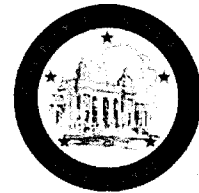


**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



ITEM: 3.48  
(ID # 11360)

**MEETING DATE:**

Tuesday, December 17, 2019

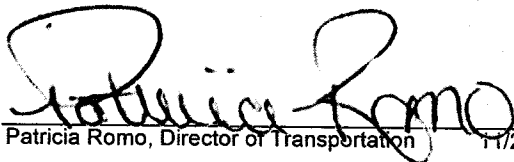
**FROM :** TLMA-TRANSPORTATION:

**SUBJECT:** TRANSPORTATION AND LAND MANAGEMENT AGENCY/TRANSPORTATION:  
Approval of the Engineering Services Agreement by and between the County of Riverside and CNS Engineers for Engineering and Environmental Services for the Bridge Preventative Maintenance Program. Fiscal Years 19/20-25/26. Districts 1, 3, and 4. [\$879,000 Total - 89% Federal Highway Bridge Program and 11% HUTA Gas Tax Funds]

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

1. Approve the Engineering Services Agreement between the County of Riverside and CNS Engineers for Engineering and Environmental Services for the Bridge Preventative Maintenance Program in the amount of \$879,000 for Fiscal Years 19/20-25/26 and authorize the Chairman of the Board to execute the same.

**ACTION:** Policy

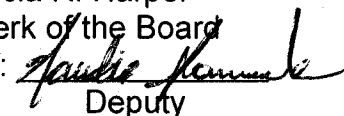
  
Patricia Romo, Director of Transportation 11/25/2019

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**MINUTES OF THE BOARD OF SUPERVISORS**

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

Ayes: Jeffries, Spiegel, Washington, Perez and Hewitt  
Nays: None  
Absent: None  
Date: December 17, 2019  
xc: Transp.

Kecia R. Harper  
Clerk of the Board  
By:   
Deputy

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

<b>FINANCIAL DATA</b>	<b>Current Fiscal Year:</b>	<b>Next Fiscal Year:</b>	<b>Total Cost:</b>	<b>Ongoing Cost</b>
<b>COST</b>	\$ 285,000	\$ 325,000	\$ 879,000	\$ 0
<b>NET COUNTY COST</b>	\$ 0	\$ 0	\$ 0	\$ 0
<b>SOURCE OF FUNDS:</b> Federal Highway Bridge Program Funds (88.53%) and HUTA Gas Tax (11.47%), There are no General Funds used in this project.			<b>Budget Adjustment:</b>	No
			<b>For Fiscal Year:</b>	19/20-25/26

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

**BACKGROUND:**

**Summary**

The County of Riverside (County) is proposing to perform bridge Preventative Maintenance (PM) work to twenty-one (21) bridge structures at various locations in the County. The proposed bridge PM work is based on the work recommendations identified in the Bridge Inspection Reports prepared by the California Department of Transportation (CALTRANS). The proposed bridge PM work will complete the structural repairs needed to extend the service life of these bridges.

The County was able to secure Bridge Preventative Maintenance Program (BPMP) Federal funds to complete the repairs that are identified in the Bridge Inspection Reports for these twenty-one (21) bridges. These bridges are listed in Attachment A.

In order to facilitate the completion of the bridge PM work, the County will need to retain the services of a consultant engineering firm. The County advertised a Request for Qualifications for Consulting Engineering firms and received ten (10) qualification packages. After interviewing the four (4) short listed firms, the County selected CNS Engineers to provide the necessary environmental and engineering services for this project. The Engineering Services Agreement for Bridge Preventative Maintenance Program between CNS Engineers and the County of Riverside defines the scope and fee to perform the engineering, environmental documentation, and construction support for the PM work.

Project Number:  
C4-0066

**Impact on Residents and Businesses**

This project is expected to have minimum impact on the surrounding environment and the community during development and construction of the PM work.

**SUPPLEMENTAL:**

**Additional Fiscal Information:**

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

CNS Engineers will perform preliminary engineering, environmental clearance, final design, and construction support for the bridge PM work in the negotiated amount of \$879,000. The contract terminates on December 30, 2025.

**ATTACHMENTS:**

Agreement

Attachment A - Bridge List



Jason Farin, Senior Management Analyst

12/11/2019

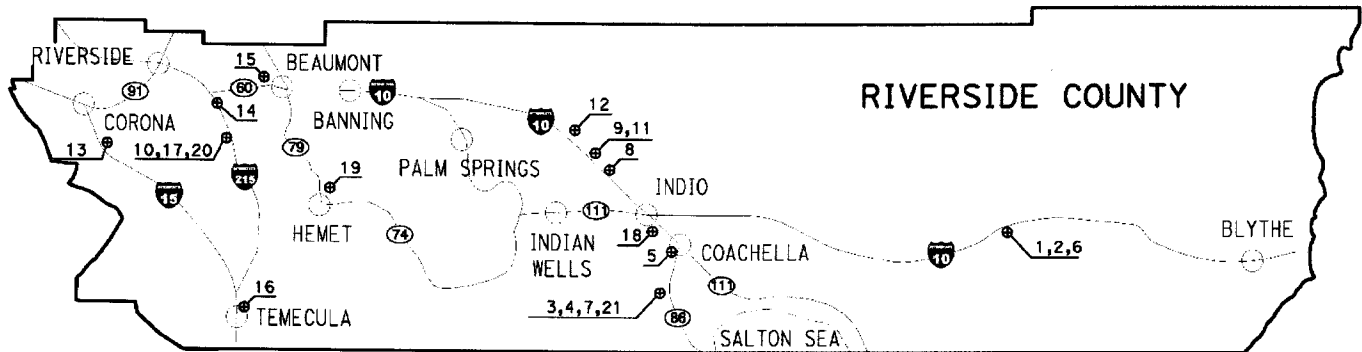


Gregory H. Priamos, Director County Counsel

12/4/2019

Attachment A

**Bridge Preventative Maintenance Program List**



	Bridge Name	Bridge Number	Supervisor District
1	Ragsdale Road Bridge over Chuckwalla Ditch	56C0122	4
2	Ragsdale Road Bridge over Rockdale Ditch	56C0121	4
3	Harrison Street Bridge over Solo Ditch	56C0582	4
4	Harrison Street Bridge over Lundy Ditch	56C0585	4
5	62ND Avenue Bridge over Whitewater River	56C0454	4
6	Ragsdale Road Bridge over Rockledge Ditch	56C0123	4
7	Harrison Street Bridge over Lowen Ditch	56C0586	4
8	Washington Street Overhead over UPRR	56C0455	4
9	Monterey Avenue Southbound Overhead over UPRR	56C0448L	4
10	Harrison Street Bridge over Vico Ditch	56C0587	4
11	Monterey Avenue Northbound Overhead over UPRR	56C0448R	4
12	Ramon Road Overhead over UPRR	56C0052	4
13	Cajalco Road Bridge over Temescal Wash	56C0155	1
14	Alessandro Boulevard over RCTC/BNSF RR	56C0341	1
15	San Timoteo Canyon Road Bridge over San Timoteo Creek	56C0244	3
16	Willows Avenue Bridge over Tocaloca Creek	56C0526	3
17	Cajalco Road Overhead over RCTC/BNSF RR	56C0196	1
18	Grapefruit Boulevard Bridge over Whitewater River	56C0578	4
19	State Street Bridge over San Jacinto River	56C0522	3
20	Harley Knox Boulevard Bridge over RCTC/BNSF	56C0451	1
21	Harrison Street Bridge over Almar Ditch	56C0584	4

Contract No.: 19-11-004

Termination Date: 5/30/2026

Amount Authorized: \$879,000.04

Federal Project No. BP MPL-5956(224)

Federal Funding:

State Funding:

## ENGINEERING SERVICES AGREEMENT

for

**Bridge Preventative Maintenance Program**

between

**County of Riverside • Transportation Department**

and

**CNS Engineers, Inc.**



DEC 17 2019

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### ATTACHMENTS

*In the event that the terms in any of the Attachments conflicts with the terms as provided in the Agreement, the terms of the Agreement shall prevail.*

Scope of Services.....	A1
Schedule of Services.....	B1
Compensation Plan .....	C1
[Caltrans Local Assistance Procedures Manual: Exhibit 10-02 Consultant Contract DBE Commitment.....]	D1]



1 **ARTICLE I INTRODUCTION**

2 A. This Engineering Consultant Services Agreement ("Agreement") is entered into this \_\_\_\_\_ day of  
3 \_\_\_\_\_, 20\_\_\_\_\_, by and between COUNTY OF RIVERSIDE, a political subdivision of the State of  
4 California, hereinafter referred to as "COUNTY", and CNS Engineers, Inc. hereinafter referred to as  
5 "CONSULTANT".

6 B. Coordination of CONSULTANT and COUNTY activities shall be accomplished through a CONSULTANT  
7 Project Manager and a COUNTY Contract Administrator.

8 The CONSULTANT's Project Manager for CONSULTANT shall be:

9 James Lu, PE, SE

10 Located at:

11 CNS Engineers, Inc.  
12 11870 Pierce Street, Suite 265  
13 Riverside, CA 92505

14 The COUNTY's Contract Administrator for COUNTY shall be:

15 Cesar Tolentino, PE

16 Located at:

17 County Administrative Center  
18 County of Riverside Transportation Department  
19 4080 Lemon Street, 8th Floor  
20 Riverside, CA 92502-1629

21 C. CONSULTANT shall perform:

22 The covenants set forth in Article III entitled Statement of Work;

23 In accordance with the time frames set forth in Article IV entitled Performance Periods;

24 For the fees set forth in Article V entitled Allowable Costs and Payments.

25 D. CONSULTANT and the agents and employees of CONSULTANT, in the performance of this contract, shall  
26 act in an independent capacity and not as officers or employees or agents of COUNTY.

27 E. Without the written consent of COUNTY, this contract is not assignable by CONSULTANT either in whole or  
28 in part.

29 F. No alteration or variation of the terms of this contract shall be valid, unless made in writing and signed by the

1 parties hereto; and no oral understanding or agreement not incorporated herein, shall be binding on any of  
2 the parties hereto.

3 G. The consideration to be paid to CONSULTANT as provided herein, shall be in compensation for all of  
4 CONSULTANT's expenses incurred in the performance hereof, including travel and per diem, unless  
5 otherwise expressly so provided.

6 H. COUNTY is designated as the lead agency for PROJECT and is working cooperatively with other agencies in  
7 the effort to complete the PROJECT.

8 I. Other public agencies that may be involved with the PROJECT including, but not limited to cooperative,  
9 funding, reviewing, regulatory or operating agencies are listed below and will hereinafter be collectively  
10 referred to as the "AGENCIES".

- 11
- 12 • Federal Highway Administration (FHWA)
- 13 • Caltrans
- 14 • Riverside County Departments
- 15 • Utility Companies
- 16 • Regulatory Agencies including:
- 17 • U.S. Army Corps of Engineers (USACE)
- 18 • U.S. Fish and Wildlife Service (USFWS)
- 19 • California Department of Fish and Wildlife (CDFW)
- 20 • Regional Water Quality Control Board (RWQCB)
- 21 • Riverside County Flood Control & Water Conservation District (RCFC & WCD)
- 22 • Coachella Valley Water District (CVWD)
- 23 • State Historic Preservation Office (SHPO)
- 24 • Southern California Air Quality Management District (SCAQMD)
- 25

26 **ARTICLE II CONSULTANT'S REPORTS OR MEETINGS**

27 A. To ensure understanding and performance of the contract objectives, meetings between COUNTY,  
28 AGENCIES, and CONSULTANT shall be held as often as deemed necessary (typically at least monthly). All  
29 work objectives, CONSULTANT's work schedule, the terms of the contract and any other related issues will



1 be discussed and/or resolved. CONSULTANT shall keep minutes of meetings and distribute copies of  
2 minutes as appropriate. Progress reporting shall conform with the contract administration requirements of the  
3 COUNTY's Consulting Services Manual including providing updated copies of the following documents at  
4 each project coordination meeting.

- 5 • Meeting Agendas
- 6 • Meeting Sign-in Sheets
- 7 • Meeting Minutes (prior meeting)
- 8 • Action Items Tracking List
- 9 • Deliverables Tracking List
- 10 • Schedule Summary

11 B. CONSULTANT's Project Manager shall meet with COUNTY's Contract Administrator, as needed, to discuss  
12 progress on the contract.

13 **ARTICLE III STATEMENT OF WORK**

14 CONSULTANT shall furnish all technical and professional services including labor, material, equipment,  
15 transportation, supervision, and expertise to fully and adequately perform and complete the covenants set forth in  
16 Attachment A, Scope of Services, which is attached hereto and incorporated herein by reference.

17 **ARTICLE IV PERFORMANCE PERIOD**

18 A. This contract shall go into effect on December 17, 2019 contingent upon approval by COUNTY, and  
19 CONSULTANT shall commence work after notification to proceed by COUNTY'S Contract Administrator. The  
20 contract shall end on December 30, 2025, unless extended by contract amendment.

21 B. CONSULTANT is advised that any recommendation for contract award is not binding on COUNTY until the  
22 contract is fully executed and approved by COUNTY.

23 C. Services provided under this contract may be performed in separate Milestones or Phases. The sequencing  
24 and scheduling of these Milestones or Phases is set forth in Attachment B, Schedule of Services, which is  
25 attached hereto and incorporated herein by reference.

26 **ARTICLE V ALLOWABLE COSTS AND PAYMENTS**

27 A. The method of payment for this contract will be based on actual cost plus a fixed fee. COUNTY will  
28 reimburse CONSULTANT for actual costs (including labor costs, employee benefits, travel, equipment rental  
29 costs, overhead and other direct costs) incurred by CONSULTANT in performance of the work.

*Bridge Preventative Maintenance Program*

1 CONSULTANT will not be reimbursed for actual costs that exceed the estimated wage rates, employee  
2 benefits, travel, equipment rental, overhead, and other estimated costs set forth in Attachment C, the  
3 CONSULTANT's Compensation Plan, which is attached hereto and incorporated herein by reference, unless  
4 additional reimbursement is provided for by contract amendment. In no event, will CONSULTANT be  
5 reimbursed for overhead costs at a rate that exceeds COUNTY's approved overhead rate set forth in the  
6 Compensation Plan. In the event, that COUNTY determines that a change to the work from that specified in  
7 the Contract is required, the contract time or actual costs reimbursable by COUNTY shall be adjusted by  
8 contract amendment to accommodate the changed work. The maximum total cost as specified in Article V.H  
9 shall not be exceeded, unless authorized by contract amendment.

10 B. In addition to the allowable incurred costs, COUNTY will pay CONSULTANT a fixed fee of \$36,912.63 The  
11 fixed fee is nonadjustable for the term of the contract, except in the event of a significant change in the scope  
12 of work and such adjustment is made by contract amendment.

13 C. Reimbursement for transportation and subsistence costs shall not exceed the rates specified in the  
14 Compensation Plan.

15 D. When milestone or phase cost estimates are included in the Compensation Plan, CONSULTANT shall obtain  
16 prior written approval for a revised milestone or phase cost estimate from the COUNTY's Contract  
17 Administrator before exceeding such cost estimate.

18 E. Progress payments will be made monthly in arrears based on services provided and allowable incurred costs.  
19 A pro rata portion of CONSULTANT's fixed fee will be included in the monthly progress payments. If  
20 CONSULTANT fails to submit the required deliverable items according to the schedule set forth in the  
21 Statement of Work, COUNTY shall have the right to delay payment or terminate this Contract in accordance  
22 with the provisions of Article VI Termination.

23 F. No payment will be made prior to approval of any work, nor for any work performed prior to approval of this  
24 contract.

25 G. CONSULTANT will be reimbursed, as promptly as fiscal procedures will permit upon receipt by COUNTY's  
26 Contract Administrator of itemized invoices. Invoices shall be submitted no later than 45 calendar days after  
27 the performance of work for which CONSULTANT is billing. Invoices shall detail the work performed on each  
28 milestone or phase and each project as applicable. Invoices shall follow the format stipulated for the  
29 Compensation Plan using the Project-specific & Multi-phase Contract Invoice templates provided in the

1 COUNTY Consulting Services Manual and shall reference this contract number and project title. Final invoice  
2 must contain the final cost and all credits due COUNTY including any equipment purchased under the  
3 provisions of Article XI Equipment Purchase of this contract. The final invoice should be submitted within 60  
4 calendar days after completion of CONSULTANT's work. Invoices shall be mailed to COUNTY's Contract  
5 Administrator at the address provided in Article I.B.

- 6 H. The total amount payable by COUNTY including the fixed fee shall not exceed \$879,000.04.
- 7 I. Salary increases will be reimbursable if the new salary is within the salary range identified in the  
8 Compensation Plan and is approved by COUNTY's Contract Administrator.
- 9 J. For personnel subject to prevailing wage rates as described in the California Labor Code, all salary increases,  
10 which are the direct result of changes in the prevailing wage rates are reimbursable.
- 11 K. The services included under the terms of this contract are funded in whole or in part as noted below:

12 Federal funds:  are included

13

14 **ARTICLE VI TERMINATION**

- 15 A. COUNTY reserves the right to terminate this contract upon thirty (30) calendar days written notice to  
16 CONSULTANT with the reasons for termination stated in the notice.
- 17 B. COUNTY may terminate this contract with CONSULTANT should CONSULTANT fail to perform the  
18 covenants herein contained at the time and in the manner herein provided. In the event of such termination,  
19 COUNTY may proceed with the work in any manner deemed proper by COUNTY. If COUNTY terminates this  
20 contract with CONSULTANT, COUNTY shall pay CONSULTANT the sum due to CONSULTANT under this  
21 contract prior to termination, unless the cost of completion to COUNTY exceeds the funds remaining in the  
22 contract. In which case the overage shall be deducted from any sum due CONSULTANT under this contract  
23 and the balance, if any, shall be paid to CONSULTANT upon demand.

24 **ARTICLE VII COST PRINCIPLES AND ADMINISTRATIVE REQUIREMENTS**

- 25 A. CONSULTANT agrees that the Contract Cost Principles and Procedures, 48 CFR, Federal Acquisition  
26 Regulations System, Chapter 1, Part 31.000 et seq., shall be used to determine the cost allowability of  
27 individual items.
- 28 B. CONSULTANT also agrees to comply with federal procedures in accordance with 2 CFR, Part 200, Uniform  
29 Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.

1 C. Any costs for which payment has been made to CONSULTANT that are determined by subsequent audit to  
2 be unallowable under 2 CFR, Part 200 and 48 CFR, Federal Acquisition Regulations System, Chapter 1, Part  
3 31.000 et seq., are subject to repayment by CONSULTANT to COUNTY.

4 **ARTICLE VIII RETENTION OF RECORDS/AUDIT**

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

16 **ARTICLE IX AUDIT REVIEW PROCEDURES**

- 17 A. Any dispute concerning a question of fact arising under an interim or post audit of this contract that is not  
18 disposed of by agreement, shall be reviewed by COUNTY'S Chief Financial Officer.
- 19 B. Not later than 30 days after issuance of the final audit report, CONSULTANT may request a review by  
20 COUNTY'S Chief Financial Officer of unresolved audit issues. The request for review will be submitted in  
21 writing.
- 22 C. Neither the pendency of a dispute nor its consideration by COUNTY will excuse CONSULTANT from full and  
23 timely performance, in accordance with the terms of this contract.
- 24 D. Audit Terms and Conditions if the amount shown in Article V.H is greater than \$150,000 and less than  
25 \$3,500,000.

26 CONSULTANT and subconsultant contracts, including cost proposals and ICR, are subject to audits or  
27 reviews such as, but not limited to, a contract audit, an incurred cost audit, an ICR Audit, or a CPA ICR audit  
28 work paper review. If selected for audit or review, the contract, cost proposal and ICR and related work  
29 papers, if applicable, will be reviewed to verify compliance with 48 CFR, Part 31 and other related laws and

1 regulations. In the instances of a CPA ICR audit work paper review it is CONSULTANT's responsibility to  
2 ensure federal, state, or local government officials are allowed full access to the CPA's work papers including  
3 making copies as necessary. The contract, cost proposal, and ICR shall be adjusted by CONSULTANT and  
4 approved by COUNTY contract manager to conform to the audit or review recommendations. CONSULTANT  
5 agrees that individual terms of costs identified in the audit report shall be incorporated into the contract by this  
6 reference if directed by COUNTY at its sole discretion. Refusal by CONSULTANT to incorporate audit or  
7 review recommendations, or to ensure that the federal, state or local governments have access to CPA work  
8 papers, will be considered a breach of contract terms and cause for termination of the contract and  
9 disallowance of prior reimbursed costs.

10 E. Audit Terms and Conditions if the amount shown in Article V.H is \$3,500,000 or greater and if Article V.K  
11 identifies that Federal or State funds are used, in whole or in part, to fund the services performed under this  
12 contract than compliance with the auditing provisions as described below is required. If the services are not  
13 identified as funded in whole or in part with Federal or State funds than compliance with the auditing  
14 provisions of Article IX.D shall apply.

15 CONSULTANT Cost Proposal is subject to a CPA ICR Audit Work Paper Review by Caltrans' Audit and  
16 Investigation (Caltrans). Caltrans, at its sole discretion, may review and/or audit and approve the CPA ICR  
17 documentation. The Cost Proposal shall be adjusted by the CONSULTANT and approved by the COUNTY  
18 Contract Administrator to conform to the Work Paper Review recommendations included in the management  
19 letter or audit recommendations included in the audit report. Refusal by the CONSULTANT to incorporate the  
20 Work Paper Review recommendations included in the management letter or audit recommendations included  
21 in the audit report will be considered a breach of the contract terms and cause for termination of the contract  
22 and disallowance of prior reimbursed costs.

23 1. During a Caltrans' review of the ICR audit work papers created by the CONSULTANT's independent  
24 CPA, Caltrans will work with the CPA and/or CONSULTANT toward a resolution of issues that arise  
25 during the review. Each party agrees to use its best efforts to resolve any audit disputes in a timely  
26 manner. If Caltrans identifies significant issues during the review and is unable to issue a cognizant  
27 approval letter, COUNTY will reimburse the CONSULTANT at a provisional ICR until a FAR compliant  
28 ICR {e.g. 48 CFR, part 31; GAGAS (Generally Accepted Auditing Standards); CAS (Cost Accounting  
29 Standards), if applicable; in accordance with procedures and guidelines of the American Association of

1 State Highways and Transportation Officials Audit Guide; and other applicable procedures and  
2 guidelines} is received and approved by A&I. Provisional rates will be as follows:

- 3 a. If the proposed rate is less than 150% - the provisional rate reimbursed will be 90% of the  
4 proposed rate.
- 5 b. If the proposed rate is between 150% and 200% - the provisional rate will be 85% of the  
6 proposed rate.
- 7 c. If the proposed rate is greater than 200% - the provisional rate will be 75% of the proposed rate.
- 8 2. If Caltrans is unable to issue a cognizant letter per Article IX.E.1. above, Caltrans may require  
9 CONSULTANT to submit a revised independent CPA-audited ICR and audit report within three (3)  
10 months of the effective date of the management letter. Caltrans will then have up to six (6) months to  
11 review the CONSULTANT's and/or the independent CPA's revisions.
- 12 3. If the CONSULTANT fails to comply with the provisions of this Article IX.E, or if Caltrans is still unable to  
13 issue a cognizant approval letter after the revised independent CPA-audited ICR is submitted, overhead  
14 cost reimbursement will be limited to the provisional ICR that was established upon initial rejection of the  
15 ICR and set forth in Article IX.E.1. above for all rendered services. In this event, this provisional ICR will  
16 become the actual and final ICR for reimbursement purposes under this contract.
- 17 4. CONSULTANT may submit to COUNTY final invoice only when all of the following items have occurred:  
18 (1) Caltrans approves or rejects the original or revised independent CPA-audited ICR; (2) all work under  
19 this contract has been completed to the satisfaction of LOCAL GAENCY; and, (3) Caltrans has issued its  
20 final ICR review letter. The CONSULTANT MUST SUBMIT ITS FINAL INVOICETO COUNTY no later  
21 than 60 days after occurrence of the last of these items.

