

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



**ITEM**  
3.33  
(ID # 10786)

**MEETING DATE:**

Tuesday, September 24, 2019

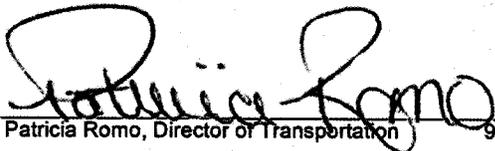
**FROM :** TLMA-TRANSPORTATION:

**SUBJECT:** TRANSPORTATION AND LAND MANAGEMENT AGENCY/ TRANSPORTATION  
DEPARTMENT: Approval of Amendment 1 to the Engineering Services Agreement by and between the County of Riverside and Kleinfelder Group, Inc. for the Replacement of the Mission Boulevard Bridge at Santa Ana River. All Covenants Set Forth in the Agreement Shall be Completed by December 31, 2025. District 2. [\$3,000,070 Total - 88.53% Federal Funds, 4.93% City of Jurupa Valley, and 6.54% City of Riverside]

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Approve Amendment 1 to the Engineering Services Agreement between the County of Riverside and Kleinfelder Group Inc. for the Replacement of the Mission Boulevard Bridge at Santa Ana River in the amount of \$3,000,070 for FY 19/20-25/26 and authorize the Chairman of the Board to execute the same.

**ACTION:**4/5 Vote Required, Policy

  
Patricia Romo, Director of Transportation 9/6/2019

---

**MINUTES OF THE BOARD OF SUPERVISORS**

On motion of Supervisor Hewitt, seconded by Supervisor Perez and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes: Jeffries, Spiegel, Washington, Perez and Hewitt  
Nays: None  
Absent: None  
Date: September 24, 2019  
xc: Transp.

Kecia R. Harper  
Clerk of the Board  
By   
Deputy

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,  
STATE OF CALIFORNIA**

<b>FINANCIAL DATA</b>	<b>Current Fiscal Year:</b>	<b>Next Fiscal Year:</b>	<b>Total Cost:</b>	<b>Ongoing Cost</b>
<b>COST</b>	\$1,300,000	\$1,700,070	\$ 3,000,070	\$ 0
<b>NET COUNTY COST</b>	\$ 0	\$ 0	\$ 0	\$ 0
<b>SOURCE OF FUNDS:</b> Federal Highway Bridge Program Funds (88.53%); City of Jurupa Valley 4.93% and City of Riverside 6.54%. There are no General Funds used in this project.			<b>Budget Adjustment:</b> No	
			<b>For Fiscal Year:</b> 19/20-25/26	

**C.E.O. RECOMMENDATION:** Approve

**BACKGROUND:**

**Summary**

The County of Riverside (County) in cooperation with the cities of Jurupa Valley and Riverside are proposing to replace the existing Mission Boulevard Bridge over the Santa Ana River, with a new bridge to enhance safety and improve traffic circulation. The Mission Boulevard Bridge is located within the City of Jurupa Valley and the City of Riverside near Mount Rubidoux.

On November 3, 2015, Agenda Item 3.23, the County Board of Supervisors executed an Engineering Services Agreement for the Replacement of the Mission Boulevard Bridge over the Santa Ana River, between the County and Kleinfelder Group, Inc. to complete the preliminary engineering and environmental clearance for this project. The California Environmental Quality Act (CEQA) document was adopted and approved on December 11, 2018. The National Environmental Policy Act (NEPA) document was adopted and approved on July 24, 2019.

Amendment 1 of the Engineering Services Agreement will add geotechnical investigations, environmental permitting, final design, preparation of bid documents, and design support during construction advertisement. The Amendment 1 to the Engineering Services Agreement provides the terms, conditions, and a detailed scope of work including the negotiated fee of \$3,000,070 for engineering services and environmental work to complete the work of design through construction.

**Impact on Residents and Businesses**

Informal public information meetings will be held as necessary during the development of the project to keep the public informed. The project is expected to have minimum impact on the surrounding environment and the community during development and construction. The replacement bridge will be designed in accordance with the latest state of the art bridge design criteria.

**SUPPLEMENTAL:**

**Additional Fiscal Information**

**SUBMITTAL TO THE BOARD OF SUPERVISORS COUNTY OF RIVERSIDE,  
STATE OF CALIFORNIA**

The consultant's proposed fee for Amendment 1 Scope of Work is \$3,000,070. It will be funded with federal 88.53% HBP funds with 11.47% of local matching funds from the City of Jurupa Valley and the City of Riverside. The contract expiration date is December 31, 2025.

Original Contract for - Preliminary and Environmental Documentation	\$1,694,939
Amendment 1 for - Final Design to Construction	\$3,000,070
<hr/>	
<b>Total Amended Contract:</b>	<b>\$4,695,009</b>

Work Order No.: B3-0528

**Contract History and Price Reasonableness**

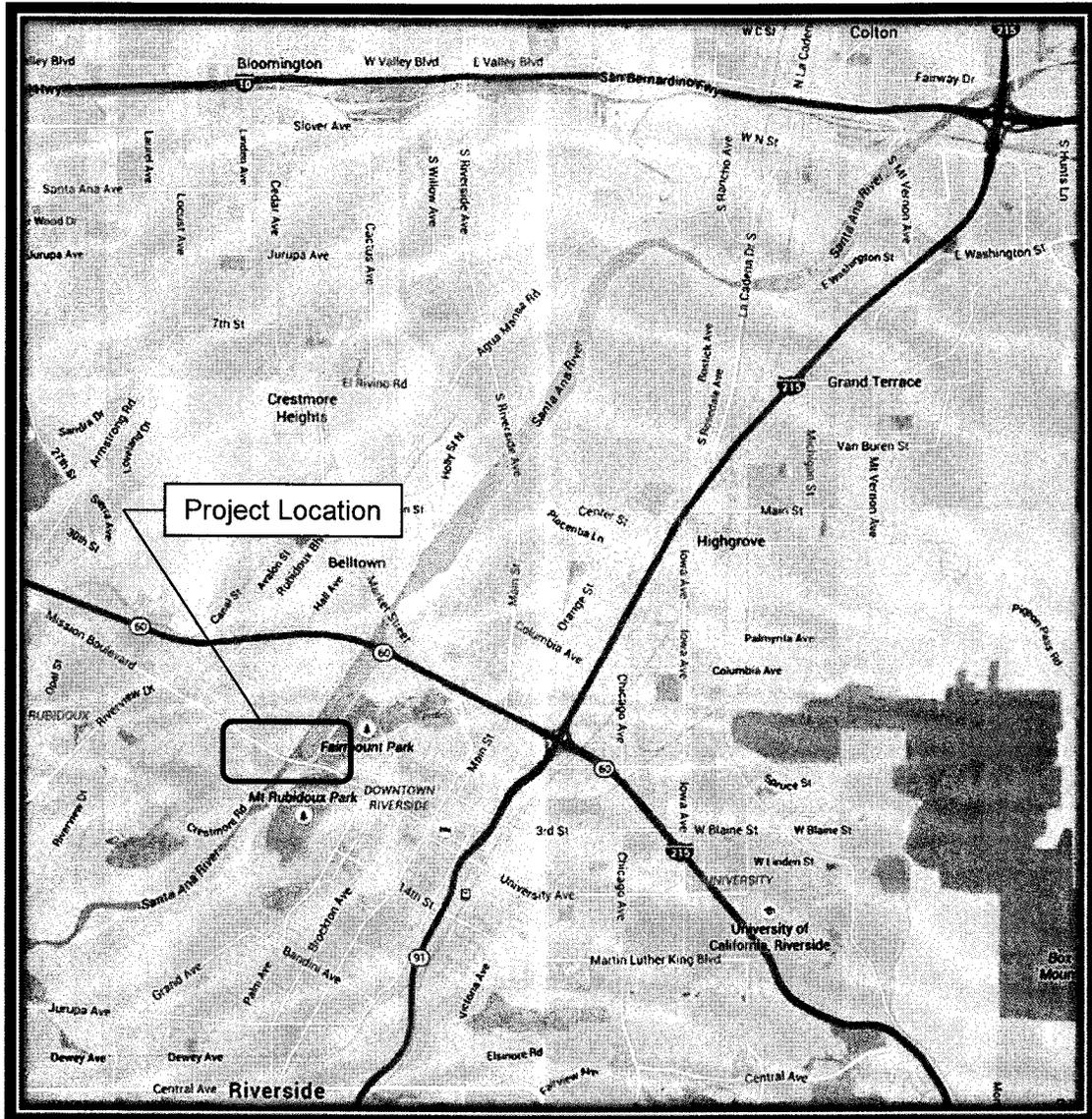
The consultant's fee is consistent with consultant work performed for other county projects of similar scope and complexity.

**ATTACHMENTS:**

Vicinity Map  
Amendment 1

	Jason Farrin, Senior Management Analyst	9/17/2019		Gregory T. Priapos, Director County Counsel	9/12/2019
---	---	-----------	--	---	-----------

# Mission Boulevard Bridge Replacement Project at Santa Ana River



**VICINITY MAP**

**Amendment 1 to Engineering Services Agreement**

**For Replacement of the Mission Boulevard Bridge at Santa Ana River**

**(Bridge No. 56C-0071)**

**Between County of Riverside Transportation Department**

**And Kleinfelder Group Inc.**

This Amendment 1 (hereinafter "AMENDMENT") to a contract is made and entered into as of this 24<sup>th</sup> day of September, 2019, by and between the County of Riverside, a political subdivision of the State of California (hereinafter "COUNTY"), and Kleinfelder Group Inc. (hereinafter "ENGINEER").

**RECITALS**

- A. COUNTY and ENGINEER have entered in an agreement entitled "Engineering Services Agreement for Replacement Mission Boulevard Bridge at Santa Ana River (Bridge No. 56C-0071)" between County of Riverside Transportation Department and Kleinfelder Group Inc. that is dated November 3, 2015, Item 3.23 (hereinafter the "CONTRACT"). The CONTRACT provides the terms and conditions, scope of work, schedule and budget for the performance of professional and technical services necessary to complete the Phase I of the "Mission Boulevard Bridge Replacement Project at Santa Ana River" (hereinafter "PROJECT"), which includes the preparation of a Preliminary Engineering Report and the environmental documentation to environmentally clear the PROJECT including widening and reconstruction of the approach roadways connecting to the new bridge. The engineering services for the remaining three phases of the project to complete plans, specifications, and cost estimate (PS&E) in Phase II, design services during the bid process in Phase III, and design services during construction in Phase IV are deferred to a future agreement.
- B. Appendix A of the original CONTRACT provides the detailed Scope of Services for performing the Phase I tasks to complete the Preliminary Engineering and Environmental Documentation (PA/ED) to clear the project and obtaining the environmental approval.
- C. Appendix B • Article BI of the CONTRACT establishes the time period for performing the scope of services detailed in Appendix A. The terms and conditions specify that all covenants set forth in the original CONTRACT shall be completed by November 2, 2019.
- D. Appendix C • Article CI of the CONTRACT establishes the Elements of Compensation. Appendix C • Article

1 CII, Subsection B provides the Position Maximum Hourly Rates and allows the ENGINEER the opportunity to  
2 request rate adjustments on an annual basis after the first three (3) years of the original CONTRACT.  
3 Appendix C • Article CV is the original negotiated cost proposal for Phase I services with a total amount of  
4 \$1,694,939.00 with no contingency.

5 H. The AMENDMENT shall also add the remaining phases of the PROJECT including engineering tasks for  
6 completion of the final design, plans, specifications, and cost estimate (PS&E) in Phase II, design services  
7 during the bid process in Phase III, and design services during construction in Phase IV.

8 **AGREEMENT**

9 NOW, THEREFORE, in consideration of the mutual covenants hereinafter contained, the parties agree as follows:

- 10 1. The AMENDMENT adds the Engineering Services for the remaining phases of the PROJECT including  
11 engineering tasks for completion of the final design, plans, specifications, and cost estimate (PS&E) in Phase  
12 II, design services during the bid process in Phase III, and design services during construction in Phase IV to  
13 successfully deliver the PROJECT with a Notice of Completion (NOC) on or before December 31, 2025.
- 14 2. The scope of services for the new added phases, i.e., Phase II, Phase III, and Phase IV are provided in detail  
15 in Amendment 1, Appendix 1A, which is attached hereto and incorporated herein.
- 16 3. The November 2, 2019 CONTRACT expiration date established in Appendix B • Article BI of the original  
17 CONTRACT is revised. All covenants set forth in the amended CONTRACT shall be completed by December  
18 31, 2025. The revised PROJECT schedule including the new added phases is provided in Amendment 1,  
19 Appendix 1B, which is attached hereto and incorporated herein.
- 20 4. The Amendment 1, Appendix 1C, which is attached hereto and incorporated herein, provides the details of  
21 the negotiated fee proposal to perform the scope of services for the new added phases, i.e., Phase II, Phase  
22 III, and Phase IV. The total fee for the new added phases is \$3,000,070. The total original CONTRACT  
23 amount of \$1,694,939 as established in Article CV • Cost Proposal of the original CONTRACT is increased by  
24 \$3,000,070 to \$4,695,009 for the amended CONTRACT. The Appendix • C • Article CI, Subsection B • Fixed  
25 Fee identifies the Total Fixed Fee payable to the ENGINEER as \$44,227.80. This amount has been  
26 increased to a total of \$213,133.71 commensurate with the increased scope of work in in this AMENDMENT.  
27 The restriction of no rate adjustments on an annual basis for the first three (3) years of the original  
28 CONTRACT specified in Appendix C • Article CII, Subsection B is removed. The billing rates including the  
29 Indirect Cost Rates (ICR) as established in Appendix 1C are hereby approved.

- 1 5. ENGINEER is allowed to request annual Position Hourly Rate adjustments subject to COUNTY PROJECT  
2 MANAGER's approval in writing. Position Hourly Rates requested shall not exceed the Maximum Position  
3 Hourly Rates specified in Amendment 1, Appendix 1D, which is attached hereto and incorporated herein,  
4 unless approved by COUNTY PROJECT MANAGER in writing.
- 5 6. The Mandatory Fiscal and Federal Provisions are included throughout the original CONTRACT language.  
6 However, the current Local Assistance Procedures require these provisions to appear verbatim in consultant  
7 contract language. So, the current Mandatory Fiscal and Federal Provisions (Verbatim) have been attached  
8 hereto in Appendix E and incorporated herein. In addition to the provisions set forth under the original  
9 CONTRACT, ENGINEER and the subconsultants shall comply with Appendix E Mandatory Fiscal and  
10 Federal Provisions (Verbatim). If any provisions set forth under this amended CONTRACT is in conflict with  
11 Appendix E, Appendix E provisions shall prevail.
- 12 7. Except to the extent specifically modified or amended hereunder, all of the term, covenants and conditions of  
13 the original CONTRACT shall remain in full force and effect between the parties hereto.

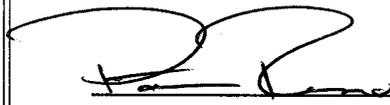
14 IN WITNESS HEREOF, the parties hereto have caused this AMENDMENT to the CONTRACT to be duly  
15 executed this day and year first written above.

16  
17 [REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29

1 **APPROVALS**

2 **COUNTY** Approvals

3 RECOMMENDED FOR APPROVAL:

4  
5  Dated: 9-16-19

6 Patricia Romo  
7 Director of Transportation

8 APPROVED AS TO FORM:

9  
10  Dated: 9-16-19

11 Gregory Priamos  
12 County Counsel

13 APPROVAL BY THE BOARD OF SUPERVISORS

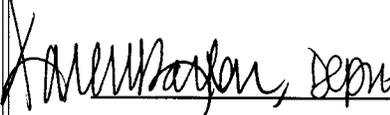
14  Dated: SEP 24 2019

15 **KEVIN JEFFRIES**

16 PRINTED NAME

17 Chairman, Riverside County Board of Supervisors

18 ATTEST:

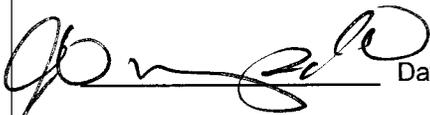
19  
20  Dated: SEP 24 2019

21 **KECIA HARPER-HEM**

22 Clerk of the Board (SEAL)

**ENGINEER** Approvals

ENGINEER:

 Dated: 8/22/19

X **John Moossazadeh**

PRINTED NAME

X **Senior Vice President**

TITLE

ENGINEER:

\_\_\_\_\_ Dated: \_\_\_\_\_

X

PRINTED NAME

X

TITLE

CERTIFICATE OF CORPORATE SECRETARY

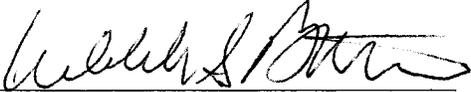
I hereby certify that I am the duly elected and acting Secretary of Kleinfelder, Inc. (the "Corporation"), a California corporation duly organized, validly existing and in good standing, and that the following is a true, accurate transcript of a resolution duly, validly and lawfully adopted on February 6, 2019 by the Board of Directors of said corporation acting in accordance with the laws of the state of incorporation.

RESOLVED, that the Board grants John Moossazadeh, Area Manager, full rights of the Corporation to execute on behalf of the Corporation, and otherwise bind the Corporation, to all contract and proposal documents related to any contract entered into with the County of Riverside; and

RESOLVED further, that any and all transactions by and of the officers or representatives of the Corporation, in its name and for its account, with the County of Riverside prior to the adoption of these resolutions be, and hereby are, ratified and approved for all purposes.

IN WITNESS WHEREOF, I have hereunto subscribed my name and affixed the seal of said corporation this 27<sup>th</sup> day of August, 2019.

{SEAL}

  
Deborah S. Butera  
Secretary

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

**CIVIL CODE § 1189**

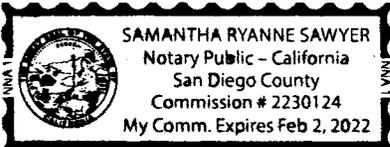
A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }  
County of San Diego }

On 08.22.2019 before me, SAMANTHA SAWYER, NOTARY PUBLIC  
Date Here Insert Name and Title of the Officer

personally appeared Deborah Butera  
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature [Handwritten Signature]  
Signature of Notary Public

Place Notary Seal and/or Stamp Above

**OPTIONAL**

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

**Description of Attached Document**

Title or Type of Document: \_\_\_\_\_  
Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_  
Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: \_\_\_\_\_ Signer's Name: \_\_\_\_\_  
 Corporate Officer – Title(s): \_\_\_\_\_  Corporate Officer – Title(s): \_\_\_\_\_  
 Partner –  Limited  General  Partner –  Limited  General  
 Individual  Attorney in Fact  Individual  Attorney in Fact  
 Trustee  Guardian of Conservator  Trustee  Guardian of Conservator  
 Other: \_\_\_\_\_  Other: \_\_\_\_\_  
Signer is Representing: \_\_\_\_\_ Signer is Representing: \_\_\_\_\_

## **AMENDMENT 1 • APPENDIX 1A**

### **Scope of Services**

**APPENDIX 1A • SCOPE OF SERVICES**

**SCOPE OF SERVICES • TABLE OF CONTENTS**

**ARTICLE AI • INTRODUCTION ..... A-1**

- A. STANDARDS .....A-1
- B. KEY PERSONNEL.....A-2
- C. COUNTY RESPONSIBILITIES.....A-2

**ARTICLE AII • PROJECT ADMINISTRATION ..... A-3**

- A. DELIVERABLES .....A-3

**ARTICLE AIII • PLANNING AND PROJECT DEVELOPMENT ..... A-4**

- A. RESEARCH AND DATA GATHERING .....A-4
- B. PROJECT DEVELOPMENT TEAM.....A-4
- C. PERMITS .....A-5
- D. DESIGN SURVEYS .....A-5
- E. FINAL DESIGN DRAINAGE AND BRIDGE HYDRAULICS REPORTS.....A-5
- F. STORM WATER POLLUTION PREVENTION PLAN.....A-8
- G. PHASE II SITE ASSESSMENT .....A-9
- H. FINAL GEOTECHNICAL INVESTIGATION AND DESIGN.....A-11
  - Geotechnical Task 1: Materials Report.....A-11
  - Geotechnical Task 2: Geotechnical Design Report (including Field Exploration and Laboratory Testing) and Foundation Report for the PS&E Phase .....A-11
- I. FINAL ARCHITECTURAL DETAILS AND VISUAL SIMULATIONS.....A-14
- J. U.S. ARMY CORPS OF ENGINEERS SECTION 408 PERMIT.....A-15
- K. FINAL RIGHT OF WAY REQUIREMENTS EXHIBIT .....A-16
- L. UTILITY COORDINATION.....A-16
- M. MISCELLANEOUS DESIGN SUPPORT .....A-22
  - Design Exceptions .....A-22
  - Final Traffic Management Plan .....A-23

**ARTICLE AIV • STRUCTURES..... A-23**

- A. STRUCTURAL DESIGN AND CALCULATIONS.....A-23
- B. INDEPENDENT CHECK REVIEW AND QUALITY CONTROL.....A-23
- C. STRUCTURE SPECIFICATIONS AND ESTIMATES.....A-24
- D. STRUCTURE PLANS, SPECIFICATONS, AND ESTIMATES.....A-24
  - Initial Structure PS&E (65% Unchecked Plans).....A-24
  - Intermediate Structure PS&E (90% Checked Plans).....A-24
  - Draft Final Structure PS&E (95% Checked Plans) .....A-25
  - Final Structure PS&E (100% Checked Plans) .....A-25

