

REQUEST FOR PROPOSALS (RFP) 0-2018

**CONSULTANT SERVICES FOR
TRAFFIC AND INTELLIGENT
TRANSPORTATION SYSTEMS
ENGINEERING SERVICES FOR
EDINGER AVENUE**



**ORANGE COUNTY TRANSPORTATION AUTHORITY
550 South Main Street
P.O. Box 14184
Orange, CA 92863-1584
(714) 560-6282**

Key RFP Dates

Issue Date:	January 27, 2020
Pre-Proposal Conference Date:	February 5, 2020
Question Submittal Date:	February 14, 2020
Proposal Submittal Date:	February 26, 2020
Interview Date:	March 24, 2020

Solutions for Congested Corridors Program Funds

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January 27, 2020

NOTICE OF REQUEST FOR PROPOSALS

(RFP): 0-2018: "CONSULTANT SERVICES FOR TRAFFIC AND INTELLIGENT TRANSPORTATION SYSTEMS ENGINEERING SERVICES"

TO: ALL OFFERORS

FROM: ORANGE COUNTY TRANSPORTATION AUTHORITY

The Orange County Transportation Authority (Authority) invites proposals from qualified consultants to provide traffic and intelligent transportation systems engineering services for Edinger Avenue.

Proposals must be received in the Authority's office at or before 2:00 p.m. on February 26, 2020.

Proposals delivered in person or by a means other than the U.S. Postal Service shall be submitted to the following:

**Orange County Transportation Authority
Contracts Administration and Materials Management
600 South Main Street, (Lobby Receptionist)
Orange, California 92868
Attention: Venita Anderson, Senior Contract Administrator**

Proposals delivered using the U.S. Postal Service shall be addressed as follows:

**Orange County Transportation Authority
Contracts Administration and Materials Management
P.O. Box 14184
Orange, California 92863-1584
Attention: Venita Anderson, Senior Contract Administrator**

Proposals and amendments to proposals received after the date and time specified above will be returned to the Offerors unopened.

Firms interested in obtaining a copy of this Request for Proposals (RFP) may do so by downloading the RFP from CAMM NET at <https://cammnet.octa.net>.

All firms interested in doing business with the Authority are required to register their business on-line at CAMM NET. The website can be found at <https://cammnet.octa.net>. From the site menu click on CAMM NET to register.

To receive all further information regarding this RFP 0-2018, firms and subconsultants must be registered on CAMM NET with at least one of the following commodity codes for this solicitation selected as part of the vendor's on-line registration profile:

<u>Category:</u>	<u>Commodity:</u>
Professional Consulting	Consultant Services - General
	Consultant Services -
	Transportation Planning
	Consultant Services –
	Intelligent Transportation
	Systems (ITS)
	Traffic Planning Consulting
Professional Services	Engineering - Traffic

A pre-proposal conference will be held on February 5, 2020, at 3:30 p.m. the Authority's Administrative Office, 600 South Main Street, Orange, California, in Conference Room 09. All prospective Offerors are encouraged to attend the pre-proposal conference.

Offeror's are asked to submit written statements of technical qualifications and describe in detail their work plan for completing the work specified in the Request for Proposal. **No cost proposal or estimate of work hours is to be included in this phase of the RFP process.**

The Authority has established March 24, 2020, as the date to conduct interviews. All prospective Offerors will be asked to keep this date available.

Certain labor categories under this project are subject to prevailing wages as identified in the State of California Labor Code commencing in Section 1770 et. Seq. It is required that all mechanics and laborers employed or working at the site be paid not less than the basic hourly rates of pay and fringe benefits as shown in the current minimum wage schedules. Offerors must use the current wage schedules applicable at the time the work is in progress.

Offerors are encouraged to subcontract with small businesses to the maximum extent possible.

All Offerors will be required to comply with all applicable equal opportunity laws and regulations.

The award of this contract is subject to receipt of federal, state and/or local funds adequate to carry out the provisions of the proposed agreement including the identified Scope of Work.

Offerors are advised that all Consultant proposals and supporting documents for the project contract are subject to audit or review by the California Department of Transportation (Caltrans). The Cost Proposal is subject to an audit or Certified Public Accountant (CPA) Indirect Cost (Overhead) Audit Workpaper Review. The Cost Proposal shall be adjusted by the Consultant and approved by the Authority's Contract Administrator to conform to the Workpaper Review recommendations or audit recommendations. The Consultant agrees that individual terms of cost identified in the audit report shall be incorporated into the agreement by this reference if directed by the Authority at its sole discretion. Refusal by the Consultant to incorporate the Workpaper Review recommendations or audit recommendations will be considered a breach of the Agreement terms and cause for termination of the Agreement.

In response to Caltrans' audit/review requirements, Offeror and all their subconsultants will be required to submit, after award of contract, Caltrans Exhibit 10-K entitled "Certification of Contract Costs and Financial Management System", a copy of which is attached to this RFP as Exhibit E. As part of this certification, the prime and all subconsultants must show their financial system's ability to segregate cost elements.

SECTION I: INSTRUCTIONS TO OFFERORS

SECTION I. INSTRUCTIONS TO OFFERORS**A. PRE-PROPOSAL CONFERENCE**

A pre-proposal conference will be held on February 5, 2020, at 3:30 p.m. the Authority's Administrative Office, 600 South Main Street, Orange, California, in Conference Room 09. All prospective Offerors are encouraged to attend the pre-proposal conference.

B. EXAMINATION OF PROPOSAL DOCUMENTS

By submitting a proposal, Offeror represents that it has thoroughly examined and become familiar with the work required under this RFP and that it is capable of performing quality work to achieve the Authority's objectives.

C. ADDENDA

The Authority reserves the right to revise the RFP documents. Any Authority changes to the requirements will be made by written addendum to this RFP. Any written addenda issued pertaining to this RFP shall be incorporated into the terms and conditions of any resulting Agreement. The Authority will not be bound to any modifications to or deviations from the requirements set forth in this RFP as the result of oral instructions. Offerors shall acknowledge receipt of addenda in their proposals. Failure to acknowledge receipt of Addenda may cause the proposal to be deemed non-responsive to this RFP and be rejected.

D. AUTHORITY CONTACT

All communication and/or contacts with AUTHORITY staff regarding this RFP are to be directed to the following Contract Administrator:

Venita Anderson, Senior Contract Administrator
Contracts Administration and Materials Management Department
600 South Main Street
P.O. Box 14184
Orange, CA 92863-1584
Phone: 714.560. 5427, Fax: 714.560.5792
Email: vanderson@octa.net

Commencing on the date of the issuance of this RFP and continuing until award of the contract or cancellation of this RFP, no proposer, subcontractor, lobbyist or agent hired by the proposer shall have any contact or communications regarding this RFP with any AUTHORITY's staff; member of the evaluation committee for this RFP; or any contractor or consultant involved with the procurement, other than the Contract Administrator named above or unless expressly permitted by this RFP. Contact includes face-to-face, telephone, electronic mail (e-mail) or formal written communication. Any proposer, subcontractor, lobbyist or agent hired by the

proposer that engages in such prohibited communications may result in disqualification of the proposer at the sole discretion of the AUTHORITY.

E. CLARIFICATIONS

1. Examination of Documents

Should an Offeror require clarifications of this RFP, the Offeror shall notify the Authority in writing in accordance with Section D.2. below. Should it be found that the point in question is not clearly and fully set forth, the Authority will issue a written addendum clarifying the matter which will be sent to all firms registered on CAMM NET under the commodity codes specified in this RFP.

2. Submitting Requests

- a. All questions, including questions that could not be specifically answered at the pre-proposal conference must be put in writing and must be received by the Authority no later than 5:00 p.m., on February 14, 2020.
- b. Requests for clarifications, questions and comments must be clearly labeled, "Written Questions". The Authority is not responsible for failure to respond to a request that has not been labeled as such.
- c. Any of the following methods of delivering written questions are acceptable as long as the questions are received no later than the date and time specified above:
 - (1) U.S. Mail: Orange County Transportation Authority, 550 South Main Street, P.O. Box 14184, Orange, California 92863-1584.
 - (2) Personal Delivery: Contracts Administration and Materials Management Department, 600 South Main Street, Lobby Receptionist, Orange, California 92868.
 - (3) Facsimile: (714) 560-5792.
 - (4) Email: vanderson@octa.net

3. Authority Responses

Responses from the Authority will be posted on CAMM NET, no later than February 19, 2020. Offerors may download responses from CAMM NET at <https://cammnet.octa.net>, or request responses be sent via U.S. Mail by emailing or faxing the request to Venita Anderson, Senior Contract Administrator.

To receive email notification of Authority responses when they are posted on CAMM NET, firms and subconsultants must be registered on CAMM NET with at least one of the following commodity codes for this solicitation selected as part of the vendor's on-line registration profile:

<u>Category:</u>	<u>Commodity:</u>
Professional Consulting	Consultant Services - General
	Consultant Services -
	Transportation Planning
	Consultant Services –
	Intelligent Transportation
	Systems (ITS)
	Traffic Planning Consulting
Professional Services	Engineering - Traffic

Inquiries received after 5:00 p.m. on February 14, 2020, will not be responded to.

F. SUBMISSION OF PROPOSALS

1. Date and Time

Proposals must be received in the Authority's office at or before 2:00 p.m. on February 26, 2020.

Proposals received after the above-specified date and time will be returned to Offerors unopened.

2. Address

Proposals delivered in person or by a means other than the U.S. Postal Service shall be submitted to the following:

**Orange County Transportation Authority
Contracts Administration and Materials Management (CAMM)
600 South Main Street, (Lobby Receptionist)
Orange, California 92868
Attention: Venita Anderson, Senior Contract Administrator**

Or proposals delivered using the U.S. Postal Services shall be addressed as follows:

**Orange County Transportation Authority
Contracts Administration and Materials Management (CAMM)
P.O. Box 14184
Orange, California 92863-1584
Attention: Venita Anderson, Senior Contract Administrator**

3. Identification of Proposals

Offeror shall submit an **original and 7 copies** of its proposal in a sealed package, addressed as shown above in F.2. The outer envelope must show the Offeror's name and address and clearly marked with RFP number. In addition to the above, Proposers shall also include one (1) electronic copy of their entire RFP submittal package in "PDF" format, on a CD, DVD, or flash drive.

4. Acceptance of Proposals

- a. The Authority reserves the right to accept or reject any and all proposals, or any item or part thereof, or to waive any informalities or irregularities in proposals.
- b. The Authority reserves the right to withdraw or cancel this RFP at any time without prior notice and the Authority makes no representations that any contract will be awarded to any Offeror responding to this RFP.
- c. The Authority reserves the right to issue a new RFP for the project.
- d. The Authority reserves the right to postpone proposal openings for its own convenience.
- e. Each proposal will be received with the understanding that acceptance by the Authority of the proposal to provide the services described herein shall constitute a contract between the Offeror and Authority which shall bind the Offeror on its part to furnish and deliver at the prices given and in accordance with conditions of said accepted proposal and specifications.
- f. The Authority reserves the right to investigate the qualifications of any Offeror, and/or require additional evidence of qualifications to perform the work.
- g. Submitted proposals are not to be copyrighted.

G. PRE-CONTRACTUAL EXPENSES

The Authority shall not, in any event, be liable for any pre-contractual expenses incurred by Offeror in the preparation of its proposal. Offeror shall not include any such expenses as part of its proposal.

Pre-contractual expenses are defined as expenses incurred by Offeror in:

1. Preparing its proposal in response to this RFP;

2. Submitting that proposal to the Authority;
3. Negotiating with the Authority any matter related to this proposal; or
4. Any other expenses incurred by Offeror prior to date of award, if any, of the Agreement.

H. JOINT OFFERS

Where two or more firms desire to submit a single proposal in response to this RFP, they should do so on a prime-subcontractor basis rather than as a joint venture. The Authority intends to contract with a single firm and not with multiple firms doing business as a joint venture.

I. TAXES

Offerors' proposals are subject to State and Local sales taxes. However, the Authority is exempt from the payment of Federal Excise and Transportation Taxes. Offeror is responsible for payment of all taxes for any goods, services, processes and operations incidental to or involved in the contract.

J. PROTEST PROCEDURES

The Authority has on file a set of written protest procedures applicable to this solicitation that may be obtained by contacting the Contract Administrator responsible for this procurement. Any protests filed by an Offeror in connection with this RFP must be submitted in accordance with the Authority's written procedures.

K. CONTRACT TYPE

It is anticipated that the Agreement resulting from this solicitation, if awarded, will be a firm-fixed price contract specifying firm-fixed prices for individual tasks specified in the Scope of Work, included in this RFP as Exhibit A.

L. PREVAILING WAGES

Certain labor categories under this project are subject to prevailing wages as identified in the State of California Labor Code commencing in Section 1770 et seq. The proposer to whom a contract for the work is awarded by the Authority shall comply with the provision of the California Labor Code, including, without limitation, the obligation to pay the general prevailing rates of wages in the locality in which the work is to be performed in accordance with, without limitation, Sections 1773.1, 1774, 1775 and 1776 of the California Labor Code governing employment of apprentices. Copies of the prevailing rates of per diem wages are on file at the Authority's principal office at 550 S. Main Street, Orange, CA 92868 and are available to any interested party on request.

M. CONFLICT OF INTEREST

All Offerors responding to this RFP must avoid organizational conflicts of interest which would restrict full and open competition in this procurement. An organizational conflict of interest means that due to other activities, relationships or contracts, an Offeror is unable, or potentially unable to render impartial assistance or advice to the Authority; an Offeror's objectivity in performing the work identified in the Scope of Work is or might be otherwise impaired; or an Offeror has an unfair competitive advantage. Conflict of Interest issues must be fully disclosed in the Offeror's proposal.

All Offerors must disclose in their proposal and immediately throughout the course of the evaluation process if they have hired or retained an advocate to lobby AUTHORITY staff or the Board of Directors on their behalf.

Offerors hired to perform services for the AUTHORITY are prohibited from concurrently acting as an advocate for another firm who is competing for a contract with the AUTHORITY, either as a prime or subcontractor.

N. CODE OF CONDUCT

All Offerors agree to comply with the Authority's Code of Conduct as it relates to Third-Party contracts which is hereby referenced and by this reference is incorporated herein. All Offerors agree to include these requirements in all of its subcontracts.

O. CERTIFICATION OF CONTRACT COSTS AND FINANCIAL MANAGEMENT SYSTEM

Offerors and all their subconsultants will be required to submit, after award of contract, Exhibit 10-K entitled "Certification of Contract Costs and Financial Management System", a copy of which is attached to this RFP. As part of this certification, the prime and all subconsultants must show their financial system's ability to segregate cost elements.

SECTION II: PROPOSAL CONTENT

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A. PROPOSAL FORMAT AND CONTENT

1. Format

Proposals should be typed with a standard 12-point font, double-spaced and submitted on 8 1/2" x 11" size paper, using a single method of fastening. Charts and schedules may be included in 11"x17" format. Proposals should not include any unnecessarily elaborate or promotional materials. Proposals should not exceed fifty (50) pages in length, excluding any appendices, cover letters, resumes, or forms.

2. Letter of Transmittal

The Letter of Transmittal shall be addressed to Venita Anderson, Senior Contract Administrator and must, at a minimum, contain the following:

- a. Identification of Offeror that will have contractual responsibility with the Authority. Identification shall include legal name of company, corporate address, telephone and fax number, and email address. Include name, title, address, email address and telephone number of the contact person identified during period of proposal evaluation.
- b. Identification of all proposed subcontractors including legal name of company, whether the firm is a Disadvantaged Business Enterprise (DBE), contact person's name and address, phone number and fax number, and email address; relationship between Offeror and subcontractors, if applicable.
- c. Acknowledgement of receipt of all RFP addenda, if any.
- d. A statement to the effect that the proposal shall remain valid for a period of not less than 180 days from the date of submittal.
- e. Signature of a person authorized to bind Offeror to the terms of the proposal.
- f. Signed statement attesting that all information submitted with the proposal is true and correct.

3. Technical Proposal

- a. Qualifications, Related Experience and References of Offeror

This section of the proposal should establish the ability of Offeror to satisfactorily perform the required work by reasons of: experience in

performing work of a similar nature; demonstrated competence in the services to be provided; strength and stability of the firm; staffing capability; work load; record of meeting schedules on similar projects; and supportive client references.

Offeror to:

- (1) Provide a brief profile of the firm, including the types of services offered; the year founded; form of the organization (corporation, partnership, sole proprietorship); number, size and location of offices; and number of employees.
- (2) Provide a general description of the firm's financial condition and identify any conditions (e.g., bankruptcy, pending litigation, planned office closures, impending merger) that may impede Offeror's ability to complete the project.
- (3) Describe the firm's experience in performing work of a similar nature to that solicited in this RFP, and highlight the participation in such work by the key personnel proposed for assignment to this project.
- (4) Identify subcontractors by company name, address, contact person, telephone number, email, and project function. Describe Offeror's experience working with each subcontractor.
- (5) Identify all firms hired or retained to provide lobbying or advocating services on behalf of the Offeror by company name, address, contact person, telephone number and email address. This information is required to be provided by the Offeror immediately during the evaluation process, if a lobbyist or advocate is hired or retained.
- (6) Provide as a minimum three (3) references for the projects cited as related experience, and furnish the name, title, address, telephone number, and email address of the person(s) at the client organization who is most knowledgeable about the work performed. Offeror may also supply references from other work not cited in this section as related experience.

b. Proposed Staffing and Project Organization

This section of the proposal should establish the method, which will be used by the Offeror to manage the project as well as identify key personnel assigned.

Offeror to:

- (1) Identify key personnel proposed to perform the work in the specified tasks and include major areas of subcontract work. Include the person's name, current location, proposed position for this project, current assignment, level of commitment to that assignment, availability for this assignment and how long each person has been with the firm.
- (2) Furnish brief resumes (not more than two [2] pages each) for the proposed Project Manager and other key personnel that includes education, experience, and applicable professional credentials.
- (3) Indicate adequacy of labor resources utilizing a table projecting the resource allocation to the project by individual task.
- (4) Include a project organization chart, which clearly delineates communication/reporting relationships among the project staff.
- (5) Include a statement that key personnel will be available to the extent proposed for the duration of the project acknowledging that no person designated as "key" to the project shall be removed or replaced without the prior written concurrence of the Authority.

c. Work Plan

Offeror should provide a narrative, which addresses the Scope of Work, and shows Offeror's understanding of Authority's needs and requirements.