22 The provisional ICR will apply to this contract and all other contracts executed between COUNTY and the  
23 CONSULTANT, either as a prime or subconsultant, with the same fiscal period ICR.

24 **ARTICLE X SUBCONTRACTING**

- 25 A. Nothing contained in this contract or otherwise, shall create any contractual relation between COUNTY and  
26 any subconsultant(s), and no subcontract shall relieve CONSULTANT of its responsibilities and obligations  
27 hereunder. CONSULTANT agrees to be as fully responsible to COUNTY for the acts and omissions of its  
28 subconsultant(s) and of persons either directly or indirectly employed by any of them as it is for the acts and  
29 omissions of persons directly employed by CONSULTANT. CONSULTANT's obligation to pay its

1 subconsultant(s) is an independent obligation from COUNTY'S obligation to make payments to the  
2 CONSULTANT.

3 B. CONSULTANT shall perform the work contemplated with resources available within its own organization and  
4 no portion of the work pertinent to this contract shall be subcontracted without written authorization by  
5 COUNTY's Contract Administrator, except that, which is expressly identified in the Compensation Plan.

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

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

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

12 **ARTICLE XI EQUIPMENT PURCHASE**

13 A. Prior authorization in writing, by COUNTY's Contract Administrator shall be required before CONSULTANT  
14 enters into any unbudgeted purchase order, or subcontract exceeding \$5,000 for supplies, equipment, or  
15 CONSULTANT services. CONSULTANT shall provide an evaluation of the necessity or desirability of  
16 incurring such costs.

17 B. For purchase of any item, service or consulting work not covered in CONSULTANT's Compensation Plan and  
18 exceeding \$5,000 prior authorization by COUNTY's Contract Administrator; three competitive quotations must  
19 be submitted with the request, or the absence of bidding must be adequately justified.

20 C. Any equipment purchased as a result of this contract is subject to the following: "CONSULTANT shall  
21 maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful  
22 life of at least two years and an acquisition cost of \$5,000 or more. If the purchased equipment needs  
23 replacement and is sold or traded in, COUNTY shall receive a proper refund or credit at the conclusion of the  
24 contract, or if the contract is terminated, CONSULTANT may either keep the equipment and credit COUNTY  
25 in an amount equal to its fair market value, or sell such equipment at the best price obtainable at a public or  
26 private sale, in accordance with established COUNTY procedures; and credit COUNTY in an amount equal to  
27 the sales price. If CONSULTANT elects to keep the equipment, fair market value shall be determined at  
28 CONSULTANT's expense, on the basis of a competent independent appraisal of such equipment. Appraisals  
29 shall be obtained from an appraiser mutually agreeable to by COUNTY and CONSULTANT, if it is determined

1 to sell the equipment, the terms and conditions of such sale must be approved in advance by COUNTY.” 2  
2 CFR, Part 200 requires a credit to Federal funds when participating equipment with a fair market value  
3 greater than \$5,000 is credited to the project.

4 **ARTICLE XII STATE PREVAILING WAGE RATES**

5 In the event that a portion of the work performed by CONSULTANT are by crafts affected by state labor laws, the  
6 following terms and conditions shall apply.

7 A. CONSULTANT shall comply with the State of California’s General Prevailing Wage Rate requirements in  
8 accordance with California Labor Code, Section 1770, and all Federal, State, and local laws and ordinances  
9 applicable to the work.

10 B. Any subcontract entered into as a result of this contract, if for more than \$25,000 for public works construction  
11 or more than \$15,000 for the alteration, demolition, repair, or maintenance of public works, shall contain all of  
12 the provisions of this Article, unless the awarding agency has an approved labor compliance program by the  
13 Director of Industrial Relations.

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

17 When all of the work performed by CONSULTANT is performed by crafts not affected by state labor laws or are  
18 not contemplated for use, the State of California’s General Prevailing Wage Rates are not applicable to this  
19 contract.

20 **Note:** The Federal “Payment of Predetermined Minimum Wage” applies only to federal-aid construction  
21 contracts.

22 **ARTICLE XIII CONFLICT OF INTEREST**

23 A. CONSULTANT shall disclose any financial, business, or other relationship with COUNTY that may have an  
24 impact upon the outcome of this contract, or any ensuing COUNTY construction project. CONSULTANT shall  
25 also list current clients who may have a financial interest in the outcome of this contract, or any ensuing  
26 COUNTY construction project, which will follow.

27 B. CONSULTANT hereby certifies that it does not now have, nor shall it acquire any financial or business  
28 interest that would conflict with the performance of services under this contract.

29 C. CONSULTANT hereby certifies that neither CONSULTANT, nor any firm affiliated with CONSULTANT will bid



1 on any construction contract, or on any contract to provide construction inspection for any construction project  
2 resulting from this contract. An affiliated firm is one, which is subject to the control of the same persons  
3 through joint-ownership, or otherwise.

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

8 **ARTICLE XIV REBATES, KICKBACKS OR OTHER UNLAWFUL CONSIDERATION**

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

14 **ARTICLE XV PROHIBITION OF EXPENDING COUNTY STATE OR FEDERAL FUNDS FOR LOBBYING**

15 A. CONSULTANT certifies to the best of his or her knowledge and belief that:

16 1. No state, federal or COUNTY appropriated funds have been paid, or will be paid by-or-on behalf of  
17 CONSULTANT to any person for influencing or attempting to influence an officer or employee of any state  
18 or federal agency; a Member of the State Legislature or United States Congress; an officer or employee  
19 of the Legislature or Congress; or any employee of a Member of the Legislature or Congress, in  
20 connection with the awarding of any state or federal contract; the making of any state or federal grant; the  
21 making of any state or federal loan; the entering into of any cooperative agreement, and the extension,  
22 continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or  
23 cooperative agreement.

24 2. If any funds other than federal appropriated funds have been paid, or will be paid to any person for  
25 influencing or attempting to influence an officer or employee of any federal agency; a Member of  
26 Congress; an officer or employee of Congress, or an employee of a Member of Congress; in connection  
27 with this federal contract, grant, loan, or cooperative agreement; CONSULTANT shall complete and  
28 submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.

29 B. This certification is a material representation of fact upon which reliance was placed when this transaction

1 was made or entered into. Submission of this certification is a prerequisite for making or entering into this  
2 transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required  
3 certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each  
4 such failure.

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

8 **ARTICLE XVI STATEMENT OF COMPLIANCE**

9 A. CONSULTANT's signature affixed herein, and dated, shall constitute a certification under penalty of perjury  
10 under the laws of the State of California that CONSULTANT has, unless exempt, complied with, the  
11 nondiscrimination program requirements of Government Code Section 12990 and Title 2, California  
12 Administrative Code, Section 8103.

13 B. During the performance of this Contract, Consultant and its subconsultants shall not unlawfully discriminate,  
14 harass, or allow harassment against any employee or applicant for employment because of sex, race, color,  
15 ancestry, religious creed, national origin, physical disability (including HIV and AIDS), mental disability,  
16 medical condition (e.g., cancer), age (over 40), marital status, and denial of family care leave. Consultant and  
17 subconsultants shall insure that the evaluation and treatment of their employees and applicants for  
18 employment are free from such discrimination and harassment. Consultant and subconsultants shall comply  
19 with the provisions of the Fair Employment and Housing Act (Gov. Code §12990 (a-f) et seq.) and the  
20 applicable regulations promulgated there under (California Code of Regulations, Title 2, Section 7285 et  
21 seq.). The applicable regulations of the Fair Employment and Housing Commission implementing  
22 Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of  
23 Regulations, are incorporated into this Contract by reference and made a part hereof as if set forth in full.  
24 Consultant and its subconsultants shall give written notice of their obligations under this clause to labor  
25 organizations with which they have a collective bargaining or other Agreement.

26 C. The Consultant shall comply with regulations relative to Title VI (nondiscrimination in federally-assisted  
27 programs of the Department of Transportation – Title 49 Code of Federal Regulations, Part 21 - Effectuation  
28 of Title VI of the 1964 Civil Rights Act). Title VI provides that the recipients of federal assistance will  
29 implement and maintain a policy of nondiscrimination in which no person in the state of California shall, on the

1 basis of race, color, national origin, religion, sex, age, disability, be excluded from participation in, denied the  
2 benefits of or subject to discrimination under any program or activity by the recipients of federal assistance or  
3 their assignees and successors in interest.

- 4 D. The Consultant, with regard to the work performed by it during the Agreement shall act in accordance with  
5 Title VI. Specifically, the Consultant shall not discriminate on the basis of race, color, national origin, religion,  
6 sex, age, or disability in the selection and retention of Subconsultants, including procurement of materials and  
7 leases of equipment. The Consultant shall not participate either directly or indirectly in the discrimination  
8 prohibited by Section 21.5 of the U.S. DOT's Regulations, including employment practices when the  
9 Agreement covers a program whose goal is employment.

10 **ARTICLE XVII DEBARMENT AND SUSPENSION CERTIFICATION**

- 11 A. CONSULTANT's signature affixed herein, shall constitute a certification under penalty of perjury under the  
12 laws of the State of California, that CONSULTANT has complied with Title 2 CFR, Part 180, "OMB Guidelines  
13 to Agencies on Government wide Debarment and Suspension (nonprocurement)", which certifies that he/she  
14 or any person associated therewith in the capacity of owner, partner, director, officer, or manager, is not  
15 currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal  
16 agency; has not been suspended, debarred, voluntarily excluded, or determined ineligible by any federal  
17 agency within the past three (3) years; does not have a proposed debarment pending; and has not been  
18 indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any  
19 matter involving fraud or official misconduct within the past three (3) years. Any exceptions to this certification  
20 must be disclosed to COUNTY.

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

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

26 **ARTICLE XVIII FUNDING REQUIREMENTS**

- 27 A. It is mutually understood between the parties that this contract may have been written before ascertaining the  
28 availability of funds or appropriation of funds, for the mutual benefit of both parties, in order to avoid program  
29 and fiscal delays that would occur if the contract were executed after that determination was made.

- 1 B. This contract is valid and enforceable only, if sufficient funds are made available to COUNTY for the purpose  
2 of this contract. In addition, this contract is subject to any additional restrictions, limitations, conditions, or any  
3 statute enacted by the Congress, State Legislature, or COUNTY governing board that may affect the  
4 provisions, terms, or funding of this contract in any manner.
- 5 C. It is mutually agreed that if sufficient funds are not appropriated, this contract may be amended to reflect any  
6 reduction in funds.
- 7 D. COUNTY has the option to void the contract under the 30-day termination clause pursuant to Article VI, or by  
8 mutual agreement to amend the contract to reflect any reduction of funds.

9 **ARTICLE XIX CHANGE IN TERMS**

- 10 A. This contract may be amended or modified only by mutual written agreement of the parties.
- 11 B. All modifications that do not fit within the definition of a minor modification shall be considered a major change  
12 and must be approved by amendment.
- 13 C. Minor modifications are changes or additions to the services being provided as defined in Article IV Statement  
14 of Work but that are consistent with and needed to complete the contracted services and do not require an  
15 increase in the total amount payable by COUNTY as provided in Article V.H and does not reduce the budget  
16 allowed for any subconsultant classified in this Agreement as a DBE. Minor modifications are approved as  
17 follows:
- 18 Shifting of budget and/or work between tasks within a single Milestone or Phase is allowable without  
19 authorization by COUNTY.
- 20 Shifting of budget and/or work between different Milestones or Phases may be approved by execution of a  
21 Administrative Budget Modification by both CONSULTANT and COUNTY in accordance with the procedures  
22 specified in the COUNTY Consulting Services Manual.
- 23 D. CONSULTANT shall only commence work covered by an amendment after the amendment is executed and  
24 notification to proceed has been provided by COUNTY's Contract Administrator.
- 25 E. There shall be no change in CONSULTANT's Project Manager or members of the project team, as listed as  
26 Key Personnel in the approved Scope of Services, which is a part of this contract without prior written  
27 approval by COUNTY's Contract Administrator.

28 **ARTICLE XX DISADVANTAGED BUSINESS ENTERPRISES (DBE) PARTICIPATION**

29 If Article V.K identifies that Federal funds are used, in whole or in part, to fund the services performed under this

1 contract than compliance with the provisions of Article XX as described below is required. If Article V.K identifies  
2 that services are not funded in whole or in part with Federal funds than compliance with the requirements of  
3 Article XX is not required.

4 A. This contract is subject to 49 CFR, Part 26 entitled "Participation by Disadvantaged Business Enterprises in  
5 Department of Transportation Financial Assistance Programs". Consultants who obtain DBE participation on  
6 this contract will assist Caltrans in meeting its federally mandated statewide overall DBE goal.

7 B. The goal for DBE participation for this contract is 47 %. Participation by DBE consultant or  
8 subconsultants shall be in accordance with information contained in the Consultant Proposal DBE  
9 Commitment (Exhibit 10-O1), or in the Consultant Contract DBE Information (Exhibit 10-O2) attached hereto  
10 and incorporated as part of the Contract. If a DBE subconsultant is unable to perform, CONSULTANT must  
11 make a good faith effort to replace him/her with another DBE subconsultant, if the goal is not otherwise met.

12 C. DBEs and other small businesses, as defined in 49 CFR, Part 26 are encouraged to participate in the  
13 performance of contracts financed in whole or in part with federal funds. CONSULTANT or subconsultant  
14 shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract.  
15 CONSULTANT shall carry out applicable requirements of 49 CFR, Part 26 in the award and administration of  
16 US DOT-assisted agreements. Failure by CONSULTANT to carry out these requirements is a material  
17 breach of this contract, which may result in the termination of this contract or such other remedy as COUNTY  
18 deems appropriate.

19 D. Any subcontract entered into as a result of this contract shall contain all of the provisions of Article XX.

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

23 F. A DBE performs a Commercially Useful Function (CUF) when it is responsible for execution of the work of the  
24 contract and is carrying out its responsibilities by actually performing, managing, and supervising the work  
25 involved. To perform a CUF, the DBE must also be responsible with respect to materials and supplies used  
26 on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing  
27 (where applicable) and paying for the material itself. To determine whether a DBE is performing a CUF,  
28 evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid  
29 under the, contract is commensurate with the work it is actually performing, and other relevant factors.

- 1 G. A DBE does not perform a CUF if its role is limited to that of an extra participant in a transaction, contract, or  
2 project through which funds are passed in order to obtain the appearance of DBE participation. In  
3 determining whether a DBE is such an extra participant, examine similar transactions, particularly those in  
4 which DBEs do not participate.
- 5 H. If a DBE does not perform or exercise responsibility for at least thirty percent (30%) of the total cost of its  
6 contract with its own work force, or the DBE subcontracts a greater portion of the work of the contract than  
7 would be expected on the basis of normal industry practice for the type of work involved, it will be presumed  
8 that it is not performing a CUF.
- 9 I. CONSULTANT shall maintain records of materials purchased or supplied from all subcontracts entered into  
10 with certified DBEs. The records shall show the name and business address of each DBE or vendor and the  
11 total dollar amount actually paid each DBE or vendor, regardless of tier. The records shall show the date of  
12 payment and the total dollar figure paid to all firms. DBE prime consultants shall also show the date of work  
13 performed by their own forces along with the corresponding dollar value of the work.
- 14 J. Upon completion of the Contract, a summary of these records shall be prepared and submitted on the form  
15 entitled, "Final Report-Utilization of Disadvantaged Business Enterprise (DBE), First-Tier Subconsultants"  
16 CEM-2402F [Exhibit 17-F, of the LAPM], certified correct by CONSULTANT or CONSULTANT's authorized  
17 representative and shall be furnished to the COUNTY's Contract Administrator with the final invoice. Failure  
18 to provide the summary of DBE payments with the final invoice will result in twenty-five percent (25%) of the  
19 dollar value of the invoice being withheld from payment until the form is submitted. The amount will be  
20 returned to CONSULTANT when a satisfactory "Final Report-Utilization of Disadvantaged Business  
21 Enterprises (DBE), First-Tier Subconsultants" is submitted to the COUNTY's Contract Administrator.
- 22 K. If a DBE subconsultant is decertified during the life of the contract, the decertified subconsultant shall notify  
23 CONSULTANT in writing with the date of decertification. If a subconsultant becomes a certified DBE during  
24 the life of the Contract, the subconsultant shall notify CONSULTANT in writing with the date of certification.  
25 Any changes should be reported to COUNTY's Contract Administrator within 30 days.

26 **ARTICLE XXI CONTINGENT FEE**

27 CONSULTANT warrants, by execution of this contract that no person or selling agency has been employed, or  
28 retained, to solicit or secure this contract upon an agreement or understanding, for a commission, percentage,  
29 brokerage, or contingent fee, excepting bona fide employees, or bona fide established commercial or selling

1 agencies maintained by CONSULTANT for the purpose of securing business. For breach or violation of this  
2 warranty, COUNTY has the right to annul this contract without liability; pay only for the value of the work actually  
3 performed, or in its discretion to deduct from the contract price or consideration, or otherwise recover the full  
4 amount of such commission, percentage, brokerage, or contingent fee.

5 **ARTICLE XXII DISPUTES**

6 A. In the event CONSULTANT considers any work demanded of him to be outside the requirements of the  
7 Agreement, or if he considers any order, instruction, or decision of COUNTY to be unfair, he shall promptly  
8 upon receipt of such order, instruction or decision, ask for a written confirmation of the same whereupon he  
9 shall proceed without delay to perform the work or to conform to the order, instruction, or decision; but unless  
10 CONSULTANT finds such order, instruction, or decision satisfactory, he shall within 20 days after receipt of  
11 same, file a written protest with COUNTY stating clearly and in detail his objections and reasons therefore.  
12 Except for such protests or objections as are made of record in the manner specified and within the time  
13 stated herein, and except for such instances where the basis of a protest could not reasonably have been  
14 foreseen by CONSULTANT within the time limit specified for protest, CONSULTANT hereby waives all  
15 grounds for protests or objections to the orders, instruction, or decisions of COUNTY and hereby agrees that,  
16 as to all matters not included in such protests, the orders, instructions and decisions of COUNTY will be  
17 limited to matters properly falling within COUNTY's authority.

18 B. Any dispute, other than audit, concerning a question of fact arising under this contract that is not disposed of  
19 by agreement shall be decided by a committee consisting of COUNTY's Contract Administrator and (Insert  
20 Department Head or Official), who may consider written or verbal information submitted by CONSULTANT.

21 C. Not later than 30 days after completion of all deliverables necessary to complete the plans, specifications and  
22 estimate, CONSULTANT may request review by COUNTY Governing Board of unresolved claims or disputes,  
23 other than audit. The request for review will be submitted in writing.

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

26 **ARTICLE XXIII INSPECTION OF WORK**

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

1 **ARTICLE XXIV SAFETY**

- 2 A. CONSULTANT shall comply with OSHA regulations applicable to CONSULTANT regarding necessary safety  
3 equipment or procedures. CONSULTANT shall comply with safety instructions issued by COUNTY Safety  
4 Officer and other COUNTY representatives. CONSULTANT personnel shall wear hard hats and safety vests  
5 at all times while working on the construction project site.
- 6 B. Pursuant to the authority contained in Section 591 of the Vehicle Code, COUNTY has determined that such  
7 areas are within the limits of the project and are open to public traffic. CONSULTANT shall comply with all of  
8 the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. CONSULTANT shall take  
9 all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling  
10 public from injury and damage from such vehicles.
- 11 C. Any subcontract entered into as a result of this contract, shall contain all of the provisions of this Article.
- 12 D. In the event CONSULTANT performs trenching of five feet or deeper in the performance any service provided  
13 under this Agreement, CONSULTANT must have a Division of Occupational Safety and Health (CAL-OSHA)  
14 permit(s), as outlined in California Labor Code Sections 6500 and 6705, prior to the initiation of any practices,  
15 work, method, operation, or process related to the construction or excavation of trenches which are five feet  
16 or deeper.

17 **ARTICLE XXV INDEMNIFICATION AND INSURANCE**

18 **A. INDEMNIFICATION**

- 19 1. To the fullest extent permitted by applicable law, CONSULTANT agrees to and shall indemnify, defend  
20 and hold harmless the County of Riverside, its Agencies, Districts, Departments and Special Districts,  
21 their respective directors, officers, Board of Supervisors, elected and appointed officials, employees,  
22 agents, volunteers and representatives (hereinafter individually and collectively referred to as  
23 "Indemnitees") from all liability, including, but not limited to loss, suits, claims, demands, actions, or  
24 proceedings caused by any alleged or actual negligence, recklessness, or willful misconduct of  
25 CONSULTANT, its directors, officers, partners, employees, agents, subconsultants or representatives or  
26 any person or organization for whom CONSULTANT is responsible, arising out of or from the  
27 performance of services under this Agreement. In no event shall the cost to defend charged to the  
28 CONSULTANT exceed the CONSULTANT's proportionate percentage of fault.
- 29 2. The duty to indemnify does not include loss, suits, claims, demands, actions, or proceedings caused by



1 actual negligence of Indemnitees; however, any actual negligence of Indemnitees will only affect the duty  
2 to indemnify for the specific act adjudged by the findings of a court of competent jurisdiction to be  
3 negligence of the Indemnitees, and will not preclude a duty to indemnify for any negligence, recklessness,  
4 or willful misconduct of CONSULTANT.

5 3. To the fullest extent permitted by applicable law, CONSULTANT shall defend and pay, at its sole  
6 expense, all costs and fees, including but not limited to attorney fees, cost of investigation, and defense,  
7 in any loss, suits, claims, demands, actions, or proceedings based or alleged to be based on any  
8 negligence, recklessness, or willful misconduct of CONSULTANT arising out of or from the performance  
9 of services under this Agreement. The duty to defend applies to any alleged or actual negligence,  
10 recklessness, or willful misconduct of CONSULTANT. The duty to defend shall apply whether or not  
11 CONSULTANT is a party to the lawsuit, and shall apply whether or not CONSULTANT is directly liable to  
12 the plaintiffs in the lawsuit. The duty to defend applies even if Indemnitees are alleged or found to be  
13 actively negligent, unless the negligent act, error or omission at issue was caused by the sole active  
14 negligence of Indemnitees.

15 4. The specified insurance provisions and limits required in this Agreement shall in no way limit or  
16 circumscribe CONSULTANT'S obligations to indemnify and hold harmless Indemnitees from third party  
17 claims.

18 5. In the event there is conflict between the indemnity and defense provisions and California Civil Code  
19 Sections 2782 and 2782.8, the indemnity and defense provisions shall be interpreted to comply with Civil  
20 Code sections 2782 and 2782.8.

21 **B. INSURANCE**

22 Without limiting or diminishing the CONSULTANT'S obligation to indemnify or hold the COUNTY harmless,  
23 CONSULTANT shall procure and maintain or cause to be maintained, at its sole cost and expense, the  
24 following insurance coverage's during the term of this Agreement. As respects to the insurance section only,  
25 the COUNTY herein refers to the County of Riverside, its Agencies, Districts, Special Districts, and  
26 Departments, their respective directors, officers, Board of Supervisors, employees, elected or appointed  
27 officials, agents or representatives as Additional Insureds.

