

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



ITEM
3.34
(ID # 8608)

MEETING DATE:

Tuesday, January 29, 2019

FROM : TLMA-TRANSPORTATION:

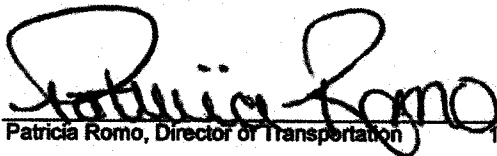
SUBJECT: TRANSPORTATION AND LAND MANAGEMENT AGENCY/ TRANSPORTATION

DEPARTMENT: Approve Amendment 1 to the Engineering Services Agreement for Preliminary Engineering Report and Environmental Clearance to Replace the Hamner Avenue Bridge at Santa Ana River between the County of Riverside and T.Y. Lin International. All Covenants Set Forth in the Agreement Shall be Completed by June 30, 2023. 2nd District [Total Cost \$2,950,514]; 88.53% Federal Funds and 11.47% State Funds. 4/5 Vote Required.

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve and Execute Amendment 1 to Engineering Services Agreement for Preliminary Engineering Report and Environmental Clearance to Replace the Hamner Avenue Bridge at Santa Ana River between the County of Riverside and T.Y. Lin International in the amount of \$2,950,514 for FY 18/19-22/23.

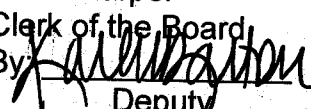
ACTION: 4/5 Vote Required, Policy


Patricia Romo, Director of Transportation 1/7/2019

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: January 29, 2019
xc: Transp.

Kecia Harper
Clerk of the Board
By: 
Deputy

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

| FINANCIAL DATA | Current Fiscal Year: | Next Fiscal Year: | Total Cost: | Ongoing Cost |
|--|-----------------------------|--------------------------|---------------------------|---------------------|
| COST | \$1,410,127 | \$1,145,301 | \$ 2,950,514 | \$ 0 |
| NET COUNTY COST | \$ 0 | \$ 0 | \$ 0 | \$ 0 |
| SOURCE OF FUNDS: Federal Highway Bridge Program Funds (88.53%) and State SB-132, (11.47%). There are no General Funds used in this project. | | | Budget Adjustment: | No |
| | | | For Fiscal Year: | 18/19-22/23 |

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

The County in cooperation with the Cities of Eastvale and Norco is proposing to replace the existing Hamner Avenue Bridge over the Santa Ana River, with a new, longer and wider bridge to enhance safety and improve traffic circulation. The Hamner Bridge is located within the City of Norco near the southern border of the City of Eastvale.

On December 6, 2016, Agenda Item 3.38, the County Board of Supervisors executed an Engineering Services Agreement for preliminary engineering and environmental clearance, for the replacement of the Hamner Avenue Bridge over the Santa Ana River, between the County and T.Y. Lin International. The public circulation of the draft environmental document took place on September 26, 2018 and the final environmental document is expected to be adopted in early 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 \$2,950,014 for engineering services and environmental work to complete the work of design through construction for the Hamner Bridge replacement project.

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 \$2,950,514. It will be funded with federal 88.53% HBP funds and 11.47% matching funds from SB-132. The contract expiration date is June 30, 2023.

| | |
|---|--------------------|
| Original Contract for - Preliminary and Environmental Documentation | \$2,222,125 |
| Amendment 1 for - Final Design to Construction | \$2,950,514 |
| <hr/> | |
| Total Amended Contract: | \$5,172,639 |

Work Order No.: B7-0754

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

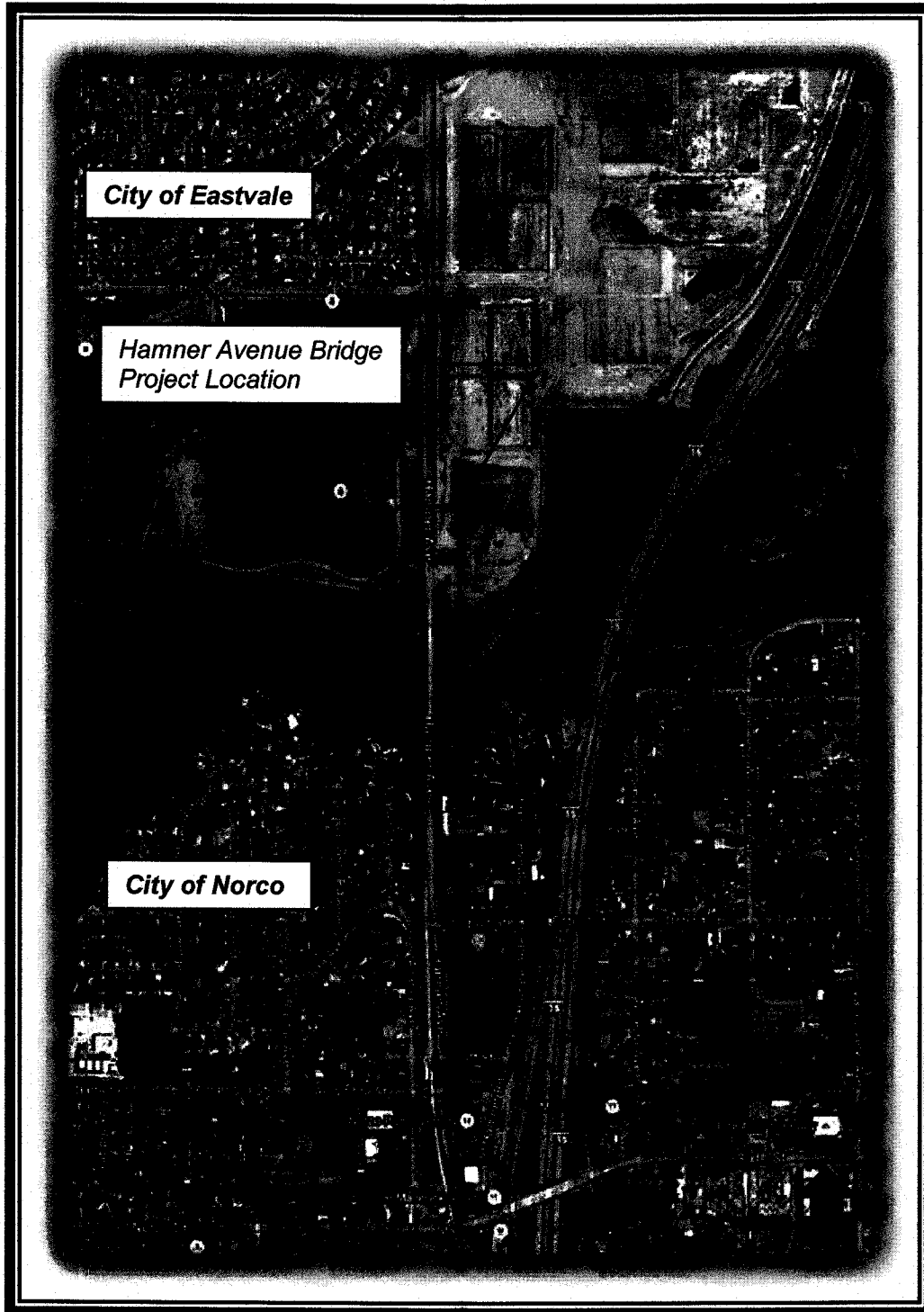


Scott Bruekner 1/23/2019



Gregory T. Priamos, Director County Counsel 1/22/2019

Hamner Avenue Bridge Replacement
Over Santa Ana River



VICINITY MAP

1 scope.

2 2. Phase IB includes the remaining tasks of Phase I to complete the Preliminary Engineering and
3 Environmental Documentation (PA/ED) for clearing the project and obtaining the environmental approval.

4 C. Appendix B • Article BI of the CONTRACT establishes the time period for performing the scope of services
5 detailed in Appendix A. The terms and conditions specify that all covenants set forth in the original
6 CONTRACT shall be completed by June 30, 2022.

7 D. Appendix C • Article CI of the CONTRACT establishes the Elements of Compensation. Appendix C • Article
8 CII, Subsection B provides the Position Maximum Hourly Rates and allows the ENGINEER the opportunity to
9 request rate adjustments on an annual basis after the first three (3) years of the original CONTRACT.
10 Appendix C • Article CV is the original negotiated cost proposal for Phase I services with a total amount of
11 **\$2,222,125** with no contingency.

12 E. On April 3, 2017 the California Senate passed Senate Bill Number 1 (hereinafter "SB-1"), which created a
13 Road Maintenance and Rehabilitation Funding Program to address deferred maintenance on the state
14 highway system and the local-street and road system.

15 F. On April 6, 2017 the California Senate amended Senate Bill Number 132 (hereinafter "SB-132"), which added
16 appropriation to the budget bill for the Riverside County Transportation Efficiency Corridor including
17 provisions in the amount of \$6,322,000 for funding the reconstruction of Hamner Avenue Bridge at Santa Ana
18 River. SB-132 funding requirements include a stipulation that all funds appropriated for the PROJECT must
19 be encumbered and liquidated by June 30, 2023. This stipulation placed the PROJECT on a very demanding
20 and aggressive schedule.

21 G. In order to meet the expedited project delivery schedule, COUNTY and ENGINEER in coordination with
22 Caltrans, Federal Highway Administration (FHWA), and the Cities of Norco and Eastvale decided to advance
23 the level of preliminary engineering design in support of the environmental document, i.e., preliminary design
24 during Phase I of the PROJECT, to 65% Plans, Specifications, and Estimate (PS&E) level. The selected level
25 of design during Phase I of the project is essential to confirm overall feasibility and constructability of the
26 project while avoiding permanent right of way takes and major power transmission line relocations, which
27 would be detrimental to meeting critical schedule deadlines and successful project delivery.

28 H. The AMENDMENT shall also add the remaining phases of the PROJECT including engineering tasks for
29 completion of the final design, plans, specifications, and cost estimate (PS&E) in Phase II, design services

1 during the bid process in Phase III, and design services during construction in Phase IV to successfully
2 deliver the PROJECT with a Notice of Completion (NOC) on or before June 30, 2023.

3 **AGREEMENT**

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

- 5 1. The AMENDMENT adds a new sub-phase in Phase I, Phase IC, which covers the increased level of design
6 in Phase I including the performance of all necessary geotechnical investigations in the roadway and in the
7 river. The AMENDMENT also adds the Engineering Services for the remaining phases of the PROJECT
8 including engineering tasks for completion of the final design, plans, specifications, and cost estimate (PS&E)
9 in Phase II, design services during the bid process in Phase III, and design services during construction in
10 Phase IV to successfully deliver the PROJECT with a Notice of Completion (NOC) on or before June 30,
11 2023.
- 12 2. The scope of services for the new added phases, i.e., Phase IC, Phase II, Phase III, and Phase IV are
13 provided in detail in Amendment 1, Appendix 1A, which is attached hereto and incorporated herein.
- 14 3. The June 30, 2022 CONTRACT expiration date established in Appendix B • Article BI of the original
15 CONTRACT is revised. All covenants set forth in the amended CONTRACT shall be completed by June 30,
16 2023. The revised PROJECT schedule including the new added phases is provided in Amendment 1,
17 Appendix 1B, which is attached hereto and incorporated herein.
- 18 4. The Amendment 1, Appendix 1C, which is attached hereto and incorporated herein, provides the details of
19 the negotiated fee proposal to perform the scope of services for the new added phases, i.e., Phase IC, Phase
20 II, Phase III, and Phase IV. The total fee for the new added phases is **\$2,950,514**. The total original
21 CONTRACT amount of **\$2,222,125** as established in Article CV • Cost Proposal of the original CONTRACT is
22 increased by **\$2,950,514** to **\$5,172,639** for the amended CONTRACT. The Appendix • C • Article CI,
23 Subsection B • Fixed Fee identifies the Total Fixed Fee payable to the ENGINEER as **\$93,410**. This amount
24 has been increased to a total of **\$254,664** commensurate with the increased scope of work in in this
25 AMENDMENT. The restriction of no rate adjustments on an annual basis for the first three (3) years of the
26 original CONTRACT specified in Appendix C • Article CII, Subsection B is removed. The billing rates
27 including the Indirect Cost Rates (ICR) as established in Appendix 1C are hereby approved.
- 28 5. ENGINEER is allowed to request annual Position Hourly Rate adjustments subject to COUNTY PROJECT
29 MANAGER's approval in writing. Position Hourly Rates requested shall not exceed the Maximum Position

1 Hourly Rates specified in Amendment 1, Appendix 1D, which is attached hereto and incorporated herein,
2 unless approved by COUNTY PROJECT MANAGER in writing.

- 3 6. The Mandatory Fiscal and Federal Provisions are included throughout the original CONTRACT language.
4 However, the current Local Assistance Procedures require these provisions to appear verbatim in consultant
5 contract language. So, the current Mandatory Fiscal and Federal Provisions (Verbatim) have been attached
6 hereto in Appendix E and incorporated herein. In addition to the provisions set forth under the original
7 CONTRACT, ENGINEER and the subconsultants shall comply with Appendix E Mandatory Fiscal and
8 Federal Provisions (Verbatim). If any provisions set forth under this amended CONTRACT is in conflict with
9 Appendix E, Appendix E provisions shall prevail.
- 10 7. Except to the extent specifically modified or amended hereunder, all of the term, covenants and conditions of
11 the original CONTRACT shall remain in full force and effect between the parties hereto.


12
13 IN WITNESS HEREOF, the parties hereto have caused this AMENDMENT to the CONTRACT to be duly
14 executed this day and year first written above.

15
16 [REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]
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APPROVALS

COUNTY Approvals

RECOMMENDED FOR APPROVAL:

 Dated: 1/18/19
for Patricia Romo

Director of Transportation

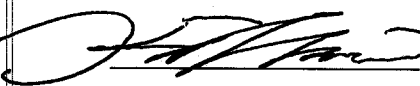
APPROVED AS TO FORM:

 Dated: 1/22/19

Gregory Priamos

County Counsel

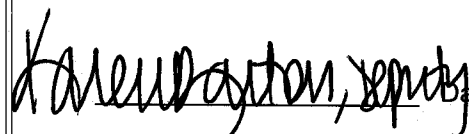
APPROVAL BY THE BOARD OF SUPERVISORS

 Dated: JAN 29 2019

KEVIN JEFFRIES
PRINTED NAME

Chairman, Riverside County Board of Supervisors

ATTEST:


 Dated: JAN 29 2019

KECIA HARPER ~~MEM~~

Clerk of the Board (SEAL)

ENGINEER Approvals

ENGINEER:

 Dated: 1/16/19

X **F.R. Clark Fernon**
PRINTED NAME

X **Vice President**
TITLE

ENGINEER:

_____ Dated: _____

X _____
PRINTED NAME

X _____
TITLE

AMENDMENT 1 • APPENDIX 1A

Scope of Services

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Introduction

On December 6, 2016, the County of Riverside (County) and T.Y. Lin International (TYLI) entered into an agreement entitled “Engineering Services Agreement for Preliminary Engineering Report and Environmental Clearance to Replace Hamner Avenue Bridge at Santa Ana River.” 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 for clearing the Hamner Avenue Bridge Replacement over the Santa Ana River, (Br. No. 56C0446) including widening and reconstruction of the approach roadways connecting to the new bridge.

On April 3, 2017 the California Senate passed Senate Bill Number 1 (hereinafter “SB-1”), which created a Road Maintenance and Rehabilitation Funding Program to address deferred maintenance on the state highway system and the local-street and road system.

On April 6, 2017 the California Senate amended Senate Bill Number 132 (hereinafter “SB-132”), which added appropriation to the budget bill for the Riverside County Transportation Efficiency Corridor including provisions in the amount of \$6,322,000 for funding the reconstruction of Hamner Avenue Bridge at Santa Ana River. SB-132 funding requirements include a stipulation that all funds appropriated for the project must be encumbered and liquidated by June 30, 2023, thus putting the project on a very demanding and aggressive schedule.

In order to meet the expedited project delivery schedule, County and TYLI in coordination with Caltrans, FHWA, and the Cities of Norco and Easvale decided to advance the level of preliminary engineering design in support of the environmental document to 65% Plans, Specifications, and Estimate (PS&E) level. The selected level of design during Phase I of the project is essential to confirm overall constructability of the project while avoiding permanent right of way takes and major transmission line relocations, which would be detrimental to meeting critical schedule deadlines and successful delivery.

The Amendment 1 addresses the increased level of design in Phase I including the performance of all necessary geotechnical investigations in the roadway and in the river. The Amendment also 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.

Phase IC – Roadway and River Geotechnical Investigations, Environmental Permits for River Geotechnical Borings, and 65% Unchecked Design and Details

1C.1 Project Management

Continue with communication and coordination with PDT, monitoring of project schedule, performing Earned Value Analysis, budget control, and monthly reporting on the project progress.

