



# RESOURCE MANAGEMENT AGENCY COUNTY OF TULARE AGENDA ITEM

## BOARD OF SUPERVISORS

KUYLER CROCKER  
District One

PETE VANDER POEL  
District Two

AMY SHUKLIAN  
District Three

J. STEVEN WORTHLEY  
District Four

MIKE ENNIS  
District Five

**AGENDA DATE:** November 6, 2018

Public Hearing Required	Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
Scheduled Public Hearing w/Clerk	Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
Published Notice Required	Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
Advertised Published Notice	Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
County Counsel Sign-Off	Yes	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
Meet & Confer Required	Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
Electronic file(s) has been sent	Yes	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>
Budget Transfer (Aud 308) attached	Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
Personnel Resolution attached	Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
Agreements are attached and signature line for Chairman is marked with tab(s)/flag(s)	Yes	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>

CONTACT PERSON: Celeste Perez    PHONE: 559-624-7010

**SUBJECT:** Agreement with TRC Engineers, Inc. for the Avenue 428 over Sand Creek Bridge Project

### **REQUEST(S):**

That the Board of Supervisors:

1. Approve an Agreement with TRC Engineers, Inc. for an amount not to exceed \$522,738, to provide Professional Engineering Consulting Services for the Avenue 428 over Sand Creek Bridge Project for the period of November 6, 2018 to June 30, 2024; and
2. Authorize the Chairman of the Board of Supervisors to sign the Agreement with TRC Engineers, Inc.

### **SUMMARY:**

The Avenue 428 bridge over Sand Creek is located approximately 1/4 mile east of State Route 63 and approximately 1.5 miles northeast of the community of Orosi. The existing structure was built in 1939 and when the project was originally programmed, the bridge was flagged as Functionally Obsolete (bridge is too narrow relative to the approach roadway width) with a sufficiency rating of 56.8, therefore qualifying to receive funding for rehabilitation or replacement. It is anticipated the proposed bridge will consist of an approximately 70-foot long by 32-foot wide, multi-span cast-in-place concrete box culvert or flat slab bridge (structure type to be determined during preliminary engineering). A consultant team, managed by TRC Engineers, Inc., will lead the engineering effort upon approval of this agreement.

The County, serving as the lead agency, will work with Caltrans Local Assistance

**SUBJECT:** Agreement with TRC Engineers, Inc. for the Avenue 428 over Sand Creek Bridge Project  
**DATE:** November 6, 2018

Engineers to determine whether the existing structure shall be rehabilitated and widened or replaced with a new bridge meeting current American Association of State Highway and Transportation Officials (AASHTO) width and loading criteria. The project will be fully reimbursed (no local match required) by the Federal Highway Administration (FHWA) through the Highway Bridge Program (HBP) with the use of "toll credits."

The Resource Management Agency (RMA) issued a Request for Proposal (RFP) for qualified firms to provide engineering consulting services for three new bridge projects, including the Avenue 428 over Sand Creek Bridge. On May 1, 2018, Tulare County RMA received five proposals from interested engineering firms including:

- TRC Engineers, Inc.
- Drake Haglan and Associates
- Kleinfelder
- Michael Baker International
- NCM Engineering Corporation

Since the project is federally funded by FHWA and must meet all federal requirements, the proposals were reviewed based on criteria recommended per the Caltrans' Local Assistance Procedures Manual (LAPM) as follows:

1. Experience with similar projects
2. Understanding of the work to be performed and project approach
3. Quality of staff and demonstrated technical ability
4. Capability of developing innovative solutions
5. Financial responsibility and availability
6. Overall impression and responsiveness

To comply with federal requirements (for federally funded projects) and with state law, consultant selection was based solely on qualifications and the criteria described above. Cost and office location of the consultants could not be considered.

The proposals were independently reviewed by a 5-member panel of staff from the RMA and Kings County. After review of the proposals, the top three firms, consisting of TRC Engineers, Inc., Drake Haglan and Associates, and NCM Engineering Corporation, were shortlisted and interviewed by the same panel. The interviews were scored based on slightly different criteria consisting of the following: 1) Understanding of the work to be performed, 2) Experience with similar kinds of work, 3) Innovative solutions, and 4) Answers to panel questions.

After interviewing all shortlisted consultants, TRC Engineers, Inc., was selected as the top ranked consultant. The selected project team consists of the following firms:

- TRC Engineers, Inc. – Prime Consultant for Bridge Design (Fresno)
- 4 Creeks – Surveying and Mapping (Visalia)

**SUBJECT:** Agreement with TRC Engineers, Inc. for the Avenue 428 over Sand Creek Bridge Project

**DATE:** November 6, 2018

- WRECO – Hydrology and Hydraulics (Walnut Creek)
- WRECO – Geotechnical and Initial Site Assessment (Walnut Creek)
  - EXARO – Potholing (Fresno)
- GPA Consulting – Environmental and Regulatory Permitting (El Segundo)
  - DesignLab252 – Landscape Architecture (Fresno)

Upon completing negotiations with prime consultant, TRC Engineers, Inc., a not to exceed amount of \$522,738 was established as fair compensation for the scope of services required for this project.

Advertisement of the RFP for engineering services did not include civil engineering (roadway) design. County staff will perform all roadway work “in-house” to minimize project expenditures, ensure the roadway design conforms with County standards and preferences, and expedite the design phase of the project.

It is anticipated that the design of this project will take approximately 3 years to complete, including bridge and roadway design, environmental analysis and right-of-way clearance. Following this timeline, construction is anticipated to start in the Fall of 2022 and depending on the alternative selected, the project may take between 6 to 12 months to complete. This agreement does not include scope for construction support services therefore an amendment to this agreement will be required once the design is complete.

**FISCAL IMPACT/FINANCING:**

No Net County Cost to the General Fund.

A summary of the total estimated project cost for the Avenue 428 over Sand Creek Bridge Project is as follows:

No.	Phase	Cost
1	Preliminary Engineering	\$ 580,000
2	Right of Way	\$ 20,000
3	Construction	\$2,400,000
<b>Total</b>		<b>\$3,000,000</b>

The Highway Bridge Program will fund this project at a 100% reimbursement ratio with the use of “toll credits” (no local match required).

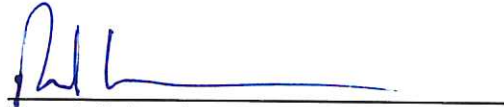
County Road Funds will be used to fund this agreement, but will be fully reimbursed by Federal Highway Bridge Program funds in an amount up to \$522,738.

**LINKAGE TO THE COUNTY OF TULARE STRATEGIC BUSINESS PLAN:**

This Project will enhance the safety and security of the public by improving the transportation infrastructure for both the general population in the region and the motorists using this facility.

**SUBJECT:** Agreement with TRC Engineers, Inc. for the Avenue 428 over Sand Creek  
Bridge Project  
**DATE:** November 6, 2018

**ADMINISTRATIVE SIGN-OFF:**

A handwritten signature in blue ink, appearing to read 'Reed Schenke', is written over a horizontal line.

Reed Schenke, P.E.  
Director

cc: County Administrative Office

Attachment(s): Attachment A – Vicinity Map  
Attachment B – Agreement for Professional Engineering Services

**BEFORE THE BOARD OF SUPERVISORS  
COUNTY OF TULARE, STATE OF CALIFORNIA**

IN THE MATTER OF AGREEMENT WITH TRC ENGINEERS, INC. FOR THE AVENUE 428 OVER SAND CREEK BRIDGE PROJECT	) ) ) )	Resolution No. _____ Agreement No. _____
--	------------------	---

UPON MOTION OF SUPERVISOR \_\_\_\_\_,      SECONDED      BY  
SUPERVISOR \_\_\_\_\_, THE FOLLOWING WAS ADOPTED BY THE  
BOARD OF SUPERVISORS, AT AN OFFICIAL MEETING HELD NOVEMBER 6, 2018,  
BY THE FOLLOWING VOTE:

AYES:  
NOES:  
ABSTAIN:  
ABSENT:

ATTEST: JASON T. BRITT  
COUNTY ADMINISTRATIVE OFFICER/  
CLERK, BOARD OF SUPERVISORS

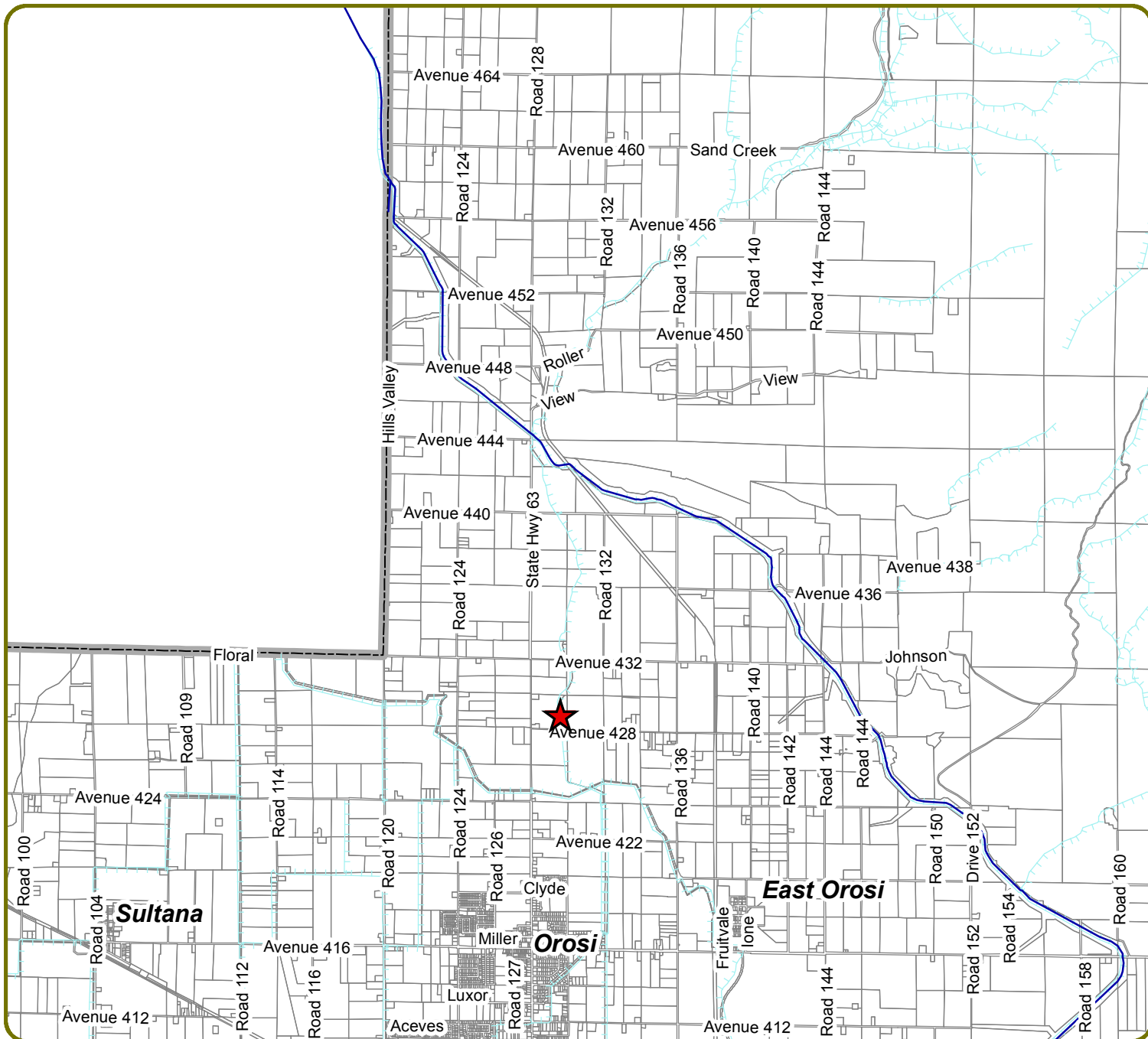
BY: \_\_\_\_\_  
Deputy Clerk

\* \* \* \* \*





1. Approved an Agreement with TRC Engineers, Inc. for an amount not to exceed \$522,738, to provide Professional Engineering Consulting Services for the Avenue 428 over Sand Creek Bridge Project for the period of November 6, 2018 to June 30, 2024; and
2. Authorized the Chairman of the Board of Supervisors to sign the Agreement with TRC Engineers, Inc.

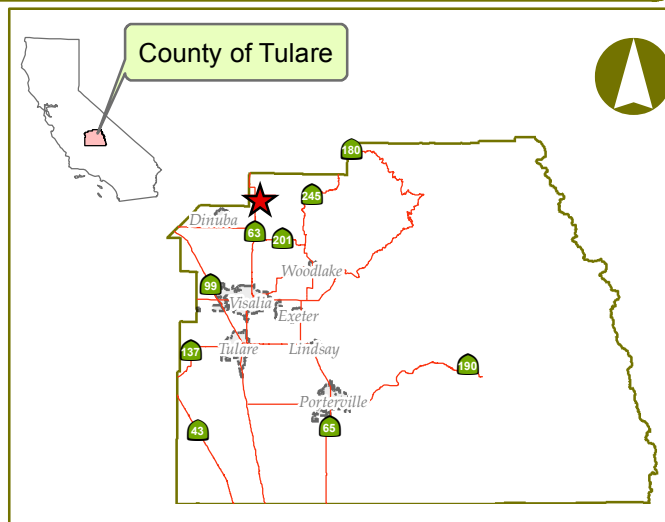
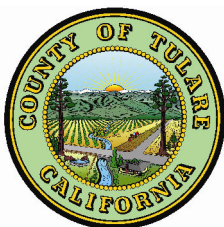
# **Attachment A**

## Vicinity Map



## Legend

-  Project Site
-  Rivers
-  Streams
-  County Boundary



**Avenue 428 and Sand Creek  
Vicinity Map**

# **Attachment B**

## Consultant Agreement



## AGREEMENT FOR PROFESSIONAL ENGINEERING CONSULTING SERVICES

THIS AGREEMENT ("Agreement") is entered into as of **November 6, 2018**, between the **COUNTY OF TULARE**, a political subdivision of the State of California ("COUNTY"), and **TRC ENGINEERS INC.**, referred to as "CONSULTANT", incorporated within the State of California. COUNTY and CONSULTANT are each a "Party" and together are the "Parties" to this Agreement, which is made with reference to the following:

A. WHEREAS, COUNTY has requested professional engineering services for a bridge replacement/rehabilitation project on **Avenue 428 Sand Creek**. These consulting services are to include project management, preliminary engineering, plan, specifications, and estimate (PS&E), bidding, and other compliance tasks as described per Exhibit A, to the satisfaction of the COUNTY, State, Federal Highway Administration (FHWA) and other jurisdictional agencies. CONSULTANT shall document the results of the work to the satisfaction of the COUNTY, the State and FHWA. This may include preparation of progress and final reports or similar evidence of attainment of the agreement objectives and;

B. WHEREAS, CONSULTANT'S response indicates that it possesses the professional qualifications, relevant experience and demonstrated competence to provide such services. If there is any conflict between the approved Cost Proposal and this Agreement, this Agreement shall take precedence and;

ACCORDINGLY, IT IS AGREED:

1. **SERVICES**. CONSULTANT will provide professional engineering services, more particularly described in **Exhibit A** ("Scope of Work"). All work performed and billed to the COUNTY by the CONSULTANT shall be grant eligible in accordance with the Caltrans Local Assistance Procedures Manual (LAPM), unless otherwise directed by the COUNTY, in writing.

2. **TIME FOR PERFORMANCE/TERM**. Time is of the essence in this Agreement. The services as described in Exhibit A will commence within five days of receipt of a written notice to proceed issued following approval of this Agreement by the COUNTY. This agreement becomes effective as of **November 6, 2018** and expires at 11:59 PM on **December 31, 2024**, unless earlier terminated as provided below, or unless the Parties extend the term by a written amendment to this Agreement. Mutually acceptable changes in the scope, character, or complexity of the work, if such changes become desirable or necessary as the work progresses, will be accommodated by a supplemental agreement. An appropriate extension of time may be

made in the form of a supplemental agreement in case of unavoidable delays. Corresponding warranted adjustments in payment will be made based upon the incorporated rate schedule. CONSULTANT is advised that any recommendation for contract award is not binding on COUNTY until the contract is fully executed and approved by COUNTY.

3. COMPENSATION.

- a. The COUNTY shall reimburse the CONSULTANT for hours worked at the hourly rates specified in the CONSULTANT's Cost Proposal, as described in **Exhibit B**. The specified hourly rates shall include direct salary costs, employee benefits, overhead, and fee. These rates are not adjustable for the performance period set forth in this Agreement.
- b. In addition, the CONSULTANT will be reimbursed for incurred direct costs other than salary costs that are identified in the Scope of Work, **Exhibit A**, and the Cost Proposal, **Exhibit B**.
- c. No additional compensation will be paid to the CONSULTANT, unless there is a change in the scope of the work or the scope of the project. In the instance of a change in the scope of the work or the scope of the project, adjustment to the fee will be negotiated between the CONSULTANT and COUNTY. Adjustment in the fee will not be effective until authorized by supplemental agreement and approved by the COUNTY.
- d. The CONSULTANT shall not commence performance of work or services until this Agreement has been approved by COUNTY, and a notification to proceed has been issued. No payment will be made for any work performed prior to approval of this Agreement.
- e. The CONSULTANT will be reimbursed, as promptly as fiscal procedures will permit, upon receipt by COUNTY'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, on each project as applicable. Invoices shall follow the format stipulated for the Cost Proposal and shall reference this contract number and project title. Final invoice must contain the final cost and all credits due COUNTY that include any equipment purchased under the provisions of Article 26 Equipment Purchase of this Agreement. The final invoice should be

submitted within 60 calendar days after completion of CONSULTANT's work. Invoices shall be mailed to COUNTY'S Contract Administrator at the following address:

Jason K. Vivian  
5961 S. Mooney Blvd.  
Visalia, CA 93277

- f. The total amount payable by the COUNTY for services identified in Exhibit A and Exhibit B shall not exceed sum of **THREE HUNDRED FIFTY-SEVEN THOUSAND TWO HUNDRED TWENTY-TWO DOLLARS AND NO CENTS (\$357,222.00)** for primary services and **ONE HUNDRED SIXTY-FIVE THOUSAND FIVE HUNDRED SIXTEEN DOLLARS AND NO CENTS (\$165,516.00)** for optional services.

The CONSULTANT shall not commence performance of work or services until this Agreement has been approved by COUNTY, and a notification to proceed has been issued. The CONSULTANT shall not commence performance of optional services until a notification to proceed has been issued. No payment will be made prior to approval or for any optional services performed prior to the issuance of a notice to proceed.

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.

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.

CONSULTANT also agrees to comply with federal procedures in accordance with 2 CFR, Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to be unallowable under 2 CFR, Part 200 and 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part 31 et seq., are subject to repayment by CONSULTANT to the COUNTY.

The approved Indirect Cost Rate (ICR), specified in Exhibit B, shall be fixed for the term of this Agreement and no adjustment will be made unless both Parties are in mutual agreement.

Any subcontract in excess of \$25,000, entered into as a result of this Agreement, shall contain all the provisions of this article.

4. PAYMENT. CONSULTANT will submit to the Resource Management Agency, Attn: Contract Administrator, a detailed invoice for services previously rendered under this Agreement in accordance to Section 3.e of this Agreement. CONSULTANT will be deemed to have waived all rights to compensation for any services not billed within 90 calendar days after the month in which the services were provided. Invoices shall detail the work performed on each milestone, on each project as applicable and shall provide total contract recap of prior invoices, current invoice, and contract balance. Invoices shall reference this Agreement number and the project title. CONSULTANT shall not commence performance of work or services until this Agreement has been approved by the COUNTY, and a notification to proceed has been issued. No payment will be made for any work performed prior to receiving the notification to proceed.

5. COMPLIANCE WITH LAW. CONSULTANT shall provide services in accordance with applicable Federal, State, and local laws, regulations and directives. With respect to CONSULTANT'S employees, CONSULTANT shall comply with all laws and regulations pertaining to prevailing wage rates and hours, state and federal income tax, unemployment insurance. Social Security, disability insurance, workers' compensation insurance, and discrimination in employment.

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.

Any subcontract entered into as a result of this Agreement, 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.

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>.

6. RETENTION OF RECORDS/AUDIT. For the purpose of determining compliance with Public Contract Code section 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 Agreement pursuant to Government Code section 8546.7; CONSULTANT, subconsultants, and COUNTY shall maintain and make available for inspection all books, documents, papers, accounting records, and other evidence pertaining to the performance of the Agreement, including but not limited to, the costs of administering the Agreement. All Parties shall make such materials available at their respective offices at all reasonable times during the Agreement period and for three years from the date of final payment under the Agreement. The state, State Auditor, COUNTY, 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. Subcontracts in excess of \$25,000 shall contain this provision.