<b>ARTICLE AV • ROADWAY .....</b>	<b>A-25</b>
A. BASIC ROADWAY PLANS .....	A-26
B. CALCULATIONS.....	A-26
C. DRAINAGE PLANS.....	A-27
D. TRAFFIC PLANS .....	A-28
E. MISCELLANEOUS PLANS.....	A-28
F. INTERMEDIATE REVIEWS.....	A-29
G. SPECIFICATIONS AND ESTIMATE .....	A-29
H. QUALITY CONTROL .....	A-30
I. DRAFT PLANS, SPECIFICATIONS, AND ESTIMATE (95% COMPLETE).....	A-30
J. FINAL PLANS, SPECIFICATIONS, AND ESTIMATE (100% COMPLETE).....	A-30
<b>ARTICLE AVI • ENVIRONMENTAL PERMITS AND MITIGATION PLAN.....</b>	<b>A-30</b>
A. ENVIRONMENTAL TASK 1: FEDERAL CLEAN WATER ACT (CWA) SECTION 404 NATIONWIDE PERMIT AUTHORIZATION .....	A-31
B. ENVIRONMENTAL TASK 2: CWA SECTION 401, WATER QUALITY CERTIFICATION.....	A-31
C. ENVIRONMENTAL TASK 3: CALIFORNIA FISH AND GAME CODE SECTION 1602, LAKE OR STREAMBED ALTERATION AGREEMENT .....	A-32
D. ENVIRONMENTAL TASK 4: ON-SITE MITIGATION PLAN .....	A-32
E. ENVIRONMENTAL TASK 5: COORDINATION WITH CITY OF RIVERSIDE AND SUCKER HABITAT CONSERVATION PLAN PARTIES FOR OFF-SITE MITIGATION.....	A-33
F. ENVIRONMENTAL TASK 6: OFF-SITE BAT HABITAT COORDINATION AND DESIGN .....	A-33
G. ENVIRONMENTAL TASK 7: OFF-SITE MITIGATION PLAN ENVIRONMENTAL LEAD COORDINATION WITH SUBCONSULTANT .....	A-33
<b>ARTICLE AVII • CONSTRUCTION BIDDING PHASE .....</b>	<b>A-34</b>
<b>ARTICLE AVIII • CONSTRUCTION SUPPORT PHASE .....</b>	<b>A-34</b>
<b>ARTICLE AVIV • COMPUTER SERVICES.....</b>	<b>A-35</b>
A. CALCULATIONS.....	A-35
B. COMPUTER AIDED DRAFTING AND DESIGN (CADD).....	A-36
<b>ARTICLE AX • QUALITY CONTROL PLAN.....</b>	<b>A-36</b>
<b>ARTICLE A XI • ADVANCE CONCEPTUAL ENGINEERING.....</b>	<b>A-36</b>
<b>ARTICLE A XII • SHEET LIST.....</b>	<b>A-36</b>

## **APPENDIX 1A – SCOPE OF SERVICES**

### **ARTICLE AI • INTRODUCTION**

On November 3, 2015, Item 3.23, the County of Riverside (COUNTY) and Kleinfelder Group, Inc. (ENGINEER) entered into an agreement (AGREEMENT) entitled “Engineering Services Agreement for Replacement of the Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071).” The AGREEMENT provides the terms and conditions, the scope of work, and the budget to perform preliminary engineering, conduct environmental studies, and prepare the environmental documentation (Phase-I) for clearing “the Mission Boulevard Bridge Replacement over the Santa Ana River, including reconstruction of the approach roadways connecting to the new bridge (PROJECT)”.

Now, having the Phase I activities successfully completed and the environmental approvals for California Environmental Quality Act (CEQA) and National Environmental Protection Act (NEPA) secured, COUNTY and ENGINEER desire to amend the existing agreement to add the remaining phases of the PROJECT for completing the design activities and constructing the bridge. This Amendment 1 (AMENDMENT) covers the remaining work for completion of the final design, plans, specifications, and cost estimate (PS&E) in Phase-II, design services during the bid process in Phase – III, and design services during construction in Phase-IV of the project.

#### **A. STANDARDS**

##### **Plans, Specifications, and Estimate (PS&E)**

Plans and specifications shall be prepared in conformance with COUNTY requirements. As part of the work involved in the preparation of the PS&E, the ENGINEER shall prepare and furnish to COUNTY special provisions for items of work included in the plans which are not covered in the Standard Specifications or CALTRANS-approved SSPs.

Bridge plans shall be prepared in accordance with the current editions of the bridge design specifications, manuals, aids, and CALTRANS guidelines, Division of Structures. COUNTY title blocks shall be used in preparation of bridge plan sheets.

Roadway plans shall be prepared electronically in conformance with the CALTRANS Plan Preparation Manual and the CALTRANS CADD User's Manual of Instructions. Roadway plans shall be

prepared with MicroStation Version V8i. All roadway plans shall be on single sheet files. Graphic files shall be two-dimensional and shall conform to the CALTRANS data format as defined in CALTRANS CADD User's Manual of Instructions.

One set of plans on mylar and one electronic version on compact disc shall be provided with the final PS&E submittal.

Special Provisions shall be prepared using Microsoft Word conforming to CALTRANS format and content. ENGINEER shall coordinate with COUNTY staff regarding procedures for specification and special provision preparation prior to commencing preparation of specifications. COUNTY Project Manager and the staff will provide the boiler plate special provisions to be reviewed and included with technical special provisions by ENGINEER. COUNTY PROJECT MANAGER will also provide the format to be used for Engineer's Estimate. This format shall be strictly adhered to.

#### **B. KEY PERSONNEL**

The ENGINEER has represented to the COUNTY that certain key personnel will perform the services and if one or more of such personnel should become unavailable, ENGINEER may substitute other personnel of at least equal competence only after prior written approval by the COUNTY PROJECT MANAGER has been secured. The key personnel for performance of this PROJECT are:

Project Manager	James Frost
Senior Roadway Engineer	Darren Adrian
Senior Structures Engineer	Sami Megally
Environmental Team Leader	Wendy Davis

#### **C. COUNTY RESPONSIBILITIES**

The following includes tasks to be completed by the COUNTY:

- Provide all final surveys and aerial mapping
- Provide agency review for design submittals including plans, specifications and estimate
- Provide regulatory agency permitting fees

## **ARTICLE AII • PROJECT ADMINISTRATION**

### **A. DELIVERABLES**

The primary deliverables listed below shall be submitted to the COUNTY by ENGINEER. All deliverables will be provided in hard copy format (as identified in the scope for each identified deliverable in this scope of work) unless otherwise noted in this scope of work and in electronic format.

- Project Management Plan (updated for final design)
- Final On-Site Drainage Report
- Final Bridge Hydraulics Report
- Updated Low Impact Development Guidance Standards for Transportation Projects (TPG)
- Concept Storm Water Pollution Prevention Plan (SWPPP)
- Phase II Site Assessment Report
- Draft and Final Materials Report
- Draft and Final Geotechnical Design Report
- Draft and Final Bridge Foundation Report (FFR)
- Right-of-Entry / Encroachment Permits
- Final architectural details for bridge aesthetics
- 3D Simulation of the bridge construction with Stages and Final conditions
- 3D Graphics for architectural treatments
- Section 408 Application Package
- Utility Relocation Letters
- Utility Potholing Summary
- Final Utility Plans
- Draft and Final Technical Specifications

Replacement of Mission Boulevard Bridge at Santa Ana River

- Draft and Final Engineer's Cost Estimate
- Final Right-of-Way Requirement Map
- Design Exceptions Fact Sheet (updated for final design)
- Final Traffic Management Plan (TMP)
- 65%, 90%, 95%, and Final Bridge, Roadway, Lighting and Landscape Plans
- 65%, 90%, 95%, and Final Structure PS&E Package
- Permit Applications to USACE, CDFW, and RWQCB for geotechnical borings
- Permit Applications to USACE, CDFW, and RWQCB for construction activities
- Quality Control/Quality Assurance Plan (updated for final design)

#### **ARTICLE AIII • PLANNING AND PROJECT DEVELOPMENT**

##### **A. RESEARCH AND DATA GATHERING**

Existing topographic mapping, photos, reports, maintenance reports, right-of-way maps, "as-built" plans, record maps and surveys, study reports, assessor maps, contract documents, utility index maps, local street improvement/development plans, and other pertinent data will be obtained and reviewed.

ENGINEER will obtain readily available data related to their scope of work. Anticipated agencies are the COUNTY, CALTRANS, City of Riverside, City of Jurupa Valley, RCFC, and impacted utility companies.

##### **B. PROJECT DEVELOPMENT TEAM**

PDT meetings shall be held monthly to resolve issues and to apprise the affected agencies of the progress of the PROJECT.

Assumptions:

- Kleinfelder and Kimley-Horn will attend up to 18 PDT meetings.
- 78-week (approximately 18-month) schedule for Phase II work.

**C. PERMITS**

ENGINEER shall identify locations outside the roadway right-of-way where it will be necessary to obtain specific rights-of- entry from affected property owners. The listing of the candidate locations will be furnished to the COUNTY. The COUNTY will contact property owners. ENGINEER will be informed if their support is required to obtain rights-of-entry.

ENGINEER shall support the application of a Section 408 Civil Works review through the USACE. This work includes the development of the permit application with the attachment of relevant project engineering and environmental studies. We have assumed that the environmental reports and studies prepared during the previous PA/ED Phase will be re-issued for the purpose of supporting the 408 permit. ENGINEER shall facilitate meetings with the USACE to describe the project and potential impacts.

Resource agency permitting is included in Article AVI, Section K of this scope of work.

Assumptions:

- ENGINEER will identify necessary right-of-entry and specific permits related to their scope of work. These determinations will be derived based on readily available information.

**D. DESIGN SURVEYS**

COUNTY shall perform field surveys, ground control, photogrammetric mapping, and digital terrain modeling.

**E. FINAL DESIGN DRAINAGE AND BRIDGE HYDRAULICS REPORTS**

A Final Design Drainage Report will be prepared to document hydrologic and hydraulic calculations necessary to complete drainage improvement plans related to the project. ENGINEER will evaluate the on-site flows along Mission Boulevard on the bridge and the adjacent approach roads. Specific limits are along Mission Boulevard between Mount Rubidoux Drive and Crestmore Road. Prior to developing drainage calculations, a thorough field reconnaissance will be conducted. Available documents pertinent to this Design Drainage Report will be obtained from the COUNTY for review. The ENGINEER's analysis will be closely coordinated with the affected agencies, including the RCFC. The Design Drainage Report will quantify the magnitude and frequency of design flows

from adjacent areas to the PROJECT area, as well as the volumes attributable to the proposed improvements.

For the Santa Ana River, a Final Bridge Hydraulics Report will be prepared. The following tasks will be performed:

- Conduct field review of the site as well as upstream and downstream reaches in order to observe the physical conditions and obtain the necessary hydraulic modeling parameters.
- Obtain and review existing hydrologic and hydraulic data including flow rates, aerial photographs, topographic data, FEMA studies, other recent studies, etc. Copies of relevant studies will be obtained from the RCFC and WCD for the review.
- Prepare a hydraulic evaluation of the final design alternative using HEC-RAS. The analyses will be based on the accepted 100-year flow rates and topographic mapping provided by the client. A debris factor will be applied to the bridge piers, if appropriate. The hydraulic analyses will be used to provide the bridge opening dimensions, low chord elevation with consideration given to freeboard requirements, and the bridge alignment.
- Perform final design of the preferred bridge alternative. The design will include tasks necessary to finalize the HEC-RAS analysis of the preferred alternative. In addition, local scour analyses of the piers will be performed to determine additional protection required for these structures.
- Prepare a report summarizing the results and recommendations of the analyses.
- Prepare a sediment transport analysis to determine the general scour at the bridge. This will ensure that the bridge piers and appurtenances are adequately designed for channel bed scour. A FLUVIAL-12 analysis will be performed to determine the general scour and a summary of the FLUVIAL-12 analysis results will be included in the report. The FLUVIAL-12 analysis will be based on the 100-year, 200-year and flood series events. Soil gradations will be provided at three locations in the stream bed.
- Prepare and process a Conditional Letter of Map Revision (CLOMR) based on the final engineering drawings. The CLOMR will be processed through RCFC and FEMA. The

*Replacement of Mission Boulevard Bridge at Santa Ana River*

COUNTY will need to provide the Endangered Species Act requirements for the CLOMR.

The CLOMR fee estimate is included with this scope. However, fees are subject to change by the issuing agencies and the COUNTY will be responsible for covering the difference. RCFC will provide all data necessary for levee certification.

- Prepare and process a Letter of Map Revision (LOMR) based on the as-built drawings. The LOMR will be processed through RCFC and FEMA. The LOMR fee estimate is included with this scope. However, fees are subject to change by the issuing agencies and the COUNTY will be responsible for covering the difference.
- Provide hydraulic and sediment transport data for the resource agency permitting.
- Up to three coordination meetings are assumed for these tasks.

ENGINEER will update and revise the designed storm water treatment BMPs for the project based on Low Impact Development Guidance Standards for Transportation Projects (TPG) for the Santa Ana Region Riverside County Co-Permittees and Template. This guidance applies to public transportation projects in the area covered by the Santa Ana Region MS4 Permit, which involve the construction of new transportation surfaces or improvement of existing transportation surfaces and is applicable to the current project. In Phase I, a TPG was prepared to follow and meet the requirements set forth in, Order No. R8-2009-0030/NPDES No. CAS618030, of the Santa Ana Regional Water Quality Control Board. The document incorporates Low Impact Development (LID) Best Management Practices (BMP) to the maximum extent practicable and will be updated to incorporate the final design conditions.

**Deliverables:**

- Final On-Site Drainage Report – 3 copies
- Final Bridge Hydraulics Report – 3 copies
- Update Final TPG – 3 copies

Assumptions:

- ENGINEER will prepare the Final On-Site Drainage Report based on the Preliminary On-Site Drainage Report that was approved in Phase I.
- Major revisions to the concepts provided in the Preliminary On-Site Drainage Report are not anticipated.
- ENGINEER will update TPG for final design based on TPG that was approved in Phase I.
- Coordination will occur as part of the PDT Meetings. Separate meetings are not anticipated.
- ENGINEER will prepare the Final Bridge Hydraulics Report based on the Preliminary Bridge Hydraulics Report that was approved in Phase I.

**F. STORM WATER POLLUTION PREVENTION PLAN**

Erosion control plans for the site will be prepared consistent with General Permit requirements. These plans will be at scale 1"=50' and will indicate erosion control Best Management Practices (BMPs) to be implemented by the contractor prior to and during construction. This plan will be used as the basis for preparation of the formal Storm Water Pollution Prevention Plan (SWPPP).

ENGINEER will prepare a Concept SWPPP to assist in bidding for the Final SWPPP to be prepared by the Contractor. This report will incorporate the Erosion Control Plan including a hydroseed mix for slope stability and details for the construction site as described above. Preparation of a Concept SWPPP requires risk level determination calculations that will further define the requirements. These calculations will be provided according to the current Caltrans procedures using the Caltrans risk level spreadsheet. This project is anticipated to be a risk level 2 project. Concept SWPPP shall be prepared by a Qualified SWPPP Developer (QSD). A QSD must have one or more of the following credentials: a California registered professional civil engineer; a California registered professional geologist or engineering geologist; a California registered landscape architect; a professional hydrologist registered through the American Institute of Hydrology; a Certified Professional in Erosion and Sediment Control (CPESC) registered through Enviro Cert International, Inc.; Certified Professional in Storm Water Quality (CPSWQ) registered through Enviro Cert International, Inc.; or a professional in erosion and sediment control registered through the National Institute for Certification in Engineering Technologies (NICET).

The SWPPP will be designed to address the following objectives:

- Pollutants and their sources, including sources of sediment associated with construction, construction site erosion and other activities associated with construction activity are controlled
- Where not otherwise required to be under a Regional Water Board permit, non-storm water discharges are identified and either eliminated, controlled, or treated
- Site BMP selection to result in the reduction or elimination of pollutants in storm water discharges and authorized non-storm water discharges from construction activity to the Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT)
- Stabilization BMPs installed to reduce or eliminate pollutants after construction are completed

Deliverables:

- Draft and Final Concept SWPPP Report – PDF and 2 Hard Copies

Assumptions:

- The Concept SWPPP serves as a guide for the Contractor who will be responsible for developing the Final SWPPP.
- Calculations and details for BMPs will be developed by the Contractor for the final SWPPP.
- ENGINEER is not responsible for the contractor's implementation, best management practice selection, compliance with local requirements, inspection or monitoring of the SWPPP, or fees related to permitting.
- One round of consolidated comments for the Draft and Final submittals is anticipated.

#### **G. PHASE II SITE ASSESSMENT**

ENGINEER will perform Phase II Site Assessment in accordance with ASTM E1903 and CALTRANS requirements to evaluate the potential presence of the following recognized environmental conditions (RECs) at and adjacent to the Project site that were identified during the Phase I Initial Site Assessment (ISA):

*Replacement of Mission Boulevard Bridge at Santa Ana River*

- Total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), metals, and polynuclear aromatic hydrocarbons (PAHs), which might be present in the fill soils used to form the existing Santa Ana River flood control levees in the 1950s.
- TPH, VOCs, and lead, which might be present in soil at the site of the historical automobile service station located at 5070 Mission Boulevard in Riverside.
- Pesticides and herbicides, which might be present in soil in areas within the Project limits that were formerly used for agricultural purposes.
- Polychlorinated biphenyls (PCBs), which might be presented in soils adjacent to electrical transformers and equipment that will be removed as part of the Project.
- TPH, metals, lead, and PAH compounds, which might be present in the soil and groundwater within the Santa Ana River at the site of the proposed replacement bridge as a result of documented contamination at the Proposed K-8 site (2950 Wallace Street in Rubidoux) located upgradient from the Project site.
- The bearing pad and the hinge and joint seal materials at the existing Mission Boulevard Bridge hinge, which might contain asbestos-containing materials (ACM).
- Soils adjacent to paved areas within the Project limits, which might contain aerially deposited lead (ADL) from vehicle exhaust.
- Lead-based paint (LBP) that might be present on the existing bridge coatings.

The Phase II Site Assessment will consist of reviewing data, preparing a work plan (including a site-specific health and safety plan), obtaining site access permits, checking for underground utilities at the site of the proposed field exploration locations through Underground Service Alert (USA) and a private geophysics service, coordinating and performing a field exploration to sample the potentially affected media at the site for hazardous materials, including disposal of investigation-derived waste (IDW), performing environmental laboratory testing on the select samples collected during the field exploration, performing statistical engineering analyses, and preparing a report documenting the findings, conclusions, and recommendations for environmental remediation of the Project site.

Site access permits will consist only of encroachment permits obtained through the City of Jurupa Valley, City of Riverside, and RCFC for the portions of the Phase II Site Assessment located outside the

Santa Ana River and its existing levees. Portions of the Phase II Site Assessment that will require access to the Santa Ana River and its existing levees will be performed under permits and biological monitoring obtained/provided for the geotechnical investigation (see Item H, Geotechnical Task 2).

Preparation of the Phase II Site Assessment deliverables includes responding to one set of comments each from RCTD, RCFC, and/or Caltrans. Comments received from RCTD and RCFC will be addressed prior to submitting the deliverables to Caltrans for review.

Deliverables:

- Phase II Site Assessment Work Plan
- Phase II Site Assessment Report

## H. FINAL GEOTECHNICAL INVESTIGATION AND DESIGN

### Geotechnical Task 1: Materials Report

Based on results from the field explorations and laboratory testing, the ENGINEER will prepare a Materials Report (MR) during the PS&E phase of the project and develop final design pavement sections. It is assumed that the COUNTY working with Kimley-Horn will provide appropriate Traffic Index (TI) values for pavement design. Pavement design will be conducted utilizing procedures described in Highway Design Manual Chapters 600 through 630.

The ENGINEER will prepare a draft and final Materials Report for review by the COUNTY. After review comments are received, we will review resulting comments and address them in the final Materials Report, as applicable. It is assumed one round of review comments will be addressed prior to completion of the final Materials Report.

Deliverables:

- Draft and Final Materials Report

### Geotechnical Task 2: Geotechnical Design Report (including Field Exploration and Laboratory Testing) and Foundation Report for the PS&E Phase

The ENGINEER will prepare a Geotechnical Design Report (GDR) and bridge Foundation Report (FR) providing final design and construction recommendations for the bridge, roadway embankments, and general earthwork. As part of this task, a geotechnical subsurface investigation will be performed

*Replacement of Mission Boulevard Bridge at Santa Ana River*

to collect subsurface soil and groundwater information to support the project design in general accordance with Caltrans practice. We propose to drill up to 4 borings for the approach roadway and up to 7 borings for the bridge. The borings will be advanced to depths ranging from approximately 10 to 100 feet.

The proposed exploration locations will be depicted on a boring plan that includes access routes as part of the general Work Plan. The Work Plan must be reviewed and approved by the County and RCFC prior to the start of any geotechnical work. The ENGINEER will obtain an encroachment or right-of-entry permit from RCFC, City of Riverside, and the City of Jurupa Valley as required. A permit fee estimate is included with this scope. However, fees are subject to change by the issuing agencies and the COUNTY will be responsible for covering the difference. Securing right-of-entry from private property owners, if necessary, is not included in this scope. The COUNTY will process a No-Fee Access Permit through RCFC for biological monitoring and surveying for geotechnical field work, similar to the PAED phase. We assume that the environmental clearance has been obtained through the project NEPA document and that updated regulatory permits for USACE, CDFW, and RWQCB (obtained for the Phase I work) will be extended to cover the proposed field work.