1C.2 Roadway Geotechnical Investigations

1C.2.1 Encroachment Permit

All planned borings in the roadway are located within the City of Norco right-of-way. An encroachment permit will be secured from the City of Norco. A traffic control plan will be prepared as part of the encroachment permit application. Borings on the south side of existing bridge will be performed at night due to the need for a lane closure. Borings on the north side of existing bridge may be performed during the day between the hours of 10:00 AM and 3:00 PM if no lane closure is required. Some of the borings on the north side may be performed at night due to the longer working window.

1C.2.2 Geotechnical Field Explorations

The roadway field explorations consist of ten (10) borings, one pavement boring, seven hollow-stem auger borings for retaining walls, and two mud rotary borings for the bridge abutments. Retaining wall borings will have a target depth of up to 60 feet below grade and bridge abutments borings will have a target depth of up to 125 feet below grade.

1C.2.3 Laboratory Testing

Representative soil samples will be collected for laboratory testing. Various tests will be performed to determine the physical and engineering characteristics of soils. Anticipated laboratory tests will include, but not limited to: in-situ moisture content and density, grain size distribution, plasticity testing, consolidation testing, direct shear testing, tri-axial strength testing, and soil corrosion testes. Tests will be conducted in general accordance with the California Test Methods and/or ASTM Standards.

1C.2.4 Geotechnical Engineering Analysis

Results obtained from the field investigation and laboratory testing will be used to generate the idealized soil profile for design. A seismic hazard evaluation will be performed based on the latest Caltrans Seismic Design Criteria. Geotechnical analysis of the bridge and retaining wall foundations will be performed following the AASHTO 2012, LRFD Bridge Design Specifications and current California Amendments (2014).

1C.2.5 Draft Geotechnical Reports & Log of Test Borings

A Draft Foundation Report (DFR) for the replacement bridge and a Geotechnical Design Report (DGDR) for the retaining walls, roadway improvements, and structural sections will be prepared in accordance with the Caltrans Guidelines. The descriptions of encountered soils, summary of laboratory testing, and locations of the borings will be provided on the Draft Log of Test Borings (LOTB) sheets prepared in accordance with the Caltrans requirements. Draft reports and LOTB sheets will be submitted to the County for review, and comments will be addressed in the Final reports following the completion of river geotechnical investigations.

Deliverables: *Draft Foundation Report, (two copies)*
Draft Geotechnical Design Report, (two copies)
Final Geotechnical Design Report (two copies)
Draft LOTB Sheets, (two copies)

1C.3 Environmental Permits for River Geotechnical Investigations

1C.3.1 Natural Environmental Study/Minimal Impacts

In order to obtain the permits for geotechnical investigations in the river ahead of obtaining environmental clearance, ICF will utilize the results of the literature search and field surveys conducted for the larger Hamner Avenue Bridge Replacement Project and prepare a Natural Environmental Study/Minimal Impacts (NESMI) report, analyzing the potential impacts to biological resources. The report will be prepared in accordance with Caltrans Standard Environmental Reference (SER) guidance and will conform to the Caltrans NESMI annotated outline that is available at the time that the NESMI is initiated. The report will describe:

- The study methods used in identifying and assessing the biological resources at the project site, the personnel who conducted the studies, contacts made with agencies, and any limitations associated with the study;
- The environmental setting including both the biological and physical setting at the project site;
- The results, including special-status species present on the site, if any, and a discussion of impacts and mitigation, as necessary; and
- The appropriate regulatory requirements and necessary permits.

It is assumed that 1) a full NES will not be required for the geotechnical work; 2) that no additional fieldwork or surveys will be required; and 3) that a separate Jurisdictional Delineation Report will not be required. A WRMSHCP consistency analysis will be included as an appendix in the NESMI.

Deliverables: *Draft NESMI*
Final NESMI for concurrence
Final signed NESMI

1C.3.2 Determination of Biologically Equivalent or Superior Preservation

ICF will prepare a Determination of Biologically Equivalent or Superior Preservation (DBESP) Report for impacts to Riparian/Riverine Resources. ICF will utilize information from the studies and surveys conducted for the larger Hamner Avenue Bridge Replacement Project to prepare the report. The report will provide the following information:

- (1) Definition of the project area for all portions of the project;
- (2) Written project description, demonstrating why an avoidance alternative is not feasible;
- (3) Written description of biological information available for the project site including the results of resource mapping;
- (4) Mapping of Riparian/Riverine areas as defined by the MSHCP indicating areas of impact;

- (5) Soils description/analysis/map, floral and faunal list;
- (6) Analysis of 100% avoidance and alternatives (including minimization of direct and indirect effects, hydrologic regime, flood storage, flood flow modification, nutrient retention and transformation, sediment trapping and transport, toxic trapping, public use, wildlife habitat, aquatic habitat);
- (7) Quantification of unavoidable impacts to riparian/riverine areas and vernal pools, associated with the project, including direct and indirect effects;
- (8) Functions and values assessment that will focus on affects to downstream values related to Conserved Species;
- (9) Habitat assessments for least Bell's vireo, southwestern willow flycatcher, western yellow-billed cuckoo, Riverside fairy shrimp, and vernal pool fairy shrimp;
- (10) Written description of project design features and mitigation measures that reduce indirect effects, such as edge treatments, landscaping, elevation difference, minimization and/or compensation through restoration or enhancement;
- (11) Written discussion of edge treatments MSHCP, Section 6.1.4 and their relation to the functions and values to be conserved (including lighting, noise, trash/debris, urban and storm water runoff, toxic material, exotic plant and animal infestations, dust);
- (12) Mitigation measures need to demonstrate ensure long-term conservation and need to consider restoration and/or enhancement of on-site habitat restoration and/or enhancement of off-site habitat; and
- (13) Finding demonstrating that although the proposed project would not avoid impacts, with proposed design and compensation measures, the project would be biologically equivalent or superior to that which would occur under an avoidance alternative without these measures.

No additional focused surveys for sensitive riparian/riverine species (i.e. least Bell's vireo or southwest willow flycatcher) are assumed.

Deliverables: *Draft DBESP Report (electronic copy)*
Final DBESP Report (electronic copy)
Final DBESP for submittal to RCA (two hard copies)

1C.3.3 Western Riverside MSHCP Joint Project Review Application (JPR)

ICF will prepare a cover letter and complete the Joint Project Review (JPR) checklist/application for submittal to the Regional Conservation Authority (RCA) for processing. ICF will coordinate with PDT, the County, and RCA as necessary during the processing period. This task also includes participation in one meeting with the RCA and wildlife agencies (USFWS and CDFW) as part of the review process. No fee is assumed or included.

Deliverables: *Draft JPR application (electronic copy)*
Final JPR application (electronic copy)
Final JPR application for submittal to RCA (two hard copies)

1C.3.4 Cultural Resources

The proposed project will be subject to compliance with Section 106 of the National Historic Preservation Act. This requires consideration of potential project effects to historic properties including archaeological and historical resources listed in or eligible for listing in the National Register of Historic Places according to criteria listed in 36 CFR800. It is assumed that Caltrans will concur that the Native American consultation conducted for the bridge replacement project will be sufficient for the geotechnical borings and no additional consultation will be required. It is also assumed that no additional record search, fieldwork, or survey will be required.

ICF will develop an Area of Potential Effect (APE) map in consultation with the County and Caltrans for obtaining Caltrans approval. The map will provide the survey boundaries for cultural resources to be evaluated during project studies. The APE map will be based on the total anticipated disturbance footprint associated with project activities.

This scope of work assumes that no archaeological sites will be identified in the APE and that no testing and/or evaluation will be required. It is anticipated that an Archaeological Survey Report (Finding of No Archaeological Resources Present) will be prepared and no additional documentation will be required. It is assumed that a Historical Resources Evaluation Report (HRER) will not be needed and no historic resources will need to be evaluated. Following completion and approval of the APE Map and detailed reports discussed above, an HPSR will be generated in accordance with Caltrans/FHWA standards for Section 106 compliance with the NHPA. It is anticipated that the proposed project will result in a HPSR with a finding that no properties requiring evaluation are present within the project's APE.

Deliverables: *Draft HPSR/ASR*
Final HPSR/ASR for concurrence
Final signed HPSR/ASR

1C.3.5 Categorical Exclusion

Based on the environmental technical studies previously discussed, a Categorical Exclusion (CE) will be prepared pursuant to NEPA. ICF will prepare the CE/CE form (NEPA portion only) in compliance with the latest format identified on Caltrans Standard Environmental Reference website. As part of the CE an Environmental Commitment Record (ECR) will be prepared and included as an attachment. No separate environmental document is assumed to be prepared to support the NEPA CE and none is included in this scope and cost.

Deliverables: *Draft and Final NEPA CE*

1C.3.6 Notice of Exemption

Based on the environmental technical studies previously discussed, a CEQA Notice of Exemption will be prepared and provided to the County for review and approval and then filed on behalf of the County. No separate environmental document is assumed to be prepared to support the NEPA CE and none is included in this scope and cost.

Deliverables: *Draft and Final Notice of Exemption*

1C.3.7 Mitigation Strategy Development

Compensatory mitigation is typically required for project imposed impacts on aquatic features regulated by the USACE, RWQCB, and CDFW. This task allows for researching and identifying potential mitigation options (i.e., in-lieu fee program and mitigation banks), and coordination with PDT, the County, Riverside-Corona Resource Conservation District, and Western Riverside County Regional Conservation Authority. This task does not include the preparation of a Conceptual Mitigation Plan, Habitat Mitigation and Monitoring Plan, or identifying land to acquire to satisfy the required mitigation as the content of these items are dependent upon the outcome of stakeholder coordination and are unknown at present.

Deliverable: Researching potential mitigation options and coordination with agencies on mitigation options

1C.3.8 USACE Clean Water Act Section 404 Pre-Construction Notification

Based on a preliminary review of the project description and plans, it appears that geotechnical work is expected to be limited to temporary impacts and could be processed under the U.S. Army Corps of Engineers (USACE) Nationwide Permit (NWP) Program pursuant to Section 404 of the Clean Water Act (CWA). This approach is expected to involve authorization under NWP 6 (Survey Activities), which allows temporary impacts up to 0.10 acre for geotechnical pads, and NWP 33 (Temporary Construction, Access, and Dewatering). A written request for authorization under the NWP Program, Pre-Construction Notification (PCN), will be prepared and submitted to the USACE. A request for an NWP generally includes the following elements:

- A detailed description of the proposed project, including cross-sections or similar graphic depicting the proposed work;
- A description of the project's purpose;
- A detailed description of the jurisdictional areas that would be affected by the proposed project (generally accomplished by submittal of the delineation report);
- A discussion of the approvals and certifications being obtained from other federal state and local agencies;
- Documentation demonstrating compliance with Section 106 of the National Historic Preservation Act (generally accomplished by submittal of a Cultural Resources Report);
- Documentation demonstrating compliance with the Endangered Species Act (generally accomplished by submittal of a Biological Resources Report, in this case the NESMI); and
- A brief description of the mitigation proposal, if deemed applicable.

*Deliverables: Draft 404 Pre-Construction Notification to County
Final 404 Pre-Construction Notification to USACE*

1C.3.9 Regional Water Quality Control Board Clean Water Act Section 401 Water Quality Certification Request

A written request for a CWA Section 401 Water Quality Certification will be prepared and submitted to the Santa Ana Regional Water Quality Control Board (RWQCB). The request will include a completed application form, detailed project description, water quality management plan

identifying project-specific best management practices, California Environmental Quality Act (CEQA) documentation, and a brief description of the mitigation proposal.

An application fee must be provided to the RWQCB as part of the permit application. Based on the State Water Resources Control Board Fee Schedule, the fee is based on the total permanent and temporary impact acreages or linear feet (whichever generates the larger fee). In addition, “Annual Active Discharge Fees” and “Annual Post Discharge Monitoring Fees” may apply to the project.

It is assumed that County will provide the application fee and annual fees during construction, if applicable, directly to RWQCB. The fees are not included in this scope and fee.

Deliverables: *Draft 401 Water Quality Certification application to County*
Final 401 Water Quality Certification application to RWQCB

1C.3.10 California Department of Fish and Wildlife, Fish and Game Section 1602 Streambed Alteration Notification

A request for the California Fish and Game Code (FGC) Section 1602 Streambed Alteration Agreement will be prepared and submitted to the California Department of Fish and Wildlife (CDFW). The request will include a completed Notification form, detailed project description, impact analysis, CEQA documentation, avoidance and minimization measures, and a brief description of the mitigation proposal.

Application fee is not included in this scope of work and it is assumed that the County will provide the fee.

Deliverables: *Draft 1602 Streambed Alteration Agreement Notification to County (electronically)*
Final 1602 Streambed Alteration Agreement Notification to CDFW

1C.3.11 Regulatory Agency Coordination

ICF will coordinate with the regulatory agencies (USACE, RWQCB and CDFW) throughout the processing of permits. Such coordination may include meetings, conference calls, or written communication with agencies to address their questions and concerns so the project can be permitted within a reasonable timeframe. This task also includes one collective site visit with USACE, RWQCB, and CDFW staff and the project team, if requested by the agencies.

Deliverable: *Coordination with Resource Agencies*

1C.3.12 Project Team Coordination

ICF will coordinate with project team, RCTD, and other stakeholders throughout the project. This task allows for the project meetings; conference calls; email correspondence; and follow-up meeting minutes. This task also allows for oversight and management of the tasks identified in this scope of work including status updates and budget and invoice review to ensure the project is progressing on schedule and within budget.

Deliverable: *Coordination with Project Team*

1C.3.13 Pre-Construction and Construction Biological Tasks for Geotechnical Investigations

Several tasks are required prior to and during the geotechnical work as a result of the NESMI and DBESP approval. These tasks include a preconstruction survey for sensitive plant and wildlife species to avoid and biological monitoring of drilling activities for the duration of the project (BIO-11), a 30-day preconstruction survey for burrowing owls (BIO-27), examination of large trees and snags by a qualified bat biologist to determine bat presence (BIO-28), clearance surveys for sensitive wildlife species performed during vegetation clearance and grubbing to flush any individuals from the project footprint (BIO-30), and a nesting bird survey to be conducted within 72 hours of work initiated. Daily monitoring logs will be recorded during all activities except for the sensitive species survey and burrowing owl surveys. The burrowing owl survey will be documented in a brief memo. Monitoring logs will be provided weekly for the project file. The scope assumes:

- Geotechnical work within the river will take up to 25 working days (10-hour work days);
- No biological support is anticipated or included for geotechnical work outside of the river;
- Since permits (401, 404, 1602) for geotechnical borings have not been issued to date, no implementation of permits conditions are included as they are not known at this time. A separate scope and fee will be provided, once permits are acquired if additional efforts and/or requirements are identified; and
- No burrowing owl active or passive relocation is anticipated or included.

Deliverables: *Draft Sensitive Species Survey Memo (electronic copy)*
 Final Sensitive Species Survey Memo (electronic copy)
 Draft 30-Day Burrowing Owl Survey Memo (electronic copy)
 Final 30-Day Burrowing Owl Survey Memo (electronic copy)

1C.4 65% Unchecked Design and Details

1C.4.1 Roadway and Drainage Design

- a. Update preliminary roadway geometric design and produce 65% roadway plans.
- b. Perform drainage calculations and design, and produce 65% drainage plans.

Roadway and drainage plans will include the following sheets:

- Title Sheet
- Typical Cross Sections
- Project Demolition Plans
- Layout Plans
- Profile and Superelevation on Hamner Avenue
- Profile North Trail
- Profile South Trail
- Construction Details
- Grading Plans
- Drainage Plans
- Drainage profile

- Drainage Details
- Temporary Water Pollution Control Plans
- Erosion Control Plans
- Existing Utility Plans
- Rock Slope Protection Plans
- Stage Construction Plans
- Traffic Control Plans
- Signing and Stripping Plans
- Roadway Lighting Plans
- Traffic Signal Modification Plans
- Traffic Signal Communication Plans

1C.4.2 Update Drainage Reports

Update Drainage Report and Transportation Project Guidance (TPG) Template, if necessary, to include project-specific BMP's that maybe required to mitigate impacts discovered during the design.

1C.4.3 65% Traffic Signal Modifications Plans

Prepare the 65% plans for the traffic signal modifications at the Detroit and Citrus Intersections.