28 **1. Workers' Compensation:**

29 If the CONSULTANT has employees as defined by the State of California, the CONSULTANT shall

1 maintain statutory Workers' Compensation Insurance (Coverage A) as prescribed by the laws of the State  
2 of California. Policy shall include Employers' Liability (Coverage B) including Occupational Disease with  
3 limits not less than \$1,000,000 per person per accident. The policy shall be endorsed to waive  
4 subrogation in favor of The County of Riverside.

5 2. Commercial General Liability:

6 Commercial General Liability insurance coverage, including but not limited to, premises liability,  
7 unmodified contractual liability, products and completed operations liability, personal and advertising  
8 injury, and cross liability coverage, covering claims which may arise from or out of CONSULTANT'S  
9 performance of its obligations hereunder. Policy shall name the COUNTY as Additional Insured. Policy's  
10 limit of liability shall not be less than \$1,000,000 per occurrence combined single limit. If such insurance  
11 contains a general aggregate limit, it shall apply separately to this agreement or be no less than two (2)  
12 times the occurrence limit.

13 3. Vehicle Liability:

14 If vehicles or mobile equipment are used in the performance of the obligations under this Agreement, then  
15 CONSULTANT shall maintain liability insurance for all owned, non-owned or hired vehicles so used in an  
16 amount not less than \$1,000,000 per occurrence combined single limit. If such insurance contains a  
17 general aggregate limit, it shall apply separately to this agreement or be no less than two (2) times the  
18 occurrence limit. Policy shall name the COUNTY as Additional Insureds.

19 4. Professional Liability

20 CONSULTANT shall maintain Professional Liability Insurance providing coverage for the  
21 CONSULTANT's performance of work included within this Agreement, with a limit of liability of not less  
22 than \$1,000,000 per occurrence and \$2,000,000 annual aggregate. If CONSULTANT's Professional  
23 Liability Insurance is written on a claims made basis rather than an occurrence basis, such insurance  
24 shall continue through the term of this Agreement and CONSULTANT shall purchase at his sole expense  
25 either 1) an Extended Reporting Endorsement (also, known as Tail Coverage); or 2) Prior Dates  
26 Coverage from new insurer with a retroactive date back to the date of, or prior to, the inception of this  
27 Agreement; or 3) demonstrate through Certificates of Insurance that CONSULTANT has Maintained  
28 continuous coverage with the same or original insurer. Coverage provided under items; 1), 2), or 3) will  
29 continue as long as the law allows.

1 5. General Insurance Provisions - All lines:

- 2 a. Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of  
3 California and have an A M BEST rating of not less than A: VIII (A:8) unless such requirements are  
4 waived, in writing, by the County Risk Manager. If the County's Risk Manager waives a requirement  
5 for a particular insurer such waiver is only valid for that specific insurer and only for one policy term.
- 6 b. The CONSULTANT must declare its insurance self-insured retention for each coverage required  
7 herein. If any such self-insured retention exceed \$500,000 per occurrence each such retention shall  
8 have the prior written consent of the County Risk Manager before the commencement of operations  
9 under this Agreement. Upon notification of self-insured retention unacceptable to the COUNTY, and  
10 at the election of the Country's Risk Manager, CONSULTANT'S carriers shall either; 1) reduce or  
11 eliminate such self-insured retention as respects this Agreement with the COUNTY, or 2) procure a  
12 bond which guarantees payment of losses and related investigations, claims administration, and  
13 defense costs and expenses.
- 14 c. CONSULTANT shall cause CONSULTANT'S insurance carrier(s) to furnish the County of Riverside  
15 with either 1) a properly executed original Certificate(s) of Insurance and certified original copies of  
16 Endorsements effecting coverage as required herein, and 2) if requested to do so orally or in writing  
17 by the County Risk Manager, provide original Certified copies of policies including all Endorsements  
18 and all attachments thereto, showing such insurance is in full force and effect. Further, said  
19 Certificate(s) and policies of insurance shall contain the covenant of the insurance carrier(s) that thirty  
20 (30) days written notice shall be given to the County of Riverside prior to any material modification,  
21 cancellation, expiration or reduction in coverage of such insurance. In the event of a material  
22 modification, cancellation, expiration, or reduction in coverage, this Agreement shall terminate  
23 forthwith, unless the County of Riverside receives, prior to such effective date, another properly  
24 executed original Certificate of Insurance and original copies of endorsements or certified original  
25 policies, including all endorsements and attachments thereto evidencing coverage's set forth herein  
26 and the insurance required herein is in full force and effect. CONSULTANT shall not commence  
27 operations until the COUNTY has been furnished original Certificate (s) of Insurance and certified  
28 original copies of endorsements and if requested, certified original policies of insurance including all  
29 endorsements and any and all other attachments as required in this Section. An individual authorized

1 by the insurance carrier to do so on its behalf shall sign the original endorsements for each policy and  
2 the Certificate of Insurance.

3 d. It is understood and agreed to by the parties hereto that the CONSULTANT'S insurance shall be  
4 construed as primary insurance, and the COUNTY'S insurance and/or deductibles and/or self-insured  
5 retention's or self-insured programs shall not be construed as contributory.

6 e. If, during the term of this Agreement or any extension thereof, there is a material change in the scope  
7 of services; or, there is a material change in the equipment to be used in the performance of the  
8 scope of work; or, the term of this Agreement, including any extensions thereof, exceeds five (5)  
9 years; the COUNTY reserves the right to adjust the types of insurance and the monetary limits of  
10 liability required under this Agreement, if in the County Risk Manager's reasonable judgment, the  
11 amount or type of insurance carried by the CONSULTANT has become inadequate.

12 f. CONSULTANT shall pass down the insurance obligations contained herein to all tiers of  
13 subconsultants working under this Agreement.

14 g. The insurance requirements contained in this Agreement may be met with a program(s) of self-  
15 insurance acceptable to the COUNTY.

16 h. CONSULTANT agrees to notify COUNTY of any claim by a third party or any incident or event that  
17 may give rise to a claim arising from the performance of this Agreement.

18 **ARTICLE XXVI OWNERSHIP OF DATA**

19 A. Ownership and title to all reports, documents, plans, specifications, and estimates produced as part of this  
20 contract will automatically be vested in COUNTY; and no further agreement will be necessary to transfer  
21 ownership to COUNTY. CONSULTANT shall furnish COUNTY all necessary copies of data needed to  
22 complete the review and approval process.

23 B. It is understood and agreed that all calculations, drawings and specifications, whether in hard copy or  
24 machine-readable form, are intended for one-time use in the construction of the project for which this contract  
25 has been entered into. CONSULTANT acknowledges that the plans, drawings and/or other work products  
26 may be used by COUNTY for the PROJECT regardless of any disputes that may develop between  
27 CONSULTANT and COUNTY. All plans, drawings, or other work product shall be deemed the sole and  
28 exclusive property of COUNTY to be used as desired by COUNTY, and ownership thereof is irrevocably  
29 vested in COUNTY whether the PROJECT is implemented or not.

- 1 C. CONSULTANT is not liable for claims, liabilities, or losses arising out of, or connected with the modification,  
2 or misuse by COUNTY of the machine-readable information and data provided by CONSULTANT under this  
3 contract; further, CONSULTANT is not liable for claims, liabilities, or losses arising out of, or connected with  
4 any use by COUNTY of the project documentation on other projects, for additions to this project, or for the  
5 completion of this project by others, except only such use as may be authorized in writing by CONSULTANT.
- 6 D. Applicable patent rights provisions regarding rights to inventions shall be included in the contracts as  
7 appropriate (48 CFR 27, Subpart 27.3 - Patent Rights under Government Contracts for federal-aid contracts).
- 8 E. COUNTY may permit copyrighting reports or other agreement products. If copyrights are permitted; the  
9 agreement shall provide that the FHWA and COUNTY shall have the royalty-free nonexclusive and  
10 irrevocable right to reproduce, publish, or otherwise use; and to authorize others to use, the work for  
11 government purposes.

12 **ARTICLE XXVII CLAIMS FILED BY COUNTY'S CONSTRUCTION CONTRACTOR**

- 13 A. If claims are filed by COUNTY's construction contractor relating to work performed by CONSULTANT's  
14 personnel, and additional information or assistance from CONSULTANT's personnel is required in order to  
15 evaluate or defend against such claims; CONSULTANT agrees to make its personnel available for  
16 consultation with COUNTY'S construction contract administration and legal staff and for testimony, if  
17 necessary, at depositions and at trial or arbitration proceedings.
- 18 B. CONSULTANT's personnel that COUNTY considers essential to assist in defending against construction  
19 contractor claims will be made available on reasonable notice from COUNTY. Consultation or testimony will  
20 be reimbursed at the same rates, including travel costs that are being paid for CONSULTANT's personnel  
21 services under this contract.
- 22 C. Services of CONSULTANT's personnel in connection with COUNTY's construction contractor claims will be  
23 performed pursuant to a written contract amendment, if necessary, extending the termination date of this  
24 contract in order to resolve the construction claims.

25 **ARTICLE XXVIII CONFIDENTIALITY OF DATA**

- 26 A. All financial, statistical, personal, technical, or other data and information relative to COUNTY's operations,  
27 which are designated confidential by COUNTY and made available to CONSULTANT in order to carry out this  
28 contract, shall be protected by CONSULTANT from unauthorized use and disclosure.
- 29 B. Permission to disclose information on one occasion, or public hearing held by COUNTY relating to the

1 contract, shall not authorize CONSULTANT to further disclose such information, or disseminate the same on  
2 any other occasion.

3 C. CONSULTANT shall not comment publicly to the press or any other media regarding the contract or  
4 COUNTY's actions on the same, except to COUNTY's staff, CONSULTANT's own personnel involved in the  
5 performance of this contract, at public hearings or in response to questions from a Legislative committee.

6 D. CONSULTANT shall not issue any news release or public relations item of any nature, whatsoever, regarding  
7 work performed or to be performed under this contract without prior review of the contents thereof by  
8 COUNTY, and receipt of COUNTY'S written permission.

9 E. Any subcontract entered into as a result of this contract shall contain all of the provisions of this Article.

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

12 **ARTICLE XXIX NATIONAL LABOR RELATIONS BOARD CERTIFICATION**

13 In accordance with Public Contract Code Section 10296, CONSULTANT hereby states under penalty of perjury  
14 that no more than one final unappealable finding of contempt of court by a federal court has been issued against  
15 CONSULTANT within the immediately preceding two-year period, because of CONSULTANT's failure to comply  
16 with an order of a federal court that orders CONSULTANT to comply with an order of the National Labor Relations  
17 Board.

18 **ARTICLE XXX LEGAL COMPLIANCE**

19 CONSULTANT shall comply with all Federal, State and local laws, statutes, ordinances, rules and regulations,  
20 and the orders and decrees of any courts or administrative bodies or tribunals currently in effect and in any  
21 manner affecting the performance of this Agreement, including, without limitation, workers' compensation laws  
22 and licensing and regulations. Failure to comply by CONSULTANT may be grounds for termination by the  
23 COUNTY.

24 **ARTICLE XXXI EVALUATION OF CONSULTANT**

25 CONSULTANT's performance may be evaluated by COUNTY. A copy of the evaluation will be sent to  
26 CONSULTANT for comments. The evaluation together with the comments shall be retained as part of the  
27 contract record.

28 **ARTICLE XXXII RETENTION OF FUNDS**

29 A. Any subcontract entered into as a result of this Contract shall contain all of the provisions of this Article.

1 B. COUNTY will withhold the last 10 percent of the budget for preparation of the final PS&E documents. The 10  
2 percent retainage is to be held after 90% of the PS&E phase has been billed and is not to be deducted from  
3 each invoice. The amount retained will be paid to CONSULTANT after COUNTY has approved  
4 CONSULTANT's PS&E documents. The CONSULTANT, or subconsultant, shall return all monies withheld in  
5 retention from a subconsultant within thirty (30) days after receiving payment. Federal law (49 CFR 26.29)  
6 requires that any delay or postponement of payment over thirty (30) days may take place only for good cause  
7 and with the COUNTY's prior written approval. Any violation of this provision shall subject the violating  
8 CONSULTANT or subconsultant to the penalties, sanctions and other remedies specified in Section 7108.5 of  
9 the Business and Professions Code. These requirements shall not be construed to limit or impair any  
10 contractual, administrative, or judicial remedies, otherwise available to the CONSULTANT or subconsultant in  
11 the event of a dispute involving late payment or nonpayment by the CONSULTANT, deficient subconsultant  
12 performance, or noncompliance by a subconsultant. This provision applies to both DBE and non-DBE prime  
13 consultant and subconsultants.

14 **ARTICLE XXXIII NOTIFICATION**

15 All notices hereunder and communications regarding interpretation of the terms of this contract and changes  
16 thereto, shall be effected by the mailing thereof by registered or certified mail, return receipt requested, postage  
17 prepaid, and addressed to the CONSULTANT's Project Manager and COUNTY's Contract Administrator at the  
18 respective addresses provided in Article I.B.

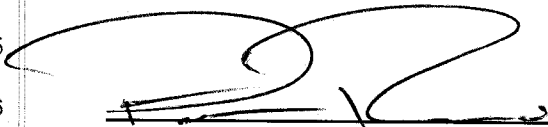
19 **ARTICLE XXXIV. CONTRACT**

20 The two parties to this contract, who are the before named CONSULTANT and the before named COUNTY,  
21 hereby agree that this contract constitutes the entire agreement which is made and concluded in duplicate  
22 between the two parties. Both of these parties for and in consideration of the payments to be made, conditions  
23 mentioned, and work to be performed; each agree to diligently perform in accordance with the terms and  
24 conditions of this contract as evidenced by the signatures below.

1 **ARTICLE XXXV APPROVALS**

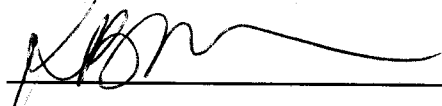
2 **COUNTY** Approvals

3 RECOMMENDED FOR APPROVAL:


4  
5   
6 \_\_\_\_\_

7 **PATRICIA ROMO**  
8 Director of Transportation

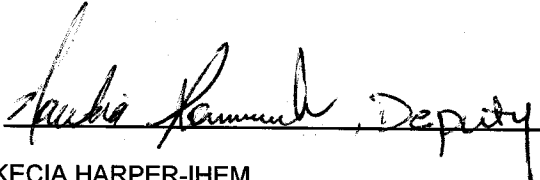
9  
10 APPROVED AS TO FORM:  
11 **GREGORY P. PRIAMOS, County Counsel**

12   
13 \_\_\_\_\_  
14 By Deputy

15  
16 APPROVAL BY THE BOARD OF SUPERVISORS

17  
18   
19 \_\_\_\_\_

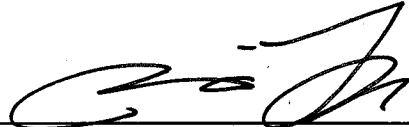
20 **KEVIN JEFFRIES**  
21 PRINTED NAME  
22 Chairman, Riverside County Board of Supervisors

23 ATTEST:  
24  
25   
26 \_\_\_\_\_  
27 **KECIA HARPER-IHEM**  
28 Clerk of the Board (SEAL)

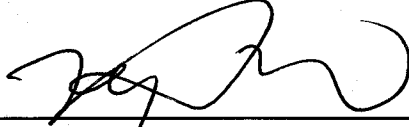
29

**CONSULTANT** Approvals

CONSULTANT:

  
\_\_\_\_\_  
**James J. Lu**  
PRINTED NAME  
**president**  
\_\_\_\_\_  
TITLE

CONSULTANT:

  
\_\_\_\_\_  
**Hui-Min Huang**  
PRINTED NAME  
**CFO**  
\_\_\_\_\_  
TITLE



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**APPENDIX A - SCOPE OF SERVICES**

**ARTICLE AI • INTRODUCTION**

**A. DESCRIPTION**

The County of Riverside (COUNTY) in cooperation with the State of California Department of Transportation (CALTRANS) proposes to perform bridge Preventative Maintenance (PM) work involving structural rehabilitation on twenty-one (21) existing local bridges owned by COUNTY. The proposed bridge PM work is based on the ratings and work recommendations identified in the Bridge Inspection Reports prepared by CALTRANS Structure Maintenance and Investigations (SM&I) and the results of preliminary field reviews. The purpose of the bridge preventative maintenance work is to utilize a nominal amount of federal Bridge Preventative Maintenance Program (BPMP) funds to make proper structural repairs and extend the service life of the bridges before the structural deficiencies become serious. Maintaining an existing bridge in a structurally sound and serviceable condition essentially keeps the bridge in a safe condition. The proposed bridges are listed below:

- Ragsdale Road Bridge over Chuckwalla Ditch (Br. No. 56C0122)
- Ragsdale Road Bridge over Rockdale Ditch (Br. No. 56C0121)
- Harrison Street Bridge over Solo Ditch (Br. No. 56C0582)
- Harrison Street Bridge over Lundy Ditch (Br. No. 56C0585)
- 62<sup>ND</sup> Avenue Bridge over Whitewater River (Br. No. 56C0454)
- Ragsdale Road Bridge over Rockledge Ditch (Br. No. 56C0123)
- Harrison Street Bridge over Lowen Ditch (Br. No. 56C0586)
- Washington Street Overhead over UPRR (Br. No. 56C0455)
- Monterey Avenue Southbound Overhead over UPRR (Br. No. 56C0448L)
- Harrison Street Bridge over Vico Ditch (Br. No. 56C0587)
- Monterey Avenue Northbound Overhead over UPRR (Br. No. 56C0448R)
- Ramon Road Overhead over UPRR (Br. No. 56C0052)
- Cajalco Road Bridge over Temescal Wash (Br. No. 56C0155)
- Alessandro Boulevard over RCTC/BNSF RR (Br. No. 56C0341)
- San Timoteo Canyon Road Bridge over San Timoteo Creek (Br. No. 56C0244)
- Willows Avenue Bridge over Tocaloca Creek (Br. No. 56C0526)

Bridge Preventative Maintenance Work

- Cajalco Road Overhead over RCTC/BNSF RR (Br. No. 56C0196)
- Grapefruit Boulevard Bridge over Whitewater River (Br. No. 56C0578)
- State Street Bridge over San Jacinto River (Br. No. 56C0522)
- Harley Knox Boulevard Bridge over RCTC/BNSF (Br. No. 56C0451)
- Harrison Street Bridge over Almar Ditch (Br. No. 56C0584)

The proposed bridge PM work is described in the following table:

No.	State Bridge No.	Location	Preventative Maintenance Work Description
1	56C0122	Blythe	1) Supplement deteriorate timber Girder #3 and #5 of Span 1 and Girder #1 of Span 2 with new timber girders. 2) Supplement deteriorated exterior timber columns at Pier 2 with a supplemental support.
2	56C0121	Blythe	1) Backfill erosion behind the southwest and northwest wingwalls.
3	56C0582	Thermal	1) Epoxy-inject cracked culvert walls.
4	56C0585	Thermal	1) Epoxy-inject cracked culvert walls.
5	56C0454	Thermal	1) Backfill erosion at both bridge ends. 2) Clean and seal bridge deck with methacrylate.
6	56C0123	Blythe	1) Supplement timber Girder #8 and #15 of Span 2, #17 of Span 4 with new timber girders. 2) Provide a supplemental column for Column #3 at Abutment 5 and #8 and #6 at the Southeast Wingwall of this Abutment. 3) Replace the deteriorated northwest timber rail. 4) Supplement the bottom planks at Abutment 1. 5) Supplement the timber caps at Pent 3 between Column 1 and 4. 6) Strengthen Columns #1 and #3 of Pier 3 and #6 of Pier 4 with steel collars.
7	56C0586	Thermal	1) Clean and seal bridge deck with methacrylate.
8	56C0455	Thermal	1) Clean and seal bridge deck and approach slabs with methacrylate. 2) Inject cracks at both abutment walls with epoxy. 3) Replace joint seals.
9	56C0448L	Sky Valley	1) Clean and seal bridge deck and approach slabs with methacrylate. 2) Inject cracks on abutment walls and slopes with epoxy.
10	56C0587	Thermal	1) Clean and seal bridge deck with methacrylate.
11	56C0448R	Sky Valley	1) Clean and seal bridge deck and approach slabs with methacrylate. 2) Inject cracks on abutment walls with epoxy. 3) Replace both abutment joint seals.

Bridge Preventative Maintenance Work

No.	State Bridge No.	Location	Preventative Maintenance Work Description
12	56C0052	Sky Valley	1) Clean and seal bridge deck with methacrylate. 2) Replace all joint seals.
13	56C0155	El Cerrito	1) Clean and seal bridge deck with methacrylate. 2) Repave the AC approaches at both ends 10' beyond the bridge deck.
14	56C0341	Perris	1) Clean and seal bridge deck with methacrylate. 2) Fill the 1" gap between the southwest wingwall and the concrete apron with Type A silicon.
15	56C0244	Beaumont	1) Saw-cut and repair the large soffit and deck spall at the south exterior bay of Span 2 and other small soffit spalls in that area. 2) Clean and seal bridge deck with methacrylate.
16	56C0526	Murrieta	1) Clean and seal bridge deck with methacrylate. 2) Inject cracks on the pier walls and abutment walls with epoxy.
17	56C0196	Perris	1) Clean and seal bridge deck with methacrylate. 2) Inject cracks on the pier walls with epoxy.
18	56C0578	Thermal	1) Clean and seal bridge deck with methacrylate and place 1" polyester concrete overlay. Grind the approach AC to provide a transition between the existing AC approach and the newly raised deck. 2) Replace joint seal at the hinge. 3) Inject large cracks on the middle of the pier walls with epoxy.
19	56C0522	Hemet	1) Clean and seal bridge deck with methacrylate and place 1" of polyester concrete overlay. Grind the approach slab and AC to provide a transition between the existing approach and the newly raised deck.
20	56C0451	Perris	1) Clean and seal bridge deck with methacrylate.
21	56C0584	Thermal	1) Repair the concrete spall 16" x 8" x 6" with rebar exposed at the southeast end of the wingwall. 2) Inject cracks on the pier walls with epoxy.

The majority of the bridge PM work involves replacing or strengthening deteriorated structural timber elements; restoring eroded side earthen slopes; epoxy-injecting wall cracks; replacing deck expansion joint seals; cleaning and sealing the bridge deck with high molecular weight methacrylate and/or placing a polyester concrete overlay. The work of epoxy-injecting cracks on pier and abutment walls is proposed to apply to the exposed portion of the walls without excavation. The rehabilitation strategy will maintain the structural integrity of the bridge substructures while minimizing the environmental impacts.

The proposed bridge PM work is a Categorical Exempt undertaking under the California Environmental Quality Act (CEQA) per 15301 Class 1(d) and an excluded action under the National Environmental Policy

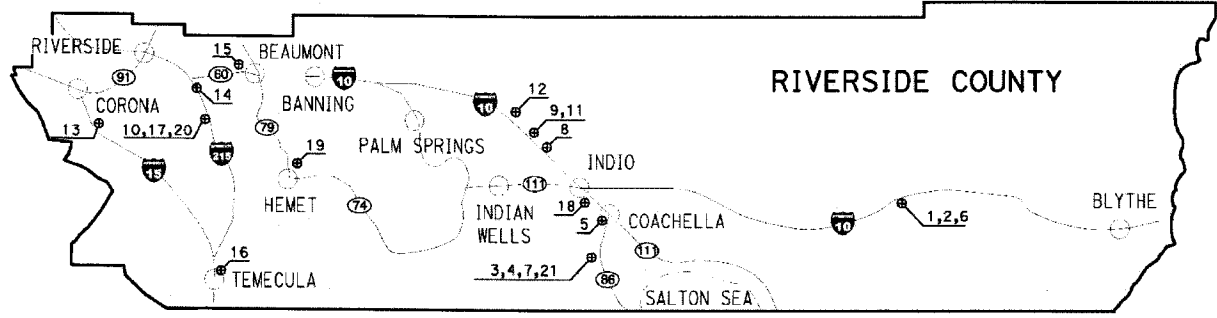
*Bridge Preventative Maintenance Work*

1 Act (NEPA) under Categorical Exclusion (CE) Assignment 23 CE (CFR 771.117(c)(28)). COUNTY will be  
2 the CEQA lead agency, and CALTRANS District 8 Local Assistance (CALTRANS) will be the NEPA lead  
3 agency. In this scope of work, it has been assumed that CONSULTANT will work closely with CALTRANS  
4 on the preparation of the Categorical Exclusion (CE), CE Checklist, Air Quality Checklist and the  
5 Environmental Commitment Record (ECR).

