### REQUEST FOR PROPOSAL (RFP) FOR PROFESSIONAL SERVICES FOR AUTOMATED TRAFFIC SIGNAL PERFORMANCE MEASURES (ATSPM) AND ADAPTIVE TRAFFIC CONTROL SYSTEM (ATCS) DEPLOYMENT AND PROJECT MANAGEMENT

### May 11, 2018

### Introduction

The City of San Rafael (City) hereby requests proposals from qualified Consultants for the project management and oversight of Automated Traffic Signal Measures (ATSPM) and Adaptive Traffic Control Systems (ATCS) Projects. The final product sought is a completed and successful ATSPM implementation meeting all Innovative Deployment of Enhanced Arterials (IDEA) grant funding contract requirements provided by the Metropolitan Transportation Commission (MTC) and a completed and successful deployment of an ATCS system in Central San Rafael. The IDEA grant will provide the funding and support to implement the ATSPM; however, the City would like to plan ahead for an ATCS and would benefit from project oversight by a consulting firm that has experience with ATSPM, ATCS, and the products each technology uses.

Proposals shall be submitted by firms that have a capable and demonstrable background in the type of work described in the section titled "Scope of Services" of this notice. In addition, all interested firms shall have sufficient, readily available resources, in the form of trained personnel, support services, specialized consultants and financial resources, to carry out the work without delay or shortcomings.

### **Project Description**

The City strives to improve arterial operations and enhance safety at signalized intersections throughout the City starting with the Central San Rafael area by deploying ATSPM and ATCS. Through the IDEA grant, MTC has awarded the City with grant funding for the deployment of ATSPM throughout its Central San Rafael area. Federal funds available through IDEA grant are designed to assist agencies with project implementation through capital support and technical assistance. The City is seeking professional services to assist in successfully executing the City's agreement with MTC for ATSPM deployment (IDEA grant) and for the simultaneous project management of deploying an ATCS.

The core goals of these two projects include: improving travel time and travel reliability along arterials for autos and transit vehicles; improve safety of motorists, transit riders, bicyclists, and pedestrians; and decrease motor vehicle emissions and fuel consumption. ATSPM will provide information/tools needed to actively monitor signal performance and proactively identify and correct deficiencies before they negatively impact arterial operations. ATSPMs are a cost-effective way to improve traditional retiming processes by providing continuous performance monitoring capability through the use of high-resolution data and real-time performance measures. ATCS will dynamically adjust signal timing at traffic signals along a corridor in real-time to accommodate changing traffic conditions.

### Anticipated Schedule

Proposals due to Public Works Consultant Selection Consultant Recommendation to City Council Kick-off Meeting

11:59 PM, local time, on Friday, May 18, 2018Wednesday, May 23, 20187:00 PM, local time, on Monday, June 4, 2018Week of June 4, 2018

### **Scope of Services**

The City is seeking consulting services for the following tasks:

### Task 1: Project Management and Coordination

- This task includes general project management-related tasks including preparation of invoices, budget oversight, adherence to project scheduling, and general project coordination. The Consultant shall be responsible for providing all contract management and quality control services throughout the duration of the project. The Consultant shall deliver high-quality product within budget and on schedule.
- The Consultant shall meet periodically with the City to discuss the project, present design options, review alternatives, etc. Monthly meetings between the City and Consultant are expected throughout the life of the project. The life expectancy of the project is estimated at three (3) years. Attendance at one (1) project kick-off meeting with City staff is required. This meeting is intended to establish the project scope, schedule, and discuss deliverables. Additional meetings, outside of the kick-off meeting, should be included in the cost estimate for when the consultant needs to meet with the City, the SE consultant, and/or MTC.
- The Consultant shall provide monthly schedule updates in conjunction with submittals of invoices and will assist the City in requests for reimbursement
- The Consultant shall assist with coordination between the City and Vendors
- The Consultant will assist with procurement and vendor selection support through a Request for Proposals (RFP) process. The Consultant will help prepare the RFP, attend pre-contract meetings, provide clarifications to vendor's question, review submitted proposals, and assist in award recommendations. The Consultant would support the City in the assessment of requirement compliance from each vendor and prepare evaluation criteria to compare submittals from each vendor

