying real-time travel speeds to passing motorists can improve safety through enhancing public awareness and reducing the speed of motorists. The project is therefore developed in conjunction with the California Safe Route to Schools grant program as a traffic calming measure to improve public safety in proximity to school zones.

The proposed project consists of furnishing and installing six illuminated changeable speed radar signs in proximity to two school sites within the City of Costa Mesa. The two school sites and proposed locations of the six changeable speed signs are graphically illustrated by attached Exhibits A and B. Proposals and fees are requested to be received for four alternate approaches of installing the proposed speed signs, with the specific scope of services described as follows:

SCOPE OF WORK

The consultant is requested to carefully analyze the project, survey each sign installation location and determine exact requirements necessary to install, power and maintain the proposed signs. Field reviews of each proposed location should establish a detailed understanding of existing conditions including visual obstructions and clearance constraints. All utilities and any conflicts within the proposed work areas are to be identified, documented and submitted to the City. Underground utility locations shall be determined by the City.

Radar Speed Signs shall be mounted on a Type 1A or 1B pole, with poles, anchor bolts, foundation and hardware meeting Caltrans standards. All hardware including bracketing and sign mountings, foundations, conduit, pullboxes, sidewalk repair and all other work, materials and equipment necessary to provide fully functional changeable speed signs shall be furnished and installed, contingent on the below installation

alternative selected by the City. All work shall comply with the Americans with Disabilities Act (ADA) standards to maintain adequate and safe pedestrian accessibility conditions.

SIGN SPECIFICATIONS

The furnished and installed changeable speed limit signs shall meet or exceed the following:

- Compliant with MUTCD Standards.
- Low voltage light emitting diode (LED) operation.
- Multiple sign displays. Signage operation modes shall display; "Speed Limit", "Your Speed" and "Slow Down". A "Blank Out" operation mode shall be provided where no message is displayed and the entire sign shall be blank. The sign shall also contain a flashing operation mode. A combination of different programmable operation modes shall be offered.
- Overall sign dimensions shall not exceed 45"(h) x 30"(w). Sign letters shall be 6"(h) x 4"(w). Speed limit numerals shall be 16"(h) x 9"(w).
- The sign shall weigh no more than 50 lbs. It shall be constructed of heavy gauge (0.90) aluminum and shall have a polycarbonate lens with 3/8" thickness minimum.
- The sign shall be able to operate on 120vAC, 240vAC, 12vDC solar or 24vDC solar power.
- Equip with a real time clock with built-in daylight savings adjustments. The clock shall have a battery backup system with a three (3) year life capacity minimum. Timer settings shall be programmable for time and day controls.
- Radar operation shall be low power K-band type, part 15 certified. No operating license shall be required.
- Sign shall have a dimming capability for use in close proximity to residencies. Dimming shall be a smooth analog type with capability settings via hardwire or PDA device.
- Programmable threshold for use in adjusting "Your Speed" trip point and flashing operation mode. Threshold adjustments shall be at one (1) mph increments minimum.
- Data Collection (speed and volume collection). Speed collection shall have the capacity to log 100,000 peak speeds per day with a thirty (30) day minimum memory capacity. Volume collection shall consist of a thirty (30) day memory capacity minimum. Two hundred fifty five (255) different user defined log sets shall be required with thirty five thousand (35,000) logs per one (1) user defined set minimum.
- Communication requirements consist of a PDA device to communicate via infrared within a distance of up to two (2) meters. A PC RS-232 port shall be required for hardwired communications. Wireless download capability with on-board modem shall be an acceptable alternative of communication.
- Housing shall be non-sealed ventilated type weather proof (NEMA 3R or better) with tamper proof fasteners.
- Display window shall be made of shatter-resistant polycarbonate. The display shall have a mechanism for highly vandal resistant, such as to absorb the shock energy by deflecting the display widow and internal display together without

damage. Internal electronic display and speed detection components must be highly resistant to damage that may be inflicted by thrown or launched projectiles.

- The manufacturers of the radar speed sign shall have the model and serial number, month and year of manufacturer, and operating voltage range marked on the sign.

PROJECT SCOPE ALTERNATIVES

The consultant is requested to provide proposals for the following alternate methods of furnishing and installing the changeable radar speed signs:

Alternative 1, Solar Power: This alternate shall consist of furnishing and installing solar/battery powered hardware assemblies integral with the six speed radar feedback signs and poles complete. Based on the extra weight of the solar equipment, type 1A or 1B pole installations are required for all proposed installations. All associated hardware, equipment and labor costs to furnish and install the solar powered sign, pole and foundation assembly complete shall be included within the fee identified for this alternative.

Alternative 2, Edison Electrical Service: This alternative provides for furnishing and installing the sign assembly and pole, and conduit, 120V. AC power and connecting the six signs to the various SC Edison service sources complete (without solar). The attached Exhibits A and B identify the respective electrical service tie-in locations for each of the six signs. The fee for this alternative shall include all costs required to connect to Edison service including conductors, conduit, pole risers, pullboxes and all related work, materials and equipment. All work for this alternative shall be carefully coordinated and in compliance with the SC Edison Company.