6  
7 CONSULTANT shall perform all tasks according to NEPA and CEQA requirements, as well as per the  
8 policies and procedures contained in CALTRANS' Environmental Handbook and Local Assistance  
9 Procedures Manual.

10  
11 **B. LOCATION**

12 The proposed bridges are in multiple areas of Riverside County, including Desert Center, Thermal, Sky  
13 Valley, Beaumont, Perris, El Cerrito, Murrieta, and Hemet.



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15  
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21 **C. COORDINATION**

22 CONSULTANT shall coordinate with other involved agencies for compatible design and phasing of  
23 construction with existing conditions. Coordination may include, but will not necessarily be limited to the  
24 following:

- 25 Federal Highway Administration (FHWA)
- 26 Caltrans
- 27 Riverside County Departments
- 28 Utility Companies
- 29 Regulatory Agencies including:

- 1 U.S. Army Corps of Engineers (USACE)
- 2 U.S. Fish and Wildlife Service (USFWS)
- 3 California Department of Fish and Wildlife (CDFW)
- 4 Regional Water Quality Control Board (RWQCB)
- 5 Riverside County Flood Control & Water Conservation District (RCFC & WCD)
- 6 Coachella Valley Water District (CVWD)
- 7 State Historic Preservation Office (SHPO)
- 8 Southern California Air Quality Management District (SCAQMD)

9 CALTRANS may exercise review and approval function through the COUNTY PROJECT MANAGER at  
10 key points in the development process. All contacts with CALTRANS will be directed through COUNTY.  
11 Milestone PROJECT submittal reviews will be performed for the specific products and deliverables listed  
12 herein. The COUNTY PROJECT MANAGER will conduct these reviews, in addition to the monthly project  
13 status reports and meetings. All meetings with other outside agencies will be scheduled by CONSULTANT  
14 with approval of COUNTY.

15 **D. PHASES**

16 The services performed by CONSULTANT shall include the following Phases:

- 17 Phase I – Preliminary Engineering / Environmental Clearance / Technical Report
- 18 Phase II – Plans, Specifications and Estimates (PS&E)
- 19 Phase III – Construction Bidding and Award Supports
- 20 Phase IV - Design Support during Construction

21 This agreement covers Phase I through Phase IV scope of services and fee, which will commence upon  
22 written notice to proceed by COUNTY.

23 **E. STANDARDS**

24 The preliminary plans / technical report, and environmental document shall be prepared in accordance with  
25 current CALTRANS regulations, policies, procedures, manuals and standards including compliance with  
26 Federal Highway Administration (FHWA) requirements and/or COUNTY Road Standards as appropriate.  
27 CALTRANS guidelines for the technical studies and the environmental document will follow the guidance  
28 available as of contract date. Improvements of local roads may be prepared in accordance with COUNTY  
29 standards in lieu of CALTRANS standards as directed by the COUNTY PROJECT MANAGER. It is



1 assumed that fact sheets documenting the exceptions to mandatory and advisory design standards are not  
2 applicable for the bridge PM work. All documents shall be prepared using English Standard Units and  
3 dimensions.

4 **1. Environmental**

5 The procedures to be followed and the content of the environmental surveys, environmental technical  
6 reports and environmental documents are set forth in CALTRANS Project Development Procedures  
7 Manual (PDPM), CALTRANS Environmental Handbook, CALTRANS Transportation Laboratory  
8 technical manuals for environmental studies, FHWA's Technical Advisory T6640.8A and on  
9 CALTRANS Standard Environmental Reference (SER) at the CALTRANS website.

10  
11 Federal and State requirements for environmental analysis and impact assessment, as set forth in the  
12 National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA) and other  
13 applicable Federal and State regulations, must be satisfied.

14 **2. Preliminary Survey/Aerial Topographical Mapping**

15 All preliminary surveys and aerial mapping, if required, shall be performed by COUNTY.

16 **3. Design**

17 Roadway design shall be in accordance with the current CALTRANS Highway Design Manual and its  
18 revisions and/or COUNTY Road Standards as appropriate. Traffic design shall be in accordance with  
19 the Manual of Uniform Traffic Control Devices (MUTCD) and the California Supplement. MicroStation  
20 (compatible with current County version) software will be used as the design software.

21 **4. Geographical Information System (GIS)**

22 a. "GIS Information" shall include GIS digital files (including the information or data contained  
23 therein) and any other information, data, or documentation from COUNTY GIS (regardless of  
24 medium or format) that is provided pursuant to this Agreement.

25 b. CONSULTANT acknowledges that the unauthorized use, transfer, assignment, sublicensing,  
26 or disclosure of the GIS information, documentation, or copies thereof will substantially diminish  
27 their value to COUNTY. CONSULTANT acknowledges and agrees that COUNTY GIS  
28 information is a valuable proprietary product, embodying substantial creative efforts, trade  
29 secrets, and confidential information and ideas. COUNTY GIS information is and shall remain

1 the sole property of COUNTY; and there is no intention of COUNTY to transfer ownership of  
2 COUNTY GIS information.

3 c. COUNTY GIS information is made available to CONSULTANT solely for use in the normal  
4 course of CONSULTANT's business to produce reports, analysis, maps and other deliverables  
5 only for this PROJECT and as described within the Scope of Services.

6 d. CONSULTANT agrees to indemnify and hold harmless COUNTY, its officers, employees and  
7 agents from any and all liabilities, claims, actions, losses or damages relating to or arising from  
8 CONSULTANT's use of COUNTY GIS information.

9 e. GIS information cannot be used for all purposes; and GIS information may not be complete for  
10 all purposes. Additional investigation or research by CONSULTANT into other sources will be  
11 required. GIS information is intended only as an information base and is not intended to replace  
12 any legal records. COUNTY has used and will continue to use its best efforts to correctly input  
13 into COUNTY GIS the information contained in various legal and other records; but COUNTY  
14 accepts no responsibility for any conflict with actual legal records or for information not  
15 transferred from legal records to COUNTY GIS. COUNTY has attempted to update GIS  
16 information as often as is practically feasible. However, CONSULTANT should be aware that  
17 GIS information may not be current and changes or additions to the information contained in  
18 COUNTY GIS may not yet be reflected in COUNTY GIS.

19 f. COUNTY accepts no responsibility for the use of GIS information; and COUNTY provides no  
20 warranty for the use of COUNTY GIS or COUNTY GIS information by CONSULTANT. THE  
21 WARRANTIES SPECIFICALLY SET FORTH IN THIS AGREEMENT ARE IN LIEU OF ALL  
22 OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF  
23 MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE; AND SUCH OTHER  
24 WARRANTIES ARE HEREBY EXCLUDED.

25 g. Final plans, drawings or PROJECT work products will be provided in an electronic format  
26 suitable for inclusion within the COUNTY GIS or CADD Systems by CONSULTANT and will  
27 contain the appropriate meta data and will be geographically registered using an appropriate  
28 coordinate system such as the California State Plane Coordinate System NAD 83.

29 **5. Project Files**

1 Project files shall be indexed in accordance with CALTRANS Project Development Uniform File  
2 System.

3 **F. QUALITY CONTROL**

- 4 1. CONSULTANT shall implement and maintain the following quality control procedures during the  
5 preparation of the plans and documents relating to PROJECT. CONSULTANT shall have a quality  
6 control plan in effect during the entire time services are being performed under this Agreement. The  
7 plan shall establish a process whereby calculations are independently checked, plans checked,  
8 corrected and back-checked, and all job related correspondence and memoranda routed and  
9 received by affected persons and then bound in appropriate job files. Where several drawings show  
10 different work in the same area, means shall be provided to avoid conflicts and misalignment in both  
11 new and existing improvements. Evidence that the quality control plan is functional may be  
12 requested by the COUNTY Contract Administrator. All plans, calculations documents and other  
13 items submitted to the COUNTY Contract Administrator for review shall be marked clearly as being  
14 fully checked and that the preparation of the material followed the quality control plan established  
15 for the work.
- 16 2. CONSULTANT has total responsibility for the accuracy and completeness of all data, reports, plans,  
17 specifications and estimates prepared for this PROJECT and shall check all such material  
18 accordingly. COUNTY will review all work product deliverables. The responsibility for accuracy and  
19 completeness of such items remains solely that of CONSULTANT. Neither COUNTY'S review or  
20 approval shall give rise to any liability or responsibility on the part of COUNTY, or waive any of  
21 COUNTY'S rights, or relieve CONSULTANT of its professional responsibilities or obligations under  
22 this Agreement.
- 23 3. The plans, designs, estimates, calculations, reports and other documents furnished in accordance  
24 with the Scope of Services shall meet the criteria for acceptance and be a product of neat  
25 appearance, well organized, technically and grammatically correct, checked and having the preparer  
26 and checker identified. The minimum standard of appearance, organization and contents shall be of  
27 similar types produced by COUNTY and AGENCIES. If any work product submitted is not complete  
28 and ready for use by COUNTY, it shall be marked "Draft" or similar designation to indicate it is not

1 ready for use by COUNTY. COUNTY expects that all work product not so designated is ready for  
2 and can be used on PROJECT.

- 3 4. The page identifying preparers of engineering reports, the title sheet for specifications and each sheet  
4 of plans, shall bear the professional seal, certificate number, registration classification, expiration  
5 date of the certificate, and signature of the professional engineer(s) responsible for their preparation.

6 **G. VALUE ENGINEERING**

- 7 1. Elements of PROJECT may be considered for Value Engineering Studies. To this end, the COUNTY  
8 Contract Administrator may direct the CONSULTANT to examine the various elements of a design  
9 segment and submit an informal written statement or memorandum addressing those elements  
10 where it appears significant savings and other advantages can be realized. The statement shall be  
11 sufficiently informative to enable COUNTY to determine whether to direct a detailed Value  
12 Engineering Study or possibly direct immediate design changes where the value of the change is  
13 apparent without the need of detailed study and analysis.
- 14 2. CONSULTANT or its subcontractors shall not incorporate in the design materials or equipment of  
15 single or sole source origin without written approval of COUNTY. Proprietary names of material or  
16 equipment shall not be used in the plans and specifications.

17 **H. KEY PERSONNAL**

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

<u>Assignment</u>	<u>Key Personnel</u>
Principal in Charge/Project Manager	Jams J. Lu (CNS)
Roadway Engineer	Steve Hosford (CNS)
Structural/Bridge Engineer	Quyett Nguyen (CNS)
Environmental Team Leader	Brian Calvert (ICF)
QA/QC Engineer	James J. Lu (CNS)
Geotechnical Engineer	Curt Scheyhing (Group Delta)
Hazardous Materials	Jack Packwood (Group Delta)

1 Channel Hydraulics / Water Quality Ceazar Aguilar (ACI)

2 **I. COUNTY RESPONSIBILITIES**

3 The following includes tasks to be completed by the COUNTY:

4 • COUNTY will provide standards, existing plans, and manuals when requested by CONSULTANT and  
5 available to COUNTY personnel.

6 • COUNTY will provide survey and land acquisition services generally as described below:

7 Provide survey controls.

8 ➤ Verify that County survey control points are still in place and undisturbed.

9 ➤ Provide survey records research, including grant deeds and right-of-way documents in  
10 support of right-of-way base mapping prepared by COUNTY surveyor.

11 ➤ Prepare existing right-of-way and parcel mapping.

12 ➤ Coordinate permits for right-of-entry with property owners.

13 ➤ Obtain and review title reports, identify easements and encumbrances.

14 ➤ Prepare appraisals for temporary and permanent right-of-way and perform appraisal  
15 review.

16 ➤ Perform right-of-way negotiations and acquisitions.

17 ➤ Certify new acquired right-of-way.

18 **H. DELIVERABLES**

19 The following list identifies the deliverables to the COUNTY by CONSULTANT. All deliverables will be  
20 provided in hard copy format and in electronic format (pdf) as identified in this scope of work unless  
21 otherwise noted.

22

23

24

25

26

**ARTICLE AII • SERVICES TO BE PROVIDED**

**1.1 PROJECT MANAGEMENT**

**Coordination and Communications**

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

**Scheduling**

Prepare a detailed project baseline schedule using a work breakdown structure (WBS) consistent with this Scope of Work. Update and distribute one week in advance of each PDT Meeting. The schedule will include the following information:

- a. Task dependencies as predecessors and successors
- b. Anticipated task durations with beginning and end dates
- c. Critical path with milestones

**Budgeting**

Monitor the budget for design services using a work breakdown structure consistent with this Scope of Work. Perform Earned Value Analysis on monthly basis.

**Project Administration**

- a. Set up a project accounting system consistent with the COUNTY's invoicing and tracking requirements.
- b. Prepare subconsultant agreements.
- c. Monitor subconsultant progress and review/approve invoices.
- d. Prepare monthly progress reports and invoices in accordance with County guidelines. Monthly reports providing actual physical progress shall be provided with every invoice.

1 **Deliverable(s):** *Monthly Progress Reports and Invoice Packages*

2 **1.2 PROJECT TEAM MEETINGS**

3 Organize, schedule, and chair meetings and conference calls as necessary to provide progress updates,  
4 coordinate between technical disciplines, and facilitate overall project communication. The engineering  
5 design and environmental team leaders shall attend the Project Development Team (PDT) meetings as  
6 appropriate. Prepare meeting agendas and minutes for all meetings.

7 a. Kickoff Meeting

8 b. PDT Meetings: Monthly face-to-face meetings at the COUNTY Transportation Annex Office.

9 (10 Meetings for Phase I, 8 Meetings for Phase II, one Meeting for Phase III, and 2 Meetings for Phase IV)

10 c. Additional meetings with Caltrans, as needed (One Meeting).

11 **Deliverable(s):** *Meeting notices, agendas, special exhibits and minutes*

12 **1.3 QUALITY CONTROL AND QUALITY ASSURANCE (QC/QA)**

13 Establish and implement a quality control process to ensure that all deliverables are complete and accurate,  
14 including but not limited to, ensuring that design calculations are independently checked and that exhibits  
15 and plans are checked, corrected, and back-checked for accuracy and completeness. Subconsultant report  
16 submittals will be reviewed to ensure that appropriate background information, study methodology,  
17 interpretation of data, and format and content are completed in accordance with current standards. The  
18 QC/QA Plan shall be submitted for COUNTY review and approval at the kickoff Meeting.

19 **Deliverable(s):** *QC/QA Plan*

20 **PHASE I – PRELIMINARY ENGINEERING / ENVIRONMENTAL CLEARANCE / TECHNICAL REPORT**

21 **2.0 RESEARCH AND DATA GATHERING**

22 **2.1 COLLECT AND REVIEW EXISTING INFORMATION**

23 Existing topographic mapping, photos, bridge reports, maintenance reports, right-of-way maps, "as-built"  
24 plans, record maps and surveys, study reports, assessor maps, contract documents, and any other data  
25 shall be obtained and reviewed.

26 **Deliverable(s):** *Document Log*

27 **2.2 CONDUCT FIELD REVIEW**

28 A site visit, by all members of the team (including CALTRANS Local Assistance, CALTRANS  
29 Environmental, FHWA, and the COUNTY), shall be conducted to obtain information on current conditions,

1 structural deficiency, constraints, and potential solutions. CONSULTANT shall complete the Field Review  
2 paperwork (CALTRANS LAPM Exhibit 7-B) and coordinate with CALTRANS to obtain approval.

3 **Deliverable(s):** *Field Review Memorandum and LAPM Exhibit 7-B*

4 **3.0 PRELIMINARY ENGINEERING**

5 The following technical studies are not expected to be required:

- 6 • Traffic Study
- 7 • Roadway Geometric Design
- 8 • Advisory and Mandatory Design Fact Sheets
- 9 • Bridge Type Selection Study

10 **3.1 PERMITS**

11 CONSULTANT shall coordinate with the COUNTY and all required agencies in order to obtain all required  
12 encroachment permits and rights of entry needed for Phase I activities. As directed by COUNTY,  
13 CONSULTANT shall prepare and submit all permit applications. All permit filing fees are to be paid by  
14 COUNTY.

15 **3.2 SURVEYING AND RIGHT-OF-WAY MAPPING (BY COUNTY)**

16 Surveying, Topographic and Right-of-Way mapping will be provided by COUNTY forces. CONSULTANT  
17 is available to provide any surveying and topographic services the COUNTY requires. The COUNTY  
18 surveyor will also provide the waterway surveyed cross-sections.

19 **3.3 PRELIMINARY GEOTECHNICAL STUDIES**

20 This task is aimed at providing preliminary geotechnical information for column replacement or addition of  
21 supplemental columns in the channel at the three proposed timber bridges (Bridge No. 56C0122, 56C0121,  
22 and 56C0123) on Ragsdale Road near the Desert Center. The work shall be performed in general  
23 accordance with CALTRANS and COUNTY's standards.

24 CONSULTANT shall perform a site reconnaissance and a review of the existing as-built plans and Logs of  
25 Test Borings (LOTBs) for the bridge structures, as well as available topographic and geologic maps, aerial  
26 photos, and geotechnical reports. CONSULTANT shall provide geotechnical information to design  
27 foundation supports as necessary. CONSULTANT shall provide preliminary geotechnical information in a  
28 CALTRANS-style Preliminary Foundation Report (PFR). The PFR shall consist of the following:

- 29 • Site Location and Project Description



- 1 • Regional and Local Geology
- 2 • Subsurface soil and Groundwater conditions
- 3 • Review of As-Built Plans and Log of Test Borings (LOTBs)
- 4 • As-Built Foundation Types, Sizes, Capacities
- 5 • Preliminary seismic information (Controlling Fault, Magnitude, Distance, PGA, Soil Profile Type, ARS
- 6 Curve)
- 7 • Liquefaction Evaluation
- 8 • Scour Potential
- 9 • Corrosion Potential
- 10 • Preliminary Foundation Recommendations
- 11 • Comments on grading, abutment slope stability and retaining wall foundations

12 **Deliverable(s):** *Preliminary Foundation Report (PFR) for each bridge structure*

### 13 3.4 RIGHT-OF-WAY REQUIREMENTS MAP

14 Based on the Right-of-Way Mapping provided by the COUNTY and the project improvements established  
15 during the structure advance planning study task, CONSULTANT shall prepare a 40-Scale right-of-way  
16 requirements map showing the right-of-way lines, parcels, and anticipated limits of the temporary  
17 construction easements necessary for the construction of the project improvements. It is assumed that  
18 permanent easements are not required. The right-of-way requirements map shall include a table identifying  
19 the amount of area needed as a TCE for each affected parcel.

20 **Deliverable(s):** *Right-of-Way Requirements Maps for Bridges requiring TCE*

### 21 3.5 STRUCTURE ADVANCE PLANNING STUDY

22 CONSULTANT shall finalize bridge general plans, typical sections and conceptual details to delineate the  
23 proposed structural rehabilitation work per CALTRANS guidelines. Conceptual plans and details shall be  
24 developed for the preferred alternative of replacement or strengthening of deteriorated timber elements  
25 including stringers, bent caps, and columns. Preliminary quantity takeoff shall be performed at this stage.  
26 The goal of this task is to provide conceptual structure plans, details and project description that can be  
27 used as the basis to support environmental, hydraulic and geotechnical studies. The CONSULTANT shall  
28 prepare the Advance Planning Study (APS) plan sheets using the standard COUNTY Bridge General Plan  
29 sheet format.

1 CONSULTANT shall prepare a brief Design Memo summarizing critical assumptions and considerations  
2 involved in developing rehabilitation alternatives. CONSULTANT shall prepare a Preliminary Cost Estimate  
3 for the bridge rehabilitation work based on approximate quantities and historical construction costs for  
4 similar projects. It is assumed that the planning studies for all bridges shall be summarized in a single  
5 report.

6 **Deliverable(s):** *Structure Advance Planning Study Report*

7 **3.6 PRELIMINARY HYDRAULICS AND SCOUR STUDY**

8 CONSULTANT shall gather and perform a thorough review of available hydrology, drainage and floodplain  
9 studies and other plans and reports relevant to the project scope. The scope of this task includes preparing  
10 preliminary hydraulics and scour study for two timber bridges (Bridge No. 56C0122 and 56C0123) on  
11 Ragsdale Road near Desert Center.

12 CONSULTANT shall conduct a field investigation to familiarize the project team with the existing drainage  
13 conditions, flow patterns, existing design constraints, and existing improvements in the project area.

14 CONSULTANT shall utilize Google-Earth and available aerial topographic maps from Riverside County  
15 Flood Control District.

16 CONSULTANT shall perform a drainage analysis in support of Structure Advance Planning Study. The  
17 analysis shall include the following:

- 18 • Determination of the flow conveyance capacity of the existing bridges based on the existing bridge  
19 footprint using the HEC-RAS model. It is assumed that COUNTY will provide field surveys of the  
20 existing stream and bridge opening in order for CONSULTANT to develop the stream and bridge cross  
21 sections.
- 22 • Determination of the scour depths at the upstream and downstream section of the existing bridge using  
23 the LACFCD's cutoff wall depth versus flow velocity chart and FHWA's HEC-18 procedure.

24 CONSULTANT shall prepare a Preliminary Hydraulics and Scour Technical Memorandum in support of the  
25 analysis. The report shall include a narrative, hydrology and hydraulic calculations, and exhibits.

26 **Deliverable(s):** *Preliminary Hydraulics and Scour Technical Memorandum*

27 **3.7 LOCATION HYDRAULIC STUDY (LHS) AND SUMMARY FLOODPLAIN ENCROACHMENT REPORT**  
28 **(SFER) (STEP-2)**

1 CONSULTANT shall prepare Location Hydraulic Study (LHS) and Summary Floodplain Encroachment  
2 Report (SFER) based upon the preferred alternative and in conformance with CALTRANS requirements for  
3 the two timber bridges (Bridge No. 56C0122 and 56C0123) on Ragsdale Road near Desert Center.

4 **Deliverable(s):** Location Hydraulic Study and Summary Floodplain Encroachment Reports

5 **3.8 PRELIMINARY UTILITY MAPPING**

6 CONSULTANT shall perform a utility search for affected utilities in the project area of the five Category A  
7 bridge sites. The search shall include field review and review of available as-builts for the project area.

8 CONSULTANT shall research records for both public and franchise utilities and shall plot the location of all  
9 existing facilities. CONSULTANT shall include preparation of a database of utility records indicating the

10 type of utility, owner, drawing number, and other vital information. The identified utility companies shall be  
11 sent a letter requesting information regarding existing and proposed utilities. Using the information obtained,

12 CONSULTANT shall prepare a utility base map which shall be the basis of the Utility Information Sheet.

13 CONSULTANT shall prepare a Utility Information Sheet. The names of all utilities and points of contact  
14 shall be developed. A description of the location, existing facility and potential conflicts with the project shall  
15 be prepared. CONSULTANT shall coordinate with COUNTY and other agencies to arrange with the  
16 respective utility owner to pothole its facility as required. CONSULTANT shall coordinate the use of County  
17 field survey crews to locate potholed utilities by coordinates and elevations based on the project's survey  
18 controls.

19 **4.0 ENVIRONMENTAL CLEARANCE AND DOCUMENTATION**

20 The bridges involved are identified in the three categories below:

21 Category A: It is assumed that the following bridges involve some level of ground disturbance. The feature  
22 that the bridge is crossing is shown in parentheses.

