

SUBJECT: AUTHORIZATION TO NEGOTIATE AND EXECUTE A CONTRACT – TRAFFIC SIGNAL DESIGN SERVICES FOR THE PUTNAM AVENUE / D STREET HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT

SOURCE: Public Works Department - Engineering Division

COMMENT: On February 19, 2014, staff received two (2) statements of qualifications (SOQs) for traffic signal design services at the Putnam Avenue / D Street intersection. The design will be a signal upgrade to provide protected left turn lanes per the analysis performed to secure Highway Safety Improvement Program (HSIP) federal grant funds.

The selection process was held in conformance with the policy established by City Council for selecting professional consulting firms. The following is a list of the consulting firms and their ranking according to the scores attributed to their proposal:

Consultant	Rank
Omni-Means (Visalia, CA)	1
Quad Knopf (Visalia, CA)	2

Omni-Means has submitted a schedule to complete all design services by May 19, 2014, to allow the City sufficient time to submit a request for authorization for construction to Caltrans in June 2014. Once authorization is received (E-76), the City will be able to advertise for construction bids and allow for the completion of the signal upgrade in the fall of this year.

The complete scope of services is included for Council's review and understanding. The design contract is funded from HSIP grant funds as approved by the 2013/2014 Annual Budget.

RECOMMENDATION: That City Council:

1. Authorize staff to negotiate a contract with Omni-Means for an anticipated fee not to exceed \$35,000 for traffic signal design services for the Putnam Avenue / D Street HSIP Project;
2. Authorize staff to negotiate a contract with the second ranked firm if staff is unable to negotiate an acceptable contract with Omni-Means;

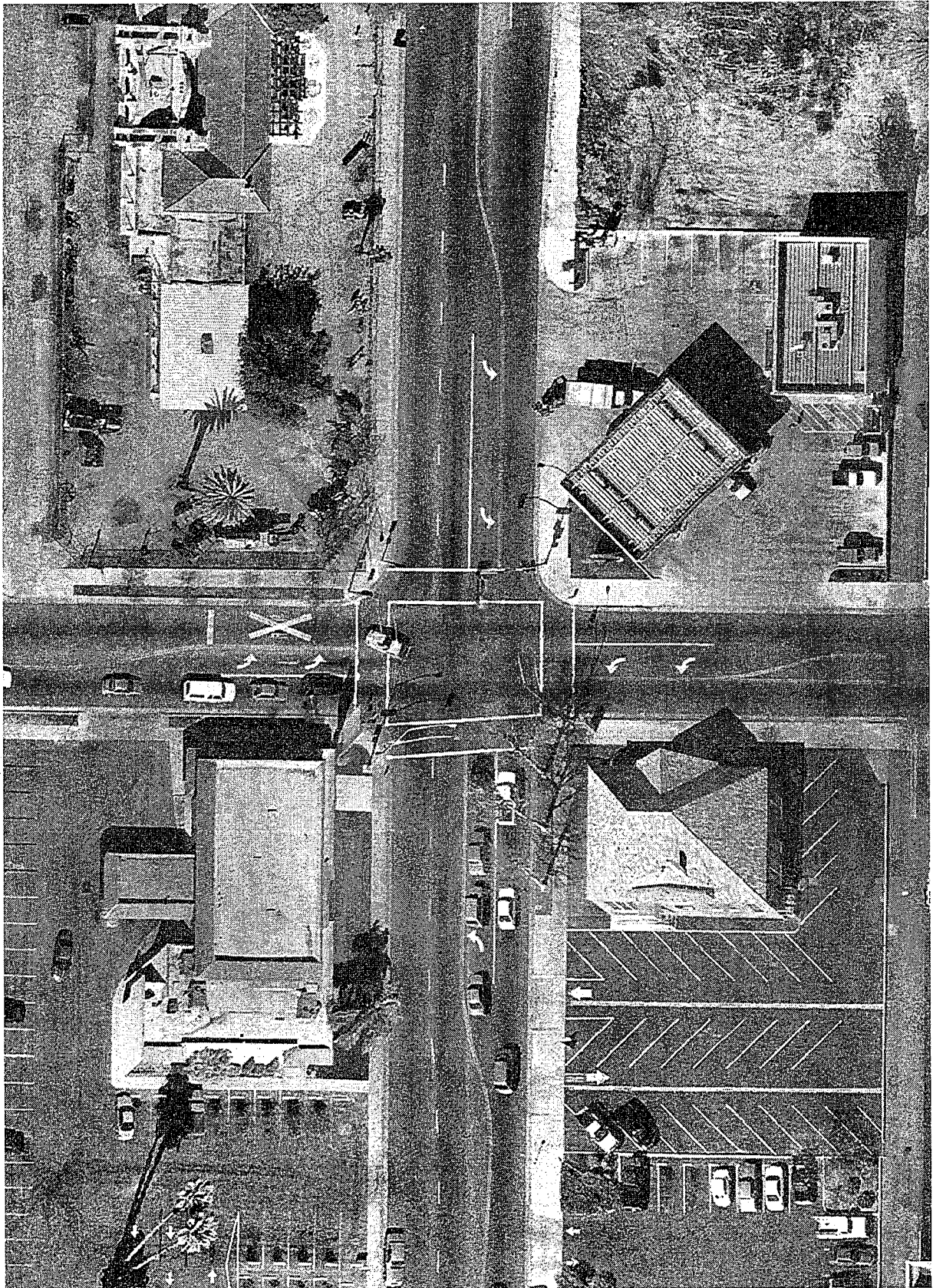
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Item No. 5

3. Authorize the Mayor to execute all contract documents;
4. Authorize progress payments up to 100% of the negotiated fee amount; and
5. Authorize a 10% contingency to cover unforeseen events that relate to the design efforts.