7. AUDIT REVIEW PROCEDURES. Any dispute concerning a question of fact arising under an interim or post audit of this Agreement that is not disposed of by subsequent agreement, shall be reviewed by the COUNTY'S Auditor-Controller.

Not later than 30 calendar days after issuance of the final audit report, CONSULTANT may request a review by COUNTY'S County Administrative Officer of unresolved audit issues. The request for review will be submitted in writing.

Neither the pendency of a dispute nor its consideration by COUNTY will excuse CONSULTANT from full and timely performance, in accordance with the terms of this Agreement.

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 COUNTY Contract Administrator 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 COUNTY 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.

8. SUBCONTRACTING. Nothing contained in this Agreement or otherwise, shall create any contractual relation between COUNTY and any subconsultant(s), and no subcontract shall relieve CONSULTANT of its responsibilities and obligations hereunder. CONSULTANT agrees to be fully responsible to COUNTY 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 COUNTY'S obligation to make payments to the CONSULTANT.

CONSULTANT shall perform the work contemplated with resources available within its own organization and no portion of the work pertinent to this Agreement shall be subcontracted without written authorization by COUNTY'S Contract Administrator, except that which is expressly identified in the approved Cost Proposal.

CONSULTANT shall pay its subconsultants within ten (10) calendar days from receipt of each payment made to CONSULTANT by COUNTY.

All subcontracts entered into as a result of this Agreement shall contain all the provisions stipulated in this Agreement to be applicable to subconsultants.

Any substitution of subconsultant(s) must be approved in writing by COUNTY'S Contract Administrator prior to the start of work by the subconsultant(s).

9. INDEPENDENT CONTRACTOR STATUS. CONSULTANT will perform all services required under this Agreement as an independent contractor. Nothing in this Agreement may be construed to constitute CONSULTANT or any of its agents, employees or officers as employees or officers of COUNTY. CONSULTANT agrees to advise everyone it assigns or hires to perform any duty under this Agreement that they are not employees of COUNTY. CONSULTANT will be solely responsible for determining the means and methods of performing the specified services, and COUNTY will have no right to control or exercise any supervision over CONSULTANT as to how the services will be performed. COUNTY will not:

- a. Withhold FICA (Social Security) from CONSULTANT'S payments.
- b. Make state or federal unemployment insurance contributions on CONSULTANT'S behalf.
- c. Withhold state or federal income tax from payments to CONSULTANT.
- d. Make disability insurance contributions on behalf of CONSULTANT.

e. Obtain unemployment compensation insurance on behalf of CONSULTANT.

Notwithstanding this independent contractor relationship, COUNTY reserves the right to monitor and evaluate the performance of CONSULTANT for the purpose of assuring compliance with this Agreement.

10. INSURANCE. Prior to approval of this Agreement by the COUNTY, CONSULTANT shall file with the Resource Management Agency, evidence of the insurance in accordance with **Exhibit C** attached, which outlines the minimum scope, specifications and limits of insurance required under this Agreement. Additional insured endorsements required as outlined in **Exhibit C** cannot be used to reduce limits available to COUNTY as an additional insured from the Contactor's full policy limits. Insurance policies shall not be used to limit liability or to limit the indemnification provisions and requirements of this Agreement or act in any way to reduce the policy coverage and limits available from the insurer (s). If CONSULTANT fails to maintain or renew coverage, or to provide evidence of renewal, then COUNTY may consider that failure a material breach of this Agreement. COUNTY may also withhold any payment otherwise due to CONSULTANT for failure to provide evidence of renewal until CONSULTANT provides such evidence.

11. INDEMNIFICATION:

(a) To the fullest extent permitted by law, CONSULTANT must indemnify, defend (at CONSULTANT'S sole cost and expense and with legal counsel approved by COUNTY, which approval may not be unreasonably withheld), protect and hold harmless COUNTY, all subsidiaries, divisions and affiliated agencies of COUNTY, and all of their representatives, partners, designees, officers, directors, employees, consultants, agents, successors and assigns, (each, an "Indemnified Party" and collectively, the "Indemnified Parties"), from and against all claims (including, without limitation, claims for bodily injury, death or damage to property), demands, obligations, damages, actions, causes of action, suits, losses, judgments, fines, penalties, liabilities, costs and expenses (including, without limitation, reasonable attorneys' fees, disbursements and court costs, and all other professional expert or consultants' fees and costs and COUNTY general and administrative expenses) of every kind and nature whatsoever (individually, a "Claim"; collectively, "Claims") which may arise out of, pertain to, or relate (directly or indirectly) to the negligence, recklessness, or misconduct of CONSULTANT with respect to any work performed or services provided under this Agreement (including, without limitation, the acts, errors and/or omissions of CONSULTANT, its principals, officers, agents, employees, vendors, suppliers, consultants, sub-consultants, contractors, anyone employed



directly or indirectly by any of them or for whose acts they may be liable or any or all of them). CONSULTANT'S obligation to indemnify applies unless it is finally adjudicated that the liability was caused by the sole active negligence or sole willful misconduct of an Indemnified Party. If it is finally adjudicated that liability is caused by the comparative active negligence or willful misconduct of an Indemnified Party, then CONSULTANT'S indemnification obligation shall be reduced in proportion to the established comparative liability.

(b) The duty to defend is a separate and distinct obligation from CONSULTANT'S duty to indemnify. CONSULTANT shall be obligated to defend, in all legal, equitable, administrative, or special proceedings, the Indemnified Parties immediately upon tender to CONSULTANT of the Claim in any form or at any stage of an action or proceeding, whether or not liability is established. Payment to CONSULTANT by any Indemnified Party or the payment or advance of defense costs by any Indemnified Party cannot be a condition precedent to enforcing the Indemnified Party's rights to indemnification under this Agreement. An allegation or determination that persons other than CONSULTANT are responsible for the Claim does not relieve CONSULTANT from its separate and distinct obligation to defend under this section. The obligation to defend extends through final judgment, including exhaustion of any appeals. The defense obligation includes an obligation to provide independent defense counsel if CONSULTANT asserts that liability is caused in whole or in part by the negligence or willful misconduct of an Indemnified Party. If it is finally adjudicated that liability was caused by the comparative active negligence or willful misconduct of an Indemnified Party, then CONSULTANT may submit a claim to the COUNTY for reimbursement of reasonable attorneys' fees and defense costs in proportion to the established comparative liability of the Indemnified Party. CONSULTANT'S indemnification obligations under this Agreement will survive the expiration or earlier termination of this Agreement until action against the Indemnified Parties for the matter indemnified is fully and finally barred by the applicable statute of limitations or statute of repose. CONSULTANT'S liability for indemnification under this Agreement is in addition to any liability CONSULTANT may have to COUNTY for a breach by CONSULTANT of any of the provisions of this Agreement. Under no circumstances may the insurance requirements and limits set forth in this Agreement be construed to limit CONSULTANT'S indemnification obligation or other liability under this Agreement. The terms of this Agreement are contractual and the result of negotiation between the Parties.



(c) CONSULTANT must indemnify and hold COUNTY harmless from all loss and liability, including attorneys' fees, court costs and all other litigation expenses, for any infringement of the patent rights, copyright, trade secret or any other proprietary right or trademark, and all other intellectual property claims of any person or persons in consequence of the use by COUNTY, or any of its officers or agents, of articles or services to be supplied in the performance of this Agreement.

12. TERMINATION. The right to terminate this Agreement under this provision may be exercised without prejudice to any other right or remedy to which the terminating Party may be entitled at law or under this Agreement.

(a) Without Cause: COUNTY may terminate this Agreement without cause by giving thirty (30) days' prior written notice to CONSULTANT of its intention to terminate under this provision, specifying the date of termination and with the reasons for termination stated in the notice. COUNTY will pay to CONSULTANT the compensation earned for work satisfactorily performed and not previously paid for to the date of termination. COUNTY will not pay lost anticipated profits or other economic loss. The payment of any compensation is subject to the restrictions on payment of compensation otherwise provided in this Agreement, and is conditioned upon receipt from CONSULTANT of any and all plans, specifications and estimates, and other documents prepared by CONSULTANT in accordance with this Agreement. COUNTY will not impose sanctions on CONSULTANT under these circumstances.

(b) With Cause: Either Party may terminate this Agreement immediately, by written notice to the other Party, should the other Party:

- (1) be adjudged a bankrupt, or
- (2) become insolvent or have a receiver appointed, or
- (3) make a general assignment for the benefit of creditors, or
- (4) suffer any judgment which remains unsatisfied for 30 days, and which would substantively impair the ability of the judgment debtor to perform under this Agreement, or
- (5) materially breach this Agreement.

In addition, COUNTY may terminate this Agreement based on:

- (6) material misrepresentation, either by CONSULTANT or anyone acting on CONSULTANT'S behalf, as to any matter related in any way to COUNTY'S retention of CONSULTANT, or

(7) other misconduct or circumstances which, in the sole discretion of the COUNTY, either impair the ability of CONSULTANT to competently provide the services under this Agreement, or expose the COUNTY to an unreasonable risk of liability.

For any of the occurrences except item (5) above, termination may be effected upon written notice by the terminating Party specifying the date of the termination. If CONSULTANT fails to perform according to the terms and conditions of this Agreement, then COUNTY may, in addition to any other remedy it may have, issue a declaration of default after 10 calendar days written notice to CONSULTANT.

Upon a material breach, the Agreement may be terminated after the failure of the defaulting Party to remedy the breach to the satisfaction of the non-defaulting Party within 5 calendar days of written notice specifying the breach. If the breach is not remedied within that 5-day period, then the non-defaulting Party may terminate this Agreement on further written notice specifying the date of termination. If the nature of the breach is such that it cannot be cured within a 5-day period, then the defaulting Party may submit a written proposal within that period which sets forth a specific means to resolve the default. If the non-defaulting Party consents to that proposal in writing, which consent may not be unreasonably withheld, then the defaulting Party must immediately embark on its plan to cure the default or breach. If the default or breach is not cured within the time agreed, then the non-defaulting Party may terminate this Agreement upon written notice specifying the date of termination.

COUNTY will pay to the CONSULTANT the compensation earned for work satisfactorily performed and not previously paid to the date of termination. The payment of such compensation is subject to the restrictions on payment of compensation otherwise provided in this Agreement, and is conditioned upon receipt from CONSULTANT of any and all reports and other documents prepared by CONSULTANT by the date of termination in accordance with this Agreement. COUNTY will not pay lost anticipated profits or other economic loss, nor will the COUNTY pay compensation or make reimbursement to cure a breach arising out of or resulting from such termination. If COUNTY terminates this Agreement for cause and the expense of finishing CONSULTANT'S scope of work exceeds the unpaid balance of the agreement, then CONSULTANT must pay the difference to COUNTY. COUNTY may impose sanctions under these circumstances, which may include possible rejection of future proposals based on specific cause of CONSULTANT'S non-performance.

(c) Effects of Termination: Expiration or termination of this Agreement will not terminate any obligations to indemnify, to maintain and make available any records pertaining to the Agreement, to cooperate with any audit, to be subject to offset, or to make any reports of pre-termination contract activities. Where COUNTY terminates CONSULTANT'S services, that termination will not affect any rights of COUNTY to recover damages against CONSULTANT.

(d) Suspension of Performance: Independent of any right to terminate this Agreement, the authorized representative of the COUNTY department or agency for which CONSULTANT'S services are to be performed, may immediately suspend performance by CONSULTANT, in whole or in part, in response to health, safety or financial emergency, or a failure or refusal by CONSULTANT to comply with the provisions of this Agreement, until such time as the cause for suspension is resolved, or a notice of termination becomes effective.

13. ENTIRE AGREEMENT REPRESENTED. This Agreement represents the entire agreement between CONSULTANT and COUNTY as to its subject matter and no prior oral or written understanding shall be of any force or effect. No part of this Agreement may be modified without the written consent of both Parties.

14. HEADINGS. Section headings are provided for organizational purposes only and do not in any manner affect the scope, meaning or intent of the provisions under the headings.

15. NOTICE. Except as may be otherwise required by law, any notice to be given must be written and must be either personally delivered, sent by facsimile transmission or sent by first class mail, postage prepaid and addressed as follows:

COUNTY:

Tulare County Resource Management Agency  
Attention: Jason K. Vivian, Contract Administrator  
5961 South Mooney Boulevard  
Visalia, CA 93277

Fax No.: (559) 730-2653      Confirming No.: (559) 624-7000,  
Email: [jvivian@co.tulare.ca.us](mailto:jvivian@co.tulare.ca.us)

CONSULTANT:

TRC Engineers, Inc.  
Attention: Mark Imbriani  
575 E. Locust Avenue, Suite 105  
Fresno, CA 93720

Phone No.: (559) 439-2576  
Fax No.: (916) 366-1501

Notice personally delivered is effective when delivered. Notice sent by facsimile transmission is deemed received upon successful transmission. Notice sent by first class mail will be deemed received on the fifth calendar day after the date of mailing. Either party may change the above address by giving written notice under this section. The above stated CONSULTANT address is to be the main working office location for the duration of this Agreement.

16. CONSTRUCTION. This Agreement reflects the contributions of both parties and accordingly the provisions of Civil Code section 1654 will not apply to address and interpret any uncertainty.

17. NO THIRD PARTY BENEFICIARIES INTENDED. Unless specifically set forth, the Parties to this Agreement do not intend to provide any other party with any benefit or enforceable legal or equitable right or remedy. The CONSULTANT warrants that he/she has not employed or retained any company or person, other than a bona fide employee working for the CONSULTANT, to solicit or secure this Agreement, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or formation of this Agreement. For breach or violation of this warranty, the COUNTY shall have the right to annul this Agreement without liability, or at its discretion to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee. The COUNTY warrants that it has not required the CONSULTANT to employ or retain any company or person, or to pay or agree to pay any firm, person or organization, any fee, contribution donation or consideration of any land, contingent upon or resulting from the award or formation of this Agreement.

18. JURISDICTION/VENUE. This Agreement shall be interpreted and governed under the laws of the State of California without reference to California conflicts of law principles. The parties agree that this Agreement is made in and shall be performed in Tulare County California. CONSULTANT waives the removal provisions of California Code of Civil Procedure Section 394.

19. WAIVERS. The failure of either party to insist on strict compliance with any provision of this Agreement will not be considered a waiver of any right to do so, whether for

that breach or any later breach. The acceptance by either party of either performance or payment will not be considered to be a waiver of any preceding breach of the Agreement by the other party.

20. EXHIBITS AND RECITALS. The Recitals and the Exhibits A-E to this Agreement are fully incorporated into and are integral parts of this Agreement. In the event of any conflict or inconsistency among or between this Agreement and any Exhibit, Schedule, or Attachment, the terms and conditions of this Agreement shall prevail.

21. CONFLICT WITH LAWS OR REGULATIONS/SEVERABILITY. This Agreement is subject to all applicable laws and regulations. If any provisions of this Agreement are found by any court or other legal authority, or are agreed by the parties, to be in conflict with any code or regulation governing its subject, the conflicting provision will be considered null and void. If the effect of nullifying any conflicting provision is such that a material benefit of the Agreement to either Party is lost, then the Agreement may be terminated at the option of the affected Party. In all other cases the remainder of the Agreement will continue in full force and effect.

22. FURTHER ASSURANCES. Each Party agrees to execute any additional documents and to perform any further acts which may be reasonably required to affect the purposes of this Agreement.

23. PROFESSIONAL STANDARDS. By submitting final documents for approval by COUNTY, CONSULTANT represents that said documents are accurate. CONSULTANT will be responsible to COUNTY for the professional quality, adequacy, and completeness of the services, studies, and reports provided, and represents that such services, studies and reports will be suitable for the intended purposes.

CONSULTANT will perform the services provided in this Agreement in a manner consistent with the professional skill and care ordinarily exercised by expert members of the planning, engineering, and environmental profession practicing in the State of California under similar conditions.

Where applicable and in accordance with California law, the responsible CONSULTANT/engineer shall sign and seal reports and engineering data furnished by him/her.

24. DBE PARTICIPATION REQUIREMENTS: 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.

The goal for DBE participation for this contract is 7 %. Participation by DBE consultant or subconsultants shall be in accordance with information contained in the Consultant Proposal DBE Commitment (**Exhibit D**), or in the Consultant Contract DBE Commitment (**Exhibit E**) 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.

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 Agreement, which may result in the termination of this Agreement or such other remedy as COUNTY deems appropriate.

Any subcontract entered into as a result of this Agreement shall contain all of the provisions of this section.

A DBE firm may be terminated only with prior written approval from COUNTY and only for the reasons specified in 49 CFR 26.53(f). Prior to requesting COUNTY consent for the termination, CONSULTANT must meet the procedural requirements specified in 49 CFR 26.53(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.

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.

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.

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.

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

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 COUNTY'S Contract Administrator within 30 days.

25. OWNERSHIP OF DOCUMENTS. Upon completion of all work under this Agreement, ownership and title to all reports, documents, plans, specifications, and estimates produce as part of this Agreement will automatically be vested in COUNTY; and no further agreement will be necessary to transfer ownership to COUNTY. CONSULTANT shall furnish COUNTY all necessary copies of data needed to complete the review and approval process.

It is understood and agreed that all calculations, drawings and specifications, whether in hard copy or machine-readable form, are intended for one-time use in the construction of the project for which this Agreement has been entered into.



CONSULTANT is not liable for claims, liabilities, or losses arising out of, or connected with the modification, or misuse by COUNTY of the machine-readable information and data provided by CONSULTANT under this Agreement; further, CONSULTANT is not liable for claims, liabilities, or losses arising out of, or connected with any use by COUNTY of the project documentation on other projects for additions to this project, or for the completion of this project by others, except only such use as may be authorized in writing by CONSULTANT.

Applicable patent rights provisions regarding right to inventions shall be included in the contracts as appropriate (48 CFR 27, Subpart 27.3 – Patent Rights under Government Contracts) for federal-aid contracts.

COUNTY may permit copyrighting reports or other agreement products. If copyrights are permitted; the agreement shall provide that the FHWA shall have the royalty-free nonexclusive and irrevocable right to reproduce, publish, or otherwise use; and to authorize others to use, the work for government purposes.

26. EQUIPMENT PURCHASE. Prior authorization in writing by the COUNTY'S Contract Administrator shall be required before the CONSULTANT enters into any unbudgeted purchase order, or subcontract exceeding \$5,000 for supplies, equipment, or CONSULTANT services. The CONSULTANT shall provide an evaluation of the necessity or desirability of incurring such costs.

Prior to seeking authorization by the COUNTY'S Contract Administrator for the purchase of any item, service or consulting work not covered in the CONSULTANT'S Cost Proposal and exceeding \$5,000, three competitive quotations must be submitted with the request, or the absence of bidding must be adequately justified.

Any equipment purchased as a result of this Agreement is subject to the following: "The 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, the COUNTY shall receive a proper refund or credit at the conclusion of the contract, or if the contract is terminated, the CONSULTANT may either keep the equipment and credit the COUNTY 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 COUNTY procedures; and credit the COUNTY in an amount equal to the sales price. If the COUNTY elects to keep the equipment, fair market value shall be determined at the 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 the COUNTY and the CONSULTANT, if it is determined to sell the equipment, the terms and conditions of such sale must be approved in advance by the COUNTY. 2 CFR, Part 200 requires a credit to Federal Funds when participating equipment with a fair market value greater than \$5000.00 is credited to the project.

All subcontracts in excess \$25,000 shall contain the above provisions.

27. DISPUTES. Any dispute, other than audit, concerning a question of fact arising under this Agreement that is not disposed of by agreement shall be decided by a committee consisting of the COUNTY'S Contract Administrator and the RMA Director - Public Works, who may consider written or verbal information submitted by the CONSULTANT.

Neither the pendency of a dispute, nor its consideration by the committee will excuse CONSULTANT from full and timely performance in accordance with the terms of this Agreement.

Not later than 30 calendar days after completion of all deliverables necessary to complete the plans, specifications and estimate, CONSULTANT may request review by the Tulare County Board of Supervisors for unresolved claims or disputes, other than audit. The request for review will be submitted in writing.