23 1. 56C0122 (wash)                      3. 56C0454 (wash)

24 2. 56C0121 (wash)                      4. 56C0123 (wash)

25  
26 Category B: It is assumed that no equipment or ground disturbance would be involved at the following  
27 bridges. This would only include walking under the bridge and the use of a small portable pump that will be  
28 placed entirely outside of any areas that are identified as sensitive such as drainages. No driving or other

1 types of ground disturbing activity would occur. The feature that the bridge is crossing is shown in  
2 parentheses.

- |   |                       |                   |                   |
|---|-----------------------|-------------------|-------------------|
| 3 | 1. 56C0582 (wash)     | 4. 56C0526 (wash) | 7. 56C0584 (wash) |
| 4 | 2. 56C0244 (wash)     | 5. 56C0585 (wash) |                   |
| 5 | 3. 56C0196 (railroad) | 6. 56C0578 (wash) |                   |

6 Category C: It is assumed that the following bridges would not involve any ground disturbance and all work  
7 would be confined to the bridge deck and paved roadway approaches. The feature that the bridge is  
8 crossing is shown in parentheses.

- |    |                        |                        |
|----|------------------------|------------------------|
| 9  | 1. 56C0586 (wash)      | 6. 56C0052 (railroad)  |
| 10 | 2. 56C0455 (railroad)  | 7. 56C0155 (wash)      |
| 11 | 3. 56C0448L (railroad) | 8. 56C0341 (railroad)  |
| 12 | 4. 56C0587 (wash)      | 9. 56C0522 (wash)      |
| 13 | 5. 56C0448R (railroad) | 10. 56C0451 (railroad) |

14  
15 The following assumptions have been made regarding this environmental scope of work.

- 16 • The National Environmental Policy Act (NEPA) document will be Categorical Exclusion (CE).
- 17 • The California Environmental Quality Act (CEQA) will be addressed with a Categorical Exemption
- 18 (CE) and the CE itself will be entirely addressed and processed by COUNTY.
- 19 • CALTRANS will be the lead agency under NEPA, and COUNTY will be the lead agency under CEQA.
- 20 • The project documents will address one Build Alternative (i.e., the Project).
- 21 • Only the five Category A bridges will require any type of environmental documentation. The remaining
- 22 Category B and C bridges will be addressed in the Preliminary Environmental Study (PES) only and
- 23 will not require any further evaluation. It is assumed that CALTRANS and the resource agencies will
- 24 concur that no work is needed for the Category B and C bridges.

25 Only those items specifically identified in this scope of work are included. No other effort is assumed or  
26 implied.

#### 27 **4.1 ENVIRONMENTAL PROJECT MANAGEMENT AND MEETINGS**

28 CONSULTANT and NEPA/CEQA lead may be required to attend meetings in addition to the monthly PDT  
29 meetings.

1 **4.2 TECHNICAL STUDIES AND ENVIRONMENTAL DOCUMENT**

2 Preparation of all technical analyses and reports shall follow local, state, and federal environmental  
3 guidelines, primarily consisting of the CALTRANS Standard Environmental Reference (SER) website,  
4 CALTRANS *Local Assistance Procedures Manual*, local and state *CEQA Guidelines*, and FHWA Technical  
5 Advisory 6640.81 *Guidance on Preparing and Processing Environmental and Section 4(f) Documents*. The  
6 formats to be used for the technical studies shall follow the guidance available on the CALTRANS SER  
7 website as of the date that those studies are initiated.

8  
9 See scope of work for each technical study for details regarding studies to be prepared.

10  
11 For each technical report all twenty-one bridges will be addressed in a single report. However, information  
12 for each individual bridge (impacts, mapping, etc.) will need to be presented within the report.

13  
14 Unless otherwise noted, the deliverables for the following technical studies will be a separate bound report  
15 including a standardized project description, a methodology relevant to each topic area, description of the  
16 affected environment, impact assessment, and mitigation measures. The assumed submittals for each  
17 report are identified below.

18  
19 ***Deliverable(s):*** *Final approved technical studies*

20  
21 CONSULTANT will prepare the following to support the technical studies:

- 22
- 23 • Engineering plans, including limits of construction, staging areas, and borrow/disposal sites, if needed,  
24 at a level of detail sufficient for preparing the technical studies (roadway lanes, topographic information  
25 [including changes in topography resulting from the proposed project], station numbers, and existing  
26 structures within 500 feet of the proposed project).
  - 27 • Mapping showing existing conditions (roadway lanes, topographic information, station numbers, and  
existing structures within 500 feet of the proposed project).

*Bridge Preventative Maintenance Work*

- 1 • Aerial photograph at a scale suitable for preparation of project mapping, figures, and analyses (1  
2 inch=200 feet scale minimum, with a minimum of 500 feet shown around any areas of improvement).  
3 Pixel size shall be no more than 2.5 square feet and image shall be orthorectified.
- 4 • Focused protocol surveys for any species are not included in this scope and cost, other than those  
5 specified under the Natural Environment Study scope. If additional focused surveys are identified during  
6 the biological field reconnaissance then this will be communicated to CONSULTANT and COUNTY,  
7 and a scope and cost for this work will be provided. The assumption includes that yellow-billed cuckoo  
8 surveys would not be required and also that no work would occur within drainages where razorback  
9 sucker could occur and therefore no surveys would be required. If any work occurs within the water  
10 then razorback sucker surveys could be required which would be considered out of scope; as would  
11 any other focused surveys not specifically included in this scope of work.
- 12 • Hazardous material (Initial Site Assessment), geotechnical assessment, and any floodplain  
13 analyses/technical reports (Location Hydraulic Study and Summary Floodplain Encroachment Report  
14 etc.), if required.
- 15 • CADD files shall be provided in a known coordinate system or projection and attributes shall be  
16 provided on discrete layers so that this information can be utilized in GIS

17 **Assumptions**

- 18 • NEPA/404 integration process will not be required.
- 19 • No CDFW 2081 Incidental Take Permit is anticipated or included.
- 20 • No additional biological field surveys are included.
- 21 • The project is anticipated to be exempt from MSHCP compliance based on qualification as operation  
22 and maintenance.
- 23 • No right-of-way acquisitions would be needed.
- 24 • No paleontological evaluation will be required.
- 25 • It is assumed that all rights of entry and access for field work and surveys, if required, would be  
26 obtained and provided by COUNTY.
- 27 • No public meetings or hearings are assumed or included.

28 Preparation of the following technical reports if the preliminary evaluation shows they are necessary:

29 Hazardous Waste Study

1 Initial Site Assessment Checklist

2 Testing for Lead Based Paint (LBP) and Asbestos Containing Material (ACM)

3 Biological Resources

4 Wetlands Delineation and Assessment

5 Natural Environmental Study

6 Biological Assessment

7 Air Quality (Memorandum) to address Greenhouse Gas Emissions

8 **4.2.1 WATER QUALITY QUESTIONNAIRE**

9 CONSULTANT shall prepare one (1) CALTRANS Standard Scoping Questionnaire for Water Quality Issues  
10 (dated February 9, 2010) for the following bridges that involve ground disturbance and excavation in or near  
11 drainage washes:

- 12 • 56C0122
- 13 • 56C0121
- 14 • 56C0123
- 15 • 56C0454

16 CONSULTANT shall prepare a single CALTRANS' Standard Scoping Questionnaire for Water Quality  
17 Issues for the aforementioned bridge crossings based upon CALTRANS' standard template and  
18 requirements.

19 **4.2.2 JURISDICTIONAL DELINEATION**

20 For projects that may impact areas under the jurisdiction of the U.S. Army Corps of Engineers (USACE),  
21 Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW)  
22 a jurisdictional delineation is required utilizing resource agency standard delineation methods. It is assumed  
23 that only those five Category A bridges will require a field delineation. Because no, or minor, disturbance is  
24 expected at Category B and C bridges, a desktop delineation will be performed for those 17 features. A  
25 single Jurisdictional Delineation Report will be prepared to cover all of the bridges but each bridge will be  
26 mapped and segregated into each individual site in terms of the resources present. CONSULTANT shall  
27 delineate aquatic resources within the study area utilizing routine on-site methods for Category A bridges  
28 and routine off-site (i.e., desktop) methods for Category B and C bridges. A pedestrian-based field survey

1 of the Category A study areas will be conducted using sub-meter GPS accuracy to precisely delineate the  
2 boundaries of agency jurisdiction.

3  
4 The study area for the field and desktop surveys shall include the Category A through C project footprints  
5 plus a 100-foot buffer. For the delineation, CONSULTANT will utilize procedures and practices in the  
6 following publications and agency guidance documents: USACE Wetland Delineation Manual (1987);  
7 USACE Regional Supplement to the Wetland Delineation Manual, Arid West Region, Version 2.0 (2008);  
8 and USACE and Environmental Protection Agency's (EPA) Clean Water Act Jurisdiction Following the U.S.  
9 Supreme Court's Decision in *Rapanos v. United States & Carabell v. United States* guidance document  
10 (2007) as well as standard practices to delineate CDFW lake and stream resources and associated riparian  
11 vegetation.

12  
13 The field and desktop survey results shall be compiled and presented in a single Jurisdictional Delineation  
14 Report prepared for the Category A through C bridges that will identify and quantify the limits of USACE  
15 wetland and non-wetland waters of the U.S., RWQCB wetland and non-wetland waters of the State, CDFW  
16 stream features and associated riparian areas within the study area boundaries, where present. Desktop  
17 delineations will estimate the limits of jurisdiction to the extent feasible based on aerial imagery. It will also  
18 include figures and maps showing the location of potential jurisdictional resources and a photo log that  
19 documents site conditions of specific drainage features. The USACE ORM spreadsheets will be completed  
20 for up to eight features that were evaluated in the field for the Category A bridges sites. Impacts to  
21 jurisdictional features will not be included in this document but will be included in the NES.

#### 22 **4.2.3 NATURAL ENVIRONMENTAL STUDY (NES)**

23 CONSULTANT shall conduct a literature search and prepare a Natural Environmental Study (NES) report  
24 analyzing potential impacts to biological resources. A full NES is assumed as the projects have varied  
25 species involved including impacts to listed species or Critical Habitat, different species survey  
26 requirements, cover several different habitat types, have different levels of potential for jurisdictional  
27 impacts, and some are located in the Western Riverside (WR) Multiple Species Habitat Conservation Plan  
28 (MSHCP), some in the Coachella Valley (CV) MSHCP, and some are not located in an MSHCP. It is



1 assumed that the discussion within the NES for the Category B and C bridges will be minimal and the NES  
2 will focus on the Category A bridges.

3 The report shall include separate mapping and separate discussions for each individual resource  
4 associated with the Category A bridges. The report shall be prepared in accordance with CALTRANS SER  
5 guidance and shall conform to the CALTRANS NES annotated outline that is available at the time that the  
6 NES is initiated. The following tasks shall be performed during the preparation of the report.

7 Review of Project Information and Applicable Literature

8 A literature review shall be conducted to identify special-status species known or reported from the project  
9 area. The literature review shall include:

- 10 1) Special status species lists from the California Department of Fish and Wildlife (CDFW) and U.S. Fish  
11 and Wildlife Service (USFWS);
- 12 2) Database searches of current versions of the California Natural Diversity Database (CNDDDB) and the  
13 Online Inventory of the California Native Plant Society (CNPS);
- 14 3) The most recent applicable Federal Register listing package and critical habitat determination for each  
15 federally listed Endangered or Threatened species potentially occurring within the project site;
- 16 4) The most recent CDFW Annual Report on the status of California's listed Threatened and Endangered  
17 plants and animals; and
- 18 5) Applicable MSHCPs (Western Riverside and Coachella Valley)

19 Field Evaluation for Biological Resource Constraints

20 Following the literature review, a pedestrian-based biological survey of each of the Category A bridge study  
21 areas shall be conducted to observe, document, and evaluate the onsite conditions and determine the  
22 potential for occurrence of common and special-status biological resources, habitats, vegetation  
23 communities, and aquatic resources. Meandering transects shall be utilized to provide complete visual  
24 coverage of the study area for the Category A bridges. A cursory desktop review of the Category B and C  
25 bridge sites shall be conducted but it is assumed that no potential for biological impacts will be identified  
26 and that no further biological related field effort will be required. Biological field review at the Category B  
27 and C bridge sites will be limited to desktop habitat assessments for special status species with potential  
28 to occur. The field analysis and data collection for the Category A bridges shall identify the types and  
29 acreages of habitat/vegetation communities present, a list of plants and wildlife observed shall be compiled,

1 and special-status species observed shall be documented and those having the potential to occur within  
2 the study areas shall be determined. The literature review and field survey data shall be compiled and  
3 presented within a NES, which shall include the methods and results of desert tortoise protocol surveys  
4 and rare plant surveys within the NES.

5 Technical Report Preparation

6 A draft NES shall be developed based on results of the biological survey and analysis and will conform to  
7 the current Caltrans NES annotated outline, as previously described. The consistency determinations for  
8 the WRMSHCP and for the CVMSHCP shall be included as appendices within the NES. The report shall  
9 describe:

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

17 **4.2.4 BIOLOGICAL ASSESSMENT (STEP-2)**

18 The Federal Endangered Species Act (FESA) and California Endangered Species Act (CESA) provides for  
19 the conservation of threatened or endangered species and their habitats from activities that would  
20 negatively impact populations. CONSULTANT's initial review of the study area has determined that the  
21 project may affect threatened or endangered species (i.e., desert tortoise) and their designated Critical  
22 Habitat in areas outside of the WRMSHCP and CVMSHCP plan areas. CONSULTANT's biologist shall  
23 prepare a comprehensive Biological Assessment (BA) for the potential effects of the Project on federally  
24 threatened and endangered species. The BA will include results of focused surveys conducted within the  
25 project study area, which will determine the likely presence or absence of desert tortoise. The BA shall  
26 assist the USFWS in determining whether the Project will have no effect, may effect but not likely to  
27 adversely affect, or is likely to adversely affect listed special status species and critical habitat. New  
28 guidance from Caltrans has determined that all projects that may impact federally-listed species beyond a  
29 no effect determination require preparation of a BA. It is assumed that one single BA will be prepared for

1 the project that will cover bridges 56C0121, 56C0122, and 56C0123. If a no effect determination is  
2 determined to be appropriate then a BA should not be required.

3 **4.2.5 HISTORIC PROPERTY SURVEY REPORT (STEP-2)**

4 For the project all twenty-one bridges will be addressed in a single Historic Property Survey Report (HPSR).  
5 It is assumed that the Category C bridges will be briefly discussed and excluded from further review in the  
6 text of the HPSR. It is assumed that the Archaeological Survey Report (ASR) will just cover the Category  
7 A and Category B bridges in details, with a very brief discussion of the C bridges identifying that there will  
8 be no ground disturbance at these locations. A single Area of Potential Effect (APE) map will be prepared  
9 covering all projects but each bridge (Category A, B and C) will have an individual sheet (or sheets) within  
10 the APE map set.

11 CONSULTANT will conduct a records search at the Eastern Information Center of the California Historical  
12 Resources Information System (CHRIS). It is assumed that record searches will only be done for the  
13 Category A and Category B bridges where ground disturbance would occur. This records search will consult  
14 California's database of previous studies and previously recorded sites within the proposed project sites  
15 and within a 0.5 mile radius of each of the Category A and Category B bridge sites, per Caltrans guidelines.  
16 Historic maps and photographs shall also be reviewed, if available. CONSULTANT will develop an Area of  
17 Potential Effect (APE) map in consultation with COUNTY and CALTRANS for obtaining Caltrans approval.  
18 The map shall provide the survey boundaries for cultural resources to be evaluated during project studies  
19 for the Category A and Category B bridges. Category C work limits will be shown but no field work will be  
20 conducted at these locations since no ground disturbance is proposed. The APE map shall be based on  
21 the total anticipated disturbance footprint associated with project activities (e.g., proposed improvements,  
22 staging areas and other temporary construction easements, detours, drainage facilities, temporary  
23 construction activities, if any).

24 CONSULTANT will also contact the Native American Heritage Commission and request a review of the  
25 Sacred Lands File and will, as instructed by CALTRANS, contact Native American groups and other  
26 interested parties to request information regarding the types of potential cultural resources in the study  
27 area. Consultation will be conducted in accordance with appropriate current state and federal regulations.

28 It is assumed that all of the Category A and Category B bridges will be covered in a single letter to each  
29 Tribe and that individuals letters for each bridge will not be required. It is assumed that Assembly Bill 52

1 (AB 52) consultation will not be required since a CEQA Categorical Exemption is assumed for the project.  
2 Following completion of the record search/review, CONSULTANT will conduct a field survey of the APE for  
3 archaeological resources at the Category A and Category B bridges. This scope of work assumes that no  
4 archaeological sites will be identified in the APE and that no testing and/or evaluation will be required. It is  
5 anticipated that a single Archaeological Survey Report (Finding of No Archaeological Resources Present)  
6 covering the Category A and Category B bridges will be prepared and no additional documentation will be  
7 required. A single summary document (HPSR) shall be generated covering the entire Category A and  
8 Category B bridges in accordance with Caltrans/FHWA standards for Section 106 compliance with the  
9 NHPA. It is anticipated that the proposed project shall result in an HPSR with a finding that no properties  
10 requiring evaluation are present within the project's APE. Category C bridges will be shown to have no  
11 ground disturbance at these locations.

12 It is assumed that no built environment DPRs will be necessary, and none of the bridges are NRHR eligible.

13 It is also assumed that no Historical Resources Evaluation Report (HRER) or other effort beyond that  
14 specifically stated in this scope of work will be required. If CALTRANS requires an HRER to evaluate the  
15 railroads or any other built environment resources then a separate scope/fee would be provided to  
16 COUNTY for approval prior to conducting that work.

#### 17 **4.2.6 AIR QUALITY MEMORANDUM**

18 An Air Quality Memorandum shall be prepared to address construction period and greenhouse gas  
19 emissions for the COUNTY. It is assumed this memorandum will be for the COUNTY's use only and that  
20 CALTRANS will not require any air quality analysis or documentation. Since project improvements would  
21 occur in each of the three Riverside County air basins (South Coast, Salton Sea, and Mojave Desert),  
22 CONSULTANT shall evaluate each project element consistent with the air district requirements applicable  
23 to each project element location. Criteria pollutant, GHG and toxic air contaminant (TAC) emissions shall  
24 be quantified and assessed for localized and regional significance. Project emissions shall be evaluated for  
25 consistency with all applicable air quality management plans and state GHG emissions reduction strategies.  
26 The project's exemption from the requirement to demonstrate transportation conformity under the federal  
27 Clean Air Act shall also be demonstrated as part of the analysis.

28

1 Findings shall be presented in a technical memorandum format that addresses each of the CEQA  
2 Guidelines Appendix G items for Air Quality and Greenhouse Gas Emissions. Figures and emissions  
3 modeling outputs will be included as attachments to the technical memorandum. It is assumed that all of  
4 the bridges will be addressed in a single memorandum. CONSULTANT will provide input data in terms of  
5 construction equipment, duration, etc. if they are required.

6 **4.2.7 NEPA CE**

7 Based on the environmental technical studies previously discussed a Categorical Exclusion (CE) shall be  
8 prepared pursuant to NEPA. CONSULTANT shall prepare the CE/CE form (NEPA portion only) in  
9 compliance with the latest format identified on Caltrans Standard Environmental Reference website. In  
10 addition, the Categorical Exclusion Checklist shall be prepared. As part of the CE a detailed project  
11 description shall be included. The CE shall also include a very brief (two to three sentence) summary of the  
12 findings of each of the technical studies. No separate environmental document is assumed to be prepared  
13 to support the CE and none is included in this scope and cost. For the project an environmental  
14 commitments record (ECR) shall be prepared in a matrix table format following the current Caltrans format  
15 and attached to the NEPA CE.

16 **PHASE II – PLANS, SPECIFICATIONS AND ESTIMATES**

17 **5.1 FOUNDATION DESIGN REPORT**

18 CONSULTANT shall perform field investigation and laboratory testing to provide site-specific geotechnical  
19 data and recommendation for column replacement or addition of supplemental columns in the wash at the  
20 two proposed timber bridges (Bridge No. 56C0122 and 56C0123) on Ragsdale Road near the Desert  
21 Center.

22 Geotechnical Work Plan: Prior to begin field explorations, CONSULTANT shall prepare a geotechnical work  
23 plan for review and approval by COUNTY. The field program shall be carefully planned and coordinated  
24 with COUNTY to maintain proper safety precautions.

25 Field Investigation: The field work generally shall be performed in accordance with CALTRANS and  
26 COUNTY requirements. The field program would consist of drilling borings and advancing Cone Penetration  
27 Test (CPT) soundings. Borings or CPTs planned for bridge rehabilitation shall be drilled down to at least 20  
28 feet below anticipated pile tip elevation, or to refusal, whichever occurs first. Relatively undisturbed,  
29 Standard Penetration Test (SPT), and bulk samples of representative subsurface materials shall be

1 obtained at appropriate depth intervals. Borings shall be backfilled following COUNTY's guidelines.

2 Laboratory Testing: The laboratory testing program shall be aimed at evaluating the physical, geotechnical,  
3 and chemical (corrosion) properties of the site materials. For planning purposes, the following types of tests  
4 have been considered:

- 5 • Moisture content and dry density
- 6 • Grain size distribution and percent passing No. 200 sieve
- 7 • Atterberg Limits
- 8 • Consolidation
- 9 • Direct Shear
- 10 • Corrosivity (pH, sulfate, chloride, minimum resistivity)

11 Foundation Report: Utilizing the data obtained in the subsurface investigation, CONSULTANT shall prepare  
12 a Foundation Report (FR) for bridges in accordance with COUNTY and CALTRANS guidelines. The FR  
13 shall provide the following:

- 14 • Introduction, project description, scope of work
- 15 • Results of field and laboratory investigation
- 16 • Site geology, subsurface conditions, groundwater, geologic hazards
- 17 • Impact of scour on foundations (scour study by the hydraulic engineer)
- 18 • Corrosion evaluation
- 19 • Seismic recommendations including fault rupture, ground motions, ARS Curve, liquefaction,  
20 seismic settlement, and slope stability
- 21 • Deep foundation recommendations including pile type, size, axial and lateral capacities, design and  
22 specified tip elevations (in accordance with CALTRANS Memo to Designers 3-1), pile installation  
23 and acceptance criteria
- 24 • Log of Test Borings (LOTB)
- 25 • Construction considerations such as groundwater/seepage, temporary excavation and shoring, pile  
26 cut-off, caving, presence of cobbles/boulders, impacts of construction on adjacent structures
- 27 • Response to one set of comments and submittal of a Final FR

28 **Deliverable(s):** *Foundation Design Report*

1 **5.2 HAZARDOUS MATERIALS SURVEYS**

2 CONSULTANT shall perform asbestos surveys at the three bridge locations (Bridge No. 56C0122,  
3 56C0121, and 56C0123) on Ragsdale Road near the Desert Center in accordance with the local, State and  
4 Federal standards. The survey shall include a visual inspection and the collection and analysis of bulk  
5 samples from suspected asbestos containing materials (ACMs). Samples shall be analyzed by Polarized  
6 Light Microscopy (PLM) and the materials determined to be ACMs shall be quantified.