ATTACHMENTS: Locator Map
Scope of Services

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City of Porterville HSIP Application

Figure 4

Aerial Photograph Putnam Ave & D St 

**SCOPE OF SERVICES
TRAFFIC SIGNAL DESIGN
PUTNAM AVENUE & D STREET**

INTRODUCTION

The City of Porterville seeks a qualified firm to provide engineering services to design a traffic signal and prepare plans, technical specifications, and special provisions. The boilerplate sections of the project manual, i.e., "Notice Inviting Bids, Invitation to Bidders, Proposal, Contract Agreement," etc., shall be prepared by the CITY. The successful CONSULTANT must demonstrate through the written proposal that the firm is knowledgeable and experienced in the preparation of traffic signal plans, specifications, and special provisions. The CITY will not consider proposals from consulting firms that do not have the personnel, experience, or software/hardware needed to satisfy the CITY's requirements.

The traffic signal to be designed is located at Putnam Avenue & D Street in the City of Porterville. The successful CONSULTANT shall prepare and submit final plans and technical specifications by May 23, 2014. Final plans shall include, but not be limited to, the design of a complete traffic signal, street returns, disabled ramps, traffic signal conduit, intersection & advance loops, signing and striping.

OBJECTIVES

The CITY's objective is to secure professional services to prepare plans, specifications, and construction cost estimates for the project, assist the CITY during the bidding and construction phases of the project, resolve questions relating to the CONSULTANT's work, and prepare timing cards for the newly designed traffic signal. The CONSULTANT selected will have a design team with strong experience in traffic signal design, Model 170 controllers, signing & striping, and in the preparation of a comprehensive bid schedule with an engineer's estimate of probable cost.

BACKGROUND

The City of Porterville has been programmed to receive HSIP funding from Caltrans to construct the traffic signal described in this RFQ. The design cost for the traffic will also be borne by HSIP federal funds. The traffic signal design project includes the preparation of plans, technical specifications and special provisions as needed to construct the traffic signal. The design shall include traffic loops, lane geometry with protected left turns, and timing plans.

TASK I: BASE MAP DEVELOPMENT

Aerial, planimetric, and topographic drawings for the intersection will be provided to the CONSULTANT selected in digital format. The CONSULTANT is encouraged to review and analyze the data provided by the CITY. If the CONSULTANT and CITY agree that proper base plans can be generated from the aerial, planimetric, and topographic drawings, these drawings can be used to generate the construction plans.

The CONSULTANT is advised herein that the CITY expects clear, complete and accurate traffic signal construction plans. The CITY will not accept incomplete or otherwise inferior plans based on the CONSULTANT's assertion that the CITY's aerial photos, planimetric and topographic drawings were not sufficient for the CONSULTANT to deliver quality plans. The CONSULTANT shall request additional data and/or information from the CITY, if needed.

TASK II: SIGNALIZATION DESIGN REQUIREMENTS

A. Project Manual/Technical Specifications:

The project manual "boiler plate" section, which includes "Notice Inviting Bids, Invitation to Bidders, Proposal and Contract Agreement," shall be prepared by the CITY. The CONSULTANT shall prepare and provide the technical specifications, special provisions, bid schedule, and the engineer's estimate of probable cost. The technical specifications and special provisions shall correspond to the appropriate sections of the "Standard Specifications for Public Works Construction" and "State of California Department of Transportation Standard Specifications." The project manual is the term used by the CITY to describe the boilerplate and specification sections. The complete project manual contains the following:

1. Notice Inviting Bids – CITY Responsibility;
2. Invitation to Bidders – CITY Responsibility;
3. Proposal – CITY Responsibility;
4. Contract Agreement – CITY Responsibility;
5. General Specifications – CITY Responsibility;
6. Special Provisions, Part 1, 2, & 3 (includes technical specifications) – CONSULTANT Responsibility;
7. Bid Schedule – CONSULTANT Responsibility;
8. Engineer's Estimate – CONSULTANT Responsibility; and
9. Appendix – CITY Responsibility.

The CONSULTANT shall provide the technical information to complete the project manual and must include, but not be limited to:

1. Standard Specifications and Standard Plans incorporated by reference, and any necessary special provisions;

2. Controller Specifications;
3. Signal heads, pole, mast arm and other related hardware;
4. Loop detector specifications;
5. Light Emitting Diodes (LED) specifications for red, green, and pedestrian lights; and
6. Signing & striping specifications and all other specifications as required by the design.