Offeror to:

- (1) Describe the approach to completing the tasks specified in the Scope of Work. The approach to the work plan shall be of such detail to demonstrate the Offeror's ability to accomplish the project objectives and overall schedule.
- (2) Outline sequentially the activities that would be undertaken in completing the tasks and specify who would perform them.
- (3) Furnish a project schedule for completing the tasks in terms of elapsed weeks.
- (4) Identify methods that Offeror will use to ensure quality control as well as budget and schedule control for the project.

- (5) Identify any special issues or problems that are likely to be encountered in this project and how the Offeror would propose to address them.
- (6) Offeror is encouraged to propose enhancements or procedural or technical innovations to the Scope of Work that do not materially deviate from the objectives or required content of the project.

d. **Exceptions/Deviations**

State any technical and/or contractual exceptions and/or deviations from the requirements of this RFP, including the AUTHORITY's technical requirements and contractual terms and conditions set forth in the Scope of Work (Exhibit A) and Proposed Agreement (Exhibit B), using the form entitled "Proposal Exceptions and/or Deviations" included in this RFP. This Proposal Exceptions and/or Deviations form must be included in the original proposal submitted by the Offeror. If no technical or contractual exceptions and/or deviations are submitted as part of the original proposal, Offerors are deemed to have accepted the AUTHORITY's technical requirements and contractual terms and conditions set forth in the Scope of Work (Exhibit A) and Proposed Agreement (Exhibit B). Offerors will not be allowed to submit the Proposal Exceptions and/or Deviations form or any technical and/or contractual exceptions after the proposal submittal date identified in the RFP. Exceptions and/or deviations submitted after the proposal submittal date will not be reviewed by AUTHORITY.

All exceptions and/or deviations will be reviewed by the AUTHORITY and will be assigned a "pass" or "fail" status. Exceptions and deviations that "pass" do not mean that the AUTHORITY has accepted the change but that it is a potential negotiable issue. Exceptions and deviations that receive a "fail" status means that the requested change is not something that the AUTHORITY would consider a potential negotiable issue. Offerors that receive a "fail" status on their exceptions and/or deviations will be notified by the AUTHORITY and will be allowed to retract the exception and/or deviation and continue in the evaluation process. Any exceptions and/or deviation that receive a "fail" status and the Offeror cannot or does not retract the requested change may result in the firm being eliminated from further evaluation.

4. Cost and Price Proposal

Offerors are asked to submit only the technical qualifications as requested in the RFP. No cost proposal or work hours are to be included in this phase

of the RFP process. Upon completion of the initial evaluations and interviews, if conducted, the highest ranked Offeror will be asked to submit a detailed cost proposal and negotiations will commence based on both the cost and technical proposals.

5. Appendices

Information considered by Offeror to be pertinent to this project and which has not been specifically solicited in any of the aforementioned sections may be placed in a separate appendix section. Offerors are cautioned, however, that this does not constitute an invitation to submit large amounts of extraneous materials. Appendices should be relevant and brief.

B. FORMS

1. Campaign Contribution Disclosure Form

In conformance with the statutory requirements of the State of California Government Code Section 84308, part of the Political Reform Act and Title 2, California Code of Regulations 18438 through 18438.8, regarding campaign contributions to members of appointed Board of Directors, Offeror is required to complete and sign the Campaign Contribution Disclosure Form provided in this RFP and submit as part of the proposal.

This form **must** be completed regardless of whether a campaign contribution has been made or not and regardless of the amount of the contribution.

The prime contractor, subconsultants, lobbyists and agents are required to report all campaign contributions made from the proposal submittal date up to and until the Board of Directors makes a selection.

Offeror is required to submit only **one** copy of the completed form(s) as part of its proposal and it must be included in only the **original** proposal.

2. Status of Past and Present Contracts Form

Offeror shall complete and sign the form entitled "Status of Past and Present Contracts" provided in this RFP and submit as part of its proposal. Offeror shall identify the status of past and present contracts where the firm has either provided services as a prime vendor or a subcontractor during the past five (5) years in which the contract has been the subject of or may be involved in litigation with the contracting authority. This includes, but is not limited to, claims, settlement agreements, arbitrations, administrative proceedings, and investigations arising out of the contract. Offeror shall have an ongoing obligation to update the Authority with any changes to the identified contracts and any new litigation, claims, settlement agreements,

arbitrations, administrative proceedings, or investigations that arise subsequent to the submission of Offeror's proposal.

A separate form must be completed for each identified contract. Each form must be signed by the Offeror confirming that the information provided is true and accurate. Offeror is required to submit one copy of the completed form(s) as part of its proposals and it should be included in only the original proposal.

3. Proposal Exceptions and/or Deviations Form

Offerors shall complete the form entitled "Proposal Exceptions and/or Deviations" provided in this RFP and submit it as part of the original proposal. For each exception and/or deviation, a new form should be used, identifying the exception and/or deviation and the rationale for requesting the change. Exceptions and/or deviations submitted after the proposal submittal date will not be reviewed nor considered by the AUTHORITY.

SECTION III: EVALUATION AND AWARD

SECTION III. EVALUATION AND AWARD

A. EVALUATION CRITERIA

The Authority will evaluate the offers received based on the following criteria:

1. **Qualifications of the Firm** **25%**
 Technical experience in performing work of a closely similar nature; strength and stability of the firm; strength, stability, experience and technical competence of subcontractors; assessment by client references.
2. **Staffing and Project Organization** **40%**
 Qualifications of project staff, particularly key personnel and especially the Project Manager; key personnel's level of involvement in performing related work cited in "Qualifications of the Firm" section; logic of project organization; adequacy of labor commitment; concurrence in the restrictions on changes in key personnel.
3. **Work Plan** **35%**
 Depth of Offeror's understanding of Authority's requirements and overall quality of work plan; logic, clarity and specificity of work plan; appropriateness of resource allocation among the tasks; reasonableness of proposed schedule; utility of suggested technical or procedural innovations.

B. EVALUATION PROCEDURE

An evaluation committee will be appointed to review all proposals received for this RFP. The committee is comprised of Authority staff and may include outside personnel. The committee members will evaluate the written proposals using criteria identified in Section III A. A list of top ranked proposals, firms within a competitive range, will be developed based upon the totals of each committee members' score for each proposal.

During the evaluation period, the Authority may interview some or all of the proposing firms. The Authority has established March 24, 2020, as the date to conduct interviews. All prospective Offerors are asked to keep this date available. No other interview dates will be provided, therefore, if an Offeror is unable to attend the interview on this date, its proposal may be eliminated from further discussion. The interview may consist of a short presentation by the Offeror after which the evaluation committee will ask questions related to the firm's proposal and qualifications.

At the conclusion of the evaluation process, the evaluation committee will rank proposals and will recommend to the Regional Planning and Highways Committee, the Offeror(s) with the highest ranking. The Regional Planning and Highways Committee will review the evaluation committee's recommendation and forward its recommendation to the Board of Directors for final action.

C. AWARD

The Evaluation Committee will select a firm to recommend to the Authority's Board of Directors. At the same time the recommended Offeror will be asked to submit a sealed price proposal. In conjunction with its action of selecting a firm, the Authority's Board of Directors will authorize staff to negotiate a contract price and other terms and conditions. The Board will also grant staff the ability to terminate negotiations with the selected Offeror if no satisfactory agreement can be reached and to begin negotiations with the next highest-ranked Offeror until a satisfactory agreement has been achieved.

The Authority reserves the right to award its total requirements to one Offeror or to apportion those requirements among several Offerors as the Authority may deem to be in its best interest. In addition, negotiations may or may not be conducted with Offerors; therefore, the proposal submitted should contain Offeror's most favorable terms and conditions, since the selection and award may be made without discussion with any Offeror.

The selected Offeror will be required to submit to an audit of its financial records to confirm its financial stability and the Offeror's accounting system.

D. THE SELECTED OFFEROR WILL BE REQUIRED TO SUBMIT TO THE AUTHORITY'S ACCOUNTING DEPARTMENT A CURRENT IRS W-9 FORM PRIOR TO COMMENCING WORK.

E. NOTIFICATION OF AWARD AND DEBRIEFING

Offerors who submit a proposal in response to this RFP shall be notified via CAMM NET of the contract award. Such notification shall be made within three (3) business days of the date the contract is awarded.

Offerors who were not awarded the contract may obtain a debriefing concerning the strengths and weaknesses of their proposal. Unsuccessful Offerors, who wish to be debriefed, must request the debriefing in writing or electronic mail and the Authority must receive it within three (3) business days of notification of the contract award.

EXHIBIT A: SCOPE OF WORK

**SCOPE OF WORK
EDINGER AVENUE
REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION PROGRAM PROJECT**

As part of the Regional Traffic Signal Synchronization Program (RTSSP) and the Solutions for Congested Corridors Program (SCCP), the Orange County Transportation Authority (Authority or OCTA) desires to provide the components necessary to improve and enhance signal timing, synchronization, and coordinated operations for signalized intersections on the Edinger Avenue Corridor (PROJECT), from Bolsa Chica Street in the City of Huntington Beach to Auto Mall Drive in the City of Santa Ana. OCTA is serving as lead agency for PROJECT for the four participating local agencies: Fountain Valley, Huntington Beach, Santa Ana, and Westminster (Participating Agencies hereinafter PARTIES and individually as PARTY) and Caltrans. Caltrans is not a participant in the Cooperative Agreement for PROJECT. They are considered a line item expense for implementation purposes. This SOW includes tables and maps for showing locations for construction for PROJECT. This project is partially funded by Senate Bill 1 under the Solutions for Congested Corridors Program (SCCP). Thus, all state requirements must be fulfilled, including but not limited to all forms and payroll documentation for all personnel required by Caltrans and OCTA Internal Audit. All Consultants and their subcontractors must agree to provide the required documents in a timely manner after notice of award.

I. DESCRIPTION – GENERAL PROVISIONS - PROJECT

PROJECT shall be completed in two distinct sequential phases; Primary Implementation (PI) followed by On-going Operations and Maintenance (O&M), respectively.

The CONSULTANT assigned the Contract for this PROJECT shall complete the PI phase within one year of Notice to Proceed. For the purposes of this SOW, the words Contractor, Consultant, and CONSULTANT are interchangeable. Upon acceptance of the PI phase by OCTA and a Notice to Proceed into O&M phase, CONSULTANT shall then and only then commence the O&M phase. O&M phase shall have a duration of 24 months. PROJECT Closeout of the PROJECT length shall occur upon payment of retention, receipt of Final Report, and acceptance by all PARTIES.

PROJECT SPECIFICS

- Project Traffic Forum (PTF) shall refer to all PARTIES, Caltrans, and OCTA.
- OCTA is designated as the LEAD or IMPLEMENTING AGENCY.
 - Primary Authority Project Manager (APM) for this PROJECT is the Program Manager of the Regional Traffic Signal Synchronization Program (RTSSP) for OCTA (Project Manager III of the Regional Modeling – Traffic Operations Section).
 - Secondary Authority Project Manager (APM) for this PROJECT is the Principal Transportation Analyst of the Regional Modeling – Traffic Operations Section.
- A PARTY shall not directly contact or direct CONSULTANT in any endeavor on this PROJECT unless approved by the APM or designee.
- CONSULTANT shall not suggest or modify any part of this Scope of Work to a PARTY or Caltrans for any endeavor, purpose, and/or enhancements on PROJECT unless approved by the APM or designee. Non-approved changes to SOW and appendices may be out of

scope and any and all related expenses are 100% the responsibility of the CONSULTANT and the receiving PARTY.

II. PARTICIPANT AGENCY INTERSECTIONS

Traffic signals to be synchronized along the corridor are controlled by the individual PARTY owners. The PARTIES along the corridor utilize several different types of controller assemblies. Controller Unit types employed within the assemblies may include various proprietary pre-Advanced Transportation Controllers (ATC) each having their own respective firmware/operating systems and characteristics; and, some of the newer ATC which is now a requirement of the Comprehensive Transportation Funding Program (CTFP) Guidelines. The respective PARTIES also interface these controllers utilizing unique Advanced Transportation Management Systems (ATMS) or Master Central Systems. Per CTFP Guidelines, all ATMS to be installed or modified must comply with all applicable NTCIP standards for communications.

The main goals and objectives of this project are:

- Perform an operations and timing analysis to develop and implement optimized traffic signal synchronization timing, including the development and implementation of timing plans at all signalized intersections;
- Determine and make recommendations for new or modifications to existing traffic signal equipment and infrastructure related solely to improve and/or enhance synchronization and overall corridor operational efficiencies; and
- Upon approval by the owning PARTY and OCTA, procure, furnish and install all approved infrastructure improvements for PROJECT.

The implementation of the new optimized timing and infrastructure improvements will:

- Provide signal synchronization timing for prevailing traffic patterns and common zones of operations;
- Maximize the number of successive intersections traversed on a green indication vs. those stopped by a red indication (Greens per Red);
- Reduce stops, travel times, and overall delay;
- Reduce emissions and Green House Gases (GHG); and
- Provide a continuing foundation for interjurisdictional cooperation in coordination of interactive but autonomous local PARTY traffic signal systems.

The following specific tasks are required to be performed in the course of providing service for the traffic signal coordination project. Tasks are listed in sequential order for clarity. However, some tasks may run concurrently or commence prior to the order listed.

III. PRIMARY IMPLEMENTATION PHASE

The Primary Implementation (PI) Phase is the initial phase lasting approximately one year to design, engineer, procure, and install the infrastructure; and, analyze existing traffic conditions to provide and implement new optimized traffic signal coordination timing. This shall be followed by a fine-tuning period, and all other aspects related to the new optimized traffic signal synchronization/coordinated operations along the Edinger Avenue RTSSP corridor. The PI Phase begins upon execution of the contract and Notice of Award from OCTA's CAMM Division. The PI Phase ends at the payment of the retention for the phase. Only work performed and hours charged associated with the PI Phase may occur within this time period.

Task 1: Project Management – PI Phase

Project Management is ongoing throughout the duration of the PROJECT. This task includes day-to-day project management, such as meetings, progress reports, tracking of schedules, invoicing, and overall administration of the PROJECT. The project management team, comprised of OCTA personnel including internal consulting support firms, and the Traffic and ITS Engineering Consultant (CONSULTANT), acts as an extension of OCTA staff and will act in that capacity at meetings with the respective corridor PARTIES. The following list is a minimum of what is required of this task:

1. The selected CONSULTANT for PROJECT shall prepare a detailed Project Management Plan (PMP) that includes budget and schedule estimates for all tasks described in the SOW, providing specific project milestones for review and approval by the APMs, or designated representative. These items shall be detailed and include expected meetings, activities (by work task, whether performed by CONSULTANT team or by others), start dates, activity durations, product submittal dates, relationships among work tasks (including critical path items), and a detailed GANT flow chart for the project tasks, and float time. The PMP shall also define the roles of the Project Manager, Project Assistant(s), and Project Manager's Reporting Contact Person, as well as their corresponding contact information. CONSULTANT shall finalize the report based on comments received from the project sponsor, other involved PARTIES, and APM and/or OCTA staff.
2. Consultant shall lead two distinct Project Kick-Off Meetings; one with the APM and internal staff and the second with all PARTIES.
 - a. The first meeting will be to kick-off the project with the APM; establish communication channels and protocols; discuss the Scope of Work, project schedule, and project budget; gather available information; and obtain a thorough understanding of the goals for the project. Specific topics to discuss include data collection needs, specific Traffic Signal Timing Optimization software programs specified herein, and specific construction items and procurement methodologies; intent of the original application and allowances or variants in design engineering, installation, and implementation; and PROJECT schedule. Administrative items to be discussed will include contact persons and secondary contacts for different functions of the project. Invoicing and reporting requirements on invoices with templates will be provided to consultant with explanations on how to provide monthly information on prime, sub-consultant, and vendor expenses on the invoice submittal.
 - b. The second stage of the meeting will be the first PROJECT Traffic Forum (PTF), a monthly meeting with CONSULTANT, APM, and PARTY representatives that have signaled intersections along the PROJECT. Data collection needs and requirements shall be outlined to the involved PARTIES. CONSULTANT shall notify each AGENCY of the type of work, and when the work is to be performed within that AGENCY. CONSULTANT shall notify each participating AGENCY any and all documents that need to be produced pertaining to the construction of the facilities and the coordination, including but not limited to: as-built drawings, Plans, Specifications, and Estimates (PS&E) for new construction to be built as part of this project, intersection Timing Charts, existing Synchro models, aerial photos, Average Daily Traffic (ADT) and intersection turning movement counts data, etc. The APM and staff will assist in this endeavor to facilitate time constraints. If available, OCTA will provide existing base models for SYNCHRO Version 10.

It is the sole responsibility of the CONSULTANT to create and calibrate the model to existing conditions.

3. CONSULTANT shall lead project meetings as directed by OCTA to include the CONSULTANT staff, APM, and other project related participants. The purpose of these meetings will be to ensure that proper input is being received and included in the work effort by CONSULTANT and OCTA.
 - a. CONSULTANT shall prepare agendas, provide status updates, discuss the progress and direction of the work, and provide notes of these meetings as directed by OCTA to all PARTIES. These meetings will also serve to provide feedback between the PTF and CONSULTANT regarding specific issues of the effort, including facilitating the development of measures of effectiveness, construction alternatives and mitigations, and as specified in later tasks. With prior approval of the PTF, these meetings can occur in person, through a conference call or email, as necessary each month.
 - b. CONSULTANT shall attend and be an active presenter at the OCTA-led Traffic Forum, updating the group on PROJECT status, effort, issues, mitigations, and other items as determined with and agreed to by APM. The Traffic Forum is envisioned to further communication and information exchange between OCTA and the local PARTIES regarding signal coordination and Intelligent Transportation Systems (ITS). The Traffic Forum Meetings are held within the first two weeks of February and late September/early October, respectively. Special Traffic Forum meetings may also be scheduled in between the regular meetings due to circumstance or by request of the Board.
 - c. At a minimum, a total of 12 meetings (this may be adjusted upon agreement of the PTF), 11 PTF and one Traffic Forum meetings shall be used for scheduling and budgeting purposes.
4. Consultant shall keep a running record of project cost broken down by PARTY. This information will be used by OCTA to bill PARTIES for their respective project match. This information may be requested by OCTA at any time.
5. CONSULTANT shall also keep a running record of all scope changes and/or any deviations from awarded contract. This information will be used by OCTA to request for Scope Changes at the Semi-Annual Review (SAR). This information may be requested by OCTA at any time.
6. CONSULTANT shall submit monthly invoices in the provided format. Each invoice shall include a detailed progress report for the reporting month, all third-party invoices, schedule, and other backup documentation as requested by APM.