28. CONFIDENTIALITY: CONSULTANT may not use or disclose any information it receives from COUNTY under this Agreement that COUNTY has previously identified as confidential or exempt from mandatory public disclosure except as necessary to carry out the purposes of this Agreement or as authorized in advance by COUNTY. Unless required to do so by law, including, but not limited to, the Ralph M. Brown Act or the California Public Records Act, COUNTY may not disclose to third parties any information it receives from CONSULTANT that CONSULTANT has previously identified as confidential. In addition, these restrictions shall not apply to information that (i) the Parties had in their possession prior to disclosure; (ii) becomes public knowledge through no fault of the receiving Party; (iii) the receiving Party lawfully acquires from a third party not under an obligation of confidentiality to the disclosing Party; or (iv) is independently developed by the receiving Party. If COUNTY determines that it must disclose any information that CONSULTANT previously identified as confidential, then it shall promptly give CONSULTANT written notice of its intention to disclose such information and the authority for such disclosure. CONSULTANT shall have a period of five (5) calendar days thereafter within which to seek a protective court order to prevent such disclosure or to notify COUNTY that it will not seek such an order. COUNTY shall cooperate with CONSULTANT in any efforts to seek such a court order. COUNTY shall not

disclose the information until the five (5) day period has expired without a response from CONSULTANT, or CONSULTANT has notified COUNTY that it will not seek such an order, or CONSULTANT has sought and a court has declined to issue a protective order for such information. If CONSULTANT seeks a protective order for such information, CONSULTANT shall defend and indemnify COUNTY from any and all loss, injury, or claim arising from COUNTY'S withholding of the information from the requestor. This includes any reasonable attorney's fees awarded to the requestor. The duty of COUNTY and CONSULTANT to maintain confidentiality of information under this section continues for a period of five (5) years beyond the term of this Agreement.

Any subcontract entered into as a result of this Agreement shall contain all of the provisions of this article.

All information related to the construction estimate is confidential, and shall not be disclosed by CONSULTANT to any entity other than COUNTY.

29. CONFLICT OF INTEREST. The CONSULTANT shall disclose any financial, business, or other relationship with COUNTY that may have an impact upon the outcome of this Agreement, or any ensuing COUNTY construction project. The CONSULTANT shall also list current clients who may have a financial interest in the outcome of this Agreement, or any ensuing COUNTY construction project, which will follow.

The 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 Agreement.

Any subcontract in excess of \$25,000 entered into as a result of this Agreement, shall contain all of the provisions of this article.

The CONSULTANT hereby certifies that neither the CONSULTANT, its employees, nor any firm affiliated with the CONSULTANT providing services on this project will bid on any construction contract, or any contract to provide construction inspection for any construction project resulting from this Agreement. An affiliated firm is one, which is subject to the control of the same persons through joint-ownership, or otherwise.

Except for subconsultants whose services are limited to providing surveying or materials testing information, no subconsultants who have provided design services in connection with this Agreement shall be eligible to bid on any construction contract, or any contract to provide construction inspection for any construction project resulting from this Agreement.

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

31. PROHIBITION OF EXPENDING COUNTY, STATE OR FEDERAL FUNDS FOR LOBBYING.

The CONSULTANT certifies to the best of his or her knowledge and belief that:

- a. No state, federal or COUNTY appropriated funds have been paid, or will be paid by-or-on behalf of the 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.
- b. 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; the CONSULTANT shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

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, US. 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.

The CONSULTANT also agrees by signing this Agreement 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.

32. CLAIMS FILED BY CONSTRUCTION CONTRACTOR. If claims are filed by COUNTY'S construction contractor relating to work performed by CONSULTANT'S personnel, and additional information or assistance from CONSULTANT'S personnel is required in order to evaluate or defend against such claims; CONSULTANT agrees to make its personnel available for consultation with COUNTY'S construction contract administration and legal staff and for testimony, if necessary, at depositions and at trial or mediation proceedings.

CONSULTANT'S personnel that COUNTY considers essential to assist in defending against construction contractor claims will be made available on reasonable notice from COUNTY. Consultation or testimony will be reimbursed at the same rates, including travel costs that are being paid for CONSULTANT'S personnel services under this Agreement.

Services of CONSULTANT'S personnel in connection with COUNTY'S construction contractor claims will be performed pursuant to a written contract amendment, if necessary, extending the termination date of this Agreement in order to resolve the construction claims.

Any subcontract in excess of \$25,000 entered into as a result of this Agreement, shall contain all of the provisions of this Article.

33. SAFETY. CONSULTANT shall comply with OSHA regulations applicable to CONSULTANT regarding necessary safety equipment or procedures. CONSULTANT shall comply with safety instructions issued and transmitted to CONSULTANT prior to initiating services by COUNTY Safety Officer and other COUNTY representatives. CONSULTANT personnel shall wear hard hats and safety vests at all times while working on the construction project site.

Pursuant to authority contained in Section 591 of the Vehicle Code, COUNTY has determined that such areas are within the limits of the project and are open to public traffic. CONSULTANT shall comply with all of the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. CONSULTANT shall take all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling public from injury and damage from such vehicles.

Any subcontract entered into as a result of this Agreement, shall contain all of the provisions of this Article.

34. EVALUATION OF CONSULTANT. CONSULTANT'S performance will be evaluated by COUNTY. A copy of the evaluation will be sent to CONSULTANT for comments. The evaluation together with the comments shall be retained as part of the Agreement record.

35. STATEMENT OF COMPLIANCE. 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.

36. NONDISCRIMINATION. During the performance of this Agreement, 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 5 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 Agreement 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.

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.

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.

37. FUNDING REQUIREMENTS. It is mutually understood between the Parties that this Agreement may have been written before ascertaining the availability of funds or appropriation of funds, for the mutual benefit of both parties, in order to avoid program and fiscal delays that would occur if the Agreement were executed after that determination was made.

This Agreement is valid and enforceable only if sufficient funds are made available to COUNTY for the purpose of this Agreement. In addition, this Agreement is subject to any additional restrictions, limitations, conditions, or any statute enacted by the Congress, State Legislature, or COUNTY governing board that may affect the provisions, terms, or funding of this Agreement in any manner.

It is mutually agreed that if sufficient funds are not appropriated, this Agreement may be amended to reflect any reduction in funds.

COUNTY has the option to void the Agreement under the 30-day termination clause pursuant to Article 12 of this Agreement, or by mutual agreement to amend the Agreement to reflect any reduction in funds.

38. INSPECTION OF WORK. CONSULTANT and any subconsultant shall permit COUNTY, the state, and the FHWA if federal participating funds are used in this Agreement, to review and inspect the project activities and files at all reasonable times during the performance period of this Agreement, including review and inspection on a daily basis.

39. RETENTION OF FUNDS. No retainage will be withheld by COUNTY Contract Administrator from progress payments due to the CONSULTANT. Retainage by the prime CONSULTANT or subconsultants is prohibited, and no retainage will be held by the prime CONSULTANT from progress due subconsultants. Any violation of this provision shall subject the violating prime CONSULTANT or subconsultants to the penalties, sanctions, and other remedies specified in Section 7108.5 of the California Business and Professions Code. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies, otherwise available to the prime CONSULTANT or subconsultant in the event of a dispute involving late payment or nonpayment by the prime CONSULTANT or deficient

subconsultant performance, or noncompliance by a subconsultant. This provision applies to both DBE and non-DBE prime CONSULTANTS and subconsultants.

Any subcontract in excess of \$25,000 entered into as a result of this contract, shall contain all of the provisions of this Article.

40. DEBARMENT AND SUSPENSION. CONSULTANTS 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 Governmentwide 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 judgement rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct with the past three (3) years. Any exceptions to this certification must be disclosed to COUNTY.

Exceptions will not necessarily result in denial of recommendation for award, but will be considered in determining CONSULTANT responsibility. Disclosure must indicate to whom exceptions apply, initiating agency, and dates of action.

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

41. COUNTERPARTS. The Parties may sign this Agreement in counterparts, each of which is an original and all of which taken together form one single document.

//

//

//

//

//

//

//

//

//

//



// THE PARTIES, having read and considered the above provisions, indicate their agreement by their authorized signatures below.

COUNTY OF TULARE

By \_\_\_\_\_

Chairman, Board of Supervisors

ATTEST: \_\_\_\_\_,  
County Administrative Officer/  
Clerk of the Board of Supervisors

By \_\_\_\_\_  
Deputy Clerk

CONSULTANT

By \_\_\_\_\_

Title

By \_\_\_\_\_

Title

[Pursuant to Corporations Code section 313, County policy requires that contracts with a Corporation be signed by both (1) the chairman of the Board of Directors, the president or any vice-president (or another officer having general, operational responsibilities), and (2) the secretary, any assistant secretary, the chief financial officer, or any assistant treasurer (or another officer having recordkeeping or financial responsibilities), unless the contract is also accompanied by a certified copy of the corporation's Board of Directors' resolution authorizing the execution of the contract. Similarly, pursuant to California Corporations Code section 17703.01, County policy requires that contracts with a Limited Liability Company be signed by at least two managers, unless the contract is accompanied by a certified copy of the articles of organization stating that the LLC is managed by only one manager.]

Approved as to Form  
County Counsel

By \_\_\_\_\_  
Deputy



**EXHIBIT A**  
**SCOPE OF WORK**



**Exhibit “A”**  
**Scope of Work**  
**Sand Creek Bridge Replacement at Avenue 428**  
**Bridge No. 46C0340**  
**Federal Project No. BRLO-5946(142)**  
**August 29, 2018**

**INTRODUCTION**

The following Scope of Work (SOW) is based on the SOW included in Tulare County's RFP and a subsequent scoping meeting held with the County on June 21, 2018. The scope has been separated into basic services and optional services. The County has selected TRC to provide engineering services for the replacement of referenced bridge, including structure design, geotechnical and hydraulic studies, environmental engineering, and preparation of construction contract documents for the bridge. The County will be responsible for all roadway design tasks, project surveys, all CEQA related tasks, permit applications, utility coordination, and right-of-way engineering and acquisition. Some County tasks may be performed by TRC as optional services.

Within the SOW, TRC's team is referred to as “the Consultant.” This is in reference to the entire consultant team consisting of:

Firm	Areas of Expertise
TRC Engineers Inc. (Prime Consultant)	Structural Design
WRECO	Hydrology, Hydraulics and Geotechnical Engineering
GPA	Environmental Engineering
4Creeks	Surveying & Mapping (Optional)
DesignLab252	Landscape and Revegetation (Optional)
EXARO Technologies	Utility Potholing (Optional)

TRC, as the prime consultant will be responsible to the County for coordination of necessary task completion by the appropriate team members.

The following SOW shall be performed by the Consultant and is based on the following assumptions:

**ASSUMPTIONS**

In addition to the assumptions stated in the various tasks below, the following assumptions were made in the development of the scope and fee for this project. Deviations from these assumptions may require a changed scope, schedule, and/or fee.

1. The design of utility relocations will be by others.
2. No wet utilities will be placed on or in the bridge.



3. The County will perform utility coordination with support from TRC.
4. The County will prepare the Stormwater Data Report.
5. The County will perform all stormwater treatment portions of the work.
6. The road will be closed during construction.
7. The County will supply the Consultant with geotechnical and hydraulic studies/reports from adjoining projects on Sand Creek.
8. A Type Selection meeting will not be required.
9. No retaining walls will be needed.
10. The County will prepare all federal funding paperwork.
11. The County will prepare the roadway and administrative portions of the specifications, as well as provide overall document assembly.
12. No aesthetic treatments will be applied to the bridge.
13. Public outreach, if required, will be by the County.
14. The date of the Revised Standard Specifications (RSS) will be frozen at the 90% PS&E stage, and more recent versions of the RSS will not be incorporated into the contract documents going forward.
15. FEMA Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) will not be required for the project.
16. Subsidence will not be an issue at the site.
17. Traffic control for geotechnical borings will be provided by County, if required.
18. No permits will be required to perform the geotechnical borings. Consultant will notify the County's Project Manager prior to work.

## BASIC SERVICES

### TASK 1: PROJECT MANAGEMENT

#### Task 1.1 Meetings

##### 1.1.1 Project Kickoff and Scoping:

The Consultant will meet with the County at a pre-design kickoff meeting to review the scope of work, project requirements, and design criteria, obtain additional material and information, and discuss the County's scheduling and review process. While meeting with the County, we shall conduct a visual on-site field investigation to identify existing conditions and confirm initial design assumptions.

##### 1.1.2 PDT Meetings:

The Consultant will attend bi-monthly PDT meetings with the County and relevant stakeholders. Consultant will prepare an outline agenda and solicit input for the agenda from anticipated attendees. Following the meeting, Consultant will prepare meeting notes and submit to attendees for review and comment, after which the notes will be finalized. This scope of work assumes a 36 month design window and thus 18 PDT meetings, up to 9 of which will occur in person and the rest via teleconference.

#### Task 1.2 Project/Staff Management:

The Consultant will manage project tasks including work needed to:



## Section 5 – Proposed Scope of Work

- Lead, direct and monitor the Consultant team, including managing sub-consultant staff
- Prepare for, attend, and document team meetings and action items
- Prepare, coordinate, and maintain a critical path method schedule
- Prepare monthly progress reports
- Miscellaneous coordination and support
- Prepare monthly invoices and specific work completed

### Task 1.3 Quality Assurance and Quality Control:

The Consultant will perform Quality Assurance (QA) and Quality Control (QC) on portions of the work completed by the Consultant.

The Consultant's designated QA/QC Manager will perform an independent review of each submittal.

Designers and CADD Technicians will use a "review stamp" for each round of changes which will track who commented on the plans, who checked the drafting, and when the final product was reviewed again by the design engineer.

As the design phase proceeds, the regularly scheduled reviews will help the team identify and evaluate issues that may affect the project.

## TASK 2: SURVEYS AND MAPPING (BY COUNTY/OPTIONAL)

See descriptions of these Optional Services following Basic Services.

## TASK 3: PRELIMINARY ENGINEERING (35% P&E)

This task includes work required to develop and study bridge alternatives and develop a preferred project design concept for budgeting and funding purposes, environmental approval, permitting and final design. **All Roadway design tasks will be performed "in-house" by Tulare County.** Work performed by the Consultant includes the following:

### Task 3.1 Preliminary Bridge Design:

This task includes work required to develop three bridge concepts. Consultant will involve the County, Caltrans and other agencies as necessary in the development of these alternatives. This work includes the following:

#### 3.1.1 – Response to Eligibility Review Letter from Caltrans

The Consultant will assist the County in responding to the Eligibility Review Letter from Caltrans OSLA. The response will include a narrative justification for replacement versus rehabilitation without further life cycle cost analyses. Disadvantages to rehabilitation include the age of the structure, the 3-span configuration, the lack of as-built plans, unknown foundation type and size, and a maximum 40-year service life for the rehabilitated portion of the structure.

#### 3.1.2 – Bridge Type Selection Report (Draft/Final)

The Consultant shall work closely with County staff to develop the appropriate bridge replacement design. Key issues to consider include (in no particular order):

- New bridge alignment vs. existing bridge alignment
- Project detour and maintenance of traffic



- Public input
- Flood water elevations
- Site geology and seismicity
- Environmental issues
- Available ROW
- Construction access
- Unique project design criteria
- Noise impacts
- Overall cost
- Constructability

### 3.1.2.1 – Bridge Type Selection Report (Draft)

The Consultant shall prepare a Type Selection Report that will document the structure types and configurations considered, with estimated costs and recommendations for final structure type. The Type Selection Report will include preliminary plan, elevation, and typical section for three bridge alternatives on the preferred alignment. Information from the hydraulic efforts will be incorporated into the study along with other required design data such as alignment, plan and profile, lane and shoulder widths, bridge width, barrier railings, clearances, approach treatments, scour depths, slope protection, utilities, falsework requirements, preliminary geotechnical input, and aesthetics. The report will also include:

- Summary of the components of each alternative including preliminary plans, right-of-way (temporary easements), construction staging and access, utility relocation and accommodation, and anticipated design exceptions
- Discussion of the pros & cons of each alternative
- Preliminary Quantities and Estimated Construction Cost for each alternative
- Recommended Alternative for Final Design
- List of design decisions needed by the County
- List of issues that will be resolved during final design

The Type Selection Report will include an engineer's estimate of probable cost on a cost per square foot basis for each bridge option. Costs will be based on preliminary quantities developed in general conformance with Caltrans Bridge Design Aids and will include approximately 25% contingency.

The Type Selection Report shall be prepared for approval by the County and Caltrans Local Assistance following the guidelines established in the Caltrans Memo to Designers 1-29. The proposed replacement bridge shall be presented on general plan drawings and documented in a report. These documents will be submitted to the County and Caltrans for review and approval before beginning final design.

### 3.1.2.2 – Bridge Type Selection Report (Final)

The Consultant will incorporate comments from the County and update the Draft Bridge Type Selection Report and submit as Final.



### 3.1.3 – Prepare 35% Bridge Design Plans

Upon receipt of comments on the Type Selection Report the Consultant will incorporate them into the preferred alternative. This structure configuration will then be developed, and a Bridge General Plan drafted and submitted to the County for approval.

With approval of the Bridge General Plan and the County's preferred alignment alternative, the Consultant will develop the remaining 35% bridge design plans as shown on the Plan Sheet List in Attachment A and described in Task 8.

#### Task 3 Deliverables:

- Response Letter to Caltrans Eligibility Review Letter
- Draft and Final Bridge Type Selection Report
- 35% Plans and Estimate

## TASK 4: FIELD EXPLORATION AND GEOTECHNICAL ENGINEERING

The Consultant will prepare a Field Investigation and Laboratory Testing program, Preliminary Foundation Report, and Foundation Report following the Caltrans Guidelines for the Bridge Foundation Report preparation and following the Local Assistance Procedures Manual (LAPM) geotechnical studies submittal requirements. The following describes the work to be performed under this task.

### Task 4.1 Research and Data Collection

The Consultant will review the readily available geologic and soil literature in the vicinity of the site including any as-built drawings and existing Log of Test Borings (LOTB).

### Task 4.2 Field Exploration

The Consultant proposes to perform the following work for this task:

- Visit the site to mark out in white paint the proposed boring locations, and call USA North 811 a minimum of 72 hours prior to the start of the field investigation work to identify potential underground conflicts.
- Contract with a drilling contractor to perform the boring work and dispose of the drill cuttings. Borings will be drilled using hollow stem auger drilling methods.
- Drill two (2) soil borings to completion depths of 50 feet below existing bottom of channel grade. These boring will be located within the existing roadway (traffic control required) behind the existing abutments of the existing bridge. The drilling work will be used to obtain disturbed and relatively undisturbed representative soil samples for use in better characterizing the soil conditions at the proposed foundation locations.
- Based upon a review of the published geology and observations made during the site visits, the site is predominantly underlain by competent alluvial soils.
- The Consultant engineer or geologist will be at the site full-time logging the recovered soil samples as drilling progresses. The recovered soil samples will be classified using the 2010 Caltrans Soil and Rock Logging, Classification, and Presentation Manual.
- The borings will be backfilled with lean cement grout in accordance with the State Water Resources Control Board requirements. Drill cuttings will be drummed and disposed of at a proper waste receiving facility.



### Task 4.3 Laboratory Testing

The Consultant will take the recovered representative samples to our certified soil testing laboratory and perform strength and index testing to better quantify the site soils and aid in developing engineering soil parameters for design.

### Task 4.4 Soils Analysis/Evaluation

The Consultant staff will take the results from the laboratory testing and soil borings to develop engineering soil parameters for use in designing the proposed bridge foundations.

### Task 4.5 Draft Foundation Memorandum

The Consultant will prepare a Draft Foundation Memorandum in general accordance with the 2009 Caltrans *Foundation Report Preparation for Bridges* for preparation of a Type Selection Report to provide design and construction recommendations for the bridge replacement. The report will include the following:

- A description of the geotechnical scope of work performed for this study.
- LOTB following the 2010 Caltrans Logging and Classification Manual.
- A summary and description of the proposed improvements for the Project.
- An overview of any field investigation performed as part of this study.
- A summary of the laboratory testing performed as part of this study.
- A discussion of the regional and site geology as it pertains to the proposed bridge replacement and new foundations.
- A discussion of the regional seismology and assumed preliminary seismic design parameters for the proposed Project site in accordance with the Caltrans 2009 ARS Online Design Tool and the Caltrans Seismic Design Criteria, Version 1.7, April 2013.
- A discussion of the liquefaction potential at the bridge replacement site.
- A discussion of the subsidence potential at the bridge replacement site.
- A summary and discussion of the available as-built information as it pertains to the proposed foundation selection.
- A discussion of the preliminary foundation recommendations for the proposed bridges taking into account the preliminary loading demands, site soil conditions, environmental constraints, and cost.

The Consultant will prepare the Draft Foundation Memorandum for submittal to the Project Team for review and use for type selection.