At the Hamner Avenue/Detroit Street Intersection, traffic signal modifications will include:

- New pedestrian push buttons and pedestrian heads for the new crosswalk on the east side of the intersection
- Additional vehicle detection
- Conductors and potentially additional vehicle detection cards in the traffic signal cabinet for the widened roadway
- A potential new pole in the northeast quadrant due to the widening

At the Hamner Avenue/Citrus Street Intersection, the traffic signal modification will include:

- Additional vehicle detection
- Conductors and potentially additional vehicle detection cards in the traffic signal cabinet
- Relocation of traffic signal pole, conduits, and pull boxes due to widening at the NW corner of the intersection. The existing phasing at the intersections will be maintained.

1C.4.4 Electrical Plans – Bridge and Roadway Lightings

Prepare the 65% lighting plans along Hamner Avenue between the Detroit and Citrus Intersections. The plans will show the proposed roadway lighting conduits, pull boxes, and conductors with the associated decorative lighting details. This task will also include coordination with Southern California Edison (SCE) to identify and locate service points along Hamner Avenue for the required

circuits to operate the roadway lighting. ADVANTEC will also coordinate with the City of Norco for service point addresses once the locations are identified.

During the initial stages of design, ADVANTEC will prepare a roadway lighting analysis that provides a visual representation of the luminaire locations along Hamner Avenue with the lumens along the roadway and sidewalk path.

Up to two different alternatives will be prepared to depict various spacing pole heights and/or different luminaire wattages to be used in the corridor.

Electrical Service Coordination – ADVANTEC will 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. Coordination with serving electric company will include fulfilling serving electric company requirements as appropriate, preparation of all utility company forms and submission to County for execution, and advising the County of requirements that are beyond the scope of the work.

ADVANTEC will notify the serving electric company regarding the Electrical Safety Orders clearance that 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). All such clearance conflicts will be shown 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.

Deliverables: *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 the electric company;
Obtain service address from appropriate municipality;
Staging plans for relocation of electrical service meters;
Application to electric purveyor for electric service, including coordination with account holder for signature, payments of fees, etc.
Electric company drawings and details, if required, for inclusion in bid package.*

1C.4.5 Draft Transportation Management Plan (TMP)

Prepare a Draft TMP, addressing development of public awareness, proper identification of lane closures, scheduling of construction activities during off-pick hours, emergency access,

development of traffic contingency plans, and all other factors related to traffic management during construction.

1C.4.6 65% Bridge Unchecked Design and Details

Perform structural analysis and design and produce unchecked bridge plans including the following sheets:

- General Plan
- General Notes – Index to Plans
- Existing Bridge Demolition Plans
- Structure Plans
- Deck Contours
- Foundation Plan
- Abutments Layout
- Abutment Details
- Bent Layout
- Bent Details
- Typical Section
- Girder Layout
- Prestressing Notes
- Girder Reinforcement and Camber Diagrams
- Hinge Details
- Bearing Details
- Joint Seal Assembly
- Utility Details
- Deck Drainage Details
- Metal Railing Details
- Structure Approach & Drainage Details
- Bridge Lighting
- Architectural Treatments

1C.4.7 65% Retaining Walls Design and Unchecked Details

Perform structural analysis and design and produce unchecked retaining walls plans including:

- General Plan
- General Notes / Index to Plans
- Layout Plans
- Soil Reinforcement Table
- Ground Improvement Plan
- Pile Schedule Table
- Retaining Wall Details

- Lighting Mounting Details
- Barrier Details
- Barrier Slab Details
- Drainage Details
- Railing Details
- MSE Wall Standard Details
- Architectural Treatments

1C.4.8 Update/Finalize Right-of-Way Requirements Map

Update and finalize the right-of-way requirements map prepared in Phase-1, if necessary, based on the findings of 65% design.

1C.4.9 65% Unchecked Quantities and Cost Estimate

- a. Perform quantity take-offs for all construction contract items based on the details shown on the plans.
- b. Prepare the 65% Cost Estimate for the bridge, walls, and roadway items.

1C.4.10 65% Specifications Item List

Prepare a complete list of roadway, walls, and bridge construction items based on the Caltrans Standard Specifications and Special Provisions.

1C.4.11 QC/QA Review

Perform a constructability review of 65% plans and document all review comments in a comment – response log.

1C.4.12 65% Submittal

Submit 65% Unchecked Plans, Specifications and Estimate (PS&E) package to the County for review, in electronic format (pdf), including:

Deliverable(s): *Complete 65% Design Plan Set, Including:*
65% Roadway and Drainage Plans
65% Signal Modification Plans
65% Lighting Plans
65% Bridge Plans
65% Retaining Walls Plans
Updated Drainage Report and TPG, if Necessary
Draft Transportation Management Plan (TMP)
Final Right-of-Way Requirements Map
65% Quantities and Cost Estimate
65% Specifications Items List

1C.5 Utility Coordination

TYLI will designate dedicated staff who will be responsible for all coordination work related to utilities for the Project, including but not limited to relocations of existing conduits and mainline facilities and installation of new conduits and mainline facilities.

TYLI will coordinate with utility owners and County utility coordination staff with respect to all utility related matters, and provide copies of all correspondence with utility companies and other utility related information to the County. Correspondence, as described herein, will be prepared by TYLI for either design team or County signature, as appropriate, and as directed by the County's Project Manager.

TYLI will identify utility companies affected by the project and delineate utilities within the project's sphere of influence on the plans, which will include all existing utilities, above and below the ground, identified by location, size, type, and owner, as appropriate. TYLI will check the horizontal and vertical clearances for utilities and coordinate design with various utility companies to address any conflicts. In addition to information provided by the owning utility companies and existing record maps, data from the potholing and County's field survey will be used to locate utility features such as manholes, valves, fire hydrants, poles, risers, etc., which will be reflected on the plans.

TYLI will evaluate the potholing data, and include the information on the utility plans in table format, with number or letter references to the location of the potholes. TYLI will determine whether or not the facilities are in conflict, and the limits of the conflict, both of which will be shown on the utility plans with construction notes.

Known utility conflicts will 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 will be shown on the plans for those facilities in conflict that have such numbers attached to the facility and as provided on the owner's inventory maps.

TYLI will send preliminary 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.

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

- TYLI, through County staff, will request and obtain a written acknowledgment of any conflicts from the respective utility owners.

- Reasonable efforts will be taken to accommodate utility company requests for minor design changes to accommodate their facilities. TYLI 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.
- TYLI will 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. TYLI will provide information and exhibits as required to support the preparation of cooperative agreements, if needed.
- TYLI will conduct utility coordination meetings, as needed, regarding adjustments and relocation, to resolve conflict issues, and with respect to performing work for utility companies by County contractor.
- For utility conflicts that require relocating, County staff will submit the official notice/order to the utility companies to relocate conflicting facilities.
- TYLI will 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.

1C.5.1 Utility B Package

Prepare and send out the Utility-B Package to all utility agencies with identified existing and proposed utilities. The Utility-B Package will consist of the following materials:

- A vicinity map capturing the boundaries of all potential construction work.
- 65% design plans for the proposed project showing the utility locations and conflicts.
- A letter on the County's letterhead requesting that each utility owner:
 - Verify the location of their utilities.
 - Identify potential conflicts.
 - Owner's prior rights.

Deliverable: Utility-B Package

1C.5.2 Utility Coordination Meetings

- a. Schedule and conduct coordination meetings with utility representatives after transmitting the Utility-B Packages to all utility agencies.

Deliverable: Meeting agendas and minutes

1C.6 River Geotechnical Investigations

1C.6.1 Geotechnical Exploration & Laboratory Testing

- a) Prepare a traffic control plan and obtain a no-fee encroachment permit from the City of Norco.
- b) Assist ICF and provide information needed to secure the boring permits from the regulatory agencies.

- c) Remove and restore existing chain link fence along the west side of Hamner Avenue, north of the river to access the north boring locations.
- d) Perform clearing of vegetation in the riverbed in accordance with the permit requirements.
- e) Perform select grading to provide a pathway navigable by the drilling equipment to the drill site, and at each site clear an approximately 20ft x 40ft area to stage the drilling equipment.
- f) Perform five (5) rotary-wash auger borings and four (4) Cone Penetration Test (CPT) sounding. Borings will have a target depth of either 75ft of penetration into granitic rock or 150ft below ground. CPT's will have a target depth of 100ft or refusal.
- g) EMI field personnel will collect soil samples for laboratory testing, including bulk samples of near surface soils, small disturbed and relatively undisturbed ring samples, and rock cores of deeper soils.
- h) Representative soil samples will be tested in a laboratory to determine their engineering parameters. Laboratory testing will generally consist of moisture/density testing, gradation determination, corrosion potential, shear strength, and unconfined compression test. Spoils generated from the boring excavations will be stored in drums, tested for contaminants, and disposed of off-site.
- i) Boreholes will be backfilled with bentonite chip or cement / bentonite grout in accordance with the permit requirements.

1C.6.2 Geotechnical Engineering Analysis

Results obtained from the River Geotechnical Investigations and laboratory testing will be used to supplement the subsurface characterization and idealized soil profiles developed for the design from the Roadway Geotechnical investigations.

Geotechnical analysis and recommendation will be updated based on the additional subsurface information obtained from the borings in the river.

1C.6.3 Final Structure Foundation Report

The Draft Structure Foundation Report prepared following the roadway geotechnical investigations will be updated and finalized based on the review comments received from the County and the additional subsurface information obtained from the geotechnical investigations in the river.

Deliverables: *Final Structure Foundation Report*
Final LOTB

Phase II – Final Plans, Specifications, Cost Estimates, and Construction Permits

2.1 Project Management

2.1.1 Coordination and Communications

- a. Continue with implementation of project document/correspondence management and distribution system to assure that information flows between all parties of the Project.
- b. Communicate regularly with the County and project development team (PDT), by telephone, email, written correspondence, and face-to-face meetings on monthly basis throughout the term of contract.
- c. Maintain a project contact list with names and contact information for all PDT members.
- d. Prepare, maintain, and update an Action Item Log for review during monthly PDT meetings.
- e. Prepare a project chronology listing all key decisions made over the life of project and update for review during monthly PDT meetings.
- f. Prepare a Submittal/Deliverable Log and update for review during PDT meetings.

2.1.2 Meetings

Organize, schedule, and chair meetings and conference calls to provide progress updates, coordinate between technical disciplines, and facilitate overall project communication. Prepare meeting agendas and minutes for all meetings.

- a. PDT Meetings: Monthly face-to-face meetings at the County's office (15 Meetings).
- b. Additional Meetings with Caltrans (2 Meetings).

Deliverable: Meeting notices, agendas, special exhibits and minutes

2.1.3 Schedule

Maintain and regularly update the project baseline schedule for Phase-II activities and submit at every PDT meeting.

Deliverable: Project Schedule and Updates

2.1.4 Budget

Continue performing Earned Value Analysis and budget monitoring to ensure the project is progressing within budget.

2.1.5 Project Administration

- a. Monitor subconsultant progress and review/approve invoices.
- b. Prepare monthly progress reports and invoices based on the County's format.

Deliverable: Monthly Progress Reports and Invoice Packages

2.1.6 Quality Control and Quality Assurance (QC/QA)

Continue with implementation of quality control process. Check and back-check every submittal requiring review and approval, including interdisciplinary reviews to ensure timely turn-around and minimal comments and review cycles.

2.2 Utility Coordination

Continue with utility coordination as outlined in Section 1C.5 during the Final PS&E Phase and preparation of Utility – C Package.

2.2.1 Utility- C Package

After the completion of 90% design and plans, prepare and send out the Utility-C Package to all utility agencies requiring relocation. The Utility-C Package will consist of the following materials:

- 90% Design Plans for the proposed project, showing existing and proposed utility facilities;
- A letter on County's letterhead outlining in writing any changes made since providing the Utility -B package including the changes related to the engineering design, bid and construction schedule, and foreseeable delays;
- Notice to Owner (NTO) following Caltrans latest procedures outlined in LAPM Section 14; and
- Provide the necessary information to the County for processing the Request for Authorization for Utility Relocation.

Deliverable(s): Utility-C Package

2.2.2 Utility Coordination Meetings

Conduct coordination meetings with utility representatives after transmitting the Utility-C Packages.

Deliverable(s): Meeting agendas and minutes

2.3 90% Design, Plans, Specifications, and Cost Estimate (PS&E)

2.3.1 Independent Check of Design Calculations and Plans

- a. All plans will be independently checked by qualified engineers not involved in the design.
- b. Roadway plans will be reviewed for safety in the selection of AASHTO design standards as designated by FHWA, County of Riverside, and City of Norco standards, as applicable.
- c. Bridge design and plans will be independently checked. The check engineer will produce an independent set of structural analysis and design calculations working only from the bridge plans without the benefit of the designer's calculations.

2.3.2 90% Checked Quantities and Cost Estimate

- a. Update quantity take-offs based on the plan revisions in response to internal and County's 65% review.
- b. Perform independent checks of quantity take-offs for all construction contract items. Resolve discrepancies within acceptable tolerances.

- c. Prepare the 90% Cost Estimate incorporating all quantity changes resulting from the independent check, identifying HBP participating and non-participating cost items.

2.3.3 90% Roadway and Bridge Specifications

Prepare the technical specifications for all bridge and roadway items using the latest Caltrans Standard Specifications and Special Provisions.

2.3.4 QC/QA Review

- a. Redline / yellow line all plan sheets.
- b. Perform an interdisciplinary / constructability review of the roadway, drainage, utility, electrical and bridge plans.
- c. Prepare Comment / Response Logs for internal and County's 65% review comments.
- d. Update all plans for internal and County's 65% review comments.
- e. Back-check all plans to ensure that all comments have been satisfactorily resolved.
- f. The Project Quality Assurance Manager will ensure that all quality control measures have been carried out and prepare a Statement of Compliance.

2.3.5 90% Submittal

Submit the 90% Plans, Specifications and Estimate package to the County for review, in electronic format (pdf), including:

*Deliverable(s): Quality Control Comment / Response Logs
Quality Assurance Manager Statement of Compliance
90% Plans
90% Specifications
90% Quantities and Cost Estimate
90% Design Calculations
90% Independent Check Calculations*

2.4 95% Design, Plans, Specifications, Cost Estimate (PS&E)

2.4.1 Design and Independent Check Comments Resolution

- a. Prepare Comment / Response Logs for County's 90% review comments.
- b. Redline / yellow line all affected plan sheets.
- c. Update all plans for County's 90% review comments.
- d. Back-check all plans to ensure that all comments have been satisfactorily resolved.
- e. The project Quality Assurance Manager will ensure that all quality control measures have been carried out and prepare a Statement of Compliance.

2.4.2 Conceptual Storm Water Pollution Prevention Plan (SWPPP)

Prepare a conceptual SWPPP based on the available information during the design of the project and based on the requirements of County and construction permits. Respond to comments from the County and resource agencies and update the conceptual SWPPP. Monitoring, updating, and finalizing the SWPPP during construction is the responsibility of contractor.

2.4.3 95% Cost Estimate

- a. Update quantity take-offs and independent check quantities based on plan revisions in response to County's 90% review.
- b. Prepare the 95% Cost Estimate incorporating all quantity changes.
- c. Prepare a Contract Proposal Form showing all construction contract items, units, quantities, and blanks for bidders use.

2.4.4 95% Combined Specifications

Update the roadway and bridge technical specifications based on changes to the Caltrans Special Provisions and in response to County's comments and combine the technical specifications with the County's boilerplate.

2.4.5 95% Submittal

Submit the 95% Plans, Specifications and Estimate (PS&E) package to the County for review, in electronic format (pdf), including:

Deliverable(s): *Quality Control Comment / Response Logs*
Quality Assurance Manager Statement of Compliance
95% Plans
95% Specifications
95% Cost Estimate
Contract Proposal Form

2.5 100% Design, Plans, Specifications, Cost Estimate (PS&E)

2.5.1 100% Design, Check and Quality Control

- a. Prepare Comment / Response Logs for closing all review comments.
- b. Redline / yellow line all affected plan sheets.
- c. Update all plans for 95% review comments.
- d. Back-check all plans to ensure that all comments have been satisfactorily resolved.
- e. Prepare NPDS County Memorandum and Risk Level Calculations for SWPPP.
- f. The project Quality Assurance Manager will prepare a Statement of Compliance.

2.5.2 100% Cost Estimate and Contract Proposal Form

- a. Update quantity take-offs and quantities independent check based on plan revisions in response to County's 95% review.
- b. Prepare the 100% Estimate incorporating all quantity changes.
- c. Update the Contract Proposal Form.
- d. DBE Contract Goal Calculations (Caltrans Exhibit 9D)

2.5.3 100% Construction Specifications

Update the construction technical specifications based on changes to the Caltrans Special Provisions and in response to County's final review comments.