If water is present in the low-flow channel within the Santa Ana River, the ENGINEER will not drill within the channel during the field exploration. Borings will be drilled as close as practical to the proposed Pier locations to obtain necessary geotechnical data for Pier design. If water is not present in the low-flow channel, the ENGINEER will drill within the channel to perform boring at all the planned Pier locations. ENGINEER will access to the proposed boring locations from both the north and south banks where feasible and allowed within the project ED. Access from the north side may require a temporary deck opening to allow for equipment access from the bridge deck. This will require traffic control, demolition and temporary deck repair which will be provided by the ENGINEER.

Upon approval of the proposed boring plan and receipt of required permits, the locations of the proposed field explorations will be marked, and USA will be notified to locate and mark existing lines and subsurface structures in the vicinity of proposed explorations. In addition, the ENGINEER will subcontract with a private service (geophysical survey) to attempt to locate utilities in the area immediately surrounding the proposed boring locations to decrease the risk from drilling.

Laboratory testing will be performed on selected soil samples obtained during our field exploration to evaluate their engineering properties. The testing will be performed using current ASTM or Caltrans test methods. Presently, we anticipate performing the following tests:

- Moisture content and dry unit weight
- Grain-size distribution
- Atterberg limits
- Direct shear strength
- Consolidation
- Expansion Index
- R-value
- Sand equivalent
- Preliminary corrosivity (resistivity, pH, soluble sulfates, and soluble chloride)

The selected type and frequency of laboratory testing will depend on the nature of the soils encountered. Upon completion of our field exploration and laboratory testing, geotechnical engineering analyses will be performed as follows for our GDR and FR:

- Development of design soil profiles and parameters and design groundwater level
- Development of geologic cross sections for global slope stability analyses of the proposed embankments and (if necessary) retaining walls, and preliminary slope stability evaluation of the existing slopes, as applicable
- Evaluation of potential seismic hazards, including liquefaction and seismic slope instability
- AASHTO LRFD design of Caltrans standard Type 1 retaining wall foundation based on loading conditions corresponding to service limit state, strength limit state and extreme limit state provided by project structural engineer's estimate assumes up to two retaining walls for the project founded on shallow footings
- AASHTO LRFD design of deep foundations consisting of cast-in-drilled-hole concrete piles or cast-in-steel-shell piles with or without casings
- Final seismic design recommendations
- Final liquefaction and lateral spread mitigation requirements

- Assessment of retaining wall foundation permissible gross contact stress, factored gross nominal bearing resistances at the strength, and extreme limit states for retaining walls on shallow foundations
- Log of Test Borings (LOTB) for each of the bridge borings
- Earthwork and grading recommendations to assist designers in the development of project specifications
- Construction considerations

The ENGINEER will prepare a draft and final GDR and FR for review by the County. After review comments are received, GDR we will review resulting comments and address them in the final GDR and FR, as applicable. It has been assumed one round of review comments will be addressed prior to completion of the final GDR.

**Deliverables:**

- Draft and Final Geotechnical Design Report
- Draft and Final Bridge Foundation Report
- Right-of-Entry / Encroachment Permits for geotechnical investigation

**I. FINAL ARCHITECTURAL DETAILS AND VISUAL SIMULATIONS**

The ENGINEER will provide final architectural details and visual simulations for the bridge architectural features including the entry pilasters, exterior railings, barrier treatments, belvederes, and intermediate pilasters. The final architectural details will be based on the approved conceptual details as processed through COUNTY, City of Riverside, and City of Jurupa Valley. Final details will show all art work and graphics necessary for the bridge PS&E and will be routed through the project stakeholders for review and approval. The final details will be incorporated into the landscape and hardscape plans, specifications, and estimate for bidding and construction.

Visual simulations will be developed in 3D graphics format to allow views from multiple perspectives and may be used for final design level detailing as well as City and County staff reviews.

The ENGINEER will also provide 3D simulations for the project staged construction. These simulations will show the bridge construction stages and phases including foundations, superstructure

approach roadway for Stage 1, Stage 2, and the final configuration. Simulations will be placed over a 3D photo of the site and may be used as visual aids for agency and community meetings prior to and during construction.

Deliverables:

- Final architectural details for bridge aesthetics
- 3D simulation of the bridge construction with stages and final conditions (up to two static views and one video presentation)
- 3D graphics for architectural treatments (up to 8 key views)

**J. U.S. ARMY CORPS OF ENGINEERS SECTION 408 PERMIT**

The ENGINEER will prepare a Section 408 Permit request through the USACE. The request should: (1) confirm the technical soundness of the proposed alteration/modification; (2) provide a basis for environmental acceptability; and (3) formally request that a Section 408 Permit be granted to for the proposed alteration or modification. Guidelines for the application can be found online at: <http://www.spl.usace.army.mil/Missions/Section-408-Permits/>

Step 1: Early Coordination - Early coordination between USACE, the requester and/or non-federal sponsor, if applicable, may aid in identifying potential issues, focusing efforts, minimizing costs, and protecting sensitive information. Requestors should review information and requirements shown on the website to incorporate into the proposed request. Pre-application conferences are encouraged for projects of a unique nature or those that involve extensive or critical modifications.

Step 2: Written Request - The initiation of the Section 408 process begins with a written request. The written request is submitted to the District Commander of the appropriate USACE district office having jurisdiction over the USACE project that would be impacted by the alteration.

Step 3: Required Documentation – Kleinfelder will prepare and submit technical and environmental documentation necessary for the district to determine whether the proposed alteration would impair the usefulness of the project or be injurious to the public interest. We have assumed that the supporting documents are the same technical documents prepared to support the CEQA/NEPA document for the bridge replacement. Updated documents required for the final bridge

design and listed in the project deliverables (including final plans, hydraulic and geotechnical reports)

list will be provided to the USACE as needed.

Step 4: Post-Permission Oversight – Once the District approves the proposed alterations and issues the 408 Permission, the County (through their consultant responsible for Construction Management and environmental monitoring) is then responsible for the Post-Permission oversight. Kleinfelder will be available to assist with this during the future construction phase of the project.

Deliverables:

- Section 408 Application Package (with supporting documents)

#### **K. FINAL RIGHT OF WAY REQUIREMENTS MAP**

Right of way map preparation will follow current COUNTY procedures. The ENGINEER will coordinate with the COUNTY regarding the information that will be presented in the map.

The ENGINEER will submit draft and final right of way requirement map to the COUNTY for review and comment. It is anticipated that COUNTY will use the approved right of way requirements to prepare the Legal Descriptions, Plats and Right of Way Maps to acquire the necessary right of way. The COUNTY will be responsible for completion of land acquisition activities.

Deliverables:

- Draft and Final Right of Way Requirements Map – PDF and 2 Hard Copies

Assumptions:

- One round of consolidated comments is anticipated for the Draft and Final submittal.
- ENGINEER anticipates COUNTY will perform the processing for acquisitions.

#### **L. UTILITY COORDINATION**

The intent of the County of Riverside (COUNTY) is that the services of the ENGINEER shall be complete and “turn-key” with respects to all utility coordination matters, including complete coordination for the protection and relocation of existing facilities as described herein, as well as coordination, preparation of applications, and all other matters pertaining to the relocation and installation of water and electric services, except for those procedures that must be performed by

COUNTY. This project is proposed to be funded mainly by state and federal funds and must therefore conform to the processes and procedures of the CALTRANS Office of Local Programs.

ENGINEER shall designate dedicated staff who shall be responsible for all coordination work related to utilities for Project, including but not limited to relocations of existing trunk and mainline facilities, installation of new trunk and mainline facilities, relocation of existing electric and water services, and installation of new electric and water services.

ENGINEER shall coordinate with utility owners and COUNTY utility coordination staff with respect to all utility related matters. ENGINEER shall provide copies of all correspondence with utility companies and other utility related information to the COUNTY. Correspondence, as described herein, shall be prepared by ENGINEER for either ENGINEER or COUNTY signature, as appropriate, and as directed by the COUNTY'S Project Manager.

ENGINEER shall coordinate with COUNTY staff to obtain record copies of utility maps from each utility owner within the project limits for existing and/or proposed utility facilities. ENGINEER shall include mapping and/or exhibits that clearly define the project limits as part of the requests for utility information.

ENGINEER shall identify utility companies affected by the project and delineate utilities within the project's sphere of influence on the plans. ENGINEER shall prepare preliminary plans, which shall include all existing utilities (above ground and below ground) identified by location, size, type, and owner, as appropriate. ENGINEER shall check horizontal and vertical clearances for utilities and coordinate design with the various utility companies to address conflicts. In addition to information provided by the owning utility companies and through research of other record maps, field surveys shall be used to locate utility features such as manholes, valves, fire hydrants, poles, risers, etc., which shall be reflected on the plans.

If it is necessary to pothole existing utilities at critical locations, ENGINEER shall coordinate with COUNTY staff to arrange with the respective utility owner to pothole its facility (at utility owner or COUNTY cost). ENGINEER shall coordinate the use of field survey crews to locate potholed utilities by coordinates and elevations based on the project's survey controls.

Known utility conflicts shall be shown on the plans with construction notes indicating action to be taken and by whom. Inventory numbers of poles, vaults, and other surface facilities shall be shown on the plans for those facilities that have such numbers attached to the facility and as provided on the owner's inventory maps.

ENGINEER shall send final design plans through COUNTY staff to owning utility companies within the project limits with requests for review and comments on the plans relevant to their respective facilities, and with requests for other project specific information.

ENGINEER shall monitor responses of utility notices received and make recommendations for mitigating conflicts. ENGINEER shall provide written responses to utility companies with regard to stated concerns and conduct design coordination meetings with utility companies as needed. Unresolved issues shall be brought to the attention of the COUNTY PROJECT MANAGER and County utility coordination staff as early as practical. Utility conflict issues shall be resolved prior to the completion of the final design plans as follows:

- ENGINEER, through COUNTY staff, shall request and obtain a written acknowledgement of any conflicts from the respective utility owners.
- Reasonable efforts shall be taken to accommodate utility company requests for minor design changes to accommodate their facilities. ENGINEER understands that the utility companies are generally operating within the COUNTY right-of-way, but may have prior rights to that of the COUNTY in some cases.
- ENGINEER shall coordinate inclusion of special provisions in County's bid documents for adjustments and relocations of utility facilities as alternate bid items, if requested by the owning utility. Said work may require that cooperative agreements be prepared by COUNTY between the County of Riverside and the owning utility companies. ENGINEER shall provide information and exhibits as required to support the preparation of cooperative agreements, if needed.

ENGINEER shall conduct utility coordination meetings, as needed, regarding adjustments and relocations, to resolve conflict issues, and with respect to performing work for utility companies by COUNTY contractors.

For utility conflicts that require relocating, COUNTY staff will submit the official notice / order to the utility companies to relocate conflicting facilities.

ENGINEER shall make recommendations for special provision language with regard to utility issues, recommendations for construction windows of time for utility relocation activities, recommendations for inclusion of utility bid items, etc.

If new electrical service will be needed, ENGINEER shall provide support as directed by COUNTY. Such support includes, but is not limited to, the following responsibilities:

- Obtain approved water service point from the serving water company for each water meter to be installed, and identify requirements that the serving water company has for the provision of service. Coordinate with water company with respect to design issues associated with the provision of service. Coordinate with serving water company to fulfill serving water company requirements as appropriate, including preparation of all utility company forms and submission to County for execution. Advise COUNTY of requirements that are beyond the scope of the consultant (e.g.: execution of applications for service). However, ENGINEER is expected to provide turn-key service.

**Deliverables:**

- Irrigation design to show preferred service location.
- Application to water purveyor for water service point, including any and all water use calculation information and landscaping plans as required by water company.
- Obtain service address from appropriate municipality.
- Obtain approved water service plan from water purveyor.
- Staging plans for relocation of water meters.
- Application to water purveyor for water service, including coordination with account holder for signatures, payments of fees, etc.
- Service spreadsheet and exhibit as described herein.

- Plans, special provisions, and water company drawings, details and requirements for inclusion in bid package.
- Construction support

If new electrical service will be needed, ENGINEER shall provide support as directed by COUNTY. Such support includes, but is not limited to, the following responsibilities:

- Obtain approved electrical service point from the serving electric company for each service equipment enclosure to be installed, and identify requirements that the serving electric company has for the provision of service. Fulfill serving electric company requirements as appropriate, and advise COUNTY of requirements that are beyond the scope of the consultant (e.g., applications for service). However, ENGINEER is expected to provide turn-key service.
- Serving electric company shall be notified that Electrical Safety Orders clearance requirements must be met (10 feet radial clearance between 12kv overhead electrical facilities and signal poles and mast arms, and greater clearance for higher voltage electrical facilities). Show such clearance conflicts on the plans with construction notes.
- Submit plans indicating proposed service connection locations to serving electric company for approval (service equipment enclosure, conduit runs, riser quadrant, pole number, and connections to vaults as appropriate).
- Provide detailed load calculations to serving electric company, with a copy to the COUNTY, which provides calculations of the normal and maximum expected loads.

For both water and electric service, ENGINEER shall prepare a spreadsheet of the tasks required to obtain service, in accordance with the sample provided by, or as approved by, the Transportation Department, which shall be utilized as an ongoing list of action items and a dynamic record of actions completed, throughout the development of the project. The spreadsheet shall be supplemented with a map exhibit of the project footprint with the locations of all services plotted and referenced to the spreadsheet. ENGINEER shall arrange for a second qualified person to periodically review work of the ENGINEER staff that is assigned this responsibility, and that person shall independently verify the accuracy of the information on a regular basis.

ENGINEER shall assist with the resolution of utility related issues that may arise during the bidding process and during construction, including design modifications as needed and as approved by the COUNTY PROJECT MANAGER.

Specific issues and utility company requirements may result in deviation from the procedures outlined herein.

The ENGINEER will show utilities according to readily available information. The COUNTY will provide field surveys with surface utility features shown and labeled. The COUNTY will provide field surveys to locate utility potholing determined to be necessary. Utility potholing, if required, will be performed as a direct cost within the budget allowance.

Utility relocations are anticipated to include adjustments to surface features (raising or lowering manholes and valves). Separate utility relocations designs are not anticipated.

**Deliverables:**

- Utility Relocation Letters
- Utility Potholing Summary
- Final Composite Utility Plans
- Electrical design to show preferred service location.
- Application to electric purveyor for electric service point(s), including any and all electricity use calculation information and electrical plans as required by electric company.
- Obtain service address from appropriate municipality.
- Obtain approved electric service plan from water purveyor.
- Staging plans for relocation of electrical service meters.
- Application to electric purveyor for electric service, including coordination with account holder for signatures, payments of fees, etc.
- Service spreadsheet and exhibit as described herein.
- Plans, special provisions, and electric company drawings, details and requirements for inclusion in bid package.
- Construction support.

Assumptions:

- Kimley-Horn will prepare composite utility plans that will show existing utility information according to readily available information and information gathered during Phase I.
- Kimley-Horn will prepare proposed composite utility plans that will show the proposed utility information based on the relocation designs provided by the third-party utilities.
- COUNTY will provide field surveys to locate utility potholing determined to be necessary.
- Utility relocations are anticipated to include adjustments to surface features (raising or lowering manholes and valves). Separate utility relocation designs are not anticipated.
- Up to ten meetings are anticipated to coordinate with utility companies.
- ENGINEER has provided a budget for utility potholing if required at the direction of the COUNTY.

**M. MISCELLANEOUS DESIGN SUPPORT**

ENGINEER shall review the final environmental document and mitigation requirements developed during the Preliminary Engineering and Environmental Phase. All requirements shall be carried forward into the PS&E phase with respect to the design plans and specifications. Engineer shall assist the COUNTY with final negotiations with resource agencies including USACE, RWQCB, and CDFW. ENGINEER shall review prior project documents including the Type Selection Report and Project Report for project requirements and agreements with the City of Riverside and Jurupa Valley. All agreements and requirements shall be incorporated into the PS&E phase with respect to the design plans and specifications.

**Design Exceptions**

If necessary, design exception documentation performed in the PA/ED phase will be updated during final design. ENGINEER will coordinate with COUNTY for necessary updates. Design exceptions are described in a fact sheet presenting the exception with reason and necessary justification. Design exceptions will be processed through the COUNTY with necessary justification and documentation.

Deliverable:

- Design Exceptions Fact Sheets (updated for final design)

### **Final Transportation Management Plan (TMP)**

The TMP was completed and approved in the PA/ED phase work. This established the concept for developing final design documents related to traffic handling during construction. No updates to the approved TMP are anticipated.

## **ARTICLE AIV • STRUCTURES**

### **A. STRUCTURAL DESIGN AND CALCULATIONS**

Following the Type Selection Meeting and approval of the General Plan, structural design calculations will be prepared in conformance with CALTRANS design specifications and procedures.

All plans and calculations shall conform to the current CALTRANS bridge design criteria and shall be submitted for review and approval.

The scope of this work shall include but not be limited to:

- Bridge plans and construction details shall be prepared on COUNTY format plan sheets. Standard Details shall be incorporated into the Contract Plans where applicable.
- Each plan sheet shall be signed and stamped by the responsible design engineer who is registered in the State of California. Each design shall be independently checked by a Professional Engineer registered in the State of California.
- Environmental Constraints Areas shall be shown in plans (if required in Environmental Document).
- The anticipated sheet list is included in ARTICLE A XII

### **B. INDEPENDENT CHECK REVIEW AND QUALITY CONTROL**

An Independent Check review shall be conducted as soon as the initial design is complete. Checking shall include the preparation of an independent set of structural design check calculations and review of the plans and details. The checker and the designer will resolve any disagreements and concur on any revisions to the contract plans.

### **C. STRUCTURE SPECIFICATIONS AND ESTIMATES**

Special Provisions will be prepared for items not covered by the CALTRANS Standard Specifications or Standard Special Provisions (SSP's).

The ENGINEER shall edit Standard Special Provisions (SSPs) and prepare Structure Special Provisions specific to this project which will be incorporated into the final PS&E. These Structure Special Provisions shall be prepared, signed and stamped by a Professional Engineer registered in the State of California.

The ENGINEER shall prepare quantity calculations for bid items and prepare the bridge cost estimate. All contract items used shall be substantiated by calculations. Quantity calculations shall be neat and orderly and shall show all sketches, diagrams and dimensions necessary to allow them to be independently used by field inspectors. All quantity calculations shall be independently checked and substantiated with calculations.

The Construction Cost Estimate will be prepared using the latest available CALTRANS cost data, COUNTY cost data and actual recent construction costs in the PROJECT area.

Deliverables:

- Draft and Final Technical Specifications
- Draft and Final Engineer's Cost Estimate

### **D. STRUCTURE PLANS, SPECIFICATIONS, AND ESTIMATE**

The structure PS&E will be provided in four submittal packages to the COUNTY. Submittal levels will be provided at 65%, 90%, 95%, and Final.

#### **Initial Structure PS&E (65% Unchecked Plans)**

(65%) structure PS&E will be compiled and submitted to the COUNTY for review.

#### **Intermediate Structure PS&E (90% Checked Plans)**

The (90%) structure PS&E will be compiled and submitted to the COUNTY for review.

**Draft Final Structure PS&E (95% Checked Plans)**

The draft (95%) structure PS&E shall be compiled and submitted for review to the COUNTY. One set of full size reproducible and ten half size copies of plans, two copies of design calculations and design check calculations, three sets of quantity calculations and Marginal Estimates and three sets of edited Structure Special Provisions. (One copy of each will be returned with comments). The package will be accompanied by a Structures PS&E checklist and Resident Engineer's file checklist.

**Final Structure PS&E (100% Checked Plans)**

The final structure PS&E will incorporate review comments from the COUNTY, City of Riverside, City of Jurupa Valley, and other affected agencies. The ENGINEER will provide all necessary documents in a bid-ready form. It is assumed that the COUNTY will advertise, award, and administer the construction contract for this PROJECT. The ENGINEER shall deliver the following documents to COUNTY:

- 1 set of full size reproducible tracings of final design plans
- 1 set of half size reproducible tracings of final design plans
- 3 sets of final Structure Special Provisions
- 2 copies of final quantity calculations and estimate
- 2 copies of final design calculations
- 2 copies of independent design check calculations
- 1 set of 4-Scale plans of the bridge deck contours
- 1 Resident Engineer's File

**Deliverables:**

- 65%, 90%, 95%, and Final Structure PS&E Package

**ARTICLE AV • ROADWAY**

The title sheet for specifications and reports, and each sheet of plans, shall bear the professional seal, certificate number, registration classification, expiration date of the certificate and signature of the Professional Engineer responsible for their preparation. All roadway plans shall also use single sheet files.