7 CONSULTANT shall also assess the concentrations of chromium and lead present in paint and/or  
8 thermoplastic striping (PTS) present on seventeen (17) bridges (Bridge No. 56C0586, 56C0455,  
9 56C0448L, 56C0587, 56C0448R, 56C0052, 56C0155, 56C0341, 56C0244, 56C0526, 56C0196, 56C0578,  
10 56C0522, 56C0451, 56C0582, and 56C0584). CONSULTANT proposes to collect one sample of yellow  
11 striping for analysis per bridge. Samples that are sent to the laboratory shall be analyzed for chromium and  
12 lead using the EPA Method 6010B. Samples with total lead concentrations in excess of 50 mg/kg shall be  
13 analyzed for soluble lead using the WET. Samples with total lead concentrations in excess of 100 mg/kg  
14 shall be analyzed for soluble lead using the Toxic Characteristic Leaching Procedure (TCLP).

15 After the data has been gathered, it shall be evaluated for technical accuracy and uncertainty (data  
16 validation). One Hazardous Materials Survey letter report shall be prepared to summarize the survey  
17 findings. The report shall include a figure showing the sample collection locations and a summary table that  
18 provides the laboratory analytical results. The report shall include recommendations for management of  
19 hazardous materials.

20 **Deliverable(s):** Hazardous Materials Surveys Report

21 **5.3 65% CIVIL ROADWAY PLANS**

22 Signing & Striping Plans

23 Signing and striping plans shall be prepared, showing the replacement of affected construction area and  
24 all affected traffic stripes for fifteen (15) bridges that receive high molecular weight methacrylate (HMWM)  
25 seal or a polyester concrete overlay on the bridge deck. The plans shall show the location of all proposed  
26 traffic stripes, markings, and the proper disposition of all affected existing signs and markings in accordance  
27 with California Manual on Uniform Traffic Control Devices (MUTCD). Traffic signs that are damaged or  
28 signs that are no longer in compliance within the project sites may be replaced. The final signing and striping  
29 plans shall be prepared on sheets at 1" = 40', as appropriate. One striping plan sheet is envisioned for up

1 to two bridge layouts.

2 Temporary ESA Fence Plans

3 Construction for structural rehabilitation work at the Bridges No. 56C0122, 56C0121, and 56C0123 on  
4 Ragsdale Road near Desert Center may require installation of a temporary Endangered Species Act (ESA)  
5 Fence as part of environmental mitigation for potential presence of Desert Tortoise. The temporary ESA  
6 Fence Plan in 1"=40' scale plan view drawing showing the existing topography, the limits of proposed  
7 earthwork, temporary and permanent construction improvements, and roadway stationing shall be  
8 prepared. The Plan shall identify the type of fence and show the precise location of the Temporary Fence  
9 using street stations and offsets based on environmental study boundary recommendations. If appropriate,  
10 the plans shall identify areas of environmental sensitivity.

11 Traffic Control Plans

12 Contract long-term traffic control plans are not expected for the proposed structural rehabilitation work.  
13 However, special provisions shall be prepared to address the requirements of preparation of temporary  
14 traffic control plans by the contractor in accordance with CA MUTCD.

15 **Deliverable(s):** 65% Signing and Striping Plans), Temporary ESA Fence Plans, Traffic Control Plans  
16 Special Provisions

17 **5.4 95% CIVIL ROADWAY PS&E**

18 Comments from COUNTY for the 65% civil roadway design submittal shall be reviewed and resolved. If  
19 needed, a meeting with the COUNTY shall be held to seek clarification on comments. CONSULTANT shall  
20 incorporate these comments into the 95% PS&E. CONSULTANT shall use Microsoft Word to prepare and  
21 edit CALTRANS 2018 Standard Special Provisions (SSP) for Civil Roadway work at this submittal. Quantity  
22 calculation and construction cost estimates in Microsoft Excel format with a contingency directed by  
23 COUNTY shall be prepared. At the 95% completion level, the PS&E is considered substantially complete  
24 and ready for bid.

25 **Deliverable(s):** 95% Civil Roadway Plans, Edited CALTRANS Standard Special Provisions, Quantities  
26 and Cost Estimates

27 **5.5 65% UNCHECKED STRUCTURE PLANS**

28 Engineering conclusions for the preferred structural rehabilitation alternative identified in the Advance  
29 Bridge Planning Study shall be carried into the final design phase. The final bridge design shall be based



1 on CALTRANS-amended AASHTO LRFD Bridge Design Specifications and various CALTRANS Bridge  
2 Design and Detail Manuals.

3 ***Deliverable(s):*** *65% Unchecked Structure Plans and General plans for several small bridges with*  
4 *nominal rehabilitation work may be combined and fitted in a single plan sheet.*

5 **5.6 BRIDGE DESIGN INDEPENDENT CHECK**

6 The 65% unchecked bridge plans shall be independently checked by a separate licensed bridge engineer,  
7 who has not been involved in the project. A separate set of structural design check calculations including  
8 quantity calculations shall be prepared in accordance with CALTRANS bridge design practice. The  
9 independent checker shall review the plans for completeness, consistency, correctness of references. The  
10 bridge designer shall revise the design and plans to mitigate checker's review comments. The checker  
11 shall perform back check to concur that the comments have been adequately addressed. All comments  
12 and responses shall be documented in the project files.

13 ***Deliverable(s):*** *Bridge Design and Quantity Independent Check Calculations and Comment /*  
14 *Response Matrix*

15 **5.7 95% STRUCTURE PS&E**

16 Response to all agencies' review comments for the 65% structure submittal shall be prepared and included  
17 in this submittal. CONSULTANT shall use Microsoft Word to prepare and edit CALTRANS 2015 Standard  
18 Special Provisions (SSP) for structural work at this submittal. The design team shall prepare a list of  
19 CALTRANS standard bridge pay items for bridge construction. Design quantity calculations shall be  
20 performed using standard CALTRANS and COUNTY forms and cost estimate summary sheets. Item unit  
21 prices shall be adjusted using Contract Cost Data Book published by CALTRANS. The plans shall be  
22 updated per independent checker's comments.

23 ***Deliverable(s):*** *95% Structure Plans, Edited CALTRANS Standard Special Provisions, Bridge Design*  
24 *and Independent Check Calculations, Quantities and Cost Estimates*

25 **5.8 FINAL 100% DESIGN PS&E AND CONTRACT BID DOCUMENTS**

26 CONSULTANT shall incorporate the COUNTY's review comments of the 95% Roadway and Structure  
27 PS&E, and compile and submit final bridge and roadway PS&E packages per COUNTY requirements. The  
28 final plans are to be plotted on "Arch D" size Mylar. CONSULTANT shall prepare the notice inviting bids  
29 and technical specifications by utilizing the COUNTY's Boiler Plate documents. In the specifications, each

1 item of work shall include a method of measurement and payment. Specification documents, including  
2 technical specifications, shall be provided on compact disc in Microsoft Word format as well as in PDF. The  
3 Engineer's estimate shall be provided in Microsoft Excel format as well as in PDF.

4 The Final PS&E shall include organized Resident Engineer (RE) Pending File, which contains construction  
5 related documents and information through the various project development phases for structure and  
6 roadway work. The RE Pending File shall include as-built plans, geotechnical reports, and special  
7 instructions for the field Resident Engineer, Structure Representatives, and COUNTY Inspectors.

8 **Deliverable(s):** *Final Signed Plans, Specifications and Estimates, and RE Pending Files*

9 **5.9 PRELIMINARY STORMWATER POLLUTION PREVENTION PLAN (P-SWPPP)**

10 CONSULTANT shall prepare Preliminary Stormwater Pollution Prevention Plan (P-SWPPP) for the  
11 following bridges that involve ground disturbance and excavation in or near drainage washes:

- 12 • 56C0122
- 13 • 56C0121
- 14 • 56C0123
- 15 • 56C0454

16 CONSULTANT shall prepare a single Preliminary Stormwater Pollution Prevention Plan (P-SWPPP) for the  
17 aforementioned bridge crossings based upon the Regional Water Quality Control Board (RWQCB)  
18 requirements. The SWPPPs shall be prepared using the CASQA Template and shall be signed by a  
19 Qualified SWPPP Developer (QSD). This scope will include electronic on-line submittal of the NOI  
20 application and P-SWPPP to SMARTS system.

21 **Deliverable(s):** *Preliminary Stormwater Pollution Prevention Plan*

22 **5.10 RIGHT-OF-WAY LEGAL DESCRIPTIONS AND PLATS (BY COUNTY IF REQUIRED)**

23 **5.11 RIGHT-OF-WAY APPRAISAL AND ACQUISITION (BY COUNTY IF REQUIRED)**

24 **6.0 PERMITTING**

25 The project includes aquatic resources that will be impacted, and as a result, Clean Water Act (CWA)  
26 Section 401 and Section 404, and California Fish and Game Code (CFGF) 1602 (*et seq.*) permits are  
27 required for some bridges. It is assumed that permits would be required at the five Category A bridges only.

28 The tasks associated with obtaining these permits are outlined below and include tasks for preparation of  
29 applications and agency coordination. For the permits it is assumed that the five Category A bridges will be

1 permitted together with the impacts aggregated since the project is under a single federal aid project  
2 number.

3 USACE 404 Permit

4 Based on a preliminary review of the project, it appears that the project could potentially be processed  
5 under the USACE Nationwide Permit (NWP) Program and this is assumed. Based on our review, this  
6 approach is expected to involve authorization under NWP 14 (Linear Transportation Projects). A NWP 14  
7 may be issued for the proposed project if permanent impacts to waters of the United States are less than  
8 0.5 acre and the proposed project meets the USACE General and Regional NWP Conditions. There is no  
9 limitation for temporary impacts.

10 A written request for authorization under the NWP Program shall be prepared for review and submittal to  
11 the USACE. A request for an NWP generally includes the following elements:

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

23 SWRCB Section 401 Water Quality Certification Application

24 Written request for a Section 401 water quality certification will be prepared and submitted to the appropriate  
25 Reginal Water Resources Control Boards (RWRCB) for review. The request shall include a completed  
26 application form, detailed project description, description of project impacts, water quality plan identifying  
27 project-specific best management practices (provided by CONSULTANT), CEQA documentation, and a  
28 brief description of proposed mitigation.

1 An application fee must be provided to the RWRCB as part of the permit applications. This fee is calculated  
2 based upon the extent of project-related impacts in acres or linear feet and will be assessed during  
3 preparation of the notification. It is assumed that COUNTY will pay this fee directly to the appropriate  
4 RWRCB.

5 CDFW 1602 Streambed Alteration Agreement Notification

6 A Lake or Streambed Alteration notification shall be prepared and submitted to CDFW for review. The  
7 request shall include a completed notification form, detailed project description, description of project  
8 impacts, CEQA documentation, and a brief description of proposed mitigation.

9 A processing fee must be provided to CDFW with the notification. This fee is based on the cost of the project  
10 and will be assessed during preparation of the notification. It is assumed that COUNTY will pay this fee  
11 directly to CDFW.

12 Coordination of Processing

13 The resource agency notifications shall be coordinated with USACE, SWRCB, and CDFW throughout  
14 processing to ensure that any potential issues are made known to the project team and resolved at the  
15 earliest possible opportunity. Coordination may include telephone, e-mail, or written correspondence

16 Permitting Assumptions

- 17
- 18 • Impact footprints including access routes will be provided by the CONSULTANT for each site and cubic  
yards for all cut and fill work proposed within aquatic resources will also be provided.
  - 19 • This scope assumes the five Category A bridges will be permitted as one package; separate permitting  
20 packages are not included.
  - 21 • Permit applications for each agency (i.e., USACE, SWRCB, and CDFW) will be developed with all  
22 Category A sites having impacts to jurisdictional waters combined.
  - 23 • It is anticipated that the Project will qualify for a USACE Nationwide Permit due to its limited potential  
24 impact of permanent losses to jurisdictional waters and compliance with all USACE General and  
25 Regional NWP Conditions. If permanent losses to jurisdictional waters exceed the limits of applicable  
26 Nationwide Permit thresholds or the project does not meet the NWP Conditions, then the Project may  
27 require an Individual Permit with a 404(b)(1) Alternatives Analysis, which is not included in this scope  
28 and cost.

- 1 • A conceptual mitigation plan will be developed based on preliminary research on available banks and  
2 options, as well as site-specific conditions such as watershed and site and resource conditions. Based  
3 on the locations of the five Category A project sites, it is assumed that up to three preliminary mitigation  
4 suggestions will be developed.
- 5 • Preparation of a compensatory mitigation plan for Project impacts to aquatic resources is not included.
- 6 • No on- or off-site Habitat Mitigation Monitoring Plan is included in this scope for impacts to aquatic  
7 resources.
- 8 • No permit application fees or mitigation costs are included.
- 9 • Jurisdiction of the Category A bridges will be assumed; A formal Preliminary Jurisdictional  
10 Determination will not be sought for these drainages and no Approved Jurisdictional Determination is  
11 included. If any of the Category A bridge features are thought to not be federally jurisdictional following  
12 the delineation and an Approved Jurisdictional Determination is determined to be a cost-saving  
13 approach (to conclusively determine features are not jurisdictional), then a separate scope and fee will  
14 be prepared for the AJD as well as the Waste Discharge Requirements (WDR) from the State Board.
- 15 • This scope does not include a water diversion plan for impacts to jurisdictional waters.

16  
17 **PHASE III – CONSTRUCTION BIDDING AND AWARD SUPPORTS**

18 **7.1 ATTEND A PRE-BID MEETING**

19 CONSULTANT shall remain available to attend a pre-bid meeting to be scheduled in advance of the bid  
20 opening date.

21 **7.2 BIDDING INTERPRETATIONS, BID REVIEW AND ANALYSIS**

22 CONSULTANT shall answer bidders' questions regarding the contract bid documents, and prepare bid  
23 addenda if required. CONSULTANT shall perform bid review and analysis, if required.

24 **PHASE IV – DESIGN CONSTRUCTION SUPPORTS**

25 **7.3 ATTEND A PRE-CONSTRUCTION MEETING AND SITE MEETINGS**

26 CONSULTANT shall attend a pre-construction meeting as directed by COUNTY. CONSULTANT shall  
27 perform site visits during the construction as requested by COUNTY.

28 **7.4 ADMINISTRATION, RESPOND CONTRACTOR'S RFI'S AND REVIEW SHOP DRAWINGS /**  
29 **SUBMITTALS**

*Bridge Preventative Maintenance Work*

1 CONSULTANT shall review shop drawings and submittals for conformance with the contract plans and  
2 specifications, and make recommendations for acceptance, denial or re-submittal within reasonable time  
3 of receipt.

4 CONSULTANT shall provide response to contractor's requests for information (RFI's) about the contract  
5 plans and specifications forwarded to the design team by COUNTY within reasonable time of receipt.

6 **7.5 PREPARE CONSTRUCTION CHANGE ORDERS**

7 Upon written authorization from COUNTY, CONSULTANT shall provide engineering design services for  
8 revisions to construction documents resulting from changed field or unforeseen conditions or other change  
9 order work required due to actions of COUNTY. Subsequent change order documentation and processing  
10 shall be prepared by COUNTY's Resident Engineer.

11 **7.6 PREPARE AS-BUILT PLANS**

12 Following the completion and acceptance of the project, CONSULTANT shall furnish COUNTY with a  
13 complete set of revised contract drawings showing as-built conditions. Revisions shall be solely based on  
14 as-built redlined information provided by COUNTY. The as-built plans shall be delivered to COUNTY within  
15 one month of receipt of redlined plans.  
16

**ATTACHMENT B • SCHEDULE OF SERVICES**

**ARTICLE BI • INTRODUCTION**

The Engineer shall perform the covenants set forth in Attachment A, Scope of Services in accordance with the performance requirements of Article IV: Performance Period of this contract and with the following additional Performance Requirements. Time is of the essence in this contract.

**ARTICLE BII • PERFORMANCE REQUIREMENTS**

**A. PHASES**

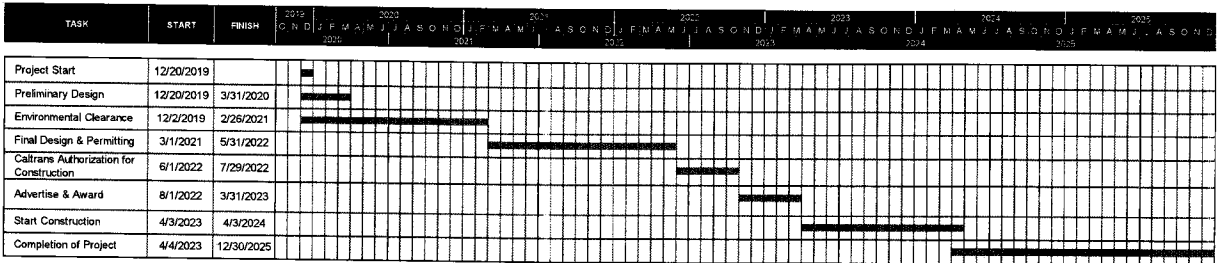
This contract is divided into the following [4] milestones/phases:

- I. Preliminary Engineering and Environmental
- II. Plans, Specifications & Estimates
- III. Bid Support
- IV. Construction Support

**B. SCHEDULE OF SERVICES • GANTT CHART**

The chart provided below graphically illustrates the sequencing and completion time for the project.

**PROJECT SCHEDULES**



**C. SUBMITTALS**

Where CONSULTANT is required to prepare and submit studies, reports, plans, etc., to COUNTY, these shall be submitted in draft as scheduled, and the opportunity provided for COUNTY and AGENCIES to offer comments prior to final submission.

**D. TIME EXTENSIONS**

- 1. Any delay in providing services required by this contract occasioned by causes beyond the control and not due to the fault or negligence of CONSULTANT, shall be the reason for granting an extension of time for the completion of the aforesaid work. When such delay occurs, CONSULTANT shall promptly notify COUNTY in writing of the cause and of the extent of the delay whereupon COUNTY shall ascertain the

*Bridge Preventative Maintenance Program*

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facts and the extent of the delay and grant an extension of time for the completion of the work when, in COUNTY's judgment, their findings of fact justify such an extension of time.

2. COUNTY's findings of fact shall be final and conclusive to the parties hereto. However, this is not intended to deny CONSULTANT of any available civil legal remedies in the event of a dispute



**ATTACHMENT C • COMPENSATION PLAN**

**ARTICLE CI • INTRODUCTION**

Satisfactory performance and completion of the Services under this Agreement shall be compensated based upon actual costs plus a fixed fee in accordance with "ARTICLE V ALLOWABLE COSTS AND PAYMENTS" and "ARTICLE VII COST PRINCIPLES AND ADMINISTRATIVE REQUIREMENTS" of this Agreement. COUNTY will reimburse CONSULTANT for actual costs (including labor costs, overhead, and other direct costs) incurred by CONSULTANT in performance of the work, exclusive of any fixed fee. A prorata portion of CONSULTANT's fixed fee shall be included in the progress payments. Actual costs shall not exceed the total estimated costs without prior written agreement between COUNTY and CONSULTANT.

**ARTICLE CII • ELEMENTS OF COMPENSATION**

Compensation for the services provided will be comprised of the following elements: DIRECT LABOR COSTS, FEES, OTHER DIRECT COSTS and OUTSIDE SERVICES.

**A. DIRECT LABOR COSTS**

Direct Labor costs shall be paid in an amount equal to the Direct Salary Costs plus the product of the Direct Salary Costs and the Multiplier which are defined as follows:

**1. Direct Salary Costs**

Direct Salary Costs are the base salaries and wages actually paid to the CONSULTANT's personnel directly engaged in performance of the Services under the Agreement. Salary rates for specific employees shall be provided on the Cost Proposal Worksheets included in ARTICLE CVI • COST PROPOSAL. All Salary rates shall be in effect for three years following the effective date of the Agreement. Thereafter, CONSULTANT may request adjustments to individual rates on an annual basis. CONSULTANT shall notify COUNTY in writing requesting a change in the rates included herein. All adjustments to rates shall be subject to approval by the County Director of Transportation, or his designee.

**2. Multiplier**

The Multiplier to be applied to the Direct Salary Costs to determine the Direct Labor Costs is the sum of the following components:

PAYROLL ADDITIVES..... 58.39%

The decimal ratio of Payroll Additives to Direct Salary Costs. Payroll Additives include all employee benefits, allowances for vacation, sick leave, and holidays, and company portion of employee insurance and social

and retirement benefits, all federal and state payroll taxes, premiums for insurance which are measured by payroll costs, and other contributions and benefits imposed by applicable laws and regulations.

OVERHEAD COSTS..... 106.21%

The decimal ratio of allowable Overhead Costs to CONSULTANT firm's total direct salary costs. Allowable Overhead Costs include general, administrative and overhead costs of maintaining and operating established offices, and consistent with established firm policies, and as defined in the Federal Acquisitions Regulations, Part 31.2.

TOTAL MULTIPLIER ..... 164.60%

(sum of Payroll Additives and Overhead Costs)

**B. FIXED FEE**

1. The Total Fixed Fee payable to the CONSULTANT is \$36,912.63 (PRIME CONSULTANT Profit)
2. A pro-rata share of the Fixed Fee shall be applied to the total Direct Labor Costs expended for services each month and shall be included on each monthly invoice.

**C. OTHER DIRECT EXPENSES**

Additional Direct Costs, directly identifiable to the performance of the services of this Agreement, shall be reimbursed at the rates below, or at actual cost.

Rates for identified Additional Direct Costs are as follows:

Item	Rate	Unit
Travel-Mileage	\$0.580	580
Parking	\$80.00	(Actual Cost)
Reproduction	\$1,992.00	(Actual Cost of Outside Services)
Shipping	\$274.00	(Actual Cost of Outside Services)
Utility Potholing	\$9,000.00	(Actual Cost of Outside Services)

**D. OUTSIDE SERVICES**

Outside services shall be paid in accordance with the cost proposals approved for each Subconsultant. Billings for Outside Services shall be submitted along with the Prime Consultant's monthly progress billing submittals and shall be in conformance with the COUNTY Consulting Services Manual invoicing procedures.

**ARTICLE CIII • DIRECT SALARY RATES**

Direct Salary Rates, which are the range of hourly rates to be used in determining Direct Salary Costs, are given

below and are subject to the following:

**A. PREMIUM OVERTIME**

Direct Salary Rates shall be applicable to both straight time and overtime work, unless payment of a premium for overtime work is required by law, regulation or craft agreement, or is otherwise specified in this Agreement. In such event, the premium portion of Direct Salary Costs will not be subject to the Multiplier.

**B. SALARY RATES**

CONSULTANT shall notify COUNTY in writing requesting a change in the rates included herein. All adjustments to rates shall be subject to approval by the COUNTY Director of Transportation, or his designee.

**POSITION OR CLASSIFICATION MAXIMUM HOURLY RATES**

[example would be to add a % multiplier to the rates provided in the fee calculations]

Principal in Charge	\$98.0	hour
Senior Project Manager	\$98.0	hour
Project Manager/Principal Engineer	\$85.0	hour
Senior Roadway Engineer	\$69.0	hour
Senior Structures Engineer	\$69.0	hour
Project Engineer	\$58.0	hour
Design Engineer III	\$49.0	hour
Design Engineer II	\$43.0	hour
Design Engineer I	\$38.0	hour
Assistant Design Engineer	\$35.0	hour
Engineering interim	\$23.0	hour
Senior CADD Technician	\$45.0	hour
CADD technician	\$35.0	hour
Project Controller	\$65.0	hour

The above rates are for CONSULTANT only. All rates for subconsultants to CONSULTANT will be in accordance with the subconsultants approved cost proposal.

**C. MINIMUM RATES**

The minimum allowable wage rates are subject to "ARTICLE XII STATE PREVAILING WAGE RATES" of this Agreement and to Federal "Payment of Predetermined Minimum Wage" requirements as outlined below. The

1 Federal requirements are only applicable if the services are being paid for in whole or in part with federal-aid  
2 funding.