### Deliverables:

- Project schedule and updates
- Meeting agendas and minutes for all coordination meetings
- Requests for reimbursement forms
- RFPs for vendor selection

# Task 2: Evaluation of Existing Inventory

- The Consultant shall evaluate the City's existing software. The City currently has Econolite software for traffic management: both Aries and Centracs. Of the 54 signals in this project, the City currently has 20 signals on Centracs, 30 signals on Aries, and 4 signals offline. As part of this project, the City will need the 30 signals on Aries and 4 offline signals (34 signals total) added to the Centracs software. The City understands that ASC 3 or newer is required to transfer/add these signals to Centracs and should be added into Centracs as soon as the controller for the intersection meets this requirement.
- The Consultant shall evaluate equipment and hardware inventory which includes, but not limited to: interconnect, conduits, detection, cabinets, controllers, and etcetera.
- The City has seven (7) Type "O" Cabinets and eight (8) Econolite Cobalt Controllers that were purchased as the City's in-kind match and plan to have the City's electrical contractor DC Electric to build the new cabinet concrete pads. The controllers will require

testing before deployment which may be completed by our on-call engineering consultant.

 The City is prepared to begin a Capital Improvements Program (CIP) Project for installation of conduit and fiber optics throughout Central San Rafael if needed. This requires coordination and scheduling among other CIP projects and land development. The City is uncertain if conduit and fiber optics will be reimbursable by MTC since the City did not request funding for this installation, but the City has available funds for this implementation.

### Deliverables:

- Existing Software and Hardware Evaluation Summary
- Transfer and addition of 34 signals onto Centracs
- Plan for deployment of the City's in-kind match
- Construction schedule and management plan for conduit and fiber optic installation

### Task 3: Systems Engineering Management Plan (SEMP)

- The Consultant shall work with City Staff to determine a list of overall goals, objectives, and strategies for the project. The Consultant shall determine specific details which include, but are not limited to ATSPM user interface, hosting information, operational performance details, visualization, and etcetera.
- The Consultant shall review the SEMP prepared by the Systems Engineering consultant assigned to the City by MTC. This plan will identify items that need to be delivered, integrated, installed, verified, and supported for a successful implementation. The Consultant shall review the SEMP and identify missing elements that are necessary for completing ATSPM, but also used for ATCS.

### <u>Deliverables:</u>

- Independent SEMP report for a simultaneous deployment of ATSPM and ATCS
- SEMP comments packaged and ready to provide to SE Consultant
- Summary of comments on the SE Consultant's SEMP with detailed explanations

### Task 4: User Needs

- Determining user needs for the project is a critical step for any advanced technology deployment. The Consultant will work with the City and the SE consultant to identify the user needs that meets the City's overall goals, objectives, and strategies for the project.
- Specific details of the ATSPM user interface, hosting information, operational performance details, visualization, and other requirements would be determined. The user needs should identify all aspects of detection, communication, and controller upgrade that can support an adaptive system implementation.
- o The Consultant shall review the Needs Assessment Report prepared by the SE Consultant

### <u>Deliverables:</u>

- Independent Needs Assessment Report for a simultaneous deployment of ATSPM and ATCS
- Comments on the Needs Assessment Report packaged and ready to return to the SE Consultant
- Summary of comments on the SE Consultant's Needs Assessment Report with detailed explanations

## Task 5: Concept of Operations and System Requirements

- The Consultant shall assist in describing the City's needs and objectives to determine proposed system's functions and capabilities for an ATSPM system and ATCS and summarize this in a report.
- Determine the functional, performance, interface, data, and future requirements for the traffic signal system
- Prepare technical scope for the ATSPM/ATCS