The following is a summary listing of drawing types that shall be prepared as part of the roadway PS&E package:

**A. BASIC ROADWAY PLANS**

The plan sheets will be provided include but are not limited to:

- Title Sheet
- Typical Cross Section Plan
- Key Map and Line Index
- Mission Boulevard Layout Plan
- Profile and Superelevation Diagrams
- Stage Construction Plans
- Bike Path Modification detail (under bridge) Plan
- Temporary and Permeant modification of west end Scout Ln Plan
- Construction Detail for Maintenance Driveways Plan
- Slurry Seal Plan for Scout Lane
- Construction Details Plan
- Erosion Control Plan
- Erosion Control Details and Quantities
- Street Lights and Bridge light plans

**B. CALCULATIONS**

The following calculations will be provided:

- Working Roadway Cross Sections at 25-foot interval Slope Staking Notes
- Grid Grades
- Profile
- Earthwork Quantities
- Other Quantities

Assumptions:

- Kimley-Horn will provide calculations for project tasks related to their scope of work.
- Limits of work are along Mission Blvd from the east leg of Crestmore Rd (approximate STA 50+50) to east of Scout Ln (approximate STA 76+00).
- Temporary modifications to west end Scout Ln for access during construction only. Scout Ln west end modifications to be restored prior to end of construction
- Santa Ana bike trail to be re-constructed and re-profiled under the new Mission Blvd bridge structure.
- The monument sign located on the southwest corner of Scout Ln and Mission Blvd is to be protected in place. Effort to relocate this sign structure is not anticipated and not included

**C. DRAINAGE PLANS**

ENGINEER shall perform hydrology and hydraulic studies to obtain and provide design solutions, which will remove surface runoff from the area of the improvements. Studies and designs shall be performed in accordance with Chapter 800 of the current Highway Design Manual, District 8 Project Development Policy Memos and the current CALTRANS or City Standard Plans. Drainage plans will show the locations of deck drains for the proposed bridge and connections to existing storm drain systems. Within the City of Jurupa Valley, the new storm drain system will connect to the existing storm drain within Crestmore Road. Within the City of Riverside, the new storm drain will connect to an existing storm drain system that runs through Carlson Park and discharges to the Santa Ana River. Storm drain details will include bioretention details for the proposed BMP adjacent to Carlson Park.

The following list of drawing types and the number of sheets estimated shall include:

- Contour Grading
- Drainage Layouts
- Drainage Profiles
- Drainage Details
- Drainage Quantities

Assumptions:

- Bridge deck drain plans, pipe profiles, and details will be provided by Kleinfelder.
- The existing storm drain within Carlson Park is in good condition; a new storm drain with outlet to the Santa Ana River is not anticipated.

**D. TRAFFIC PLANS**

The following list of drawing types and the number of sheets estimated shall include:

- Construction Area Signs
- Stage Construction and Traffic Handling
- Traffic Signal Modification Plan
- Highway Lighting and Sign Illumination
- Signal and Lighting
- Pavement Delineation

Assumptions:

- Kimley-Horn will provide calculations for project tasks related to their scope of work.
- Traffic Signal Modification at Mission Blvd/Crestmore Rd are necessary to tie-in the multiuse path with existing class 2 bikes paths along Crestmore Rd.

**E. MISCELLANEOUS PLANS**

The following miscellaneous plans shall be included:

- Composite Utility Plan
- Summary of Quantities
- Retaining Wall Plan and Elevation
- Retaining Wall Details and Quantities
- Safety Barrier
- Fencing
- Right of Way Requirements
- Landscape and Hardscape Plans
- Lighting Plans

Assumptions:

- Kimley-Horn will provide calculations for project tasks related to their scope of work.

**F. INTERMEDIATE REVIEWS**

Roadway, drainage, traffic and miscellaneous plans shall be submitted for review to the COUNTY at the 65%, 95%, and 100% complete stage. A pre-65% submittal will be prepared and submitted that consists of "skeletal" layouts at approximately 30% completion to confirm appropriate direction of the designs and plan set. The ENGINEER will submit up to 5 full size sets of all plans and 5 sets of plans reduced to 11" x 17" size. Roadway cross sections, grid grades, and slope staking notes will be submitted only at the 100% complete submittal stage. Also, the ENGINEER should submit electronic samples of all plan sheet groups on a compact disc at intermediate reviews.

Landscape and hardscape plans shall be consistent with the approved conceptual architectural plans developed during the Phase I scope of work. Hardscape plans will include details for entry pilasters, intermediate pilasters, decorative barrier and railing treatments, decorative multi-purpose trail surface treatments, interpretive signage, textures, and colors. Landscape plans shall include landscaping along the Mission Boulevard roadway approaches, restoration for any work in Carlson Park, planting and irrigation for slopes, percolation basin at Carlson Park, and on-site mitigation within the Santa Ana River.

Assumptions:

- Final Right-of-Way Requirements will be provided by the ENGINEER.
- Communication Plans are not anticipated to be needed and are not included.

**G. SPECIFICATIONS AND ESTIMATE**

Specifications and Special Provisions will be prepared for items not covered by the CALTRANS Standard Specifications or Standard Special Provisions.

The Roadway Construction Cost Estimate will be prepared using the latest available CALTRANS cost data, COUNTY cost data, and actual recent construction costs in the PROJECT area.

**H. QUALITY CONTROL**

The PS&E will be subject to quality control reviews before submittal. These reviews will assure conformance to CALTRANS and COUNTY standards and criteria as well as minimize typographical omissions.

**I. DRAFT PLANS, SPECIFICATIONS, AND ESTIMATE (95% COMPLETE)**

The roadway plans, revised to incorporate Quality Control review comments, will be submitted to the COUNTY for review and comments. These will include:

- Roadway Plans
- Design Calculations
- Special Provisions
- Roadway Quantities and Cost Estimate

One safety/constructability review meeting will be held at the 95% PS&E stage.

**J. FINAL PLANS, SPECIFICATIONS, AND ESTIMATE (100% COMPLETE)**

The final PS&E will incorporate applicable comments from the draft PS&E received from the COUNTY, and other affected agencies. The ENGINEER will provide the necessary final PS&E documents in a bid-ready form. PROJECT files and the Project Engineer's/Resident Engineer's file will also be submitted with the final PS&E. The entire PROJECT, which will be prepared in MicroStation format, will be submitted upon final approval of the PS&E.

**ARTICLE AVI • ENVIRONMENTAL PERMITS AND MITIGATION PLAN**

Environmental permits for final construction will be required because the project will affect waters considered jurisdictional by the USACE, RWQCB, and CDFW. Agency coordination may include meetings with one or more of the applicable agencies to discuss the project and the submittal packages. Therefore, this task includes two meetings with agency personnel. The permitting tasks will also require some coordination with the various project team members in order to obtain all of the requisite information and materials.

Deliverables:

- Permit Applications to USACE, CDFW, and RWQCB for geotechnical borings
- Permit Applications to USACE, CDFW, and RWQCB for construction activities

To complete this task, LSA will need to compile a variety of requisite engineering and construction information and materials, including plan view and cross-section view construction drawings pertaining to the jurisdictional areas subject to project-related impacts; construction and post-construction best management practices (BMPs); and hydrology/hydraulics data. It is important that the project design be complete or nearly complete before the permitting process is initiated. The following tasks will be included:

**A. ENVIRONMENTAL TASK 1: FEDERAL CLEAN WATER ACT (CWA) SECTION 404  
NATIONWIDE PERMIT AUTHORIZATION**

ENGINEER anticipates that Nationwide Permit (NWP) 14 is the appropriate NWP for the proposed construction activities. ENGINEER anticipates that a Pre-Construction Notification will be required for temporary impacts. The notification will include pertinent information, including project description and figures, a discussion of the biological resources expected to be in the vicinity of the project, including an explanation of measures to avoid impacts to listed species. Additionally, copies of the permit applications/notification packages submitted to the RWQCB and CDFW will also be included. Please note that the USACE Section 408 Civil Works review and permitting process, as applicable, will need to be completed prior to receiving Section 404 authorization.

**B. ENVIRONMENTAL TASK 2: CWA SECTION 401, WATER QUALITY CERTIFICATION**

The construction activities that will require a 404 permit will also require a Section 401 Water Quality Certification from the RWQCB. This effort involves preparing a separate application package, including a detailed application form and fee calculation, for submittal to the RWQCB. The form addresses water quality and wetland issues, BMPs, flow volumes and velocities, and potential impacts to beneficial water uses. A copy of the Water Quality Management Plan, if available, will be included with the submittal package. In expediting the permit process, it is important to note that the USACE will not issue its final authorization as a condition of the NWP until the USACE has received a copy of the water quality certification from the RWQCB. The RWQCB requires a Section 401

application filing fee for fill or dredge operations based on the quantity (linear feet and acreage) of fill with respect to waters of the United States. A check for the application filing fee in the amount of \$1,500 will be included in the application submittal.

**C. ENVIRONMENTAL TASK 3: CALIFORNIA FISH AND GAME CODE SECTION 1602, LAKE OR STREAMBED ALTERATION AGREEMENT**

Through provisions of the California Fish and Game Code (Section 1600 et seq.), the CDFW has jurisdiction to enter into agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. ENGINEER will prepare and submit a Notification of Streambed Alteration to the CDFW. Completion of CDFW form FG2023 is required, along with a detailed cover letter, including graphics and various other attachments (e.g., CEQA documentation, habitat mitigation plan, water diversion plan). Additionally, a signed and stamped copy of the Notice of Determination as well as a copy of the CDFW environmental filing fee payment are required as part of the submittal package. In addition, a check for the Notification processing fee, based on the estimated cost associated with the activity resulting in impacts to CDFW jurisdiction, will be included in the Notification submittal package; the maximum fee is \$5,145.75 for project costs above \$350,000.

**D. ENVIRONMENTAL TASK 4: ON-SITE MITIGATION PLAN**

ENGINEER will develop an on-site mitigation or enhancement plan which will be suitable for submittal to the CDFW and RWQCB, as required, to satisfy permit requirements. It is not anticipated that the Compensatory Mitigation Plan would be needed to USACE standards due to lack of permanent impacts to USACE jurisdictional areas. The mitigation plan will be prepared as required by CDFW and RWQCB permit conditions in order to address mitigation for shade impacts and temporal loss of occupied least Bell's vireo habitat. This mitigation is anticipated to be consistent with the mitigation requirements addressed in the Determination of Biologically Equivalent or Superior Preservation (DBESP). This mitigation plan will include a general evaluation of the project impacts, use of mitigation through in-lieu fee programs, the location of potential mitigation areas/sites as necessary, habitat types to be created or enhanced, general implementation strategy, supporting rationale, site preparation, seed and plant material, installation methods, and target (maintenance and monitoring success criteria) and ultimate performance standards as necessary for the mitigation measures. If applicable, LSA will also develop basic revegetation strategies addressing hydrological

requirements, soils requirements, general species selection, types of revegetation to be employed, sources for plant materials, planting techniques, monitoring and maintenance, and documentation of results.

**E. ENVIRONMENTAL TASK 5: COORDINATION WITH CITY OF RIVERSIDE AND SUCKER HABITAT CONSERVATION PLAN PARTIES FOR OFF-SITE MITIGATION**

ENGINEER will coordinate with City of Riverside Public Utilities Water Division and other entities associated with the Habitat Conservation Plan for the Santa Ana sucker, including Riverside-Corona Resource Conservation District, in order to design a mitigation plan that can accommodate future park amenities and use of the site for mitigation for the Santa Ana sucker. Scope includes 8 conference calls (including 6 hours of preparation and follow up for each) and 4 meetings (including 12 hours of preparation and follow up for each).

**F. ENVIRONMENTAL TASK 6: OFF-SITE BAT HABITAT COORDINATION AND DESIGN**

ENGINEER will develop a bat replacement habitat to be installed at Fairmount Park.

**G. ENVIRONMENTAL TASK 7: OFF-SITE MITIGATION PLAN ENVIRONMENTAL LEAD COORDINATION WITH SUBCONSULTANT**

ENGINEER will develop an off-site mitigation or enhancement plan which will be suitable for submittal to the CDFW and RWQCB, as required, to satisfy permit requirements. It is not anticipated that the Compensatory Mitigation Plan would be needed to USACE standards due to lack of permanent impacts to USACE jurisdictional areas. The mitigation plan will be prepared as required by CDFW and RWQCB permit conditions in order to address mitigation for shade impacts and temporal loss of occupied least Bell's vireo habitat. This mitigation is anticipated to be consistent with the mitigation requirements addressed in the Determination of Biologically Equivalent or Superior Preservation (DBESP). This mitigation plan will include a general evaluation of the project impacts, use of mitigation through in-lieu fee programs, the location of potential mitigation areas/sites as necessary, habitat types to be created or enhanced, general implementation strategy, supporting rationale, site preparation, seed and plant material, installation methods, and target (maintenance and monitoring success criteria) and ultimate performance standards as necessary for the mitigation measures. If applicable, LSA will also develop basic revegetation strategies addressing hydrological requirements, soils requirements, general species selection, types of revegetation to be employed,

sources for plant materials, planting techniques, monitoring and maintenance, and documentation of results.

**ARTICLE AVII • CONSTRUCTION BIDDING PHASE**

Bidding procedures will be the responsibility of COUNTY. While the PROJECT is being advertised for bids, all questions concerning the intent shall be referred to COUNTY for resolution. In the event that the items requiring interpretation in the drawings or specifications are discovered during the bidding period, said items shall be analyzed by the ENGINEER for decision by COUNTY as to the proper procedure required. Corrective action taken will either be in the form of an addendum prepared by the ENGINEER and issued by COUNTY or by covering change order after the award of the construction contract.

**ARTICLE AVIII • CONSTRUCTION SUPPORT PHASE**

ENGINEER shall attend the pre-construction meeting with the successful contractor upon notification by the COUNTY.

Upon award of the construction contract, ENGINEER will proceed with the Construction Support Phase services required by this contract.

During construction, the ENGINEER shall furnish all necessary additional drawings for correcting and change orders required by errors and omissions of ENGINEER. Such drawings will be requested in writing from the ENGINEER by COUNTY and shall be at no additional cost to the COUNTY. The original tracing(s) of the drawings and contract wording for change orders shall be submitted to the COUNTY for duplication and distribution.

ENGINEER shall review shop drawings and RFIs submitted by the contractor (falsework and rebar shop-plan review is not included). ENGINEER shall complete shop plan reviews within the time allowed on the project specifications (SSP's) including COUNTY response time. Contract change order and RFI reviews shall be completed within two working days of receipt.

Drawings and change orders required due to actions of the COUNTY or to address unanticipated field conditions or Contractor requested revisions, which are beyond the scope of the ENGINEER's responsibilities, shall be considered extra services.

ENGINEER shall be available to visit to the jobsite for on-site review of construction and other visits to the jobsite as requested by the COUNTY to resolve any discrepancies in the contract documents. ENGINEER will be on-site during the pile placement to confirm the geotechnical design assumptions and

to document soil conditions. ENGINEER shall bring to the attention of the COUNTY's Resident Engineer any defects or deficiencies in the work by the construction contractor, which the ENGINEER may observe. ENGINEER shall have no authority to issue instructions on behalf of the COUNTY or to deputize another to do so. All agreements shall be between the COUNTY and its construction contractor. These provisions shall not be construed as making the ENGINEER responsible for failure of the construction contractor to carry out the work in accordance with the contract documents nor the construction means or methods or techniques, sequences, procedures or safety programs in connection with the work.

ENGINEER shall prepare and deliver to the COUNTY the "As-Built" plans within two months of completion of structure construction. We anticipate the following:

- Contract Change Order Reviews – up to five per Item E above
- RFI Responses to address questions and clarifications from the Contractor and field engineering staff
- Shop Drawing Reviews:
  - CIDH Pile installation plans
  - Prestressing system working drawings
  - Joint seal assembly shop drawings
  - Bearings shop drawings
  - Metal railing shop drawings
- Field Visits/Meetings – up to 8
- Part time observations for pile placement by geotechnical engineer of record

Design changes for the Contractor's preference are not anticipated

As-Built plans will be based on a redline markup of the latest design as provided by the Contractor.

Independent verification is not anticipated.

## **ARTICLE AVIV • COMPUTER SERVICES**

### **A. CALCULATIONS**

All roadway calculations will be performed using AutoCAD Civil 3D or Bentley InRoads. The structural analyses and design will be performed by using commercially available bridge analysis and

design programs. Water use calculations will be performed per 2015 Model Water Efficient Landscape Ordinance.

#### **B. COMPUTER AIDED DRAFTING AND DESIGN**

All plans will be prepared using MicroStation format in conformance with the latest CALTRANS CADD User's Manual and the CALTRANS Drafting Manual as modified by the current COUNTY CADD Guidelines to assure complete compatibility.

#### **ARTICLE AX • QUALITY CONTROL PLAN**

A Quality Control Plan will be established for this PROJECT in accordance with the provisions of Article IV, Section H of the Agreement. It will be provided to the COUNTY within two (2) weeks after NTP for review and approval.

Deliverable:

- Quality Control/Quality Assurance Plan (updated for final design)

#### **ARTICLE AXI • ADVANCE CONCEPTUAL ENGINEERING**

ENGINEER shall provide advance conceptual engineering to support the environmental studies during the PA/ED phase. This effort may include preliminary calculations on materials quantities and impact areas needed to develop the preliminary mitigation areas and to support resource agency reviews and comments.

Deliverable:

- Advance conceptual engineering documents as requested by the COUNTY

#### **ARTICLE AXII • SHEET LIST**

The anticipated sheet list for the project includes but is not limited to:

Title Sheet  
Bridge General Plan  
Index to Plans  
Deck Contours (1 of 2)  
Deck Contours (2 of 2)  
Bridge Removal Plan (1 of 2)  
Bridge Removal Plan (2 of 2)

Structure Plan (1 of 2)  
Structure Plan (2 of 2)  
Foundation Plan (1 of 2)  
Foundation Plan (2 of 2)  
Abutment 1 Layout  
Abutment 7 Layout  
Abutment Details No. 1  
Abutment Details No. 2  
Abutment Details No. 3  
Bent Details No. 1  
Bent Details No. 2  
Bent Details No. 3  
Typical Section (1 of 2)  
Typical Section (2 of 2)  
Girder Layout (1 of 3)  
Girder Layout (2 of 3)  
Girder Layout (3 of 3)  
Girder Details (1 of 3)  
Slab Reinforcement (1 of 3)  
Slab Reinforcement (2 of 3)  
Hinge Details (1 of 2)  
Hinge Details (2 of 2)  
End Diaphragm Details  
PTFE Spherical Bearings  
Joint Seal Assembly Details  
Structure Approach Drainage Details  
Barrier Layout (1 of 2)  
Barrier Layout (2 of 2)  
Railing Details (1 or 2)  
Railing Details (2 or 2)  
Miscellaneous Details  
Utility Details  
Architectural Details (1 of 4)  
Architectural Details (2 of 4)  
Architectural Details (3 of 4)  
Architectural Details (4 of 4)  
Retaining Wall Plan and Elevation (1 of 3)  
Retaining Wall Plan and Elevation (2 of 3)  
Retaining Wall Plan and Elevation (3 of 3)  
Retaining Wall Details and Quantities (1 of 2)  
Retaining Wall Details and Quantities (2 of 2)  
Log of Test Borings (1 of 6)  
Log of Test Borings (2 of 6)  
Log of Test Borings (3 of 6)  
Log of Test Borings (4 of 6)  
Log of Test Borings (5 of 6)

Log of Test Borings (6 of 6)  
Title Sheet (Roadway)  
Typical Cross Sections (1 of 2)  
Typical Cross Sections (2 of 2)  
Key Map and Line Index (1 of X)  
Roadway Layout (1 of 4)  
Roadway Layout (2 of 4)  
Roadway Layout (3 of 4)  
Roadway Layout (4 of 4)  
Santa Ana River Bike Path Details  
Profile and Superelevation Diagrams (1 of X2)  
Profile and Superelevation Diagrams (2 of 2)  
Construction and Intersection Details (1 of 2)  
Construction and Intersection Details (2 of 2)  
Erosion Control Plan (1 of 2)  
Erosion Control Plan (2 of 2)  
Erosion Control Details and Quantities  
Contour Grading and Drainage Layout (1 of 3)  
Contour Grading and Drainage Layout (2 of 3)  
Contour Grading and Drainage Layout (3 of 3)  
Drainage Profiles  
Drainage Details (1 of 2)  
Drainage Details (2 of 2)  
Drainage Quantities  
Construction Area Signs  
Stage Construction and Traffic Handling (1 of 3)  
Stage Construction and Traffic Handling (2 of 3)  
Stage Construction and Traffic Handling (3 of 3)  
Detours (1 of 2)  
Detours (2 of X2)  
Pavement Delineation (1 of 2)  
Pavement Delineation (2 of 2)  
Roadside Sign Plan  
Roadway Lighting and Sign Illumination (1 of 2)  
Roadway Lighting and Sign Illumination (2 of 2)  
Signal and Lighting (1 of 2)  
Signal and Lighting (2 of 2)  
Architectural Lighting Details  
Utility Plan (1 of 2)  
Utility Plan (2 of 2)  
Planting Plan (1 of 3)  
Planting Plan (2 of 3)  
Planting Plan (3 of 3)  
Planting Details (1 of 2)  
Planting Details (2 of 2)  
Hardscape Plan (1 of 2)

Hardscape Plan (2 of 2)

Hardscape Details

Architectural Treatment (1 of 4)

Architectural Treatment (2 of 4)

Architectural Treatment (3 of 4)

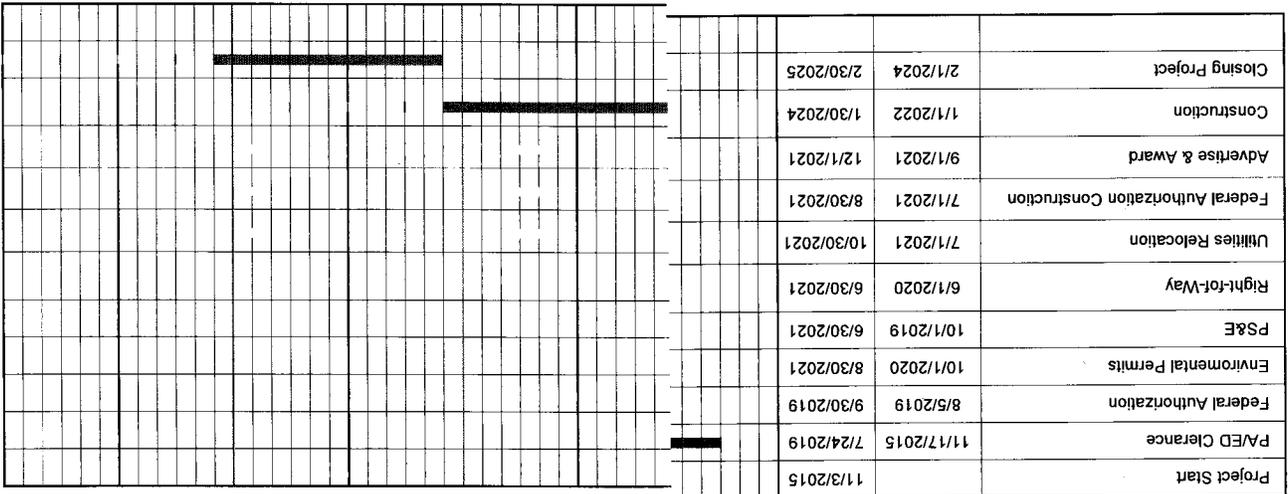
Architectural Treatment (4 of 4)

