



AGENDA REPORT
SAN CLEMENTE CITY COUNCIL MEETING
 Meeting Date: April 16, 2013

Agenda Item 6-H
 Approvals:
 City Manager [Signature]
 Dept. Head _____
 Attorney _____
 Finance [Signature]

Department: Public Works / Engineering Division
Prepared By: Tom Frank, Transportation Engineering Manager

Subject: *AWARD OF PROFESSIONAL SERVICES AGREEMENT FOR SERVICES TO REPLACE EXISTING TRAFFIC SIGNAL CONTROLLERS AND EXISTING CENTRAL TRAFFIC SIGNAL CONTROL SYSTEM.*

Summary: In 2012, the Orange County Transit Authority (OCTA) approved grants to reimburse the City 80% of the project costs to synchronize the signals along the Avenida Pico, Avenida Vista Hermosa, El Camino Real, and Camino De Los Mares corridors. The Avenida Pico and El Camino Real projects are scheduled to be completed by November 2013 and Avenida Vista Hermosa and Camino De Los Mares projects are scheduled to be completed by April 2014. As a part of these projects, 54 of the City's 74 controllers will be replaced. The replacement of the majority of the City's controllers created an opportunity to evaluate the available controller and central traffic system providers and implement a system that best meets the City needs in the most cost effective manner.

To accomplish this evaluation, staff distributed a Request for Proposals (RFP) to four interested providers. The RFP listed two objectives including acquiring the next generation traffic signal controller and to acquire a central control system that will optimize the operations of the next generation traffic signal controllers. The goal of the RFP was to find the most capable provider with hardware and software products that meet the City's present and foreseeable future needs for its signal controllers and central traffic system.

Staff received two proposals. Following the evaluation of the proposals, Control Tech West Inc. (CTW) received the highest ranking. CTW's key differentiating qualities include its thorough understanding of the City's needs, the most comprehensive approach to maximize the value received within the project budget, and the quality of its products. CTW'S scope of work includes furnishing and installing the controllers, configuring the server software, installing the central system, and supporting City staff. The fee submitted by CTW was about \$267,548 and lower than the other proposer's submitted fee of \$298,741. Considering that CTW's proposal met all City requirements in the RFP, received the highest ranking during the selection process, and its submitted fee of \$267,548 is reasonable for the requested scope of work, staff recommends contracting with CTW for new controllers and central traffic signal control system.

**Recommended
 tion:** STAFF RECOMMENDS THAT City Council authorize the Mayor to execute a Professional Services Agreement with Control West Inc. for services to furnish and install traffic signal controllers and a traffic signal control system, at a cost not to exceed \$267,548.