2.5.4 Resident Engineer Pending File

Prepare Resident Engineer (RE) Pending File, including:

- Vicinity Map
- 4-Scale Drawings (electronic and pdf copies)
- Copy of Environmental Clearance Documents
- Utility Relocation Matrix, Contact Information, Agreements
- Temporary Construction Easement (TCE) Agreements
- Copies of Construction Permits
- Supplemental Project Information, including;
 - Geotechnical Design Report
 - Foundation Report
 - Cross sections
 - As-Built Drawings
 - Quantities
 - List of Applicable Standard Plans

2.5.5 100% Submittal

Submit the 100% Plans, Specifications and Estimate (PS&E) package to the County for signatures.

Deliverable(s): *Quality Control Comment / Response Logs*
Quality Assurance Manager Statement of Compliance
100% Plans (original signed and stamped Mylar plots, 3 full-size sets, 3 half-size set, Pdf and CAD files)
100% Specifications (Microsoft Word file, pdf copy)
100% Cost Estimate (Microsoft Word file, pdf copy)
Contract Proposal Form (Microsoft Excel file, pdf copy)
R.E. Pending File
DBE Contract Goal Calculation (Microsoft Excel file, pdf copy)

2.6 Construction Permits

2.6.1 USACE Clean Water Act Section 404 Pre-Construction Notification

Based on the review of project description and preliminary plans, construction of the project could potentially be processed under the U.S. Army Corps of Engineers (USACE) Nationwide permit (NWP) Program, pursuant to Section 404 of the Clean Water Act (CWA). This approach is expected to involve authorization under NWP 14 (Linear Transportation Projects). A NWP 14 may be issued for the proposed project if permanent impacts to waters of the United States are less than 0.5 acre. NWP 33 (Temporary Construction Access and Dewatering) may also be required to address the temporary access paths. A written request for authorization under the NWP Program, Pre-Construction Notification (PCN), will be prepared and submitted to the USACE.

The request for a NWP will include:

- A detailed description of the proposed project, including cross-sections or similar graphic depicting the proposed work;
- A description of the project's purpose;
- A detailed description of the jurisdictional areas that would be affected by the proposed project, accomplished by submittal of the delineation report;
- A discussion of the approvals and certifications being obtained from other federal, state, and local agencies;
- Documentation demonstrating compliance with Section 106 of the National Historic Preservation Act, accomplished by submittal of a Cultural Resources Report;
- Documentation demonstrating compliance with the Endangered Species Act, accomplished by submittal of a Biological Resource Report, in this case NESMI; and
- A brief description of the mitigation proposal, if deemed applicable.

Deliverable(s): *Draft 404 Pre-Construction Notification to County (electronically)*
Final 404 Pre-Construction Notification to USACE

2.6.2 Regional Water Quality Control Board Clean Water Act Section 401 Water Quality Certification Request

A written request for a CWA Section 401 Water Quality Certification for the project will be prepared and submitted to the Santa Ana Regional Water Quality Control Board (RWQCB). The request will include a completed application form, detailed project description, impact analysis, water quality management plan identifying project-specific best management practices, California Environmental Quality Act (CEQA) documentation, and a brief description of the mitigation proposal. ICF will utilize the results from the project's forthcoming NES and supporting surveys to prepare the applications.

An application fee must be provided to the RWQCB as part of the permit application. Based on the State Water Resources Control Board Fee Schedule, the fee is based on the total permanent and temporary impact acreage. In addition, "Annual Active Discharge Fees" and "Annual Post Discharge Monitoring Fees" may apply to the project during and following construction. An application fee of \$47,580 has been assumed, which includes the application fee and three years of annual discharges; if the actual fee at the time of application submittal is in excess of this amount, then it is assumed the County will provide the fee balance above the \$47,580 estimate.

It is assumed that the County will provide the annual fees during construction, if applicable, directly to RWQCB. The annual fees are not included in this scope and fee.

*Deliverable(s): Draft 401 Water Quality Certification to County (electronically)
Final 401 Water Quality Certification Application to RWQCB*

2.6.3 California Department of Fish and Wildlife, Fish and Game Section 1602 Streambed Alteration Notification

A request for the California Fish and Game Code (FGC) Section 1602 Streambed Alteration Agreement for the project will be prepared and submitted to the California Department of Fish and Wildlife (CDFW). The request will include a completed Notification form, detailed project description, impact analysis, CEQA documentation, avoidance and minimization measures, and a brief description of the mitigation proposal. ICF will utilize the results from the project's forthcoming NES and supporting surveys to prepare the Notification.

It is assumed the application fee will be \$10,000. If CDFW determines the fee exceeds this amount, then it is assumed the County will provide the fee balance above the \$10,000 estimate.

*Deliverable(s): Draft 1602 Streambed Alteration Agreement Notification to County
Final 1602 Streambed Alteration Agreement Notification to CDFW*

2.6.4 Mitigation Strategy Development

Compensatory mitigation is typically required for project imposed impacts on aquatic features regulated by the USACE, RWQCB, and CDFW. This task allows for researching and identifying potential mitigation options (i.e., in lieu fee program and mitigation banks) and coordination with the project team, County, Riverside Corona Resource Conservation District, and the Western Riverside County Regional Conservation Authority.

*Deliverable: Research potential mitigation options;
Coordinate with agencies on mitigation options;
Document the agreed upon mitigation.*

2.6.5 Regulatory Agency Coordination

ICF will coordinate with the regulatory agencies (USACE, RWQCB, and CDFW), throughout the permitting process. It is assumed that a pre-application meeting and a separate collective site visit with USACE, RWQCB, and CDFW staff and the project team, if requested by the agencies, will be conducted. Additional coordination may include follow-up meetings, conference calls, or written communication with the agencies to address their questions and concerns so the project can be permitted within a reasonable timeframe.

Deliverable(s): Coordination with Resource Agencies

2.6.6 Western Riverside MSHCP Joint Project Review Application

ICF will prepare a cover letter and complete the Joint Project Review (JPR) checklist/application for submittal to the Regional Conservation Authority (RCA) for processing. ICF will coordinate with the County and RCA as necessary during the processing period. This task also includes one meeting with the RCA and wildlife agencies (USFWS and CDFW), as part of the review process.

Deliverable(s): Draft JPR Application (electronic)
Final JPR Application (electronic)
Final JPR Application for Submittal to RCA (two hard copies)

2.6.7 Project Team Coordination

ICF will coordinate with the project team, County, and other stakeholders throughout the project. This task allows for project meetings; conference calls; email correspondence; and follow-up meeting minutes. This task also allows for oversight and management of the tasks identified in this scope of work, status updates, and budget and invoice review to ensure the project is progressing on schedule and within budget.

2.6.8 Prepare Habitat Mitigation and Monitoring Plan

Qualified ICF restoration specialists will develop, through coordination with the Cities, County, Caltrans, USACE, RWQCB, CDFW, and Riverside Corona Resource Conservation District (RCRCD) if necessary, a Habitat Mitigation and Monitoring Plan (HMMP) that details the creation / restoration/enhancement of habitats temporarily and/or permanently impacted by construction of the proposed project.

The HMMP will be a single document that provides all necessary information to document what and how the on-site and off-site mitigations will be implemented including project impacts, any re-grading (if required), proposed habitat creation/restoration/enhancement activities to offset the project impacts, appropriate plant palettes, irrigation to be utilized (if required), mitigation success criteria, and maintenance activities based on a standard 5-year mitigation monitoring program.

The HMMP will be prepared in accordance with USACE regulatory requirements for the preparation of mitigation plans pursuant to 2008 Clean Water Act (CWA) Section 404 Final Compensatory Mitigation Rule (33 CFR 332.4 (c)). Pursuant to 33 CFR 332.4(c) the mitigation plan must address the following:

- 1) Objectives - A description of the resource type(s) and amount(s) that will be provided, the method of compensation (restoration, establishment, preservation, etc.), and how the anticipated functions of the mitigation project will address watershed needs.
- 2) Site Selection - A description of the factors considered during the site selection process. This will include consideration of watershed needs, onsite alternatives where applicable, and

practicability of accomplishing ecologically self-sustaining aquatic resource restoration, establishment, enhancement, and/or preservation at the mitigation site(s).

- 3) Site protection instrument - A description of the legal arrangements and instrument including site ownership that will be used to ensure the long-term protection of the mitigation project site.
- 4) Baseline information - A description of the ecological characteristics of the proposed mitigation project site. This may include descriptions of historic and existing plant communities, historic and existing hydrology, soil conditions, a map showing the locations of the impact and mitigation site(s) or the geographic coordinates for those site(s), and other characteristics appropriate to the type of resource proposed as compensation. The baseline information should include a delineation of waters of the United States on the proposed mitigation project site. A prospective permittee planning to secure credits from an approved mitigation bank or in-lieu fee program only needs to provide baseline information about the impact site.
- 5) Determination of credits - A description of the number of credits to be provided including a brief explanation of the rationale for this determination.
 - For permittee-responsible mitigation such as on-site restoration, this will include an explanation of how the mitigation project will provide the required compensation for unavoidable impacts to aquatic resources resulting from the permitted activity.
 - For permittees intending to secure credits from an approved mitigation bank or in-lieu fee program, it will include the number and resource type of credits to be secured and how these were determined.
- 6) Mitigation work plan, detailed written specifications and work descriptions for the mitigation project, including:
 - Geographic boundaries of the project
 - Construction methods
 - Timing and sequence
 - Sources of water
 - Methods for establishing the desired plant community
 - Plans to control invasive plant species
 - Proposed grading plan
 - Soil management
 - Erosion control measures

For stream mitigation projects, the mitigation work plan may also include other relevant information. Such as platform geometry, channel form (e.g. typical channel cross section), watershed size, design discharge, and riparian area plantings.

- 7) Maintenance plan - A description and schedule of maintenance requirements to ensure the continued viability of the resource once initial construction is completed.
- 8) Performance standard - Ecologically – based standards that will be used to determine whether the mitigation project is achieving its objectives.

- 9) Monitoring requirements - A description of parameters monitored to determine whether the mitigation project is on track to meet performance standards and if adaptive management is needed. A schedule for monitoring and reporting monitoring results must be included.
- 10) Long-term management plan - A description of how the mitigation project will be managed after performance standards have been achieved to ensure the long-term sustainability of the resource, including long-term financing mechanisms and the party responsible for long term management.
- 11) Adaptive management plan - A management strategy to address unforeseen changes in the site conditions or other components of the mitigation project, including the party or parties responsible for implementing adaptive management measures.
- 12) Financial assurances - A description of financial assurances that will be provided and how they are sufficient to ensure a high level of confidence that the mitigation project will be successfully completed, in accordance with its performance standards.

Conduct field visits with Caltrans, County, the Cities, RCRC, and the regulatory permitting agencies to discuss the project impacts. Determine expected mitigation requirements, and coordinate with PDT and regulatory agencies to develop the appropriate mitigation strategy.

The scope includes the necessary revisions based on the review by the PDT, Caltrans, and the regulatory agencies including USACE, RWQCB, and CDFW.

2.6.9 Prepare Planting Plans

ICF will prepare the planting plan and specifications for the areas to be revegetated per the HMMP. ICF anticipates that a temporary irrigation system will not be needed due to the dynamic nature of the river environment. Plans will be stamped by a licensed architect and undergo one round of consolidated review. Deliverables will include a draft and final planting plan, cost estimates, and specifications.

Assumptions for this task are as follow:

- Irrigation planning and design are not included as part of this scope as it is not anticipated to be used.
- The planting plans will include up to two sheets at 1:50 scale.
- Plans will be electronically submitted and one original wet-signed copy will be provided.
- Construction administration and oversight is not included.

2.6.10 Offsite Mitigation Coordination

ICF regulatory permitting specialists and restoration ecologists will coordinate with PDT, Caltrans, County, USACE, RWQCB, CDFW, and RCRC staff, to obtain approvals for the purchase of in-lieu fee program credits to offset permanent impacts to special status wildlife (i.e. least Bell's vireo, Santa Ana sucker), permanent impacts to aquatic resources including waters of the U.S., wetland

waters of the U.S. and CDFW un-vegetated streambed and associated riparian vegetation, and additional temporary impact acreage if mitigation ratios are above 1:1.

This process coordination is considered the conceptual mitigation plan and final mitigation plan. The final mitigation plan assumes that all off-site mitigation will occur through in-lieu fee credit purchase and that no formal written plan will be required.

The scope assumes coordination including conference calls and up to three (3) meetings will be required to obtain approvals to purchase in-lieu fee program credits and that the task fee is sufficient to cover all project mitigation coordination.

Phase III – Design Support, Bid Period

3.1 Project Management, Coordination and Communication

- a. Implement a project document/correspondence management and distribution system to assure that information flows between all parties of the Project.
- b. Utility Coordination – Assist with the resolution of utility related issues that may arise during the bidding process, including design modifications as needed and as approved by the County Project Manager.

*Deliverable(s): Monthly Progress Reports and Invoice Packages
Utility Coordination, Documentation of Decisions Made*

3.2 Bidding Period, Design Support

- a. Attend a pre-bid meeting
- b. Respond to bidder inquiries
- c. Prepare contract addenda

*Deliverable(s): Written responses to bidder inquiries
Contract addenda*

Phase IV – Design Support, Construction Period

4.1 Project Management, Coordination and Communications

- a. Implement a project document/correspondence management and distribution system to assure that information flows between all parties of the Project.
- b. Prepare a Submittal/Deliverable Log for the Contractor's RFIs and submittals.
- c. Utility Coordination – Assist with the resolution of utility related issues that may arise during the construction process, including design modifications as needed and as approved by the County Project Manager.

Deliverable(s): *Monthly Progress Reports and Invoice Packages*
Utility Coordination, Documentation of Decisions Made

4.2 Construction Period, Design Support

- a. Attend the pre-construction meeting.
- b. Respond to requests for information, RFIs.
- c. Attend site meetings at the request of County, (assumed 8 meetings).
- d. Review contractor's submittals including the following:
 - CIDH Pile installation plans
 - Prestressing system working drawings
 - Joint seal assembly shop drawings
 - Bearings shop drawings
 - Metal railing shop drawings
 - MSE Wall shop drawings
- e. Prepare change order plans, if required
- f. Prepare as-built plans based on the Resident Engineer's redlines

Deliverable(s): *Written review comments*
Redline submittal markups
Statement of no exceptions taken for corrected submittals
As-Built Plans

AMENDMENT 1 • APPENDIX 1B

Project Schedule

AMENDMENT 1 • APPENDIX 1C

Fee Proposal

HAMNER AVENUE BRIDGE PROJECT

| PHASE I (IA+IB) | PHASE II | PHASE III | PHASE IV | TOTAL | | |
|----------------------------------|--------------------|--------------------|--------------------|-----------------|------------------|--------------------|
| | | | | PHASE I (IA+IB) | PHASE II | |
| T. Y. LIN INTERNATIONAL | \$1,135,599 | \$527,155 | \$880,274 | \$55,266 | \$321,198 | \$2,919,491 |
| ICF INTERNATIONAL | \$760,568 | \$230,450 | \$240,918 | | | \$1,231,936 |
| ICF INTERNATIONAL - STEP 2 TASKS | \$121,125 | | | | | \$121,125 |
| EARTH MECHANICS | \$47,476 | \$615,956 | \$3,084 | \$15,539 | | \$682,054 |
| CHANG CONSULTANT | \$39,038 | | | | | \$39,038 |
| DIAZ-YOURMAN | \$38,697 | | | | | \$38,697 |
| RGI CONSULTING | \$30,000 | | | | | \$30,000 |
| ADVANTEC | \$49,622 | \$36,566 | \$24,109 | | | \$110,298 |
| SUBTOTALS | \$2,222,125 | \$1,410,127 | \$1,145,301 | \$58,350 | \$336,736 | \$5,172,639 |
| TOTALS | \$2,222,125 | \$2,950,514 | | | | \$5,172,639 |

Exhibit A

Cost Proposal Worksheet

| | | |
|---|---|------------------------|
| COMPANY: T.Y. Lin International | SCOPE OF WORK: Roadway Geotechnical Investigations, Permits for River Borings, & 65% Design | DATE: Sep-18 |
|---|---|------------------------|

| | |
|--|---|
| PROJECT: Hammer Ave Bridge Project | MILESTONE/PHASE/PROJECT SUMMARY: Phase IC |
|--|---|