## **AMENDMENT 1 • APPENDIX 1B**

### **Project Schedule**

# PROJECT SCHEDULE

TASK	START	FINISH	J A S O N	2015	F M A M J J A S O N D	J F M A M J J A S O N D	2023	J F M A M J J A S O N D	2024	J F M A M J J A S O N D	2025	J F M A M J J A S O N D	2026
Project Start	11/3/2015												
PA/ED Clearance	11/17/2015	7/24/2019											
Federal Authorization	8/5/2019	9/30/2019											
Environmental Permits	10/1/2020	8/30/2021											
PS&E	10/1/2019	6/30/2021											
Right-of-Way	6/1/2020	6/30/2021											
Utilities Relocation	7/1/2021	10/30/2021											
Federal Authorization Construction	7/1/2021	8/30/2021											
Advertise & Award	9/1/2021	12/1/2021											
Construction	1/1/2022	1/30/2024											
Closing Project	2/1/2024	2/30/2025											



# **AMENDMENT 1 • APPENDIX 1C**

## **Fee Proposal**

Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071) Fee Proposal Summary

August 14, 2019

COMPANIES	PHASE I	PHASE II	PHASE III	PHASE IV	TOTAL
<b>Kleinfelder</b> Prime, Bridge, Geotechnical, Visual	\$522,414	\$1,705,097	\$29,662	\$200,789	<b>\$2,457,961</b>
<b>LSA</b> Sub consultant - Environmental	\$627,192	\$206,567		\$16,951	<b>\$850,710</b>
<b>Kimley-Horn</b> Sub consultant - Civil	\$372,030	\$526,728		\$26,271	<b>\$925,030</b>
<b>Diaz-Yourman</b> Sub consultant - Phase II Site Assessment	\$46,409	\$117,892		\$7,533	<b>\$171,834</b>
<b>Tatsumi and Partners</b> Sub consultant - Landscape Architect	\$51,594	\$73,342		\$8,067	<b>\$133,002</b>
<b>Chang Consultants</b> Sub consultant - Bridge Hydraulics	\$35,503	\$77,667		\$3,504	<b>\$116,674</b>
<b>Value Management Strategies</b> Sub consultant - Value Analysis	\$39,797				<b>\$39,797</b>
<b>TOTAL</b>	<b>\$1,694,939</b>	<b>\$2,707,293</b>	<b>\$29,662</b>	<b>\$263,116</b>	<b>\$4,695,009</b>

Phase I **PAED (Previously Approved)**

Phase II **Plans, Specs & Estimates**

Phase III **Bid Support**

Phase IV **Construction Support**

FEE PROPOSAL WORKSHEET		
COMPANY: <b>Kleinfelder</b>	SCOPE OF WORK: <b>Project Summary - II-IV</b>	PHASE: <b>II-IV Phases</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
James Frost	Project Manager	952	@	\$105.77	\$100,693.0
Sami Megally	Senior Structural Engineer	1,078	@	\$83.41	\$89,916.0
Keith Gazaway	Senior Bridge Engineer	380	@	\$71.16	\$27,040.8
NganHa Vu	Senior Bridge Engineer	1,568	@	\$55.50	\$87,024.0
Josh Olmedo	Assistant Engineer	960	@	\$36.06	\$34,617.6
Ty Brittain	Senior Technician	738	@	\$64.45	\$47,564.1
Karibia Baillargeon	Deputy Project Manager	1,058	@	\$47.12	\$49,853.0
Laura Anderson	Project Controls	249	@	\$41.35	\$10,296.2
Robert Torres	Sr. Project Manager/Geotechnical	83	@	\$85.34	\$7,083.2
Zia Zafir	Sr. Seismic Engineer	30	@	\$81.92	\$2,457.6
Kevin Crennan	Sr. Geotechnical Engineer	148	@	\$68.27	\$10,104.0
Scott Rugg	Sr. Geologist	240	@	\$55.77	\$13,384.8
Janna Bonfiglio	Project Geotechnical Engineer	470	@	\$36.54	\$17,173.8
Salvador Tena	Staff Geotechnical Engineer	338	@	\$33.18	\$11,214.8
Janet Patay	Sr. CADD/GIS	124	@	\$41.84	\$5,188.2
Miki Muramoto	Project Administrator / Word Processing	60	@	\$31.00	\$1,860.0
Christopher Balema	Technical Reviews	8	@	\$64.64	\$517.1
Johnathan West	3D Design and Visualization Specialist	104	@	\$51.16	\$5,320.6
Ange Sarno	Staff Architect / QA/QC	42	@	\$31.11	\$1,306.6
Darvadra Huffman	Administrative	3	@	\$31.11	\$93.3
Sarah Ouadghiri	Administrative	1	@	\$22.16	\$22.2
		<b>TOTAL HOURS:</b>		<b>8,634</b>	<b>TOTAL AMOUNT: \$522,730.88</b>

**MULTIPLIERS**

ESCALATION @	(Rates Vary by Phase)	\$24,207.36
OVERHEAD @ (60.34% Fringe + 115.12% OH) = 175.46%	(of Direct Labor + Escalation)	\$959,657.83
PAYROLL ADDITIVES @	(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%	\$150,659.61
<b>TOTAL MULTIPLIERS:</b>		<b>\$1,134,524.79</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction (Full Plan Sheets)	1098	EA @	\$0.72	\$790.56
Reproduction (Half Size Sheets)	3294	EA @	\$0.24	\$790.56
Reproduction (Exhibits, Mounted Graphics)	5	EA @	\$50.00	\$250.00
Mylars	122	EA @	\$18.42	\$2,247.24
Deliveries	14	EA @	\$100.00	\$1,400.00
Mileage	8400	MI @	\$0.545	\$4,578.00
Miscellaneous Permit Needs	1	LS @	\$3,000.00	\$3,000.00
Geotech - Mileage	2000	MI	\$0.545	\$1,090.00
Geotech - Per Diem		DAY	\$188.00	
Geotech - SoCal Drilling	1	ACTUAL @	\$144,110.00	\$144,110.00
Geotech - SoClarix (Test/Haz Mat Disposal)	1	ACTUAL @	\$28,425.00	\$28,425.00
Geotech - Co's Traffic Control	6	DAY @	\$2,765.00	\$16,590.00
Geotech - Cut-N-Core	4	EA @	\$400.00	\$1,600.00
Geotech - Tow Truck	10	HR @	\$600.00	\$6,000.00
Geotech - CPL Underground Detection Services	3	DAY @	\$2,500.00	\$7,500.00
Geotech - Geophysical Sub	2	LOCATION @	\$3,800.00	\$7,600.00
Geotech - Permits	11	EA @	\$250.00	\$2,750.00
Geotech - Lab Testing	1	VARIES @	\$40,070.00	\$40,070.00
Geotech - Deck Coring/Demo	1	EA @	\$4,700.00	\$4,700.00
Geotech - Deck Repair	1	EA @	\$4,800.00	\$4,800.00
				19962
<b>TOTAL ODC'S:</b>				<b>\$278,291.36</b>

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL
LSA Associates	\$63,601.32	\$145,820.40	\$14,096.50	\$223,518.22
Kimley-Horn	\$144,981.16	\$343,631.85	\$64,386.72	\$552,999.73
Diaz Yourman	\$19,962.10	\$52,570.36	\$52,892.50	\$125,424.96
Tatsumi and partners	\$25,083.68	\$55,463.46	\$861.22	\$81,408.36
Chang Consultants	\$25,326.60	\$37,344.86	\$18,500.00	\$81,171.46

**TOTAL SUBCONSULTANT SERVICES: \$1,064,522.73**

**GRAND TOTAL \$3,000,069.77**

FEE PROPOSAL WORKSHEET		
COMPANY: <b>Kleinfelder</b>	SCOPE OF WORK: <b>Plans, Specs &amp; Estimates</b>	PHASE: <b>Phase II</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
James Frost	Project Manager	852	@ \$105.77	\$90,116
Sami Megally	Senior Structural Engineer	1,078	@ \$83.41	\$89,916
Keith Gazaway	Senior Bridge Engineer	240	@ \$71.16	\$17,078
NganHa Vu	Senior Bridge Engineer	1,368	@ \$55.50	\$75,924
Josh Olmedo	Assistant Engineer	740	@ \$36.06	\$26,684
Ty Brittain	Senior Technician	678	@ \$64.45	\$43,697
Karibia Baillargeon	Deputy Project Manager	918	@ \$47.12	\$43,256
Laura Anderson	Project Controls	185	@ \$41.35	\$7,650
Robert Torres	Sr. Project Manager/Geotechnical	63	@ \$85.34	\$5,376
Zia Zafir	Sr. Seismic Engineer	30	@ \$81.92	\$2,458
Kevin Crennan	Sr. Geotechnical Engineer	128	@ \$68.27	\$8,739
Scott Rugg	Sr. Geologist	160	@ \$55.77	\$8,923
Janna Bonfiglio	Project Geotechnical Engineer	280	@ \$36.54	\$10,231
Salvador Tena	Staff Geotechnical Engineer	338	@ \$33.18	\$11,215
Janet Patay	Sr. CADD/GIS	124	@ \$41.84	\$5,188
Miki Muramoto	Project Administrator / Word Processing	60	@ \$31.00	\$1,860
Christopher Balerna	Technical Reviews	8	@ \$64.64	\$517
Johnathan West	3D Design and Visualization Specialist	104	@ \$51.16	\$5,321
Ange Sarno	Staff Architect / QA/QC	42	@ \$31.11	\$1,307
Darvadra Huffman	Administrative	3	@ \$31.11	\$93
Sarah Quadghiri	Administrative	1	@ \$22.16	\$22
<b>TOTAL HOURS:</b>		<b>7,400</b>	<b>TOTAL AMOUNT:</b>	<b>\$455,572</b>

**MULTIPLIERS**

ESCALATION @	3.59%	(of Direct Labor)	\$16,355.02
OVERHEAD @ (60.34% Fringe + 115.12% OH) = 175.46%	175.46%	(of Direct Labor + Escalation)	\$828,043
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$129,997
<b>TOTAL MULTIPLIERS:</b>			<b>\$974,395</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction (Full Plan Sheets)	1098	EA	@ \$0.72	\$790.56
Reproduction (Half Size Sheets)	3294	EA	@ \$0.24	\$790.56
Reproduction (Exhibits, Mounted Graphics)	5	EA	@ \$50.00	\$250.00
Mylars	122	EA	@ \$18.42	\$2,247.24
Deliveries	14	EA	@ \$100.00	\$1,400.00
Mileage	3600	MI	@ \$0.545	\$1,962.00
Miscellaneous Permit Needs	1	LS	@ \$3,000.00	\$3,000.00
Geotech - Mileage	1000	MI	@ \$0.545	\$545.00
Geotech - Per Diem		DAY	\$188.00	
Geotech - SoCal Drilling	1	ACTUAL	@ \$144,110.00	\$144,110.00
Geotech - SoClarix (Test/Haz Mat Disposal)	1	ACTUAL	@ \$28,425.00	\$28,425.00
Geotech - Co's Traffic Control	6	DAY	@ \$2,765.00	\$16,590.00
Geotech - Cut-N-Core	4	EA	@ \$400.00	\$1,600.00
Geotech - Tow Truck	10	HR	@ \$600.00	\$6,000.00
Geotech - CPL Underground Detection Services	3	DAY	@ \$2,500.00	\$7,500.00
Geotech - Geophysical Sub	2	LOCATION	@ \$3,800.00	\$7,600.00
Geotech - Permits	11	EA	@ \$250.00	\$2,750.00
Geotech - Lab Testing	1	VARIES	@ \$40,070.00	\$40,070.00
Geotech - Deck Coring/Demo	1	EA	@ \$4,700.00	\$4,700.00
Geotech - Deck Repair	1	EA	@ \$4,800.00	\$4,800.00
<b>TOTAL ODC'S:</b>				<b>\$275,130.36</b>

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL
LSA Associates	\$58,880.06	\$133,590.45	\$14,096.50	\$206,567.01
Kimley-Horn	\$137,885.56	\$324,456.00	\$64,386.72	\$526,728.28
Diaz Yourman	\$18,040.82	\$46,958.92	\$52,892.50	\$117,892.24
Tatsumi and partners	\$22,793.06	\$49,687.25	\$861.22	\$73,341.53
Chang Consultants	\$24,027.80	\$35,139.17	\$18,500.00	\$77,666.97

TOTAL SUBCONSULTANT SERVICES: **\$1,002,196.04**

**TOTAL** **\$2,707,292.62**

FEE PROPOSAL WORKSHEET		
COMPANY: <b>Kleinfelder</b>	SCOPE OF WORK: <b>Bid Support</b>	PHASE: <b>Phase III</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT	
James Frost	Project Manager	20	@ \$105.77	\$2,115.40	
Sami Megally	Senior Structural Engineer		\$83.41		
Keith Gazaway	Senior Bridge Engineer	40	@ \$71.16	\$2,846.40	
NganHa Vu	Senior Bridge Engineer		\$55.50		
Josh Olmedo	Assistant Engineer	20	@ \$36.06	\$721.20	
Ty Brittain	Senior Technician	20	@ \$64.45	\$1,289.00	
Karibia Baillargeon	Deputy Project Manager	40	@ \$47.12	\$1,884.80	
Laura Anderson	Project Controls	4	@ \$41.35	\$165.40	
Robert Torres	Sr. Project Manager/Geotechnical		\$85.34		
Zia Zafir	Sr. Seismic Engineer		\$81.92		
Kevin Crennan	Sr. Geotechnical Engineer		\$68.27		
Scott Rugg	Sr. Geologist		\$55.77		
Janna Bonfiglio	Project Geotechnical Engineer		\$36.54		
Salvador Tena	Staff Geotechnical Engineer		\$33.18		
Janet Patay	Sr. CADD/GIS		\$41.84		
Miki Muramoto	Project Administrator / Word Processing		\$31.00		
Christopher Balerna	Technical Reviews		\$64.64		
Johnathan West	3D Design and Visualization Specialist		\$51.16		
Ange Sarno	Staff Architect / QA/QC		\$31.11		
Darvadra Huffman	Administrative		\$31.11		
Sarah Ouadghiri	Administrative		\$22.16		
		<b>TOTAL HOURS:</b>	<b>144</b>	<b>TOTAL AMOUNT:</b>	<b>\$9,022.20</b>

**MULTIPLIERS**

ESCALATION @	8.50%	(of Direct Labor)	\$766.89	
OVERHEAD @ (60.34% Fringe + 115.12% OH) = 175.46%	175.46%	(of Direct Labor + Escalation)	\$17,175.93	
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)		
PROFIT (FIXED FEE)	10.0%		\$2,696.50	
			<b>TOTAL MULTIPLIERS:</b>	<b>\$20,639.32</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
<b>TOTAL ODC'S:</b>				

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL
<b>TOTAL SUBCONSULTANT SERVICES:</b>				

**TOTAL** **\$29,661.52**

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>Kleinfelder</b>	SCOPE OF WORK: <b>Construction Support</b>	PHASE: <b>Phase IV</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
James Frost	Project Manager	80	@ \$105.77	\$8,461.60
Sami Megally	Senior Structural Engineer		\$83.41	
Keith Gazaway	Senior Bridge Engineer	100	@ \$71.16	\$7,116.00
NganHa Vu	Senior Bridge Engineer	200	@ \$55.50	\$11,100.00
Josh Olmedo	Assistant Engineer	200	@ \$36.06	\$7,212.00
Ty Brittain	Senior Technician	40	@ \$64.45	\$2,578.00
Karibia Baillargeon	Deputy Project Manager	100	@ \$47.12	\$4,712.00
Laura Anderson	Project Controls	60	@ \$41.35	\$2,481.00
Robert Torres	Sr. Project Manager/Geotechnical	20	@ \$85.34	\$1,706.80
Zia Zafir	Sr. Seismic Engineer		\$81.92	
Kevin Crennan	Sr. Geotechnical Engineer	20	@ \$68.27	\$1,365.40
Scott Rugg	Sr. Geologist	80	@ \$55.77	\$4,461.60
Janna Bonfiglio	Project Geotechnical Engineer	190	@ \$36.54	\$6,942.60
Salvador Tena	Staff Geotechnical Engineer		\$33.18	
Janet Patay	Sr. CADD/GIS		\$41.84	
Miki Muramoto	Project Administrator / Word Processing		\$31.00	
Christopher Balema	Technical Reviews		\$64.64	
Johnathan West	3D Design and Visualization Specialist		\$51.16	
Ange Sarno	Staff Architect / QA/QC		\$31.11	
Darvadra Huffman	Administrative		\$31.11	
Sarah Quadghiri	Administrative		\$22.16	
<b>TOTAL HOURS:</b>		<b>1,090</b>	<b>TOTAL AMOUNT:</b>	<b>\$58,137.00</b>

**MULTIPLIERS**

ESCALATION @	12.19%	(of Direct Labor)	\$7,085.45
OVERHEAD @ (60.34% Fringe + 115.12% OH) = 175.46%	175.46%	(of Direct Labor + Escalation)	\$114,439.31
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$17,966.18
<b>TOTAL MULTIPLIERS:</b>			<b>\$139,490.93</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	LIMIT	UNIT COST	AMOUNT
Mileage	4800	MI	@ \$0.545	\$2,616.00
Geotech Breakdown Attached	1000	MI	@ \$0.545	\$545.00
<b>TOTAL ODC'S:</b>				<b>\$3,161.00</b>

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL
LSA Associates	\$4,721.26	\$12,229.96		\$16,951.22
Kimley-Horn	\$7,095.60	\$19,175.85		\$26,271.45
Diaz Yourman	\$1,921.28	\$5,611.44		\$7,532.72
Tatsumi and partners	\$2,290.62	\$5,776.20		\$8,066.82
Chang Consultants	\$1,298.80	\$2,205.69		\$3,504.49

**TOTAL SUBCONSULTANT SERVICES: \$62,326.70**

**TOTAL \$263,115.62**











COMPANY: **Kleinfelder**      PHASE: **Phase IV**  
 PROJECT: **Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)**      DATE: **August 14, 2019**  
 SCOPE OF WORK: **Construction Support**

TASK	80	100	200	200	200	40	100	60	20	80	190	1,090	58,137
Construction Support													

**Total Manhours**      80      100      200      200      200      40      100      60      20      80      190      1,090      58,137

Article AVII - Construction Bidding Phase	80	100	200	200	200	40	100	60	20	80	190	1,090	58,137
A. Construction Bidding Phase													
Article AVIII - Construction Support Phase													
A. Construction Support Phase	80	100	200	200	200	40	100	60	20	80	190	1,090	\$ 58,137

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>LSA Associates</b>		SCOPE OF WORK: <b>Project Summary</b>	PHASE: <b>II-IV Phases</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>	

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Rob McCann	Principal In Charge	4	@	\$115.83	\$463.32
Wendy Davis	Environmental Task Manger	280	@	\$52.03	\$14,568.40
Art Horrighausen	Principal Technical Staff	58	@	\$77.63	\$4,502.54
Laurel Frakes	Associate Technical Staff	366	@	\$46.48	\$17,011.68
Jill Carpenter	Senior Technical Staff	244	@	\$41.96	\$10,238.24
Lonnie Rodriguez	Technical Staff	134	@	\$35.67	\$4,779.78
Leeann McDougall	Assistant Technical Staff	8	@	\$28.32	\$226.56
Steve Dong	Word Processing	60	@	\$35.10	\$2,106.00
Tom Flahive	GIS	115	@	\$47.63	\$5,477.45
Maria Perez	Administrative Support	23	@	\$21.41	\$492.43
Anthony Greco	Senior Technical Staff	88	@	\$35.77	\$3,147.76
Jodi Ross	Principal Technical Staff	12	@	\$48.93	\$587.16
		<b>TOTAL HOURS:</b>		<b>1,392</b>	<b>TOTAL AMOUNT: \$63,601.32</b>

**MULTIPLIERS**

ESCALATION @		(Rates Vary by Phase)	\$2,945.36
OVERHEAD @ (90.43% Fringe + 95.66% OH) = 186.09%	186.09%	(of Direct Labor + Escalation)	\$123,836.71
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%	(of Total Labor + Total Multipliers)	\$19,038.34
<b>TOTAL MULTIPLIERS:</b>			<b>\$145,820.40</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Mileage	1000	MI	@	\$0.545	\$545.00
Printing	600	EA	@	\$0.10	\$60.00
Mailing	20	EA	@	\$10.00	\$200.00
Section 401 Application Fee for <=0.1 acre fill material	2	APPLICATION FEE	@	\$1,500.00	\$3,000.00
Section 1602 Notification Fee (maximum fee)	2	NOTIFICATION FEE	@	\$5,145.75	\$10,291.50
<b>TOTAL ODC'S:</b>					<b>\$14,096.50</b>