Deliverables – Task 1:

1. Lead a 2 Stage Project Kick-off Meeting(s) and prepare agendas and meeting materials.
2. Draft and Final Detailed Project Management Plan – one copy for each participating agency.
3. Monthly progress reports, including detailed status of the work effort, outlook, issues/ solutions, and updated schedule shall be e-mailed to PTF.
4. Attend Monthly PTF meetings and prepare meeting materials, including agenda, action items, graphics, presentation aides, and notes/minutes.
5. Electronic versions of all data files as directed by OCTA.
6. Graphics and presentation aides required for all meetings.

7. All documents provided in electronic form should be those currently used by OCTA: MS Office Professional format, and Adobe Acrobat portable document format (pdf) files.
8. All electronic data produced for this project shall be provided on Flash Media or similar hardware non-volatile memory device.
9. Monthly invoices shall include all third-party invoices and other supporting documentation as requested by OCTA.
 - a. Monthly invoices that include third-party invoices shall also include an equipment breakdown sheet in the format provided by APM.
 - b. Monthly invoices shall include a detailed progress report, outlook, issues/solutions, and updated schedule.

The OCTA Microsoft Teams portal that will be created and shared by the APM shall be used for all PROJECT correspondence, file transfer, and schedule management. All email correspondence shall include TrafficOps@octa.net as a recipient. In addition, during the course of the project, online resources, such as DropBox, OneDrive, or Consultant's own file transfer system may also be employed for file transfer, etc.

Task 2: Data Collection

Data, such as counts, field conditions, and travel time studies, collected along the PROJECT will provide the necessary insight to develop appropriate design construction documents and optimal time-of-day traffic signal coordination plans. This data will also be used to measure the effectiveness of the PROJECT.

Sub-Task 2.1: Counts and Field Review

CONSULTANT shall collect, at a minimum, the following count data and field review necessary to thoroughly understand existing traffic conditions in the study area.

1. From the involved PARTIES and/or OCTA, CONSULTANT shall collect existing timing charts/sheets, existing coordination plans, traffic as-built drawings, aerial photos, maps, traffic collision data as available, and collision diagrams for the study intersections, if available. CONSULTANT shall also collect any of the shelf plans for construction and all traffic signal coordination/synchronization related Plans, Specifications, and Estimates (PS&E) for the corridor. CONSULTANT, if requested by the involved PARTY, will provide their own staff to review available records/plans and request copies of needed records/plans with minimal disruption to the involved PARTY.
2. From the involved PARTIES, CONSULTANT shall collect signal timing and signal priority preferences, including, but not limited to, those related to pedestrian and bicycle timing, phase sequence modifications and preferences, and special operations such as conditional service, coordination preferred phase re-service, and ring-barrier logic, as well as the timing optimization software preference.
3. CONSULTANT shall conduct seven-day 24-hour machine counts along each 1-mile segment of the PROJECT. Additionally, CONSULTANT shall collect 24-hour vehicle classification counts at up to 75% of the ADT locations on the PROJECT to determine heavy vehicle (Buses and Trucks) percentage information. The vehicle classification categories shall correspond to the latest Federal Highway Administration (FHWA) vehicle class categories. All count locations will be approved by the PTF prior to collection.

4. CONSULTANT shall conduct weekday and weekend peak period intersection turning movement (ITM) counts at each and every one of the PROJECT signalized intersections (see List of Intersections and Project Map with Construction Notes for specific project), including pedestrian and bicycle counts. ITM counts shall be conducted, with approval of PTF, for two hours of each weekday peak period (AM, mid-day, and PM) and a single four-hour Saturday mid-day peak period.
 - a. Any and all modes of vehicles and/or pedestrians that do not clear the intersection for counting purposes during the count time period shall also be counted as part of the quarter hour period in which they occur. *(This means that if a queue develops that is not served in one cycle and the counting period is ending, the number of vehicles remaining in the queue shall be included in that 15-minute period. They shall not be included in the succeeding 15-minute period).* CONSULTANT shall acknowledge and enforce this requirement and shall inform all vendors utilized of same.
 - b. ITMs that were collected within 2 years of the planned data collection period and supplied by an alternate viable source for an intersection may be used in lieu of a manual count if approved by the involved PARTIES. Per the Comprehensive Transportation Funding Programs (CTFP) Guidelines, ITM's supplied by a PARTY cannot be used as a credit against match funding requirements.
5. All counts shall be summarized in Microsoft Excel format. Counts shall also be summarized in a Comma Separated Values (CSV) file in the Universal Traffic Data Format (UTDF) for direct volume import into Synchro 10 by peak period. Copies of the raw data count sheets shall also be provided to each involved PARTY and APM. (See CTFP Guidelines for ROADS requirements).
6. CONSULTANT shall review the geometric layout, existing traffic signal equipment, and signal synchronization related infrastructure to identify any deficiencies for each intersection and along the whole corridor/route. The review shall include an assessment of the existing intersection geometry, traffic conditions, traffic signal control equipment, and telemetry/interconnect facilities along the corridor and of each intersection using observation, available as-built plans, consultation with the local PARTIES, and PARTY-supplied aerial photos. CONSULTANT shall use a standard field form developed by CONSULTANT for this review that accounts for each piece of intersection data required. With permission of the PARTIES, CONSULTANT shall inspect the interior of each traffic control cabinet, inspect the telemetry systems and determine their respective condition and make recommendations for equipment upgrades. Photos of each cabinet shall be included with the field review inventory. If existing, as part of the PROJECT APPLICATION, before photos may be requested from OCTA/PARTIES.
7. CONSULTANT shall also include an identification of all planned and programmed improvements (widening projects, intersection improvements, etc.) on the study corridor or on intersecting corridors or streets that might affect the PROJECT. The identification of these projects should be at minimum a list summarizing all improvements.
8. Key components of the corridor review shall include, at minimum, the following:
 - Corridor lane configurations;

- Existing street and lane geometries, curbs, bus turnouts, and medians;
 - Upcoming improvements to the corridor;
 - Existing signal operation characteristics – signal phasing, cycle lengths, phase sequence alteration, protective-permissive, etc.;
 - Crossing arterial coordination operations;
 - Crossing arterial or street with adjacent intersections within 2,700 feet of PROJECT unless specifically made not part of the PROJECT by PARTIES and APM;
 - All traffic control devices related to traffic signal operations at all PROJECT intersections, approaches to cross streets, and along PROJECT corridor;
 - Traffic signal control device information, such as type of device, brand and make, and condition of equipment. Open each controller cabinet and take digital photos of all equipment inside before the installation of new equipment. Intersection photographic documentation log of existing equipment condition shall be required;
 - Necessary configuration and parameters, such as advanced loop distances and detector channel assignments, for Automated Traffic Signal Performance Measures (ATSPM);
 - Existing controller and telemetry/interconnect equipment, if any. Note if to be reused;
 - Existing time-referencing setup, if any;
 - Existing Central Master Equipment, if any. Note if to be reused and modified, salvaged and/or new;
 - Existing Field Master equipment or peer-to-peer operation, if any. Note if to be reused and modified, salvaged and/or new;
 - Note any deficiencies of traffic control equipment at each intersection; and
 - Note the maintenance condition or existence of the traffic signal equipment, controllers and synchronization related infrastructure.
9. CONSULTANT shall also investigate factors that are expected to affect signal progression including, but not limited to: intersections with high pedestrian or bicyclist volumes; over-saturated intersections; uneven lane distribution; high volumes of trucks and buses; high-volume un-signalized intersections, including interchanges; parking maneuvers; presence and location of bus stops; differing signal timing patterns among PARTIES; etc.

With the view of assisting, enhancing, and improving the traffic operations along this corridor, CONSULTANT shall identify any deficiencies of the existing traffic signal control and telemetry infrastructure and geometric layout, and provide recommendations towards simple solutions that may be implemented to correct such deficiencies.

CONSULTANT shall prepare a report summarizing the findings of the data collection and field review completed as part of this task. This report will be incorporated into the Project Report (Task 5).

Sub-Task 2.2: 'Before' Travel Time Studies

Travel time studies will be used to measure the effectiveness of the PROJECT improvements and timing plans. At a minimum, CONSULTANT shall conduct the following travel time studies to measure the traffic conditions prior to the development and implementation of new timing plans.

1. Project travel-time data shall be collected using the floating car method, a laptop computer, a GPS receiver unit, and Tru-Traffic, only. The following modules shall be downloaded and installed as part of Tru-Traffic for the 'Before' runs:

- OCTA CSPI.urc
- Emissions using CMEM for Vehicle Category 4 rev2.urc
- FuelConsumption&Emissions_mph.urc
- CumulativeAvgSpeedLOS_mph.urc

CONSULTANT shall perform due diligence regarding the parameters in the modules to ensure values and formulas are current and accurate for the purpose of this PROJECT.

2. CONSULTANT shall complete, at least, five (5) runs in each direction for each of the three weekday timing plans (AM, mid-day, and PM) and one Saturday mid-day plan. Number of runs shall be consistent for both directions and time periods. Based on engineering judgment and in conjunction with APM approval, CONSULTANT should subdivide the corridor into contiguous segments for the 'Before' and 'After' runs. CONSULTANT shall notify and receive approval from PTF on number of runs and contiguous segments to be accomplished.
3. CONSULTANT shall conduct a 'Before' field study representative of the times and days for which synchronization plans will be developed.
4. Measures of Effectiveness (MOE) to evaluate shall include, at a minimum, traffic flow, travel time, average speed, number of stops per mile, number of intersections traversed on green vs. stopped by red (Greens per Red) (*note: Average Speed, Stops per Mile, and Greens per Red are the OCTA MOE, Corridor Synchronization Performance Index (CSPI)*), fuel consumption reduction, pollution reduction, and other pertinent items.
5. CONSULTANT shall prepare a memorandum and present the findings to the PTF outlining the findings of the 'Before' field study.
 - a. The report shall identify MOE to evaluate the effects of the synchronization plans. The identified MOE's shall be compiled for the corridor using the floating car method and from Synchro 10 and from Tru-Traffic Version 10.
 - b. The report shall address likely optimization strategies for signal synchronization, specifically focusing on how to consider PROJECT optimization: end-to-end vs. coordinated zones.
 - c. Ideally, the analysis should include the floating car data and data collected as part of Task 2. However draft versions of the report can include previously collected traffic, travel time, or other data, if considered relevant and available, until the full set of data collected by CONSULTANT as part of Task 2 is available.
 - d. The memorandum shall provide a very good understanding of traffic patterns on PROJECT throughout the weekdays and throughout the weekend. The CONSULTANT shall perform due diligence with regard to existing and proposed timing operations on arterials that intersect with the PROJECT.
 - e. Tru-Traffic Version 10 has the OCTA CSPI calculation formulas available for use, as well as the calculations for the latest emissions for GHG and other MOE's.
 - f. CONSULTANT shall finalize the memorandum based on comments received from APM and other involved PARTIES.

6. CONSULTANT shall present to the PTF the traffic patterns on PROJECT scope and possible synchronization strategies to address the traffic patterns (optimizing the fill corridor versus optimizing segments identified with natural traffic breaks) to provide direction on the preferred signal timing strategy. Any requested presentation shall include as much of the turning movement, 24-hour machine counts, travel time, earlier city counts, etc. as available.

Sub-Task 2.3: 'After' Travel Time Studies

Following the implementation of all system and timing enhancements, and per PARTY and APM approval, CONSULTANT shall schedule 'After' travel time studies to measure the effectiveness of the PROJECT.

1. The CONSULTANT shall conduct an 'After' field study representative of the times and days for which synchronization plans were developed. The 'After' study must be conducted in the same manner and contain the same MOE's as the 'Before' study in order to evaluate the improvements of the synchronization plans.
2. At least five (5) runs will be completed in each direction for each of the three weekday timing plans (AM, mid-day, and PM), and at least five (5) runs will be completed in each direction during the Saturday midday plan.
3. Project travel-time data shall be collected using the floating car method, a laptop computer, a GPS receiver unit, and the methodologies and software to match the 'Before' study, exactly. MOE's should be compiled for the optimized corridor using the floating car method output in Tru-Traffic and then from Synchro/SimTraffic 10.
4. CONSULTANT shall prepare a memorandum comparing the results of the 'Before' and 'After' field study with reference to the specific MOE's. The report shall specifically give data on total project cost for the PI along with a one-year and three-year projection on benefit to cost. CONSULTANT shall present the findings to the Board.
5. CONSULTANT shall finalize the memorandum based on comments from other PARTIES and the APM. GHG calculations shall be performed by the APM and incorporated into the memorandum and Final Report.

OCTA may request a presentation on the comparison of the 'Before' and 'After' conditions along the PROJECT. Any requested presentation shall include visuals and short summaries of overall project achievements that can be quickly understood by staff of all levels.

Deliverables – Task 2:

1. Report summarizing data collection and field review efforts, including intersection turning counts, traffic collision analysis, current traffic signal timing patterns, drawings and photos of intersection features, and recommended mitigations to perceived problems.
2. Deliverable of drawings, photos, and counts to PARTIES shall be limited to political boundaries.
3. Draft and Final Memorandum documenting the results of the 'Before' study is to be distributed to the APM and PARTIES as a discussion item.
4. Draft and Final Memorandum comparing the results of the 'Before' and 'After' studies, including benefit-to-cost ratio, to be distributed to APM and PARTIES as a discussion item.
5. Electronic versions of all data files and memorandum to all PTF members.

6. Presentation to the APM and PARTIES of the 'Before' and 'After' study comparison.

Task 3: System Design and Construction

If deemed necessary by the APM or through request of a PARTY through the APM, CONSULTANT shall prepare any design construction documents in the form of sketches to full-fledged Plans, Specifications, and Estimates (PS&E). CONSULTANT shall prepare such plans for use in the construction of the PROJECT per each respective PARTY'S standards. CONSULTANT shall supply such documentation to the APM and the PARTY owning the affected facility for approval prior to commencing any construction.

Sub-Task 3.1: Design Plans and Standards

CONSULTANT will be required to design, procure, install, construct, and implement all desired components of the PROJECT as described in this document. At a minimum, CONSULTANT shall generate design plans as follows to ensure appropriate construction documents are developed to capture all improvements desired by the PARTIES.

1. CONSULTANT will work directly with APM and PARTIES at the outset of conceptual design to affect the most cost effective and time sensitive approach to design plans.
2. CONSULTANT shall coordinate with each PARTY of the PROJECT to assess special construction requirements, needs and desires, either known and proposed or previously unforeseen or unknown but necessary to complete the project.
3. CONSULTANT shall provide design services for interconnect plans along the PROJECT route. The interconnect plans may be submitted as high quality detailed aerial plans at 1" = 40' scale. The plans shall include, but not be limited to, all utilities, locations of control and communications cabinets, conduit runs, pull boxes, R/W and roadway centerlines, North Arrow, etc. The interconnect plans shall also provide terminations details at each signalized intersection and show the communication path from each intersection to a communications hub (if any) and to the appropriate PARTY Traffic Management Center (TMC). All connections and terminations shall be indicated.
4. CONSULTANT shall provide design services for traffic signal modification plans at intersections where minor phasing or other electrical changes require an "as-built" drawing record change for the intersection. Plans shall be drawn at 1"= 20' scale and include all details described in (2) above.
5. Consultant shall prepare maintenance related memoranda listing field conditions, maintenance, and design recommendations at the 50% submittal stage. CONSULTANT shall also prepare an updated engineer's cost estimate to achieve desired and intended operation. CONSULTANT shall negotiate with OCTA and PARTIES to determine what shall be installed and implemented to maintain budgetary control.
 - a. All work and equipment supplied and/or necessary for PROJECT, including all labor and material and insurances, to make PROJECT operate as designed and intended shall be included in the lump sum price for PROJECT. All work and equipment including labor, material, and insurances for maintaining and operating existing electrical facilities including communications equipment shall be included in the lump sum price for PROJECT.

- b. All work and equipment including labor, material, and insurances for utility location including potholing shall be included in the lump sum price for PROJECT.
 - c. CONSULTANT shall contact each appropriate PARTY's inspection services division to determine inspection costs that might impact PROJECT budget.
 - d. Electrical energy service costs and regular maintenance costs for PROJECT facilities under construction shall be borne by the owning PARTY. Replacement and/or maintenance costs for PROJECT facilities caused by or from damage or negligence from public or PARTY shall be borne by the owning PARTY. Replacement and/or maintenance costs caused by or from damage or negligence on the part of CONSULTANT or sub – consultants, and/or vendors shall be borne by CONSULTANT.
6. CONSULTANT, at the 100% submittal stage, shall provide all construction documents, including ITS design plans and a list of associated equipment, interconnect design plans and fiber strand splicing/termination diagrams to achieve desired and intended operation.

Individual PARTY design blocks (if available), preferences, standard plans and specifications will be provided to the awarded CONSULTANT.

Sub-Task 3.2: System Construction and Integration

All work and equipment supplied for PROJECT shall comply and be done in accordance with the latest standards and provisions of each PARTY or latest approved California Department of Transportation (Caltrans) Standard Plans and Standard Specifications, as directed by PARTY. Individual PARTY standards for construction of infrastructure will be provided to CONSULTANT.

- 1. Only when PARTY and APM approves final design plans or provide written approval to proceed with system construction and integration, shall CONSULTANT begin the procurement and mobilization of system improvements on PROJECT.
- 2. CONSULTANT shall work directly with APM and affected PARTIES to schedule, construct, and inspect the improvements implemented for this PROJECT.
 - a. Traffic Signal shutdown shall be limited to four-hour periods between the hours of 9:00 a.m. and 3:00 p.m. on weekdays (Monday through Thursday), except as authorized by owning PARTY.
 - b. Turn-on of new or rewired traffic signals, or those with a new controller cabinet shall only be scheduled for hours between 9 a.m. and 12 p.m. and shall not begin the functional test on a Friday, weekend, holiday or any day preceding a holiday, except as authorized by owning PARTY.
 - c. The Contractor may perform sub-surface work consisting of the installation of conduit, and foundations, prior to receipt of all electrical materials and equipment.

- d. Above-ground signal work shall not commence until such time that the CONTRACTOR notifies the APM, in writing, of the date that all electrical materials and equipment are received and said work shall start within 15 days after said date.
 - e. Existing street lighting shall remain in operation.
 - f. All striping, pavement markings, and signing shall be in place prior to signal turn-on and/or opening of street to public travel.
3. CONSULTANT shall be responsible for performing or scheduling necessary testing, as specified by the Caltrans Standard Specifications, of all equipment procured for PROJECT.
- a. All performance testing relative to tasks performed on this PROJECT shall be performed by an inspector determined by the owning PARTY of the equipment being delivered or installed.
 - b. Testing of any traffic controller assemblies or traffic controller units shall be done per the policy at the direction of the owning PARTY. All costs involved with testing shall be borne by the CONSULTANT.
4. Unless noted by owning PARTY or APM, CONSULTANT shall be responsible for the configuration and integration of all devices implemented on PROJECT.
5. CONSULTANT shall provide PARTIES with construction management support throughout the system implementation stage of PROJECT.