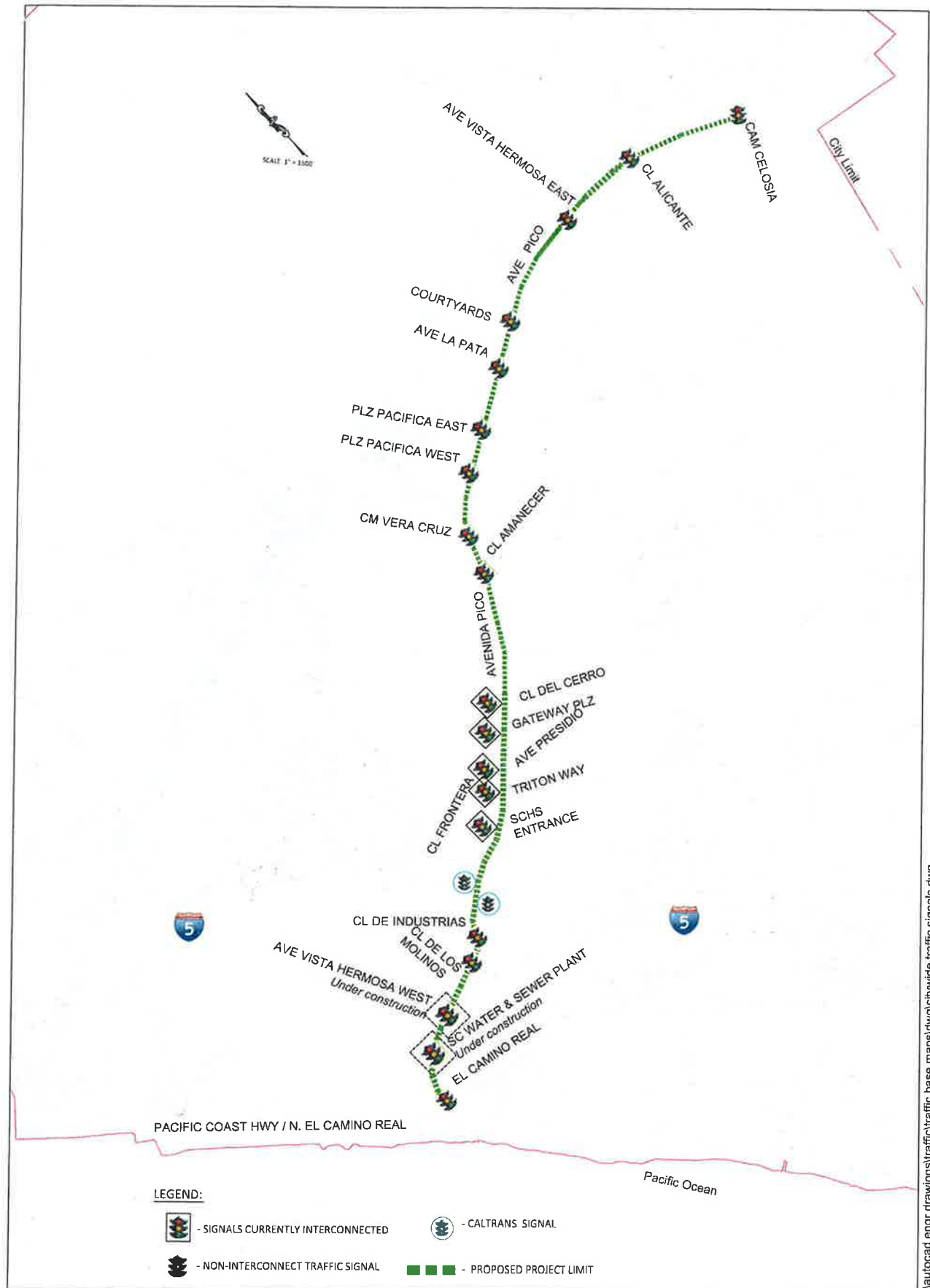
Fiscal Impact: None. The current approved budget includes Gas Tax funds for these signal synchronization projects.

Attachments: Location Maps for Avenida Pico, El Camino Real, Avenida Vista Hermosa, and Camino De Los Mares Corridors
Scope of Work

Notification: None.