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL

TOTAL SUBCONSULTANT SERVICES:

**GRAND TOTAL \$223,518.22**

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>LSA</b>	SCOPE OF WORK: <b>Plans, Specs &amp; Estimates</b>	PHASE: <b>Phase II</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Rob McCann	Principal In Charge	4	@	\$115.83	\$463.32
Wendy Davis	Environmental Task Manger	256	@	\$52.03	\$13,319.68
Art Homrighausen	Principal Technical Staff	48	@	\$77.63	\$3,726.24
Laurel Frakes	Associate Technical Staff	356	@	\$46.48	\$16,546.88
Jill Carpenter	Senior Technical Staff	234	@	\$41.96	\$9,818.64
Lonnie Rodriguez	Technical Staff	134	@	\$35.67	\$4,779.78
Leeann McDougall	Assistant Technical Staff	8	@	\$28.32	\$226.56
Steve Dong	Word Processing	60	@	\$35.10	\$2,106.00
Tom Flahive	GIS	107	@	\$47.63	\$5,096.41
Maria Perez	Administrative Support	23	@	\$21.41	\$492.43
Anthony Greco	Senior Technical Staff	48	@	\$35.77	\$1,716.96
Jodi Ross	Principal Technical Staff	12	@	\$48.93	\$587.16

TOTAL HOURS: **1,290**      TOTAL AMOUNT: **\$58,880.06**

**MULTIPLIERS**

ESCALATION @	3.87%	(of Direct Labor)	\$2,280.13
OVERHEAD @ (90.43% Fringe + 95.66% OH) = 186.09%	186.09%	(of Direct Labor + Escalation)	\$113,813.00
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$17,497.32
TOTAL MULTIPLIERS:			<b>\$133,590.45</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Mileage	1000	MI	@	\$0.545	\$545.00
Printing	600	EA	@	\$0.10	\$60.00
Mailing	20	EA	@	\$10.00	\$200.00
Section 401 Application Fee for =<0.1 acre fill material	2	APPLICATION FEE	@	\$1,500.00	\$3,000.00
Section 1602 Notification Fee (maximum fee)	2	NOTIFICATION FEE	@	\$5,145.75	\$10,291.50

TOTAL ODC'S: **\$14,096.50**

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL

TOTAL SUBCONSULTANT SERVICES:

**TOTAL**      **\$206,567.01**

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>LSA Associates</b>	SCOPE OF WORK: <b>Construction Support</b>	PHASE: <b>Phase IV</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT	
Rob McCann	Principal In Charge		\$115.83		
Wendy Davis	Environmental Task Manger	24	@ \$52.03	\$1,248.72	
Art Homrighausen	Principal Technical Staff	10	@ \$77.63	\$776.30	
Laurel Frakes	Associate Technical Staff	10	@ \$46.48	\$464.80	
Jill Carpenter	Senior Technical Staff	10	@ \$41.96	\$419.60	
Lonnie Rodriguez	Technical Staff		\$35.67		
Leeann McDougall	Assistant Technical Staff		\$28.32		
Steve Dong	Word Processing		\$35.10		
Tom Flahive	GIS	8	@ \$47.63	\$381.04	
Maria Perez	Administrative Support		\$21.41		
Anthony Greco	Senior Technical Staff	40	@ \$35.77	\$1,430.80	
Jodi Ross	Principal Technical Staff		\$48.93		
		<b>TOTAL HOURS:</b>	<b>102</b>	<b>TOTAL AMOUNT:</b>	<b>\$4,721.26</b>

**MULTIPLIERS**

ESCALATION @	14.09%	(of Direct Labor)	\$665.23
OVERHEAD @ (90.43% Fringe + 95.66% OH) = 186.09%	186.09%	(of Direct Labor + Escalation)	\$10,023.71
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$1,541.02
<b>TOTAL MULTIPLIERS:</b>			<b>\$12,229.96</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
<b>TOTAL ODC'S:</b>				

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL
<b>TOTAL SUBCONSULTANT SERVICES:</b>				

**TOTAL** **\$16,951.22**





**MANHOUR WORKSHEET**

COMPANY: **LSA**  
 PROJECT: **Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)**  
 SCOPE OF WORK: **Plans, Specs & Estimates**  
 PHASE: **Phase II**  
 DATE: **August 14, 2019**

TASK	APPROVAL IN CONCEPT	PRELIMINARY DESIGN	FINAL DESIGN	CONSTRUCTION ADMINISTRATION	POST CONSTRUCTION	TOTAL HOURS	COST
	APPROVAL IN CONCEPT	PRELIMINARY DESIGN	FINAL DESIGN	CONSTRUCTION ADMINISTRATION	POST CONSTRUCTION		

Draft and Final Materials Report							
GDR inc. Field Investigation							
Draft and Final Foundation Report							
ROE/Encroachment Coordination							
I. Architectural Details and Simulations							
Final Architectural Details and Coord.							
Bridge Visual Simulations							
Community Meetings							
J. Corps 408 Permit							
Section 408 Permit							
K. Final ROW Documents							
Final ROW Exhibits							
L. Utility Coordination							
Utility Letters							
Potholing Summary							
Final Utility Plans							
M. Misc. Design Support							
Updated Fact Sheet							
Traffic Management Plan							
Article AIV - Structures							
A. Structural Design and Calculations							
Complete Structural Design							
B. Independent Check and Quality Control							
Perform Structures IC and QC							
C. Structures Specifications and Estimate							
Develop Specifications and Estimate							
D. Structure PS&E							
Prepare 65% Unchecked PS&E							
Prepare 90% Checked PS&E							
Prepare 95% PS&E							
Prepare Final PS&E							
RE Pending File							
Article AV - Roadway							
A. Basic Roadway Plans							
B. Calculations							
C. Drainage Plans							
D. Traffic Plans							
E. Miscellaneous Plans							
F. Intermediate Reviews							





**FEE PROPOSAL WORKSHEET**

COMPANY: <b>Kimley-Horn</b>	SCOPE OF WORK: <b>Project Summary</b>	PHASE: <b>II-IV Phases</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
Darren Adrian	Sr. Roadway Engineer	348	@ \$89.92	\$31,292.16
Jason Melchor	Traffic Engineer	54	@ \$62.26	\$3,362.04
Frank Hoffman	QC / Senior Engineer	124	@ \$75.00	\$9,300.00
Michael Madsen	Landscape Architect		@ \$60.10	
Stephanie Lam	Project Engineer Civil	938	@ \$41.36	\$38,795.68
Tim Chan	Project Engineer Traffic	164	@ \$42.56	\$6,979.84
Survey Staff	Surveyor			
Alan Huynh	Engineer	1,121	@ \$37.74	\$42,306.54
Gabe Keehn	Assistant Engineer / Technician	20	@ \$31.26	\$625.20
Mingfang Song	CADD Designer	200	@ \$40.00	\$8,000.00
Admin Staff	Administrative	119	@ \$36.30	\$4,319.70

TOTAL HOURS: **3,088**      TOTAL AMOUNT: **\$144,981.16**

**MULTIPLIERS**

ESCALATION @		(Rates Vary by Phase)	\$6,713.96
OVERHEAD @ (38.63% Fringe + 154.19% OH) = 192.82	192.82%	(of Direct Labor + Escalation)	\$292,498.53
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$44,419.36

TOTAL MULTIPLIERS: **\$343,631.85**

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction (Full Plan Sheets)	1544	EA @	\$0.72	\$1,111.68
Reproduction (Half Size Sheets)	3700	EA @	\$0.24	\$888.00
Mileage	2912	MI @	\$0.545	\$1,587.04
Deliveries	1	ACTUAL @	\$800.00	\$800.00
Office Expenses (per County agreement)	1	LS @	\$20,000.00	\$20,000.00
Potholing (allowance)	1	ACTUAL @	\$40,000.00	\$40,000.00

TOTAL ODC'S: **\$64,386.72**

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL

TOTAL SUBCONSULTANT SERVICES:

**GRAND TOTAL \$552,999.73**

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>Kimley-Horn</b>	SCOPE OF WORK: <b>Plans, Specs &amp; Estimates</b>	PHASE: <b>Phase II</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Darren Adrian	Sr. Roadway Engineer	323	@	\$89.92	\$29,044.16
Jason Melchor	Traffic Engineer	50	@	\$62.26	\$3,113.00
Frank Hoffman	QC / Senior Engineer	122	@	\$75.00	\$9,150.00
Michael Madsen	Landscape Architect			\$60.10	
Stephanie Lam	Project Engineer Civil	874	@	\$41.36	\$36,148.64
Tim Chan	Project Engineer Traffic	158	@	\$42.56	\$6,724.48
Survey Staff	Surveyor				
Alan Huynh	Engineer	1,107	@	\$37.74	\$41,778.18
Gabe Keehn	Assistant Engineer / Technician	20	@	\$31.26	\$625.20
Mingfang Song	CADD Designer	180	@	\$40.00	\$7,200.00
Admin Staff	Administrative	113	@	\$36.30	\$4,101.90
<b>TOTAL HOURS:</b>		<b>2,947</b>		<b>TOTAL AMOUNT:</b>	<b>\$137,885.56</b>

**MULTIPLIERS**

ESCALATION @	4.10%	(of Direct Labor)	\$5,653.31
OVERHEAD @ (38.63% Fringe + 154.19% OH) = 192.82%	192.82%	(of Direct Labor + Escalation)	\$276,771.65
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$42,031.05
<b>TOTAL MULTIPLIERS:</b>			<b>\$324,456.00</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction (Full Plan Sheets)	1544	EA	@ \$0.72	\$1,111.68
Reproduction (Half Size Sheets)	3700	EA	@ \$0.24	\$888.00
Mileage	2912	MI	\$0.545	\$1,587.04
Deliveries	1	ACTUAL	\$800.00	\$800.00
Office Expenses (per County agreement)	1	LS	\$20,000.00	\$20,000.00
Potholing (allowance)	1	ACTUAL	\$40,000.000	\$40,000.00
<b>TOTAL ODC'S:</b>				<b>\$64,386.72</b>

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL

TOTAL SUBCONSULTANT SERVICES:

**TOTAL \$526,728.28**

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>Kimley-Horn</b>	SCOPE OF WORK: <b>Construction Support</b>	PHASE: <b>Phase IV</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
Darren Adrian	Sr. Roadway Engineer	25	@ \$89.92	\$2,248.00
Jason Melchor	Traffic Engineer	4	@ \$62.26	\$249.04
Frank Hoffman	QC / Senior Engineer	2	@ \$75.00	\$150.00
Michael Madsen	Landscape Architect		\$60.10	
Stephanie Lam	Project Engineer Civil	64	@ \$41.36	\$2,647.04
Tim Chan	Project Engineer Traffic	6	@ \$42.56	\$255.36
Survey Staff	Surveyor			
Alan Huynh	Engineer	14	@ \$37.74	\$528.36
Gabe Keehn	Assistant Engineer / Technician		\$31.26	
Mingfang Song	CADD Designer	20	@ \$40.00	\$800.00
Admin Staff	Administrative	6	@ \$36.30	\$217.80
<b>TOTAL HOURS:</b>		<b>141</b>	<b>TOTAL AMOUNT:</b>	<b>\$7,095.60</b>

**MULTIPLIERS**

ESCALATION @	14.95%	(of Direct Labor)	\$1,060.65
OVERHEAD @ (38.63% Fringe + 154.19% OH) = 192.82%	192.82%	(of Direct Labor + Escalation)	\$15,726.88
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$2,388.31
<b>TOTAL MULTIPLIERS:</b>			<b>\$19,175.85</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT

TOTAL ODC'S:

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL

TOTAL SUBCONSULTANT SERVICES:

**TOTAL** **\$26,271.45**









**MANHOURLY WORKSHEET**

COMPANY: **Kimley-Horn**  
 PROJECT: **Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)**  
 SCOPE OF WORK: **Construction Support**  
 PHASE: **Phase IV**  
 DATE: **August 19, 2019**

TASK	SR. CONSULTING ENGINEER	SR. PROJECT ENGINEER	PROJECT ENGINEER	PROJECT ENGINEER - CIVIL	PROJECT ENGINEER - TRAFFIC	ENGINEER	ASSISTANT ENGINEER	DEPT. DESIGNER	ADMINISTRATIVE	HOURS	COST

<b>Total Manhours</b>	<b>25</b>	<b>4</b>	<b>2</b>	<b>64</b>	<b>6</b>	<b>14</b>	<b>\$77.74</b>	<b>\$42.66</b>	<b>\$60.10</b>	<b>\$41.36</b>	<b>\$40.00</b>	<b>\$36.30</b>	<b>141</b>	<b>7,096</b>
-----------------------	-----------	----------	----------	-----------	----------	-----------	----------------	----------------	----------------	----------------	----------------	----------------	------------	--------------

Task Description	25	4	2	64	6	14	Cost	60.10	41.36	40.00	36.30	Hours	Cost
<b>Article AVII - Construction Bidding Phase</b>													
A. Construction Bidding Phase													
<b>Article AVIII - Construction Support Phase</b>													
A. Construction Support Phase	25	4	2	64	6	14	\$77.74	\$42.66	\$60.10	\$41.36	\$40.00	141	\$ 7,096

FEE PROPOSAL WORKSHEET		
COMPANY: <b>Diaz-Yourman</b>	SCOPE OF WORK: <b>Project Summary</b>	PHASE: <b>II-IV Phases</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Vallipuram Nadeswaran	Pricipal	30	@	\$80.30	\$2,409.00
Somadevan Niranjanan	Associate II	6	@	\$61.37	\$368.22
Clint Isa	Associate I	114	@	\$56.00	\$6,384.00
Edward Reinert	Project I	6	@	\$36.06	\$216.36
Chaitanya Kukutla	Staff II	194	@	\$34.62	\$6,716.28
Kelly Shaw	Staff I	80	@	\$28.00	\$2,240.00
Ashley Scholder	CADD	28	@	\$23.90	\$669.20
Sandra Diaz	Word Processor	16	@	\$22.97	\$367.52
Deanna Rose	Technical Editor	16	@	\$36.97	\$591.52

TOTAL HOURS: **490**      TOTAL AMOUNT: **\$19,962.10**

**MULTIPLIERS**

ESCALATION @		(Rates Vary by Phase)	\$924.38
OVERHEAD @ (74.35% Fringe + 141.33% OH) = 215.6%	215.7%	(of Direct Labor + Escalation)	\$45,052.13
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$6,593.86

TOTAL MULTIPLIERS: **\$52,570.36**

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Certified Industrial Hygienist	1	@	\$1,000.00	\$1,000.00
Geophysics (Utility Location)	1	SHIFT	\$2,243.00	\$1,121.50
Drillers	2	SHIFT	\$3,174.00	\$6,348.00
Equipment Rental (PID)	7	DAY	\$115.00	\$805.00
Equipment Rental (Hand Auger Kit)	5	DAY	\$230.00	\$1,150.00
ACM/LBP Evaluation	1	EA	\$9,085.000	\$9,085.00
Investigation-Derived Waste Characterization and Disposal	2	DRUM	\$595.00	\$1,190.00
Environmental Laboratory Testing	1	EA	\$27,265.00	\$27,265.00
FedEx	2	EA	\$100.00	\$200.00
Field Vehicle	96	HR	\$18.00	\$1,728.00
Permits (City and County of Riverside, City of Jurupa Valley)	3	EA	\$1,000.00	\$3,000.00

TOTAL ODC'S: **\$52,892.50**

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL

TOTAL SUBCONSULTANT SERVICES:

**GRAND TOTAL** **\$125,424.96**

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>Diaz-Yourman</b>	SCOPE OF WORK: <b>Plans, Specs &amp; Estimates</b>	PHASE: <b>Phase II</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
Vallipuram Nadeswaran	Pricipal	22	@ \$80.30	\$1,766.60
Somadevan Niranjanan	Associate II	6	@ \$61.37	\$368.22
Clint Isa	Associate I	106	@ \$56.00	\$5,936.00
Edward Reinert	Project I	6	@ \$36.06	\$216.36
Chaitanya Kukutla	Staff II	170	@ \$34.62	\$5,885.40
Kelly Shaw	Staff I	80	@ \$28.00	\$2,240.00
Ashley Scholder	CADD	28	@ \$23.90	\$669.20
Sandra Diaz	Word Processor	16	@ \$22.97	\$367.52
Deanna Rose	Technical Editor	16	@ \$36.97	\$591.52

TOTAL HOURS: **450**      TOTAL AMOUNT: **\$18,040.82**

**MULTIPLIERS**

ESCALATION @	3.75%	(of Direct Labor)	\$676.53
OVERHEAD @ (74.35% Fringe + 141.33% OH) = 215.6%	215.7%	(of Direct Labor + Escalation)	\$40,373.33
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$5,909.07

TOTAL MULTIPLIERS: **\$46,958.92**

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Certified Industrial Hygienist	1	@	\$1,000.00	\$1,000.00
Geophysics (Utility Location)	1	SHIFT @	\$2,243.00	\$1,121.50
Drillers	2	SHIFT @	\$3,174.00	\$6,348.00
Equipment Rental (PID)	7	DAY @	\$115.00	\$805.00
Equipment Rental (Hand Auger Kit)	5	DAY @	\$230.00	\$1,150.00
ACM/LBP Evaluation	1	EA @	\$9,085.000	\$9,085.00
Investigation-Derived Waste Characterization and Disposal	2	DRUM @	\$595.00	\$1,190.00
Environmental Laboratory Testing	1	EA @	\$27,265.00	\$27,265.00
FedEx	2	EA @	\$100.00	\$200.00
Field Vehicle	96	HR @	\$18.00	\$1,728.00
Permits (City and County of Riverside, City of Jurupa Valley)	3	EA @	\$1,000.00	\$3,000.00

TOTAL ODC'S: **\$52,892.50**

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL

TOTAL SUBCONSULTANT SERVICES:

**TOTAL \$117,892.24**

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>Diaz-Yourman</b>	SCOPE OF WORK: <b>Construction Support</b>	PHASE: <b>Phase IV</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT	
Vallipuram Nadeswaran	Pricipal	8	@ \$80.30	\$642.40	
Somadevan Niranjana	Associate II		\$61.37		
Clint Isa	Associate I	8	@ \$56.00	\$448.00	
Edward Reinert	Project I		\$36.06		
Chaitanya Kukutla	Staff II	24	@ \$34.62	\$830.88	
Kelly Shaw	Staff I		\$28.00		
Ashley Scholder	CADD		\$23.90		
Sandra Diaz	Word Processor		\$22.97		
Deanna Rose	Technical Editor		\$36.97		
		<b>TOTAL HOURS:</b>	<b>40</b>	<b>TOTAL AMOUNT:</b>	<b>\$1,921.28</b>

**MULTIPLIERS**

ESCALATION @	12.90%	(of Direct Labor)	\$247.85	
OVERHEAD @ (74.35% Fringe + 141.33% OH) = 215.6%	215.7%	(of Direct Labor + Escalation)	\$4,678.80	
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)		
PROFIT (FIXED FEE)	10.0%		\$684.79	
			<b>TOTAL MULTIPLIERS:</b>	<b>\$5,611.44</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT

TOTAL ODC'S:

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL

TOTAL SUBCONSULTANT SERVICES:

**TOTAL** \$7,532.72

**MAN-HOUR WORKSHEET**

COMPANY:

**Diaz-Yourman**

PROJECT:

**Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)**

SCOPE OF WORK:

**Manhour Summary**

PHASE:

**II-IV Phases**

DATE:

**August 14, 2019**

TASK	PRINCIPAL	ASSOCIATE I	ASSOCIATE II	ASSOCIATE	PROJECT	STRATE I	STRATE II	STRATE III	CADD	TRNGD PROFESSOR	TECHNICAL EDITOR	HOURS
	6	6	114	6	6	194	80	28	16	16	16	490

\$80.30 \$61.37 \$56.00 \$36.06 \$34.62 \$28.00 \$23.90 \$22.97 \$16.97

**PHASE TOTALS**

PHASE I	
PHASE II	22 6 106 6 170 80 28 16 16 450
PHASE III	
PHASE IV	8 8 24 40









**FEE PROPOSAL WORKSHEET**

COMPANY: <b>Tatsumi and Partners</b>	SCOPE OF WORK: <b>Project Summary</b>	PHASE: <b>II-IV Phases</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
David Tatsumi	Sr. Pricipal	28	@ \$92.31	\$2,584.68
Ryohei Ota	Associate/Sr. Project Manager	122	@ \$44.00	\$5,368.00
Jimmy Ogata	Senior Technical Staff	100	@ \$38.50	\$3,850.00
Nathan Quy	Technical Staff	210	@ \$36.50	\$7,665.00
Weywantheavy Kang	Landscape Staff	208	@ \$27.00	\$5,616.00
<b>TOTAL HOURS:</b>		<b>668</b>	<b>TOTAL AMOUNT:</b>	<b>\$25,083.68</b>

**MULTIPLIERS**

ESCALATION @	(Rates Vary by Phase)	\$1,161.72
OVERHEAD @ (0.0% Fringe + 179.0% OH) = 179.0%	179.00% (of Direct Labor + Escalation)	\$46,979.27
PAYROLL ADDITIVES @	(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%	\$7,322.47
<b>TOTAL MULTIPLIERS:</b>		<b>\$55,463.46</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction	20	EA @	\$13.50	\$270.00
CD (Digital Files)	1	EA @	\$10.00	\$10.00
Soil Tests	4	EA @	\$75.00	\$300.00
Mileage	516	MI @	\$0.545	\$281.22
<b>TOTAL ODC'S:</b>				<b>\$861.22</b>