Sub-Task 3.3: Construction Documentation

- 1. CONSULTANT shall note any modifications, additions, or repair of missing or damaged signal synchronization infrastructure and other assets to be determined. Any changes desired during construction shall be documented and presented to the PARTY and APM for approval.
- 2. CONSULTANT shall provide the appropriate warranties and guaranties for all procurement items. Manufacturers' warranties and guaranties furnished for materials used in the work and instruction sheets and parts lists supplied with materials shall be delivered to the owning PARTY prior to acceptance of the project. CONSULTANT, sub-consultant and vendors of equipment and material on PROJECT shall provide to the owning PARTY the following Warranties and Guaranties:
 - a. ONE (1) YEAR GUARANTEE on LABOR and MATERIAL for all equipment furnished, installed, and/or modified.
 - b. THREE (3) YEAR GUARANTEE on Firmware and Software Patches, Fixes, Updates, and Upgrades for all central and local control and communications systems supplied. Note that for all ATMS, this price shall be included in the lump sum price for installation. Continuity testing for existing ATMS shall be limited to 10 percent of the construction cost and included in the cost of the ATMS installation. No special hardware license or maintenance package shall be allowed. Maintenance Contracts or extra fees for these specific tasks and deliverables shall not be allowed, shown as such on any document, nor charged to any PARTY or APM by either the CONSULTANT, his/her sub-consultants, and/or vendors/suppliers, either jointly or severally, of the specified systems and related components for this service or task. (THIS MEANS SPECIFIC VENDOR MANDATED

MAINTENANCE CONTRACTS SHALL NOT BE ALLOWED DURING THE ENTIRE 3 THREE YEAR CONTRACT PERIOD). If an agency wishes to enter into a Software and/or Hardware Maintenance Contract or Agreement with a specific vendor, they may do so at their sole expense.

Enforcement of Standard Warranties or Guaranties for hardware and software or firmware specified heretofore shall be the sole responsibility of the PARTY receiving the equipment.

3. Upon completion of construction and acceptance by owning PARTY, CONSULTANT shall schedule a field visit to document final improvements and photograph final conditions of all devices implemented as part of PROJECT.
4. CONSULTANT shall prepare as-built plans for any and all improvements that required design plans for PROJECT in Sub-Task 3.1.

Deliverables – Task 3:

1. Interconnect and ITS Design Plans at 50, 90, and 100% submittal stages, per this Scope of Work and Attachments or Appendices
2. Maintenance Memorandum during 50% submittal stage
3. Updated Cost Estimate for any additional improvements not included in this document
4. Procure and install any and all equipment as specified, and/or necessary, to make the proposed systems operate as originally intended, per this Scope of Work and Attachments or Appendices.
5. Negotiate with APM and PARTY representatives on alternative procurements or substitutions as deemed necessary during the course of the PROJECT.
6. All WARRANTIES and GUARANTIES as specified.
7. As-built plans and photo log of all field implementations. Photo log should be divided by PARTY.
8. All documentation shall be supplied to APM and PARTIES in two hard copies and electronic copies.

Task 4: Signal Timing Optimization and Implementation

The PROJECT aims to improve efficient traffic operations along the regional corridor for all modes of transportation. As part of this task, CONSULTANT will evaluate existing timing conditions, generate, implement and fine-tune recommended optimized signal timing plans based on available data and improvements planned in the PROJECT. Guidelines and standards for signal synchronization continue to evolve with the innovations in technology. OCTA encourages CONSULTANT to present progressive and forward-thinking optimization solutions for more efficient operations on this PROJECT.

Sub-Task 4.1: Base Network

1. CONSULTANT shall work with the APM and PARTIES to develop a model of the study area and calibrate the model based on field observations of existing conditions.
2. Signal synchronization existing and optimized networks shall be conducted in Synchro 10. The CONSULTANT must be cognizant of the version of Synchro that the receiving PARTY is using and provide any files in that version.

3. The corridor model must be consistent with all aspects and seamlessly interface with the Countywide Synchro Network as administered by the GIS/ROADS database. The PROJECT shall be developed with Synchro 10 and shall be easily imported and/or exported to and from those programs' respective database.
4. Node or intersection numbering scheme must remain consistent with the OCTA identification numbers. Any modifications, additions, or removal of intersections or roadway segments (nodes or links) must be approved by the Section Manager III – Planning/GIS, Planning and Analysis for OCTA. CONSULTANT shall calibrate the model based on travel time, delay studies, field observations of queue lengths, and saturation flows for heavy movements at key intersections.

The CONSULTANT may use their own numbering scheme for use in Synchro analysis if the volume balancing and other factors becomes an issue with node numbering in regard to OCTA GIS Database. If the CONSULTANT chooses to use this methodology, the requirement for submittal of the database with the OCTA identification numbers format is still required. The extra node numbering used for volume balancing nodes and other factors must be removed upon final submittal of the Synchro document that will be incorporated into the GIS database. These operations will be closely monitored and controlled through the APM and the Section Manager of the GIS department of Planning.

It is recommended that the CONSULTANT utilize a GIS shapefile layer as the background from Synchro 10 in the development of the base layout files. Tru-Traffic Software version 10 or latest release should be used, subsequent to initial optimization, to augment and enhance green band throughput (offset, splits, phase rotation); and, to incorporate specific off band coordinated traffic platoons into the corridor operation as required by data analysis and field observations.

Sub-Task 4.2: Basic Timing Review

1. The CONSULTANT shall gather AGENCY standards, guidelines, and preferences for basic timing parameters, including walk, pedestrian clearance, yellow, all red, and bicycle clearance.
2. CONSULTANT should note that proposed new pedestrian timing standards have been approved at the Federal and State level. Additionally, new State standards have been adopted for yellow change intervals using the 85th percentile of a newly completed speed survey for a corridor rounded up to the nearest 5-mile an hour increment or the posted speed limit plus an additional 7 miles per hour (MPH) if over 30 MPH or an additional 10 MPH if posted 25 MPH or less. An inclusive table is provided in the latest edition of the California Manual on Uniform Traffic Control Devices (CA MUTCD). PARTIES must be contacted and provide policy and guidance to the CONSULTANT for calculations regarding these timing intervals.
3. CONSULTANT shall prepare excel tables for each intersection on the corridor for each PARTY showing both existing and proposed pedestrian walk, pedestrian clearance, yellow change, and all red clearance intervals based on PARTY preference and guidance. Timings will be used in optimized timings analysis and set on control systems in the field during implementation, if not already set.
4. CONSULTANT shall receive written approval of final recommended basic timing parameters from all PARTIES prior to proceeding with optimization of the corridor.

Sub-Task 4.3: Concept of Operations

1. The CONSULTANT shall, in concert with all PTF members, develop a Concept of Operations (CONOPS) for all time periods including AM, MD, PM, Weekend, and FREE operational patterns or plans. CONOPS shall provide operational procedures, plans, and strategies on how the traffic should flow optimally for all directions providing as many successive greens as possible to the motorist whether on the primary coordinated band or traversing from a primary coordinated band to another coordinated band or vice versa. Planned Stops will be allowed only as a last resort and must be approved by the PTF prior to implementation.
2. CONOPS shall consider all special generators and known congestion points/areas such as freeway interchanges, schools, or shopping centers and analyze them for specific circulation flows and conditions that may require special plans or queue mitigation (flush) operations. For Diamond Interchanges, when possible, off ramp phase single entry operations coupled with coordinated phase through band with offset off ramp band flows should be employed for both directions. Dependent on spacing between off ramp intersections, dual entry operations may be appropriate.
3. CONSULTANT may utilize video and/or Bluetooth or combination of technologies to perform an origin and destination (O-D) analysis during peak periods to determine actual flow patterns. However, the objective to determine actual traffic flow patterns for band width and both coordinated street and cross street entry band offset requirements analysis shall be met. Analysis time periods shall be determined from the 24-hour ADT count data from Task 2.
4. CONSULTANT shall present from 2 to 3 timing plan operational scenarios dependent on coordinated and crossing arterial traffic conditions for timing plan implementation and the "when", "who", and "how". These scenarios will be part of the initial presentation of the corridor existing conditions, proposed groupings and cycle lengths report.

Sub-Task 4.4: Coordinated Optimized Traffic Signal Timing

1. Based on a consensus developed from discussions of the scenarios presented and then approved by the PTF, the CONSULTANT shall prepare Coordinated Optimized Traffic Signal Timing Plans for all corridor intersections using:
 - NEMA Coordinated phase gap-out style coordination shall be employed where possible using on street coordinated phase detection to allow the coordinated phase to gap out once the primary platoon has passed and the resulting straggler vehicles are out of the dilemma zone
 - Logic Sensor operations to enhance Time Clock Timing Plan/Pattern Selection
 - Flow Interconnect using peer to peer communications and logic internal to the ATC
 - Free Operations only
 - Modified Phase Sequence Rotation
 - Lead/Lead
 - Lead/Lag
 - Lag/Lag
 - Any combination of two concurrent left turn phases where a single phase is serviced twice in one cycle by either leading or lagging

- Protected/Permissive operations
 - Phasing will be lead/lead only; or,
 - Flashing Yellow Arrow technique may be employed for lead/lag
 - Owning/Operating PARTY policy permits its use
 - Harmonic cycling – double, half, third or other harmonic multiple,
 - Other innovative techniques upon approval of the owning PARTY and APM
 - Mitigate minor or non – coordinated phase delay
 - Preferred Phase re-service any Phase/any Ring
 - By Pattern
 - By Phase Rotation/Sequence #
 - By Cycle Length
 - Ped Y/N
2. CONSULTANT will measure the saturation flow rates at key project intersections during one peak hour where the overall intersection volume-to-capacity ratio is greater than or equal to 0.8 as a calibration for the Synchro model. Timing parameters shall provide adequate crossing time to accommodate pedestrians within the phase split. CONSULTANT shall take into consideration the pedestrian timing parameters used by the local PARTY on a case by case basis.
3. CONSULTANT shall endeavor to keep Crossing Arterial Operations intact when analyzing PROJECT intersections and shall use these intersections as anchor points for offset control. In the event that the cycle length must change, CONSULTANT shall coordinate such change with PARTIES and APM and shall incorporate cycle length and offset and possible split modifications to 1 to 3 intersections on either side of the PROJECT Crossing Arterial corridor intersections as agreed upon by the PTF and within budget. CONSULTANT shall endeavor to have this type of operation:
- a. CONSULTANT shall endeavor to find a method of providing for crossing arterial coordination wherever they occur along PROJECT corridor. Crossing Arterial phases shall have HOLD placed on them until the calculated offset for the crossing arterial should occur in the cycle.
4. CONSULTANT shall develop an operational model within SimTraffic Version 10. The operational analysis will be used to micro-simulate and analyze specific roadway segments with queuing, spill back, starvation, storage blocking, and other queuing interactions, and to analyze and mitigate the conditions discovered by CONSULTANT and/or APM and PARTIES in field reviews.
5. CONSULTANT shall develop optimized signal timings using the results from Synchro/SimTraffic 10.0, in conjunction with Tru-Traffic version 10.0 or latest released version and recommend any changes to the signal phasing at each signalized intersection that may improve the efficiency of operations. Output of the modeling software shall not be utilized without proper QA/QC. Engineering judgment shall be utilized to determine final operational parameters. The recommended signal timing plans shall be reviewed by the APM and local PARTY staff.
- a. CONSULTANT shall prepare, at minimum, three (3) timing plans for a typical weekday which consider the following peak periods: AM PEAK, MID-DAY PEAK, PM PEAK and

one (1) timing plan for a typical Saturday/Sunday MID-DAY PEAK. Timing plans should be in Synchro, Tru-Traffic, and the preferred timing chart format of each local PARTY.

- b. CONSULTANT shall prepare, special plans for congestion mitigation based on scenarios approved by the PTF.
6. CONSULTANT shall prepare a memorandum detailing the proposed signal timing optimization and implementation plans for PARTIES and APM to review and approve prior to generating timing charts for implementation and fine-tuning.

Sub-Task 4.5: Signal Timing Implementation and Fine-Tuning

Upon approval of the optimized signal timings by OCTA and PARTIES, CONSULTANT, at a minimum, shall prepare for new timing implementation and fine-tuning as follows.

1. CONSULTANT shall prepare timing charts for each intersection on the corridor for each PARTY showing the implementation-ready timing parameters based on PARTY preference and guidance. These parameters may include, but is not limited to, approved basic timing, sequence, coordination pattern, action plan, day plan, schedule plan, and time of day function.
2. CONSULTANT shall implement or assist local PARTIES staff in the implementation of new signal timings either through the central traffic signal system (if available) or direct implementation at the intersection controller units. CONSULTANT shall use existing traffic signal interconnection systems, where they exist, and, as a result of the inter-jurisdictional nature of the project, shall implement time-based signal coordination techniques across signals controlled by different PARTIES. Updated timing sheets containing the most current controller timing shall immediately be placed within the controller assembly and time/date stamped and signed by the City designate.
3. As the project will be using time-based signal coordination, the CONSULTANT shall evaluate the current time-referencing of all traffic signal controllers and recommend a corridor-wide strategy to ensure that all traffic signal controllers are on synchronized time clocks linked to a master time source. CONSULTANT shall verify that all Central Master or Local Field Master, and/or Local Controller unit clocks are:
 - Operating properly and are synchronized;
 - Referencing Coordinated Universal Time (UTC) and the reference for all cycle length calculation shall be 12:00 AM (midnight).
4. CONSULTANT shall fine-tune, or assist local PARTY staff in the fine-tuning of, the new settings and timings. CONSULTANT shall fine-tune timings in the field and record all changes. Fine-tuning shall be conducted during times and days that are representative of the times and days for which coordination plans were developed.
5. CONSULTANT shall use ATSPM data and metrics, where available, to supplement the fine-tuning efforts on PROJECT. Any changes to the ATSPM signal configuration due to field upgrades, such as new detection systems, on PROJECT shall be properly documented.

6. CONSULTANT shall collect detailed notes of any and all implementation and fine-tuning activities by PARTY to include in the Project Report.
7. CONSULTANT shall utilize Tru-Traffic Version 10 or later software on a laptop with appropriate GPS device and use the floating car method utilized in the PROJECT 'Before' Study to fine-tune the corridor operation and verify integrity of system intersection clocks. Synchronized Video shall be used to compare actual conditions to anticipated conditions dictated by the Tru-Traffic time-space diagram so that any anomalies may be corrected prior to the 'After' studies task.

Deliverables – Task 4:

1. Excel Files of pedestrian and vehicle clearance intervals.
2. Concept of Operations Report including Scenarios Report.
3. Memorandum documenting the signal timing optimization and implementation.
4. All optimized and synchronized traffic signal timing plans, including existing corridor conditions and improved corridor conditions customized per participating PARTY.
5. Field implementation of optimized traffic signal plans for existing corridor conditions, including all required fine-tuning.
6. Electronic versions of files from all Traffic Signal Modeling Software programs used in PROJECT.
7. Electronic versions of all other data files and memorandums.
8. Deliverables of final plans of other participating neighbor PARTY to each participating PARTY for timing shall only be the coordinated timing intervals and time of day plans. And, they shall be limited to one to three signalized intersections on each side of their respective political boundaries or as approved by participating neighbor PARTY.

Task 5: Project Report

1. CONSULTANT shall prepare a Project Report with an executive summary. The report shall provide complete documentation of the project, including, but not limited to:
 - Project scope, objectives, locations, findings, and recommendations
 - Data collected: counts, travel time studies, and project benefits achieved in terms of fuel savings, travel time, and other measurable parameters
 - For each intersection: lane configurations, signal phasing, turning movement data, and cycle lengths for existing and proposed timings for all peak periods
 - All work performed for system construction and signal timing optimization
 - Implementation schedule and improvements accomplished, including dates
 - Procedures for continuing maintenance, surveillance, and evaluation of the coordinated signal system

The report shall document all planned and programmed improvements on the study corridor as well as recommendations based on PI tasks for further infrastructure improvements that would likely improve the corridor signal coordination project results. CONSULTANT shall present the final report and results of the project to the Traffic Forum if requested by APM. The report shall be completed in accordance with the current CTFP Guidelines.

Finally, the report shall provide recommendations with cost and benefit estimates for future improvements to traffic signal infrastructure (signal controllers, vehicle detection, communications, etc.), intersection capacity (appropriate signal phasing, lane geometrics, and alleviation of physical bottlenecks that curtail arterial capacity), and traffic management

strategies. These proposed improvements should be useful in determining future enhancements to the corridor.

2. CONSULTANT shall update the Project Report per PARTY comments and submit a final version with all appendices in electronic and hard copies. Full appendices shall be provided to OCTA and PARTY submittals shall be within PARTY boundaries, unless approved by PARTIES to include for all participants.
3. CONSULTANT shall prepare a Project Summary Sheet, one sheet front and back, that describes the PROJECT and improvements gained. This sheet will be used by OCTA and PARTIES to present to the Board and elected officials.
4. CONSULTANT shall complete the Primary Implementation Phase by obtaining approval from all PARTIES and have paid all third-party vendors and sub-consultants/contractors.
5. CONSULTANT shall request in writing release of retention of funds for Primary Implementation Phase.

Deliverables – Task 5:

1. Draft and Final Project Report (one electronic master, two hardcopies to OCTA, and one hardcopy per PARTY) at the end of the one (1) year Implementation Phase.
2. Draft and Final Project Summary Sheet
3. Follow directions on closing out Primary Implementation Phase and release of retention funds.
4. Electronic versions of all data files as directed by OCTA.

IV. ONGOING OPERATIONS AND MAINTENANCE PHASE

Prior to beginning the Ongoing Operations and Maintenance (O&M) Phase of the PROJECT, CONSULTANT shall have completed all PI tasks and received official written approval from the PARTIES on completion of their respective PROJECT segments of the PI Phase, and;

1. Invoiced and paid all third-party sub-consultants and vendors
2. Invoiced OCTA for the final invoice
3. Received payment for final invoice
4. Invoiced OCTA with Request Letter for Release of Final Retention on PI Phase
5. Received payment of Final Retention

Once these five items are complete, an NTP will be issued by the APM to CONSULTANT to advance to the O&M Phase. Until the NTP is issued, no work or hours may be charged against the PI phase for the PROJECT.

