

May 17, 2023

AFFILIATED AGENCIES

SUBJECT:

Orange County Transit District

Local Transportation Authority

Service Authority for Freeway Emergencies

Consolidated Transportation Service Agency

Congestion Management Agency

> Service Authority for Abandoned Vehicles

Request for Proposals (RFP) 3-2270 "Construction Management Support Services for the Interstate 605/Katella Avenue Interchange Project"

All Offerors:

This letter shall serve as Addendum No. 3 to the above RFP issued by the Orange County Transportation Authority (OCTA). Offerors are reminded that the proposal submittal date is at or before **2:00 p.m., May 24, 2023**.

Offerors are advised of the following:

- 1. An additional pre-proposal registration sheet from the pre-proposal conference held on May 2, 2023 is presented as Attachment A to this Addendum No. 3.
- 2. The Scope of Work has been revised and is presented as Exhibit A, Revised Scope of Work, attached to this Addendum No. 3.
- 3. The following are OCTA's responses to the remaining written questions submitted by the deadline:
 - Q1 Upon reviewing the RFP, we noticed that there is a personnel position titled "Project Assistant (PA)" listed among the Consultant personnel. However, we could not find a clear description of the Qualifications and Responsibilities associated with this role. Instead, we found a description for a "Survey Assistant." We kindly request clarifications on the following:
 - Could you please provide a detailed description of the qualifications and responsibilities for "Project Assistant (PA)"?
 - Is the Survey Assistant intended to be part of the required personnel?
 - R1 The Project Assistant (PA) position has been removed from the Scope of Work. The hours allocated to the PA position were intended for the Survey Assistant(s) which is described in the Scope of Work and is intended to be required personnel. The hours originally allocated to the PA position (1,390) have been reallocated to Surveying for a total of 4,169 hours.

Orange County Transportation Authority

550 South Main Street / P.O. Box 14184 / Orange / California 92863-1584 / (714) 560-OCTA (6282)

- Q2 Can you please provide a description/required qualification for the PA role identified under Section 3.1 General (Personnel) of the Scope of Work?
- R2 Refer to the response to Q1.
- Q3 Will OCTA provide a description for the PA role mentioned in Section 3.1 of the Scope of Work?
- R3 Refer to the response to Q1.
- Q4 Will OCTA require a consultant source materials representative (SMR) or will all items for source inspection be handled by Caltrans?
- R4 Plant/source inspection will be handled by Caltrans.
- Q5 Does the double-spacing format requirement also apply to resumes?
- R5 No, the double-spacing format requirement does not apply to resumes.
- Q6 Would it be acceptable to use a smaller font size for charts and figures?
- R6 Yes, a smaller font size for charts and figures is acceptable.
- 4. The following are revised responses to **Question Nos. 1, 3, 5, 7, 9, 13, 16, 23, and 28** from Addendum No. 2.
 - Q1 Would you please advise if OCTA can provide a copy or access to the project design plans and specifications?
 - Revised Draft 100% Plans, including Stage Construction Plans are provided as Attachment B-1 to Addendum No. 2. Please note: The Post Miles will be revised along Interstate 605 to capture the replacement of a northbound overhead sign structure at STA "A" 218+15. The Post Mile change will be reflected in an upcoming Supplemental Project Report.

Draft 100% Special Provisions are provided as Attachment B-2 to Addendum No. 2

Q3	Could OCTA make the most recent plan set available to proposers for review?
<i>Revised</i> R3	Refer to the response to revised Q1.
Q5	Please advise how we can obtain a copy of the plans and specifications for this project.
<i>Revised</i> R5	Refer to the response to revised Q1.
Q7	We would like to request the plans and specifications for the project to work on the Work Plan.
<i>Revised</i> R7	Refer to the response to revised Q1.
Q9	RFP Page 12, Work Plan C (3) Furnish a project schedule for completing the work in terms of elapsed weeks. Will OCTA make the plans or the staging plans available for review?
<i>Revised</i> R9	Refer to the response to revised Q1.
Q13	Will OCTA provide current construction plans with staging for review during the RFP process and to develop a project schedule as requested in Section 3c (3) "Work Plan"?
<i>Revised</i> R13	Refer to the response to revised Q1.
Q16	Can OCTA provide the plans, specs and/or estimate?
<i>Revised</i> R16	Refer to the response to revised Q1.
Q23	Are the construction phasing plan/requirements developed and can a copy be shared?
<i>Revised</i> R23	Refer to the response to revised Q1.

Q28 Will the project plans and specifications be available for review?

Revised Refer to the response to revised Q1. R28

Offerors are reminded to acknowledge receipt of this Addendum No. 3 in their transmittal letter. All changes addressed in this Addendum No. 3 shall be incorporated into the final Agreement.

Questions regarding this Addendum No. 3 should be directed to the undersigned at ideneau@octa.net.