### Deliverables:

- Concept of Operations Summary
- Technical scope for ATSPM and ATCS

### Task 6: Verification Plan

- The consultant shall prepare a Verification Plan with a traceability matrix to confirm that the requirements of the Systems Engineering Plan are met.
- The Verification Plan will ensure traceability, such that each system requirement will have a test(s) with an associated requirement or set of requirements. The traceability matrix will be used to check that each system requirement has been met for the project

### Deliverables:

- Verification Plan
- Traceability Matrix

# Task 7: As-Built and Project Completion Summary Report

• At the completion of the project, the Consultant shall prepare As-Built drawings and a Project Completion Report summarizing the end product and user instructions

### Deliverables:

- As-Built drawings
- Project Completion Summary Report

# City Responsibility

The City shall provide the following:

- 1. Existing Inventory List dated 9/29/17
- 2. Map showing segment lengths between signalized intersections
- 3. Answering non-technical questions during advertisement period of this RFP. Clarification offered by the City to one Consultant shall be distributed to all known participants at the City's discretion.
- 4. Reviewing all Consultants' deliverables and providing comments in a timely manner.

# Payment and Cost Estimate

The method of payment to the successful proposer shall be on a time and materials basis with a maximum "not to exceed" fee, as set by the proposer in his/her Proposal, as being the maximum cost to perform all work. This figure shall include direct costs, including labor, overhead, profit, and expenses, such as, but not limited to, transportation, communications, materials, and any subcontracted items of work. Progress payments will be based on actual hours, hourly costs and support service costs charged to the project on

a monthly basis. Each invoice submitted to the City for payment shall contain a brief description of the work billed on that invoice, total billed to date, total paid to date, and amount remaining.

## **Proposal**

The Proposal shall be concise, well organized, and demonstrate an understanding of the Scope of Work as outlined in this RFP. Proposals shall be limited to a project understanding, proposed scope of services and proposed timeline. Proposal submittals shall be in PDF format and electronically mailed.

Proposals shall be evaluated based on the Evaluation Criteria section of this RFP.

At a minimum, Proposals shall include:

- Proposals must be received no later than 5:00 PM, local time, on May 18, 2018. Electronically mail to: <u>lauren.davini@cityofsanrafael.org</u> with subject line: "Proposal for Professional Services for ATSPM and ATCS Deployment"
- 2. Cover letter signed by the person authorized to negotiate a contract for proposed services with the City on behalf of the Proposal team. <u>The cover letter must state that the sample Professional Services Agreement is acceptable as-is.</u>
- 3. Project understanding outlining the Consultant's basic understanding of the project and identifying key issues to be addressed during the project and any insights.
- 4. A detailed project approach and level of effort, in accordance with the section titled "Scope of Work" of this RFP.
- 5. A project schedule including at minimum, those tasks outlined in the section titled "Scope of Work" of this notice.
- 6. A statement of Qualification (SOQ) that includes:
  - a. The proposer's experience and history in performing this type of work, particularly those projects that have been successfully carried through construction.
  - b. At least two (2) references of persons, firms, or agencies that the City may contact to verify the experience of the proposer; include phone numbers.
  - c. An organization chart setting forth the project manager and the staff.
  - d. Experience for each individual expected to perform responsible portions of the work. Do not submit resumes for individuals who do not have a high probability of actually leading or working on the project.
  - e. Experience for each sub-consultant.

The Consultant shall be aware of the following:

- Proposals and/or modifications to Proposals received after the time and date specified in this RFP will be rejected.
- All Proposals shall be submitted according to the specifications set forth in the RFP. Failure to adhere to these specifications may be cause for rejection.