Task 6: Project Management – O&M Phase

Project Management Costs associated with Task 9 are all inclusive and are not part of Task 1: Project Management (PI). Project Management is ongoing throughout the duration of the O&M Phase of the PROJECT. This task includes day-to-day project management, such as meetings, progress reports, tracking of schedules, invoicing, and overall administration of the PROJECT. The Project Management shall continue in full force as specified in the Primary Implementation Phase.

CONSULTANT shall invoice monthly for all O&M tasks and shall include with the invoice a filled-out form of work performed based on one- or two-page template provided by APM at Kick-Off Meeting Number 1.

Deliverables – Task 6:

1. Electronic versions of all data files as directed by OCTA.
2. Graphics and presentation aides required for all meetings.
3. Monthly invoicing including filled out Report Template of work performed.

Task 7: Continuing Support

CONSULTANT shall provide “on-call” signal system and timing support services for a period of two years or 24 months following the submittal of the Final Project Report and NTP from the APM, to address any future adjustments that may be needed during this period. At a minimum, CONSULTANT, shall provide the following continued support during this period.

1. During this 24-month period, CONSULTANT shall be prepared to review any project intersection requested by the PTF within (24) hours of written notice, including observing and fine-tuning the signal timing. Depending on the nature of the adjustment, CONSULTANT may accomplish the fine-tuning adjustments remotely from the office through the traffic management systems.
2. During this 24-month period, CONSULTANT shall be prepared to review any request by the PTF for system improvement, such as detection and communication, implemented as part of the PROJECT within (48) hours of written notice, including conducting a field visit. CONSULTANT shall be responsible for identifying the appropriate response and coordinating with vendors and contractors for systems under warranty.
3. CONSULTANT shall drive the length of the project arterial during all designated corridor synchronization timing plan hours of operation on a monthly basis in order to verify that the synchronization timing is working as designed and complete any necessary adjustments. The number of runs and hours shall be approved by all PARTIES.
4. CONSULTANT shall notify APM and respective corridor PARTIES 24 hours prior to commencement of driving periods. All drives shall be documented and sent to APM as part of the monthly invoice. A copy, limited to political boundaries, shall also be sent to each PARTY.
5. CONSULTANT shall configure ATSPM systems to forward alerts to CONSULTANT team. Any timing modifications desired based on these alerts shall be documented and presented to the PARTY and APM for approval prior to implementation. An analysis of improvement achieved once the timing has been implemented shall also be provided to PARTY and APM during the monthly reporting.
6. CONSULTANT shall determine the level of effort required to address any other signal system or signal timing requests during this period of support. These requests may include, but is not limited to, the following:
 - a. Update basic timing parameters due to change in PARTY guidelines or speed surveys;
 - b. Evaluate new cycle lengths due to PARTY crossing corridor or network update;
 - c. Configure communication switches due to change in IP schemes; and

- d. Evaluate potential issues with signal system outside of PROJECT, such as an existing ATMS or Field Master, that significantly impacts the efficiency of the corridor.

CONSULTANT shall present level of effort and potential effect on monthly drive of the corridor to APM and PARTY. Note that any additional requests specific to one PARTY should not impact the remaining PARTIES on PROJECT.

7. CONSULTANT shall provide a monthly memorandum summarizing the status and trends of the corridor based on the runs conducted. Trip logs for the month from Tru-Traffic shall be provided to the PARTIES. The memorandum shall include all additional tasks requested and completed during that month. Performance metrics comparisons from ATSPM, where available, shall also be included in the memorandum.

Deliverables – Task 7:

1. 24 months of on-call support and revised signal timing plans and memorandum documenting CONSULTANT recommendations and PARTY actions.
2. Monthly memorandum with comparisons from field and ATSPM.
3. Electronic versions of all data files and memorandums.

Task 8: Final Technical Memorandum

At the end of the three (3) year contract period, CONSULTANT shall prepare a Technical Memorandum documenting the Ongoing Operations and Maintenance efforts and procedures for continuing maintenance. The memorandum shall document all planned and programmed improvements on the study corridor as well as recommendations for further infrastructure improvements that would likely improve the corridor signal coordination project results. The memorandum shall be completed in accordance with the current CTFP Guidelines.

CONSULTANT shall provide information to APM for the OCTA FINAL REPORT as required by the M2 Ordinance and Chapter 9 of the 2020 CTFP Guidelines. This report is a fill in the form type of report.

Deliverables – Task 8:

1. O&M Technical Memorandum
2. Information required for OCTA FINAL REPORT and project closure

V. OPTIONAL

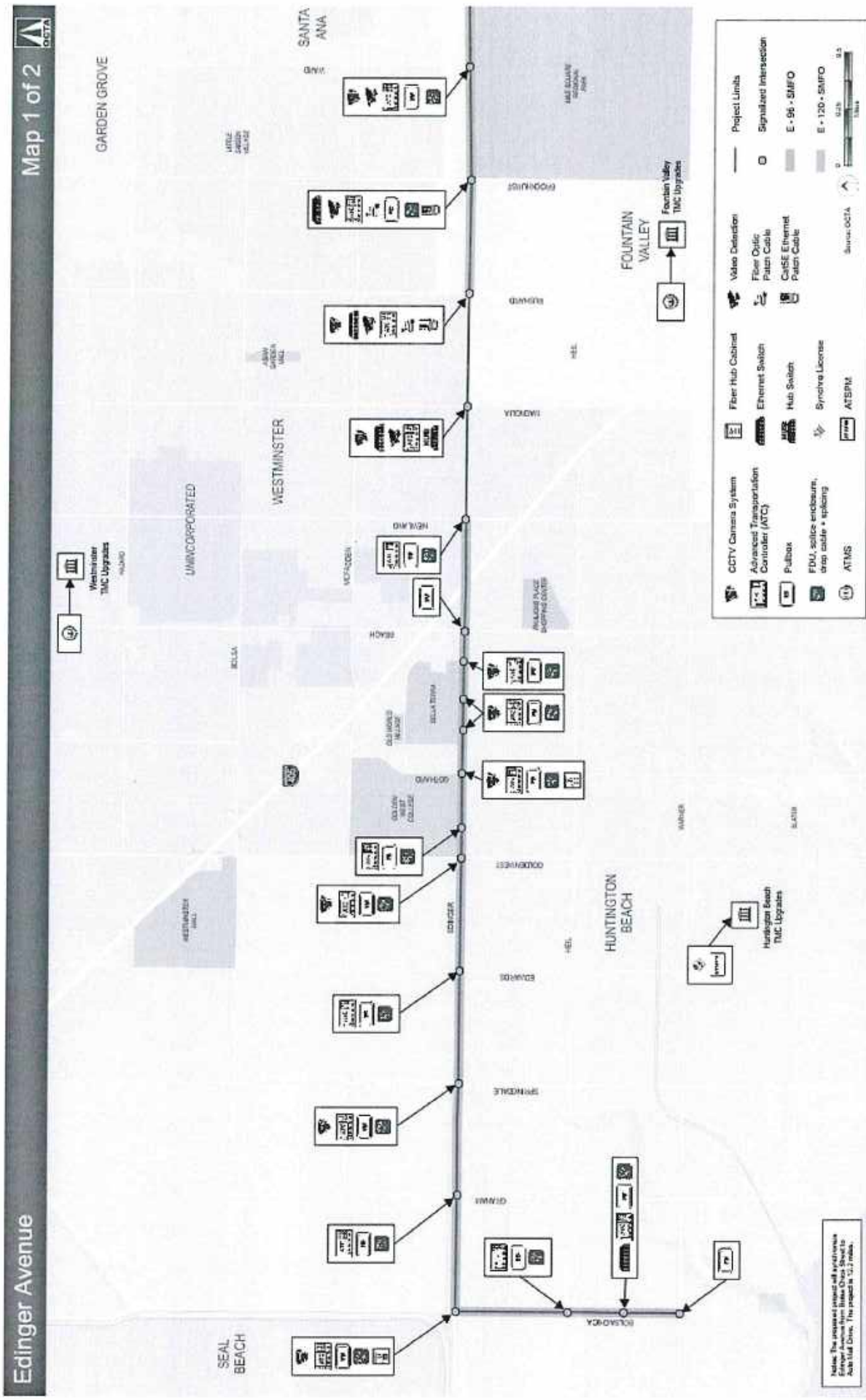
This PROJECT follows the CTFP Guidelines and scope; however, OCTA understands that innovative and advanced technologies are present in the industry to more efficiently achieve the goals of the PROJECT and guide the future of the region. Any improvement or task not identified in the previous sections shall be added as an optional task for OCTA and PARTY review and consideration.

Based on the PROJECT understanding and goals of OCTA, CONSULTANT shall provide optional tasks that will enhance the performance of the PROJECT. Optional tasks presented by CONSULTANT shall be cognizant of overall project schedule and budget. These tasks may include, but is not limited to, implementation of the following:

- Real-time traffic signal responsive operation
- Peer-to-peer signal operation
- Adaptive signal operation
- Third-party origin-destination platform
- Third-party travel time and delay platform
- Connected vehicle technology
- Dilemma zone technology
- Bicycle extension strategy or technology
- Passive pedestrian detection technology

For every optional task, CONSULTANT shall provide an explanation of additional enhancement to the PROJECT along with a detailed scope of work, preliminary timeline, estimated lump sum cost, deliverables, and location(s) of each implementation. One-page samples of each optional task submittals shall be included in CONSULTANT proposal.

EDINGER AVENUE PROJECT MAP WITH SUMMARY OF IMPROVEMENTS (PAGE 1)





Intersection Improvements

Item No.	Agency / Contractor / Vendor	EDINGER Avenue @	Item Description	Unit	Qty
1	Huntington Beach	Bolsa Chica Street	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
2	Huntington Beach	Bolsa Chica Street	Furnish and install new Cohu Rise CCTV Camera + appurtenances (latest model)	EA	1
3	Huntington Beach	Bolsa Chica Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
4	Huntington Beach	Bolsa Chica Street	Furnish and install #6E Pullbox + conduit sweeps	EA	1
5	Huntington Beach	Bolsa Chica Street	Furnish and install new Communications Hub in new 332 Cabinet	EA	1
6	Huntington Beach	Bolsa Chica Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination in Hub Cabinet	EA	1
7	Huntington Beach	Graham Street	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
8	Huntington Beach	Graham Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
9	Huntington Beach	Graham Street	Furnish and install 96-SMFO cable in existing conduit (Bolsa Chica to Graham), fiber splicing, terminations, and conduit repair	LF	3200
10	Huntington Beach	Graham Street	Furnish and install #6E Pullbox + conduit sweeps	EA	1
11	Huntington Beach	Graham Street	Furnish and install #6 Pullbox + conduit sweeps (Bolsa Chica to Graham)	EA	5
12	Huntington Beach	Springdale Street	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
13	Huntington Beach	Springdale Street	Furnish and install new Cohu Rise CCTV Camera + appurtenances (latest model)	EA	1
14	Huntington Beach	Springdale Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
15	Huntington Beach	Springdale Street	Furnish and install 96-SMFO cable in existing conduit (Graham to Springdale), fiber splicing, terminations, and conduit repair	LF	3200
16	Huntington Beach	Springdale Street	Furnish and install #6E Pullbox + conduit sweeps	EA	1
17	Huntington Beach	Springdale Street	Furnish and install #6 Pullbox + conduit sweeps (Graham to Springdale)	EA	4
18	Huntington Beach	Edwards Street	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
19	Huntington Beach	Edwards Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1

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Item No.	Agency / Contractor / Vendor	EDINGER Avenue @	Item Description	Unit	Qty
20	Huntington Beach	Edwards Street	Furnish and install 96-SMFO cable in existing conduit (Springdale to Edwards), fiber splicing, terminations, and conduit repair	LF	3200
21	Huntington Beach	Edwards Street	Furnish and install #6E Pullbox + conduit sweeps	EA	1
22	Huntington Beach	Edwards Street	Furnish and install #6 Pullbox + conduit sweeps (Springdale to Edwards)	EA	5
23	Huntington Beach	Goldenwest Street	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
24	Huntington Beach	Goldenwest Street	Furnish and install new Cohu Rise CCTV Camera + appurtenances (latest model)	EA	1
25	Huntington Beach	Goldenwest Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
26	Huntington Beach	Goldenwest Street	Furnish and install 96-SMFO cable in existing conduit (Edwards to Goldenwest), fiber splicing, terminations, and conduit repair	LF	3200
27	Huntington Beach	Goldenwest Street	Furnish and install #6E Pullbox + conduit sweeps	EA	1
28	Huntington Beach	Goldenwest Street	Furnish and install #6 Pullbox + conduit sweeps (Edwards to Goldenwest)	EA	5
29	Huntington Beach	Golden West College	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
30	Huntington Beach	Golden West College	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
31	Huntington Beach	Golden West College	Furnish and install 96-SMFO cable in existing conduit (Goldenwest to Goldenwest College), fiber splicing, terminations, and conduit repair	LF	850
32	Huntington Beach	Golden West College	Furnish and install #6E Pullbox + conduit sweeps	EA	1
33	Huntington Beach	Golden West College	Furnish and install #6 Pullbox + conduit sweeps	EA	1
34	Huntington Beach	Gothard Street	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
35	Huntington Beach	Gothard Street	Furnish and install new Cohu Rise CCTV Camera + appurtenances (latest model)	EA	1
36	Huntington Beach	Gothard Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1

Item No.	Agency / Contractor / Vendor	EDINGER Avenue @	Item Description	Unit	Qty
37	Huntington Beach	Gothard Street	Furnish and install 96-SMFO cable in existing conduit (Golden West College to Gothard), fiber splicing, terminations, and conduit repair	LF	1600
38	Huntington Beach	Gothard Street	Furnish and install #6E Pullbox + conduit sweeps (Golden West College to Gothard)	EA	1
39	Huntington Beach	Gothard Street	Furnish and install #6 Pullbox + conduit sweeps (Golden West College to Gothard)	EA	2
40	Huntington Beach	Gothard Street	Furnish and install new Communications Hub in new 332 Cabinet	EA	1
41	Huntington Beach	Fortuna Lane	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
42	Huntington Beach	Fortuna Lane	Furnish and install new Cohu Rise CCTV Camera + appurtenances (latest model)	EA	1
43	Huntington Beach	Fortuna Lane	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
44	Huntington Beach	Fortuna Lane	Furnish and install 96-SMFO cable in existing conduit (Gothard to Fortuna), fiber splicing, terminations, and conduit repair	LF	1200
45	Huntington Beach	Fortuna Lane	Furnish and install #6E Pullbox + conduit sweeps	EA	1
46	Huntington Beach	Fortuna Lane	Furnish and install #6 Pullbox + conduit sweeps	EA	1
47	Huntington Beach	Sher Lane	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
48	Huntington Beach	Sher Lane	Furnish and install new Cohu Rise CCTV Camera + appurtenances (latest model)	EA	1
49	Huntington Beach	Sher Lane	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
50	Huntington Beach	Sher Lane	Furnish and install 96-SMFO cable in existing conduit (Fortuna to Sher), fiber splicing, terminations, and conduit repair	LF	850
51	Huntington Beach	Sher Lane	Furnish and install #6E Pullbox + conduit sweeps (Fortuna to Sher)	EA	1
52	Huntington Beach	Sher Lane	Furnish and install #6 Pullbox + conduit sweeps	EA	1
53	Huntington Beach	Parkside	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
54	Huntington Beach	Parkside	Furnish and install new Cohu Rise CCTV Camera + appurtenances (latest model)	EA	1

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Item No.	Agency / Contractor / Vendor	EDINGER Avenue @	Item Description	Unit	Qty
55	Huntington Beach	Parkside	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
56	Huntington Beach	Parkside	Furnish and install 96-SMFO cable in existing conduit (Sher to Parkside), fiber splicing, terminations, and conduit repair	LF	1100
57	Huntington Beach	Parkside	Furnish and install #6E Pullbox + conduit sweeps (Sher to Parkside)	EA	1
58	Huntington Beach	Parkside	Furnish and install #6 Pullbox + conduit sweeps	EA	1
59	Huntington Beach	Beach Boulevard	Furnish and install 96-SMFO cable in existing conduit (Parkside to Beach), fiber splicing, terminations, and conduit repair	LF	850
60	Huntington Beach	Beach Boulevard	Furnish and install #6E Pullbox	EA	1
61	Huntington Beach	Beach Boulevard	Furnish and install #6 Pullbox + conduit sweeps	EA	1
62	Huntington Beach	Newland Street	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
63	Huntington Beach	Newland Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
64	Huntington Beach	Newland Street	Furnish and install 96-SMFO cable in existing conduit (Beach to Newland), fiber splicing, terminations, and conduit repair	LF	3400
65	Huntington Beach	Newland Street	Furnish and install #6E Pullbox	EA	1
66	Huntington Beach	Newland Street	Furnish and install #6 Pullbox + conduit sweeps (Beach to Newland)	EA	2
67	Huntington Beach	Bolsa Chica Street @ Heil Avenue	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
68	Huntington Beach	Bolsa Chica Street @ Heil Avenue	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
69	Huntington Beach	Bolsa Chica Street @ Heil Avenue	Furnish and install 96-SMFO cable in existing conduit (along Bolsa Chica from Edinger to Heil), fiber splicing, terminations, and conduit repair	LF	3200
70	Huntington Beach	Bolsa Chica Street @ Heil Avenue	Furnish and install #6E Pullbox + conduit sweeps	EA	1
71	Huntington Beach	Bolsa Chica Street @ Heil Avenue	Furnish and install #6 Pullbox + conduit sweeps (Edinger to Heil)	EA	4
72	Huntington Beach	Bolsa Chica Street @ Pearce Drive	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1