Sincerely,

oneau

Iris Deneau Senior Contract Administrator Contracts Administration and Materials Management

PRE-PROPOSAL CONFERENCE REGISTRATION



Date: May 2, 2023

Title: Construction Management Support Services for the Interstate 605/Katella Avenue Interchange Project

1.	Company Name:Anser Advisory					
	Attendee: Lucas Rathe					
	Address: 2677 N. Main Street, Suite 400					
	City, State Zip: Santa Ana, CA 92705					
	Phone Number: _(⁽⁶¹⁹⁾ 755-9596	Registered on CAMM NET?	🗶 Yes	🗌 No		
	Prime 🗔 Sub 🗌 DBE 🗌					
	E-Mail Address: lucas.rathe@anseradvisory.com					
2.	Company Name: Anser Advisory					
	Attendee:Nicole Wolf					
	Address:2677 North Main Street, Suite 400					
	City, State Zip: tSanta Ana, CA 92705					
	Phone Number: _(^{619.316,2822}	Registered on CAMM NET?	X Yes	🗌 No		
	Prime 🗴 Sub 🗌 DBE 🗌					
	E-Mail Address:nicole.wolf@anserad	lvisory.com				
3.	Company Name:Anser Advisory					
	Attendee: Suzie Bravo					
	Address: 2677 North Main Street, Suite 400					
	City, State Zip: La Palma, CA 92705					
	Phone Number: (310) 621-6410	Registered on CAMM NET?	X Yes	🗌 No		
	Prime 🔄 Sub 🗌 DBE 🗌					
	E-Mail Address:					

ADDENDUM NO. 3 TO RFP 3-2270 EXHIBIT A

CONSTRUCTION MANAGEMENT SUPPORT SERVICES

FOR THE

INTERSTATE 605/KATELLA AVENUE INTERCHANGE PROJECT

REVISED SCOPE OF WORK

PROJECT DESCRIPTION

1.1 Introduction

The Orange County Transportation Authority (OCTA) and California Department of Transportation (Caltrans) require inspection and administrative support staff for construction of the Interstate 605 (I-605)/Katella Avenue Interchange (Project).

1.2 Statement of Intent

CONSULTANT shall provide qualified personnel to perform the function of construction inspection (including roadway and structures), Critical Path Method (CPM) scheduler, claims support, Office Engineer, field materials testing, surveying, and electrical inspection. These services shall include inspection services, field/office contract administration, and other services as determined necessary by the OCTA Project Manager. Caltrans will lead the construction management and administration of the construction contract and will provide the Senior Resident Engineer (RE), Principal Assistant RE, Structural Representative, additional inspection services as needed and other functional support services necessary to administer the construction contract. CONSULTANT inspection personnel shall be assigned full time or part time as needed and shall provide assistance to, and work under the direction of the Caltrans RE. CONSULTANT shall also provide a fully equipped field office for all staff assigned to the project including Caltrans, OCTA, and CONSULTANT'S own staff.

LIMITATION ON GOVERNMENTAL DECISIONS

Nothing contained in this scope of work permits CONSULTANT's personnel to authorize or direct any actions, votes, appoint any person, obligate, or commit OCTA to any course of action or enter into any contractual agreement on behalf of OCTA. In addition, CONSULTANT's personnel shall not provide information, an opinion, or a recommendation for the purpose of affecting a decision without significant intervening substantive review by OCTA personnel, counsel, and management.

1.3 **Project Description**

1.3-1 Background

Caltrans District 12 (Caltrans, or Caltrans D12), in cooperation with OCTA, proposes the construction of I-605/Katella Avenue Interchange. The proposed project is located in Orange County on I-605 and traverses between the cities of Los Alamitos and Long Beach. The proposed project limits cover a distance of 0.5 miles between postmile (P.M.) R1.1 and P.M. R1.6 along the I-605 corridor. The Environmental Document and Project Report were approved on October 3, 2018

and November 8, 2018, respectively. The Environmental Revalidation is anticipated to be approved by April 2023.

The final design phase for this project is scheduled to be completed in early 2023 and contract documents will be developed for the construction-bidding phase by early 2024. OCTA is expecting funding for the project from federal funds and Measure M2 funds. As the implementing agency, OCTA contracted with Michael Baker International (MBI) to prepare the final design Plans, Specifications, and Estimates (PS&E) for this Project. Caltrans provided oversight up to the completion of the PS&E phase. Caltrans will be the lead agency during the construction phase and will administer the contract for the construction phase.

1.3-2 Location and Limits

The project limits on I-605 between P.M. R1.1 and P.M. R1.6, and along Katella Avenue between Coyote Creek Channel and Civic Center Drive. The Project is located in the City of Los Alamitos and in the County of Orange.

1.3-3 General Project Description

Project will provide improvements to northbound and southbound ramps along I-605 between PM 1.1 and PM 1.6 and along Katella Avenue, between Coyote Creek Channel and Civic Center Drive.

The project construction will be in accordance with the Caltrans approved PS&E documents for project EA# 12-0K871.

1.4 **Project Delivery**

The design consultant who prepared the PS&E, Michael Baker International, will provide construction support services during construction.

Caltrans will advertise, award, and administer the construction contract. Caltrans will provide the Resident Engineer (RE), Principal Assistant RE, Structures Representative and other support as outlined in Section 1.2 "Statement of Intent" above. CONSULTANT shall be responsible for coordinating with Caltrans, design team and other stakeholders as necessary.

Caltrans is the lead agency for the right-of-way certification and utility relocation on the project. All utility and right of way issues during construction will be the responsibility of Caltrans as defined in the cooperative agreement between Caltrans and OCTA.