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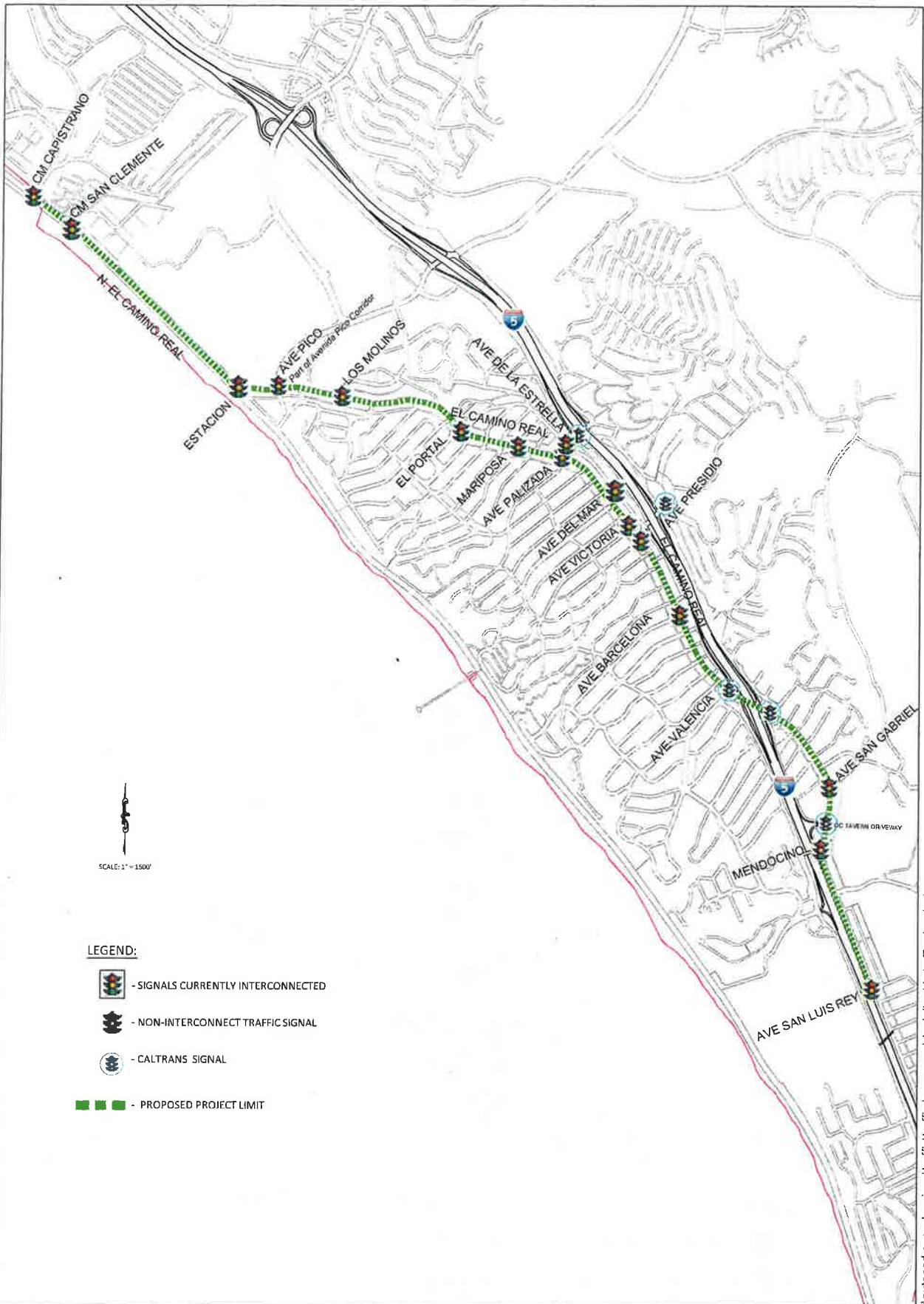
FIGURE 1 - LOCATION MAP

AVENIDA PICO CORRIDOR





TRAFFIC SIGNAL SYNCHRONIZATION

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LEGEND:

-  - SIGNALS CURRENTLY INTERCONNECTED
-  - NON-INTERCONNECT TRAFFIC SIGNAL
-  - CALTRANS SIGNAL
-  - PROPOSED PROJECT LIMIT