3 The Federal minimum wage rates for this project as determined by the United States Secretary of Labor are  
4 available from the U.S Department of Labor, Employment Standards Administration, Wage and Hour Division.  
5 If there is a difference between the minimum wage rates determined by the Secretary of Labor and the general  
6 prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar  
7 classifications of labor, the CONSULTANT and subcontractors shall pay not less than the higher wage rate.  
8 The Department will not accept lower State wage rates determinations. This includes "helper" (or other  
9 classifications based on hours of experience) or any other classification not appearing in the Federal wage  
10 determinations. Where Federal wage determinations do not contain the State wage rate determination  
11 otherwise available for use by the CONSULTANT and subcontractors, the CONSULTANT and subcontractors  
12 shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the  
13 employees in question.

14 **ARTICLE CIV • INVOICING**

15 CONSULTANT shall submit invoices in accordance with the "ARTICLE V • ALLOWABLE COSTS AND  
16 PAYMENTS" of this Agreement, the COUNTY's Consulting Services Manual and with the following  
17 requirements.

- 18 1. Charges shall be billed in accordance with the terms and rates included herein, unless otherwise agreed  
19 in writing by the County Contract Administrator.
- 20 2. Base Work and Extra Work shall be charged separately, and the charges for each Phase listed in  
21 Appendix B, Schedule of Services, shall be listed separately. The charges for each individual assigned  
22 under this Agreement shall be listed separately.
- 23 3. Each invoice shall bear a certification signed by the CONSULTANT's Project Manager or an officer of  
24 the firm which reads as follows:

25 I hereby certify that the hours and salary rates charged in this invoice are the actual hours and  
26 rates worked and paid to the employees listed.

27 **ARTICLE CV • PAYMENT**

28 Progress payments shall be made in accordance with ARTICLE V • ALLOWABLE COSTS AND PAYMENTS" of  
29 this Agreement.

**ARTICLE CVI • COST PROPOSAL**

The following cost proposal worksheets reflect the negotiated targeted contract amounts. The cost proposal will serve as a guideline and reference document during the execution of this contract. The total amount of the contract is not to exceed \$879,000.04. Reimbursement is to be made at actual cost plus fixed fee, however, billing shall not exceed the rates provided in Section B above. In the event a contingency budget is provided, COUNTY shall hold such contingency in reserve for unforeseen Extra Work that may arise during the performance of this agreement. Contingency budget shall only be used at the discretion of the COUNTY's Contract Administrator, and with prior written authorization by the COUNTY's Contract Administrator in the form of an Administrative Budget Modification as required by the COUNTY's Consulting Services Manual. Contingency budgets are not allowed for services that are paid in whole or in part with federal-aid funding.

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# Engineering and Environmental Services

## Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMPL-5956(224) Fee Proposal Summary

October 18, 2019

COMPANIES	PHASE I	PHASE II	PHASE III	PHASE IV	TOTAL
CNS Engineers, Inc. (Prime Consultant) Prime	\$ 97,867.91	\$ 297,683.20	\$ 2,000.45	\$ 20,413.32	\$ 417,964.88
ICF Jones & Stokes Environmental	\$ 240,855.20	\$ 78,214.96			\$ 319,070.16
Group Delta Consultants Geotechnical and ISA	\$ 43,816.62	\$ 35,696.38			\$ 79,513.00
Aguilar Consulting, Inc. (ACI) Channel Hydraulics & Wafer Quality	\$ 37,920.37	\$ 24,531.64			\$ 62,452.01
<b>TOTAL</b>	<b>\$ 420,460.10</b>	<b>\$ 436,126.17</b>	<b>\$ 2,000.45</b>	<b>\$ 20,413.32</b>	<b>\$ 879,000.04</b>

- Phase I Preliminary Engineering & Environmental Clearance
- Phase II Plans, Specifications & Estimate (PS&E)
- Phase III Construction Bidding and Award Supports
- Phase IV Design Construction Supports

FEE PROPOSAL WORKSHEET		
COMPANY: CNS Engineers, Inc. (Prime Consultant)	SCOPE OF WORK: Project Summary	PHASE: All Phases
PROJECT: Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BP MPL -5956(224)		DATE: October 18, 2019

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
James J. Lu *	Senior Project Manager	339	@	\$89.50	\$30,340.50
Quy et T. Nguyen	Senior Bridge Engineer	570	@	\$60.50	\$34,485.00
Steve Hosford	Senior Roadway Engineer	242	@	\$59.50	\$14,399.00
Justin Nguyen	Design Engineer III	372	@	\$43.50	\$16,182.00
Teng Ge	Design Engineer I	220	@	\$37.05	\$8,151.00
Nan Li	Senior CADD Technician	762	@	\$38.50	\$29,337.00
Hui-Min Huang	Project Controller	20	@	\$58.50	\$1,170.00

\* Key Personnel, \*\* Employees subject to prevailing wages

TOTAL HOURS **2,525** TOTAL DIRECT LABOR **\$134,064.50**

**MULTIPLIERS**

ESCALATION @	4.057%	(of Direct Labor)	\$5,439.00
FRINGE BENEFIT @	58.39%	(of Direct Labor + Escalation)	\$81,456.09
GENERAL AND ADMINISTRATIVE OVERHEAD @	106.21%	(of Direct Labor + Escalation)	\$148,166.66
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead)	\$36,912.63
TOTAL MULTIPLIERS			<b>\$271,974.38</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction	1	LS	@ \$1,992.00	\$1,992.00
Mailing and Special Delivery	1	LS	@ \$274.00	\$274.00
Mileage and Travel	1	LS	@ \$660.00	\$660.00
Utility Potholing	1	LS	@ \$9,000.00	\$9,000.00

TOTAL ODC'S **\$11,926.00**

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL
ICF Jones & Stokes	\$97,346.74	\$205,097.42	\$16,626.00	\$319,070.16
Group Delta Consultants	\$17,155.24	\$29,583.76	\$32,774.00	\$79,513.00
Aguilar Consulting, Inc. (ACI)	\$24,590.88	\$36,731.93	\$1,129.20	\$62,452.01

TOTAL SUBCONSULTANT SERVICES **\$461,035.16**

**TOTAL \$879,000.04**

**EXHIBIT 10-H COST PROPOSAL**  
**ACTUAL COST-PLUS-FIXED FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS**  
**(CALCULATIONS FOR ANTICIPATED SALARY INCREASES)**

Consultant CNS Engineers, Inc. Contract No. \_\_\_\_\_ Date 9/15/2019

**1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)**

Direct Labor <u>Subtotal</u> per Cost Proposal	Total Hours per Cost Proposal	=	Avg Hourly Rate	5 Year Contract Duration
\$134,064.50	2525	=	\$53.09	Year 1 Avg Hourly Rate

**2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)**

	Avg Hourly Rate		Proposed Escalation		
Year 1	\$53.09	+	3.0%	=	\$54.69 Year 2 Avg Hourly Rate
Year 2	\$54.69	+	3.0%	=	\$56.33 Year 3 Avg Hourly Rate
Year 3	\$56.33	+	3.0%	=	\$58.02 Year 4 Avg Hourly Rate
Year 4	\$58.02	+	3.0%	=	\$59.76 Year 5 Avg Hourly Rate

**3. Calculate estimated hours per year (Multiply estimate % each year by total hours)**

	Estimated % Completed Each Year	*	Total Hours per Cost Proposal	=	Total Hours per Year	
Year 1	25.00%	*	2525.0	=	631.3	Estimated Hours Year 1
Year 2	30.00%	*	2525.0	=	757.5	Estimated Hours Year 2
Year 3	35.00%	*	2525.0	=	883.8	Estimated Hours Year 3
Year 4	7.00%	*	2525.0	=	176.8	Estimated Hours Year 4
Year 5	3.00%	*	2525.0	=	75.8	Estimated Hours Year 5
Total	100%		Total	=	2525.0	

**4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)**

	Avg Hourly Rate (calculated above)	*	Estimated hours (calculated above)	=	Cost per Year	
Year 1	\$53.09	*	631	=	\$33,516.13	Estimated Hours Year 1
Year 2	\$54.69	*	758	=	\$41,425.93	Estimated Hours Year 2
Year 3	\$56.33	*	884	=	\$49,780.16	Estimated Hours Year 3
Year 4	\$58.02	*	177	=	\$10,254.71	Estimated Hours Year 4
Year 5	\$59.76	*	76	=	\$4,526.72	Estimated Hours Year 5
	Total Direct Labor Cost with Escalation	=		=	\$139,503.65	
	Direct Labor Subtotal before Escalation	=		=	\$134,064.50	
	Estimated total of Direct Labor Salary Increase (Dollar Amount)	=		=	\$5,439.15	Transfer to Cost Proposal
	Estimated total of Direct Labor Salary Increase (%)	=		=	4.057%	Transfer to Cost Proposal

**NOTES:**

- This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
- An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable. (i.e. \$250,000 x 2% x 5 yrs = \$25,000 is not an acceptable methodology)
- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.



**ESTIMATE OF OTHER DIRECT COST (ODC) ITEMS**

Bridge Preventative Maintenance Program (Various Locations in Riverside County)

FPN: BP MPL-5956(224)

Consultant: CNS Engineers, Inc.

Contract No.: \_\_\_\_\_

Date: 9/19/2019

Reproduction Cost Breakdown			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
8.5"X11" B/W	\$0.06	6000	\$360.00
24"X36" COLOR BOARD	\$16.00	2	\$32.00
11"X17" B/W	\$0.10	200	\$20.00
24"X36" B/W	\$5.00	100	\$500.00
24"X36" COLOR	\$10.00	2	\$20.00
BINDING	\$5.00	8	\$40.00
FULL SIZE (MYLER)	\$15.00	68	\$1,020.00
			\$0.00
SUBTOTAL COST			<b>\$1,992.00</b>
Mailing and Special Delivery Cost Breakdown			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
Priority Mail	\$6.70	20	\$134.00
FedEx	\$35.00	4	\$140.00
			\$0.00
SUBTOTAL COST			<b>\$274.00</b>
Mileage & Travel			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
Mileage (2019 IRS Standard Rate)	\$0.580	1000	\$580.00
Parking	\$5.00	16	\$80.00
TOTAL BUDGET			<b>\$660.00</b>
Miscellaneous			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
			\$0.00
Utility Potholing	\$900.00	10	\$9,000.00
	\$0.00	0	\$0.00
	\$0.00	0	\$0.00
SUBTOTAL COST			<b>\$9,000.00</b>
<b>TOTAL ODCs</b>			<b>\$11,926.00</b>

**NOTES:**

1. ODC items should be based on actual costs and supported by historical data and other documentation.
2. ODC items that would be considered "tools of the trade" are not reimbursable.
3. ODC items should be consistently billed directly to all clients, not just when client will pay for them as a direct cost.
4. ODC items when incurred for the same purpose, in like circumstance, should not be included in any indirect cost pool or in overhead rate.

### **Classification Hourly Rate Ranges**

Bridge Preventative Maintenance Program (Various Locations in Riverside County)

FPN BPMPL-5956(224)

09/16/2019

Company: CNS Engineer, Inc.

Position Title/Classification	Hourly Rate Range (Min. – Max.)
Senior Project Manager	\$80.00 - \$98.00
Project Manager/Principal Engineer	\$70.00 - \$85.00
Senior Bridge Engineer	\$55.00 - \$69.00
Senior Roadway Engineer	\$55.00 - \$69.00
Project Engineer	\$45.00 - \$58.00
Design Engineer III	\$43.00 - \$49.00
Design Engineer II	\$38.00 - \$43.00
Design Engineer I	\$35.00 - \$38.00
Assistant Design Engineer	\$28.00 - \$35.00
Engineering Interim	\$16.00 - \$23.00
Senior CADD Technician	\$35.00 - \$45.00
CADD Technician	\$25.00 - \$35.00
Project Controller	\$49.00 - \$65.00

EXHIBIT 10-H1 COST PROPOSAL Page 3 of 3

**Certification of Direct Costs:**

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

1. Generally Accepted Accounting Principles (GAAP)
2. Terms and conditions of the contract
3. Title 23 United States Code Section 112 - Letting of Contracts
4. 48 Code of Federal Regulations Part 31 - Contract Cost Principles and Procedures
5. 23 Code of Federal Regulations Part 172 - Procurement, Management, and Administration of Engineering and Design Related Service
6. 48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement.

Local governments are responsible for applying only cognizant agency approved or Caltrans accepted Indirect Cost Rate(s).

**Prime Consultant or Subconsultant Certifying:**

Name: James J. Lu

Title \*: President

Signature : 

Date of Certification (mm/dd/yyyy): 9-18-2019

Email: james.lu@cnsenginc.com

Phone Number: (951) 687-1005 Address: 11870 Pierce St., Suite 265, Riverside, CA 92505

\*An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:

Project Management, Bridge and Road Design

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>CNS Engineers, Inc. (Prime Consultant)</b>	SCOPE OF WORK: <b>Preliminary Engineering &amp; Environmental Clearance</b>	PHASE: <b>Phase I</b>
PROJECT: <b>Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMPL-5956(224)</b>		DATE: <b>October 18, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
James J. Lu *	Senior Project Manager	142	@	\$89.50	\$12,709.00
Quyett T. Nguyen	Senior Bridge Engineer	112	@	\$60.50	\$6,776.00
Steve Hosford	Senior Roadway Engineer	88	@	\$59.50	\$5,236.00
Justin Nguyen	Design Engineer III	6	@	\$43.50	\$261.00
Teng Ge	Design Engineer I			\$37.05	
Nan Li	Senior CADD Technician	76	@	\$38.50	\$2,926.00
Hui-Min Huang	Project Controller	8	@	\$58.50	\$468.00

\* Key Personnel, \*\* Employees subject to prevailing

TOTAL HOURS **432** TOTAL DIRECT LABOR **\$28,376.00**

**MULTIPLIERS**

ESCALATION @	4.057%	(of Direct Labor)	\$1,151.21
FRINGE BENEFIT @	58.39%	(of Direct Labor + Escalation)	\$17,240.94
GENERAL AND ADMINISTRATIVE OVERHEAD @	106.21%	(of Direct Labor + Escalation)	\$31,360.85
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead)	\$7,812.90
TOTAL MULTIPLIERS			<b>\$57,565.91</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction	1	LS	@ \$1,992.00	\$1,992.00
Mailing and Special Delivery	1	LS	@ \$274.00	\$274.00
Mileage and Travel	1	LS	@ \$660.00	\$660.00
Utility Potholing	1	LS	@ \$9,000.00	\$9,000.00

TOTAL ODC'S **\$11,926.00**

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL
ICF Jones & Stokes	\$72,171.94	\$152,057.26	\$16,626.00	\$240,855.20
Group Delta Consultants	\$4,053.12	\$6,989.50	\$32,774.00	\$43,816.62
Aguilar Consulting, Inc. (ACI)	\$14,753.52	\$22,037.65	\$1,129.20	\$37,920.37

TOTAL SUBCONSULTANT SERVICES **\$322,592.19**

**TOTAL \$420,460.10**

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>CNS Engineers, Inc. (Prime Consultant)</b>	SCOPE OF WORK: <b>Plans, Specifications &amp; Estimate (PS&amp;E)</b>	PHASE: <b>Phase II</b>
PROJECT: <b>Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPML-5956(224)</b>		DATE: <b>October 18, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
James J. Lu *	Senior Project Manager	184	@ \$89.50	\$16,468.00
Quy T. Nguyen	Senior Bridge Engineer	416	@ \$60.50	\$25,168.00
Steve Hosford	Senior Roadway Engineer	142	@ \$59.50	\$8,449.00
Justin Nguyen	Design Engineer III	332	@ \$43.50	\$14,442.00
Teng Ge	Design Engineer I	220	@ \$37.05	\$8,151.00
Nan Li	Senior CADD Technician	650	@ \$38.50	\$25,025.00
Hui-Min Huang	Project Controller	10	@ \$58.50	\$585.00

\* Key Personnel, \*\* Employees subject to prevailing

TOTAL HOURS **1,954** TOTAL DIRECT LABOR **\$98,288.00**

**MULTIPLIERS**

ESCALATION @	4.057%	(of Direct Labor)	\$3,987.54
FRINGE BENEFIT @	58.39%	(of Direct Labor + Escalation)	\$59,718.69
GENERAL AND ADMINISTRATIVE OVERHEAD @	106.21%	(of Direct Labor + Escalation)	\$108,626.86
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead)	\$27,062.11
TOTAL MULTIPLIERS			<b>\$199,395.20</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction		LS		
Mailing and Special Delivery		LS		
Mileage and Travel		LS		
Utility Potholing		LS		

TOTAL ODC'S

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL
ICF Jones & Stokes	\$25,174.80	\$53,040.16		\$78,214.96
Group Delta Consultants	\$13,102.12	\$22,594.26		\$35,696.38
Aguilar Consulting, Inc. (ACI)	\$9,837.36	\$14,694.28		\$24,531.64

TOTAL SUBCONSULTANT SERVICES **\$138,442.97**

**TOTAL \$436,126.17**

FEE PROPOSAL WORKSHEET		
COMPANY: CNS Engineers, Inc. (Prime Consultant)	SCOPE OF WORK: Construction Bidding and Award Supports	PHASE: Phase III
PROJECT: Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPML-5956(224)		DATE: October 18, 2019

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
James J. Lu *	Senior Project Manager	3	@ \$89.50	\$268.50
Quyet T. Nguyen	Senior Bridge Engineer		\$60.50	
Steve Hosford	Senior Roadway Engineer	4	@ \$59.50	\$238.00
Justin Nguyen	Design Engineer III		\$43.50	
Teng Ge	Design Engineer I		\$37.05	
Nan Li	Senior CADD Technician	4	@ \$38.50	\$154.00
Hui-Min Huang	Project Controller		\$58.50	

\* Key Personnel, \*\* Employees subject to prevailing

TOTAL HOURS 11 TOTAL DIRECT LABOR \$660.50

**MULTIPLIERS**

ESCALATION @	4.057%	(of Direct Labor)	\$26.80
FRINGE BENEFIT @	58.39%	(of Direct Labor + Escalation)	\$401.31
GENERAL AND ADMINISTRATIVE OVERHEAD @	106.21%	(of Direct Labor + Escalation)	\$729.98
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead)	\$181.86
TOTAL MULTIPLIERS			\$1,339.95

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction		LS		
Mailing and Special Delivery		LS		
Mileage and Travel		LS		
Utility Potholing		LS		

TOTAL ODC'S

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC's	TOTAL
ICF Jones & Stokes				
Group Delta Consultants				
Aguilar Consulting, Inc. (ACI)				

TOTAL SUBCONSULTANT SERVICES

TOTAL \$2,000.45

**FEE PROPOSAL WORKSHEET**

COMPANY: <b>CNS Engineers, Inc. (Prime Consultant)</b>	SCOPE OF WORK: <b>Design Construction Supports</b>	PHASE: <b>Phase IV</b>
PROJECT: <b>Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMPL-5956(224)</b>		DATE: <b>October 18, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
James J. Lu *	Senior Project Manager	10	@	\$89.50	\$895.00
Quyett T. Nguyen	Senior Bridge Engineer	42	@	\$60.50	\$2,541.00
Steve Hosford	Senior Roadway Engineer	8	@	\$59.50	\$476.00
Justin Nguyen	Design Engineer III	34	@	\$43.50	\$1,479.00
Teng Ge	Design Engineer I			\$37.05	
Nan Li	Senior CADD Technician	32	@	\$38.50	\$1,232.00
Hui-Min Huang	Project Controller	2	@	\$58.50	\$117.00

\* Key Personnel, \*\* Employees subject to prevailing

TOTAL HOURS **128** TOTAL DIRECT LABOR **\$6,740.00**

**MULTIPLIERS**

ESCALATION @	4.057%	(of Direct Labor)	\$273.44
FRINGE BENEFIT @	58.39%	(of Direct Labor + Escalation)	\$4,095.15
GENERAL AND ADMINISTRATIVE OVERHEAD @	106.21%	(of Direct Labor + Escalation)	\$7,448.98
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead)	\$1,855.76
TOTAL MULTIPLIERS			<b>\$13,673.32</b>

**OTHER DIRECT COSTS**

... Billed at Actual Cost (See ODC Cost Estimate Work Sheet) ...

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction		LS		
Mailing and Special Delivery		LS		
Mileage and Travel		LS		
Utility Potholing		LS		

TOTAL ODC'S

**SUB CONSULTANT SERVICES**

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL
ICF Jones & Stokes				
Group Delta Consultants				
Aguilar Consulting, Inc. (ACI)				

TOTAL SUBCONSULTANT SERVICES

**TOTAL \$20,413.32**

**MANHOUR WORKSHEET**

COMPANY: **CNS Engineers, Inc. (Prime Consultant)**      SCOPE OF WORK: **Manhour Summary**      PHASE: **All Phases**

PROJECT: **Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPWPL-5956(224)**      DATE: **September 19, 2019**

TASK	SENIOR PROJECT MANAGER	SENIOR BRIDGE ENGINEER	SENIOR ROADWAY ENGINEER	DESIGN ENGINEER III	DESIGN ENGINEER I	SENIOR CAD/ TECHNICIAN	PROJECT CONTROLLER	HOURS	HOURS (Top & Bottom)
	\$183.24	\$180.21	\$131.75	\$112.21	\$116.60	\$177.18			

PHASE TOTALS	339	570	242	372	220	762	20	2,525	2,525
PHASE I	142	112	88	6	76	8		432	432
PHASE II	184	416	142	332	220	650	10	1,954	1,954
PHASE III	3		4		4			11	11
PHASE IV	10	42	8	34	32	2		128	128

TASK	HOURS

PHASE TOTALS

PHASE I	
PHASE II	
PHASE III	
PHASE IV	





**MANHOUR WORKSHEET**

COMPANY: CNS Engineers, Inc. (Prime Consultant)      SCOPE OF WORK: Plans, Specifications & Estimate (PS&E)      PHASE: Phase II  
 PROJECT: Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMPL-5856(224)      DATE: September 19, 2019

TASK	SENIOR PROJECT MANAGER	SENIOR BRIDGE ENGINEER	SENIOR ROADWAY ENGINEER	DESIGN ENGINEER III	DESIGN ENGINEER I	SENIOR CIVIL TECHNICIAN	PROJECT CONTROLLER	HOURS	COST
	\$271.07	\$183.24	\$180.21	\$101.75	\$112.21	\$116.60	\$177.18		

**Total Manhours**      184    416    142    332    220    650    10      **1,954**

Task Description	184	416	142	332	220	650	10	90	\$	23,457
1.1 Project Management	80									
1.2 Project Team Meetings	24	12						36	\$	8,704
1.3 Quality Control and Quality Assurance (QC/QA)	24							24	\$	6,506
5.1 Foundation Design Report										
5.2 Hazardous Materials Surveys										
5.3 65% Civil Roadway Plans		72				96		168	\$	24,169
5.4 95% Civil Roadway PS&E		30				28		58	\$	8,671
5.5 65% Unchecked Structure Plans	24	280		232		388		924	\$	133,619
5.6 Bridge Design Independent Check					180			180	\$	20,198
5.7 95% Structure PS&E	20	80		60	40	70		270	\$	40,636
5.8 Final 100% Design PS&E and Contract Bid Documents	12	44	24	40		52		172	\$	26,973
5.9 Preliminary Stormwater Pollution Prevention Plan (P-SWPPP)										
5.10 Right-of-Way Legal Descriptions and Plats (by County)										
5.11 Right-of-Way Appraisal and Acquisition (by County)										
6.0 Permitting (USACE 404 Permit, USACE 404 Permit, CDFW 1602 Streambed Alteration Agreement)		16				16		32	\$	4,749



**MANHOOR WORKSHEET**

COMPANY: **CNS Engineers, Inc. (Prime Consultant)**  
 PROJECT: **Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMPL-5956(224)**  
 SCOPE OF WORK: **Design Construction Supports**  
 PHASE: **Phase IV**  
 DATE: **September 19, 2019**