1.5 Project Schedule and Cost

Shown below are the Project Ready-To-List (RTL), construction start, construction completion dates, and estimated cost for construction:

Ready-To-List Construction Start Construction Completion Construction Cost: April 2024 October 2024 April 2026 \$21,275,368

GENERAL CONDITIONS AND REQUIREMENTS

2.1 **Project General Conditions and Requirements**

- 2.1-1 The number of project personnel and duration of the assignments will vary depending on the needs of the project. The final number of personnel and exact duration of assignment will be determined by OCTA and Caltrans. CONSULTANT personnel shall be available within two (2) weeks from written notification by OCTA and up to a maximum of six (6) months after Caltrans acceptance of the construction project.
- 2.1-2 CONSULTANT shall assist in verifying compliance with the labor standards provisions of the project and the related wage determination decisions of the Secretary of Labor.
- 2.1-3 CONSULTANT shall assist Caltrans in verifying compliance with the safety and accident prevention provisions of the project. Caltrans shall retain jurisdictional control for traffic control but shall receive assistance from CONSULTANT forces in reviewing and monitoring.
- 2.1-4 CONSULTANT shall assist Caltrans in verifying compliance with the equal employment opportunity (EEOC) provisions of the project.
- 2.1-5 All services required hereunder shall be performed in accordance with latest Caltrans regulations, policies, procedures, manuals, and standards. Documents shall be made available upon request.
- 2.1-6 CONSULTANT shall furnish a Project Manager to coordinate the CONSULTANT's operations with Caltrans and OCTA. The Project Manager shall be responsible for all matters related to the CONSULTANT's personnel and operations.
- 2.1.7 CONSULTANT's Project Manager shall be accessible to Caltrans and OCTA at all times during Caltrans normal working hours.
- 2.1-8 CONSULTANT shall provide construction management support services to control quality and manage work. CONSULTANT shall perform the following administrative activities:
 - a. Prepare, circulate, and file correspondence and memos as appropriate.
 - b. At the end of each month, CONSULTANT shall report the progress of the work. Progress shall be based on actual work accomplished such as estimated progress toward completion. The progress report shall include a staff labor report. Progress payments will be based upon actual time and expenses incurred.

- c. CONSULTANT shall submit 1 copy of a monthly Progress Report to the OCTA and Caltrans Project Manager consisting of a written narrative and an updated progress and expenditure curve. This report shall be received no later than the last day of the month. The narrative portion of the monthly Progress Report shall describe overall progress of the work, discuss significant problems and present proposed corrective action, and show the status of major changes.
- 2.1-9 To ensure an understanding of contract objectives, meetings between Caltrans, OCTA, and CONSULTANT will be held as often as deemed necessary. All work objectives, the work schedules, the terms of the contract, and any other related issues will be discussed and any problems will be resolved.
- 2.1-10 OCTA will designate a Project Manager to administer CONSULTANT Agreement and provide general direction to CONSULTANT.
- 2.1-11 Resumes of personnel must be submitted to OCTA for review and approval prior to assignment to a project. Caltrans, OCTA, and CONSULTANT will have the responsibility of determining the quality and quantity of work performed by CONSULTANT's personnel. If, at any time, the level of performance is below expectations, OCTA shall have the right to request removal of any project personnel. OCTA may request another person to be assigned as needed.
- 2.1-12 If a CONSULTANT's employee is on a leave of absence, the Project Manager shall provide an equally qualified replacement employee until the assigned employee returns to work. The replacement employee shall meet all the requirements of a permanently assigned employee.
- 2.1-13 The typical workday includes all hours worked by the Caltrans' construction contractor, normally forty (40) hours per week. If ordered by the RE, overtime for CONSULTANT's employees may be required. The construction contractor's operations may be restricted to specific hours during the week, which shall become the normal workday for CONSULTANT's personnel. On days when the construction contractor, such as rainy or unsuitable weather days, does not perform work CONSULTANT services shall not be provided unless authorized by the RE. The RE will provide eight (8) hours advance notice if CONSULTANT services are not required.
- 2.1-14 All personnel shall be knowledgeable of, and comply with, all applicable local, Caltrans, and federal regulations; cooperate and consult with Caltrans and OCTA officials during the course of the contract; and perform other duties as may be required to assure that the construction is being performed in accordance with the project plans and specifications.

- 2.1-15 CONSULTANT shall keep detailed records and document the work as directed by the Caltrans RE.
- 2.1-16 Caltrans will furnish a representative to perform the usual functions of a RE. Caltrans Department of Structures will provide the Structure Representative.
- 2.1-17 Caltrans or OCTA will provide CONSULTANT with the following:
 - a. Caltrans construction forms and other policies and procedures to be followed by CONSULTANT's personnel in the performance of the work.
 - b. A set of approved project plans for the project.