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL

TOTAL SUBCONSULTANT SERVICES:

**GRAND TOTAL \$81,408.36**

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>Tatsumi and Partners</b>	SCOPE OF WORK: <b>Plans, Specs &amp; Estimates</b>	PHASE: <b>Phase II</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
David Tatsumi	Sr. Pricipal	26	@ \$92.31	\$2,400.06
Ryohei Ota	Associate/Sr. Project Manager	110	@ \$44.00	\$4,840.00
Jimmy Ogata	Senior Technical Staff	92	@ \$38.50	\$3,542.00
Nathan Quy	Technical Staff	190	@ \$36.50	\$6,935.00
Weywantheawy Kang	Landscape Staff	188	@ \$27.00	\$5,076.00
<b>TOTAL HOURS:</b>		<b>606</b>	<b>TOTAL AMOUNT:</b>	<b>\$22,793.06</b>

**MULTIPLIERS**

ESCALATION @	3.61%	(of Direct Labor)	\$823.86
OVERHEAD @ (0.0% Fringe + 179.0% OH) = 179.0%	179.00%	(of Direct Labor + Escalation)	\$42,274.28
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$6,589.12
<b>TOTAL MULTIPLIERS:</b>			<b>\$49,687.25</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction	20	EA	@ \$13.50	\$270.00
CD (Digital Files)	1	EA	@ \$10.00	\$10.00
Soil Tests	4	EA	@ \$75.00	\$300.00
Mileage	516	MI	@ \$0.545	\$281.22
<b>TOTAL ODCs:</b>				<b>\$861.22</b>

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL

TOTAL SUBCONSULTANT SERVICES:

**TOTAL** **\$73,341.53**

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>Tatsumi and Partners</b>	SCOPE OF WORK: <b>Construction Support</b>	PHASE: <b>Phase IV</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
David Tatsumi	Sr. Pricipal	2	@ \$92.31	\$184.62
Ryohei Ota	Associate/Sr. Project Manager	12	@ \$44.00	\$528.00
Jimmy Ogata	Senior Technical Staff	8	@ \$38.50	\$308.00
Nathan Quy	Technical Staff	20	@ \$36.50	\$730.00
Weywantheawy Kang	Landscape Staff	20	@ \$27.00	\$540.00
<b>TOTAL HOURS:</b>		<b>62</b>	<b>TOTAL AMOUNT:</b>	<b>\$2,290.62</b>

**MULTIPLIERS**

ESCALATION @	14.75%	(of Direct Labor)	\$337.87
OVERHEAD @ (0.0% Fringe + 179.0% OH) = 179.0%	179.00%	(of Direct Labor + Escalation)	\$4,704.99
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$733.35
<b>TOTAL MULTIPLIERS:</b>			<b>\$5,776.20</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
<b>TOTAL ODC'S:</b>				

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
<b>TOTAL SUBCONSULTANT SERVICES:</b>				

**TOTAL** **\$8,066.82**



**MANHOUR WORKSHEET**

COMPANY: **Tatsumi and Partners**      SCOPE OF WORK: **Phase II Plans, Specs & Estimates**      PHASE: **Phase II**  
 PROJECT: **Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)**      DATE: **August 19, 2019**

TASK	APPROVAL PROJECT MANAGER	SENIOR TECHNICIAN / EST	PROJECT ENGINEER	LABORER / STAFF	HOURS	COST

**Total Manhours**      \$92.00    \$44.00    \$38.50    \$36.50    \$27.00      **26**    **110**    **92**    **190**    **188**      **606**    **22,793**

<b>Article All - Project Administration</b>						
A. Project Management						
Project Management Plan / Work Plan						
Project Chronology						
B. Budgeting						
Project Budgeting						
C. Cost Accounting						
Project Cost Accounting						
D. Scheduling						
Project Scheduling						
E. Progress Reporting						
Progress Reporting						
F. Contract Administration						
Contract Administration Services						
G. Deliverables						
Per Specific Items						
<b>Article All - Planning and Proj. Dev.</b>						
A. Research and Data Gathering						
Obtain Updated Project Information						
B. Project Development Team						
Monthly PDT Meetings						
C. Permits						
Encroachment and Right-of-Entry Permits						
D. Design Surveys						
Coordinate with County Survey						
E. Final Drainage and Bridge Hydraulics						
Final On-Site Drainage Report						
Update Final TPG						
Final Bridge Hydraulics Report						
F. SWPPP						
Draft and Final SWPPP						
G. Phase II Site Assessment						







**FEE PROPOSAL WORKSHEET**

COMPANY: <b>Chang Consultants</b>	SCOPE OF WORK: <b>Project Summary</b>	PHASE: <b>II-IV Phases</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
Wayne Chang	Principal	390	@ \$64.940	\$25,326.60
		<b>TOTAL HOURS:</b>	<b>390</b>	<b>TOTAL AMOUNT:</b>
				<b>\$25,326.60</b>

**MULTIPLIERS**

ESCALATION @		(Rates Vary by Phase)	\$1,172.96
OVERHEAD @ (Safe Harbor Rate)	115.00%	(of Direct Labor + Escalation)	\$30,474.49
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$5,697.41
<b>TOTAL MULTIPLIERS:</b>			<b>\$37,344.86</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction	1	EA @	\$500.00	\$500.00
CLOMR Processing Fee	1	EA @	\$7,250.00	\$7,250.00
LOMR Processing Fee	1	EA @	\$8,250.00	\$8,250.00
LOMR (1 Map Panel) Fee	1	EA @	\$2,500.00	\$2,500.00
FEMA processing fees subject to change				
<b>TOTAL ODC'S:</b>				<b>\$18,500.00</b>

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL

TOTAL SUBCONSULTANT SERVICES:

**GRAND TOTAL** **\$81,171.46**

FEE PROPOSAL WORKSHEET		
COMPANY: <b>Chang Consultants</b>	SCOPE OF WORK: <b>Plans, Specs &amp; Estimates</b>	PHASE: <b>Phase II</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
Wayne Chang	Principal	370	@ \$64.94	\$24,027.80
		<b>TOTAL HOURS:</b>	<b>370</b>	<b>TOTAL AMOUNT: \$24,027.80</b>

**MULTIPLIERS**

ESCALATION @	4.12%	(of Direct Labor)	\$989.95
OVERHEAD @ (Safe Harbor Rate)	115.00%	(of Direct Labor + Escalation)	\$28,770.41
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$5,378.82
			<b>TOTAL MULTIPLIERS: \$35,139.17</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction	1	EA @	\$500.00	\$500.00
CLOMR Processing Fee	1	EA @	\$7,250.00	\$7,250.00
LOMR Processing Fee	1	EA @	\$8,250.00	\$8,250.00
LOMR (1 Map Panel) Fee	1	EA @	\$2,500.00	\$2,500.00
FEMA processing fees subject to change				
				<b>TOTAL ODC'S: \$18,500.00</b>

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL

TOTAL SUBCONSULTANT SERVICES:

**TOTAL \$77,666.97**

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>Chang Consultants</b>	SCOPE OF WORK: <b>Construction Support</b>	PHASE: <b>Phase IV</b>
PROJECT: <b>Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)</b>		DATE: <b>August 14, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
Wayne Chang	Pricipal	20	@ \$64.94	\$1,298.80
		<b>TOTAL HOURS:</b>	<b>20</b>	<b>TOTAL AMOUNT:</b>
				<b>\$1,298.80</b>

**MULTIPLIERS**

ESCALATION @	14.09%	(of Direct Labor)	\$183.01
OVERHEAD @ (Safe Harbor Rate)	115.00%	(of Direct Labor + Escalation)	\$1,704.09
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE)	10.0%		\$318.59
<b>TOTAL MULTIPLIERS:</b>			<b>\$2,205.69</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
<b>TOTAL ODC'S:</b>				

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL
<b>TOTAL SUBCONSULTANT SERVICES:</b>				

**TOTAL** **\$3,504.49**



**MANHOUR WORKSHEET**

COMPANY:

Chang Consultants

PROJECT:

Replacement of Mission Boulevard Bridge at Santa Ana River (Br. No. 56C-0071)

SCOPE OF WORK:

Plans, Specs & Estimates

PHASE:

Phase II

DATE:

August 19, 2019

TASK	HOURS
------	-------

<b>Total Manhours</b>	<b>370</b>
-----------------------	------------

Task Description	Hours	Cost
<b>Article All - Project Administration</b>		
A. Project Management		
Project Management		
Project Management Plan / Work Plan		
Project Chronology		
B. Budgeting		
Project Budgeting		
C. Cost Accounting		
Project Cost Accounting		
D. Scheduling		
Project Scheduling		
E. Progress Reporting		
Progress Reporting		
F. Contract Administration		
Contract Administration Services		
G. Deliverables		
Per Specific Items		
<b>Article AllI - Planning and Proj. Dev.</b>		
A. Research and Data Gathering		
Obtain Updated Project Information		
B. Project Development Team		
Monthly PDT Meetings		
C. Permits		
Encroachment and Right-of-Entry Permits		
D. Design Surveys		
Coordinate with County Survey		
E. Final Drainage and Bridge Hydraulics		
Final On-Site Drainage Report		
Update Final TPG		
Final Bridge Hydraulics Report	370	
F. SWPPP		
Draft and Final SWPPP		
G. Phase II Site Assessment		
		<b>\$ 24,028</b>







## **AMENDMENT 1 • APPENDIX 1D**

### **Maximum Position Hourly Rates**

**KLEINFELDER**

**Staff Escalations**

Kleinfelder

Function	2019		2020		2021		2022		2023		2024		2025	
	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Project Manager	\$ 106.98	\$ 110.72	\$ 114.60	\$ 118.61	\$ 122.76	\$ 127.06	\$ 131.51							
Senior Structural Engineer	\$ 85.09	\$ 88.07	\$ 91.15	\$ 94.34	\$ 97.64	\$ 101.06	\$ 104.60							
Senior Bridge Engineer	\$ 74.04	\$ 76.63	\$ 79.31	\$ 82.09	\$ 84.96	\$ 87.94	\$ 91.01							
Senior Bridge Engineer	\$ 56.75	\$ 58.74	\$ 60.79	\$ 62.92	\$ 65.12	\$ 67.40	\$ 69.76							
Assistant Engineer	\$ 38.46	\$ 39.81	\$ 41.20	\$ 42.64	\$ 44.13	\$ 45.68	\$ 47.28							
Senior Technician	\$ 64.90	\$ 67.17	\$ 69.52	\$ 71.96	\$ 74.47	\$ 77.08	\$ 79.78							
Deputy Project Manager	\$ 55.77	\$ 57.72	\$ 59.74	\$ 61.83	\$ 64.00	\$ 66.24	\$ 68.56							
Project Controls	\$ 42.55	\$ 44.04	\$ 45.58	\$ 47.18	\$ 48.83	\$ 50.54	\$ 52.30							
Sr. Project Manager/Geotechnical	\$ 88.95	\$ 92.06	\$ 95.29	\$ 98.62	\$ 102.07	\$ 105.64	\$ 109.34							
Sr. Seismic Engineer	\$ 82.74	\$ 85.64	\$ 88.63	\$ 91.74	\$ 94.95	\$ 98.27	\$ 101.71							
Sr. Geotechnical Engineer	\$ 70.67	\$ 73.14	\$ 75.70	\$ 78.35	\$ 81.10	\$ 83.93	\$ 86.87							
Sr. Geologist	\$ 57.21	\$ 59.21	\$ 61.28	\$ 63.43	\$ 65.65	\$ 67.95	\$ 70.33							
Project Geotechnical Engineer	\$ 38.46	\$ 39.81	\$ 41.20	\$ 42.64	\$ 44.13	\$ 45.68	\$ 47.28							
Staff Geotechnical Engineer	\$ 34.18	\$ 35.38	\$ 36.61	\$ 37.90	\$ 39.22	\$ 40.60	\$ 42.02							
Sr. CADD/GIS	\$ 42.31	\$ 43.79	\$ 45.32	\$ 46.91	\$ 48.55	\$ 50.25	\$ 52.01							
Project Administrator / Word Processing	\$ 32.00	\$ 33.12	\$ 34.28	\$ 35.48	\$ 36.72	\$ 38.01	\$ 39.34							
Technical Reviews	\$ 65.77	\$ 68.07	\$ 70.45	\$ 72.92	\$ 75.47	\$ 78.11	\$ 80.85							
3D Design and Visualization Specialist	\$ 48.18	\$ 49.87	\$ 51.61	\$ 53.42	\$ 55.29	\$ 57.22	\$ 59.23							
Staff Architect / QA/QC	\$ 31.11	\$ 32.20	\$ 33.33	\$ 34.49	\$ 35.70	\$ 36.95	\$ 38.24							
Administrative	\$ 37.34	\$ 38.65	\$ 40.00	\$ 41.40	\$ 42.85	\$ 44.35	\$ 45.90							
Administrative	\$ 22.43	\$ 23.22	\$ 24.03	\$ 24.87	\$ 25.74	\$ 26.64	\$ 27.57							

LSA

Staff Escalations

LSA

Function	2019		2020		2021		2022		2023		2024		2025	
	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max	Max
Principal in Charge	\$ 115.83	\$ 119.88	\$ 124.08	\$ 128.42	\$ 132.92	\$ 137.57	\$ 142.38							
Environmental Task Manager	\$ 52.03	\$ 53.85	\$ 55.74	\$ 57.69	\$ 59.71	\$ 61.80	\$ 63.96							
Principal Technical Staff	\$ 77.63	\$ 80.35	\$ 83.16	\$ 86.07	\$ 89.08	\$ 92.20	\$ 95.43							
Associate Technical Staff	\$ 57.08	\$ 59.08	\$ 61.15	\$ 63.29	\$ 65.50	\$ 67.79	\$ 70.17							
Senior Technical Staff	\$ 47.41	\$ 49.07	\$ 50.79	\$ 52.56	\$ 54.40	\$ 56.31	\$ 58.28							
Technical Staff	\$ 32.15	\$ 33.28	\$ 34.44	\$ 35.65	\$ 36.89	\$ 38.18	\$ 39.52							
Assistant Technical Staff	\$ 28.08	\$ 29.06	\$ 30.08	\$ 31.13	\$ 32.22	\$ 33.35	\$ 34.52							
Word Processing	\$ 35.10	\$ 36.33	\$ 37.60	\$ 38.92	\$ 40.28	\$ 41.69	\$ 43.15							
GIS	\$ 61.24	\$ 63.38	\$ 65.60	\$ 67.90	\$ 70.27	\$ 72.73	\$ 75.28							
Administrative Support	\$ 22.48	\$ 23.27	\$ 24.08	\$ 24.92	\$ 25.80	\$ 26.70	\$ 27.63							

**KIMLEY-HORN**

**Staff Escalations**

KHA

Function	2019	2020	2021	2022	2023	2024	2025
	Max	Max	Max	Max	Max	Max	Max
Senior Roadway Engineer	\$ 89.92	\$ 93.07	\$ 96.32	\$ 99.70	\$ 103.19	\$ 106.80	\$ 110.53
Traffic Engineer	\$ 62.26	\$ 64.44	\$ 66.69	\$ 69.03	\$ 71.44	\$ 73.95	\$ 76.53
QC/Senior Engineer	\$ 75.00	\$ 77.63	\$ 80.34	\$ 83.15	\$ 86.06	\$ 89.08	\$ 92.19
Landscape Architect	\$ 60.10	\$ 62.20	\$ 64.38	\$ 66.63	\$ 68.97	\$ 71.38	\$ 73.88
Project Engineer Civil	\$ 41.36	\$ 42.81	\$ 44.31	\$ 45.86	\$ 47.46	\$ 49.12	\$ 50.84
Project Engineer Traffic	\$ 42.56	\$ 44.05	\$ 45.59	\$ 47.19	\$ 48.84	\$ 50.55	\$ 52.32
Engineer	\$ 37.74	\$ 39.06	\$ 40.43	\$ 41.84	\$ 43.31	\$ 44.82	\$ 46.39
Assistant Engineer/Technician	\$ 31.26	\$ 32.35	\$ 33.49	\$ 34.66	\$ 35.87	\$ 37.13	\$ 38.43
CADD Designer	\$ 40.00	\$ 41.40	\$ 42.85	\$ 44.35	\$ 45.90	\$ 47.51	\$ 49.17
Administrative	\$ 36.30	\$ 37.57	\$ 38.89	\$ 40.25	\$ 41.66	\$ 43.11	\$ 44.62

DIAZ-YOURMAN

Staff Escalations

DYA

Function	2019	2020	2021	2022	2023	2024	2025
	Max	Max	Max	Max	Max	Max	Max
Principal	\$ 80.30	\$ 83.11	\$ 86.02	\$ 89.03	\$ 92.15	\$ 95.37	\$ 98.71
Associate II	\$ 61.37	\$ 63.52	\$ 65.74	\$ 68.04	\$ 70.42	\$ 72.89	\$ 75.44
Associate I	\$ 56.00	\$ 57.96	\$ 59.99	\$ 62.09	\$ 64.26	\$ 66.51	\$ 68.84
Project I	\$ 36.06	\$ 37.32	\$ 38.63	\$ 39.98	\$ 41.38	\$ 42.83	\$ 44.33
Staff II	\$ 34.62	\$ 35.83	\$ 37.09	\$ 38.38	\$ 39.73	\$ 41.12	\$ 42.56
Staff I	\$ 28.00	\$ 28.98	\$ 29.99	\$ 31.04	\$ 32.13	\$ 33.26	\$ 34.42
CADD	\$ 23.90	\$ 24.74	\$ 25.60	\$ 26.50	\$ 27.43	\$ 28.39	\$ 29.38
Word Processor	\$ 22.97	\$ 23.77	\$ 24.61	\$ 25.47	\$ 26.36	\$ 27.28	\$ 28.24
Technical Editor	\$ 36.97	\$ 38.26	\$ 39.60	\$ 40.99	\$ 42.42	\$ 43.91	\$ 45.45

TATSUMI

Staff Escalations

TAP

Function	2019	2020	2021	2022	2023	2024	2025
	Max	Max	Max	Max	Max	Max	Max
Senior Principal	\$ 92.31	\$ 95.54	\$ 98.88	\$ 102.35	\$ 105.93	\$ 109.64	\$ 113.47
Associate/St. Project Manager	\$ 46.40	\$ 48.02	\$ 49.70	\$ 51.44	\$ 53.25	\$ 55.11	\$ 57.04
Senior Technical Staff	\$ 41.00	\$ 42.44	\$ 43.92	\$ 45.46	\$ 47.05	\$ 48.70	\$ 50.40
Technical Staff	\$ 38.50	\$ 39.85	\$ 41.24	\$ 42.69	\$ 44.18	\$ 45.73	\$ 47.33
Landscape Staff	\$ 29.00	\$ 30.02	\$ 31.07	\$ 32.15	\$ 33.28	\$ 34.44	\$ 35.65

**CHANG**

**Staff Escalations**

Chang

Function	2019	2020	2021	2022	2023	2024	2025
	Max	Max	Max	Max	Max	Max	Max
Principal	\$ 64.94	\$ 67.21	\$ 69.57	\$ 72.00	\$ 74.52	\$ 77.13	\$ 79.83

## **AMENDMENT 1 • APPENDIX 1E**

### **Mandatory Fiscal and Federal Provisions (Verbatim)**

**APPENDIX E MANDATORY FISCAL AND FEDERAL PROVISIONS**

(Based on Caltrans 10-R Dated August 2016)

**Definitions:**

- A. CONSULTANT means the same as ENGINEER in the Agreement.
- B. Contract means the same as Agreement in the Agreement.
- C. LOCAL AGENCY means the same as COUNTY in the Agreement
- D. Contract Administrator means the same as COUNTY PROJECT MANAGER in the Agreement

**Mandatory Fiscal and Federal provisions:**

Article I	Performance Period .....	E-1
Article II	Allowable Costs and Payments .....	E-1
Article III	Termination .....	E-2
Article IV	Cost Principles and Administrative Requirements .....	E-3
Article V	Retention of Records/Audit .....	E-3
Article VI	Audit Review Procedures .....	E-3
Article VII	Subcontracting.....	E-3
Article VIII	Equipment Purchase .....	E-4
Article IX	State Prevailing Wage Rates .....	E-4
Article X	Conflict of Interest .....	E-5
Article XI	Rebates, Kickbacks or other Unlawful Consideration .....	E-5
Article XII	Prohibition of Expending Local Agency State or Federal Funds for Lobbying.....	E-5
Article XIII	Statement of Compliance .....	E-6
Article XIV	Debarment and Suspension Certification .....	E-6
Article XV	Disadvantaged Business Enterprises (DBE) Participation .....	E-7

**ARTICLE I PERFORMANCE PERIOD (Verbatim)**

- A. This contract shall go into effect on \_\_\_\_\_ contingent upon approval by LOCAL AGENCY, and CONSULTANT shall commence work after notification to proceed by LOCAL AGENCY’S Contract Administrator. The contract shall end on **December 31, 2025** unless extended by contract amendment.
- B. CONSULTANT is advised that any recommendation for contract award is not binding on LOCAL AGENCY until the contract is fully executed and approved by LOCAL AGENCY.