#### Task 4.5 Deliverables:

- Draft Foundation Memorandum (PDF)

### Task 4.6 Foundation Report

The Consultant will prepare a Bridge Foundation Report in accordance with the 2009 Caltrans *Foundation Report Preparation for Bridges* to provide design and construction recommendations for the bridge replacement. The report will include the following:

- A Project summary and description of the geotechnical work performed.
- A discussion of the regional and local geology as it pertains to the Project.
- A summary of the identified site soils, summary of the laboratory testing results, and a LOTB with the boring presented.



## Section 5 – Proposed Scope of Work

- A discussion of the regional seismology and seismic design parameters for the proposed Project site in accordance with the Caltrans 2009 ARS Online Design Tool and the Caltrans Seismic Design Criteria, Version 1.7, November 2013.
- A liquefaction evaluation of the identified site soils. Based upon the published geology and observations made during the site visit, the potential of liquefaction occurring at the site is low to moderate as the site is underlain by competent alluvial and basin deposit soils.
- An engineering soil profile of the Project site that will be used to aid in the design of the proposed foundations.
- The results of the grain size determination of the site soils for use in determining the predicted scour at the site based upon the proposed bridge configuration.
- At this time, it is anticipated the foundations will consist of Cast-In-Drilled-Hole (CIDH) piles.
- Slope stability analyses will be performed for the new bridge slopes.
- Approach grading recommendations to aid in the temporary construction staging and any profile correction work.
- New flexible structural pavement section recommendations for the reconstructed roadway approaches as appropriate. The County will provide the Traffic Index (TI) for pavement design.
- Contract Standard Special Provision (SSP) language for inclusion in the Contract Documents to better identify and quantify the foundation construction risk during bidding and construction.

The Draft Bridge Foundation Report will be prepared and submitted to the Project Team and County staff for review and comment. Upon receipt of all review comments, the Consultant will prepare the Final Bridge Foundation Report to be submitted for Project approval and use in developing the final Contract Documents.

### **Task 4.6 Deliverables:**

- Draft Bridge Foundation Report (PDF)
- Final Bridge Foundation Report (PDF and 1 hard copy)

## **TASK 5: RIVER HYDROLOGY AND HYDRAULICS**

### **Task 5.1 Obtain and Review Project Documentation**

The Consultant will review available data, including previous studies, provided by the County and the Project Team. Key information to review will be the available hydrologic and hydraulic data, topographic survey, available cross-sections, County and Caltrans Bridge Inspection Reports, as-built data, published geological and seismological studies, and maintenance records for the Project site. There were two recent bridge projects over Sand Creek. The County will provide the consultant with past technical reports for those projects.

The Consultant will also conduct a field reconnaissance to assess the existing conditions in the vicinity of the Project site.

### **Task 5.2 Estimate Hydrology**

The Consultant will identify the appropriate design floods (likely the 50-year flood), base flood (100-year flood), flood of record (if available) and the overtopping flood.

As required by Federal Highway Administration (FHWA) and Caltrans, these floods will be evaluated using two or more methods. The results of the hydrologic analysis will be presented in the form of a flood frequency curve. WRECO will also coordinate with the Central Valley Flood Protection Board (CVFPB) to obtain their design flows.





## Section 5 – Proposed Scope of Work

Where necessary, the Consultant will also estimate the flow rate for the possible construction bypass system design.

### **Task 5.3 Hydraulic Analysis**

The Consultant will perform a hydraulic analysis to determine the design flow characteristics for the existing and proposed conditions, including the limits and water surface profiles through the study area for the design flood, base flood and overtopping flood. The hydraulic model of choice will be the U.S. Army Corps of Engineers' HEC-RAS Model (Version 5.0.3 or newer). The Consultant will coordinate with the Project Team to obtain the surveyed channel cross-sections. The hydraulic model will be put together based on 1) 8 to 10 surveyed cross sections, 2) as-built data or survey of the existing bridge, and 3) a reconnaissance level field investigation.

The Consultant will research bridge maintenance records for existing bridges upstream and downstream of the proposed bridge to determine if any maintenance challenges occurred such as debris getting caught on the piers. This helps to determine necessary freeboard and bridge span lengths that will minimize debris capture and therefore future maintenance.

The Consultant will work with the Project Team to develop the design concept for the flow bypass system during construction.

### **Task 5.4 Scour and Bank Protection**

The Consultant will perform a bridge scour analysis to determine the scour potential for the existing and proposed bridges per the methodology specified in the FHWA HEC-18, HEC-20, and HEC-23 manuals. The Consultant will make recommendations on the need for scour countermeasures for the proposed bridge per the HEC-23 and *California Bank and Shore Protection Manual*.

### **Task 5.5 Prepare Existing Condition Hydraulic Memo**

As a first order of work, a brief summary of the existing condition hydraulics and scour analysis will be prepared as justification for replacement of the bridge at the request of Caltrans OSLA.

#### **Task 5.5 Deliverables:**

- Existing Condition Hydraulic Memo (PDF)

### **Task 5.6 Prepare Draft Report**

The Consultant will prepare a Bridge Design Hydraulic Study Report, which will summarize the results from the hydraulic and bridge scour analyses and recommendations for bridge scour countermeasures. The report will also include all the detailed hydraulic model output.

#### **Task 5.6 Deliverables:**

- Draft Bridge Design Hydraulic Study Report (PDF)

### **Task 5.7 Prepare Final Report**

The Consultant will update the draft Bridge Design Hydraulic Study Report with comments received from the County and affected regulatory agencies and prepare the final report.

#### **Task 5.7 Deliverables:**

- Final Bridge Design Hydraulic Study Report (PDF and 1 hard copy)



### Task 5.8 Complete Location Hydraulic Study

The Consultant will complete the Location Hydraulic Study and prepare a Floodplain Evaluation Report, which will include the Technical Information for the Location Hydraulic Study and Floodplain Evaluation Report Summary forms, to document the investigation and determine the specific impacts to the floodplain.

#### Task 5.8 Deliverables:

- Draft Floodplain Evaluation Summary Report (PDF)
- Final Floodplain Evaluation Summary Report (PDF and 1 hard copy)

## TASK 6: RIGHT OF WAY ACQUISITION SERVICES (BY COUNTY)

All right-of-way engineering appraisal and acquisition services for these projects will be provided by the County with assistance by Consultant.

### Task 6.1 Establish Right of Way Requirements (Engineering Support)

Consultant will provide engineering support to the County to establish Right-of-Way requirements for acquisition. Support may include providing input regarding temporary construction easements (TCEs) for access and potential staging areas. The County will prepare the necessary maps and exhibits for acquisition.

## TASK 7: ENVIRONMENTAL DOCUMENT AND REGULATORY AGENCY PERMITS

The County is planning to use federal funds through the Highway Bridge Program (HBP) for the project; therefore, environmental documentation pursuant to the National Environmental Policy Act (NEPA) is required, and Caltrans would be the NEPA lead agency. Because Avenue 428 is considered a local street and not Caltrans ROW, the project would be processed through Caltrans' Local Assistance Program. All technical studies required for NEPA approval would be completed by the Consultant in accordance with the Caltrans' *Standard Environmental Reference* (SER) guidelines and *Local Assistance Procedures Manual* (LAPM).

Certain categories of projects are specifically called out in 23 CFR 771.117(d) as actions that would fall under a Categorical Exclusion (CE) pursuant to NEPA. NEPA CEs are generally actions that do not induce significant impacts related to planned growth or land use for the area; do not require the relocation of significant numbers of people; do not have a significant impact on any natural, cultural, recreational, historic or other resource; do not involve significant air, noise, or water quality impacts; do not have significant impacts on travel patterns; and do not otherwise, either individually or cumulatively, have any significant environmental effect. Based on the information provided, the Consultant assumes that the project will be categorically excluded under the provisions of NEPA; several technical studies will be required to support this determination. The Consultant will coordinate the review and approval of all NEPA documentation with Caltrans.

According to Section 15063 of the California Environmental Quality Act (CEQA), a lead agency is required to prepare an Initial Study (IS) to determine whether a project could have a significant impact on the environment. Once the IS has been completed, the agency may prepare a Mitigated Negative Declaration (MND) if potentially significant impacts are identified, but revisions are made to the project that would avoid or mitigate these impacts to a less than significant level (CEQA Section 15070). This type of project could under different circumstances be



categorically exempted from CEQA (CEQA Guidelines Section 15301); however, because of the project's location over a waterway, the Consultant has identified that there may be potentially significant impacts associated with implementation that could require mitigation measures to avoid or reduce these impacts. With the implementation of available mitigation measures, no significant impacts are expected; therefore, the Consultant anticipates that an IS/MND would be the appropriate level of CEQA documentation to meet the County's lead agency responsibilities. However, as the CEQA lead agency, the County would make the final determination as to the appropriate level of CEQA documentation.

The County may choose to perform all CEQA related tasks and permitting using County staff, therefore **all CEQA related tasks and permitting are included under Optional Services.**

### **Task 7.1 Project Initiation and Preliminary Environmental Study**

The current Federal Transportation Improvement Program (FTIP) listing describes the project as a bridge replacement; therefore, the Consultant will include bridge replacement as the only alternative in the PES form. If the County would like to carry forward more than one project alternative, Caltrans will require an Environmental Assessment for NEPA. GPA will work with the project team to prepare a detailed project description, including project components, purpose and need, environmental study limits (ESL), and timing of construction prior to the field review meeting. GPA will also review any existing information and analysis related to the project.

Once all of the project information is gathered, GPA will prepare the Draft PES. The PES will be completed pursuant to Caltrans' SER and LAPM and will include a reasoned explanation for all checklist answers, as well as all required attachments. GPA will submit the Draft PES to the County for review and approval. Once the Draft PES has been approved by the County, GPA will finalize the revisions, submit the PES to Caltrans, and coordinate as needed for review and approval of the document.

#### **Task 7.1 Deliverables:**

- One electronic copy and up to two hard copies of the Project Description, ESL Map, and PES

### **Task 7.2 Environmental Studies and Consultation with Regulatory Agencies**

#### **Task 7.2(a) Biological Resources: Natural Environment Study (Minimal Impacts)**

To document the existing biological resources in the project area, identify potential project impacts, and develop appropriate impact avoidance, minimization, and mitigation measures, a Natural Environment Study (Minimal Impacts) (NES(MI)) will be prepared.

#### Background Research and Biological Study Area Delineation

GPA will review available data on biological resources recorded on and within the vicinity of the project area, including all plant and wildlife species with the potential to be in the area. This review will include conducting searches in databases such as the California Natural Diversity Database (CNDDB), National Wetlands Inventory, and the California Native Plant Society. Additionally, a list of threatened and endangered species with the potential to be within the project area will be requested from the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). GPA will also work with the County to delineate an appropriate Biological Study Area (BSA) that will cover the direct and indirect impact area for the project, including temporary construction areas, and create a BSA map to be used for the biological analysis.



### Field Surveys

GPA will systematically survey the BSA for plant and wildlife species, their signs, and/or potential habitat. GPA will work with the project team to limit the size of the survey area to the extent feasible, based on proposed construction areas. GPA will inventory botanical and wildlife resources observed in the BSA and will identify and record all existing vegetation communities in this area. Botanical surveys will be conducted during the appropriate blooming period for species with the potential to be in the project area (May), where feasible. The limits of potentially jurisdictional areas, including waters of the United States (U.S.) and waters of the state, will be identified based on the ordinary high water mark (OHWM) and edge of creek banks. Based on aerial investigations, Sand Creek is a natural bottomed feature and may support wetland vegetation.

As part of the development of this scope of work, GPA completed a preliminary CNDDDB search for special-status species recorded within the vicinity of the project area (Orange Cove Quad and surrounding quads). The search identified multiple special status-species, including several federally and/or state threatened, endangered, or candidate species, that have been recorded within the search area, including the California tiger salamander (*Ambystoma californiense*), Swainson's hawk (*Buteo swainsoni*), and San Joaquin kit fox (*Vulpes macrotis mutica*), in addition to other special-status species.

Because the project is in a rural area, is downstream of known California tiger salamander populations within Sand Creek, and within the range of the San Joaquin kit fox and Swainson's hawk, there may be habitat for these and other special-status species within the project area. GPA will confirm the existing habitat and potential for special-status species to be in the BSA during field surveys. Focused wildlife surveys to determine presence/absence of federally or state threatened and endangered species, if required, are not included in this scope of work. If it is determined that the project could result in impacts on any federally or state listed threatened or endangered species, consultation with the USFWS and/or California Department of Fish and Wildlife (CDFW) would be conducted.

### Natural Environment Study (Minimal Impacts)

Following completion of the background research, BSA investigations, and field surveys, GPA will summarize the results of these studies into a Natural Environment Study (Minimal Impacts) (NES(MI)). The NES(MI) will include a discussion of the existing biological resources in the BSA, applicable regulations, potential project impacts, and proposed avoidance, minimization, and mitigation measures to minimize and/or mitigate these impacts to the extent feasible. If present, jurisdictional areas will be discussed in the NES(MI). The NES(MI) will also discuss any consultation required with other agencies to obtain project approvals and environmental permits, if necessary.

#### **Task 7.2(a) Deliverables:**

- One electronic copy and up to two hard copies of the NES(MI)

#### **Task 7.2(b): Biological Resources: Federal Endangered Species Act Consultation**

Under the Federal Endangered Species Act (FESA), if the project may affect a listed species or designated critical habitat, Section 7 consultation with the USFWS is required. Under the FESA, the San Joaquin kit fox is listed as endangered and the California tiger salamander is listed as threatened. If required, GPA will prepare the Section 7 Consultation initiation package, including the Biological Assessment, and will coordinate as needed for review and submittal of the Section 7 consultation initiation package to USFWS.



## Section 5 – Proposed Scope of Work

Based on recent coordination with Caltrans District 6, if it is determined that the project could result in impacts to San Joaquin kit fox, the Biological Assessment will be submitted to Caltrans concurrently with the draft NES(MI) for an efficient and streamlined review process. If requested, GPA will attend internal meetings and/or agency meetings held as part of the consultation process.

GPA will provide ongoing support to the County to streamline the FESA consultation process, including preparation of supplemental information requested by the USFWS. GPA will also provide technical assistance to the design engineers and County to refine impact avoidance, minimization, and mitigation measures, as required by resource agencies to reduce project impacts on listed species to the maximum extent feasible.

### **Task 7.2(b) Deliverables:**

- One electronic copy and up to two hard copies of the FESA consultation package

### **Task 7.2(c): Biological Resources: California Endangered Species Act Consultation**

Under the California Endangered Species Act (CESA), if the project may result in the 'take' of a state listed or candidate species, consultation with the CDFW is required. Under CESA, the San Joaquin kit fox, California tiger salamander, and Swainson's hawk are all listed as threatened. GPA will prepare the request for a Consistency Determination or Incidental Take Permit application, and will coordinate as needed for review and submittal of the consultation initiation package/Incidental Take Permit application to CDFW. If requested, GPA will attend internal meetings and/or agency meetings held as part of the consultation process. If requested, following the submittal of the consultation initiation package/Incidental Take Permit application, GPA will assist the County in navigating the consultation and/or Incidental Take Permit process with the CDFW.

GPA will provide ongoing support to the County to streamline the CESA consultation processes, including preparation of supplemental information requested by CDFW and negotiating the required compensatory mitigation. GPA will also provide technical assistance to the design engineers and County to refine impact avoidance, minimization, and mitigation measures, as required by CDFW to reduce project impacts and potential for take of listed species to the maximum extent feasible.

### **Task 7.2(c) Deliverables:**

- One electronic copy and up to two hard copies of the CESA consultation package

### **Task 7.2(d): Water Quality Technical Memorandum**

GPA will prepare a Water Quality Technical Memorandum (WQ Memo) for the project. Background information for the project vicinity, including other studies completed, will be reviewed. GPA will refer to the Location Hydraulic Study and Storm Water Data Report for supporting data. GPA will identify and describe existing waterways and watersheds, identify specific water quality concerns in the area, evaluate the potential for project impacts, and identify appropriate measures to minimize these impacts. Construction-related impacts and long-term impacts to water quality will be qualitatively evaluated, and both direct and cumulative impacts related to the project will be described. The WQ Memo will address regulatory compliance, including conformance with the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES), and identify applicable best management practices included in the project design. If mitigation is required for the project, mitigation measures will be outlined in the WQ Memo.



### Task 7.2(d) Deliverables:

- One electronic copy and up to two hard copies of the WQ Memo

### Task 7.2(e): Construction Noise Memorandum

As a sub-consultant to GPA, AMBIENT Air Quality & Noise Consulting (AMBIENT) will prepare a technical noise memorandum (Noise Memo) to evaluate short-term construction impacts associated with the project. The Noise Memo will include a description of the existing noise environment, based on existing environmental documentation and a review of site reconnaissance data. The site reconnaissance will be conducted for identification of nearby noise-sensitive land uses and existing ambient noise levels in the project vicinity. Up to five short-term (i.e., 10-15 minute) noise measurement surveys will be conducted. Relevant background information, including noise fundamentals, descriptors, and applicable federal, state, and local regulatory framework will be described.

Noise and ground-borne vibration impacts associated with the project are anticipated to be primarily associated with short-term construction-related activities. To assess potential construction noise impacts, sensitive receptors and their relative exposure to the proposed project areas (considering topographic barriers and distance) will be identified. Predicted construction-generated noise levels will be quantified for the preferred project using the Federal Highway Administration (FHWA) *Roadway Construction Noise Model* (version 1.0). Construction-generated noise levels at the nearest land uses will be identified and summarized in tabular format within the Noise Memo.

Construction-generated groundborne vibration levels typically associated with construction equipment and commonly applied thresholds for structural damage and human annoyance will be identified based on existing FHWA/California Department of Transportation documentation. Predicted groundborne vibration levels at the nearest existing structures will be quantified and summarized in tabular format within the Noise Memo.

The project is not anticipated to have a quantifiable effect on long-term traffic noise levels and is not anticipated to be considered a Type I project. For these reasons, evaluation of long-term noise impacts is not anticipated to be required. The significance of noise and groundborne vibration impacts will be assessed in comparison to applicable standards and recommended thresholds. Mitigation measures will be identified for significant and potentially significant impacts. The effectiveness of proposed mitigation measures will be assessed.

### Task 7.2(e) Deliverables:

- One electronic copy and up to two hard copies of the Noise Memo

### Task 7.2(f): Cultural Resources: Historic Property Survey Report, Archaeological Survey Report, AB 52

As a sub-consultant to GPA, Applied Earthworks (Æ) will complete the cultural resource studies pursuant to Section 106 of the National Historic Preservation Act (NHPA), its implementing regulations found at 36 CFR 800, the Caltrans Environmental Handbook, and the Programmatic Agreement between the Federal Highway Administration, Advisory Council on Historic Preservation, State Historic Preservation Officer and Caltrans regarding compliance with Section 106 of the NHPA.





## Section 5 – Proposed Scope of Work

### Records Search and Background Research

Once the project alternative has been defined and the Area of Potential Effects (APE) is confirmed, Æ will review historic topographic maps, atlas, and aerials to identify changes in the landscape and identify areas of extant and nonextant built environment resources. Data collected from modern and historical aerial images and historical maps will be combined with soils and geologic data to better understand the past conditions of the Holocene landscape and assess the potential for buried sites. Concurrent with the desktop review, Æ will request a formal records search at the Southern San Joaquin Valley Information Center at California State University, Bakersfield to identify all known cultural resources (archaeological and historical built environment) and previous investigations within the APE as well as within 0.5 mile of the APE. The record searches will include a review of the NRHP, the California Register of Historical Resources, the California Inventory of Historic Resources, the California Historical Landmarks, the California Points of Historical Interest listing, the Historic Property Data File, the Caltrans State and Local Bridge Survey, the Survey of Surveys, GLO Plat maps, and other pertinent historic data.

### Native American Outreach and AB 52 Consultation

Native American Consultation is an integral part of the Section 106 process. In addition, pursuant to the State Public Resources Code §5097.9, state and local agencies cooperate with and assist the Native American Heritage Commission (NAHC) in its efforts to preserve and protect locations of sacred or special cultural and spiritual significance to Native Americans. Æ will contact the NAHC to determine whether it has information on sacred or special sites in the study area and to obtain the names and contact information of Native American representatives who may have such information. Those included on the list will be contacted by letter and telephone to request information about the study area.

Æ also will assist the County in satisfying the statutory requirements of Assembly Bill (AB) 52, which amends Section 5097.94 of CEQA. AB 52 invokes the involvement of California Native American Tribes in the identification and mitigation of Tribal Cultural Resources (TCR) (PRC 21074). Æ's assistance may include drafting and/or reviewing notification letters, participating in site visits, providing guidance to County personnel on the procedures associated with AB 52, and helping to identify measures to avoid or mitigate the effect on any identified TCRs.