ADDENDUM NO. 3 TO RFP 3-2270 EXHIBIT A

STATEMENT OF SERVICES

3.0 Construction Inspection Services

3.1 General

CONSULTANT will be required to provide:

- a. Inspection and administration personnel
- b. A fully equipped field office
- c. Miscellaneous equipment, vehicles, and tools.
- d. Materials testing lab facility

The number of CONSULTANT personnel shall be dependent upon the actual work scope. The anticipated category and approximate annual quantity of personnel required is (based on a construction duration of 400 working days and 1,758 hours/year):

	Personnel	<u>Total Hours</u>
Project Manager	0.1	278
Senior Inspector (Roadway)	0.5	1,390
Inspector (Roadway)	0.5	1,390
Inspector (Structural)	0.0	0
Inspector (Electrical)	0.0	0
Office Engineer	1.0	2,779
CPM Scheduler	0.2	556
Claims Support	0.1	278
Field Materials Testing	0.5	1,390
Surveying	<u>1.5</u>	<u>4,169</u>
Total	4.4	12,230

ADDENDUM NO. 3 TO RFP 3-2270 EXHIBIT A 3.2 Construction Inspection and Administrative Support Services Requirements

Inspection work shall not be performed when conditions (such as weather, traffic, and other factors) prevent a safe, efficient operation or as directed by Caltrans or OCTA.

Assignments to be performed by CONSULTANT personnel may include, but are not limited to, the following:

3.2-1 Perform and assist in performing the duties of construction inspection and engineering including: paving and subgrade inspection, structures inspection, electrical inspection, drainage, signing and striping inspection, quantity calculations, checking grade and alignment, construction traffic control, and ensuring compliance with project plans and specifications.

3.2-2 Analyze the project plans and specifications for possible errors and deficiencies and report such findings to the RE. Identify actual and potential problems associated with the construction project and recommend sound engineering solutions to the RE. If the RE determines that changes are necessary, CONSULTANT's personnel shall assist in implementing and processing of "Change Orders" in accordance with Caltrans' Standard Specifications.

3.2-3 Adhere to all safety and health code and regulations and enforce applicable contract provisions for the protection of the public and project personnel. Prepare Assistant RE daily diaries in accordance with the Caltrans construction manual.

3.2-4 Prepare calculations, records, reports, and correspondence related to project activities.

3.2-5 CONSULTANT to assist in the preparation of As-Built plans.

3.2-6 Assist in preparing claims reports and be available for any claims settlements meetings.

3.2-7 Perform and assist in review of contractor's CPM schedule and construction staging plans.

3.2-8 Assist in performing Storm Water Pollution Prevention (SWPP) duties.

3.2-9 Assist in performing oversight of advance utility relocation prior to start of construction.

3.2-10 Assist in control of contractor's work within temporary construction easements.

3.2-11 Develop and maintaining a risk register of critical work that may affect construction schedule and cost.

3.3 Inspection Standards

Construction inspection and contract administration shall be in accordance with:

- 3.3-1 The Manual of Traffic Controls for Construction and Maintenance Work Zones.
- 3.3-2 The Caltrans Standard Specifications and Standard Plans.
- 3.3-3 The project plans and special provisions.
- 3.3-4 The Caltrans Construction Manual and other applicable Caltrans manuals.
- 3.3-5 Caltrans and OCTA shall decide all questions which may arise as to the quality or acceptability of deliverables furnished and work performed for this contract.

3.4 Construction Surveying Services

Surveying work shall not be performed when conditions (such as weather, traffic, and other factors) prevent a safe, efficient operation or as directed by Caltrans or OCTA.

Tasks and assignments to be performed by CONSULTANT personnel will generally include, but are not limited to, the following:

3.4-1 Construction Contract Documents. CONSULTANT shall perform all surveying that is required to be performed the OCTA as described in the Construction Contract between the OCTA and CONTRACTOR. Other surveying and engineering calculations shall be performed as needed to administer and manage the Project.

3.4-2 Survey Calculations and Adjustments. Survey calculations and adjustments shall be performed with established and computed coordinates based on the California Coordinate System. Cross Section Data Collection shall be performed by conventional and terrain line interpolation survey methods. Survey Data Formatting will include formatting topography, cross-section, and other survey data into computerized formats compatible with the Caltrans' computerized survey and design systems. Preparing and maintaining survey documents will include compiling and survey field notes, maps, drawing, and other survey documents. Monitoring for settlement shall be performed if required. GPS equipment shall be made available if required by OCTA.

ADDENDUM NO. 3 TO RFP 3-2270 EXHIBIT A

3.4-3 Existing Right of Way and Easements. CONSULTANT shall establish existing right of way and easements from Caltrans and other OCTA's record information and existing monumentation. Right of Way related monumentation shall be renewed and restored in accordance with Section 10.4 of the Surveys Manual, and the Land Surveyor's Act. Corner records and records of surveys shall be prepared and filed in accordance with Chapter 10 of the Caltrans Surveys Manual, and the Land Surveyors' Act. Perpetuating Existing Monumentation – Includes restoring, renewing, referencing, and resetting existing boundary-related monumentation, staking areas where construction disturbs the existing right of way and preparing and filing required maps and records.

3.4-4 New Right of Way and Easements. CONSULTANT shall establish new right of way and easements from plans, right of way maps, utility drawings, Caltrans and other OCTA's record information and existing monumentation. Right of Way Surveys - Includes research, locating and monumenting right of way and easement lines, staking right of way and easement fences and preparing and filing required maps and records. Final Monumentation - Includes the setting of centerline points of control upon completion of construction. Special Design-Data Surveys -Including drainage, utility, and those required for special field studies.