DIRECT LABOR

| PERSONNEL | FUNCTION | HOURS | RATE | AMOUNT |
|---------------------|---------------------------|----------------|-----------|---|
| Roya Golchoobian | Project Manager | 474.0 | \$ 89.59 | \$ 42,465.66 |
| Kumar Ghosh | Project Engineer | 384.0 | \$ 64.75 | \$ 24,864.00 |
| Robert Barton | Sr. Bridge Engineer | 92.0 | \$ 70.44 | \$ 6,480.48 |
| Wade Durant | Sr Const Engineer | 24.0 | \$ 83.63 | \$ 2,007.12 |
| Brett Makley | Specifications Engineer | 40.0 | \$ 68.43 | \$ 2,737.20 |
| Dina Tobia | Associate Bridge Engineer | 208.0 | \$ 40.80 | \$ 8,486.40 |
| Brad Wilton | Assistant Bridge Engineer | 48.0 | \$ 33.21 | \$ 1,594.08 |
| Hunter Ruthrauff | Bridge Architect | 24.0 | \$ 48.21 | \$ 1,157.04 |
| Karen Chapman | Lead Civil Engineer | 92.0 | \$ 101.23 | \$ 9,313.16 |
| Phil Brand | Sr Civil Engineer | 448.0 | \$ 60.75 | \$ 27,216 |
| Eric Johnson | Sr. Civil Engineer | 80.0 | \$ 69.66 | \$ 5,573 |
| Hommayon Gerami | Sr Drainage Engineer | 216.0 | \$ 50.50 | \$ 10,908 |
| Valeria Santiago | Assistant Civil Engineer | 262.0 | \$ 30.00 | \$ 7,860 |
| Katherine Andreason | Assistant Civil Engineer | 100.0 | \$ 18.00 | \$ 1,800 |
| Bernard Aparicio | Assistant Civil Engineer | 80.0 | \$ 30.00 | \$ 2,400 |
| James Rucker | QA Manager | 8.0 | \$ 103.82 | \$ 831 |
| Ivan Martin | CAD Technician | 208.0 | \$ 39.04 | \$ 8,120 |
| Yihon Wang | CAD Technician | 408.0 | \$ 45.02 | \$ 18,368 |
| Stacy Bracco | Admin Accounting | 24.0 | \$ 42.21 | \$ 1,013 |
| | | | | \$ - |
| TOTAL HOURS | | 3,220.0 | | TOTAL DIRECT LABOR \$ 183,194.02 |

MULTIPLIERS

| | | |
|--------------------------|---------------------------------|-------------------|
| Fringe Benefit | 46.35% (of Total Direct Labor) | \$ 84,910 |
| Audited Overhead Rate | 114.55% (of Total Direct Labor) | \$ 209,854 |
| TOTAL MULTIPLIERS | | \$ 294,765 |

OTHER DIRECT EXPENSES

| ITEM | UNIT | QUANTITY | UNIT COST | AMOUNT |
|------------------------------------|------|----------|-----------|--------------------|
| Plans | Ea | 200 | \$ 2.00 | \$ 400.00 |
| Shipping | Ea | 10 | \$ 100.00 | \$ 1,000.00 |
| | | | | \$ - |
| | | | | \$ - |
| TOTAL OTHER DIRECT EXPENSES | | | | \$ 1,400.00 |

OUTSIDE SERVICES

| COMPANY | LABOR | MULTIPLIERS | FEE | EXPENSES | TOTAL |
|-------------------------------|-----------|-------------|-----------|------------|----------------------|
| ICF International | \$ 73,427 | \$ 130,554 | \$ 20,398 | \$ 6,071 | \$ 230,450 |
| Earth Mechanics | \$ 86,653 | \$ 160,489 | \$ 24,714 | \$ 344,100 | \$ 615,956 |
| ADVANTEC | \$ 11,572 | \$ 21,033 | \$ 3,260 | \$ 701 | \$ 36,566 |
| | | | | | \$ - |
| | | | | | \$ - |
| | | | | | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| TOTAL OUTSIDE SERVICES | | | | | \$ 882,972.39 |

FEES

| | | |
|-------------------|--------|------------------|
| FIXED FEE | 10.00% | \$ 47,796 |
| TOTAL FEES | | \$ 47,796 |

TOTAL COST \$ 1,410,127

Exhibit A

Cost Proposal Worksheet

| | | |
|------------------------------------|---|-----------------|
| COMPANY: T.Y. Lin International | SCOPE OF WORK: Final Design, PS&E, Construction Permits, RE Pending File | DATE: Sep-18 |
|------------------------------------|---|-----------------|

| | |
|---------------------------------------|--|
| PROJECT: Hammer Ave Bridge Project | MILESTONE/PHASE/PROJECT SUMMARY: Phase-II |
|---------------------------------------|--|

DIRECT LABOR

| PERSONNEL | FUNCTION | HOURS | RATE | AMOUNT |
|---------------------|---------------------------|----------------|-----------|---|
| Roya Golchoobian | Project Manager | 904.0 | \$ 89.59 | \$ 80,989.36 |
| Kumar Ghosh | Project Engineer | 224.0 | \$ 64.75 | \$ 14,504.00 |
| Robert Barton | Sr. Bridge Engineer | 370.0 | \$ 70.44 | \$ 26,062.80 |
| Wade Durant | Sr Const Engineer | 20.0 | \$ 83.63 | \$ 1,672.60 |
| Brett Makley | Sr Bridge Engineer | 264.0 | \$ 68.43 | \$ 18,065.52 |
| Dina Tobia | Associate Bridge Engineer | 104.0 | \$ 40.80 | \$ 4,243.20 |
| Brad Wilton | Assistant Bridge Engineer | 272.0 | \$ 33.21 | \$ 9,033.12 |
| Hunter Ruthrauff | Bridge Architect | 24.0 | \$ 48.21 | \$ 1,157.04 |
| Karen Chapman | Lead Civil Engineer | 244.0 | \$ 101.23 | \$ 24,700.12 |
| Phil Brand | Sr Civil Engineer | 524.0 | \$ 60.75 | \$ 31,833 |
| Eric Johnson | Sr. Civil Engineer | 256.0 | \$ 69.66 | \$ 17,833 |
| Hommayon Gerami | Sr Drainage Engineer | 400.0 | \$ 50.50 | \$ 20,200 |
| Valeria Santiago | Assistant Civil Engineer | 399.0 | \$ 30.00 | \$ 11,970 |
| Katherine Andreason | Assistant Civil Engineer | 80.0 | \$ 18.00 | \$ 1,440 |
| Bernard Aparicio | Assistant Civil Engineer | 120.0 | \$ 30.00 | \$ 3,600 |
| James Rucker | QA Manager | 12.0 | \$ 103.82 | \$ 1,246 |
| Ivan Martin | CAD Technician | 224.0 | \$ 39.04 | \$ 8,745 |
| Yihon Wang | CAD Technician | 280.0 | \$ 45.02 | \$ 12,606 |
| Stacy Bracco | Admin Accounting | 40.0 | \$ 42.21 | \$ 1,688 |
| | | | | \$ - |
| TOTAL HOURS | | 4,761.0 | | TOTAL DIRECT LABOR \$ 291,588.52 |

MULTIPLIERS

| | | | |
|--------------------------------------|---------------------------------|-------|-----------------------|
| % Work 2018 | 0.00% | | \$ - |
| % Work 2019 | 50.00% Escalation | 3% | \$145,794.26 \$ 4,374 |
| % Work 2020 | 50.00% Escalation | 6.09% | \$145,794.26 \$ 8,879 |
| TOTAL DIRECT LABOR+ESCALATION | | | \$ 304,841.22 |
| Fringe Benefit | 46.35% (of Total Direct Labor) | | \$141,293.90 |
| Audited Overhead Rate | 114.55% (of Total Direct Labor) | | \$ 349,204.76 |
| TOTAL MULTIPLIERS | | | \$ 490,499 |

OTHER DIRECT EXPENSES

| ITEM | UNIT | QUANTITY | UNIT COST | AMOUNT |
|------------------------------------|------|----------|-----------|--------------------|
| | | | | \$ - |
| Plans | Ea | 200 | \$ 2.00 | \$ 400.00 |
| Shipping | Ea | 10 | \$ 100.00 | \$ 1,000.00 |
| Car Rental - Meetings | Ea | 20 | \$ 200.00 | \$ 4,000.00 |
| | | | | \$ - |
| | | | | \$ - |
| TOTAL OTHER DIRECT EXPENSES | | | | \$ 5,400.00 |

OUTSIDE SERVICES

| COMPANY | LABOR | MULTIPLIERS | FEE | EXPENSES | TOTAL |
|-------------------------------|-----------|-------------|-----------|-----------|----------------------|
| ICF International | \$ 58,357 | \$ 103,759 | \$ 16,212 | \$ 62,591 | \$ 240,918 |
| | | | | | \$ - |
| ADVANTEC | \$ 7,553 | \$ 13,727 | \$ 2,128 | \$ 701 | \$ 24,109 |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| TOTAL OUTSIDE SERVICES | | | | | \$ 265,027.29 |

FEES

| | | |
|-------------------|--------|------------------|
| FIXED FEE | 10.00% | \$ 79,534 |
| TOTAL FEES | | \$ 79,534 |

TOTAL COST \$ 1,145,301

| COMPANY: | | SCOPE OF WORK: | | | | | | | | | | | DATE: | | | | | | | | | | |
|---------------------------|---|---|-----------------|------------------|---------------------|--------------------|---------------------|--------------------|---------------------|---------------------------|------------------|---------------------|--------------------|--------------------|-----------------------|--------------------------|--------------------------|--------------------------|----------------|----------------|------------------|-------------|-----------|
| T.Y. Lin International | | Final Design, PS&E, Construction Permits, RE Pending File | | | | | | | | | | | Sep-18 | | | | | | | | | | |
| PROJECT: | | MILESTONE/PHASE/PROJECT SUMMARY: | | | | | | | | | | | | | | | | | | | | | |
| Hammer Ave Bridge Project | | Phase-II | | | | | | | | | | | | | | | | | | | | | |
| Task No. | DESCRIPTION | Personnel | Project Manager | Project Engineer | Sr. Bridge Engineer | Sr. Const Engineer | Sr. Bridge Engineer | Sr. Const Engineer | Sr. Bridge Engineer | Assistant Bridge Engineer | Bridge Architect | Lead Civil Engineer | Sr. Civil Engineer | Sr. Civil Engineer | Sr. Drainage Engineer | Assistant Civil Engineer | Assistant Civil Engineer | Assistant Civil Engineer | CAD Technician | CAD Technician | Admin Accounting | Total Hours | Amount |
| | | Raw Labor Rate | \$89.59 | \$84.75 | \$70.44 | \$63.63 | \$68.43 | \$40.80 | \$33.21 | \$48.21 | \$101.23 | \$80.75 | \$69.66 | \$50.50 | \$30.00 | \$18.00 | \$30.00 | \$103.62 | \$38.04 | \$45.02 | \$42.21 | | |
| 2.1 | Project Management | | | | | | | | | | | | | | | | | | | | | | |
| 2.1.1 | Communication and Coordination | | 180 | | | | | | | | 80 | | | | | | | | | | | 260 | \$ 24,225 |
| 2.1.2 | Meetings (15 PDT+ 3 Review Comm + 2 Calltrns) | | 120 | | | | | | | | 80 | 120 | | | | | | | | | | 320 | \$ 26,139 |
| 2.1.3 | Schedule | | 40 | | | | | | | | | | | | | | | | | | | 40 | \$ 3,584 |
| 2.1.4 | Budget | | 24 | | | | | | | | | | | | | | | | | | | 24 | \$ 2,150 |
| 2.1.5 | Project Admin | | 24 | | | | | | | | | | | | | | | | | | 40 | 64 | \$ 3,838 |
| | | | | | | | | | | | | | | | | | | | | | | | |
| 2.2 | Utility Coordination | | | | | | | | | | | | | | | | | | | | | | |
| 2.2.1 | Utility C Package | | 24 | 24 | | | | | | | 26 | 80 | | | | 20 | | | | | | 176 | \$ 11,989 |
| 2.2.2 | Utility Coordination Meeting | | 24 | 24 | | | | | | | 24 | 24 | | | | | | | | | | 96 | \$ 7,592 |
| | | | | | | | | | | | | | | | | | | | | | | | |
| 2.3 | 90% Design and PS&E | | | | | | | | | | | | | | | | | | | | | | |
| 2.3.1 | Independent Check of Design and Plans | | 28 | 40 | 250 | | | 60 | 200 | 16 | 8 | 80 | 8 | 180 | 167 | 40 | 40 | 80 | 80 | 80 | | 1,269 | \$ 62,642 |
| 2.3.2 | Check Quantities & Cost Estimate | | 28 | | | 8 | | | 48 | | 8 | 8 | 10 | 10 | 24 | | | | | | | 142 | \$ 7,378 |
| 2.3.3 | Specifications | | 28 | | | | 100 | | | | 60 | 80 | 40 | 40 | | | | | | | | 228 | \$ 15,017 |
| 2.3.4 | QA/QC | | 28 | | | 8 | | | | | 4 | 8 | | | | | | 4 | 16 | 16 | | 120 | \$ 9,166 |
| 2.3.5 | 90% Submittal | | 28 | 8 | 8 | | | | | | 4 | 8 | | | | | | | 16 | 16 | | 88 | \$ 5,826 |
| | | | | | | | | | | | | | | | | | | | | | | | |
| 2.4 | 95% Design and PS&E | | | | | | | | | | | | | | | | | | | | | | |
| 2.4.1 | Comments Resolution - QA/QC | | 28 | 40 | 40 | | | 40 | 40 | 4 | 8 | 24 | 80 | 70 | 80 | 20 | 20 | 40 | 40 | 40 | | 578 | \$ 29,583 |
| 2.4.2 | 95% Cost Estimate | | 24 | 8 | 8 | 4 | | 8 | 8 | | 8 | 8 | 10 | 10 | 24 | | | | | | | 102 | \$ 5,869 |
| 2.4.3 | 95% Combined Specifications with County's Boilerplate | | 28 | | 8 | | 80 | | | | 40 | 40 | 20 | 20 | | | | | | | | 176 | \$ 11,986 |
| 2.4.4 | 95% Submittal | | 24 | 8 | 8 | | | | | | 4 | 8 | | | | | | 24 | 24 | 24 | | 88 | \$ 5,249 |
| | | | | | | | | | | | | | | | | | | | | | | | |
| 2.5 | 100% PS&E | | | | | | | | | | | | | | | | | | | | | | |
| 2.5.1 | Respond to Final Comments - QA/QC | | 28 | 24 | 24 | | | 8 | 8 | 4 | 4 | 40 | 80 | 50 | 80 | 20 | 20 | 4 | 24 | 40 | | 458 | \$ 23,984 |
| 2.5.2 | 100% Cost Estimate - Contract Proposal Form | | 28 | 8 | 8 | | | 8 | 8 | | 8 | 8 | 10 | 10 | 24 | | | | | | | 86 | \$ 5,301 |
| | R.E. Pending File | | 28 | 24 | | | | | | | | | | | | | | | | | | 92 | \$ 5,863 |
| 2.5.3 | 100% Construction Specifications | | 28 | 8 | 8 | | 24 | | | | 8 | 16 | 16 | 10 | | | | | | | | 118 | \$ 8,634 |
| 2.5.4 | 100% Mylar Submittal | | 28 | 8 | 8 | | | | | | | | | | | | | 40 | 40 | 40 | | 124 | \$ 6,952 |
| | | | | | | | | | | | | | | | | | | | | | | | |
| 2.6 | Environmental Permits | | | | | | | | | | | | | | | | | | | | | | |
| 2.6.1 | USACE Section 404 Permit | | 12 | | | | | | | | | 8 | | | | | | | | | | 40 | \$ 2,161 |
| 2.6.2 | RWCCB Section 401 Permit | | 12 | | | | | | | | | | | | | | | | | | | 12 | \$ 1,075 |
| 2.6.3 | CDFW Fish and Game 1602 Streambed Alteration | | 12 | | | | | | | | | | | | | | | | | | | 12 | \$ 1,075 |
| 2.6.4 | Mitigation Strategy Development | | 12 | | | | | | | | | | | | | | | | | | | 12 | \$ 1,075 |
| 2.6.5 | Regulatory Agency Coordination | | 8 | | | | | | | | | | | | | | | | | | | 8 | \$ 717 |
| 2.6.6 | MSHCP JPR Application | | 8 | | | | | | | | | | | | | | | | | | | 8 | \$ 717 |
| 2.6.8 | Prepare HMMP | | 8 | | | | | | | | | | | | | | | | | | | 8 | \$ 717 |
| 2.6.9 | Prepare Planting Plans | | 4 | | | | | | | | | | | | | | | | | | | 4 | \$ 358 |
| 2.6.10 | Offsite Mitigation Coordination | | 4 | | | | | | | | | | | | | | | | | | | 4 | \$ 358 |