Item No.	Agency / Contractor / Vendor	EDINGER Avenue @	Item Description	Unit	Qty
73	Huntington Beach	Bolsa Chica Street @ Pearce Drive	Furnish and install 96-SMFO cable in existing conduit (Heil to Pearce), fiber splicing, terminations, and conduit repair	LF	1600
74	Huntington Beach	Bolsa Chica Street @ Pearce Drive	Furnish and install new Ruggedcom Ethernet Switch	EA	1
75	Huntington Beach	Bolsa Chica Street @ Pearce Drive	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
76	Huntington Beach	Bolsa Chica Street @ Pearce Drive	Furnish and install #6E Pullbox + conduit sweeps	EA	1
77	Huntington Beach	Bolsa Chica Street @ Pearce Drive	Furnish and install #6 Pullbox + conduit sweeps	EA	2
78	Huntington Beach	Bolsa Chica Street / Warner Avenue	Furnish and install 96-SMFO cable in existing conduit (Pearce to Warner), fiber splicing, terminations, and conduit repair	LF	1600
79	Huntington Beach	Bolsa Chica Street / Warner Avenue	Furnish and install #6 Pullbox + conduit sweeps (Pearce to Warner)	EA	4
80	Huntington Beach	TMC	Furnish, install, configure, and integrate Advanced Traffic Signal Performance Measures	EA	1
81	Huntington Beach	TMC	Furnish and install Synchro 10 Software	EA	1
82	Westminster	Magnolia Street	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
83	Westminster	Magnolia Street	Furnish and install new Bosch MIC CCTV Camera (latest model)	EA	1
84	Westminster	Magnolia Street	Furnish and install new Comnet Ethernet Switch	EA	1
85	Westminster	Magnolia Street	Furnish and install new Cisco Hub Switch	EA	1
86	Westminster	Magnolia Street	Furnish and install new Iteris Vantage Next Video Detection System and Cameras	EA	1
87	Westminster	TMC	Furnish, install, configure, and integrate McCain Transparency ATMS software, server, licenses, and software support	EA	1
88	Fountain Valley	Bushard Street	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
89	Fountain Valley	Bushard Street	Replace existing CCTV camera w/new Bosch MIC CCTV Camera (latest model)	EA	1

Item No.	Agency / Contractor / Vendor	EDINGER Avenue @	Item Description	Unit	Qty
90	Fountain Valley	Bushard Street	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	1
91	Fountain Valley	Bushard Street	Furnish and install Fiber Optic Patch Cable (SC-SC, 2 Meter)	EA	2
92	Fountain Valley	Bushard Street	Furnish and install new CAT5E Ethernet Patch Cable (3 feet)	EA	2
93	Fountain Valley	Bushard Street	Furnish and install new Video Detection System and Cameras (Econolite Autoscope Encore or Iteris Vantage Edge w/EdgeConnect module)	EA	1
94	Fountain Valley	Brookhurst Street	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
95	Fountain Valley	Brookhurst Street	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	1
96	Fountain Valley	Brookhurst Street	Furnish and install new Fiber Optic Patch Cable (SC-SC, 2 Meter)	EA	2
97	Fountain Valley	Brookhurst Street	Furnish and install new CAT5E Ethernet Patch Cable (3 feet)	EA	2
98	Fountain Valley	Brookhurst Street	Furnish and install new 120-SMFO cable in existing conduit (Brookhurst to Bushard), fiber splicing, terminations, and conduit repair	LF	3000
99	Fountain Valley	Brookhurst Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
100	Fountain Valley	Brookhurst Street	Furnish and install new #6E Pullbox + conduit sweeps	EA	1
101	Fountain Valley	Brookhurst Street	Furnish and install new Video Detection System and Cameras (Econolite Autoscope Encore or Iteris Vantage Edge w/EdgeConnect module)	EA	1
102	Fountain Valley	Ward Street	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
103	Fountain Valley	Ward Street	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	1
104	Fountain Valley	Ward Street	Replace existing CCTV camera w/new Bosch MIC CCTV Camera (latest model)	EA	1
105	Fountain Valley	Ward Street	Furnish and install new 120-SMFO cable in existing conduit (Ward to Brookhurst), fiber splicing, termination, and conduit repair	LF	3000
106	Fountain Valley	Ward Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
107	Fountain Valley	Ward Street	Furnish and install new #6E Pullbox + conduit sweeps	EA	1

Item No.	Agency / Contractor / Vendor	EDINGER Avenue @	Item Description	Unit	Qty
108	Fountain Valley	Ward Street	Furnish and install new Video Detection System and Cameras (Econolite Autoscope Encore or Iteris Vantage Edge w/EdgeConnect module)	EA	1
109	Fountain Valley	Euclid Street	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
110	Fountain Valley	Euclid Street	Replace existing CCTV camera w/new Bosch MIC CCTV Camera (latest model)	EA	1
111	Fountain Valley	Euclid Street	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	1
112	Fountain Valley	Euclid Street	Furnish and install new CAT5E Ethernet Patch Cable (SC-SC, 2 Meter)	EA	2
113	Fountain Valley	Euclid Street	Furnish and install new CAT5E Ethernet Patch Cable (3 feet)	EA	2
114	Fountain Valley	Euclid Street	Furnish and install new 120-SMFO cable in existing conduit (Euclid to Ward Run), fiber splicing, termination, and conduit repair	LF	3000
115	Fountain Valley	Euclid Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
116	Fountain Valley	Euclid Street	Furnish and install new #6E Pullbox + conduit sweeps	EA	1
117	Fountain Valley	Euclid Street	Furnish and install new Video Detection System and Cameras (Econolite Autoscope Encore or Iteris Vantage Edge w/EdgeConnect module)	EA	1
118	Fountain Valley	Harbor Boulevard	Furnish and install new McCain 2070 ATC Controller w/latest Omni software	EA	1
119	Fountain Valley	Harbor Boulevard	Replace existing CCTV camera w/new Bosch MIC CCTV Camera (latest model)	EA	1
120	Fountain Valley	Harbor Boulevard	Furnish and install new Type 333L cabinet and foundation	EA	1
121	Fountain Valley	Harbor Boulevard	Furnish and install new Type III Service cabinet and foundation, including an estimate for SCE conduit and fees	EA	1
122	Fountain Valley	Harbor Boulevard	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	1
123	Fountain Valley	Harbor Boulevard	Furnish and install new Fiber Optic Patch Cable (SC-SC, 2 Meter)	EA	2
124	Fountain Valley	Harbor Boulevard	Furnish and install CAT5E Ethernet Patch Cable (3 feet)	EA	2
125	Fountain Valley	Harbor Boulevard	Furnish and install new 120-SMFO cable in existing conduit (Harbor to Euclid Run), fiber splicing, termination, and conduit repair	LF	6500

Item No.	Agency / Contractor / Vendor	EDINGER Avenue @	Item Description	Unit	Qty
126	Fountain Valley	Harbor Boulevard	Furnish and install new Video Detection System and Cameras (Econolite AutoScope Encore or Iteris Vantage Edge w/EdgeConnect module)	EA	1
127	Fountain Valley	TMC	Furnish, install, configure, and integrate McCain Transparency ATMS software, server, licenses, and software support	EA	1
128	Santa Ana	Newhope Street	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1
129	Santa Ana	Newhope Street	Furnish and install new Axis Q6155-E CCTV Camera	EA	1
130	Santa Ana	Newhope Street	Furnish and install new 120-SMFO cable in existing conduit (Newhope/Edinger to Newhope/McFadden), fiber splicing, terminations, and conduit repair	LF	4000
131	Santa Ana	Newhope Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
132	Santa Ana	Newhope Street	Furnish and install new #6E pullbox + conduit sweeps	EA	1
133	Santa Ana	Newhope Street	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	2
134	Santa Ana	Newhope Street	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1
135	Santa Ana	Newhope Street	Furnish and install new Econolite AutoScope Vision or Iteris Vantage Next Video Detection System and Cameras	EA	1
136	Santa Ana	Mohawk Drive	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1
137	Santa Ana	Mohawk Drive	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1
138	Santa Ana	Fairview Street	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1
139	Santa Ana	Fairview Street	Furnish and install new Econolite AutoScope Vision or Iteris Vantage Next Video Detection System and Cameras	EA	1
140	Santa Ana	Sullivan Street	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1
141	Santa Ana	Greenville Street	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1
142	Santa Ana	Greenville Street	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1

Item No.	Agency / Contractor / Vendor	EDINGER Avenue @	Item Description	Unit	Qty
143	Santa Ana	Center Street	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1
144	Santa Ana	Center Street	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1
145	Santa Ana	Raitt Street	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1
146	Santa Ana	Raitt Street	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1
147	Santa Ana	Raitt Street	Furnish and install new Econolite AutoScope Vision or Iteris Vantage Next Video Detection System and Cameras	EA	1
148	Santa Ana	Pacific Avenue	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1
149	Santa Ana	Bristol Street	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1
150	Santa Ana	Bristol Street	Furnish and install new Econolite AutoScope Vision or Iteris Vantage Next Video Detection System and Cameras	EA	1
151	Santa Ana	Baker Street	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1
152	Santa Ana	Baker Street	Furnish and install new 120-SMFO cable in existing conduit (Bristol to Baker), fiber splicing, terminations, and conduit repair	LF	1500
153	Santa Ana	Baker Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
154	Santa Ana	Baker Street	Furnish and install new #6E pullbox + conduit sweeps	EA	1
155	Santa Ana	Baker Street	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	1
156	Santa Ana	Flower Street	Furnish and install new 3" Schedule 80 Conduit (Edinger/Flower to Edinger/Broadway) + pullboxes, potholes, video inspection on sewer laterals, and concrete repair	LF	2300
157	Santa Ana	Flower Street	Furnish and install new 120-SMFO cable in new conduit (Edinger/Flower to Edinger/Broadway) and new 120-SMFO in existing conduit (Edinger/Flower to Flower/Wilshire), fiber splicing, terminations, and conduit repair	LF	5000
158	Santa Ana	Flower Street	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	2

Item No.	Agency / Contractor / Vendor	EDINGER Avenue @	Item Description	Unit	Qty
159	Santa Ana	Flower Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
160	Santa Ana	Flower Street	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1
161	Santa Ana	Broadway	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1
162	Santa Ana	Broadway	Furnish and install new 120-SMFO cable in existing conduit (Broadway to Main), fiber splicing, terminations, and conduit repair	LF	1500
163	Santa Ana	Broadway	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
164	Santa Ana	Broadway	Furnish and install new #6E pullbox + conduit sweeps	EA	1
165	Santa Ana	Broadway	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	1
166	Santa Ana	Broadway	Furnish and install new Econolite AutoScope Vision or Iteris Vantage Next Video Detection System and Cameras	EA	1
167	Santa Ana	Main Street	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1
168	Santa Ana	Main Street	Furnish and install new Econolite AutoScope Vision or Iteris Vantage Next Video Detection System and Cameras	EA	1
169	Santa Ana	Orange Avenue	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1
170	Santa Ana	Orange Avenue	Furnish and install new 120-SMFO cable in existing conduit (Main to Orange), fiber splicing, terminations, and conduit repair	LF	1500
171	Santa Ana	Orange Avenue	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
172	Santa Ana	Orange Avenue	Furnish and install new #6E pullbox + conduit sweeps	EA	1
173	Santa Ana	Orange Avenue	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	1
174	Santa Ana	Maple Bike Trail	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1
175	Santa Ana	Maple Bike Trail	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1
176	Santa Ana	Standard Avenue	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1

Item No.	Agency / Contractor / Vendor	EDINGER Avenue @	Item Description	Unit	Qty
177	Santa Ana	Standard Avenue	Furnish and install new Axis Q6155-E CCTV Camera	EA	1
178	Santa Ana	Standard Avenue	Railroad Encroachment Permit	LS	1
179	Santa Ana	Standard Avenue	Furnish and install new 3" Schedule 80 Conduit (Edinger / Standard to Edinger/Grand) + pullboxes, potholes, video inspection on sewer laterals, and concrete repair. This will require a special casing under the tracks at a depth of at least 5 feet	LF	2000
180	Santa Ana	Standard Avenue	Furnish and install new 120-SMFO cable in new conduit (Edinger/Standard to Edinger/Grand) and 120-SMFO in existing conduit (Edinger/Standard to Standard/Hobart), fiber splicing, terminations, and conduit repair	LF	5000
181	Santa Ana	Standard Avenue	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	2
182	Santa Ana	Standard Avenue	Furnish and install new Fiber Distribution Unit, Splice enclosure, 12-SMFO Drop Cable, splicing, and termination	EA	1
183	Santa Ana	Standard Avenue	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1
184	Santa Ana	Standard Avenue	Furnish and install new Econolite AutoScope Vision or Iteris Vantage Next Video Detection System and Cameras	EA	1
185	Santa Ana	Grand Avenue	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1
186	Santa Ana	Grand Avenue	Furnish and install new Polara Accessible Pedestrian Push Button Modules + System (Polara iNavigator 2-Wire System)	EA	1
187	Santa Ana	Grand Avenue	Furnish and install new Econolite AutoScope Vision or Iteris Vantage Next Video Detection System and Cameras	EA	1
188	Santa Ana	Lyon Street	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1
189	Santa Ana	Lyon Street	Furnish and install new 12-SMFO Drop cable	EA	300
190	Santa Ana	Lyon Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 6-SMFO Drop Cable, splicing, and termination	EA	1
191	Santa Ana	Lyon Street	Furnish and install new #6E pullbox + conduit sweeps	EA	1
192	Santa Ana	Lyon Street	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	1
193	Santa Ana	Ritchey Street	Furnish and install new Econolite 2070-1C CPU w/latest EOS software	EA	1

Item No.	Agency / Contractor / Vendor	EDINGER Avenue @	Item Description	Unit	Qty
194	Santa Ana	Ritchey Street	Furnish and install new 12-SMFO Drop Cable	LF	300
195	Santa Ana	Ritchey Street	Furnish and install new Fiber Distribution Unit, Splice enclosure, 6-SMFO Drop Cable, splicing, and termination	EA	1
196	Santa Ana	Ritchey Street	Furnish and install new #6E pullbox + conduit sweeps (Lyon to Ritchey)	EA	1
197	Santa Ana	Ritchey Street	Furnish and install new Fiber Optic Ethernet Switch (Etherwan EX71802-0VB w/Hardened Power Supply) and 4 SFPs (2-Gbps & 2-100Mbps)	EA	1
198	Santa Ana	TMC	Furnish 100 Centracs licenses, integrate intersections, and provide software support	EA	1
199	Santa Ana	TMC	Furnish, install, and configure Centracs Signal Performance Measures Module and software support	EA	1
200	Santa Ana	TMC	Furnish Bluetooth Travel Time System Software Licensing for 3 years	EA	1

EXHIBIT B: PROPOSED AGREEMENT

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PROPOSED AGREEMENT NO. C-0-2018

BETWEEN

ORANGE COUNTY TRANSPORTATION AUTHORITY

AND

THIS AGREEMENT is effective as of this ____ day of _____, 2020 ("Effective Date"), by and between the Orange County Transportation Authority, 550 South Main Street, P.O. Box 14184, Orange, CA 92863-1584, a public corporation of the State of California (hereinafter referred to as "AUTHORITY"), and , , , (hereinafter referred to as "CONSULTANT").

WITNESSETH:

WHEREAS, AUTHORITY requires assistance from CONSULTANT to provide consultant services for Traffic Engineering Services and Intelligent Transportation Systems for Edinger Avenue Regional Traffic Synchronization project; and

WHEREAS, said work cannot be performed by the regular employees of AUTHORITY; and

WHEREAS, CONSULTANT has represented that it has the requisite personnel and experience, and is capable of performing such services; and

WHEREAS, CONSULTANT wishes to perform these services; and

WHEREAS, the AUTHORITY's Board of Directors authorized this Agreement on _____;

NOW, THEREFORE, it is mutually understood and agreed by AUTHORITY and CONSULTANT as follows:

ARTICLE 1. COMPLETE AGREEMENT

A. This Agreement, including all exhibits and documents incorporated herein and made applicable by reference, constitutes the complete and exclusive statement of the terms and conditions of the agreement between AUTHORITY and CONSULTANT and it supersedes all prior representations, understandings and communications. The invalidity in whole or in part of any term or condition of this Agreement shall not affect the validity of other terms or conditions.

B. AUTHORITY's failure to insist in any one or more instances upon the performance of any terms or conditions of this Agreement shall not be construed as a waiver or relinquishment of AUTHORITY's right to such performance by CONSULTANT or to future performance of such terms or conditions and CONSULTANT obligation in respect thereto shall continue in full force and effect. Changes to any portion of this Agreement shall not be binding upon AUTHORITY except when specifically confirmed in writing by an authorized representative of AUTHORITY by way of a written Amendment to this Agreement and issued in accordance with the provisions of this Agreement.

ARTICLE 2. AUTHORITY DESIGNEE

The Chief Executive Officer of AUTHORITY, or designee, shall have the authority to act for and exercise any of the rights of AUTHORITY as set forth in this Agreement.

ARTICLE 3. SCOPE OF WORK

A. CONSULTANT shall perform the work necessary to complete in a manner satisfactory to AUTHORITY the services set forth in Exhibit A, entitled "Scope of Work," which is attached to and, by this reference, incorporated in and made a part of this Agreement. All services shall be provided at the times and places designated by AUTHORITY.

B. CONSULTANT shall provide the personnel listed below to perform the above-specified services, which persons are hereby designated as key personnel under this Agreement.

Names

Functions

C. No person named in paragraph B of this Article, or his/her successor approved by AUTHORITY, shall be removed or replaced by CONSULTANT, nor shall his/her agreed-upon function or level of commitment hereunder be changed, without the prior written consent of AUTHORITY. Should the services of any key person become no longer available to CONSULTANT, the resume and

qualifications of the proposed replacement shall be submitted to AUTHORITY for approval as soon as possible, but in no event later than seven (7) calendar days prior to the departure of the incumbent key person, unless CONSULTANT is not provided with such notice by the departing employee. AUTHORITY shall respond to CONSULTANT within seven (7) calendar days following receipt of these qualifications concerning acceptance of the candidate for replacement.

ARTICLE 4. TERM OF AGREEMENT

This Agreement shall commence upon the effective date of this Agreement, and shall continue in full force and effect through _____, unless earlier terminated as provided hereunder.

ARTICLE 5. PAYMENT

A. For CONSULTANT's full and complete performance of its obligations under this Agreement and subject to the maximum cumulative payment obligation provision set forth in Article 6, AUTHORITY shall pay CONSULTANT on a firm fixed price basis in accordance with the following provisions.

B. The following schedule shall establish the firm fixed payment to CONSULTANT by AUTHORITY for each work task set forth in the Scope of Work.

<u>Task</u>	<u>Description</u>	<u>Firm Fixed Price</u>
		.00
		.00
		.00
TOTAL FIRM FIXED PRICE PAYMENT		.00

C. CONSULTANT shall invoice AUTHORITY on a monthly basis for payments corresponding to the work actually completed by CONSULTANT. Percentage of work completed shall be documented in a monthly progress report prepared by CONSULTANT, which shall accompany each invoice submitted by CONSULTANT. CONSULTANT shall also furnish such other information as may be requested by AUTHORITY to substantiate the validity of an invoice. At its sole discretion, AUTHORITY may decline to make full payment for any task listed in paragraph B of this Article until such time as CONSULTANT has documented to AUTHORITY's satisfaction, that CONSULTANT has fully

completed all work required under the task. AUTHORITY's payment in full for any task completed shall not constitute AUTHORITY's final acceptance of CONSULTANT's work under such task; final acceptance shall occur only when AUTHORITY's release of the retention described in paragraph D.