**ARTICLE II ALLOWABLE COSTS AND PAYMENTS (Verbatim)**

- A. The method of payment for this contract will be based on actual cost plus a fixed fee. LOCAL AGENCY will reimburse CONSULTANT for actual costs (including labor costs, employee benefits, travel, equipment rental costs, overhead and other direct costs) incurred by CONSULTANT in performance of the work. CONSULTANT will not be reimbursed for actual costs that exceed the estimated wage rates, employee benefits, travel, equipment rental, overhead, and other estimated costs set forth in the approved CONSULTANT’S Cost Proposal, unless additional reimbursement is provided for by contract amendment. In no event, will CONSULTANT be reimbursed for overhead costs at a rate that exceeds LOCAL AGENCY’S approved overhead rate set forth in the Cost Proposal. In the event, that LOCAL AGENCY determines that a change to the work from that specified in the Cost Proposal and contract is required, the contract time or actual costs reimbursable by LOCAL AGENCY shall be adjusted by contract amendment to accommodate the changed work. The maximum total cost as specified in Paragraph “H” shall not be exceeded, unless authorized by contract amendment.

*Replacement of Mission Boulevard Bridge at Santa Ana River*

- B. In addition to the allowable incurred costs, LOCAL AGENCY will pay CONSULTANT a fixed fee of **\$213,133.71**. The fixed fee is nonadjustable for the term of the contract, except in the event of a significant change in the scope of work and such adjustment is made by contract amendment.
- C. Reimbursement for transportation and subsistence costs shall not exceed the rates specified in the approved Cost Proposal.
- D. When milestone cost estimates are included in the approved Cost Proposal, CONSULTANT shall obtain prior written approval for a revised milestone cost estimate from the Contract Administrator before exceeding such cost estimate.
- E. Progress payments will be made monthly in arrears based on services provided and allowable incurred costs. A pro rata portion of CONSULTANT's fixed fee will be included in the monthly progress payments. If CONSULTANT fails to submit the required deliverable items according to the schedule set forth in the Statement of Work, LOCAL AGENCY shall have the right to delay payment or terminate this Contract in accordance with the provisions of Article VI Termination.
- F. No payment will be made prior to approval of any work, nor for any work performed prior to approval of this contract.
- G. CONSULTANT will be reimbursed, as promptly as fiscal procedures will permit upon receipt by LOCAL AGENCY's Contract Administrator of itemized invoices in triplicate. Invoices shall be submitted no later than 45 calendar days after the performance of work for which CONSULTANT is billing. Invoices shall detail the work performed on each milestone and each project as applicable. Invoices shall follow the format stipulated for the approved Cost Proposal and shall reference this contract number and project title. Final invoice must contain the final cost and all credits due LOCAL AGENCY including any equipment purchased under the provisions of Article XI Equipment Purchase of this contract. The final invoice should be submitted within 60 calendar days after completion of CONSULTANT's work. Invoices shall be mailed to LOCAL AGENCY's Contract Administrator at the following address:

TLMA Account Payable

Cesar Tolentino PE, County Project Manager  
PO BOX 1605  
Riverside, CA 92502

- H. The total amount payable by LOCAL AGENCY including the fixed fee shall not exceed **\$4,695,009**.
- I. Salary increases will be reimbursable if the new salary is within the salary range identified in the approved Cost Proposal and is approved by LOCAL AGENCY's Contract Administrator.
- J. For personnel subject to prevailing wage rates as described in the California Labor Code, all salary increases, which are the direct result of changes in the prevailing wage rates are reimbursable.

**ARTICLE III TERMINATION (Verbatim)**

- A. LOCAL AGENCY reserves the right to terminate this contract upon thirty (30) calendar days written notice to CONSULTANT with the reasons for termination stated in the notice.
- B. LOCAL AGENCY may terminate this contract with CONSULTANT should CONSULTANT fail to perform the covenants herein contained at the time and in the manner herein provided. In the event of such termination, LOCAL AGENCY may proceed with the work in any manner deemed proper by LOCAL AGENCY. If LOCAL AGENCY terminates this contract with CONSULTANT, LOCAL AGENCY shall pay CONSULTANT the sum due to CONSULTANT under this contract prior to termination, unless the cost of completion to LOCAL AGENCY exceeds the funds remaining in the contract. In which case the overage shall be deducted from any sum due CONSULTANT under this contract and the balance, if any, shall be paid to CONSULTANT upon demand.
- C. The maximum amount for which the LOCAL AGENCY shall be liable if this contract is terminated is **\$4,695,009** dollars.

**ARTICLE IV COST PRINCIPLES AND ADMINISTRATIVE REQUIREMENTS (Verbatim)**

- A. CONSULTANT agrees that the Contract Cost Principles and Procedures, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., shall be used to determine the cost allowability of individual items.
- B. CONSULTANT also agrees to comply with federal procedures in accordance with 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments.
- C. Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 49 CFR, Part 18 and 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31.000 et seq., are subject to repayment by CONSULTANT to LOCAL AGENCY.

**ARTICLE V RETENTION OF RECORDS/AUDIT (Verbatim)**

For the purpose of determining compliance with Public Contract Code 10115, et seq. and Title 21, California Code of Regulations, Chapter 21, Section 2500 et seq., when applicable and other matters connected with the performance of the contract pursuant to Government Code 8546.7; CONSULTANT, subconsultants, and LOCAL AGENCY shall maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of the contract, including but not limited to, the costs of administering the contract. All parties shall make such materials available at their respective offices at all reasonable times during the contract period and for three years from the date of final payment under the contract. The state, State Auditor, LOCAL AGENCY, FHWA, or any duly authorized representative of the Federal Government shall have access to any books, records, and documents of CONSULTANT and its certified public accountants (CPA) work papers that are pertinent to the contract and indirect cost rates (ICR) for audit, examinations, excerpts, and transactions, and copies thereof shall be furnished if requested.

**ARTICLE VI AUDIT REVIEW PROCEDURES (Verbatim)**

- A. Any dispute concerning a question of fact arising under an interim or post audit of this contract that is not disposed of by agreement, shall be reviewed by LOCAL AGENCY'S Chief Financial Officer.
- B. Not later than 30 days after issuance of the final audit report, CONSULTANT may request a review by LOCAL AGENCY'S Chief Financial Officer of unresolved audit issues. The request for review will be submitted in writing.
- C. Neither the pendency of a dispute nor its consideration by LOCAL AGENCY will excuse CONSULTANT from full and timely performance, in accordance with the terms of this contract.
- D. CONSULTANT and subconsultant contracts, including cost proposals and ICR, are subject to audits or reviews such as, but not limited to, a contract audit, an incurred cost audit, an ICR Audit, or a CPA ICR audit work paper review. If selected for audit or review, the contract, cost proposal and ICR and related work papers, if applicable, will be reviewed to verify compliance with 48 CFR, Part 31 and other related laws and regulations. In the instances of a CPA ICR audit work paper review it is CONSULTANT'S responsibility to ensure federal, state, or local government officials are allowed full access to the CPA'S work papers including making copies as necessary. The contract, cost proposal, and ICR shall be adjusted by CONSULTANT and approved by LOCAL AGENCY contract manager to conform to the audit or review recommendations. CONSULTANT agrees that individual terms of costs identified in the audit report shall be incorporated into the contract by this reference if directed by LOCAL AGENCY at its sole discretion. Refusal by CONSULTANT to incorporate audit or review recommendations, or to ensure that the federal, state or local governments have access to CPA work papers, will be considered a breach of contract terms and cause for termination of the contract and disallowance of prior reimbursed costs.

**ARTICLE VII SUBCONTRACTING (Verbatim)**

- A. Nothing contained in this contract or otherwise, shall create any contractual relation between LOCAL AGENCY and any subconsultant(s), and no subcontract shall relieve CONSULTANT of its responsibilities

*Replacement of Mission Boulevard Bridge at Santa Ana River*

and obligations hereunder. CONSULTANT agrees to be as fully responsible to LOCAL AGENCY for the acts and omissions of its subconsultant(s) and of persons either directly or indirectly employed by any of them as it is for the acts and omissions of persons directly employed by CONSULTANT. CONSULTANT's obligation to pay its subconsultant(s) is an independent obligation from LOCAL AGENCY'S obligation to make payments to the CONSULTANT.

- B. CONSULTANT shall perform the work contemplated with resources available within its own organization and no portion of the work pertinent to this contract shall be subcontracted without written authorization by LOCAL AGENCY's Contract Administrator, except that, which is expressly identified in the approved Cost Proposal.
- C. CONSULTANT shall pay its subconsultants within ten (10) calendar days from receipt of each payment made to CONSULTANT by LOCAL AGENCY.
- D. All subcontracts entered into as a result of this contract shall contain all the provisions stipulated in this contract to be applicable to subconsultants.
- E. Any substitution of subconsultant(s) must be approved in writing by LOCAL AGENCY's Contract Administrator prior to the start of work by the subconsultant(s).

**ARTICLE VIII EQUIPMENT PURCHASE (Verbatim)**

- A. Prior authorization in writing, by LOCAL AGENCY's Contract Administrator shall be required before CONSULTANT enters into any unbudgeted purchase order, or subcontract exceeding \$5,000 for supplies, equipment, or CONSULTANT services. CONSULTANT shall provide an evaluation of the necessity or desirability of incurring such costs.
- B. For purchase of any item, service or consulting work not covered in CONSULTANT's Cost Proposal and exceeding \$5,000 prior authorization by LOCAL AGENCY's Contract Administrator; three competitive quotations must be submitted with the request, or the absence of bidding must be adequately justified.
- C. Any equipment purchased as a result of this contract is subject to the following: "CONSULTANT shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of \$5,000 or more. If the purchased equipment needs replacement and is sold or traded in, LOCAL AGENCY shall receive a proper refund or credit at the conclusion of the contract, or if the contract is terminated, CONSULTANT may either keep the equipment and credit LOCAL AGENCY in an amount equal to its fair market value, or sell such equipment at the best price obtainable at a public or private sale, in accordance with established LOCAL AGENCY procedures; and credit LOCAL AGENCY in an amount equal to the sales price. If CONSULTANT elects to keep the equipment, fair market value shall be determined at CONSULTANT's expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable to by LOCAL AGENCY and CONSULTANT, if it is determined to sell the equipment, the terms and conditions of such sale must be approved in advance by LOCAL AGENCY." 49 CFR, Part 18 requires a credit to Federal funds when participating equipment with a fair market value greater than \$5,000 is credited to the project.

**ARTICLE IX STATE PREVAILING WAGE RATES (Verbatim)**

- A. CONSULTANT shall comply with the State of California's General Prevailing Wage Rate requirements in accordance with California Labor Code, Section 1770, and all Federal, State, and local laws and ordinances applicable to the work.
- B. Any subcontract entered into as a result of this contract, if for more than \$25,000 for public works construction or more than \$15,000 for the alteration, demolition, repair, or maintenance of public works, shall contain all of the provisions of this Article, unless the awarding agency has an approved labor compliance program by the Director of Industrial Relations.

*Replacement of Mission Boulevard Bridge at Santa Ana River*

- C. When prevailing wages apply to the services described in the scope of work, transportation and subsistence costs shall be reimbursed at the minimum rates set by the Department of Industrial Relations (DIR) as outlined in the applicable Prevailing Wage Determination. See <http://www.dir.ca.gov>.

**ARTICLE X CONFLICT OF INTEREST (Verbatim)**

- A. CONSULTANT shall disclose any financial, business, or other relationship with LOCAL AGENCY that may have an impact upon the outcome of this contract, or any ensuing LOCAL AGENCY construction project. CONSULTANT shall also list current clients who may have a financial interest in the outcome of this contract, or any ensuing LOCAL AGENCY construction project, which will follow.
- B. CONSULTANT hereby certifies that it does not now have, nor shall it acquire any financial or business interest that would conflict with the performance of services under this contract.
- C. CONSULTANT hereby certifies that neither CONSULTANT, nor any firm affiliated with CONSULTANT will bid on any construction contract, or on any contract to provide construction inspection for any construction project resulting from this contract. An affiliated firm is one, which is subject to the control of the same persons through joint-ownership, or otherwise.
- D. Except for subconsultants whose services are limited to providing surveying or materials testing information, no subconsultant who has provided design services in connection with this contract shall be eligible to bid on any construction contract, or on any contract to provide construction inspection for any construction project resulting from this contract.

**ARTICLE XI REBATES, KICKBACKS OR OTHER UNLAWFUL CONSIDERATION (Verbatim)**

CONSULTANT warrants that this contract was not obtained or secured through rebates kickbacks or other unlawful consideration, either promised or paid to any LOCAL AGENCY employee. For breach or violation of this warranty, LOCAL AGENCY shall have the right in its discretion; to terminate the contract without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

**ARTICLE XII PROHIBITION OF EXPENDING LOCAL AGENCY STATE OR FEDERAL FUNDS FOR LOBBYING (Verbatim)**

- A. CONSULTANT certifies to the best of his or her knowledge and belief that:
1. No state, federal or local agency appropriated funds have been paid, or will be paid by-or-on behalf of CONSULTANT to any person for influencing or attempting to influence an officer or employee of any state or federal agency; a Member of the State Legislature or United States Congress; an officer or employee of the Legislature or Congress; or any employee of a Member of the Legislature or Congress, in connection with the awarding of any state or federal contract; the making of any state or federal grant; the making of any state or federal loan; the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or cooperative agreement.
  2. If any funds other than federal appropriated funds have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency; a Member of Congress; an officer or employee of Congress, or an employee of a Member of Congress; in connection with this federal contract, grant, loan, or cooperative agreement; CONSULTANT shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.
- B. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

- C. CONSULTANT also agrees by signing this document that he or she shall require that the language of this certification be included in all lower-tier subcontracts, which exceed \$100,000 and that all such sub recipients shall certify and disclose accordingly.

#### **ARTICLE XIII STATEMENT OF COMPLIANCE**

- A. CONSULTANT's signature affixed herein, and dated, shall constitute a certification under penalty of perjury under the laws of the State of California that CONSULTANT has, unless exempt, complied with, the nondiscrimination program requirements of Government Code Section 12990 and Title 2, California Administrative Code, Section 8103.
- B. During the performance of this Contract, Consultant and its subconsultants shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability, medical condition (e.g., cancer), age (over 40), marital status, and denial of family care leave. Consultant and subconsultants shall insure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Consultant and subconsultants shall comply with the provisions of the Fair Employment and Housing Act (Gov. Code §12990 (a-f) et seq.) and the applicable regulations promulgated there under (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Contract by reference and made a part hereof as if set forth in full. Consultant and its subconsultants shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.
- C. The Consultant shall comply with regulations relative to Title VI (nondiscrimination in federally-assisted programs of the Department of Transportation – Title 49 Code of Federal Regulations, Part 21 - Effectuation of Title VI of the 1964 Civil Rights Act). Title VI provides that the recipients of federal assistance will implement and maintain a policy of nondiscrimination in which no person in the state of California shall, on the basis of race, color, national origin, religion, sex, age, disability, be excluded from participation in, denied the benefits of or subject to discrimination under any program or activity by the recipients of federal assistance or their assignees and successors in interest.
- D. The Consultant, with regard to the work performed by it during the Agreement shall act in accordance with Title VI. Specifically, the Consultant shall not discriminate on the basis of race, color, national origin, religion, sex, age, or disability in the selection and retention of Subconsultants, including procurement of materials and leases of equipment. The Consultant shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the U.S. DOT's Regulations, including employment practices when the Agreement covers a program whose goal is employment.

#### **ARTICLE XIV DEBARMENT AND SUSPENSION CERTIFICATION**

- A. CONSULTANT's signature affixed herein, shall constitute a certification under penalty of perjury under the laws of the State of California, that CONSULTANT has complied with Title 2 CFR, Part 180, "OMB Guidelines to Agencies on Government wide Debarment and Suspension (nonprocurement)", which certifies that he/she or any person associated therewith in the capacity of owner, partner, director, officer, or manager, is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency; has not been suspended, debarred, voluntarily excluded, or determined ineligible by any federal agency within the past three (3) years; does not have a proposed debarment pending; and has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years. Any exceptions to this certification must be disclosed to LOCAL AGENCY.
- B. Exceptions will not necessarily result in denial of recommendation for award, but will be considered in determining CONSULTANT responsibility. Disclosures must indicate to whom exceptions apply, initiating agency, and dates of action.

- C. Exceptions to the Federal Government Excluded Parties List System maintained by the General Services Administration are to be determined by the Federal highway Administration.

**ARTICLE XV DISADVANTAGED BUSINESS ENTERPRISES (DBE) PARTICIPATION**

- A. This contract is subject to 49 CFR, Part 26 entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs". Consultants who obtain DBE participation on this contract will assist Caltrans in meeting its federally mandated statewide overall DBE goal.
- B. The goal for DBE participation for this contract is 6.5 %. Participation by DBE consultant or subconsultants shall be in accordance with information contained in the Consultant Proposal DBE Commitment (Exhibit 10-O1), or in the Consultant Contract DBE Information (Exhibit 10-O2) attached hereto and incorporated as part of the Contract. If a DBE subconsultant is unable to perform, CONSULTANT must make a good faith effort to replace him/her with another DBE subconsultant, if the goal is not otherwise met.
- C. DBEs and other small businesses, as defined in 49 CFR, Part 26 are encouraged to participate in the performance of contracts financed in whole or in part with federal funds. CONSULTANT or subconsultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. CONSULTANT shall carry out applicable requirements of 49 CFR, Part 26 in the award and administration of US DOT-assisted agreements. Failure by CONSULTANT to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as LOCAL AGENCY deems appropriate.
- D. Any subcontract entered into as a result of this contract shall contain all of the provisions of this section.
- E. A DBE firm may be terminated only with prior written approval from LOCAL AGENCY and only for the reasons specified in 49 CFR 26.53(f). Prior to requesting LOCAL AGENCY consent for the termination, CONSULTANT must meet the procedural requirements specified in 49 CFR 26.53(f).
- F. A DBE performs a Commercially Useful Function (CUF) when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a CUF, the DBE must also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a CUF, evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing, and other relevant factors.
- G. A DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation. In determining whether a DBE is such an extra participant, examine similar transactions, particularly those in which DBEs do not participate.
- H. If a DBE does not perform or exercise responsibility for at least thirty percent (30%) of the total cost of its contract with its own work force, or the DBE subcontracts a greater portion of the work of the contract than would be expected on the basis of normal industry practice for the type of work involved, it will be presumed that it is not performing a CUF.
- I. CONSULTANT shall maintain records of materials purchased or supplied from all subcontracts entered into with certified DBEs. The records shall show the name and business address of each DBE or vendor and the total dollar amount actually paid each DBE or vendor, regardless of tier. The records shall show the date of payment and the total dollar figure paid to all firms. DBE prime consultants shall also show the date of work performed by their own forces along with the corresponding dollar value of the work.
- J. Upon completion of the Contract, a summary of these records shall be prepared and submitted on the form entitled, "Final Report-Utilization of Disadvantaged Business Enterprise (DBE), First-Tier Subconsultants" CEM-2402F [Exhibit 17-F, of the LAPM], certified correct by CONSULTANT or CONSULTANT's authorized representative and shall be furnished to the Contract Administrator with the final invoice. Failure to provide the summary of DBE payments with the final invoice will result in twenty-five percent (25%) of the dollar value of the invoice being withheld from payment until the form is submitted. The amount will be

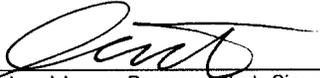
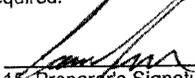
*Replacement of Mission Boulevard Bridge at Santa Ana River*

returned to CONSULTANT when a satisfactory "Final Report-Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subconsultants" is submitted to the Contract Administrator.

- K. If a DBE subconsultant is decertified during the life of the contract, the decertified subconsultant shall notify CONSULTANT in writing with the date of decertification. If a subconsultant becomes a certified DBE during the life of the Contract, the subconsultant shall notify CONSULTANT in writing with the date of certification. Any changes should be reported to LOCAL AGENCY's Contract Administrator within 30 days.

EXHIBIT 10-02 CONSULTANT CONTRACT DBE COMMITMENT

1. Local Agency: County of Riverside 2. Contract DBE Goal: 2%  
 3. Project Description: Replacement of the Mission Boulevard Bridge over Santa Ana River (Br No. 56C-0071)  
 4. Project Location: Riverside, CA  
 5. Consultant's Name: Kleinfelder 6. Prime Certified DBE:  7. Total Contract Award Amount: \$4,695,009  
 8. Total Dollar Amount for ALL Subconsultants: \$2,237,048 9. Total Number of ALL Subconsultants: 5

10. Description of Work, Service, or Materials Supplied	11. DBE Certification Number	12. DBE Contact Information	13. DBE Dollar Amount
Landscape Architecture	4570	Tatsumi and Partners 49 Discovery, Suite 120, Irvine, California, 92618 949-453-9901	\$133,002
Geotechnical	21160	Diaz Yourman 1616 East 17th Street Santa Ana, CA 92705 714-245-2920, ext. 232	\$171,834
<b>Local Agency to Complete this Section</b>			\$304,836
20. Local Agency Contract Number: <u>(951) 955-1520</u>		<b>14. TOTAL CLAIMED DBE PARTICIPATION</b>	6.5%
21. Federal-Aid Project Number: <u>BRLSZ-5956(192)</u>			
22. Contract Execution Date: <u>9/24/2019</u>		IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required.	
Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.			
	8/19/2019		8/19/2019
23. Local Agency Representative's Signature	24. Date	15. Preparer's Signature	16. Date
Cesar Tolentino	951-955-1520	James Frost	619-302-9275
25. Local Agency Representative's Name	26. Phone	17. Preparer's Name	18. Phone
Engineering Project Manager		Senior Program Manager	
27. Local Agency Representative's Title		19. Preparer's Title	

DISTRIBUTION: 1. Original – Local Agency  
 2. Copy – Caltrans District Local Assistance Engineer (DLAE). Failure to submit to DLAE within 30 days of contract execution may result in de-obligation of federal funds on contract.

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.