3.4-5 Control Survey. Horizontal and vertical controls, including project control surveys and aerial mapping control surveys. Also includes the restoring, renewing, referencing, relocating, and resetting existing control monumentation.

3.4-6 Topographic Surveys. By ground survey methods only.

3.4-7 As-built Drawing Survey Support. Provide electronic record information to support the development of project as-built drawings.

3.4-8 Survey Monument Markings. Monuments established by the CONSULTANT shall be marked by CONSULTANT with furnished disks, plugs, or tags acceptable to OCTA and the municipality having jurisdiction over the improvements. In addition, the CONSULTANT shall identify CONSULTANT-established monuments by tagging or stamping the monuments with the license or registration number of the CONSULTANT's surveyor who is in "reasonable charge" of the work.

3.4-9 All surveys shall be performed in accordance with the current Caltrans Survey Manual, its revisions and the District 12 Standard Staking Procedures Manual. Work not covered by the Manual shall be performed in accordance with the directions of the OCTA and accepted professional surveying standards.

3.4-10 Surveys performed by CONSULTANT shall conform to the requirements of the Land Surveyors' Act. In accordance with the Act, "responsible charge" for the work shall reside with a Licensed Land Surveyor or a pre-January 1, 1982, Registered Civil Engineer, in the state of California.

3.4-11 Unless otherwise specified in the survey request, control surveys shall conform to second-order (modified) accuracy standards as specified in the Caltrans Surveys Manual.

3.4-12 Additional standards for specific surveying work might be included in a special survey request by the OCTA. Such standards supplement the standards specified herein. If such additional standards conflict with the standards specified herein, the survey request standard shall govern over the standards herein.

3.5 Construction Management, Inspection and Survey Deliverables

CONSULTANT shall create and maintain the following documentation and provide the following deliverables:

3.5-1 Daily reports and extra-work diaries.

3.5-2 Monthly progress reports prepared by CONSULTANT's project manager.

3.5-3 Construction contract progress payment and quantity documents delivered to the RE the morning of the day specified in the contract payment schedule.

3.5-4 Final payment quantity documents delivered to the RE by no later than five (5) working days after acceptance by Caltrans of the completed construction project.

3.5-5 Field measurements, field, and laboratory test data and other documents as required by Caltrans procedures.

3.5-6 All reports, calculations, and other applicable documents prepared for the project.

3.5-7 Survey points, lines, and monuments shall be established, marked identified and referenced, as required by the survey request and the requirements herein.

3.5-8 Survey notes, drawings, calculations and other survey documents and information shall be completed as required herein.

3.5-9 All original survey documents resulting from this contract (including original field notes, adjustment calculations, final results, and appropriate intermediate documents) shall be delivered to OCTA and shall become the property of OCTA. A copy of all survey documents furnished to OCTA shall be retained by CONSULTANT for future reference.

3.5-10 When a survey is performed with a total station survey system, the original field notes shall be a hard copy listing, in a readable format, of the data (observations) as originally collected and submitted by the survey party. The party

chief shall sign the listing or if the chief is not licensed, the person in "responsible charge" of the survey shall sign.

3.5-11 Survey deliverables to OCTA shall follow the format specified below:

a) Horizontal Control - Alpha/numeric hard copy point listing with adjusted California Coordinate System northing and eastings and appropriate description.

b) Vertical Control - Alpha/numeric hard copy benchmark listing with adjusted elevations compatible with the design datum.

c) Topography - Alpha/numeric hard copy listing, hard copy drawing, and CADD digital drawing. The CADD drawing shall be provided on current media that will be compatible with Caltrans' computer systems. See Attachment A. Topographic symbology shall conform to the current Caltrans Drafting and Plan Manual.

d) Cross-Section Data - The data collection method used to collect crosssection data and the coding (feature description) of terrain data for cross-sections shall conform to the survey request requirements. Deliverables shall depend on the data collection method as follows:

e) Conventional Cross-Sections - For each cross-section: and alpha/numeric listing, a hard copy drawing, and a computerized formatted file, which is compatible with Caltrans' computer systems. Computerized formatted cross-sections shall be provided on magnetic tapes or disks compatible with Caltrans' computer systems.

f) Terrain Line Interpolation Cross-Section Data for each Terrain Line Interpolation survey: an alpha/numeric listing, a hard copy plan view drawing of the terrain lines, and a computerized input file. The computerized input file shall be provided on magnetic tape or disks compatible with Caltrans' computer systems and shall be in a format compatible with the Caltrans Terrain Line Interpolation computer program.

g) Data Collector Data - If specified in the Survey Request, the raw data from the data collector shall be provided in a format conforming to the Survey Request requirements.

3.5-12 All correspondence, records, and other Project documents.

3.5-13 Field notes and redline as-builts related to advance utility relocations.

3.5-14 Risk register of critical work that may affect construction schedule and cost.

3.6 Field Office Requirements

CONSULTANT shall provide a fully equipped and operational field office. It is not anticipated right-of-way will be provided to provide temporary trailers as the field office.