### Archaeological Pedestrian Survey

Æ's Archaeologist will survey the APE for archaeological resources. Any previously recorded and newly discovered archaeological resources will be documented using current Department of Parks and Recreation forms (DPR-523). All resources will be photographed using digital pictures, and their locations will be plotted using a Global Positioning System (GPS) unit.

### Preparation of Technical Documents

Æ will prepare an Archaeological Survey Report (ASR) that will include the results of the background research, records search, Native American outreach and AB 52 consultation, and pedestrian survey, as well as detailed methodology and environmental and cultural overview sections. Additionally, Æ will prepare a Historic Property Survey Report (HPSR) that will summarize the archaeological and historical built environment investigations documented in the HRER (if an HRER is required). The HPSR is the primary document to demonstrate compliance with Section 106. An essential feature of the HPSR is the delineation of the APE, defined as the area within which



## Section 5 – Proposed Scope of Work

an undertaking may directly or indirectly affect historic properties (36 CFR 800.16 [d]). AE will coordinate with Caltrans' cultural resources staff to determine the final APE for the project and prepare the draft and final APE map for signature.

### **Task 7.2(f) Deliverables:**

One electronic copy and up to two hard copies of the APE Map, HPSR, and ASR

### **Task 7.3 Phase 1 Initial Site Assessment (ISA)**

Consultant shall conduct an Initial Site Assessment (ISA) to identify hazardous materials issues that could affect the constructability, feasibility, and/or cost of the proposed project. Hazardous materials may include, but are not limited to:

- Any lead paint that exists and whether it can affect construction of planned improvements.
- Whether any asbestos containing building materials are present in the bridge structure.

The Consultant will prepare a report documenting the assessment. The report will include:

- Site Description
- Records Review
- Site Reconnaissance Information
- Interview Information
- Photocopied pictures of significant items of environmental concern on the site (if any)
- Pertinent supporting documentation, such as boring logs and laboratory results available from reports reviewed (if any)
- Findings and Conclusions – including opinions on potential impacts of any recognized environmental conditions concerning the project site and, if considered warranted, recommendations for further study.

The ISA report submittals will include a "draft" version for review, a "revised draft" version incorporating review comments, and a final report incorporating any final comments. The asbestos report will be appended to the ISA report.

### **Task 7.3 Deliverables:**

- One electronic copy and up to two hard copies of the draft, revised draft and final ISA report.

## **TASK 8: FINAL DESIGN (PLANS, SPECIFICATIONS, ESTIMATES)**

This Task represents the beginning of the Final Design phase of the project. The Consultant staff will meet with the County at a final-design kick-off meeting to discuss the Final Engineering Scope of Work, project requirements, design criteria, and the County's most current scheduling and review requirements. An agenda and outline will be prepared and distributed before the meeting, and minutes will be prepared and distributed after the meeting.





### **Task 8.1 Final Design (65% PS&E):**

Upon approval of 35% P&E by the County and Caltrans and upon receiving environmental clearance (both NEPA and CEQA), the Consultant will prepare and submit the 65% plans, specifications, and estimate to the County.

Attention is directed to Attachment A for the anticipated plan sheets to be completed in this task.

#### **8.1.1 – 65% Bridge Design**

Consultant will prepare structural calculations and bridge plans for the bridge type and configuration agreed upon during the Preliminary Engineering task. This submittal will represent complete, unchecked set of bridge construction documents to be submitted to the County. The bridge design will be performed in general accordance with the following:

- County CAD Drafting Standards. County CAD manager will review Consultant CAD drawings at each milestone submittal for conformance with County CAD standards. A copy of the County's CAD Standards Manual will be made available to the Consultant at the inception of the project. In addition, the County will also provide CAD templates, CAD blocks, borders, and plot styles.
- California Department of Transportation (Caltrans) 2015 Standard Plans & 2015 Specifications
- Caltrans Bridge Design & Detailing Manuals
- AASHTO LRFD Bridge Design Specifications, 6<sup>th</sup> Edition and Caltrans Amendments dated 2014
- Caltrans Seismic Design Criteria, version 1.7, dated April 2013

#### **8.1.2 - Engineer's Estimate of Probable Construction Cost**

The Consultant will provide a draft cost estimate at the 65% PS&E design submittal. Consultant will prepare approximate quantities in accordance with Caltrans 2015 Standard Specifications and payment items. Detailed quantities will be prepared under Task 8.2.3. The engineer's estimate of probable construction cost ("Marginal Estimate") for the project will be prepared using the most recent and relevant Caltrans Cost Data, Consultants cost data, as well as the County's cost data. The County will provide the Consultant with bid results from the upstream project on Sand Creek at Road D129.

#### **8.1.3 - Contract Specifications/Special Provisions**

The Consultant will prepare the contract bridge technical Special Provisions for the project based in General on Caltrans 2015 Standard Special Provisions (SSPs), Caltrans 2015 Standard Specifications, and County construction contract standards. For the 65% PS&E submittal, the specifications submittal will consist of an annotated list of required bridge technical SSPs for the project. The Consultant will provide edited SSPs and Contract Special provisions with the 90% PS&E submittal under Task 8.2.3.

#### **8.1.4 - Engineering Support for Permitting**

The Consultant will provide engineering support as the permitting documents are drawn up. This support will be in the form of preparing exhibits and calculating areas and quantities of impacts as required by the permit documents.



### 8.1.5 – Utility Coordination Support

The County will perform utility coordination, including preparation and distribution of utility letters and ongoing coordination with utility companies for relocation of their facilities, as necessary. The County will provide the Consultant with response information from each utility owner. The Consultant will assist the County with utility coordination by determining which utilities need to be relocated to accommodate the bridge work. The Consultant will work with the County to ensure that all utility conflicts and construction feasibility issues are resolved and that utilities are relocated prior to the project advertising date. Attendance at up to two utility coordination meetings is assumed.

#### Task 8.1 Deliverables:

- Three full-size sets of 65 percent plans (22X34)
- One half-size set of 65 percent plans (11X17)
- Three sets of annotated bridge technical Special Provisions list
- Three copies of Cost Estimate
- One set of all draft (unchecked) Design Calculations

#### Task 8.2 90% PS&E Design:

The 90% PS&E will include incorporating the 65% review comments from the County into the design and bidding documents. After receiving County concurrence on responses, the Consultant will proceed with the preparation of the 90% plans. Plan revisions will include addressing 65% comments and design changes to address mitigation measures and concerns expressed by the public and/or other agencies.

##### 8.2.1 – Response to County's 65% Comments

The Consultant will provide written responses to County comments on the 65% PS&E. The County will summarize all comments in a review comment form. The Consultant will provide responses to the County's comments on the form.

##### 8.2.2 – Bridge Independent Check

The 65% PS&E will be independently checked. An independent engineer, who was not involved in the design will re-analyze the bridge, verify member capacities and review the special provisions for the bridge. The checker will provide a list of comments and a set of "red-marked" plans that communicate issues uncovered during the preparation of the independent check. Issues raised by the checker will be discussed with and resolved by the designer and checker. A record of the written responses to the Independent Check will be included with the final calculation package. The final design will reflect agreement between the two engineers.

##### 8.2.3 - Update Bridge PS&E to 90%

The Consultant will update the PS&E based on the agreement and resolution of comments for final submittal to the County. This submittal will represent the final contract documents that will be issued for bid and construction.

The Consultant will prepare an itemized engineer's estimate at the 90% stage. Two independent sets of quantity calculations shall be performed by individuals experienced in this work for the bridge design. Work also includes updating the bid item list to correspond to Caltrans current standards. Prices will be updated to current expected values.



## Section 5 – Proposed Scope of Work

Plans shall be cross checked with the specifications and the engineer's estimate. The specifications shall then be compiled using the bid item list to collect and edit the applicable Caltrans Standard Special Provisions (SSPs) and prepare required bridge technical special provisions in coordination with the County's roadway designers. The County will prepare the roadway technical specifications and administrative portions of the specifications, as well as provide overall document assembly. The date of the Revised Standard Specifications (RSS) will be frozen at this time, and more recent versions of the RSS will not be incorporated into the contract documents going forward.

Specifications will be updated and finalized with comments from the County after the 90% submittal.

The QA/QC procedures described in Task 1.3 will be implemented during this task as well, this time with an emphasis on coordination between structural, traffic and utility documents and the elimination of any conflicts between them.

### **Task 8.2 90% PS&E Deliverables:**

- Response to 65% Comments
- Five half-size set of plans (11 x 17)
- Three sets of annotated Special Provisions
- Three copies of Cost Estimate
- One sets of checked Bridge Design Calculations
- Three sets of Foundation Report with Log of Test Borings
- Three sets of Hydraulic Design Report
- Electronic submittals of all deliverables in PDF format

### **Task 8.3 100% PS&E Design**

This phase begins after the 90% PS&E is submitted and County has responded with comments. The objective in this task is to provide the design and construction documents the County will use to advertise for bids and administer construction. PS&E shall be developed to the 100% level of completion. Following the reviews by the County, agreed-upon revisions shall be made by the Consultant to the 90% PS&E. The specifications, plans, and other bid documents will be submitted to the County for final approval.

Consultant shall provide written responses to County comments on the 90% plans. After receiving County concurrence on responses, Consultant will proceed with the preparation of the 100% plans. Plan revisions will include addressing 90% comments and design changes to address mitigation measures and concerns expressed by the public and/or other agencies.

The Consultant will complete the bridge design documents and bidding documents to 100% level, this includes updating the Plans, Specifications, and Engineer's Cost Estimate. The Consultant will sign and seal the bridge design and bidding documents, prepare them for reproduction, and deliver them to the County.

### **Task 8.3 100% PS&E Deliverables:**

- Updated comment/response matrix
- One full-size sets of Plans (22 x 34)
- Three sets of 100 Percent Bidding Documents
- Three copies of Cost Estimate
- Copies of all updated Design Calculations



### Task 8.4 Deliver Final PS&E

After receipt of final approval, an original set of stamped and signed plans and an engineer's estimate will be submitted to the County for its use in soliciting construction bids. The Consultant shall provide the quantity calculations to the County for use in administering the contract.

#### Task 8.4 Final PS&E Deliverables:

- One set of Mylar Final plans
- Final Plans on compact disk in AutoCAD 2017 format. CAD files to be prepared using COUNTY CAD standards
- Bidding Documents on compact disk in MS Word format
- Engineers Estimate on compact disk in MS Excel format
- Three full-size sets of Plans (22 x 34)
- Two sets of independently checked Bridge Design Calculations
- Two sets of independently checked Quantity Calculations
- Electronic submittal of all deliverables in PDF format

## OPTIONAL SERVICES

The following services have been added by the team in anticipation of their need, or deemed optional by the County.

## TASK 2: SURVEYS AND MAPPING

The County anticipates providing the surveying and mapping for these projects. However, at the County's request, the Consultant may be asked to prepare the base mapping for the project(s). The work for this task includes:

### Task 2.1 Project Survey Control

Perform control surveys and set control points. Resolve property boundary and right-of-way locations. Prepare survey control plan sheet.

### Task 2.2 Obtain County Encroachment Permit and Permission to Enter from Adjoining Property Owners

Under this task, Consultant shall obtain an encroachment permit to perform surveying within the roadway right-of-way. Under this task, Consultant shall identify those properties where access is required in order to complete the project base mapping. Consultant would be required to coordinate Permission to Enter (PTE) with County right-of-way staff to ensure all adjoining property owners have been adequately notified prior to initial site study.

### Task 2.3 Topographic Surveys

Perform topographic surveys including; surveying necessary utility potholes, existing bridge features, existing utility locations (inverts), sign location and nomenclature, and other detailed topography. The County shall determine the extent of the survey necessary for approach roadway design. It is anticipated that field survey along Avenue 428 will extend from approximately 600 feet west to 600 feet east of the bridge, at regular intervals centered on the existing roadway centerline. Contour interval shall be one foot. The location and elevations of existing improvements, including curb and gutter, sidewalks, driveways, and existing visible surface utility facilities



## Section 5 – Proposed Scope of Work

within 20' of the existing right-of-way shall be obtained/verified by field survey. It is assumed that traffic control will not be required. This task also includes the following:

- **Hydrographic Survey:** Perform survey of channel cross-sections starting at each face of bridge and then upstream and downstream for 1,000-ft at 200-ft intervals. Waterway cross-sections will include top and toe of bank, any overbanks (if present), and thalweg elevations, as well as any grade breaks within the channel, and high water marks on the structure and channel banks.

### Task 2.4 Property Surveys and Resolution

Perform property boundary and right-of-way surveys of all affected parcels. Set and stake necessary monuments to indicate boundary locations and acquisition corners.

### Task 2.5 Base Map Preparation

Prepare a base map, in imperial units, showing property boundaries, easements, rights-of-way, existing utilities and topographic information. Consultant will prepare base sheet in accordance with County CAD standards.

### Task 2.6 Right-of-Way Acquisition Support

This task shall include assisting the County with the preparation of legal descriptions, plats and closure calculations, R/W Appraisal Maps including preparation of R/W descriptions and exhibits, descriptions and exhibits for utilities, drainage, slope, and construction easements.

### Task 2.7 Utility Potholing

The Consultant will perform utility potholes at predetermined locations using air-vacuum excavation to verify the precise horizontal and vertical location of any identified existing high-risk facilities. The exact locations of proposed utility potholes will be determined at a later date. Once the requested utility has been exposed, pertinent utility data will be collected that will include the utility type, material composition, general soil characteristics, depth and a photo of the exposed utility. After the collection of utility data has been completed, the pothole will be restored to its previous condition using the appropriate backfill and surface restoration materials per the County's requirements. Consultant will arrange with the County to have the potholes surveyed and marked in the field by the County or the surveying subconsultant with MAG nail in asphalt, chiseled X in concrete, or wooden lath in natural ground, and pertinent utility data will be recorded on the ground surface with white paint displaying the pothole number, utility size, type and depth. Up to 10 potholes (standard 1'x1') are assumed. The County will pay all permit fees and provide traffic control, if required.

#### Task 2 Deliverables:

- Topographic survey map and electronic surface model compatible with Civil3D
- Acquisition map
- Record of Survey
- Legal descriptions, plats and closure calculations for ROW acquisition
- AutoCAD dwg file of the topographic survey containing the survey points stream cross section survey Map (1" = 30')
- Appraisal map of the proposed right of way acquisitions



## TASK 3: PRELIMINARY ENGINEERING (35% P&E)

### Task 3.1 Preliminary Bridge Design:

#### 3.1.4 – Life-Cycle Cost Analysis

The Consultant will perform a life-cycle cost analysis (LCCA) to determine the present-value cost impact of a rehabilitation project versus a replacement project. The Consultant will use the real rate of interest method as recommended by Caltrans OSLA. A brief letter will be prepared summarizing the results of the LCCA.

#### Task 3.1.4 Deliverables

- One electronic copy and up to two hardcopies of the LCCA Letter

## TASK 5: RIVER HYDROLOGY AND HYDRAULICS

### Task 5.9 Coordination with Central Valley Flood Protection Board to Obtain Freeboard Variance

The Consultant will assist the Project Team in obtaining a freeboard variance from the CVFPB. The Consultant will summarize the background information and prepare the application package, including necessary hydraulic data and exhibits. If construction is anticipated during non-working months, hydraulic analysis of the anticipated falsework system shall be included. One meeting with the CVFPB is anticipated.

#### Task 5.9 Deliverables

- Draft and Final CVFPB Freeboard Variance Application (pdf)

### Task 5.10 No-rise Certificate

The proposed Project is not expected to have any significant impact to the floodplains. It is assumed that CLOMR/LOMR will not be needed for this Project. However, WRECO will prepare a No-rise Certification for the Project for the County to file for documentation purpose.

WRECO will research and review the FEMA effective hydraulic model and effective hydrologic data for the Project reach of Sand Creek. It is assumed that the County National Flood Insurance Program (NFIP) Floodplain Administrator will provide the current effective model for development of the No-rise Certification.

WRECO will develop and document the FEMA No-rise Certification using FEMA procedures, including digital copies of the of the effective model, duplicate effective model, corrected effective model, existing condition model, and proposed condition model, as well as a summary memorandum documenting the source and development of the various models. The memorandum will include the signed and stamped engineering No-rise Certification for the County's Project documentation.

#### Task 5.10 Deliverables

- No-rise Certification (pdf)





## TASK 7: ENVIRONMENTAL DOCUMENT AND REGULATORY AGENCY PERMITS

### Task 7.2(g): Farmland Impacts, AD 1006 Form

The Department of Conservation (DOC) established the Farmland Mapping and Monitoring Program (FMMP) in 1982. The goal of the FMMP is to provide consistent and impartial data to decision makers for use in assessing present status and planning for the future of California's agricultural land resources. One of the primary responsibilities of the FMMP is to produce Important Farmland Maps and statistical data for California's agricultural resources. Important Farmland Maps identify the location and quality of agricultural land across the state. The project site is adjacent to lands identified by the DOC as agricultural resources; due to the fact that ROW is likely to be required for the project it is assumed the project would result in the conversion of farmlands to other uses. Therefore, Parts I, III, and VI of Form AD 1006 must be completed to calculate the Total Site Assessment value of the farmland. GPA will prepare the AD 1006 Form and submit it to the County for review. Once approved by the County, GPA will submit the AD 1006 Form to Caltrans for review and approval of the document. It is assumed that the Total Site Assessment value would be under the 160-point threshold; therefore, the form would not require analysis by the National Resource Conservation Service (NRCS) local field office.

#### Task 7.2(g) Deliverables

- One electronic copy and up to three hard copies of the AD 1006 Form

### Task 7.2(h): Cultural Resources: Historic Resources Evaluation Report

Sand Creek appears to be a natural waterway within the project area; however, if research reveals that it is not natural, but rather manmade, it would be considered a work of engineering and would require evaluation for the NRHP for Section 106 compliance. In addition, GPA assumes that Avenue 428 would not be evaluated as a historic road and the residential property located just east of the northeastern quadrant of the bridge (APN 025-190-001-000) would not be impacted by the project. If it is determined that any of these features would require evaluation for Section 106 compliance, a Historic Resources Evaluation Report (HRER) would be required. The proposed scope of work for the HRER includes the following tasks:

- Site Visit/Photography – The Area of Potential Effect (APE) Map will be prepared by AE. A field survey will be conducted by GPA to identify potential and known historic properties within the project's APE. Potential historic properties are those with buildings or structures over 45 years of age. Known historic properties are those that are designated or have been determined eligible under the local, state, or federal designation programs. Digital photographs will be taken during the field survey. All photographs will be taken from the public right-of-way, unless property access is granted in advance.
- Research/Review Existing Information – GPA will review all existing information on the project site provided by the client, as well as the results of the records search provided by AE. Property-specific and general research will be conducted to develop relevant historic contexts. Research may include general historical information, building permits, county tax assessor records, Sanborn maps, etc.



## Section 5 – Proposed Scope of Work

- Public Consultation – GPA will conduct outreach to potentially interested members of the public in accordance with established Section 106 procedures.
- Evaluations/DPR 523 Inventory Forms – GPA will evaluate all properties greater than 45 years of age within the project APE that have not been previously evaluated or that require re-evaluation. The results of the evaluations will be recorded on DPR 523 inventory forms and included in the HRER.

Following completion of these activities, a draft HRER will be prepared according to established Caltrans procedures and submitted for County review. Once the HRER has been approved by the County, GPA will submit the document for Caltrans review and coordinate for approval of the document.

### **Task 7.2(h) Deliverables**

- One electronic copy and up to two hard copies of the HRER

### **Task 7.2(i): Cultural Resources: Finding of Effect**

If the HRER identifies historic properties in the APE, a Finding of Effect (FOE) report will be required. GPA will prepare the FOE according to established Caltrans procedures and submit for County review. Once the FOE has been approved by the County, GPA will submit the document for Caltrans review and coordinate for approval of the document. GPA assumes that a Memorandum of Agreement would not be required for this project.

### **Task 7.2(i) Deliverables**

- One electronic copy and up to two hard copies of the FOE

### **Task 7.2(j): Section 4(f) Report**

If the HRER identifies historic properties in the APE, and the project would require use of a historic resource, Section 4(f) of the Department of Transportation Act of 1966 would apply and a Section 4(f) Evaluation will be required to analyze potential impacts to the 4(f) resource. GPA will reference all existing documentation and perform any outstanding research related to attributes of the resource, and will prepare a Section 4(f) Evaluation that will describe the Section 4(f) property, potential project impacts, avoidance alternatives, findings, and measures to minimize project impacts. GPA will also perform any necessary public outreach efforts and coordinate, as appropriate, with the agency with jurisdiction over the 4(f) property to obtain the appropriate concurrence on the 4(f) determination.