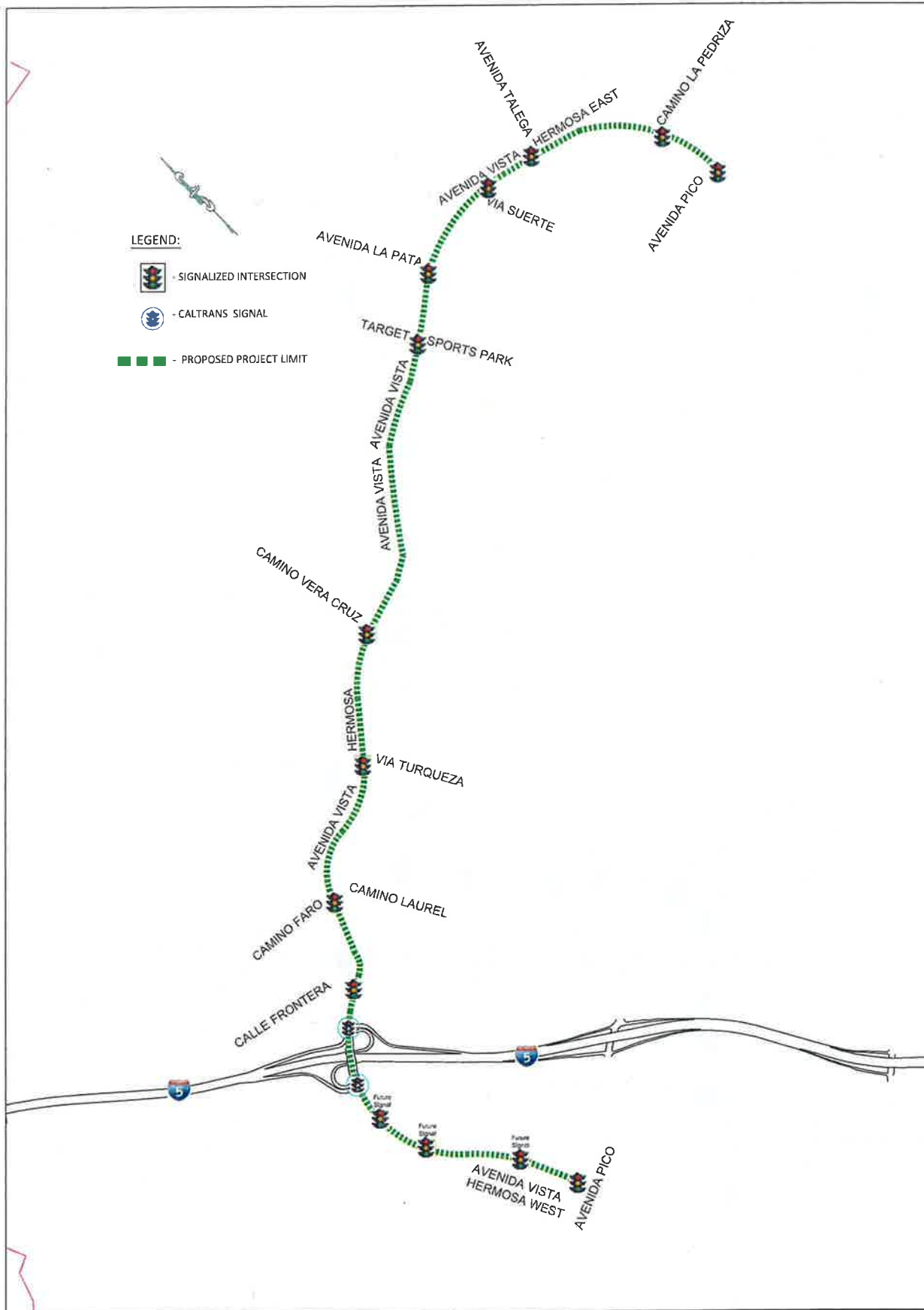


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FIGURE 1 - LOCATION MAP
EL CAMINO REAL CORRIDOR
TRAFFIC SIGNAL SYNCHRONIZATION

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LEGEND:

-  - SIGNALIZED INTERSECTION
-  - CALTRANS SIGNAL
-  - PROPOSED PROJECT LIMIT



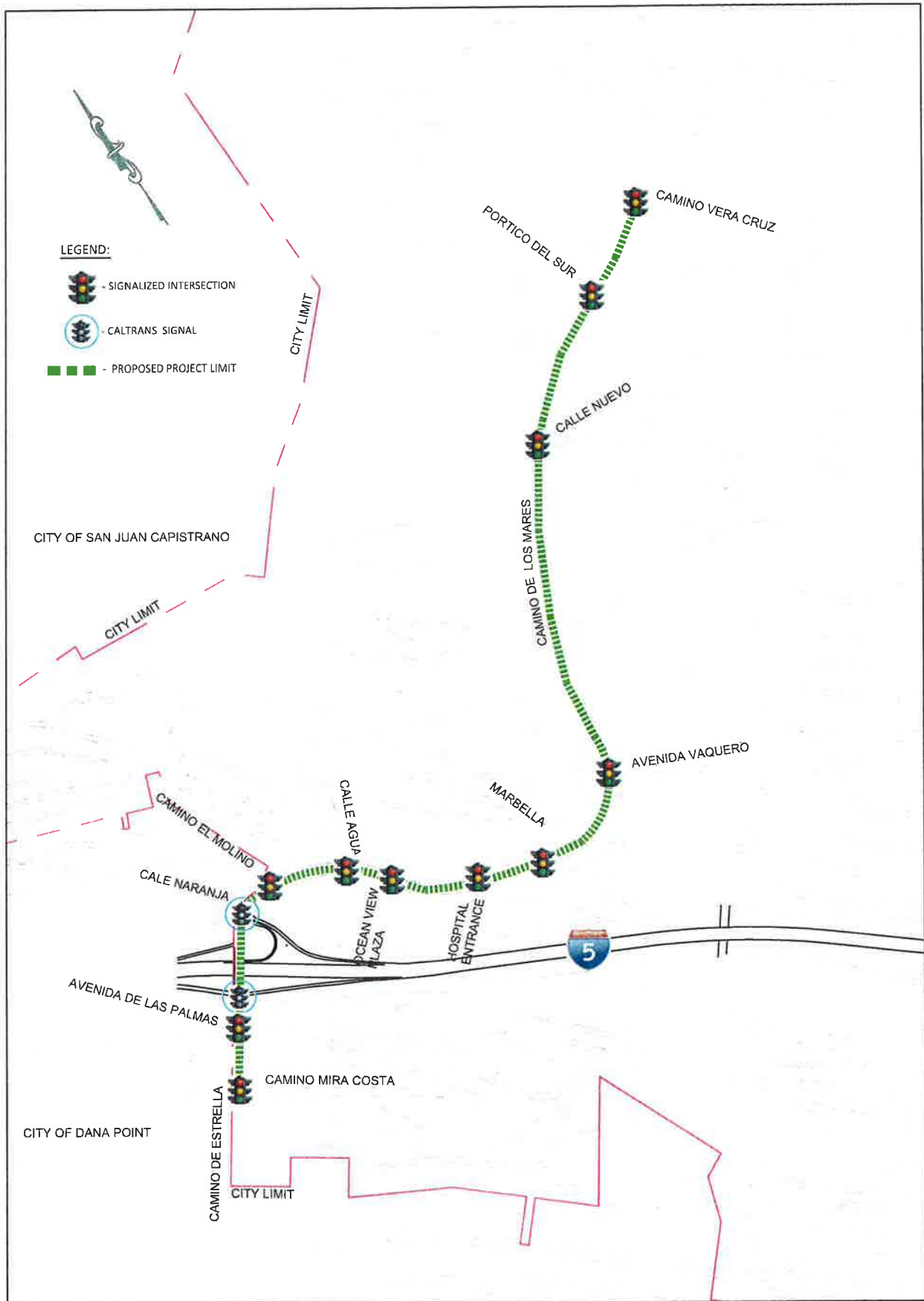
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FIGURE 1 - LOCATION MAP

**AVENIDA VISTA HERMOSA CORRIDOR
 REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION
 MEASURE M2 - PROJECT P**

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FIGURE 1 - LOCATION MAP

**CAMINO DE LOS MARES CORRIDOR
 REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION
 MEASURE M2 - PROJECT P**

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1.0 Project Understanding and Approach

Control Tech West and Intelight understand that the City of San Clemente, CA is using OCTA Grant funding to replace 54 traffic signal controllers during four major projects. We are excited that the City has chosen to replace their legacy, proprietary controllers with hardware and software that will support open protocol standards such as NTCIP, encouraging industry innovation, service oriented business models, and healthy competition among traffic industry vendors and manufacturers.

We are excited to offer a turn-key solution to the City of San Clemente focused on the following key objectives:

- Supply of new traffic signal controllers with local controller software
- Provide a central traffic control system.
- Provide a turn-key integration solution including providing timing conversions, integration, controller installation support, effective training throughout the project and ongoing support and services.