- 3.6-1 The field office shall house all construction personnel assigned to the project. The construction staff includes: Caltrans personnel, CONSULTANT inspection personnel, and one (1) office for the construction survey crew.
- 3.6-2 The field office shall have one desk and chair for every person assigned to the project, a desktop computer for CONSULTANT personnel only, internet access (T1 line), phones, fax machine, copy machine, full sized plotter, and conference table and chairs, and other normal office furniture, equipment, and utilities. CONSULTANT shall dispose of office furniture and equipment at project completion.
- 3.6-3 The field office shall also provide a common area (kitchen), bathrooms, field laboratory storage area, miscellaneous equipment storage area, and a large conference area for project meetings.

3.7 Miscellaneous Equipment, Inspection Vehicles, and Tools

CONSULTANT shall provide all necessary instruments, tools, and safety equipment required for their personnel to perform their work accurately, efficiently, and safely.

- 3.7-1 CONSULTANT shall provide one inspection vehicle (truck) for each inspector. Vehicles without side windows shall not be used. Caltrans-furnished magnetic logos shall be affixed to each side of the vehicle at all times it is used for the work under this contract.
- 3.7-2 CONSULTANT shall provide other field materials such as testing equipment and safety equipment, as needed, for use by their staff on the project.
- 3.7-3 CONSULTANT shall provide each inspector with a cellular phone.

3.8 Survey Services Equipment and Supplies

3.8-1 Office Equipment and Supplies- CONSULTANT shall have adequate office equipment and supplies to complete the required surveying work. Such equipment and supplies shall include, but not be limited to:

- 1) Drafting equipment.
- 2) Computers and calculators.

3) Data processing systems, including software, for:

• Reducing survey data collected with conventional and total station survey systems.

• Performing network adjustments for vertical and horizontal control surveys.

• Formatting survey data to be compatible with the Caltrans' computerized survey and data system.

3.8-2 Field Equipment and Supplies- CONSULTANT shall have adequate field equipment and supplies to complete the required surveying work. The equipment and supplies for each survey party shall include, but not be limited to, the following:

• Survey vehicles suitable for the work to be performed and terrain conditions of the project site. Vehicles shall be fully equipped with all necessary tools, instruments, and supplies required for the efficient operation of a survey party. Vehicles shall have an overhead flashing yellow light.

• Electronic calculator.

• Hand tools and supplies as appropriate for the requested survey work.

• Sufficient number of traffic cones twenty-eight (28) inches, minimum, in height.

• Traffic control devices (including signs, sign bases, flags, and hand held signs) as required to perform the requested survey work.

• Leveling instruments and equipment, including 1) self-leveling level; precision: standard deviation in one mile of double-run leveling 0.005 feet or less, and 2) suitable leveling rods for the work to be performed.

• Distance measuring instruments and equipment, including 1) electronic distance measurer; precision: standard deviation 3 millimeters plus 3 ppm, or less; range: at least one mile under average atmospheric conditions, 2) prisms, sufficient to perform the required work, 3) tapes; steel, cloth, 4) angle measuring instruments and equipment: Theodolite for non-control surveys; precision: direct circle reading to three seconds, or equivalent, horizontal and vertical, and 5) targets as required to perform the required work.

• When required for efficient survey operations, total station survey systems measurer, and electronic data collector shall be provided. The angle measuring instruments and distance measurer shall conform to requirements above.

• Radio communication shall be required if requested by OCTA.

3.8-3 Survey Personnel Safety. In addition to the requirements specified elsewhere in this contract, the following also shall apply. CONSULTANT shall conform to the safety provisions of the Caltrans Construction and Survey Manuals. CONSULTANT's personnel shall wear white hard hats, orange vests and rubber soled shoes at all times while working in the field. CONSULTANT shall provide appropriate safety training for all CONSULTANT's personnel required to work on and near the Project site. All safety equipment and personnel protective devices and gear shall be provided by CONSULTANT.

3.9 Personnel Qualifications and Responsibilities

The preferred minimum qualifications for CONSULTANT personnel assigned to this project are as follows:

3.9-1 Project Manager

The preferred minimum qualifications for the position of Project Manager are:

- a) Minimum of ten (10) years project management experience on similar highway construction/bridge construction projects, or other relative equivalent experience as determined by OCTA.
- b) Thorough knowledge of Caltrans construction practices, and the ability to read and interpret plans and specifications.
- c) Ability to make effective decisions concerning field problems and work in progress.
- d) Licensed Civil Engineer in the State of California.
- e) Ability to use typical computer programs such as Microsoft Word, Outlook, and Excel.

Under the direction of OCTA and Caltrans, the Project Manager will assume the following functional responsibilities:

- a) Review, monitor, train, and provide general direction for CONSULTANT's personnel.
- b) Assign personnel to projects on an as-needed basis.
- c) Administer personnel leave subject to approval of the Caltrans' RE.
- d) Prepare monthly reports for delivery to the OCTA Project Manager.
- e) Maintain continuous communication with the Caltrans' RE, OCTA Project Manager, CONSULTANT field personnel, and with public outreach personnel.
- f) Coordinate/communicate with the OCTA Project manager, staffing needs, and ensure project support costs are within budget.
- g) Advise the OCTA Project Manager of major project issues and contract status.
- h) Provide expert advice when called upon.

3.9-2 Senior Roadway Inspector

Minimum qualification is at least five (5) years working as a RE on Caltrans Highway improvement projects of similar size and complexity.

a) Act as the lead inspector and provide guidance to other CONSULTANT inspectors and staff in carrying out their day-to-day duties.