### **Task 7.2(j) Deliverables**

- One electronic copy and up to two hard copies of the Section 4(f) Evaluation

### **Task 7.2(k): Biological Resources: Aquatic Resource Delineation**

Sand Creek is under the jurisdiction of the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW. In addition, Sand Creek is a Central Valley Flood Protection Board (CVFPB)-regulated stream and therefore is under the jurisdiction of the CVFPB. If the creek would be impacted by the project, the limits of waters under jurisdiction of the USACE, RWQCB, and CDFW will be delineated to support the regulatory permitting process.





### Field Delineation

GPA will delineate wetlands and other waters of the U.S. GPA will identify wetlands, OHWM, and other jurisdictional limits within the BSA. The actual presence or absence of USACE wetlands will be verified through the presence of hydrologic conditions, hydrophytic vegetation, and hydric soils pursuant to the U.S. USACE's 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* and its 1987 *Corps of Engineers Wetlands Manual*. The spatial limits of all wetlands and/or other waters of the U.S. will be mapped according to USACE's minimum mapping standards.

### Aquatic Resources Delineation Report

GPA will summarize existing regulatory setting, project area conditions, and delineated wetlands and waters of the U.S. in an Aquatic Resources Delineation report. The report will be used to (1) assist the design team in avoiding impacts to jurisdictional areas; (2) provide the jurisdictional information necessary for the supporting project environmental documentation; and (3) support the regulatory permitting process.

#### **Task 7.2(k) Deliverables**

- One electronic copy and up to two hard copies of the Aquatic Resources Delineation

### **Task 7.4: CEQA Environmental Document: Initial Study/Mitigated Negative Declaration**

#### Administrative Draft IS

GPA understands that the CEQA document may be prepared by the County. If requested, following completion of the appropriate technical analysis, GPA will reference the results of these studies, as well as other background research, to prepare an Administrative Draft IS, consistent with CEQA Guidelines Appendix G and in a format acceptable to the County. The document will include all of the required sections for an IS and will address on-site and off-site impacts of the project. GPA will then submit the Administrative Draft IS to the County for review and will coordinate, as needed, for review and approval of the document.

#### Draft IS and NOI

Once the Administrative Draft IS has been approved by the County, GPA will prepare the Draft IS (with anticipated MND) and circulate the document to the public for the 30-day public review period. GPA staff will also prepare a Notice of Intent (NOI). GPA will deliver hard copies of the document to area libraries by U.S. Mail, and will maintain a file of any comments received during the circulation period for use in preparing the final document. It is assumed that the County will be responsible for any additional local postings.

#### Final IS and NOD

Following circulation of the Draft IS (with anticipated MND), GPA will coordinate with the County to prepare responses to any public comments received (as appropriate) and incorporate the responses and any required revisions into the document. GPA will then prepare a Final IS and submit it to the County for review. GPA will coordinate as needed to make further revisions and obtain approval to finalize the document. Upon completion of the Final IS, GPA will coordinate with the County to obtain a Notice of Determination (NOD) for the project from the County within five days of approval.



### Task 7.4 Deliverables

- Up to four electronic copies of the Administrative Draft IS
- Up to eight electronic copies and up to ten hard copies of the Draft IS and NOI
- Up to eight electronic copies and up to ten hard copies of the Final IS and NOD

### Task 7.5: Biological Resources: Environmental Permitting

#### Section 404 of the Clean Water Act Nationwide Permit

Section 404 of the Clean Water Act regulates, and authorizes the USACE to issue permits for the discharge of dredged or fill materials into waters of the U.S. Sand Creek falls under the jurisdiction of the USACE as waters of the U.S. Because the project is expected to require work within the creek, the need for a Section 404 Permit is anticipated. It is expected that the project will fall within the scope of the USACE Nationwide Permit 14 for “Linear Transportation Facilities.” To qualify for this permit, the project must meet 27 general conditions and not result in greater than 0.5 acre of permanent impacts (e.g., loss) on jurisdictional waters of the U.S.

A pre-construction notification (PCN) would be required for the project if more than 0.10 acre of permanent impacts on waters of the U.S. would result from the project, or if the project would impact wetlands. If a PCN is required, GPA will prepare the PCN package for submittal to the USACE. The application will include a brief description of the project, potential impacts, measures to minimize impacts, and other pertinent project information, as required by the USACE. GPA will coordinate with the County and USACE as needed to obtain the 404 authorization. If warranted, a site visit will be coordinated with the USACE and other regulatory agencies to facilitate the process.

#### Section 401 of the Clean Water Act Certification

The Clean Water Act provides the RWQCB with jurisdiction over waters of the state. Section 401 of the Clean Water Act requires applicants acquiring permits from the USACE under Section 404 obtain a Water Quality Certification from the RWQCB for the state in which the discharge originates. The RWQCB typically takes jurisdiction over the same areas as the USACE; therefore, Sand Creek is also considered waters of the state. If required, GPA will prepare an application for a Section 401 Water Quality Certification for submittal to the Central Valley RWQCB. The application will include a brief description of the project, potential impacts, measures to minimize impacts, and other pertinent project information, as required by the Central Valley RWQCB. GPA will coordinate with the County and RWQCB as needed to obtain the 401 Certification. If warranted, a site visit will be coordinated with the RWQCB and other regulatory agencies to facilitate the process.

#### 1602 Streambed Alteration Agreement

Section 1602 of the Fish and Game Code requires submittal of a Streambed Alteration Notification to the CDFW for any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake. The CDFW reviews the proposed actions and, if necessary, submits to the applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Streambed Alteration Agreement.

Streams (and rivers) are defined by the presence of a channel bed and banks and at least an intermittent flow of water; therefore, the Sand Creek is expected to fall under the jurisdiction of the CDFW. GPA will prepare a



Streambed Alteration Notification package for submittal to the CDFW. The notification will include a brief description of the project, potential impacts, measures to minimize impacts, and other pertinent project information, as required by the CDFW. If warranted, a site visit will be coordinated with the CDFW and other regulatory agencies to facilitate the process.

### Central Valley Flood Control Protection Board Encroachment Permit

Approval by the CVFPB is required for projects or uses that encroach into rivers, waterways, or floodways within and adjacent to federal and State authorized flood control projects and within designated floodways adopted by the Board. CVFPB approval of the encroachment must be obtained before a project can begin construction work or any proposed project within these areas. The project design engineer will prepare the encroachment permit application for the project. GPA will coordinate with the design engineer, the County, and the CVFPB as necessary to support preparation of the encroachment permit application and to obtain the permit.

#### **Task 7.5 Deliverables**

- One electronic copy and up to two hard copies of the 404, 401, and 1602 notification/application packages; supporting information for the CVFPB permit acquisition

#### **Task 7.6 Revegetation Plan and Specifications**

If requested, the Consultant will work with the County and design engineer to combine project-specific requirements with project-specific conditions to create revegetation plans that have the highest potential for long-term success. Using the Consultant's understanding of local soils, flora and fauna, and water resources, the Consultant will help to identify an approach that will result in the greatest benefit to the landscape while reducing the overall cost of installation and maintenance. The Consultant will also work closely with the County, regulatory agencies, and other stakeholders to make sure that the revegetation plan incorporates project needs and the larger goals for conservation. Plans will include but are not limited to:

1. Plant schedule
2. Planting plan
3. Conceptual irrigation plan
4. Specifications

The Consultant will develop revegetation plans, contract specifications/special provisions, and an engineer's estimate.

#### **Task 7.6 Deliverables**

- Electronic copies of the revegetation PS&E at 65%, 90% and 100% design stages
- Singed mylar copies of final revegetation plans and electronic copies of final PS&E

#### **Task 7.7: Review of Contract Specifications/Special Provisions for Environmental Compliance**

The Consultant will assist the County with ensuring that design-related avoidance, minimization, and mitigation measures are successfully integrated into project design plans and contract specifications/special provisions. Specifically, the Consultant will review final design plans and contract specifications/special provisions to ensure all relevant NEPA/CEQA obligations and permitting requirements have been adequately incorporated. The Consultant will review the draft and make direct additions, supplemental comments and/or create specialized, non-



standard environmental specifications in tracked changes. During the review, the Consultant will coordinate with the design engineer and the County throughout the review process to make any required changes.

### **Task 7.7: Deliverables**

- Supporting information concerning environmental commitments and permitting measures for design plans and contract specifications/special provisions

## **TASK 9: ASSISTANCE DURING BIDDING**

The County will advertise the project for bidding and distribute the plans to prospective bidders. The County's Project Manager will be the designated person to receive contractor inquiries. The Consultant's Project Manager and project staff will assist the County as requested during bidding. The work may include answering questions, providing consultation and interpretation of the construction documents, and assisting the County in preparation of addenda to the PS&E during the advertisement period. Attending preconstruction meetings or bid opening and analysis of bids will also be provided, if requested.

## **TASK 10: DESIGN AND ENVIRONMENTAL MONITORING SUPPORT DURING CONSTRUCTION**

The Consultant's Project Manager and project staff will be available to assist the County during construction and provide construction support and environmental monitoring services. The scope of work for construction support services will be determined during the final design phase and prior to construction. Prior to construction, the contract will be amended to include construction support services.

**EXHIBIT B**  
**COST PROPOSAL**

## **EXHIBIT B**

### **PAYMENT PROVISIONS**

#### **SPECIFIC RATES OF COMPENSATION – BASIC SERVICES**

1. CONSULTANT will be reimbursed for hours worked at the hourly billing rates specified in CONSULTANT's Cost Proposal attached hereto. The specified hourly rates shall include direct salary costs, employee benefits, overhead, and fee.
2. In addition, CONSULTANT will be reimbursed for incurred (actual) direct costs other than salary and subconsultant costs. CONSULTANT will be reimbursed for subconsultant costs at actual cost.
3. Reimbursement for transportation and subsistence costs shall not exceed the rates as specified by the COUNTY.
4. Progress payments will be made monthly in arrears based on services provided and actual costs incurred.

#### **SPECIFIC RATES OF COMPENSATION – OPTIONAL SERVICES**

The basis of payment for the optional services provided under this agreement shall be at the hourly billing rates specified in CONSULTANT's Cost Proposal attached hereto. The fee shall be negotiated for each individual optional service. In addition payment provisions include those four items listed under Basic Services above.

#### **TOTAL COMPENSATION**

The specific rates of compensation are not adjustable until January 1, 2020, at which point any escalation will be made in accordance with the relevant article(s) of the Agreement.

The total amount payable by COUNTY for Basic Services hereunder shall not exceed the sum of \$357,222, unless authorized by an amendment to this Agreement.

The total amount payable by COUNTY for Optional Services hereunder shall not exceed the sum of \$165,516, unless authorized by an amendment to this Agreement.

For billing purposes, work will be segregated between Basic and Optional Services. Total expenditures made under this Agreement for Basic and Optional Services combined shall not exceed the sum of \$522,738, without amendment of this Agreement.

**TRC ENGINEERS, INC.**  
**COST PROPOSAL - BASIC SERVICES**

**PROJECT**                      Tulare County  
Professional Engineering Services for  
Ave 428 Sand Creek Bridge Replacement

**INDIRECT COSTS**

		Rate
	Fringe Benefits	48.31%
	General and Administrative OH	109.79%
Overhead		158.10%

**FEE (Profit)** 10%

**DIRECT LABOR**

<u>Employee</u>	<u>Function</u>	<u>Hours</u>	<u>Hourly Billing Rate</u>	<u>Total</u>	<u>Actual or Avg Rate</u>
M. Imbriani	Principal In Charge	31 @	\$255.51	\$7,921	\$90.00
R. Yates	Project Manager	245 @	\$167.06	\$40,930	\$58.84
T. Lambert	Bridge Project Engineer	166 @	\$176.89	\$29,363	\$62.30
J. Conklin	Roadway Project Engineer	2 @	\$176.89	\$354	\$62.30
C. Pinkerton	Bridge Senior Engineer	100 @	\$147.41	\$14,741	\$51.92
C. Christensen	QA/QC Manager	40 @	\$235.85	\$9,434	\$83.07
K. Negoro	Engineer II	404 @	\$127.75	\$51,612	\$45.00
TBD	Engineer I	0 @	\$103.18	\$0	\$36.34
G. Imbsen	Eng. CADD Supervisor	48 @	\$137.58	\$6,604	\$48.46
A. Cardoza	Eng. CADD Technician	258 @	\$98.27	\$25,354	\$34.61
J. Hull	Eng. Desktop Publisher	12 @	\$83.53	\$1,002	\$29.42
T. Maechler	Eng. Adm. Assistant	10 @	\$83.53	\$835	\$29.42
Escalation Factor				\$8,637	
Total Direct Labor Costs		1,316			\$196,788

**OTHER DIRECT COSTS**

	<u>Quantity</u>	<u>Per Unit</u>	<u>Total</u>
Mileage	5520	\$0.545	\$3,008
Lodging	2	\$120.000	\$240
Per Diem	12	\$46.000	\$552
Mail	50	\$0.55	\$28
Overnight mail	10	\$15.00	\$150
Copies (8.5x11)	500	\$0.06	\$30
Copies (11x17)	1000	\$0.12	\$120
Prints (22x34)	160	\$3.00	\$480
Mylars (22x34)	80	\$12.00	\$960
Envir. Permits	1	\$3,128.00	\$3,128
Miscellaneous	1	\$50.00	\$50
Total Other Costs			\$8,746

**SUBCONTRACTOR COSTS (detailed cost estimate attached)**

Sub #1 GPA  
Sub #2 WRECO  
Sub #3 4 Creeks  
Sub #4 DesignLab 252  
Sub #5 EXARO

<b>Basic</b>
\$84,760
\$66,928
\$0
\$0
\$0

\$151,688

**TOTAL COST** **\$357,222**

Tulare County  
Professional Engineering Services for  
Ave 428 Sand Creek Bridge Replacement

TRC ENGINEERS  
DESIGN FEE ESTIMATE WORKSHEET

Proposal Date:

07/17/18

Project:

P2018-18

Sub administration:

0.0%

Current Date:

23-Oct-18

Expenses	
Description	Amount
Travel	
Airfare (round trips)	\$0
Mileage	\$3,008
Lodging	\$240
Per Diem	\$552
Car rental	\$0
Miscellaneous Travel	\$0
Travel Subtotal	\$3,800
Other Direct Costs	
Subconsultants Admin. Costs	\$0
ODC Subtotal	\$4,946
Total	\$8,746

Subconsultants (Labor + ODC)		
Name	Amount	DBE %
GPA	\$84,760	23.73%
WRECO	\$66,928	18.74%
4 Creeks		
DesignLab 252		
EXARO		
Total Basic Services	\$151,688	42.46%

Total Basic Fee Estimate	
Labor	\$196,788
Subconsultants	\$151,688
Expenses	\$8,746
Total	\$357,222



**\$8,745.90**

## BASIC SERVICES

## Escalation Calculation

Employee	Actual Employee Rate	Hours on Project	% of Project	Weighted Portion of Rate
Principal In Charge	\$ 255.51	31	2.36%	\$6.02
Project Manager	\$ 167.06	245	18.62%	\$31.10
Bridge Project Engineer	\$ 176.89	166	12.61%	\$22.31
Roadway Project Engineer	\$ 176.89	2	0.15%	\$0.27
Bridge SeniorEngineer	\$ 147.41	100	7.60%	\$11.20
QA/QCManager	\$ 235.85	40	3.04%	\$7.17
Engineer II	\$ 127.75	404	30.70%	\$39.22
Engineer I	\$ 103.18	0	0.00%	\$0.00
Eng. CADD Supervisor	\$ 137.58	48	3.65%	\$5.02
Eng. CADD Technician	\$ 98.27	258	19.60%	\$19.27
Eng. Desktop Publisher	\$ 83.53	12	0.91%	\$0.76
Eng. Adm.Assistant	\$ 83.53	10	0.76%	\$0.63
	\$ -	0	0.00%	\$0.00
	\$ -	0	0.00%	\$0.00
	\$ -	0	0.00%	\$0.00
	\$ -	0	0.00%	\$0.00
	\$ -	0	0.00%	\$0.00
	\$ -	0	0.00%	\$0.00
	\$ -	0	0.00%	\$0.00
		1,316	100.00%	\$142.97

TRC ave rate, January 2018

Year		Est hours spent per year	Est % spent per year	Unescalated Ave. Rate	Escalation	Escalated Ave. Rate	Total Unescalated Labor	Total Escalated Labor	Escalated Labor by Year
July 2018 to June 2019	Design	329	25.00%	\$142.97					
July 2019 to June 2020	Design	329	25.00%	\$142.97	3.0%	\$147.26	\$47,038	\$48,449	\$1,411
July 2020 to June 2021	Design	329	25.00%	\$142.97	3.0%	\$151.68	\$47,038	\$49,902	\$2,865
July 2021 to June 2022	Design	329	25.00%	\$142.97	3.0%	\$156.23	\$47,038	\$51,399	\$4,362
July 2022 to June 2023	Const	0	0.00%	\$142.97	3.0%	\$160.92	\$0	\$0	\$0
		1316	100%				\$141,113	\$149,750	\$8,637

### Difference between Unescalated Labor and Escalated Labor



GPA	
COST PROPOSAL - BASIC SERVICES	
PROJECT	Tulare County Professional Engineering Services for Ave 428 Sand Creek Bridge Replacement

		Rate
	Fringe Benefits	46.39%
	General and Administrative OH	83.67%
Overhead		<u>130.06%</u>

<u>Employee</u>	<u>Function</u>	<u>Hours</u>		<u>Hourly Billing Rate</u>	<u>Total</u>	<u>Actual or Avg Rate</u>
Erinn Silva	Project Manager	154	@	131.39	\$20,234	\$52.88
Laura Comstock	Associate Env. Planner	8	@	94.36	\$755	\$37.98
Nicole Greenfield	Environmental Planner		@	71.65		\$28.84
Alen Estrada-Rodas	Environmental Planner	40	@	69.57	\$2,783	\$28.00
Marieka Schrader	Senior Associate Biologist	28	@	149.08	\$4,174	\$60.00
Martin Rose	Senior GIS Analyst	8	@	113.48	\$908	\$45.67
Jennifer Johnson	Associate Biologist	56	@	93.17	\$5,218	\$37.50
Angela Scudiere	Senior Biologist	128	@	96.75	\$12,384	\$38.94
Dawn Cunningham	Associate Biologist	96	@	89.60	\$8,602	\$36.06
Anastasia Shippey	Biologist	152	@	67.09	\$10,197	\$27.00
Christine Cruiss	Sr Architectural Historian	14	@	113.48	\$1,589	\$45.67
Jenna Kachour Jelks	Sr Preservation Planner		@	107.49		\$43.26
Audrey von Ahrens	Architectural Historian II	8	@	71.73	\$574	\$28.87

[illegible]

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893	1892	1891	1890	1889	1888	1887	1886	1885	1884	1883	1882	1881	1880	1879	1878	1877	1876	1875	1874	1873	1872	1871	1870	1869	1868	1867	1866	1865	1864	1863	1862	1861	1860	1859	1858	1857	1856	1855	1854	1853	1852	1851	1850	1849	1848	1847	1846	1845	1844	1843	1842	1841	1840	1839	1838	1837	1836	1835	1834	1833	1832	1831	1830	1829	1828	1827	1826	1825	1824	1823	1822	1821	1820	1819	1818	1817	1816	1815	1814	1813	1812	1811	1810	1809	1808	1807	1806	1805	1804	1803	1802	1801	1800	1799	1798	1797	1796	1795	1794	1793	1792	1791	1790	1789	1788	1787	1786	1785	1784	1783	1782	1781	1780	1779	1778	1777	1776	1775	1774	1773	1772	1771	1770	1769	1768	1767	1766	1765	1764	1763	1762	1761	1760	1759	1758	1757	1756	1755	1754	1753	1752	1751	1750	1749	1748	1747	1746	1745	1744	1743	1742	1741	1740	1739	1738	1737	1736	1735	1734	1733	1732	1731	1730	1729	1728	1727	1726	1725	1724	1723	1722	1721	1720	1719	1718	1717	1716	1715	1714	1713	1712	1711	1710	1709	1708	1707	1706	1705	1704	1703	1702	1701	1700	1699	1698	1697	1696	1695	1694	1693	1692	1691	1690	1689	1688	1687	1686	1685	1684	1683	1682	1681	1680	1679	1678	1677	1676	1675	1674	1673	1672	1671	1670	1669	1668	1667	1666	1665	1664	1663	1662	1661	1660	1659	1658	1657	1656	1655	1654	1653	1652	1651	1650	1649	1648	1647	1646	1645	1644	1643	1642	1641	1640	1639	1638	1637	1636	1635	1634	1633	1632	1631	1630	1629	1628	1627	1626	1625	1624	1623	1622	1621	1620	1619	1618	1617	1616	1615	1614	1613	1612	1611	1610
--	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------