Exhibit A

| Cost Proposal Worksheet | | | | | | |
|---------------------------------------|---------------------------------|---|---------------------------|--------------------------------------|-------------------------------|---------------------|
| COMPANY: T.Y. Lin International | | SCOPE OF WORK: Design Services During Bid | | | DATE: Sep-18 | |
| PROJECT: Hamner Ave Bridge Project | | MILESTONE/PHASE/PROJECT SUMMARY: Phase-III | | | | |
| DIRECT LABOR | | | | | | |
| PERSONNEL | FUNCTION | HOURS | RATE | AMOUNT | | |
| Roya Golchoobian | Project Manager | 90.0 | \$ 89.59 | \$ 8,063.10 | | |
| Kumar Ghosh | Project Engineer | 56.0 | \$ 64.75 | \$ 3,626.00 | | |
| Robert Barton | Sr. Bridge Engineer | 16.0 | \$ 70.44 | \$ 1,127.04 | | |
| Wade Durant | Sr Const Engineer | 16.0 | \$ 83.63 | \$ 1,338.08 | | |
| Karen Chapman | Lead Civil Engineer | 0.0 | \$ 101.23 | - | | |
| Phil Brand | Sr Civil Engineer | 8.0 | \$ 60.75 | \$ 486 | | |
| Yihon Wang | CAD Technician | 64.0 | \$ 45.02 | \$ 2,881 | | |
| Stacy Bracco | Admin Accounting | 8.0 | \$ 42.21 | \$ 338 | | |
| | | | | \$ - | | |
| TOTAL HOURS | | 258.0 | TOTAL DIRECT LABOR | | \$ 17,859.18 | |
| MULTIPLIERS | | | | | | |
| % Work 2018 | 0.00% Escalation | 0% | \$ | - | | |
| % Work 2019 | 0.00% Escalation | 0% | \$ | - | | |
| % Work 2020 | 100.00% Escalation | 6.09% | \$ 17,859.18 | \$ 1,154 | | |
| | | | | TOTAL DIRECT LABOR+ESCALATION | | \$ 19,013.04 |
| Fringe Benefit | 46.35% (of Total Direct Labor) | | \$ | 8,812.54 | | |
| Audited Overhead Rate | 114.55% (of Total Direct Labor) | | \$ | 21,780.01 | | |
| | | | | TOTAL MULTIPLIERS | | \$ 30,592.55 |
| OTHER DIRECT EXPENSES | | | | | | |
| ITEM | UNIT | QUANTITY | UNIT COST | AMOUNT | | |
| | | | | \$ - | | |
| | | | | \$ - | | |
| Shipping | Ea | 5 | \$ 100.00 | \$ 500.00 | | |
| Car Rental - Meetings | Ea | 1 | \$ 200.00 | \$ 200.00 | | |
| | | | | \$ - | | |
| | | | | \$ - | | |
| | | | | TOTAL OTHER DIRECT EXPENSES | | \$ 700.00 |
| OUTSIDE SERVICES | | | | | | |
| COMPANY | LABOR | MULTIPLIERS | FEE | EXPENSES | TOTAL | |
| | | | | | \$ - | |
| Earth Mechanics | \$ 967 | \$ 1,791 | \$ 276 | \$ 50 | \$ 3,084 | |
| | | | | | \$ - | |
| | | | | | \$ - | |
| | | | | | \$ - | |
| | | | | | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | | | | | TOTAL OUTSIDE SERVICES | \$ 3,083.78 |
| FEES | | | | | | |
| FIXED FEE | 10.00% | | | \$ | 4,961 | |
| | | | | | TOTAL FEES | \$ 4,961 |
| | | | | | TOTAL COST | \$ 58,350 |

Exhibit A

Cost Proposal Worksheet

| | | |
|-----------------|--|-----------------|
| COMPANY: ICF | SCOPE OF WORK: Environmental Permits for River Geotechnical Borings | DATE: Sep-18 |
|-----------------|--|-----------------|

| | |
|---------------------------------------|--|
| PROJECT: Hamner Ave Bridge Project | MILESTONE/PHASE/PROJECT SUMMARY: Phase IC |
|---------------------------------------|--|

DIRECT LABOR

| PERSONNEL | FUNCTION | HOURS | RATE | AMOUNT |
|--------------------|--------------------------|----------------|----------|--|
| Brian Calvert | Environ. Project Manager | 74.0 | \$ 90.17 | \$ 6,672.58 |
| Rusty Whisman | NEPA/CEQA Lead | 90.0 | \$ 41.91 | \$ 3,771.90 |
| Greg Hoisington | Biologist | 178.0 | \$ 57.73 | \$ 10,275.94 |
| Stephanie Gasca | Regulatory | 260.0 | \$ 55.77 | \$ 14,500.20 |
| Paul Schwartz | Biological Resources | 38.0 | \$ 45.31 | \$ 1,721.78 |
| Colleen Martin | Biological Resources | 82.0 | \$ 35.44 | \$ 2,906.08 |
| Soraya Swiontek | Adm GISin | 72.0 | \$ 34.08 | \$ 2,453.76 |
| Elizabeth Irvin | Editor | 32.0 | \$ 42.79 | \$ 1,369.28 |
| Denise Souliotes | Admin | 18.0 | \$ 19.82 | \$ 356.76 |
| Meris Guerrero | Regulatory | 31.0 | \$ 48.56 | \$ 1,505 |
| Ryan Winkleman | Biological Resources | 540.0 | \$ 42.00 | \$ 22,680 |
| Marisa Flores | Biological Resources | 44.0 | \$ 37.92 | \$ 1,668 |
| Karen Crawford | Cultural Resources | 28.0 | \$ 63.90 | \$ 1,789 |
| Karolina Chmiel | Cultural Resources | 50.0 | \$ 35.12 | \$ 1,756 |
| | | | \$ - | \$ - |
| | | | \$ - | \$ - |
| TOTAL HOURS | | 1,537.0 | | TOTAL DIRECT LABOR \$ 73,427.32 |

MULTIPLIERS

| | | |
|--------------------------|---------------------------------|-------------------|
| Fringe Benefit | 36.20% (of Total Direct Labor) | \$ 26,581 |
| Audited Overhead Rate | 141.60% (of Total Direct Labor) | \$ 103,973 |
| TOTAL MULTIPLIERS | | \$ 130,554 |

OTHER DIRECT EXPENSES

| ITEM | UNIT | QUANTITY | UNIT COST | AMOUNT |
|------------------------------------|------|----------|-------------|--------------------|
| Reproduction | EA | 1 | \$ 1,260.00 | \$ 1,260.00 |
| Travel, Mileage and Rental Car | MILE | 7,800 | \$ 0.55 | \$ 4,251.00 |
| Mailing | EA | 1 | \$ 560.00 | \$ 560.00 |
| | | | | \$ - |
| | | | | \$ - |
| TOTAL OTHER DIRECT EXPENSES | | | | \$ 6,071.00 |

OUTSIDE SERVICES

| COMPANY | LABOR | MULTIPLIERS | FEE | EXPENSES | TOTAL |
|-------------------------------|-------|-------------|------|----------|-------------|
| | | | | | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| TOTAL OUTSIDE SERVICES | | | | | \$ - |

FEES

| | | |
|-------------------|--------|-------------------|
| FIXED FEE | 10.00% | \$ 20,398 |
| TOTAL FEES | | \$ 20,398 |
| TOTAL COST | | \$ 230,450 |

Exhibit A

| Cost Proposal Worksheet | | | | | |
|--|--|----------------|---------------------------|----------------------|---------------------|
| COMPANY: | SCOPE OF WORK: | | | | DATE: |
| ICF | Phase-II Final PS&E and Construction Permits | | | | Sep-18 |
| PROJECT: | MILESTONE/PHASE/PROJECT SUMMARY: | | | | |
| Hamner Ave Bridge Project | Phase II | | | | |
| DIRECT LABOR | | | | | |
| PERSONNEL | FUNCTION | HOURS | RATE | AMOUNT | |
| Brian Calvert | Environ. Project Manager | 35.0 | \$ 90.17 | \$ 3,155.95 | |
| Rusty Whisman | NEPA/CEQA Lead | 40.0 | \$ 41.91 | \$ 1,676.40 | |
| Greg Hoisington | Biologist | 220.0 | \$ 57.73 | \$ 12,700.60 | |
| Stephanie Gasca | Regulatory | 372.0 | \$ 55.77 | \$ 20,746.44 | |
| Paul Schwartz | Biological Resources | 184.0 | \$ 45.31 | \$ 8,337.04 | |
| Colleen Martin | Biological Resources | 18.0 | \$ 35.44 | \$ 637.92 | |
| Soraya Swiontek | AdmGISin | 40.0 | \$ 34.08 | \$ 1,363.20 | |
| Elizabeth Irvin | Editor | 22.0 | \$ 42.79 | \$ 941.38 | |
| Denise Souliotes | Admin | 14.0 | \$ 19.82 | \$ 277.48 | |
| Meris Guerrero | Regulatory | 48.0 | \$ 48.56 | \$ 2,331 | |
| Marris Maggio | Biological Resources | 18.0 | \$ 30.54 | \$ 550 | |
| Spears | Biological Resources | 16.0 | \$ 50.00 | \$ 800 | |
| Kristin Lantz | Biological Resources | 16.0 | \$ 46.80 | \$ 749 | |
| Nicholas Deyo | Biological Resources | 44.0 | \$ 35.32 | \$ 1,554 | |
| Kristin Klinefelter | Biological Resources | 0.0 | \$ 32.45 | \$ - | |
| Phil Richards | Biological Resources | 0.0 | \$ 47.72 | \$ - | |
| TOTAL HOURS | | 1,087.0 | TOTAL DIRECT LABOR | | \$ 55,819.89 |
| MULTIPLIERS | | | | | |
| % of Work Year 2018 | 0.00% Escalation | | \$0 | | |
| % of Work Year 2019 | 50.00% Escalation | 3% | \$27,910 | \$ 837.30 | |
| % of Work Year 2020 | 50.00% Escalation | 6.09% | \$27,910 | \$ 1,699.72 | |
| TOTAL DIRECT LABOR + ESCALATION | | | | \$ 58,356.90 | |
| Fringe Benefit | 36.20% | | \$ 21,125.20 | | |
| Audited Overhead Rate | 141.60% (of Total Direct Labor) | | \$ 82,633.38 | | |
| TOTAL MULTIPLIERS | | | | \$ 103,758.58 | |
| OTHER DIRECT EXPENSES | | | | | |
| ITEM | UNIT | QUANTITY | UNIT COST | AMOUNT | |
| Reproduction | EA | 1 | \$ 250.00 | \$ 250.00 | |
| Travel | EA | 8,506 | \$ 0.55 | \$ 4,635.77 | |
| Mailing | EA | 1 | \$ 125.00 | \$ 125.00 | |
| Estimated 401 Application Fee | EA | 1 | \$ 47,580.00 | \$ 47,580.00 | |
| Estimated 1602 Application Fee | EA | 1 | \$ 10,000.00 | \$ 10,000.00 | |
| TOTAL OTHER DIRECT EXPENSES | | | | \$ 62,590.77 | |
| OUTSIDE SERVICES | | | | | |
| COMPANY | LABOR | MULTIPLIERS | FEE | EXPENSES | TOTAL |
| | | | | | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| TOTAL OUTSIDE SERVICES | | | | | \$ - |
| FEES | | | | | |
| FIXED FEE | 10.00% | | \$ 16,212 | | |
| TOTAL FEES | | | | | \$ 16,212 |
| TOTAL COST | | | | | \$ 240,918 |

| COMPANY: | | SCOPE OF WORK: | | | | | | | | | | | | | | DATE: | | | |
|---------------------------------|---|--|----------------------|----------------|-----------|------------|----------------------|-----------|---------|---------|------------|----------------------|----------------------|----------------------|----------------------|----------------------|-------------|---------|----------|
| ICF | | Phase-II Final PS&E and Construction Permits | | | | | | | | | | | | | | Sept-18 | | | |
| PROJECT: | | MILESTONE/PHASE/PROJECT SUMMARY: | | | | | | | | | | | | | | | | | |
| Hammer Ave Bridge Project | | Phase II | | | | | | | | | | | | | | | | | |
| Task No. | DESCRIPTION | Personnel | Evon Project Manager | NEPA/CEQA Lead | Biologist | Regulatory | Biological Resources | Admin/OSM | Editor | Admin | Regulatory | Biological Resources | Biological Resources | Biological Resources | Biological Resources | Biological Resources | Total Hours | Amount | |
| | | Rev. Labor Rate | \$90.17 | \$41.91 | \$57.73 | \$55.77 | \$45.31 | \$35.44 | \$34.08 | \$42.79 | \$19.82 | \$48.56 | \$30.54 | \$50.00 | \$46.80 | \$35.32 | \$32.45 | \$47.72 | |
| 2.6 Construction Permits | | | | | | | | | | | | | | | | | | | |
| 2.6.1 | USACE Clean Water Act Section 404 Pre-construction Notification | | 2 | 4 | 4 | 26 | 6 | 6 | 12 | 4 | 4 | 8 | | | | | | 76 | \$ 3,561 |
| 2.6.2 | RWQCB Clean Water Act Section 401 Cert | | 2 | 4 | 4 | 30 | 6 | 6 | 8 | 4 | 4 | 8 | | | | | | 76 | \$ 3,648 |
| 2.6.3 | CDPW Fish and Game Section 1602 | | 2 | 4 | 4 | 30 | 6 | 6 | 8 | 4 | 4 | 8 | | | | | | 76 | \$ 3,648 |
| 2.6.4 | Mitigation Strategy Development | | 4 | 4 | 48 | 48 | | | | | | 24 | | | | | | 128 | \$ 7,142 |
| 2.6.5 | Regulatory Agency Coordination | | 8 | 8 | 48 | 84 | 20 | | | | | | | | | | | 168 | \$ 9,419 |
| 2.6.6 | Western Riverside MSHCP Joint Review Application | | 4 | 4 | 8 | 24 | 10 | | | 2 | | | | | | | | 92 | \$ 2,821 |
| 2.6.7 | Project Team Coordination | | 4 | 8 | 44 | 62 | | | | | | | | | | | | 138 | \$ 7,809 |
| Mitigation Site Tasks | | | | | | | | | | | | | | | | | | | |
| 2.6.8 | Prepare Habitat Mitigation and monitoring Plan | | 4 | 4 | 16 | 12 | 108 | | 12 | 10 | | 18 | 16 | | | | | 200 | \$ 9,201 |
| 2.6.9 | Prepare Planting Plans | | 1 | | 8 | | 12 | | | | | | | 44 | | | | 81 | \$ 3,399 |
| 2.6.10 | Offsite Mitigation Coordination | | 4 | | 36 | 36 | 16 | | | | | | | | | | | 92 | \$ 5,172 |
| TOTALS | | | 35 | 40 | 220 | 372 | 184 | 18 | 40 | 22 | 14 | 48 | 18 | 16 | 16 | 44 | | 1,087 | \$5,820 |

Exhibit A

| Cost Proposal Worksheet | | | | | | |
|---------------------------------------|---------------------------------|--|---------------------------|------------------------------------|---------------------|---------------------|
| COMPANY: EMI | | SCOPE OF WORK: Roadway Geotechnical Borings & Reports | | | DATE: Sep-18 | |
| PROJECT: Hamner Ave Bridge Project | | MILESTONE/PHASE/PROJECT SUMMARY: Phase IC - Roadway Borings | | | | |
| DIRECT LABOR | | | | | | |
| PERSONNEL | FUNCTION | HOURS | RATE | AMOUNT | | |
| Lino Cheang | PM | 66.0 | \$ 80.00 | \$ 5,280.00 | | |
| Eric Brown | Principal Engineer | 108.0 | \$ 63.00 | \$ 6,804.00 | | |
| Pat Wilson | Sr Project Engineer | 250.0 | \$ 46.30 | \$ 11,575.00 | | |
| Michael Hoshiyama | Project Geologist | 510.0 | \$ 35.55 | \$ 18,130.50 | | |
| Dane Nicklaus | Staff Engineer | 280.0 | \$ 33.80 | \$ 9,464.00 | | |
| Kiat Kaekul | Technician | 140.0 | \$ 34.65 | \$ 4,851 | | |
| TOTAL HOURS | | 1,354.0 | TOTAL DIRECT LABOR | | \$ 56,104.50 | |
| MULTIPLIERS | | | | | | |
| Fringe Benefit | 37.23% (of Total Direct Labor) | | | \$ 20,888 | | |
| Audited Overhead Rate | 147.98% (of Total Direct Labor) | | | \$ 83,023 | | |
| | | | | TOTAL MULTIPLIERS | | \$ 103,911 |
| OTHER DIRECT EXPENSES | | | | | | |
| ITEM | UNIT | QUANTITY | UNIT COST | AMOUNT | | |
| Drill Rig | EA | 1 | \$ 40,000 | \$ 40,000.00 | | |
| Drum Testing and Disposal | EA | 1 | \$ 6,000.00 | \$ 6,000.00 | | |
| Lab Test | EA | 1 | \$ 7,500.00 | \$ 7,500.00 | | |
| Traffic Control | EA | 1 | \$ 16,000.00 | \$ 16,000.00 | | |
| Permitting Fees | EA | 1 | \$ 500.00 | \$ 500.00 | | |
| Shipping & Repro | EA | 1 | \$ 50.00 | \$ 50.00 | | |
| | | | | \$ - | | |
| | | | | TOTAL OTHER DIRECT EXPENSES | | \$ 70,050.00 |
| OUTSIDE SERVICES | | | | | | |
| COMPANY | LABOR | MULTIPLIERS | FEE | EXPENSES | TOTAL | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | | | | TOTAL OUTSIDE SERVICES | | \$ - |
| FEES | | | | | | |
| FIXED FEE | 10.00% | | | \$ 16,002 | | |
| | | | | TOTAL FEES | | \$ 16,002 |
| | | | | TOTAL COST | | \$ 246,067 |