- b) Provide consultation on complex contract interpretation issues as called upon by the RE. Act as an advisor to the RE.
- c) Thorough knowledge of Caltrans construction practices.
- d) Ability to make effective decisions concerning field problems and work in progress.
- e) Licensed Civil Engineer in the State of California.
- f) Maintain continuous communication with the Caltrans RE, lead staff, OCTA Project Manager, field staff, public outreach personnel, and with construction administration staff.
- g) Provide expert advice when called upon.

3.9-3 Roadway Inspector

Preferred minimum qualification for the position of roadway inspectors will be as follows:

- a) Minimum of three (3) years of relevant construction inspection and management experience on similar highway construction projects.
- b) Knowledge of construction practices, physical characteristics and properties of highway construction inspection, and the approved methods and equipment used in performing physical inspections.
- c) Ability to work independently and perform inspection duties in the construction field office.
- d) Ability to effectively make minor decision concerning work in progress and solving field and office problems.
- e) Ability to use typical computer programs such as Microsoft Word, Outlook, and Excel.
- f) Ability and experience with review of Critical Path Method (CPM) baseline schedule including updates and revisions. Ability to run Claim Digger or other available software to detect changes to the CPM schedule for Claims analysis purposes.
- g) Assist in the response to potential claims filed by the contractor and preparation of documentation for contract claims and claim reports.

Under the direction of the Caltrans RE the Roadway Inspector(s) will assume the following functional responsibilities:

- a) Perform inspections to achieve compliance with contract plans and specifications on all phases of Highway construction, such as paving, structures, grading, drainage, utility relocation, electrical installation, sign installation, and landscaping items.
- b) Perform quantity calculations for progress pay estimates and keep project records.
- c) Perform design for minor changes and make design estimates for contract change orders.

- d) Perform analytical calculations for items such as basic earthwork and grading, special staking procedures and redesigning facilities to fit existing field conditions.
- e) Perform analytical calculation for items such as basic earthwork and grading, special staking procedures and redesigning facilities to fit existing field conditions.
- f) Maintain continuous communication with the Caltrans' RE, OCTA Project Manager, Principal Assistant (Resident) Engineer, field personnel, public outreach personnel, and with construction administration staff.
- 3.9-4 Office Engineer
- a) Minimum of three (3) years of relevant construction inspection and/or office engineering experience.
- b) Ability to work independently and perform typical construction field office duties.
- c) Thorough knowledge of Caltrans construction practices, and the ability to read and interpret plans and specifications.
- d) Thorough knowledge of the construction manual regarding estimates, extra work bidding, change orders, and other administrative duties.
- e) Maintain continuous communication with the Caltrans' RE, OCTA Project Manager, and Caltrans District Construction Administration.
- f) Ability to use typical computer programs such as Microsoft Word, Excel, Outlook, Scheduling software, and Expedition or equivalent.

Under direction of the Caltrans RE, the office engineer will assume the following functional responsibilities:

- a) Perform quality calculations for progress pay estimates and keep for project records.
- b) Draft Change Orders and process for approval.
- c) Maintain continuous communications with the Caltrans' RE, OCTA Project Manager, construction administration staff, and the District Construction office.
- 3.9-5 Scheduling Support Specialist

Construction scheduling support CONSULTANT shall be knowledgeable and experienced in the following:

- a) Using Primavera Project Management Software (P6/P7), Primavera Project Planner (P3), SureTrack, Microsoft Project and Microsoft Office (Word, Excel, Powerpoint etc.) software.
- b) Generating, reviewing, and analyzing CPM schedules with respect to time, resource, and cost. CONSULTANT shall possess the experience and skills to track Contractor's submittals and Caltrans submittals reviews, and in conjunction with schedule analysis, determine credits to State-owned Float activity for time saved on the critical path for early review of submittals.

CONSULTANT shall also possess the experience and skills to determine other savings to the critical path due to actions by Caltrans.

- c) Monitoring and analyzing Contractor's performance of the work with respect to time, resource, and cost. Generating project correspondence, daily diaries, monthly contract item payments related to scheduling work, Weekly Statement of Working Days, reports, plots exhibits, other presentation materials and other items related to scheduling.
- d) Generating, reviewing, and analyzing reports with respect to time, resource and cost.
- e) Generating, reviewing, and analyzing Time Impact Analyses.
- f) Providing specialized expertise for the support of review and analysis of potential claims.
- g) Negotiating issues related to construction scheduling.
- h) Conducting constructability reviews.
- i) Making presentations as needed. Providing training in areas related to scheduling.
- j) General construction process and terminology.
- k) Working knowledge of Caltrans plans, specifications, and manuals (Standard Plans, Standard Specifications, Construction Manual etc.)
- I) Construction scheduling support CONSULTANT shall possess excellent oral and written communications skills.
- m) Minimum of four (4) years of experience performing construction scheduling for highway, or major public works projects, performing related duties as described above.