Alternative 3 (a & b), City Pole Installations: The City may elect to furnish and install the six 1A sign poles and install Edison electrical service conduit and conductors. Under this alternative, the sign provider would be responsible for furnishing; installing and configuring the sign assemblies on the city furnished and installed posts. Mounting hardware shall be furnished by the sign provider. The sign assembly would be furnished with either solar panels or 120V. AC based on the above service alternative determined by the City. It is requested that the proposal include separate costs to provide either solar panels or 120V. AC service for this installation alternative.

TESTING

The radar speed sign shall be factory tested. In addition to manufacturer recommended field-testing, the following Functional Testing will be done (before any final payment) by the qualified representative of the Sign vendor and the Engineer:

1. Approach: The sign is set up to detect oncoming traffic. The radar shall not detect the opposite direction of traffic.
2. Accuracy: +/- 1.6 km/h.

3. Visibility: In normal weather condition, the display shall be extremely high contrast and visible. The dimmer option could be experimentally turn off if the normal display is not too bright to view at night. In severe weather condition (wet/fog), the overall performance of the sign shall be evaluated.

The Contractor shall have a maximum of ten calendar days from the date of rejection to correct deviations and deficiencies.

INSTALLATION STANDARDS

The following standards shall be applied to this project:

- City Standard. Drawing No. 411, 412 and 413 - Sidewalk removal and reconstruction as required to accommodate the new sign foundations.
- City Standard. Drawing No. 813 - Trenching and/or Boring.
- City Standard. Drawing No. 312 - Curb, gutter removal and reconstruction.
- City Standard. Drawing. No 813 - Conduit installation and repair.
- Caltrans Standard Plans/Specifications - Pullbox and conduit installations.
- Southern California Edison Specifications – Service installations and point-of-service connections.
- W.A.T.C.H. Manual and the Caltrans Traffic Manual – Traffic control provisions

TRAINING

The Contractor shall give minimum of 48 hours notice to the Engineer to bring City personnel to the site during the testing period to observe the tests and to be trained on operation of the radar speed sign. A field training session of not less than 2 hours shall be provided to maximum of five City employees on the operations, troubleshooting and repair of the Sign.

WARRANTY

The manufacturer shall provide a written warranty against defects in materials and workmanship for the radar speed sign for a period of two years after installation. Replacement radar speed signs or components within the warranty period shall be provided within ten working days after receipt of failed radar speed sign at no cost to the City. All warranty documentation shall be given to the City's Project Manager before the installation.

PAYMENT

The contract shall be a lump sum price and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in radar speed sign, complete in place, including testing and training, as shown on the plans and these special provisions, and as directed by the Engineer.

SCHEDULE

The work shall be diligently prosecuted to completion before the expiration of 30 working days beginning on the date that work begins or beginning on the twenty-fifth

calendar day after approval of the contract, whichever occurs first.

CITY RESPONSIBILITIES

The City of Costa Mesa will be responsible for the following items:

A. Payment of Edison service connection fees.
B. Coordination and communications with schools, residents and the general public.
C. Determining locations of underground utilities.

CONTENT OF PROPOSAL

Contract award will primarily be based on an evaluation of product functionality, quality and compliance with the described specifications. The City requests that the following be submitted with your proposal:

A. Identify your firm's understanding and approach to the project, with any suggestions relative to the project and/or special concerns pertaining to the installations.

B. Identify the project schedule indicating sequence and time frames per task.

C. Provide a list of related radar speed sign projects that your firm has recently completed. Information should include a description of work, cost, agency name and contact person.

D. Provide an itemized Lump Sum Fee Estimate for the six sign locations, based on separate costs for the following four contract alternatives:

Alt 1: Furnish / install signs with solar panels and poles complete;
Alt 2: Furnish / install signs with Edison service work and poles complete;
Alt 3a: Furnish and install signs with solar panels on City poles;
Alt 3b: Furnish and install signs with 120v. AC on City poles.
{ Fees may be submitted for a select alternative, however it is preferred that the proposal provides fees for all alternatives. }

E. Submit three (3) identical copies of the proposal.

RIGHT TO REJECT ALL PROPOSALS

The City of Costa Mesa reserves the right to reject any or all proposals submitted, and no representation is made hereby that any contract will be awarded pursuant to this request for proposals, or otherwise. All costs incurred in the preparation of the proposal, in the submission of additional information and/or in any other aspect of a proposal prior to the award of a written contract will be borne by respondent. The City will provide only the staff assistance and documentation specifically referred to herein and will not be responsible for any other cost or obligation of any kind which may be incurred by a respondent. All proposals submitted to the City of Costa Mesa in response to this request for proposal shall become the property of the City.

Attached is a sample Standard Agreement for Professional Services for use in preparing your proposal. In addition, a standard Certificate of Insurance form is enclosed stating the minimum insurance coverage and endorsement requirements. Should your firm be interested in submitting a proposal for this project, please forward **on or before July 22, 2005** to:

City of Costa Mesa
Transportation Services Division,
77 Fair Drive
Costa Mesa, California 92626
Attention: David Sorge

Should additional information be required on this project, please contact me at (714) 754-5183.

Sincerely,

David Sorge
Project Manager

Attachments: Exhibits A & B - Sign Location Plans
City Standard Agreement Form
Certificate of Insurance Form

c: William J. Morris, Director of Public Services
Peter Naghavi, Transportation Services Manager
John Cox, Engineering Technician