Our companies business, support, and development philosophies are in line with the City's major project goals including but not limited to the following:

- Form a long-term support partnership with agency staff
- Provide upgrade solutions instead of requiring a complete system change-out
- Provide the City with true, open architecture NTCIP compliant products. We give the City full, unrestricted access to our NTCIP MIBS, ATC Controller API's, and any other relevant tools needed to interface with our software and hardware. This would enable the City to easily install 3rd party software on Intelight controllers in the future, if so desired
- Provide the City with a reliable, innovative product that we will continue to back with first class support
- Provide future product innovation and adaptation to current industry (IT Industry) technologies
- Continue to provide customer driven development and configuration of products for ease of use, maintenance, cost effective solutions, and enhanced functionality
- Quick response and effective local and remote customer support driven by service oriented business models

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2.0 Detailed Scope of Work

All work outlined below will be performed within the controller cost specified in this proposal and according to the schedule proposed at the end of this section.

General - Project Management, Schedule, and Meetings

Kick-Off Meeting and Site Survey

Control Tech West and Intelight will make an initial visit to San Clemente for a project kick-off meeting, and to perform site visits and an existing operations survey of the existing intersections and proposed Central System location. After the survey trip, we will work with the City to discuss any foreseen issue and suggestions to ensure a successful, on-time project completion. At this time, we will also discuss any variances from the assumptions made in this proposal. If necessary, we will also meet with the City's IT staff to ensure the proposed system configuration is incorporated into the City's master communication plan.

Status Updates and Project Meetings

Control Tech West will provide frequent status updates and as deemed necessary by Vendor or City staff, monthly meetings will be conducted with Control Tech West, Intelight and the City to ensure the project task are completed in an accurate and timely manner. These meetings may be on-site, or via web or teleconferencing and will address any concerns, installation issues, or value added solutions that may be discovered during the integration process. When possible, update meetings will be combined with support and integration visits to reduce the time commitment required of City staff.

Phase 1: Central System Installation and Timing Conversions

Task 1: Central System Installation

Once the necessary equipment (Server and TMC communications equipment, if any) has been procured the Central System installation and configuration will begin. If resources are available, key City staff members should be available during the installation and configuration process for system exposure and familiarity prior to the formal training upon system completion.

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Control Tech West and Intelight will install and configure all server hardware in preparation for MaxView Central System Installation. The server may be initially configured by Intelight and Control Tech West, off-site to reduce on-site installation time and troubleshooting.

Field deployment and integration of the controllers will occur after the Central System has been installed and configured. Then, confirmation of system-controller communications, testing, and troubleshooting can be conducted as each controller is installed, reducing the number of repeat trips to each intersection. Also, the City can begin to monitor and use the system as each controller is placed online.

Task 2: Intersection Timing Database Conversion

Timing conversions from the existing controllers to MaxTime controllers can be conducted during the Central System Installation. All timings will be reviewed by a Professional Traffic Operations Engineer (PTOE). Timing databases can be programmed off-site from the City's existing timing sheets and will be tested in both the Windows and Linux (Local Controller) versions of MaxTime. We will work closely with the City to quickly resolve any incompatibility or operations issues encountered during timing conversion or testing. Intersection timings will be converted in the following order:

1. Avenida Pico Corridor
2. El Camino Real Corridor

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3. Avenida Hermosa Corridor
4. Camino de Los Mares Corridor

Control Tech West will work with the City to create a testing /acceptance procedure for new NEMA controllers and timings. Prior to field deployment, the controllers will be tested according to the testing/acceptance procedure agreed upon by all members of the project team.

PHASE 1 DELIVERABLES

1. Dell PowerEdge R415 Chassis w/up to 4 Cabled HDs, Quad-Pack LED
2. MaxView Central Traffic Control System
3. Fully configured MaxView database including main map and intersection status screens
4. Controller and System Test Documentation
5. Signal Timing Databases for MaxTime Local Controller Software

Phase 2: Controller Installation Support, Testing, and Training

Task 1: Controller Installation Support

As specified in the RFP documents, the Intelight Traffic Signal Controllers with MaxTime Software will be installed by another contractor under a separate project. Control Tech West and Intelight will provide the City and contractor with the following during project deployment:

- Converted Traffic Signal Timing Databases
- Controller Installation and Turn-On Support as required
- Troubleshooting associated with the traffic signal controller and software
- Confirmation and troubleshooting of communications with the MaxView Central System

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Task 2: Testing

The system and controller functionality will be tested, evaluated, and operated for an acceptance period of 60 days (2 Months) following the quality control and acceptance plan developed by Control Tech West, and Intelight, with the City of San Clemente prior to the start of warranty service.