B. Field Analysis:

CONSULTANT shall perform the necessary traffic volume counts, left turn counts, analysis of traffic models, etc. and do all computations necessary to prepare construction plans covering all traffic signal related details. Traffic counts, left turn counts and other computational data shall become the property of the City of Porterville and shall be transmitted to the CITY under separate cover at the time of final plan submittal.

C. Construction Plans:

Construction plans shall be developed from CITY field topography surveys and may use aerial and planimetric drawings as the base map if acceptable to the CITY. The plans shall include, as a minimum, the following information:

1. Location of controller, signal standards (poles), signal heads, vehicle detectors, pedestrian push buttons, pull boxes and all related hardware. CONSULTANT shall be cognizant of and shall make sure that clearance around poles, cabinets and other installed improvements satisfy ADA requirements;
2. Cable runs identified and keyed to a separate cable schedule;
3. Equipment scheduled to location;
4. Signal phasing diagrams;
5. Schedule of start-up time settings for all control equipment;
6. Special and electrical notes as required to insure accurate installation of the designed signalization; and
7. Clear dimensioning of all component locations (i.e. Controller, signal standard, detectors, curb returns, disable ramps, etc.) referenced to the established control.

The CITY may provide a Digital Cover Sheet, to be incorporated with the drawings, upon request.

D. Intersection and Approaches:

Construction plans of the intersections and approaches shall include:

1. Type and location of signing;

2. Pavement marking and striping, crosswalk striping, lane and centerline markings;
3. Recommended geometric changes/channelization, if appropriate; and
4. Accessible ramps and pedestrian signal hardware per City Standard at all returns or as directed by the City Engineer.

E. Plan Check Review:

The CONSULTANT shall submit two (2) sets of 1" = 20", 24" x 36" drawings to the CITY at the 60% and 100% completion for review and approval. The CITY's review will cover quality, completeness, accuracy and neatness. The CONSULTANT shall incorporate those comments and/or revisions into the construction plans.

F. Final Plans/Digital Format:

Final plans shall be printed on Mylar or Vellum at 1" = 20" scale on 24" x 36" sheets. Sheets shall have a 1/2" border on top, bottom and right and a 1" border on left. Final plans shall also be provided to the CITY electronically in CAD format.

Drafting and lettering shall be of a size and weight suitable for photographic reduction to one-half size. Plans shall conform to the standard procedures of the State of California Department of Transportation.

TASK III: UTILITY COORDINATION

The CONSULTANT shall include in his/her proposal all items necessary to satisfy the following:

1. Coordinate work between appropriate utility companies to insure project plans and manual are received by all agencies. Provide written proof that So. CA. Edison has received notice of pending construction and notice of request for power source location.
2. Furnish to the appropriate persons and agencies any revisions or supplemental data needed by such persons or agencies during and throughout the submittal of final plans and project manual.
3. Attend meetings that may be called from time to time concerning the project.
4. Request, receive and plot all facilities owned by all agencies that may affect the project.

TASK IV: CONSTRUCTION COST ESTIMATE

Prepare and submit engineer's estimate of probable cost. The engineer's estimate report shall be signed by the Engineer in responsible charge and shall be presented to the CITY under separate cover at the 100% plan submittal.

TASK V: PRE-BID AND CONSTRUCTION SUPPORT SERVICES

Provide pre-bid and construction support services such as, but not limited to, explanations as to intent of plans and/or specifications, preparation of addenda, review of shop drawings, interpretation of plans and specifications. The CONSULTANT's responsibilities during the construction period shall be that of reviewing submittals and rendering professional advice and consultation as to the best means of satisfying the project requirements.

The CONSULTANT is not expected, nor will be allowed to take control of any portion of the project. Construction support shall include field trips to the CITY and will be provided only at the request of the CITY. The CITY and CONSULTANT shall mutually agree upon the duration of each request. For the purpose of this proposal, assume a total of 24 hours of CONSULTANT time for this item of work.

LOCAL AGENCY RESPONSIBILITIES

The CONSULTANT will report to the CITY's Contract Administrator who reports to the City Engineer and Public Works Director. The CONSULTANT shall not proceed with any work until the CITY provides the Notice to Proceed to the CONSULTANT.

The CITY's Contract Administrator will directly handle the project management and monitoring of the CONSULTANT's work to ensure it is complete, accurate, and consistent with the terms and conditions of the CONSULTANT contract. The Contract Administrator and designees will also inspect, review, and discuss project progress, comply with Federal, State and Local policies and regulations, and other requirements to further the prosecution of the contract work with the least delay.

The CITY's Contract Administrator shall be responsible for the following:

1. Serve as the CITY's primary contact person for the CONSULTANT;
2. Monitor the CONSULTANT's progress and provide direction;
3. Review billings and determines whether costs billed are reasonable in relation to the work performed during billing period;
4. Approve the CONSULTANT's progress payments; and
5. Identify other CITY personnel for CONSULTANT to contact, if needed.

All records and documentation produced by the CONSULTANT for this project, become property of the CITY.

END OF SCOPE OF SERVICES