Manhour Worksheet

| COMPANY: | | SCOPE OF WORK: | | | | | | | | | | DATE: | | |
|---------------------------|--|--|--------------------|---------------------|-------------------|----------------|------------|-----|---|---|-------|-------------|-----------|--|
| EMI | | Roadway Geotechnical Borings & Reports | | | | | | | | | | Sep-18 | | |
| PROJECT: | | MILESTONE/PHASE/PROJECT SUMMARY: | | | | | | | | | | | | |
| Hamner Ave Bridge Project | | Phase IC - Roadway Borings | | | | | | | | | | | | |
| Task No. | DESCRIPTION | Personnel: | | | | | | | | | | Total Hours | Amount | |
| | | PM | Principal Engineer | Sr Project Engineer | Project Geologist | Staff Engineer | Technician | | | | | | | |
| Raw Labor Rate: | | \$80.00 | \$63.00 | \$46.30 | \$35.55 | \$33.80 | \$34.65 | | | | | | | |
| 1A.2 | Roadway Geotechnical Investigations | | | | | | | | | | | | | |
| 1A.2.1 | Permitting / Planning | | | 10 | 40 | | 40 | | | | | 90 | \$ 3,271 | |
| 1A.2.2 | Field Investigation | 8 | | 20 | 80 | | 80 | | | | | 188 | \$ 7,182 | |
| 1A.2.3 | Lab Testing | | | | 30 | | 20 | | | | | 50 | \$ 1,760 | |
| 1A.2.4 | Analysis and Design | | 8 | 40 | 80 | 120 | 140 | | | | | 388 | \$ 15,862 | |
| 1A.2.5 | LOTB | | 2 | 8 | 20 | 80 | | | | | | 110 | \$ 4,434 | |
| 1A.2.5 | Report Preparation | | 8 | 60 | 80 | 160 | 140 | | | | | 448 | \$ 18,544 | |
| | Meetings/Coordination | | 40 | | 40 | | | | | | | 80 | \$ 5,052 | |
| | | | | | | | | | | | | - | \$ - | |
| | | | | | | | | | | | | - | \$ - | |
| TOTALS | | - | 66 | 108 | 250 | 510 | 280 | 140 | - | - | 1,354 | 56,105 | | |

Exhibit A

Cost Proposal Worksheet

| | | | | | |
|---------------------------------------|--|--------------------|------------------------------------|----------------------|---------------------|
| COMPANY: EMI | SCOPE OF WORK: Final PS&E - River Borings and Final Reports | DATE: Sep-18 | | | |
| PROJECT: Hamner Ave Bridge Project | MILESTONE/PHASE/PROJECT SUMMARY: Phase IC - River Borings | | | | |
| DIRECT LABOR | | | | | |
| PERSONNEL | FUNCTION | HOURS | RATE | AMOUNT | |
| Lino Cheang | PM | 28.0 | \$ 80.00 | \$ 2,240.00 | |
| Eric Brown | Principal Engineer | 24.0 | \$ 63.00 | \$ 1,512.00 | |
| Pat Wilson | Senior Project Engineer | 110.0 | \$ 46.30 | \$ 5,093.00 | |
| Michael Hoshiyama | Project Geologist | 320.0 | \$ 35.55 | \$ 11,376.00 | |
| Dane Nicklaus | Staff Engineer | 80.0 | \$ 33.80 | \$ 2,704.00 | |
| Kiat Kaekul | Technician | 220.0 | \$ 34.65 | \$ 7,623.00 | |
| | | | | \$ - | |
| TOTAL HOURS | | 782.0 | TOTAL DIRECT LABOR | | \$ 30,548.00 |
| MULTIPLIERS | | | | | |
| Fringe Benefit | 37.23% (of Total Direct Labor) | | \$ | 11,373 | |
| Audited Overhead Rate | 147.98% (of Total Direct Labor) | | \$ | 45,205 | |
| | | | TOTAL MULTIPLIERS | \$ 56,578 | |
| OTHER DIRECT EXPENSES | | | | | |
| ITEM | UNIT | QUANTITY | UNIT COST | AMOUNT | |
| Clearing and Grading Contractor | EA | 1 | \$ 26,500 | \$ 26,500.00 | |
| Fence Repair | EA | 1 | \$ 2,000.00 | \$ 2,000.00 | |
| Drilling Rig | EA | 1 | \$ 180,000.00 | \$ 180,000.00 | |
| CPT Rig | | 1 | \$ 18,000.00 | \$ 18,000.00 | |
| Drum Testing and Disposal | | 40 | \$ 275.00 | \$ 11,000.00 | |
| Lab Tests | | 1 | \$ 12,500.00 | \$ 12,500.00 | |
| Traffic Control | | 10 | \$ 1,500.00 | \$ 15,000.00 | |
| Permitting Fees | | 1 | \$ 9,000.00 | \$ 9,000.00 | |
| Shipping & Repro | | 1 | \$ 50.00 | \$ 50.00 | |
| | | | | \$ - | |
| | | | TOTAL OTHER DIRECT EXPENSES | \$ 274,050.00 | |
| OUTSIDE SERVICES | | | | | |
| COMPANY | LABOR | MULTIPLIERS | FEE | EXPENSES | TOTAL |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| | | | TOTAL OUTSIDE SERVICES | \$ | - |
| FEES | | | | | |
| FIXED FEE | 10.00% | | \$ | 8,713 | |
| | | | TOTAL FEES | \$ 8,713 | |
| | | | TOTAL COST | \$ 369,889 | |

Exhibit A

| Cost Proposal Worksheet | | | | | | |
|---------------------------------------|---|-------------|---------------------------|------------------------------------|------------------|-----------------|
| COMPANY: EMI | SCOPE OF WORK: Services During Bid | | | | DATE: Sep-18 | |
| PROJECT: Hamner Ave Bridge Project | MILESTONE/PHASE/PROJECT SUMMARY: Phase III | | | | | |
| DIRECT LABOR | | | | | | |
| PERSONNEL | FUNCTION | HOURS | RATE | AMOUNT | | |
| Lino Cheang | PM | 0.0 | \$ 80.00 | \$ - | | |
| Eric Brown | Principal Engineer | 8.0 | \$ 63.00 | \$ 504.00 | | |
| Pat Wilson | Senior Project Engineer | 10.0 | \$ 46.30 | \$ 463.00 | | |
| Michael Hoshiyama | Project Geologist | 0.0 | \$ 35.55 | \$ - | | |
| Dane Nicklaus | Staff Engineer | 0.0 | \$ 33.80 | \$ - | | |
| Kiat Kaekul | Technician | 0.0 | \$ 34.65 | \$ - | | |
| | | | | \$ - | | |
| TOTAL HOURS | | 18.0 | TOTAL DIRECT LABOR | | \$ 967.00 | |
| MULTIPLIERS | | | | | | |
| Fringe Benefit | 37.23% (of Total Direct Labor) | | | \$ 360 | | |
| Audited Overhead Rate | 147.98% (of Total Direct Labor) | | | \$ 1,431 | | |
| | | | | TOTAL MULTIPLIERS | | \$ 1,791 |
| OTHER DIRECT EXPENSES | | | | | | |
| ITEM | UNIT | QUANTITY | UNIT COST | AMOUNT | | |
| Mileage | Ea | 1 | \$ 50 | \$ 50.00 | | |
| | | | | \$ - | | |
| | | | | TOTAL OTHER DIRECT EXPENSES | | \$ 50.00 |
| OUTSIDE SERVICES | | | | | | |
| COMPANY | LABOR | MULTIPLIERS | FEE | EXPENSES | TOTAL | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | | | | TOTAL OUTSIDE SERVICES | | \$ - |
| FEES | | | | | | |
| FIXED FEE | 10.00% | | | \$ 276 | | |
| | | | | TOTAL FEES | | \$ 276 |
| | | | | TOTAL COST | | \$ 3,084 |

Exhibit A

| Cost Proposal Worksheet | | | | | | |
|--|--|--------------|---------------------------|------------------------------------|------------------------|------------------|
| COMPANY: EMI | SCOPE OF WORK: Secices During Construction | | | | DATE: Sep-18 | |
| PROJECT: Hamner Ave Bridge Project | MILESTONE/PHASE/PROJECT SUMMARY: Phase IV | | | | | |
| DIRECT LABOR | | | | | | |
| PERSONNEL | FUNCTION | HOURS | RATE | AMOUNT | | |
| Lino Cheang | PM | 0.0 | \$ 80.00 | \$ - | | |
| Eric Brown | Principal Engineer | 36.0 | \$ 63.00 | \$ 2,268.00 | | |
| Pat Wilson | Senior Project Engineer | 36.0 | \$ 46.30 | \$ 1,666.80 | | |
| Michael Hoshiyama | Project Geologist | 0.0 | \$ 35.55 | \$ - | | |
| Dane Nicklaus | Staff Engineer | 0.0 | \$ 33.80 | \$ - | | |
| Kiat Kaekul | Technician | 28.0 | \$ 34.65 | \$ 970.20 | | |
| | | | | \$ - | | |
| TOTAL HOURS | | 100.0 | TOTAL DIRECT LABOR | | \$ 4,905.00 | |
| MULTIPLIERS | | | | | | |
| Fringe Benefit | 37.23% (of Total Direct Labor) | | | \$ 1,826 | | |
| Audited Overhead Rate | 147.98% (of Total Direct Labor) | | | \$ 7,258 | | |
| | | | | TOTAL MULTIPLIERS | | \$ 9,085 |
| OTHER DIRECT EXPENSES | | | | | | |
| ITEM | UNIT | QUANTITY | UNIT COST | AMOUNT | | |
| Mileage | Ea | 3 | \$ 50 | \$ 150.00 | | |
| | | | | \$ - | | |
| | | | | TOTAL OTHER DIRECT EXPENSES | | \$ 150.00 |
| OUTSIDE SERVICES | | | | | | |
| COMPANY | LABOR | MULTIPLIERS | FEE | EXPENSES | TOTAL | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | \$ - | \$ - | \$ - | \$ - | \$ - | |
| | | | | TOTAL OUTSIDE SERVICES | | \$ - |
| FEES | | | | | | |
| FIXED FEE | 10.00% | | | \$ 1,399 | | |
| | | | | TOTAL FEES | | \$ 1,399 |
| | | | | TOTAL COST | | \$ 15,539 |

Manhour Worksheet

| COMPANY: | | SCOPE OF WORK: | | | | | | | DATE: | | | | | | | |
|---------------------------|--|----------------------------------|--|----|--------------------|-------------------------|-------------------|----------------|------------|-------------|----------|---|----|---|-----|-------|
| EMI | | Services During Construction | | | | | | | Sep-18 | | | | | | | |
| PROJECT: | | MILESTONE/PHASE/PROJECT SUMMARY: | | | | | | | | | | | | | | |
| Hammer Ave Bridge Project | | Phase IV | | | | | | | | | | | | | | |
| Task No. | DESCRIPTION | Personnel: | | PM | Principal Engineer | Senior Project Engineer | Project Geologist | Staff Engineer | Technician | Total Hours | Amount | | | | | |
| | | Raw Labor Rate: | | | | | | | | | | | | | | |
| 4 | Geotechnical Support during Construction | | | | | | | | | | | | | | | |
| | | | | | | | | | | | \$ - | | | | | |
| | | | | | | | | | | | \$ - | | | | | |
| | Attend a Pre-Construction Meeting | | | 4 | | | | | | 4 | \$ 252 | | | | | |
| | Respond to RFI | | | 8 | | 4 | | | | 12 | \$ 689 | | | | | |
| | Review Contract CCO | | | 8 | | 8 | | | | 16 | \$ 874 | | | | | |
| | Review Contractor's Submittals | | | 8 | | 8 | | | | 16 | \$ 874 | | | | | |
| | Review CIDH Pile Installation Plans | | | | | | | | | | \$ - | | | | | |
| | On-site Support | | | 8 | | 16 | | | 28 | 52 | \$ 2,215 | | | | | |
| | | | | | | | | | | | \$ - | | | | | |
| | | | | | | | | | | | \$ - | | | | | |
| | | | | | | | | | | | \$ - | | | | | |
| TOTALS | | | | | | | | | | 36 | 36 | - | 28 | - | 100 | 4,905 |

Exhibit A

| Cost Proposal Worksheet | | | | | |
|---------------------------------------|---------------------------------|--|-----------|------------------------------------|---------------------|
| COMPANY: ADVANTEC | | SCOPE OF WORK: 65% Unchecked Design & Details - Traffic Signal Modifications & Electrical Plans | | | DATE: Sep-18 |
| PROJECT: Hamner Ave Bridge Project | | MILESTONE/PHASE/PROJECT SUMMARY: Phase II | | | |
| DIRECT LABOR | | | | | |
| PERSONNEL | FUNCTION | HOURS | RATE | AMOUNT | |
| Edward Miller | Prog Manager | 38.0 | \$ 96.15 | \$ | 3,653.70 |
| Tracy Moriya | SR Traffic Eng | 57.0 | \$ 56.91 | \$ | 3,243.87 |
| Alferedo Cabrera | Traffic Eng | 61.0 | \$ 42.31 | \$ | 2,580.91 |
| HKHeang Tang | Assisstant Engineer | 67.0 | \$ 31.25 | \$ | 2,093.75 |
| | | | | \$ | - |
| TOTAL HOURS | | 223.0 | | TOTAL DIRECT LABOR | \$ 11,572.23 |
| MULTIPLIERS | | | | | |
| Fringe Benefit | 53.88% (of Total Direct Labor) | | | \$ | 6,235 |
| Audited Overhead Rate | 127.87% (of Total Direct Labor) | | | \$ | 14,797 |
| | | | | TOTAL MULTIPLIERS | \$ 21,033 |
| OTHER DIRECT EXPENSES | | | | | |
| ITEM | UNIT | QUANTITY | UNIT COST | AMOUNT | |
| | | | | \$ | - |
| Printing | EA | 251 | \$ 1.00 | \$ | 251.00 |
| FedEx | EA | 5 | \$ 49.00 | \$ | 245.00 |
| Mileage | MI | 380 | \$ 0.54 | \$ | 205.20 |
| | | | | \$ | - |
| | | | | \$ | - |
| | | | | \$ | - |
| | | | | \$ | - |
| | | | | TOTAL OTHER DIRECT EXPENSES | \$ 701.20 |
| OUTSIDE SERVICES | | | | | |
| COMPANY | LABOR | MULTIPLIERS | FEE | EXPENSES | TOTAL |
| | | | | | \$ - |
| | | | | | \$ - |
| | | | | | \$ - |
| | | | | | \$ - |
| | | | | | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| TOTAL OUTSIDE SERVICES | | | | | \$ - |
| FEES | | | | | |
| FIXED FEE | 10.00% | | | \$ | 3,260 |
| | | | | | TOTAL FEES |
| | | | | | \$ 3,260 |
| TOTAL COST | | | | | \$ 36,566 |

Manhour Worksheet

| COMPANY: | | SCOPE OF WORK: | | | | | | DATE: |
|--|------------------------------------|--|--------------|----------------|-------------|--------------------|-------------|----------|
| ADVANTEC | | 65% Unchecked Design & Details - Traffic Signal Modifications & Electrical Plans | | | | | | Sep-18 |
| PROJECT: | | MILESTONE/PHASE/PROJECT SUMMARY: | | | | | | |
| Hammer Ave Bridge Project | | Phase IC | | | | | | |
| Task No. | DESCRIPTION | Personnel: | Prog Manager | SR Traffic Eng | Traffic Eng | Assistant Engineer | Total Hours | Amount |
| | | Raw Labor Rate: | | | | | | |
| Traffic Signal Modifications & Electrical Plans | | | | | | | | |
| 1A.4.3 | Traffic Signal Modification Plans | | 4 | 22 | 26 | 26 | 78 | \$ 3,549 |
| | Traffic Signal Communication Plans | | 1 | 10 | 14 | 14 | 39 | \$ 1,695 |
| 1A.4.5 | Roadway Lighting Plans | | 1 | 16 | 16 | 16 | 49 | \$ 2,184 |
| | Roadway Lighting Analysis | | | 1 | 2 | 6 | 9 | \$ 329 |
| | Specifications | | | 1 | 1 | 1 | 3 | \$ 130 |
| | Cost Estimates | | | 1 | 2 | 4 | 7 | \$ 267 |
| | PM - QC | | 24 | 6 | | | 30 | \$ 2,649 |
| | PDT Meetings (10) & Coordination | | 8 | | | | 8 | \$ 769 |
| | | | | | | | | \$ - |
| | | | | | | | | \$ - |
| TOTALS | | | 38 | 57 | 61 | 67 | 223 | 11,572 |