- Once submitted, Proposals, including the composition of the consulting staff, shall not be changed without prior written consent.
- All requests for clarification for this RFP must be made in writing at least 48 hours prior to the due date as set forth in this RFP. Consultants shall contact Lauren Davini at <u>lauren.davini@cityofsanrafael.org</u>.
- The City will only respond to written questions from Consultants. The City cannot respond to verbal questions submitted by telephone or in person. All addenda will be posted on the City's Web site. By submitting a Proposal, the proposer affirms that they are aware of any addenda and have prepared their Proposal accordingly. No allowances will be made for a proposer's failure to inform themselves of addenda content. A link to the addenda may be accessed at <a href="https://www.cityofsanrafael.org/ATSPM-and-ATCS-Deployment-request-for-proposal/">https://www.cityofsanrafael.org/ATSPM-and-ATCS-Deployment-request-for-proposal/</a>
- The City reserves the right to revise the RFP prior to the indicated due date. The City may consider extending the due date for RFP due to significant revisions to Scope of Services.

# **Evaluation Criteria**

A review and selection committee, made up of City staff and other professionals, will evaluate the Consultants based on the Proposals to determine which Consultant is best gualified to perform the work for this project. The committee will then determine a ranking of the Consultants at which time negotiations may begin with the most qualified Consultant. The Consultant fee will be evaluated to determine if the amount of the fee is considered a reasonable cost for the work outlined in the Proposal. If the top ranked Consultant has submitted a reasonable fee, the committee will make a recommendation to the Public Works Director that negotiations be opened to ensure that the top ranked Consultant has a full understanding of the expectations of the City, that the scope reflects all tasks anticipated and that the fee reflects completion of the project to the satisfaction of the City. In the event that the City and the top ranked Consultant are unable to come to an agreement as to scope and fee, the City reserves the right to close negotiations with the top ranked Consultant and open negotiations with the second-ranked Consultant. Once an agreement is reached involving the scope and fee, the Public Works Director will make a recommendation to the City Council to award the project to the selected Consultant and to authorize the Public Works Director to enter into an agreement with that Consultant. If the City Council is in agreement with the recommendation, City staff will proceed with the completion of the agreement and prepare the contract for execution.

Ranking of the Proposals will be based on the following point system (50 points maximum):

- 1. Inclusion of all required items and completeness of the Proposal (5 points)
- 2. Understanding of the work to be done (10 points)
- 3. Previous experience of similar projects completed on time and within budget (10 points)
- 4. Qualified and experienced personnel in the project team (5 points)
- 5. Familiarity with state and federal procedures (5 points)
- 6. Commitment to adhering to the project schedule and budget (10 points)
- 7. Clear description of the tasks and demonstrated technical ability (5 points)

The City will notify each Consultant regarding the outcome of the Proposal selection process.

The City may reject any or all of the Proposals if it deems such action are in the public interest.

### **Special Conditions**

o <u>Professional Services Agreement</u>

The Consultant selected to provide the scope of services shall use the City of San Rafael's standard Professional Services Agreement. A copy of the template of this agreement is attached to this RFP. Submittal of a Proposal is acceptance of the Professional Services Agreement. Contractually required insurance coverage and endorsement information is shown in the body of the document.

## o <u>Reservations</u>

This RFP does not commit the City to award a contract, to defray any costs incurred in the preparation of a Proposal pursuant to this RFP, or to procure or contract for work.

### • RFP as a Public Record

All Proposals submitted in response to this RFP become the property of the City and thus become public records and, as such, may be subject to public review.

### o <u>Right to Cancel</u>

The City reserves the right to cancel or change, for any or no reason, in part or in its entirety, this RFP, including but not limited to: selection schedule, submittal date, and submittal requirements.

### o Additional Information

The City reserves the right to request additional information and/or clarification from any or all respondents to this RFP.

### • Public Information

Consultants who wish to release information regarding the Consultant selection process, contract award, or data provided by the City at any Public Hearing, must receive prior written approval from the City before disclosing such information to the public.

### Attachments

- 1. City of San Rafael *Professional Services Agreement* Template (subject to change by the City Attorney's office if necessary)
- 2. Existing Inventory List dated 9/29/17
- 3. Map showing segment lengths between signalized intersections

Thank you for your interest in contracting opportunities with the City of San Rafael.

Sincerely,

Charmine Solla

Charmine Solla, P.E., T.E. Deputy Public Works Director/City Traffic Engineer