3.9-6 Claims Support

The construction claims support CONSULTANT shall be knowledgeable and experienced in the following:

- a) Using Primavera Project Management Software (P6/P7), Primavera Project Planner (P3), Suretrack, Microsoft Project, and Microsoft Office (Word, Excel, PowerPoint etc.) software.
- b) Generating and analyzing CPM schedules with respect to time, resource, and cost. CONSULTANT shall possess the experience and skills to conduct detailed schedule analysis.
- c) Have at least five (5) years of experience with Claims analysis, responding to potential claims, preparing claims reports and presenting to the Dispute Review Boards or District Claims Board.
- d) Analyzing Time Impact Analyses.

3.9-7 Surveying

Survey Field/Office Party Chief

a) Minimum preferred qualifications for the position of Survey Field/Office Party Chief are as follows:

1) Party Chief shall fulfill at least one (1) of the three (3) following licensing requirements:

a. A licensed Land Surveyor in the State of California.

b. A pre-January 1, 1982, Registered Civil Engineer in the State of California

c. An experienced surveyor who serves as chief under the direction or supervision of a person who is a licensed Land Surveyor or pre-January 1, 1982 Registered Civil Engineer in the state of California. This direction or supervision shall be provided in a manner and with a span of control and immediacy that enables the supervisor to be in "responsible charge" of the work as defined in Chapter 15 of the Business and Professions Code (the Land Surveyors Act) and Title 16, Chapter 5, of the California Administrative Code (regulations adopted by the Board of Registration for Professional Engineers and Land Surveyors).

- i. b) Five (5) years survey experience on a similar construction projects, or other relevant experience.
- ii. c) Thorough knowledge of construction survey practices and the ability to read and interpret plans and specifications.
- b) Ability to make effective decisions concerning field problems and work in progress.
- c) Familiarity with typical coordinate geometry computer programs.
- d) Under the direction of the Caltrans RE, the Party Chief will assume the following functional responsibilities and shall possess experience in all of these areas:
 - 1. Perform survey services for all stages of construction as described in the Survey Services sections above.
 - 2. Administer day to day activities of the survey party.
 - 3. Perform analytical survey calculations for items such as grading, horizontal and vertical control, right of way and minor in-field design.
 - 4. Maintain continuous communication with the RE, field personnel and construction administration staff when on site.
 - 5. Shall be designated safety officer for the survey party field operations, and shall be trained in the principles of traffic control.

Survey Assistants

Preferred minimum qualifications for survey assistants are as follows:

- a) One (1) year survey experience on a similar construction projects.
- b) Fundamental knowledge of construction survey practices and the ability to read and interpret plans and specifications.
- c) Ability to assist field and office party chiefs in all required surveying work.
- d) One (1) survey party member must have the ability to assume temporary leadership of the survey party in the absence of the party chief.
- e) Trained in the appropriate safety areas for the job decisions each individual is required to make.
- f) Under the direction of the Caltrans RE and the Party Chief, the survey assistants will assume the following responsibilities and shall possess experience in all of these areas:
 - 1. Assist field and office party chiefs in all required surveying work.
 - 2. Perform basic calculations to support surveying and staking work.
 - 3. Maintain continuous communication with the field or office party chief

3.10 Inspection and Safety

In addition to the requirements specified elsewhere in this contract, the following also shall apply.

3.10-1 CONSULTANT shall conform to the safety provisions of the Caltrans Construction and Survey Manuals.

3.10-2 CONSULTANT's personnel shall wear white hard hats, safety orange vests and rubber-soled shoes at all times while working in the field.

3.10-3 CONSULTANT shall provide appropriate safety training for all CONSULTANT's personnel required to work on and near highways.

3.10-4 All safety equipment shall be provided by CONSULTANT.

3.11 Field Material Testing

SOILS AND MATERIALS TESTING SERVICES

3.11-1 Materials sampling and testing shall be in accordance with the Project plans, technical specifications, standard specifications, and other applicable standards and procedures.

3.11-2 The contractor for the Project shall be responsible to provide Quality Assurance/Quality Control Soils and Materials Testing Services. CONSULTANT

shall provide a certified laboratory to perform soils and materials testing services on an as needed basis in order to validate construction contractor test results.

3.11-3 The laboratory, whether temporary or permanent, is to be in the general vicinity of the project area and no more than thirty (30) miles from the field office for the project.

3.11-4 Testing shall be performed in accordance with the California Test Methods and shall meet the latest requirement of ASTM.

3.11-5 Testing machines must be calibrated annually or more frequently by impartial means using devices of accuracy traceable to the National Bureau of Standards.

3.11-6 The laboratory shall participate in the AASHTO Materials Reference Laboratory (AMRL) or Cement or Concrete Reference Laboratory (CCRL) inspection programs as appropriate. Copies of applications, correspondence, reports, and corrective actions shall be provided to OCTA if requested.

3.11-7 The laboratory shall have a quality control plan and a quality assurance plan in effect during the entire time work is being performed under the contract. The plan shall include quality control, quality assurance, and equipment calibration programs for the laboratory.

3.11-8 The laboratory shall maintain an inventory of the testing equipment (listing the manufacturer, model serial number, calibration, and tolerances).

3.11-9 The laboratory shall maintain a laboratory procedure manual describing the methods used for recording, processing, and reporting data, the sources of references material, standards, and test methods.

3.11-10 CONSULTANT and the laboratory shall be responsible for all soils and materials testing performed for the project include source testing if required.