[illegible][illegible]

---

Tulare County			GPA													
Professional Engineering Services for			HOURS & DESIGN FEE ESTIMATE WORKSHEET													
Ave 428 Sand Creek Bridge Replacement			BASIC SERVICES													
			LABOR													
	Task & Description	Project Manager/ Erinn Silva	Associate Env. Planner Laura Comstock	Environmental Planner Nicole Greenfield	Environmental Planner Aleen Estrada-Rodas	Senior Associate Biologist Marieka Schrader	Senior GIS Analyst Martin Rose	Associate Biologist Jennifer Johnson	Senior Biologist Angela Scudlere	Associate Biologist Dawn Cunningham	Biologist Anastasia Shippey	Sr Architectural Historian Christine Cruties	Sr Preservation Planner Jenna Kachour Jeka	Architectural Historian II Audrey von Ahrens	Total Hours	Total \$
			Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	
1.0	Project Management															
1.1	Meetings														54	\$7,095
1.2	Project/Staff Management														60	\$7,883
7.0	Environmental Document and Regulatory Agency Permits															
7.1	Project Initiation and Preliminary Environmental Study		8		40		8	6							96	\$9,472
7.2	Environmental Studies & Consultation with Regulatory Agencies															
7.2(a)	Biological Resources: Natural Environment Study (Minimal Impact's)					8			64	96	40				208	\$18,670
7.2(b)	Biological Resources: Federal Endangered Species Act Consultation					8			40		80				128	\$10,430
7.2(c)	Biological Resources: California Endangered Species Act Consultation					8			24		32				64	\$5,661
7.2(d)	Water Quality Technical Memorandum	6				4		50							60	\$6,043
7.2(e)	Construction Noise Memorandum															
7.2(f)	Cultural Resources: Historic Property Survey Report, Archaeological Survey Report, A8.52											14		8	22	\$2,163
7.20	Total Hours	154	8		40	28	8	56	128	96	152	14		8	692	\$67,417
	Billing Rate	\$131.39	\$94.36	\$71.65	\$69.57	\$149.08	\$113.48	\$93.17	\$96.75	\$89.60	\$67.09	\$113.48	\$107.49	\$71.73		
	Cost	20234	755		2783	4174	908	5218	12384	8602	10197	1589		574	692	\$67,417
	% of Total Hours by Classification	22%	1%		6%	4%	1%	8%	18%	14%	22%	2%		1%	100%	

**WRECO  
COST PROPOSAL - BASIC SERVICES**

<b>PROJECT</b>	<b>Tulare County</b>
	<b>Professional Engineering Services for</b>
	<b>Ave 428 Sand Creek Bridge Replacement</b>

**INDIRECT COSTS**

		Rate
	Fringe Benefits	71.95%
	General and Administrative OH	68.20%
Overhead		<u>140.15%</u>

**FEE (Profit)** 8%

**DIRECT LABOR**

<u>Employee</u>	<u>Function</u>	<u>Hours</u>		<u>Hourly Billing Rate</u>	<u>Total</u>	<u>Actual or Avg Rate</u>
H. Liang	Principal Engineer	12	@	247.38	\$2,969	\$95.38
C. Sewell	Supervising Engineer	36	@	181.61	\$6,538	\$70.02
TBD	Senior Geotechnical Engineer	22	@	180.96	\$3,981	\$69.77
D. Kitzmann	Senior Geologist	64	@	162.85	\$10,423	\$62.79
L. Brooks	Senior Engineer	50	@	117.83	\$5,891	\$45.43
M. McAssey	Associate Environmental Scientist	40	@	106.34	\$4,254	\$41.00
TBD	Associate Geologist	54	@	94.43	\$5,099	\$36.41
TBD	Staff Geologist	48	@	76.97	\$3,695	\$29.68
TBD	Staff Engineer	124	@	71.87	\$8,912	\$27.71
TBD	Clerical/ Tech Editor	8	@	67.62	\$541	\$26.07
Total Direct Labor Costs		458				\$52,301.95

**OTHER DIRECT COSTS**

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Cost per Unit</u>	<u>Total Cost</u>
item #1	Reproduction	3	\$60.00	\$180
item #2	Overnight Delivery/Shipment	3	\$25.00	\$75
item #3	Laboratory Testing	1	\$3,500.00	\$3,500
item #4	Transportation/Travel & Per Diem	3800	\$0.545	\$2,071
item #5	EDR Database	1	\$800.00	\$800
item #6	Driller	1	\$8,000.00	\$8,000
				\$14,626

**TOTAL COST** \$66,927.95

Tulare County			WRECO											
Professional Engineering Services for			HOURS & DESIGN FEE ESTIMATE WORKSHEET											
Ave 428 Sand Creek Bridge Replacement			BASIC SERVICES											
Task & Description			LABOR											
			Principal Engineer H. Liang	Supervising Engineer C. Sewell	Senior Geotechnical Engineer	Senior Geologist D. Kitzmann	Senior Engineer L. Brooks	Associate Environmental Scientist M. McAssey	Associate Geologist	Staff Geologist	Staff Engineer	Clerical/ Tech Editor	Total Hours	Total \$
			Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours		
1.0	Project Management													
1.1	Meetings		4	12	2	8								
4.0	Field Exploration and Geotechnical Engineering												26	\$4,834
4.1	Research and Data Collection				2	4							6	\$1,013
4.2	Field Exploration									26			26	\$2,001
4.3	Laboratory Testing									6			6	\$462
4.4	Soils Analysis/Evaluation				4	12			20				36	\$4,567
4.5	Draft Foundation Memo (Type Selection Report/Letter)				2	8			12	2		1	25	\$3,019
4.6	Final Foundation Report				4	16			22	6		1	49	\$5,936
5.0	River Hydrology and Hydraulics													
5.1	Obtain and Review Project Documentation		1	2			2				4		9	\$1,134
5.2	Estimate Hydrology		1	4	4		4				8		17	\$2,020
5.3	Hydraulic Analysis		1	4			8				40		53	\$4,791
5.4	Scour and Bank Protection		1	2			8				12		23	\$2,416
5.5	Prepare Existing Condition Hydraulic Memo			2			4				8		14	\$1,409
5.6	Prepare Draft Report		1	4			12				20	1	38	\$3,893
5.7	Prepare Final Report		1	2			4				8	1	16	\$1,724
5.8	Location Hydraulic Study		2	4			8				24	2	40	\$4,024
7.3	Phase 1 Initial Site Assessment (ISA)				8	16		40		8		2	74	\$9,058
Total Hours			12	36	22	64	50	40	54	48	124	8	458	\$52,302
Billing Rate			\$247.38	\$181.61	\$180.96	\$162.85	\$117.83	\$106.34	\$94.43	\$76.97	\$71.87	\$67.62		
Cost			2969	6538	3981	10423	5891	4254	5099	3695	8912	541	458	\$52,302
% of Total Hours by Classification			3%	8%	5%	14%	11%	9%	12%	10%	27%	2%	100%	

Tulare County		TRC ENGINEERS				Proposal Date:		July 17, 2018	
Professional Engineering Services for		DESIGN FEE ESTIMATE WORKSHEET				Start Date:		August 14, 2018	
Ave 428 Sand Creek Bridge Replacement						End Date:		December 31, 2021	
Total Hours by Task and Firm									
Firm		TRC	GPA	WRECO	4 Creeks	DesignLab 252	EXARO		
Task Description									
BASIC SERVICES									
1.0	Project Management								
1.1	Meetings		54	26					
1.1.1	Project Kickoff and Scoping	18							
1.1.2	PDT Meetings	61							
1.2	Project/Staff Management	88	60						
1.3	Quality Assurance and Quality Control	50							
2.0	Surveys and Mapping (By County/Optional)								
3.0	Preliminary Engineering (35% P&E)								
3.1	Preliminary Bridge Design								
3.1.1	Response to Eligibility Review Letter from Caltrans	7							
3.1.2	Bridge Type Selection Report								
3.1.2.1	Bridge Type Selection Report (Draft)	110							
3.1.2.2	Bridge Type Selection Report (Final)	13							
3.1.3	35% Bridge Design Plans	72							
4.0	Field Exploration and Geotechnical Engineering								
4.1	Research and Data Collection			6					
4.2	Field Exploration			26					
4.3	Laboratory Testing			6					
4.4	Soils Analysis/Evaluation			36					
4.5	Draft Foundation Memo (Type Selection Report/Letter)	7		25					
4.6	Final Foundation Report	9		49					
5.0	River Hydrology and Hydraulics								
5.1	Obtain and Review Project Documentation			9					
5.2	Estimate Hydrology			17					
5.3	Hydraulic Analysis	3		53					
5.4	Scour and Bank Protection	2		23					
5.5	Prepare Existing Condition Hydraulic Memo	2		14					
5.6	Prepare Draft Report	4		38					
5.7	Prepare Final Report	2		16					
5.8	Location Hydraulic Study	3		40					
6.0	Right of Way Acquisition Services (By County)								
6.1	Establish Right of Way Requirements (Engineering Support)	21							
7.0	Environmental Document and Regulatory Agency Permits								
7.1	Project Initiation and Preliminary Environmental Study	12	96						
7.2	Environmental Studies & Consultation with Regulatory Agencies								
7.2(a)	Biological Resources: Natural Environment Study (Minimal Impacts)	16	208						
7.2(b)	Biological Resources: Federal Endangered Species Act Consultation		128						
7.2(c)	Biological Resources: California Endangered Species Act Consultation		64						
7.2(d)	Water Quality Technical Memorandum	1	60						
7.2(e)	Construction Noise Memorandum	1							
7.3	Phase 1 Initial Site Assessment (ISA)			74					
8.0	Final Design (Plans, Specifications, Estimates)								
8.1	Final Design (65% PS&E)								
8.1.1	65% Bridge Design	398							
8.1.2	Engineer's Estimate of Probable Construction Cost	32							
8.1.3	Contract Specifications/Special Provisions	16							
8.1.4	Engineering Support for Permitting	30							
8.1.5	Utility Coordination Support	30							
8.2	90% PS&E								
8.2.1	Response to County's 65% Comments	16							
8.2.2	Bridge Independent Check	120							
8.2.3	Update Bridge PS&E to 90%	88							
8.3	100% PS&E Design	46							
8.4	Deliver Final PS&E	38							
	OPTIONAL SERVICES								
2.0	Surveys and Mapping								
2.1	Project Survey Control				25				
2.2	Obtain County Encroachment Permit and Permission to Enter from Adjoining Property Owners				3				
2.3	Topographic Surveys	10			61				
2.4	Property Surveys and Resolution				40				
2.5	Base Map Preparation				21				
2.6	Right of Way Acquisition Support				18				
2.7	Utility Potholing							65	
3.0	Preliminary Engineering (35% P&E)								
3.1	Preliminary Bridge Design								
3.1.4	Life-Cycle Cost Analysis	65							
5.0	River Hydrology and Hydraulics								
5.9	Coordination with Central Valley Flood Protection Board to Obtain Freeboard Variance	17		44					
5.10	No-Rise Certificate			38					
7.0	Environmental Document and Regulatory Agency Permits								
7.2(g)	Farmland Impacts, AD 1006 Form		30						
7.2(h)	Cultural Resources: Historic Resources Evaluation Report		144						
7.2(i)	Cultural Resources: Finding of Effect		104						
7.2(j)	Section 4(f) Report		82						
7.2(k)	Biological Resources: Aquatic Resources Delineation		108						
7.4	CEQA Environmental Document: Initial Study/Mitigated Negative Declaration		294						
7.5	Biological Resources: Environmental Permitting		144						
7.6	Revegetation Plan and Specifications					114			
7.7	Review of Contract Specifications/Special Provisions for Environmental Compliance		68						
9.0	Assistance During Bidding	36							



**TRC ENGINEERS, INC.**

**COST PROPOSAL - OPTIONAL SERVICES**

**PROJECT**

Tulare County

Professional Engineering Services for

Ave 428 Sand Creek Bridge Replacement

**INDIRECT COSTS**

		Rate
	Fringe Benefits	48.31%
	General and Administrative OH	109.79%
Overhead		158.10%

**FEE (Profit)**

10%

**DIRECT LABOR**

<u>Employee</u>	<u>Function</u>	<u>Hours</u>	<u>Hourly Billing Rate</u>	<u>Total</u>	<u>Actual or Avg Rate</u>
M. Imbriani	Principal In Charge	4 @	\$255.51	\$1,022	\$90.00
R. Yates	Project Manager	26 @	\$167.06	\$4,344	\$58.84
T. Lambert	Bridge Project Engineer	36 @	\$176.89	\$6,368	\$62.30
J. Conklin	Roadway Project Engineer	0 @	\$176.89	\$0	\$62.30
C. Pinkerton	Bridge Senior Engineer	0 @	\$147.41	\$0	\$51.92
C. Christensen	QA/QC Manager	0 @	\$235.85	\$0	\$83.07
K. Negoro	Engineer II	56 @	\$127.75	\$7,154	\$45.00
TBD	Engineer I	0 @	\$103.18	\$0	\$36.34
G. Imbsen	Eng. CADD Supervisor	2 @	\$137.58	\$275	\$48.46
A. Cardoza	Eng. CADD Technician	4 @	\$98.27	\$393	\$34.61
J. Hull	Eng. Desktop Publisher	0 @	\$83.53	\$0	\$29.42
T. Maechler	Eng. Adm. Assistant	0 @	\$83.53	\$0	\$29.42
Escalation Factor				\$898	
Total Direct Labor Costs		128			\$20,454

**OTHER DIRECT COSTS**

	<u>Quantity</u>	<u>Per Unit</u>	<u>Total</u>
Mileage	920	\$0.545	\$501
Lodging	1	\$120.000	\$120
Per Diem	1	\$46.000	\$46
Mail	0	\$0.55	\$0
Overnight mail	0	\$15.00	\$0
Copies (8.5x11)	0	\$0.06	\$0
Copies (11x17)	0	\$0.12	\$0
Prints (22x34)	0	\$3.00	\$0
Mylars (22x34)	0	\$12.00	\$0
Envir. Permits	0	\$3,128.00	\$0
Miscellaneous	0	\$50.00	\$0
Total Other Costs			\$667

**SUBCONTRACTOR COSTS (detailed cost estimate attached)**

Sub #1 GPA  
Sub #2 WRECO  
Sub #3 4 Creeks  
Sub #4 DesignLab 252  
Sub #5 EXARO

<b>Optional</b>
\$85,093
\$9,015
\$19,108
\$13,218
\$17,961

\$144,394

**TOTAL COST**

**\$165,516**

Tulare County  
Professional Engineering Services for  
Ave 428 Sand Creek Bridge Replacement

TRC ENGINEERS  
DESIGN FEE ESTIMATE WORKSHEET

Proposal Date:

07/17/18

Project:

Sub administration:

Current Date:

P2018-18  
0.0%  
23-Oct-18

Expenses	
Description	Amount
Travel	
Airfare (round trips)	\$0
Mileage	\$501
Lodging	\$120
Per Diem	\$46
Car rental	\$0
Miscellaneous Travel	\$0
Travel Subtotal	\$667
Other Direct Costs	\$0
Subconsultants Admin. Costs	\$0
ODC Subtotal	\$0
Total	\$667

Subconsultants (Labor + ODC)		
Name	Amount	DBE %
GPA	\$85,093	51.41%
WRECO	\$9,015	5.45%
4 Creeks	\$19,108	
DesignLab 252	\$13,218	
EXARO	\$17,961	
Total Optional Services	\$144,394	56.86%

Total Optional Services Fee Estimate	
Labor	\$20,454
Subconsultants	\$144,394
Expenses	\$667
Total	\$165,516

**\$667.40**



<p style="text-align: center;"><b>GPA</b> <b>COST PROPOSAL - OPTIONAL SERVICES</b></p>	
<b>PROJECT</b>	<p><b>Tulare County</b></p> <hr/> <p><b>Professional Engineering Services for</b></p> <hr/> <p><b>Ave 428 Sand Creek Bridge Replacement</b></p> <hr/>

INDIRECT COSTS		
		Rate
	Fringe Benefits	46.39%
	General and Administrative OH	83.67%
Overhead		<u>130.06%</u>

<b>FEE (Profit)</b>	8%
---------------------	----

DIRECT LABOR					Actual or Avg Rate
Employee	Function	Hours	Hourly Billing Rate	Total	
Erinn Silva	Project Manager	82	@ 131.39	\$10,774	\$52.88
Laura Comstock	Associate Env. Planner	44	@ 94.36	\$4,152	\$37.98
Nicole Greenfield	Environmental Planner	140	@ 71.65	\$10,031	\$28.84
Alen Estrada-Rodas	Environmental Planner	90	@ 69.57	\$6,261	\$28.00
Marieka Schrader	Senior Associate Biologist	44	@ 149.08	\$6,559	\$60.00
Martin Rose	Senior GIS Analyst	18	@ 113.48	\$2,043	\$45.67
Jennifer Johnson	Associate Biologist	32	@ 93.17	\$2,982	\$37.50
Angela Scudiere	Senior Biologist	88	@ 96.75	\$8,514	\$38.94
Dawn Cunningham	Associate Biologist	32	@ 89.60	\$2,867	\$36.06
Anastasia Shippey	Biologist	156	@ 67.09	\$10,466	\$27.00
Christine Cruie	Sr Architectural Historian	44	@ 113.48	\$4,993	\$45.67
Jenna Kachour Jelks	Sr Preservation Planner	12	@ 107.49	\$1,290	\$43.26
Audrey von Ahrens	Architectural Historian II	192	@ 71.73	\$13,772	\$28.87

Escalation Factor
-------------------

Total Direct Labor Costs	974	\$84,704.36
--------------------------	-----	-------------

[illegible]

**SUBCONTRACTOR COSTS** (detailed cost estimate attached)

SUBCONTRACTOR COSTS (detailed cost estimate attached)	
APE, Outreach, HPSR/ASR	1
Construction Noise Memorandum	1

<b>TOTAL COST</b>	<b>\$85,092.86</b>
-------------------	--------------------

Tulare County			GPA																
Professional Engineering Services for			HOURS & DESIGN FEE ESTIMATE WORKSHEET																
Ave 428 Sand Creek Bridge Replacement			OPTIONAL SERVICES																
Task & Description			Project Manager		Associate Env. Planner	Environmental Planner	Environmental Planner	Senior Associate Biologist		Senior GIS Analyst	Associate Biologist	Senior Biologist	Associate Biologist	Biologist	Sr Architectural Historian	Sr Preservation Planner	Architectural Historian II	Total Hours	Total \$
			Erinn Silva	Laura Constock	Nicole Greenfield	Allen Estrada- Rodas	Marleka Schrader	Martin Rose	Jennifer Johnson	Angela Scudiere	Dawn Cunningham	Anastasia Shippy	Christine Crutcher	Jenna Kachour Jenks	Audrey von Arens	Hours	Hours	Hours	Hours
			Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	
LABOR																			
	OPTIONAL SERVICES																		
7.0	Environmental Document and Regulatory Agency Permits																		
7.2(g)	Farmland Impacts, AD 1006 Form																		
7.2(h)	Cultural Resources: Historic Resources Evaluation Report																		
7.2(i)	Cultural Resources: Finding of Effect																		
7.2(j)	Section 4(f) Report																		
7.2(k)	Biological Resources: Aquatic Resources Delineation																		
7.4	CEQA Environmental Document: Initial Study/Mitigated Negative Declaration																		
7.5	Biological Resources: Environmental Permitting																		
7.7	Review of Contract Specifications/Special Provisions for Environmental Compliance																		
	Total Hours																		
	Raw Billing Rate																		
	Cost																		
	% of Total Hours by Classification																		

**WRECO  
COST PROPOSAL - OPTIONAL SERVICES**

<b>PROJECT</b>	<b>Tulare County</b>
	<b>Professional Engineering Services for</b>
	<b>Ave 428 Sand Creek Bridge Replacement</b>

**INDIRECT COSTS**

Overhead		Rate
	Fringe Benefits	71.95%
	General and Administrative OH	68.20%
		<u>140.15%</u>