D. As partial security against CONSULTANT's failure to satisfactorily fulfill all of its obligations under this Agreement, AUTHORITY shall retain Ten percent (10%) of the amount of each invoice submitted for payment by CONSULTANT. All retained funds shall be released by AUTHORITY and shall be paid to CONSULTANT within sixty (60) calendar days of payment of final invoice, unless AUTHORITY elects to audit CONSULTANT's records in accordance with Article 16 of this Agreement. If AUTHORITY elects to audit, retained funds shall be paid to CONSULTANT within thirty (30) calendar days of completion of such audit in an amount reflecting any adjustment required by such audit. During the term of the Agreement, at its sole discretion, AUTHORITY reserves the right to release all or a portion of the retained amount based on CONSULTANT's satisfactory completion of certain milestones. CONSULTANT shall invoice AUTHORITY for the release of the retention in accordance with Article 5.

E. Invoices shall be submitted by CONSULTANT on a monthly basis and shall be submitted in duplicate to AUTHORITY's Accounts Payable office. CONSULTANT may also submit invoices electronically to AUTHORITY's Accounts Payable Department at vendorinvoices@octa.net. Each invoice shall be accompanied by the monthly progress report specified in paragraph C of this Article. AUTHORITY shall remit payment within thirty (30) calendar days of the receipt and approval of each invoice. Each invoice shall include the following information:

1. Agreement No. C-0-2018;
2. Specify the task number for which payment is being requested;
3. The time period covered by the invoice;
4. Total monthly invoice (including project-to-date cumulative invoice amount); and retention;
5. Monthly Progress Report;
6. Weekly certified payroll for personnel subject to prevailing wage requirements;

7. Certificate signed by the CONSULTANT or his/her designated alternate that a) The invoice is a true, complete and correct statement of reimbursable costs and progress; b) The backup information included with the invoice is true, complete and correct in all material respects; c) All payments due and owing to subcontractors and suppliers have been made; d) Timely payments will be made to subcontractors and suppliers from the proceeds of the payments covered by the certification and; e) The invoice does not include any amount which CONSULTANT intends to withhold or retain from a subcontractor or supplier unless so identified on the invoice.

8. Any other information as agreed or otherwise requested by AUTHORITY to substantiate the validity of an invoice.

ARTICLE 6. MAXIMUM OBLIGATION

Notwithstanding any provisions of this Agreement to the contrary, AUTHORITY and CONSULTANT mutually agree that AUTHORITY's maximum cumulative payment obligation (including obligation for CONSULTANT's profit) shall be Dollars (\$.00) which shall include all amounts payable to CONSULTANT for its subcontracts, leases, materials and costs arising from, or due to termination of, this Agreement.

ARTICLE 7. NOTICES

All notices hereunder and communications regarding the interpretation of the terms of this Agreement, or changes thereto, shall be effected by delivery of said notices in person or by depositing said notices in the U.S. mail, registered or certified mail, returned receipt requested, postage prepaid and addressed as follows:

To CONSULTANT:

To AUTHORITY:

Orange County Transportation Authority

550 South Main Street

P.O. Box 14184

Orange, CA 92863-1584

/

ATTENTION:

ATTENTION: Venita Anderson

Senior Contract Administrator

Tel (714) 560 - 5427

vanderson@octa.net

cc: Anup Kulkarni, Project Manager

Tel (714) 560-5867

Email: akulkarni@octa.net

ARTICLE 8. INDEPENDENT CONTRACTOR

A. CONSULTANT's relationship to AUTHORITY in the performance of this Agreement is that of an independent contractor. CONSULTANT's personnel performing services under this Agreement shall at all times be under CONSULTANT's exclusive direction and control and shall be employees of CONSULTANT and not employees of AUTHORITY. CONSULTANT shall pay all wages, salaries and other amounts due its employees in connection with this Agreement and shall be responsible for all reports and obligations respecting them, such as social security, income tax withholding, unemployment compensation, workers' compensation and similar matters.

B. Should CONSULTANT's personnel or a state or federal agency allege claims against AUTHORITY involving the status of AUTHORITY as employer, joint or otherwise, of said personnel, or allegations involving any other independent contractor misclassification issues, CONSULTANT shall defend and indemnify AUTHORITY in relation to any allegations made.

ARTICLE 9. INSURANCE

A. CONSULTANT shall procure and maintain insurance coverage during the entire term of this Agreement. Coverage shall be full coverage and not subject to self-insurance provisions. CONSULTANT shall provide the following insurance coverage:

1. Commercial General Liability, to include Products/Completed Operations, Independent Contractors', Contractual Liability, and Personal Injury Liability, and Property Damage with a minimum limit of \$1,000,000.00 per occurrence and \$2,000,000.00 general aggregate;

2. Automobile Liability Insurance to include owned, hired and non-owned autos with a combined single limit of \$1,000,000.00 each accident;

3. Workers' Compensation with limits as required by the State of California including a waiver of subrogation in favor of AUTHORITY, its officers, directors, employees or agents;

4. Employers' Liability with minimum limits of \$1,000,000.00; and

5. Professional Liability with minimum limits of \$1,000,000.00 per claim.

B. Proof of such coverage, in the form of a certificate of insurance, with the AUTHORITY, its officers, directors, employees and agents, designated as additional insureds as required by contract. In addition, provide an insurance policy blanket additional insured endorsement. Both documents must be received by AUTHORITY prior to commencement of any work. Proof of insurance coverage must be received by AUTHORITY within ten (10) calendar days from the effective date of this Agreement. Such insurance shall be primary and non-contributive to any insurance or self-insurance maintained by the AUTHORITY. Furthermore, AUTHORITY reserves the right to request certified copies of all related insurance policies.

C. CONSULTANT shall include on the face of the certificate of insurance the Agreement Number C-0-2018; and, the Contract Administrator's Name, Venita Anderson.

D. CONSULTANT shall also include in each subcontract the stipulation that subcontractors shall maintain insurance coverage in the amounts required from CONSULTANT as provided in this Agreement.

E. CONSULTANT shall be required to immediately notify AUTHORITY of any modifications or cancellation of any required insurance policies.

ARTICLE 10. ORDER OF PRECEDENCE

Conflicting provisions hereof, if any, shall prevail in the following descending order of precedence: (1) the provisions of this Agreement, including all exhibits; (2) the provisions of RFP ; (3) CONSULTANT's technical proposal dated , CONSULTANT's cost proposal dated , and (4) all other documents, if any, cited herein or incorporated by reference.

ARTICLE 11. CHANGES

A. By written notice or order, AUTHORITY may, from time to time, order work suspension and/or make changes in the general scope of this Agreement, including, but not limited to, the services furnished to AUTHORITY by CONSULTANT as described in the Scope of Work. If any such work suspension or change causes an increase or decrease in the price of this Agreement or in the time required for its performance, CONSULTANT shall promptly notify AUTHORITY thereof and assert its claim for adjustment within ten (10) calendar days after the change or work suspension is ordered, and an equitable adjustment shall be negotiated. However, nothing in this clause shall excuse CONSULTANT from proceeding immediately with the Agreement as changed.

B. CONSULTANT shall only commence work covered by an amendment after the amendment is executed by AUTHORITY.

ARTICLE 12. DISPUTES

A. Except as otherwise provided in this Agreement, any dispute concerning a question of fact arising under this Agreement which is not disposed of by supplemental agreement shall be decided by AUTHORITY's Director, Contracts Administration and Materials Management (CAMM), who shall reduce the decision to writing and mail or otherwise furnish a copy thereof to CONSULTANT. The decision of the Director, CAMM, shall be final and conclusive.

B. Pending final decision of a dispute hereunder, CONSULTANT shall proceed diligently with the performance of this Agreement and in accordance with the decision of AUTHORITY's Director, CAMM. This "Disputes" clause does not preclude consideration of questions of law in connection with decisions provided for above. Nothing in this Agreement, however, shall be construed as making final the decision of any AUTHORITY official or representative on a question of law, which questions shall be settled in accordance with the laws of the State of California.

ARTICLE 13. TERMINATION

A. AUTHORITY may terminate this Agreement for its convenience at any time, in whole or part, by giving CONSULTANT written notice thereof. Upon said notice, AUTHORITY shall pay

CONSULTANT its allowable costs incurred to date of termination and those allowable costs determined by AUTHORITY to be reasonably necessary to effect such termination. Thereafter, CONSULTANT shall have no further claims against AUTHORITY under this Agreement.

B. In the event either Party defaults in the performance of any of their obligations under this Agreement or breaches any of the provisions of this Agreement, the non-defaulting Party shall have the option to terminate this Agreement upon thirty (30) days' prior written notice to the other Party. Upon receipt of such notice, CONSULTANT shall immediately cease work, unless the notice from AUTHORITY provides otherwise. Upon receipt of the notice from AUTHORITY, CONSULTANT shall submit an invoice for work and/or services performed prior to the date of termination. AUTHORITY shall pay CONSULTANT for work and/or services satisfactorily provided to the date of termination in compliance with this Agreement. Thereafter, CONSULTANT shall have no further claims against AUTHORITY under this Agreement. AUTHORITY shall not be liable for any claim of lost profits or damages for such termination.

ARTICLE 14. INDEMNIFICATION

CONSULTANT shall indemnify, defend and hold harmless AUTHORITY, its officers, directors, employees and agents from and against any and all claims (including attorneys' fees and reasonable expenses for litigation or settlement) for any loss, costs, penalties, fines, damages, bodily injuries, including death, damage to or loss of use of property, arising out of, resulting from, or in connection with the performance of CONSULTANT, its officers, directors, employees, agents, subconsultants or suppliers under the Agreement. Notwithstanding the foregoing, such obligation to defend, hold harmless, and indemnify AUTHORITY, its officers, directors, employees and agents shall not apply to such claims or liabilities arising from the sole or active negligence or willful misconduct of AUTHORITY.

ARTICLE 15. ASSIGNMENTS AND SUBCONTRACTS

A. Neither this Agreement nor any interest herein nor claim hereunder may be assigned by CONSULTANT either voluntarily or by operation of law, nor may all or any part of this Agreement be subcontracted by CONSULTANT, without the prior written consent of AUTHORITY. Consent by

AUTHORITY shall not be deemed to relieve CONSULTANT of its obligations to comply fully with all terms and conditions of this Agreement.

B. AUTHORITY hereby consents to CONSULTANT's subcontracting of portions of the Scope of Work to the parties identified below for the functions described in CONSULTANT's proposal. CONSULTANT shall include in the subcontract agreement the stipulation that CONSULTANT, not AUTHORITY, is solely responsible for payment to the subcontractor for the amounts owing and that the subcontractor shall have no claim, and shall take no action, against AUTHORITY, its officers, directors, employees or sureties for nonpayment by CONSULTANT.

<u>Subcontractor Name/Address</u>	<u>Subcontractor Amounts</u>
1.	.00
2.	.00

ARTICLE 16. AUDIT AND INSPECTION OF RECORDS

CONSULTANT shall provide AUTHORITY, or other agents of AUTHORITY, such access to CONSULTANT's accounting books, records, work data, documents and facilities, as AUTHORITY deems necessary. CONSULTANT shall maintain such books, records, data and documents in accordance with generally accepted accounting principles and shall clearly identify and make such items readily accessible to such parties during CONSULTANT's performance hereunder and for a period of four (4) years from the date of final payment by AUTHORITY. AUTHORITY's right to audit books and records directly related to this Agreement shall also extend to all first-tier subcontractors identified in Article 15 of this Agreement. CONSULTANT shall permit any of the foregoing parties to reproduce documents by any means whatsoever or to copy excerpts and transcriptions as reasonably necessary.

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ARTICLE 17. FEDERAL, STATE AND LOCAL LAWS

CONSULTANT warrants that in the performance of this Agreement, it shall comply with all applicable federal, state and local laws, statutes and ordinances and all lawful orders, rules and regulations promulgated thereunder.

ARTICLE 18. EQUAL EMPLOYMENT OPPORTUNITY

In connection with its performance under this Agreement, CONSULTANT shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, age or national origin. CONSULTANT shall take affirmative action to ensure that applicants are employed, and that employees are treated during their employment, without regard to their race, religion, color, sex, age or national origin. Such actions shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

ARTICLE 19. PROHIBITED INTERESTS

CONSULTANT covenants that, for the term of this Agreement, no director, member, officer or employee of AUTHORITY during his/her tenure in office/employment or for one (1) year thereafter shall have any interest, direct or indirect, in this Agreement or the proceeds thereof.

ARTICLE 20. OWNERSHIP OF REPORTS AND DOCUMENTS

A. The originals of all letters, documents, reports and other products and data produced under this Agreement shall be delivered to, and become the property of AUTHORITY. Copies may be made for CONSULTANT's records but shall not be furnished to others without written authorization from AUTHORITY. Such deliverables shall be deemed works made for hire and all rights in copyright therein shall be retained by AUTHORITY.

B. All ideas, memoranda, specifications, plans, manufacturing, procedures, drawings, descriptions, and all other written information submitted to CONSULTANT in connection with the performance of this Agreement shall not, without prior written approval of AUTHORITY, be used for any purposes other than the performance for this project, nor be disclosed to an entity not connected with

the performance of the project. CONSULTANT shall comply with AUTHORITY's policies regarding such material. Nothing furnished to CONSULTANT, which is otherwise known to CONSULTANT or becomes generally known to the related industry shall be deemed confidential. CONSULTANT shall not use AUTHORITY's name, photographs of the project, or any other publicity pertaining to the project in any professional publication, magazine, trade paper, newspaper, seminar or other medium without the express written consent of AUTHORITY.

C. No copies, sketches, computer graphics or graphs, including graphic art work, are to be released by CONSULTANT to any other person or agency except after prior written approval by AUTHORITY, except as necessary for the performance of services under this Agreement. All press releases, including graphic display information to be published in newspapers, magazines, etc., are to be handled only by AUTHORITY unless otherwise agreed to by CONSULTANT and AUTHORITY.

ARTICLE 21. PATENT AND COPYRIGHT INFRINGEMENT

A. In lieu of any other warranty by AUTHORITY or CONSULTANT against patent or copyright infringement, statutory or otherwise, it is agreed that CONSULTANT shall defend at its expense any claim or suit against AUTHORITY on account of any allegation that any item furnished under this Agreement or the normal use or sale thereof arising out of the performance of this Agreement, infringes upon any presently existing U.S. letters patent or copyright and CONSULTANT shall pay all costs and damages finally awarded in any such suit or claim, provided that CONSULTANT is promptly notified in writing of the suit or claim and given authority, information and assistance at CONSULTANT's expense for the defense of same. However, CONSULTANT will not indemnify AUTHORITY if the suit or claim results from: (1) AUTHORITY's alteration of a deliverable, such that said deliverable in its altered form infringes upon any presently existing U.S. letters patent or copyright; or (2) the use of a deliverable in combination with other material not provided by CONSULTANT when such use in combination infringes upon an existing U.S. letters patent or copyright.

B. CONSULTANT shall have sole control of the defense of any such claim or suit and all negotiations for settlement thereof. CONSULTANT shall not be obligated to indemnify AUTHORITY

under any settlement made without CONSULTANT's consent or in the event AUTHORITY fails to cooperate fully in the defense of any suit or claim, provided, however, that said defense shall be at CONSULTANT's expense. If the use or sale of said item is enjoined as a result of such suit or claim, CONSULTANT, at no expense to AUTHORITY, shall obtain for AUTHORITY the right to use and sell said item, or shall substitute an equivalent item acceptable to AUTHORITY and extend this patent and copyright indemnity thereto.

ARTICLE 22. DESIGN WITHIN FUNDING LIMITATIONS

A. In order to ensure the accuracy of the construction budget for the benefit of the public works bidders and AUTHORITY's budget process, CONSULTANT shall accomplish the design services required under this Agreement so as to permit the award of a contract, for the construction of the facilities designed at a price that does not exceed the estimated construction contract price as set forth by AUTHORITY. When bids or proposals for the construction contract are received that exceed the estimated price, CONSULTANT shall perform such redesign and other services as are necessary to permit contract award within the funding limitation. These additional services shall be performed at no increase in the price for which the services were specified. However, CONSULTANT shall not be required to perform such additional services at no cost to AUTHORITY if the unfavorable bids or proposals are the result of conditions beyond its reasonable control.

B. CONSULTANT will promptly advise AUTHORITY if it finds that the project being designed will exceed or is likely to exceed the funding limitations and it is unable to design a usable facility within these limitations. Upon receipt of such information, AUTHORITY will review CONSULTANT's revised estimate of construction cost. AUTHORITY may, if it determines that the estimated construction contract price is so low that award of a construction contract not in excess of such estimate is improbable, authorize a change in scope or materials as required to reduce the estimated construction cost to an amount within the estimated construction contract price set forth by AUTHORITY, or AUTHORITY may adjust such estimated construction contract price. When bids or proposals are not solicited or are unreasonably delayed, AUTHORITY shall prepare an estimate of constructing the

design submitted and such estimate shall be used in lieu of bids or proposals to determine compliance within the funding limitation.

ARTICLE 23. REQUIREMENTS FOR REGISTRATION OF DESIGNERS

All design and engineering work furnished by CONSULTANT shall be performed by or under the supervision of persons licensed to practice architecture, engineering or surveying (as applicable) in the State of California, by personnel who are careful, skilled, experienced and competent in their respective trades or professions, who are professionally qualified to perform the work in accordance with the contract documents and who shall assume professional responsibility for the accuracy and completeness of the design documents and construction documents prepared or checked by them.

ARTICLE 24. FINISHED AND PRELIMINARY DATA

A. All of CONSULTANT's finished technical data, including but not limited to illustrations, photographs, tapes, software, software design documents, including without limitation source code, binary code, all media, technical documentation and user documentation, photoprints and other graphic information required to be furnished under this Agreement, shall be AUTHORITY's property upon payment and shall be furnished with unlimited rights and, as such, shall be free from proprietary restriction except as elsewhere authorized in this Agreement. CONSULTANT further agrees that it shall have no interest or claim to such finished, AUTHORITY-owned, technical data; furthermore, said data is subject to the provisions of the Freedom of Information Act, 5 USC 552.

B. It is expressly understood that any title to preliminary technical data is not passed to AUTHORITY but is retained by CONSULTANT. Preliminary data includes roughs, visualizations, software design documents, layouts and comprehensives prepared by CONSULTANT solely for the purpose of demonstrating an idea or message for AUTHORITY's acceptance before approval is given for preparation of finished artwork. Preliminary data title and right thereto shall be made available to AUTHORITY if CONSULTANT causes AUTHORITY to exercise ARTICLE 11, and a price shall be negotiated for all preliminary data.