Task 3: System and Controller Training

Intelight and Control Tech West will provide 3 days of training on MaxTime local controller software and 1 day of training on the MaxView System Software following the initial integration and deployment. The training will cover software features, operations procedures, and case studies. Once the software has been deployed in the field, Intelight and Control Tech West will continue to provide support regarding system operations, functionality, and future development needs.

Control Tech West will work with the City to create a training program outline that best benefits the users attending and provide the most effective use of training time. Furthermore, remote training tools such as webinars can be used at the City's request when shortened or specialty sessions are needed.

PHASE 2 DELIVERABLES

1. Traffic Controller Installation Support
2. Testing and Confirmation of Controller/System Communications
3. Final Acceptance Testing
4. MaxTime Local Controller Software and MaxView Central Software Training

Phase 3: Ongoing Support and Warranty

On-call support and warranty is included for three (3) years from the purchase of the software. Control Tech West or Intelight will respond to service request within one business day.

Intelight's warranty provides phone, email, webinar, and limited on-site support, software bug fixes, and new releases during the warranty period. Software bug fixes are included in the purchase of the software for the lifetime of the product.

A detailed support overview is located in the "Other Information Section" below.

3.0 Project Organization and Staffing

Project Partnership

For this project, Control Tech West will be the prime-provider and Intelight, Inc. will support Control Tech West providing traffic signal controllers, local and central control software, and support and engineering services.

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Our team prides itself on being an extension of the agency and by being the technical partner in an Intelligent Transportation Solution. Our goal is to work with the agency towards accomplishing the complete solution and provide on-going support, maintenance, and guidance, ensuring the City takes advantage of advances in technology and maximizes the life of the system.

Following are brief overviews of our companies and our proposed project team.

Company Profiles

Control Tech West (Prime Provider)

Control Tech West will be the primary point of contact for this project, providing integration support and consulting services regarding integration and communications of Intelight X2 controller with MaxTime Software and Intelight's MaxView Central System. Control Tech West Inc. was started in May of 2011 to supply the Western United States with Intelligent Transportation Solutions and Smart Highway Technology products. Located in Temecula, California, Control Tech West is focused on providing an unparalleled level of support and service to agencies west of the Rocky Mountains.

The current team, with a combined industry experience of over 85 years, all started in the field as maintenance technicians with a real world approach and understanding of what happens day to day within our industry. This understanding allows Control Tech West to be a true technology partner, capable of solving customers' needs and requirements from the field to the city council level. The

experience of the Control Tech West team includes intimate knowledge of both hardware and software components as well as computer and communications networks. Control Tech West's proposed staff is located in the "Project Team" below.

Intelight (Sub-Provider / Equipment and Software Manufacturer)

Intelight Inc. will provide hardware, software, service, and support for this project. Our unique team has over 35 years of experience in the traffic signal industry and includes Professional Traffic Operations Engineers, Licensed Professional Engineers, Systems Integration Specialist, network experts, and experienced IMSA certified Traffic Signal Technicians. Intelight Inc. manufactures and supplies innovative traffic management products including advanced traffic controllers, traffic control cabinets, smart signals, arterial systems masters, NTCIP compliant local software, and web-based central software systems. Our company's mission is to provide our customers with the highest quality and most innovative "state-of-the-art" technology along with exceptional service and cost-effectiveness.

With Manufacturing and Corporate Headquarters located in Tucson, Arizona since 2006, Intelight now has four satellite offices located in Seattle, Washington; Salt Lake City, Utah; Austin and Houston, Texas; and Beijing China (Joint Partnership).

In addition to supplying equipment and local and central software, Intelight's expert team offers the following services:

- Traffic and ITS Engineering and Consulting Services
- ITS System Integration & Training
- On-going ITS System support and maintenance
- System Upgrades and Retrofits
- Turn-Key ITS Solutions
- Superior Customer Service and Response