**FEE (Profit)** 8%

**DIRECT LABOR**

<u>Employee</u>	<u>Function</u>	<u>Hours</u>		<u>Hourly Billing Rate</u>	<u>Total</u>	<u>Actual or Avg Rate</u>
Han-Bin Liang	Principal Engineer	2	@	247.38	\$495	\$95.38
Chris Sewell	Supervising Engineer	12	@	181.61	\$2,179	\$70.02
Robert Lawrence	Senior Geotechnical Engineer		@	180.96		\$69.77
TBD	Senior Geologist		@	162.85		\$62.79
Lesley Brooks	Senior Engineer	32	@	117.83	\$3,770	\$45.43
Melissa McAssey	Associate Environmental Scientist		@	106.34		\$41.00
Amanda Kahn	Associate Geologist		@	94.43		\$36.41
Dmitriy Lukashov	Staff Geologist		@	76.97		\$29.68
Binjue Wu	Staff Engineer	32	@	71.87	\$2,300	\$27.71
TBD	Clerical/ Tech Editor	4	@	67.62	\$270	\$26.07
Total Direct Labor Costs		82				\$9,014.81

**OTHER DIRECT COSTS**

<u>Item</u>	<u>Description</u>	<u>Quantity</u>	<u>Cost per Unit</u>	<u>Total Cost</u>
item #1	Reproduction		\$50.00	
item #2	Overnight Delivery/Shipment		\$25.00	
item #3	Laboratory Testing		\$3,500.00	
item #4	Transportation/Travel & Per Diem		\$0.545	
item #5	EDR Database		\$800.00	
item #6	Driller		\$8,000.00	

**TOTAL COST** \$9,014.81





<p align="center"><b>4 Creeks</b>  <b>COST PROPOSAL - OPTIONAL SERVICES</b></p>	
<p><b>PROJECT</b></p>	<p><b>Tulare County</b>  <b>Professional Engineering Services for</b>  <b>Ave 428 Sand Creek Bridge Replacement</b></p>

INDIRECT COSTS	
	Rate
Overhead (Safe Harbor Rate)	110.00%

FEE (Profit)	8%
--------------	----

DIRECT LABOR						Actual or Avg Rate
Employee	Function	Hours		Hourly Billing Rate	Total	
Swannie Gist	Project Technician II	8	@	52.16	\$417	\$23.00
Matthew Limas	Assistant Surveyor	48	@	70.31	\$3,375	\$31.00
Danielle Avila	Engineer I	4	@	108.86	\$435	\$48.00
Randy Wasnick	Principal Surveyor	54	@	120.20	\$6,491	\$53.00
Justin Asleson	Instrument Man	27	@	158.76	\$4,287	\$70.00
Eric Soto	Rodman	27	@	151.96	\$4,103	\$67.00
0		0	@	0.00	\$0	\$0.00
0		0	@	0.00	\$0	\$0.00
0		0	@	0.00	\$0	\$0.00
0		0	@	0.00	\$0	\$0.00
Total Direct Labor Costs		168				\$19,107.90

[illegible]

TOTAL COST	\$19,107.90
------------	-------------

**\$19,107.90**

Tulare County		4 Creeks											
Professional Engineering Services for		HOURS & DESIGN FEE ESTIMATE WORKSHEET											
Ave 428 Sand Creek Bridge Replacement		OPTIONAL SERVICES											
Task & Description		Project Technician II Swannie Gist	Assistant Surveyor Matthew Limas	Engineer I Danielle Avila	Principal Surveyor Randy Wasnick	Instrument Man Justin Asleson	Rodman Eric Soto					Total Hours	Total \$
		Hours	Hours	Hours	Hours	Hours	Hours						
	OPTIONAL SERVICES												
2.0	Surveys and Mapping												
2.1	Project Survey Control		9		8	4	4					25	\$2,837
2.2	Obtain County Encroachment Permit and Permission to Enter from Adjoining	2		1								3	\$213
2.3	Topographic Surveys	2	18	1	4	18	18					61	\$7,552
2.4	Property Surveys and Resolution	2	9	1	18	5	5					40	\$4,563
2.5	Base Map Preparation	1	12		8							21	\$1,857
2.6	Right of Way Acquisition Support	1		1	16							18	\$2,084
	Total Hours	8	48	4	54	27	27					168	\$19,108
	Billing Rate	\$52.16	\$70.31	\$108.86	\$120.20	\$158.76	\$151.96						
	Cost	417	3375	435	6491	4287	4103					168	\$19,108
	% of Total Hours by Classification	5%	29%	2%	32%	16%	16%					100%	

DL252 COST PROPOSAL - OPTIONAL SERVICES						
PROJECT	Tulare County					
	Professional Engineering Services for					
	Ave 428 Sand Creek Bridge Replacement					
INDIRECT COSTS						
Overhead (Safe Harbor Rate)				Rate	110.00%	
FEE (Profit)				8%		
DIRECT LABOR						
<u>Employee</u>	<u>Function</u>	<u>Hours</u>		<u>Hourly Billing Rate</u>	<u>Total</u>	<u>Actual or Avg Rate</u>
Patrick Boyd	Landscape Architect	48	@	111.12	\$5,334	\$49.00
Konni Jones	Project Manager	20	@	111.12	\$2,222	\$49.00
	Designer	46	@	111.12	\$5,112	\$49.00
	Technician		@	93.98		\$41.44
			@			
			@			
			@			
			@			
			@			
			@			
Total Direct Labor Costs		114				\$12,667.93
OTHER DIRECT COSTS						
Item	Description	Quantity		Per Unit	Total	
	Travel	1		\$50.00	\$50	
	Printing	1		\$500.00	\$500	
						\$550
TOTAL COST						
						\$13,217.93



EXARO COST PROPOSAL - OPTIONAL SERVICES						
PROJECT	Tulare County					
	Professional Engineering Services for					
	Ave 428 Sand Creek Bridge Replacement					
INDIRECT COSTS						
				Rate		
	Fringe Benefits			0.00%		
	Overhead Rate			199.00%		
Overhead				199.00%		
FEE (Profit)				8%		
DIRECT LABOR						
<u>Employee</u>	<u>Function</u>	<u>Hours</u>		<u>Hourly Billing Rate</u>	<u>Total</u>	<u>Actual or Avg Rate</u>
TBD	Foreman	27	@	183.23	\$4,947	\$56.74
TBD	Technician	27	@	175.96	\$4,751	\$54.49
Mario Lopez	Project Coordinator	9	@	168.05	\$1,512	\$52.04
Arthur Servin	Estimator	2	@	67.20	\$134	\$20.81
Jose Dominguez	Principal	0	@	194.05	\$0	\$60.09
0		0	@	0.00	\$0	\$0.00
0		0	@	0.00	\$0	\$0.00
0		0	@	0.00	\$0	\$0.00
0		0	@	0.00	\$0	\$0.00
0		0	@	0.00	\$0	\$0.00
Total Direct Labor Costs		65				\$11,344.91
OTHER DIRECT COSTS						
Item	Description	Quantity		Per Unit	Total	
	Travel/Mileage	1		\$2,136.000	\$2,136	
	Equipment Rental and Supplies	1		\$3,480.000	\$3,480	
	Materials and Disposal	1		\$1,000.000	\$1,000	
					\$0	
					\$0	
					\$0	
					\$0	
					\$0	
					\$0	
					\$0	
						\$6,616
						\$0.00
TOTAL COST						\$17,960.91



Tulare County		TRC Roadway & Civil Hours										Project:		
Professional Engineering Services for		DESIGN FEE ESTIMATE WORKSHEET										July 17, 2018		
Ave 428 Sand Creek Bridge Replacement		Start Date:										August 14, 2018		
		End Date:										#####/#####/#####		
Task Description		Principal in Charge	Project Manager	Bridge Project Engineer	Roadway Project Engineer	QA/QC Manager	Engineer I	Engineer II	Engineer Supervisor	Eng. CAD Technician	Eng. Desktop Publisher	Eng. Admin. Assistant	Total Hours	Total \$
		M. Imbrianli	R. Yates	T. Lambert	J. Conklin	C. Christensen	TBD	K. Negro	G. Imbisan	A. Cardozo	J. Hall	T. Mauchler		
		Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
All Roadway Design Tasks Completed By County														
1.0	Project Management													
1.1	Meetings													
1.1.1	Project Kick-off and Scoping													
1.1.2	PDT Meetings													
1.2	Project Administration													
1.2.1	Quality Assurance and Quality Control													
2.0	Surveys and Mapping (By County/Optional)													
3.0	Preliminary Engineering (35% P&E)													
3.1	Preliminary Bridge Design													
3.1.1	Response to Eligibility Review Letter from Caltrans													
3.1.2	Bridge Type Selection Report													
3.1.2.1	Bridge Type Selection Report (Draft)													
3.1.2.2	Bridge Type Selection Report (Final)													
3.1.3	35% Bridge Design Plans													
4.0	Field Exploration and Geotechnical Engineering													
4.1	Research and Data Collection													
4.2	Field Exploration													
4.3	Laboratory Testing													
4.4	Soils Analysis/Evaluation													
4.5	Draft Foundation Memo (Type Selection Report)(Later)													
5.0	River Hydrology and Hydraulics													
5.1	Obtain and Review Project Documentation													
5.2	Estimate Hydrology													
5.3	Hydraulic Analysis													
5.4	Scour and Bank Protection													
5.5	Prepare Existing Condition Hydraulic Memo													
5.6	Prepare Draft Report													
5.7	Prepare Final Report													
5.8	Location Hydraulic Study													
6.0	Right of Way Acquisition Services (By County)													
6.1	Establish Right of Way Requirements (Engineering Support)													
7.0	Environmental Document and Regulatory Agency Permits													
7.1	Project Initiation and Preliminary Environmental Study													
7.2	Environmental Studies & Consultation with Regulatory Agencies													
7.2(a)	Biological Resources: Natural Environment Study (Minimal Impacts)													
7.2(b)	Biological Resources: Federal Endangered Species Act Consultation													
7.2(c)	Biological Resources: California Endangered Species Act													
7.2(d)	Water Quality Technical Memorandum													
7.2(e)	Cultural Resources: Historic Property Survey Report, Archaeological Survey, and Historic AB													
7.3	Phase I Initial Site Assessment (ISA)													
8.0	Final Design (Plans, Specifications, Estimates)													
8.1	Final Design (Plans, Specifications, Estimates)													
8.1.1	65% Bridge Design													
8.1.2	Engineer's Estimate of Probable Construction Cost													
8.1.3	Contract Specifications/Special Provisions													
8.1.4	Engineering Support for Permitting													
8.1.5	Utility Coordination Support													
8.2	90% PS&E													
8.2.1	Response to County's 65% Comments													
8.2.2	Bridge Independent Check													
8.2.3	Upgrade Bridge PS&E to 90%													
8.3	100% PS&E Design													
8.4	Deliver Final PS&E													
OPTIONAL SERVICES														
2.0	Surveys and Mapping													
2.1	Project Survey Control													
2.2	Obtain County Encroachment Permit and Permission to Enter from Adjoining Property Owners													
2.3	Topographic Surveys													
2.4	Property Surveys and Resolution													
2.5	Base Map Preparation													
2.6	Right of Way Acquisition Support													
2.7	Utility Relocation													
3.0	Preliminary Engineering (35% P&E)													
3.1	Preliminary Bridge Design													
3.1.4	Life-Cycle Cost Analysis													
5.0	River Hydrology and Hydraulics													
5.9	Coordination with Central Valley Flood Protection Board to Obtain Freeboard Variance													
7.0	Environmental Document and Regulatory Agency													
7.2(a)	Permit Impact, AD 1006 Form													
7.2(b)	Cultural Resources: Historic Resources Evaluation Report													
7.2(c)	Cultural Resources: Finding of Effect													
7.2(d)	Section 4(f) Report													
7.2(e)	Biological Resources: Aquatic Resources Delineation													
7.4	CEQA Environmental Document: Initial Study/Mitigated Negative Declaration													
7.5	Biological Resources: Environmental Permitting													
7.6	Revegetation Plan and Specifications													
7.7	Review of Contract Specifications/Special Provisions for Environmental Compliance													
9.0	Assistance During Bidding													
		Hrs	Hrs	Hrs	Hrs	Hrs	Hrs	Hrs	Hrs	Hrs	Hrs	Hrs	Hrs	Hrs
		Rate \$255.51	Rate \$167.08	Rate \$176.89	Rate \$176.89	Rate \$235.85	Rate \$147.41	Rate \$127.75	Rate \$137.58	Rate \$98.27	Rate \$83.53	Rate \$83.53	Rate	Rate
Fee Classification:														
% of Total Hours Classification														

All Roadway Design Tasks Completed By County

**EXHIBIT C**  
**INSURANCE REQUIREMENTS**



## **PROFESSIONAL SERVICES CONTRACTS**

### **INSURANCE REQUIREMENTS**

*CONSULTANT shall provide and maintain insurance for the duration of this Agreement against claims for injuries to persons and damage to property which may arise from, or in connection with, performance under the Agreement by the CONSULTANT, his agents, representatives, employees and subconsultants, if applicable.*

#### **A. Minimum Scope & Limits of Insurance**

1. Coverage at least as broad as Commercial General Liability, insurance Services Office Commercial General Liability coverage occurrence form GC 00 01, with limits no less than \$1,000,000 per occurrence including products and completed operations, property damage, bodily injury and personal & advertising injury. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
2. Insurance Services Office Form Number CA 00 01 covering Automobile Liability of \$1,000,000 per occurrence including any auto or, if the CONSULTANT has no owned autos, hired and non-owned auto coverage. If an annual aggregate applies it must be no less than \$2,000,000.
3. Workers' Compensation insurance as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than \$1,000,000 per accident for bodily injury or disease.
4. Professional Liability (Errors and Omissions) insurance appropriate to the CONSULTANT's profession, with limit no less than \$3,000,000 per occurrence or claim, \$4,000,000 aggregate.

#### **B. Specific Provisions of the Certificate**

1. If the required insurance is written on a claims made form, the retroactive date must be before the date of the contract or the beginning of the contract work and must be maintained and evidence of insurance must be provided for at least three (3) years after completion of the contract work.
2. CONSULTANT must submit endorsements to the General Liability reflecting the following provisions:
  - a. *The COUNTY, its officers, agents, officials, employees and volunteers are to be covered as additional insureds as respects; liability arising out of work or operations performed by or on behalf of the CONSULTANT including material, parts, or equipment furnished in connection with such work or operations.*
  - b. *For any claims related to this project, the CONSULTANT's insurance coverage shall be primary insurance as respects the COUNTY, its officers, agents, officials, employees and volunteers. Any insurance or self-insurance maintained by the COUNTY, its officers, agents, officials, employees or volunteers shall be excess of the CONSULTANT's insurance and shall not contribute with it.*
  - c. *CONSULTANT hereby grants to COUNTY a waiver of any right to subrogation which any insurer of CONSULTANT may acquire against the county by virtue of the payment of any loss under such insurance. CONSULTANT agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the COUNTY has received a waiver of subrogation endorsement from the insurer.*

*d. Each insurance policy required by this agreement shall be endorsed to state that coverage shall not be canceled by either party, except after written notice has been provided to the County.*

3. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the COUNTY for all work performed by the CONSULTANT, its employees, agents and subconsultants. CONSULTANT waives all rights against the COUNTY and its officers, agents, officials, employees and volunteers for recovery of damages to the extent these damages are covered by the workers compensation and employers liability.

C. Deductibles and Self-Insured Retentions

*Self-insured retentions must be declared and the COUNTY Risk Manager must approve any deductible or self-insured retention that exceeds \$100,000.*

D. Acceptability of Insurance

*Insurance must be placed with insurers with a current rating given by A.M. Best and Company of no less than A-:VII and a Standard & Poor's Rating (if rated) of at least BBB and from a company approved by the Department of Insurance to conduct business in California. Any waiver of these standards is subject to approval by the County Risk Manager.*

E. Verification of Coverage

*Prior to approval of this Agreement by the COUNTY, the CONSULTANT shall file with the submitting department, certificates of insurance with original endorsements effecting coverage in a form acceptable to the COUNTY. Endorsements must be signed by persons authorized to bind coverage on behalf of the insurer. The COUNTY reserves the right to require certified copies of all required insurance policies at any time.*

# **EXHIBIT D**

## **CONSULTANT PROPOSAL DBE COMMITMENT**

**(Caltrans Exhibit 10-O1)**

**EXHIBIT 10-O1 CONSULTANT PROPOSAL DBE COMMITMENT**

1. Local Agency: \_\_\_\_\_ 2. Contract DBE Goal: \_\_\_\_\_

3. Project Description: \_\_\_\_\_

4. Project Location: \_\_\_\_\_

5. Consultant's Name: \_\_\_\_\_ 6. Prime Certified DBE: ☐

7. Description of Work, Service, or Materials Supplied	8. DBE Certification Number	9. DBE Contact Information	10. DBE %
<b>Local Agency to Complete this Section</b>			
17. Local Agency Contract Number: _____		<b>11. TOTAL CLAIMED DBE PARTICIPATION</b>	<b>%</b>
18. Federal-Aid Project Number: _____		<b>IMPORTANT:</b> Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required.	
19. Proposed Contract Execution Date: _____			
Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.		<div> <div>_____</div> <div>12. Preparer's Signature</div> </div> <div>_____</div> <div>13. Date</div>	
20. Local Agency Representative's Signature	21. Date		
22. Local Agency Representative's Name	23. Phone		
24. Local Agency Representative's Title			
		14. Preparer's Name	15. Phone
		16. Preparer's Title	

DISTRIBUTION: Original – Included with consultant's proposal to local agency.

---

**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 PROPOSAL 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. 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.
- 8. DBE Certification Number** - Enter the DBE's Certification Identification Number. All DBEs must be certified on the date bids are opened.
- 9. 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.
- 10. DBE %** - Percent participation of work to be performed or service provided by a DBE. Include the prime consultant if the prime is a DBE. See LAPM Chapter 9 for how to count full/partial participation.
- 11. Total Claimed DBE Participation %** - Enter the total DBE participation claimed. 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).
- 12. Preparer's Signature** - The person completing the DBE commitment form on behalf of the consultant's firm must sign their name.
- 13. Date** - Enter the date the DBE commitment form is signed by the consultant's preparer.
- 14. Preparer's Name** - Enter the name of the person preparing and signing the consultant's DBE commitment form.
- 15. Phone** - Enter the area code and phone number of the person signing the consultant's DBE commitment form.
- 16. Preparer's Title** - Enter the position/title of the person signing the consultant's DBE commitment form.



### LOCAL AGENCY SECTION

- 17. Local Agency Contract Number** - Enter the Local Agency contract number or identifier.
- 18. Federal-Aid Project Number** - Enter the Federal-Aid Project Number.
- 19. Proposed Contract Execution Date** - Enter the proposed contract execution date.
- 20. 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.
- 21. Date** - Enter the date the DBE commitment form is signed by the Local Agency Representative.
- 22. Local Agency Representative's Name** - Enter the name of the Local Agency Representative certifying the consultant's DBE commitment form.
- 23. Phone** - Enter the area code and phone number of the person signing the consultant's DBE commitment form.
- 24. Local Agency Representative Title** - Enter the position/title of the Local Agency Representative certifying the consultant's DBE commitment form.

**EXHIBIT E**  
**CONSULTANT CONTRACT DBE COMMITMENT**  
**(Caltrans Exhibit 10-O2)**

**EXHIBIT 10-02 CONSULTANT CONTRACT DBE COMMITMENT**

1. Local Agency: Tulare County 2. Contract DBE Goal: 7%  
 3. Project Description: Sand Creek Bridge Replacement at Ave 428  
 4. Project Location: Orosi  
 5. Consultant's Name: TRC Engineers, Inc. 6. Prime Certified DBE: ☐ 7. Total Contract Award Amount: \$357,222  
 8. Total Dollar Amount for **ALL** Subconsultants: \$151,688 9. Total Number of **ALL** Subconsultants: 2

10. Description of Work, Service, or Materials Supplied	11. DBE Certification Number	12. DBE Contact Information	13. DBE Dollar Amount
Geotechnical/Hydraulics	30066	WRECO, 1243 Alpine Road Suite 108, Walnut Creek, CA 94596,	66,928
Environmental	36278	GPA Consulting, 231 California Street, El Segundo, CA 90245,	84,760
<b>Local Agency to Complete this Section</b>			
20. Local Agency Contract Number: _____			<b>14. TOTAL CLAIMED DBE PARTICIPATION</b>
21. Federal-Aid Project Number: <u>BRLO-5946(142)</u>			
22. Contract Execution Date: <u>11/06/18</u>			
Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.			
 23. Local Agency Representative's Signature <u>Jason K. Vivian</u> 25. Local Agency Representative's Name <u>Engineer IV</u> 27. Local Agency Representative's Title			
24. Date <u>10/23/18</u> 26. Phone <u>(559) 624-7135</u>			
 15. Preparer's Signature <u>Mark Imbriani</u> 17. Preparer's Name <u>Vice President</u> 19. Preparer's Title			
			<u>10/23/18</u>
			<u>916-366-0632</u>
			<u>18. Phone</u>

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.