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ARTICLE 25. GENERAL WAGE RATES

A. CONSULTANT warrants that all mechanics, laborers, journeypersons, workpersons, craftspersons or apprentices employed by CONSULTANT or subcontractor at any tier for any work hereunder, shall be paid unconditionally and not less often than once a week and without any subsequent deduction or rebate on any account (except such payroll deductions as are permitted or required by federal, state or local law, regulation or ordinance), the full amounts due at the time of payment, computed at a wage rate and per diem rate not less than the aggregate of the highest of the two basic hourly rates and rates of payments, contributions or costs for any fringe benefits contained in the current general prevailing wage rate(s) and per diem rate(s), established by the Director of the Department of Industrial Relations of the State of California, (as set forth in the Labor Code of the State of California, commencing at Section 1770 et. seq.), or as established by the Secretary of Labor (as set forth in Davis-Bacon Act, 40 U.S.C. 267a, et. seq.), regardless of any contractual relationship which may be alleged to exist between CONSULTANT or subcontractor and their respective mechanics, laborers, journeypersons, workpersons, craftspersons or apprentices. Copies of the current General Prevailing Wage Determinations and Per Diem Rates are on file at AUTHORITY's offices and will be made available to CONSULTANT upon request. CONSULTANT shall post a copy thereof at each job site at which work hereunder is performed.

B. In addition to the foregoing, CONSULTANT agrees to comply with all other provisions of the Labor Code of the State of California, which is incorporated herein by reference, pertaining to workers performing work hereunder including, but not limited to, those provisions for work hours, payroll records and apprenticeship employment and regulation program. CONSULTANT agrees to insert or cause to be inserted the preceding clause in all subcontracts which provide for workers to perform work hereunder regardless of the subcontractor tier.

ARTICLE 26. CONTRACTOR PURCHASED EQUIPMENT

A. If during the course of this Agreement, additional equipment is required, which will be paid for by the AUTHORITY, CONSULTANT must request prior written authorization from the

AUTHORITY's project manager before making any purchase. As part of this purchase request, CONSULTANT shall provide a justification for the necessity of the equipment or supply and submit copies of three (3) competitive quotations. If competitive quotations are not obtained, CONSULTANT must provide the justification for the sole source.

B. CONSULTANT shall maintain an inventory record for each piece of equipment purchased that will be paid for by the AUTHORITY. The inventory record shall include the date acquired, total cost, serial number, model identification, and any other information or description necessary to identify said equipment or supply. A copy of the inventory record shall be submitted to the AUTHORITY upon request.

C. At the expiration or termination of this Agreement, CONSULTANT may keep the equipment and credit AUTHORITY in an amount equal to its fair market value. Fair market value shall be determined, at CONSULTANT's expense, on the basis of an independent appraisal. CONSULTANT may sell the equipment at the best price obtainable and credit AUTHORITY in an amount equal to the sales price. If the equipment is to be sold, then the terms and conditions of the sale must be approved in advance by AUTHORITY's project manager.

D. Any subconsultant agreement entered into as a result of this Agreement shall contain all provisions of this clause.

ARTICLE 27. FORCE MAJEURE

Either party shall be excused from performing its obligations under this Agreement during the time and to the extent that it is prevented from performing by an unforeseeable cause beyond its control, including but not limited to: any incidence of fire, flood; acts of God; commandeering of material, products, plants or facilities by the federal, state or local government; national fuel shortage; or a material act or omission by the other party; when satisfactory evidence of such cause is presented to the other party, and provided further that such nonperformance is unforeseeable, beyond the control and is not due to the fault or negligence of the party not performing.

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ARTICLE 28. CONFLICT OF INTEREST

CONSULTANT agrees to avoid organizational conflicts of interest. An organizational conflict of interest means that due to other activities, relationships or contracts, the CONSULTANT is unable, or potentially unable to render impartial assistance or advice to the AUTHORITY; CONSULTANT's objectivity in performing the work identified in the Scope of Work is or might be otherwise impaired; or the CONSULTANT has an unfair competitive advantage. CONSULTANT is obligated to fully disclose to the AUTHORITY in writing Conflict of Interest issues as soon as they are known to the CONSULTANT. All disclosures must be submitted in writing to AUTHORITY pursuant to the Notice provision herein. This disclosure requirement is for the entire term of this Agreement.

ARTICLE 29. CODE OF CONDUCT

CONSULTANT agrees to comply with the AUTHORITY's Code of Conduct as it relates to Third-Party contracts which is hereby referenced and by this reference is incorporated herein. CONSULTANT agrees to include these requirements in all of its subcontracts.

ARTICLE 30. PROHIBITION ON PROVIDING ADVOCACY SERVICES

CONSULTANT and all subconsultants performing work under this Agreement, shall be prohibited from concurrently representing or lobbying for any other party competing for a contract with AUTHORITY, either as a prime consultant or subconsultant. Failure to refrain from such representation may result in termination of this Agreement.

ARTICLE 31. HEALTH AND SAFETY REQUIREMENTS

CONSULTANT shall comply with all the requirements set forth in EXHIBIT B, Level 1 MODIFIED SAFETY AND ENVIRONMENTAL SPECIFICATIONS. As used therein, "Contractor" shall mean "Consultant," and "Subcontractor" shall mean "Sub-consultant."

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ORANGE COUNTY TRANSPORTATION AUTHORITY

By: _____ By: _____
Darrell E. Johnson
Chief Executive Officer

Date: _____ Date: _____

By: _____
Darrell E. Johnson
Chief Executive Officer

Date: _____ Date: _____

By: _____
James M. Donich
General Counsel

Date: _____

By: _____
Kia Mortazavi
Executive Director

Date: _____

EXHIBIT C: FORMS

ORANGE COUNTY TRANSPORTATION AUTHORITY
CAMPAIGN CONTRIBUTION DISCLOSURE FORM

RFP Number: _____ RFP Title: _____

Was a campaign contribution made to any OCTA Board Member within the preceding 12 months, regardless of dollar amount of the contribution by either the proposing firm, proposed subconsultants and/or agent/lobbyist? Yes _____ No _____

If no, please sign and date below.

If yes, please provide the following information:

Prime Contractor Firm Name: _____

Contributor or Contributor Firm's Name: _____

Contributor or Contributor Firm's Address: _____

Is Contributor:

- | | | |
|---|-----------|----------|
| <input type="radio"/> The Prime Contractor | Yes _____ | No _____ |
| <input type="radio"/> Subconsultant | Yes _____ | No _____ |
| <input type="radio"/> Agent/Lobbyist hired by Prime
to represent the Prime in this RFP | Yes _____ | No _____ |

Note: Under the State of California Government Code section 84308 and California Code of Regulations, Title 2, Section 18438, campaign contributions made by the Prime Contractor and the Prime Contractor's agent/lobbyist who is representing the Prime Contractor in this RFP must be aggregated together to determine the total campaign contribution made by the Prime Contractor.

Identify the Board Member(s) to whom you, your subconsultants, and/or agent/lobbyist made campaign contributions, the name of the contributor, the dates of contribution(s) in the preceding 12 months and dollar amount of the contribution. Each date must include the exact month, day, and year of the contribution.

Name of Board Member: _____

Name of Contributor: _____

Date(s) of Contribution(s): _____

Amount(s): _____

Name of Board Member: _____

Name of Contributor: _____

Date(s) of Contribution(s): _____

Amount(s): _____

Date: _____

Signature of Contributor _____

Print Firm Name _____

Print Name of Contributor _____

ORANGE COUNTY TRANSPORTATION AUTHORITY
AND AFFILIATED AGENCIES

Board of Directors

Steve Jones, Chairman
Andrew Do, Vice Chairman
Lisa A. Bartlett, Director
Doug Chaffee, Director
Laurie Davies, Director
Barbara Delgleize, Director
Michael Hennessey, Director
Gene Hernandez, Director
Joseph Muller, Director
Mark A. Murphy, Director
Richard Murphy, Director
Miguel Pulido, Director
Tim Shaw, Director
Harry S. Sidhu, Director
Michelle Steel, Director
Donald P. Wagner, Director
Greg Winterbottom, Director

STATUS OF PAST AND PRESENT CONTRACTS FORM

On the form provided below, Offeror/Bidder shall list the status of past and present contracts where the firm has either provided services as a prime vendor or a subcontractor during the past five (5) years in which the contract has been the subject of or may be involved in litigation with the contracting authority. This includes, but is not limited to, claims, settlement agreements, arbitrations, administrative proceedings, and investigations arising out of the contract.

A separate form must be completed for each contract. Offeror/Bidder shall provide an accurate contact name and telephone number for each contract and indicate the term of the contract and the original contract value. Offeror/Bidder shall also provide a brief summary and the current status of the litigation, claims, settlement agreements, arbitrations, administrative proceedings, or investigations. If the contract was terminated, list the reason for termination.

Offeror/Bidder shall have an ongoing obligation to update the Authority with any changes to the identified contracts and any new litigation, claims, settlement agreements, arbitrations, administrative proceedings, or investigations that arise subsequent to the submission of the bid. Each form must be signed by an officer of the Offeror/Bidder confirming that the information provided is true and accurate.

Project city/agency/other:	
Contact Name:	Phone:
Project Award Date:	Original Contract Value:
Term of Contract:	
(1) Litigation, claims, settlements, arbitrations, or investigations associated with contract:	
(2) Summary and Status of contract:	
(3) Summary and Status of action identified in (1):	
(4) Reason for termination, if applicable:	

By signing this Form entitled "Status of Past and Present Contracts," I am affirming that all of the information provided is true and accurate.

Name

Signature

Title

Date

PROPOSAL EXCEPTIONS AND/OR DEVIATIONS

The following form shall be completed for each technical and/or contractual exception or deviation that is submitted by Offeror for review and consideration by Authority. The exception and/or deviation must be clearly stated along with the rationale for requesting the exception and/or deviation. If no technical or contractual exceptions or deviations are submitted as part of the original proposal, Offerors are deemed to have accepted Authority's technical requirements and contractual terms and conditions set forth in the Scope of Work (Exhibit A) and Proposed Agreement (Exhibit B). Offerors will not be allowed to submit this form or any contractual exceptions and/or deviation after the proposal submittal date identified in the RFP. Exceptions and/or deviations submitted after the proposal submittal date will not be reviewed by Authority.

Offeror: _____

RFP No.: _____ RFP Title: _____

Deviation or Exception No. : _____

Check one:

- Scope of Work (Technical) _____
- Proposed Agreement (Contractual) _____

Reference Section/Exhibit: _____ Page/Article No. _____

Complete Description of Deviation or Exception:

Rationale for Requesting Deviation or Exception:

Area Below Reserved for Authority Use Only:

EXHIBIT D: SAFETY SPECIFICATIONS

PART I – GENERAL

1.1 GENERAL HEALTH, SAFETY & ENVIRONMENTAL REQUIREMENTS

- A. The Contractor, its subcontractors, suppliers, and employees have the obligation to comply with all Authority health, safety and environmental compliance department (HSEC) requirements of this safety specification, project site requirements, bus yard safety rules, as well as all federal, state, and local regulations pertaining to scope of work, contracts or agreements with the Authority. Additionally, manufacturer requirements are considered incorporated by reference as applicable to this scope of work.
- B. Observance of repeated unsafe acts or conditions, serious violation of safety standards, non-conformance of Authority health, safety and environmental compliance department (HSEC) requirements, or disregard for the intent of these safety specifications to protect people and property, by Contractor or its subcontractors may be cause for termination of scope or agreements with the Authority, at the sole discretion of the Authority.
- C. The health, safety, and environmental requirements, and references contained within this scope of work shall not be considered all-inclusive as to the hazards that might be encountered. Safe work practices shall be planned and performed, and safe conditions shall be maintained during this work scope.
- D. The Authority Project Manager shall be responsible to ensure a safety orientation is conducted of known potential hazards and emergency procedures for all Contractor personnel, subcontractors, suppliers, vendors, and new employees assigned to the project prior to commencement of the project.
- E. The Contractor shall ensure that all Contractor vehicles, including those of its subcontractors, suppliers, vendors and employees are parked in designated parking areas, and comply with traffic routes, and posted traffic signs in areas other than the employee parking lots.
- F. California Code of Regulations (CCR) Title 8 Standards are minimum requirements; each Contractor is encouraged to exceed minimum requirements. When the Contractor's safety requirements exceed statutory standards, the more stringent requirements shall be applied for the safeguard of public and employees.

1.2 REGULATORY

- A. Injury/Illness Prevention Program
The Contractor shall comply with CCR Title 8, Section with California Code of Regulations (CCR) Title 8, Section 3203. The intent and elements of the IIPP shall be implemented and enforced by the Contractor and its sub-tier contractors, suppliers, and vendors. The program shall be provided to the Authority's Project Manager, upon request, within 72 hours.
- B. Substance Abuse Prevention Program
Contractor shall comply with the Policy or Program of the Company's Substance Abuse Prevention Policy that complies with the most recent Drug Free Workplace Act. The

program shall be provided to the Authority's Project Manager, upon request, within 72 hours.

C. Heat Illness Prevention Program

Contractor shall comply with CCR Title 8, Section, Section 3395, Heat Illness Prevention. The program shall be provided to the Authority's Project Manager, upon request, within 72 hours.

D. Hazard Communication Program

Contractor shall comply with CCR Title 8, Section 5194 Hazard Communication Standard. Prior to use on Authority property and/or project work areas Contractor shall provide the Authority Project Manager copies of SDS for all applicable chemical products used, if any. The program shall be provided to the Authority's Project Manager, upon request, within 72 hours.

- a. All chemicals including paint, solvents, detergents and similar substances shall comply with South Coast Air Quality Management District (SCAQMD) rules 103, 1113, and 1171.

E. Storm Water Pollution Prevention Plan

The Contractor shall protect property and water resources from fuels and similar products throughout the duration of the contract. Contractor shall comply with Storm Water Pollution Prevention Plan (SWPPP) requirements. The program or plan if required by scope shall be provided to the Authority's Project Manager, upon request, within 72 hours.

1.3 INCIDENT NOTIFICATION AND INVESTIGATION

A. The Authority shall be promptly notified of any of the following types of incidents including but not limited to:

1. Damage incidents of property (incidents involving third party, contractor or Authority property damage);
2. Reportable and/or Recordable injuries (as defined by the U. S. Occupational Safety and Health Administration), a minor injury, and near miss incidents;
3. Incidents impacting the environment, i.e. spills or releases on Authority projects or property.
4. Outside Agency Inspections; agencies such as Cal/OSHA, DTSC, SCAQMD, State Water Resources Control Board, FTA, CPUC, EPA, USACE and similar agencies.

B. Notifications shall be made to Authority representatives, employees and/or agents. This includes incidents occurring to contractors, vendors, visitors, or members of the public that arise from the performance of Authority contract work. An immediate verbal notice followed by an initial written incident investigation report shall be submitted to the Authority's Project Manager within 24 hours of the incident.

C. A final written incident investigative report shall be submitted within seven (7) calendar days and include the following information. The Current Status of anyone injured, photos of the incident area, detailed description of what happened, Photos of the existing

conditions and area of the injury/incident, the contributing factors that lead to the incident occurrence, a copy of the company policy or procedure associated with the incident and evaluation of effectiveness, copy of task planning documentation, copy of the Physician's first report of injury, copy of Cal/OSHA 300 log of work related injuries and illnesses, the Cal/OSHA 301 Injury Illness Incident Report, and corrective actions initiated to prevent recurrence. This information shall be considered the minimum elements required for a comprehensive incident report provided to OCTA.

- D. A Serious Injury, Serious Incident, OSHA Recordable Injury/Illness, or a Significant Near Miss shall require a formal incident review at the discretion of the Authority's Project Manager. The incident review shall be conducted within seven (7) calendar days of the incident. This review shall require a company senior executive, company program or project manager from the Contractors' organization to participate and present the incident review as determined by the OCTA Project Manager. The serious incident presentation shall include action taken for the welfare of the injured, a status report of the injured, causation factors that lead to the incident, a root cause analysis (using 5 whys and fishbone methods), and a detailed recovery plan that identifies corrective actions to prevent a similar incident, and actions to enhance safety awareness.

1. Serious Injury: includes an injury or illness to one or more employees, occurring in a place of employment or in connection with any employment, which requires inpatient hospitalization for a period in excess of twenty-four hours for other than medical observation, or in which an employee suffers the loss of any member of the body, or suffers any serious degree of physical disfigurement. A serious injury also includes a lost workday or reassignment or restricted injury case as determined by the Physician's first report of injury or Cal/OSHA definitions.
2. Serious Incident: includes but not limited to property damage of \$500.00 or more, an incident requiring emergency services (local fire, paramedics and ambulance response), news media or OCTA media relations response, and/or incidents involving other agencies (Cal/OSHA, EPA, AQMD, DTSC, Metrolink, FTA, FRA etc.) notification or representation.
3. OSHA Recordable Injury / Illness: includes and injury / illness resulting in medical treatment beyond First Aid, an injury / illness which requires restricted duty, or an injury / illness resulting in days away from work.
4. Significant Near Miss Incident: includes incidents where no property was damaged and no personal injury sustained, but where, given a slight shift in time or position, damage and/or injury easily could have occurred.

1.4 DESIGNATED HEALTH AND SAFETY REPRESENTATIVE

- A. Upon contract award, the contractor within 10 business days shall designate a health and safety representative and provide a resume and qualifications to the Authority project manager, upon request, within 72 hours.
- B. This person shall be a competent or qualified individual as defined by the Occupational, Safety, and Health Administration (OSHA), familiar with applicable CCR Title 8 Standards (Cal/OSHA) and has the authority to affect changes in work procedures that may have associated cost, schedule and budget impacts.

1.5 PERSONAL PROTECTIVE EQUIPMENT

- A. The Contractor, its subcontractors, suppliers, and employees are required to comply with applicable personal protective equipment (PPE) requirements while performing work at any Authority project or property. Generally minimum PPE requirements include eye protection; hearing protection, head protection, class 2 or 3 safety reflective vests, and appropriate footwear.
- B. The Contractor, its subcontractors, suppliers, and employees are required to provide their own PPE, including eye, head, foot, and hand protection, safety vests, or other PPE required to perform their work safely on Authority projects or property. The Authority requires eye protection on construction projects and work areas that meet ANSI Z-87.1 Standards.

1.6 REFERENCES

- A. CCR Title 8 Standards (Cal/OSHA)
- B. FCR Including 1910 and 1926 Standards
- C. NFPA, NEC, ANSI, NIOSH Standards
- D. Construction Industry Institute (CII)
- E. OCTA Yard Safety Rules

END OF SECTION