Exhibit A

Cost Proposal Worksheet

| | | |
|----------------------|--|-----------------|
| COMPANY: ADVANTEC | SCOPE OF WORK: Final PS&E - Traffic Signal Modifications & Electrical Plans, Specifications, & Estimate | DATE: Sep-18 |
|----------------------|--|-----------------|

| | |
|---------------------------------------|--|
| PROJECT: Hamner Ave Bridge Project | MILESTONE/PHASE/PROJECT SUMMARY: Phase II |
|---------------------------------------|--|

DIRECT LABOR

| PERSONNEL | FUNCTION | HOURS | RATE | AMOUNT |
|--------------------|---------------------|--------------|----------|---------------------------------------|
| Edward Miller | Prog Manager | 28.0 | \$ 96.15 | \$ 2,692.20 |
| Tracy Moriya | SR Traffic Eng | 35.0 | \$ 56.91 | \$ 1,991.85 |
| Alferedo Cabrera | Traffic Eng | 39.0 | \$ 42.31 | \$ 1,650.09 |
| HKHeang Tang | Assisstant Engineer | 39.0 | \$ 31.25 | \$ 1,218.75 |
| | | | | \$ - |
| TOTAL HOURS | | 141.0 | | TOTAL DIRECT LABOR \$ 7,552.89 |

MULTIPLIERS

| | | |
|-----------------------|---------------------------------|------------------------------------|
| Fringe Benefit | 53.88% (of Total Direct Labor) | \$ 4,069 |
| Audited Overhead Rate | 127.87% (of Total Direct Labor) | \$ 9,658 |
| | | TOTAL MULTIPLIERS \$ 13,727 |

OTHER DIRECT EXPENSES

| ITEM | UNIT | QUANTITY | UNIT COST | AMOUNT |
|------------------------------------|------|----------|-----------|------------------|
| | | | | \$ - |
| Printing | EA | 251 | \$ 1.00 | \$ 251.00 |
| FedEx | EA | 5 | \$ 49.00 | \$ 245.00 |
| Mileage | MI | 380 | \$ 0.54 | \$ 205.20 |
| | | | | \$ - |
| | | | | \$ - |
| | | | | \$ - |
| | | | | \$ - |
| TOTAL OTHER DIRECT EXPENSES | | | | \$ 701.20 |

OUTSIDE SERVICES

| COMPANY | LABOR | MULTIPLIERS | FEE | EXPENSES | TOTAL |
|-------------------------------|-------|-------------|------|----------|-------------|
| | | | | | \$ - |
| | | | | | \$ - |
| | | | | | \$ - |
| | | | | | \$ - |
| | | | | | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| | \$ - | \$ - | \$ - | \$ - | \$ - |
| TOTAL OUTSIDE SERVICES | | | | | \$ - |

FEES

| | | |
|-----------|--------|-----------------------------|
| FIXED FEE | 10.00% | \$ 2,128 |
| | | TOTAL FEES \$ 2,128 |
| | | TOTAL COST \$ 24,109 |

Manhour Worksheet

| COMPANY: | | SCOPE OF WORK: | | | | | | DATE: | |
|--|------------------------------------|--|-----------------|--------------|----------------|-------------|--------------------|-------------|----------|
| ADVANTEC | | Final PS&E - Traffic Signal Modifications & Electrical Plans, Specifications, & Estimate | | | | | | Sep-18 | |
| PROJECT: | | MILESTONE/PHASE/PROJECT SUMMARY: | | | | | | | |
| Hamner Ave Bridge Project | | Phase II | | | | | | | |
| Task No. | DESCRIPTION | Personnel: | | Prog Manager | SR Traffic Eng | Traffic Eng | Assistant Engineer | Total Hours | Amount |
| | | | Raw Labor Rate: | | | | | | |
| Traffic Signal Modifications & Electrical Plans | | | | | | | | | |
| 1A.4.3 | Traffic Signal Modification Plans | | | 2 | 10 | 14 | 14 | 40 | \$ 1,791 |
| | Traffic Signal Communication Plans | | | 1 | 6 | 6 | 6 | 19 | \$ 879 |
| 1A.4.5 | Roadway Lighting Plans | | | 1 | 8 | 8 | 8 | 25 | \$ 1,140 |
| | Roadway Lighting Analysis | | | | 1 | 2 | 6 | 9 | \$ 329 |
| | Specifications | | | | 3 | 7 | 1 | 11 | \$ 498 |
| | Cost Estimates | | | | 1 | 2 | 4 | 7 | \$ 267 |
| | | | | | | | | - | \$ - |
| | PM - QC | | | 16 | 6 | | | 22 | \$ 1,880 |
| | PDT Meetings (10) & Coordination | | | 8 | | | | 8 | \$ 769 |
| | | | | | | | | - | \$ - |
| | | | | | | | | - | \$ - |
| TOTALS | | | | 28 | 35 | 39 | 39 | 141 | 7,553 |

AMENDMENT 1 • APPENDIX 1D

Maximum Position Hourly Rates

TYLI Hourly Salary Position Maximums

| FUNCTION | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|--------------------------|----------|----------|----------|----------|----------|----------|
| | Max | Max | Max | Max | Max | Max |
| Project Manager | \$119.00 | \$122.57 | \$126.25 | \$130.03 | \$133.94 | \$137.95 |
| Specifications Engineer | \$92.34 | \$95.11 | \$97.96 | \$100.90 | \$103.93 | \$107.05 |
| Construction Engineer | \$108.84 | \$112.11 | \$115.47 | \$118.93 | \$122.50 | \$126.18 |
| Bridge CAD | \$52.00 | \$53.56 | \$55.17 | \$56.82 | \$58.53 | \$60.28 |
| Bridge Architect | \$83.24 | \$85.74 | \$88.31 | \$90.96 | \$93.69 | \$96.50 |
| QA/QC Manager | \$119.00 | \$122.57 | \$126.25 | \$130.03 | \$133.94 | \$137.95 |
| Lead Civil Engineer | \$119.00 | \$122.57 | \$126.25 | \$130.03 | \$133.94 | \$137.95 |
| CAD | \$52.00 | \$53.56 | \$55.17 | \$56.82 | \$58.53 | \$60.28 |
| Admin | \$40.00 | \$41.20 | \$42.44 | \$43.71 | \$45.02 | \$46.37 |
| Accountant | \$44.96 | \$46.31 | \$47.70 | \$49.13 | \$50.60 | \$52.12 |
| Sr Bridge Engineer | \$92.34 | \$95.11 | \$97.96 | \$100.90 | \$103.93 | \$107.05 |
| Civil Engineer | \$51.60 | \$53.15 | \$54.74 | \$56.38 | \$58.08 | \$59.82 |
| Senior Civil Engineer | \$92.34 | \$95.11 | \$97.96 | \$100.90 | \$103.93 | \$107.05 |
| Bridge Engineer | \$51.60 | \$53.15 | \$54.74 | \$56.38 | \$58.08 | \$59.82 |
| Bridge Architect CAD | \$83.24 | \$85.74 | \$88.31 | \$90.96 | \$93.69 | \$96.50 |
| Civil Engineer/Architect | \$83.24 | \$85.74 | \$88.31 | \$90.96 | \$93.69 | \$96.50 |
| Drainage Engineer | \$51.60 | \$53.15 | \$54.74 | \$56.38 | \$58.08 | \$59.82 |
| Senior Stormwater Eng | \$92.34 | \$95.11 | \$97.96 | \$100.90 | \$103.93 | \$107.05 |

ICF Hourly Salary Position Maximums

| FUNCTION | 2018 | 2019 | 2020 | 2021 |
|-------------------------------|----------|----------|----------|----------|
| | Max | Max | Max | Max |
| Senior Project Director | \$134.81 | \$138.85 | \$143.02 | \$147.31 |
| Project Director | \$91.22 | \$93.96 | \$96.77 | \$99.68 |
| Technical Director | \$85.78 | \$88.35 | \$91.00 | \$93.73 |
| Sr Technical Analyst | \$75.21 | \$77.47 | \$79.80 | \$82.19 |
| Managing Consultant | \$69.00 | \$71.07 | \$73.20 | \$75.39 |
| Senior Consultant III | \$64.22 | \$66.15 | \$68.13 | \$70.17 |
| Senior Consultant II | \$59.80 | \$61.59 | \$63.44 | \$65.35 |
| Senior Consultant I | \$53.27 | \$54.87 | \$56.51 | \$58.21 |
| Associate Consultant III | \$46.51 | \$47.91 | \$49.34 | \$50.82 |
| Associate Consultant II | \$46.48 | \$47.88 | \$49.31 | \$50.79 |
| Associate Consultant I | \$45.68 | \$47.05 | \$48.46 | \$49.92 |
| Assistant Consultant / Editor | \$42.79 | \$44.07 | \$45.40 | \$46.76 |
| Admin Technician | \$36.77 | \$37.87 | \$39.01 | \$40.18 |
| Intern | \$27.00 | \$27.81 | \$28.64 | \$29.50 |

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:

Table listing articles and their corresponding page numbers: 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 June 30, 2023 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 Hamner Avenue Bridge at Santa Ana River

- B. In addition to the allowable incurred costs, LOCAL AGENCY will pay CONSULTANT a fixed fee of **\$254,664**. 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
Tayfun Saglam, 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 **\$5,172,639**.
- 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 **\$5,172,639** 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 Hamner Avenue 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 Hamner Avenue 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.

Replacement of Hamner Avenue Bridge at Santa Ana River

- 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.

Replacement of Hamner Avenue Bridge at Santa Ana River

- 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 0 %. Participation by DBE consultant or subconsultants shall be in accordance with information contained in the Consultant Proposal DBE Commitment (Exhibit 10-01), or in the Consultant Contract DBE Information (Exhibit 10-02) 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 Hamner Avenue 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: Riverside County Transportation Department 2. Contract DBE Goal: 0%
 3. Project Description: Replacement of Hamner Avenue Bridge over Santa Ana River
 4. Project Location: Hamner Avenue, City of Norco, County of Riverside
 5. Consultant's Name: T.Y. Lin International 6. Prime Certified DBE: 7. Total Contract Award Amount: \$5,172,639
 8. Total Dollar Amount for **ALL** Subconsultants: \$2,253,148 9. Total Number of **ALL** Subconsultants: 6

| 10. Description of Work, Service, or Materials Supplied | 11. DBE Certification Number | 12. DBE Contact Information | 13. DBE Dollar Amount |
|---|------------------------------|--|-----------------------|
| Earth Mechanics, Geotechnical Investigations and Reports | 6956 | 17800 Newhope Street, Suite B, Fountain Valley, CA 92708 | \$682,054 |
| Diaz-Yourman, Initial Site Assessment & Aerially Deposited Lead Reports | 20160 | 1616 East 17th Street Santa Ana, CA 92705 | \$38,697 |
| ADVANTEC - Traffic Engineering | 30139 | 217011 Copley Drive, Suite 350, Diamond Bar, CA 91765 | \$110,298 |
| | | | |
| | | | |
| | | | |
| | | | |
| Local Agency to Complete this Section | | | |
| 20. Local Agency Contract Number: <u>Tayfun Saglam</u> | | 14. TOTAL CLAIMED DBE PARTICIPATION | \$ 831,049 |
| 21. Federal-Aid Project Number: <u>BRLSZ5956(230)</u> | | | 16 % |
| 22. Contract Execution Date: <u>12/6/2016</u> | | IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required. Digitally signed by W. Mark Ashley DN: cn=W. Mark Ashley, o=T.Y. Lin International, ou=, email=mark.ashley@tylin.com, c=US Date: 2018.09.20 17:02:06 -07'00' | |
| Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate. | | | |
| <u><i>Tayfun Saglam</i></u> | <u>9/20/18</u> | | |
| 23. Local Agency Representative's Signature | 24. Date | | |
| <u>Tayfun Saglam</u> | <u>951-955-2871</u> | | |
| 25. Local Agency Representative's Name | 26. Phone | | |
| <u>Engineering Project Manager</u> | | 15. Preparer's Signature | <u>9/20/2018</u> |
| 27. Local Agency Representative's Title | | <u>W. Mark Ashley</u> | 16. Date |
| | | 17. Preparer's Name | <u>(619) 908-3203</u> |
| | | <u>Sr. Vice President</u> | 18. Phone |
| | | 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.

INSTRUCTIONS – CONSULTANT CONTRACT DBE COMMITMENT**CONSULTANT SECTION**

1. **Local Agency** - Enter the name of the local or regional agency that is funding the contract.
2. **Contract DBE Goal** - Enter the contract DBE goal percentage as it appears on the project advertisement.
3. **Project Description** - Enter the project description as it appears on the project advertisement (Bridge Rehab, Seismic Rehab, Overlay, Widening, etc).
4. **Project Location** - Enter the project location as it appears on the project advertisement.
5. **Consultant's Name** - Enter the consultant's firm name.
6. **Prime Certified DBE** - Check box if prime contractor is a certified DBE.
7. **Total Contract Award Amount** - Enter the total contract award dollar amount for the prime consultant.
8. **Total Dollar Amount for ALL Subconsultants** - Enter the total dollar amount for all subcontracted consultants. SUM = (DBEs + all Non-DBEs). Do not include the prime consultant information in this count.
9. **Total number of ALL subconsultants** - Enter the total number of all subcontracted consultants. SUM = (DBEs + all Non-DBEs). Do not include the prime consultant information in this count.
10. **Description of Work, Services, or Materials Supplied** - Enter description of work, services, or materials to be provided. Indicate all work to be performed by DBEs including work performed by the prime consultant's own forces, if the prime is a DBE. If 100% of the item is not to be performed or furnished by the DBE, describe the exact portion to be performed or furnished by the DBE. See LAPM Chapter 9 to determine how to count the participation of DBE firms.
11. **DBE Certification Number** - Enter the DBE's Certification Identification Number. All DBEs must be certified on the date bids are opened.
12. **DBE Contact Information** - Enter the name, address, and phone number of all DBE subcontracted consultants. Also, enter the prime consultant's name and phone number, if the prime is a DBE.
13. **DBE Dollar Amount** - Enter the subcontracted dollar amount of the work to be performed or service to be provided. Include the prime consultant if the prime is a DBE. See LAPM Chapter 9 for how to count full/partial participation.
14. **Total Claimed DBE Participation** - \$: Enter the total dollar amounts entered in the "DBE Dollar Amount" column. %: Enter the total DBE participation claimed ("Total Participation Dollars Claimed" divided by item "Total Contract Award Amount"). If the total % claimed is less than item "Contract DBE Goal," an adequately documented Good Faith Effort (GFE) is required (see Exhibit 15-H DBE Information - Good Faith Efforts of the LAPM).
15. **Preparer's Signature** - The person completing the DBE commitment form on behalf of the consultant's firm must sign their name.
16. **Date** - Enter the date the DBE commitment form is signed by the consultant's preparer.
17. **Preparer's Name** - Enter the name of the person preparing and signing the consultant's DBE commitment form.
18. **Phone** - Enter the area code and phone number of the person signing the consultant's DBE commitment form.
19. **Preparer's Title** - Enter the position/title of the person signing the consultant's DBE commitment form.

LOCAL AGENCY SECTION

20. **Local Agency Contract Number** - Enter the Local Agency contract number or identifier.
21. **Federal-Aid Project Number** - Enter the Federal-Aid Project Number.
22. **Contract Execution Date** - Enter the date the contract was executed.
23. **Local Agency Representative's Signature** - The person completing this section of the form for the Local Agency must sign their name to certify that the information in this and the Consultant Section of this form is complete and accurate.
24. **Date** - Enter the date the DBE commitment form is signed by the Local Agency Representative.
25. **Local Agency Representative's Name** - Enter the name of the Local Agency Representative certifying the consultant's DBE commitment form.
26. **Phone** - Enter the area code and phone number of the person signing the consultant's DBE commitment form.
27. **Local Agency Representative Title** - Enter the position/title of the Local Agency Representative certifying the consultant's DBE commitment form.