TASK	SENIOR PROJECT MANAGER	SENIOR BRIDGE ENGINEER	SENIOR ROADWAY ENGINEER	DESIGN ENGINEER III	DESIGN ENGINEER I	SENIOR CAD/ TECHNICIAN	PROJECT CONTROLLER	HOURS	COST
	10	42	8	8	34		2		
	\$271.07	\$183.24	\$180.21	\$131.75	\$112.21	\$116.90	\$177.18		

<b>Total Manhours</b>	<b>10</b>	<b>42</b>	<b>8</b>	<b>8</b>	<b>34</b>	<b>32</b>	<b>2</b>	<b>128</b>	
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TASK	10	42	8	8	34	32	2	128	HOURS	COST
7.3 Attend a Pre-Construction Meeting and Site Meetings	1	10			8				19	\$ 3,157
7.4. Administration, Respond Contractor's RFI's and Review Shop Drawings/Submittals	8	16	4	16		2			46	\$ 8,283
7.5 Prepare Construction Change Orders	1	4	2	2	4				13	\$ 2,094
7.6 Prepare As-built Plans		12	2	8	28				50	\$ 6,878

**SUBCONSULTANT FEE PROPOSAL WORKSHEET**

COMPANY: <b>ICF Jones &amp; Stokes (SubConsultant)</b>	SCOPE OF WORK: <b>Environmental</b>	PHASE: <b>All Phases</b>
PROJECT: <b>Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMPL-5956(224)</b>		DATE: <b>October 17, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT	
Brian Calvert *	Environmental Manager (Project Director)	77	@ \$94.32	\$7,262.64	
Vincent Tong	NEPA/CEQA (Associate Consultant I)	155	@ \$40.86	\$6,333.30	
Greg Hoisington	Biology and Jurisdictional Resources (Managing Consultant)	102	@ \$60.76	\$6,197.52	
Keith Cooper	Air Quality (Senior Technical Analyst)	44	@ \$67.71	\$2,979.24	
Soraya Swiontek	GIS (Associate Consultant I)	255	@ \$35.78	\$9,123.90	
Elizabeth Irvin	Editor (Associate Consultant I)	122	@ \$45.36	\$5,533.92	
Benjamin Vargas	Cultural Resources (Senior Consultant III)	132	@ \$52.40	\$6,916.80	
Peter Pham	Cultural Resources (Assistant Consultant)	302	@ \$28.00	\$8,456.00	
Daniel Paul	Cultural Resources (Senior Consultant II)	44	@ \$49.84	\$2,192.96	
Russell Whisman	Air Quality (Senior Consultant II)	128	@ \$50.49	\$6,462.72	
Paul Schwartz	Biology and Jurisdictional Resources (Senior Consultant II)	140	@ \$48.02	\$6,722.80	
Marisa Flores	Biology (Senior Consultant I)	102	@ \$40.95	\$4,176.90	
James Hickman	Biology (Senior Consultant II)	82	@ \$47.94	\$3,931.08	
Megan Jameson	Biology and Jurisdictional Resources (Managing Consultant)	124	@ \$58.64	\$7,271.36	
Gasca, Stephanie	Permitting (Senior Consultant II)	240	@ \$57.44	\$13,785.60	
* Key Personnel, ** Employees subject to prevailing wages		TOTAL HOURS	<b>2,049</b>	TOTAL DIRECT LABOR	<b>\$97,346.74</b>

**MULTIPLIERS**

ESCALATION @	1.354%	(of Direct Labor)	\$1,318.07
FRINGE BENEFIT @	36.77%	(of Direct Labor + Escalation)	\$36,279.05
GENERAL AND ADMINISTRATIVE OVERHEAD @	141.90%	(of Direct Labor + Escalation)	\$140,005.37
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead )	\$27,494.92
TOTAL MULTIPLIERS			<b>\$205,097.42</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction	1	LS	@ \$7,700.00	\$7,700.00
Mailing and Special Delivery	1	LS	@ \$1,440.00	\$1,440.00
Mileage and Travel	1	LS	@ \$3,886.000	\$3,886.00
Record Search	1	LS	@ \$3,600.00	\$3,600.00
TOTAL ODC'S				<b>\$16,626.00</b>

**TOTAL \$319,070.16**

**EXHIBIT 10-H COST PROPOSAL  
ACTUAL COST-PLUS-FIXED FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS  
(CALCULATIONS FOR ANTICIPATED SALARY INCREASES)**

Consultant ICF Jones and Stokes Contract No.                      Date 10/17/2019

**1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)**

Direct Labor Subtotal per Cost Proposal	Total Hours per Cost Proposal	=	Avg Hourly Rate	5 Year Contract Duration
\$97,346.74	2049	=	\$47.51	Year 1 Avg Hourly Rate

**2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)**

	Avg Hourly Rate		Proposed Escalation		
Year 1	\$47.51	+	3.0%	=	\$48.93 Year 2 Avg Hourly Rate
Year 2	\$48.93	+	3.0%	=	\$50.40 Year 3 Avg Hourly Rate
Year 3	\$50.40	+	3.0%	=	\$51.91 Year 4 Avg Hourly Rate
Year 4	\$51.91	+	3.0%	=	\$53.47 Year 5 Avg Hourly Rate

**3. Calculate estimated hours per year (Multiply estimate % each year by total hours)**

	Estimated % Completed Each Year		Total Hours per Cost Proposal		Total Hours per Year
Year 1	60.00%	*	2049.0	=	1229.4 Estimated Hours Year 1
Year 2	35.00%	*	2049.0	=	717.2 Estimated Hours Year 2
Year 3	5.00%	*	2049.0	=	102.5 Estimated Hours Year 3
Year 4	0.00%	*	2049.0	=	0.0 Estimated Hours Year 4
Year 5	0.00%	*	2049.0	=	0.0 Estimated Hours Year 5
Total	100%		Total	=	2049.0

**4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)**

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)		Cost per Year
Year 1	\$47.51	*	1229	=	\$58,408.04 Estimated Hours Year 1
Year 2	\$48.93	*	717	=	\$35,093.50 Estimated Hours Year 2
Year 3	\$50.40	*	102	=	\$5,163.76 Estimated Hours Year 3
Year 4	\$51.91	*	0	=	\$0.00 Estimated Hours Year 4
Year 5	\$53.47	*	0	=	\$0.00 Estimated Hours Year 5
	Total Direct Labor Cost with Escalation	=			\$98,665.30
	Direct Labor Subtotal before Escalation	=			\$97,346.74
	Estimated total of Direct Labor Salary Increase (Dollar Amount)	=			\$1,318.56 Transfer to Cost Proposal
	Estimated total of Direct Labor Salary Increase (%)	=			1.354% Transfer to Cost Proposal

**NOTES:**

- This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
- An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable. (i.e. \$250,000 x 2% x 5 yrs = \$25,000 is not an acceptable methodology)
- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.

## ESTIMATE OF OTHER DIRECT COST (ODC) ITEMS

Bridge Preventative Maintenance Program (Various Locations in Riverside County)

FPN: BP MPL-5956(224)

Consultant: ICF Jones & Stokes, Inc.

Contract No.: \_\_\_\_\_

Date: 10/17/2019

Reproduction Cost Breakdown			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
Reproduction (external)	\$100.00	77	\$7,700.00
			\$0.00
<b>SUBTOTAL COST</b>			<b>\$7,700.00</b>
Mailing and Special Delivery Cost Breakdown			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
FedEx	\$45.00	32	\$1,440.00
			\$0.00
<b>SUBTOTAL COST</b>			<b>\$1,440.00</b>
Mileage & Travel			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
Mileage (2019 IRS Standard Rate)	\$0.580	6700	\$3,886.00
			\$0.00
<b>TOTAL BUDGET</b>			<b>\$3,886.00</b>
Miscellaneous			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
Record Search	\$3,600.00	1	\$3,600.00
			\$0.00
<b>SUBTOTAL COST</b>			<b>\$3,600.00</b>
<b>TOTAL ODCs</b>			<b>\$16,626.00</b>

**NOTES:**

1. ODC items should be based on actual costs and supported by historical data and other documentation.
2. ODC items that would be considered "tools of the trade" are not reimbursable.
3. ODC items should be consistently billed directly to all clients, not just when client will pay for them as a direct cost.
4. ODC items when incurred for the same purpose, in like circumstance, should not be included in any indirect cost pool or in overhead rate.

EXHIBIT 10-H1 COST PROPOSAL

**Certification of Direct Costs:**

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual,

- 1. Generally Accepted Accounting Principles (GAAP)
- 2. Terms and conditions of the contract

- 3. Title 23 United States Code Section 112 - Letting of Contracts
- 4.48 Code of Federal Regulations Part 31 - Contract Cost Principles and Procedures

5.23 Code of Federal Regulations Part 172 - Procurement, Management, and Administration of Engineering and Design Related Service

6.48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement.

Local governments are responsible for applying only cognizant agency approved or Caltrans accepted Indirect Cost Rate(s).

**Prime Consultant or Subconsultant Certifying:**

Name: Ted Lee Title \*: Senior Vice President

Signature :  Date of Certification (mm/dd/yyyy): 9/18/2019

Email: Court.Morgan@icf.com Phone Number: 949-333-6638

Address: 49 Discovery, Suite 250, Irvine, CA 92618

\*An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief

List services the consultant is providing under the proposed contract:

Environmental Documentation and Permitting



### **Classification Hourly Rate Ranges**

Bridge Preventative Maintenance Program (Various Locations in Riverside County)

FPN BPMPL-5956(224)

10/10/2019

Company: ICF Jones & Stokes

Position Title/Classification	Hourly Rate Range (Min. – Max.)
Project Director	\$ 63.01 - \$ 111.10
Senior Technical Analyst	\$ 55.53 - \$ 90.00
Managing Consultant	\$ 47.50 - \$ 80.00
Senior Consultant I	\$ 29.00 - \$ 58.88
Senior Consultant II	\$ 34.50 - \$ 62.19
Senior Consultant III	\$ 40.00 - \$ 67.46
Associate Consultant I	\$ 19.34 - \$ 47.51
Associate Consultant II	\$ 25.49 - \$ 48.11
Associate Consultant III	\$ 26.02 - \$ 50.00
Assistant Consultant	\$ 24.57 - \$ 45.00
Technician Trainee	\$ 17.00 - \$ 35.00

**SUBCONSULTANT FEE PROPOSAL WORKSHEET**

COMPANY: <b>ICF Jones &amp; Stokes (SubConsultant)</b>	SCOPE OF WORK: <b>Preliminary Engineering &amp; Environmental Clearance</b>	PHASE: <b>Phase I</b>
PROJECT: <b>Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMP-5956(224)</b>		DATE: <b>October 17, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT	
Brian Calvert *	Environmental Manager (Project Director)	73	@	\$94.32	\$6,885.36	
Vincent Tong	NEPA/CEQA (Senior Consultant I)	147	@	\$40.86	\$6,006.42	
Greg Hoisington	Biology and Jurisdictional Resources (Managing I)	82	@	\$60.76	\$4,982.32	
Keith Cooper	Air Quality (Senior Technical Analyst)	44	@	\$67.71	\$2,979.24	
Soraya Swiontek	GIS (Associate Consultant I)	187	@	\$35.78	\$6,690.86	
Elizabeth Irvin	Editor (Associate Consultant I)	122	@	\$45.36	\$5,533.92	
Benjamin Vargas	Cultural Resources (Project Director)	132	@	\$52.40	\$6,916.80	
Peter Pham	Cultural Resources (Senior Consultant I)	302	@	\$28.00	\$8,456.00	
Daniel Paul	Cultural Resources (Senior Consultant II)	44	@	\$49.84	\$2,192.96	
Russell Whisman	Air Quality (Senior Consultant I)	128	@	\$50.49	\$6,462.72	
Paul Schwartz	Biology and Jurisdictional Resources (Senior Con	140	@	\$48.02	\$6,722.80	
Marisa Flores	Biology (Associate Consultant III)	102	@	\$40.95	\$4,176.90	
James Hickman	Biology (Senior Consultant II)	82	@	\$47.94	\$3,931.08	
Megan Jameson	Biology and Jurisdictional Resources (Senior Con	4	@	\$58.64	\$234.56	
Gasca, Stephanie	Permitting (Senior Consultant I)			\$57.44		
		<b>TOTAL HOURS</b>		<b>1,589</b>	<b>TOTAL DIRECT LABOR</b>	<b>\$72,171.94</b>

\* Key Personnel, \*\* Employees subject to prevailing wages

**MULTIPLIERS**

ESCALATION @	1.354%	(of Direct Labor)	\$977.21
FRINGE BENEFIT @	36.77%	(of Direct Labor + Escalation)	\$26,896.94
GENERAL AND ADMINISTRATIVE OVERHEAD @	141.90%	(of Direct Labor + Escalation)	\$103,798.64
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead)	\$20,384.47
<b>TOTAL MULTIPLIERS</b>			<b>\$152,057.26</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction	1	LS	@	\$7,700.00	\$7,700.00
Mailing and Special Delivery	1	LS	@	\$1,440.00	\$1,440.00
Mileage and Travel	1	LS	@	\$3,886.000	\$3,886.00
Record Search	1	LS	@	\$3,600.00	\$3,600.00
<b>TOTAL ODC'S</b>					<b>\$16,626.00</b>

**TOTAL** **\$240,855.20**

**SUBCONSULTANT FEE PROPOSAL WORKSHEET**

COMPANY: <b>ICF Jones &amp; Stokes (SubConsultant)</b>	SCOPE OF WORK: <b>Plans, Specifications &amp; Estimate (PS&amp;E)</b>	PHASE: <b>Phase II</b>
PROJECT: <b>Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMPL-5956(224)</b>		DATE: <b>October 17, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Brian Calvert *	Environmental Manager (Project Director)	4	@	\$94.32	\$377.28
Vincent Tong	NEPA/CEQA (Senior Consultant III)	8	@	\$40.86	\$326.88
Greg Hoisington	Biology and Jurisdictional Resources (Managing C	20	@	\$60.76	\$1,215.20
Keith Cooper	Air Quality (Senior Technical Analyst)			\$67.71	
Soraya Swiontek	GIS (Associate Consultant I)	68	@	\$35.78	\$2,433.04
Elizabeth Irvin	Editor (Associate Consultant I)			\$45.36	
Benjamin Vargas	Cultural Resources (Senior Consultant III)			\$52.40	
Peter Pham	Cultural Resources (Technician Trainee)			\$28.00	
Daniel Paul	Cultural Resources (Senior Consultant II)			\$49.84	
Russell Whisman	Air Quality (Senior Consultant I)			\$50.49	
Paul Schwartz	Biology and Jurisdictional Resources (Senior Con:			\$48.02	
Marisa Flores	Biology (Associate Consultant III)			\$40.95	
James Hickman	Biology (Senior Consultant II)			\$47.94	
Megan Jameson	Biology and Jurisdictional Resources (Senior Con:	120	@	\$58.64	\$7,036.80
Gasca, Stephanie	Permitting (Senior Consultant I)	240	@	\$57.44	\$13,785.60
* Key Personnel, ** Employees subject to prevailing wages		TOTAL HOURS			
		<b>460</b>		TOTAL DIRECT LABOR	<b>\$25,174.80</b>

**MULTIPLIERS**

ESCALATION @	1.354%	(of Direct Labor)	\$340.87
FRINGE BENEFIT @	36.77%	(of Direct Labor + Escalation)	\$9,382.11
GENERAL AND ADMINISTRATIVE OVERHEAD @	141.90%	(of Direct Labor + Escalation)	\$36,206.73
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead )	\$7,110.45
TOTAL MULTIPLIERS			<b>\$53,040.16</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction		LS		
Mailing and Special Delivery		LS		
Mileage and Travel		LS		
TOTAL ODC'S				

**TOTAL** **\$78,214.96**



**SUBCONSULTANT MANHOOUR WORKSHEET**

COMPANY: ICF Jones & Stokes (SubConsultant) PROJECT: Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMP-L-5956(224) 8/31/2017 PHASE: Phase 1

	ENVIRONMENTAL MANAGER (PROJECT DIRECTOR)	NEPA/CEA (ASSOCIATE CONSULTANT I)	PROJECT AND MANAGING CONSULTANT I	AIQ QUALITY CONTROL (M.A.S.T)	ASSOCIATE CONSULTANT I	ENGINEER (ASSOCIATE CONSULTANT II)	ENGINEER (ASSOCIATE CONSULTANT I)	CIVIL RESOURCES (ASSOCIATE CONSULTANT I)	CIVIL RESOURCES (ASSOCIATE CONSULTANT I)	AIR QUALITY RESOURCES (ASSOCIATE CONSULTANT I)	TRAVEL AND TRANSPORTATION RESOURCES (ASSOCIATE CONSULTANT I)	BIOLOGY (ASSOCIATE CONSULTANT II)	BIOLOGY (ASSOCIATE CONSULTANT II)	BIOLOGY (ASSOCIATE CONSULTANT II)	JURISDICTIONAL RESOURCES (ASSOCIATE CONSULTANT II)	TRAINING (SENIOR CONSULTANT II)	COST
	\$126.96	\$188.77	\$210.37	\$111.16	\$140.83	\$182.80	\$96.9H	\$154.85	\$158.87	\$149.19	\$127.23	\$148.84	\$182.19	\$178.46			
	73	147	82	44	187	122	302	44	128	140	102	82	4	4		1,589	

Total Manhours		73	147	82	44	187	122	302	44	128	140	102	82	4	4			
1.1 Project Management																		
1.2 Project Team Meetings																		
1.3 Quality Control and Quality Assurance (QC/QA)																		
2.0 Research and Data Gathering																		
2.1 Collect and Review Existing Information																		
2.2 Conduct Field Review																		
3.0 Preliminary Engineering																		
3.1 Permits																		
3.2 Surveying and Right-of-Way Mapping (by County)																		
3.3 Preliminary Geotechnical Studies																		
3.4 Right-of-Way Requirements Map																		
3.5 Structure Advance Planning Study																		
3.6 Preliminary Hydraulics and Scour Study																		
3.7 Location Hydraulic Study (LHS) and Summary Floodplain Encroachment Report (SFER) (Step-2)																		
4.0 Environmental Clearance & Documentation																		
4.1 Environmental Project Management and Meetings	48	68															116	\$ 22,698
4.2 Preliminary Environmental Study (PES)																		
4.3 Technical Studies and Environmental Document																		
4.3.1 ISA Checklist and Preliminary Site Assessment																		
4.3.2 Water Quality Questionnaire																		
4.3.3 Jurisdictional Delineation	4	14	30		55	20				140							263	\$ 38,432
4.3.4 Natural Environmental Study (NES)	6	16	28		44	36								4			202	\$ 28,984
4.3.5 Biological Assessment (Step-2)	4	16	24		16	18								60	56		194	\$ 28,024
4.3.6 Historic Property Survey Report (Step-2)	6	16			72	36		44									608	\$ 71,441
4.3.7 Air Quality Memorandum	4	14		44		12				128							202	\$ 33,976
4.3.8 NEPA CE	1	3															4	\$ 674

**SUBCONSULTANT FEE PROPOSAL WORKSHEET**

COMPANY: <b>Group Delta Consultants (SubConsultant)</b>	SCOPE OF WORK: <b>Geotechnical Investigations and Hazardous Materials</b>	PHASE: <b>All Phases</b>
PROJECT: <b>Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMP-5956(224)</b>		DATE: <b>October 10, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Curt Scheyhing, G.E. *	Principal In-Charge	40	@	\$69.72	\$2,788.80
	Principal Engineer/Geologist	2	@	\$99.82	\$199.64
	Associate Engineer/Geologist	8	@	\$65.62	\$524.96
	Senior Engineer/Geologist			\$52.62	
	Project Engineer/Geologist	88	@	\$41.40	\$3,643.20
	Staff Engineer/Geologist	226	@	\$32.04	\$7,241.04
	Technician Geotechnical Laboratory	60	@	\$29.50	\$1,770.00
	Technician Hazardous Materials	12	@	\$33.18	\$398.16
	CADD	16	@	\$36.84	\$589.44
* Key Personnel, ** Employees subject to prevailing wages					

TOTAL HOURS      **452**      TOTAL DIRECT LABOR      **\$17,155.24**

**MULTIPLIERS**

ESCALATION @	1.800%	(of Direct Labor)	\$308.79
FRINGE BENEFIT @	54.50%	(of Direct Labor + Escalation)	\$9,517.90
GENERAL AND ADMINISTRATIVE OVERHEAD @	88.80%	(of Direct Labor + Escalation)	\$15,508.06
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead )	\$4,249.00
TOTAL MULTIPLIERS			<b>\$29,583.76</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction		LS			
Mailing and Special Delivery		LS			
Mileage and Travel	1	LS	@	\$1,624.000	\$1,624.00
Miscellaneous (Various Items)	1	LS	@	\$31,150.00	\$31,150.00

TOTAL ODC'S      **\$32,774.00**

**TOTAL      \$79,513.00**

**EXHIBIT 10-H COST PROPOSAL**  
**ACTUAL COST-PLUS-FIXED FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS**  
**(CALCULATIONS FOR ANTICIPATED SALARY INCREASES)**

Consultant Group Delta Consultants, Inc. Contract No. \_\_\_\_\_ Date 9/19/2019

**1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)**

Direct Labor Subtotal per Cost Proposal	Total Hours per Cost Proposal	=	Avg Hourly Rate	5 Year Contract Duration
\$17,155.24	452	=	\$37.95	Year 1 Avg Hourly Rate

**2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)**

	Avg Hourly Rate		Proposed Escalation		
Year 1	\$37.95	+	3.0%	=	\$39.09
					Year 2 Avg Hourly Rate
Year 2	\$39.09	+	3.0%	=	\$40.27
					Year 3 Avg Hourly Rate
Year 3	\$40.27	+	3.0%	=	\$41.47
					Year 4 Avg Hourly Rate
Year 4	\$41.47	+	3.0%	=	\$42.72
					Year 5 Avg Hourly Rate

**3. Calculate estimated hours per year (Multiply estimate % each year by total hours)**

	Estimated % Completed Each Year		Total Hours per Cost Proposal		Total Hours per Year	
Year 1	40.00%	*	452.0	=	180.8	Estimated Hours Year 1
Year 2	60.00%	*	452.0	=	271.2	Estimated Hours Year 2
Year 3	0.00%	*	452.0	=	0.0	Estimated Hours Year 3
Year 4	0.00%	*	452.0	=	0.0	Estimated Hours Year 4
Year 5	0.00%	*	452.0	=	0.0	Estimated Hours Year 5
Total	100%		Total	=	452.0	

**4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)**

	Avg Hourly Rate (calculated above)		Estimated hours (calculated above)		Cost per Year	
Year 1	\$37.95	*	181	=	\$6,862.10	Estimated Hours Year 1
Year 2	\$39.09	*	271	=	\$10,601.94	Estimated Hours Year 2
Year 3	\$40.27	*	0	=	\$0.00	Estimated Hours Year 3
Year 4	\$41.47	*	0	=	\$0.00	Estimated Hours Year 4
Year 5	\$42.72	*	0	=	\$0.00	Estimated Hours Year 5
	Total Direct Labor Cost with Escalation			=	\$17,464.03	
	Direct Labor Subtotal before Escalation			=	\$17,155.24	
	Estimated total of Direct Labor Salary Increase (Dollar Amount)			=	\$308.79	Transfer to Cost Proposal
	Estimated total of Direct Labor Salary Increase (%)			=	1.800%	Transfer to Cost Proposal

**NOTES:**

- This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
- An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable. (i.e. \$250,000 x 2% x 5 yrs = \$25,000 is not an acceptable methodology)
- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.

**ESTIMATE OF OTHER DIRECT COST (ODC) ITEMS**  
**Bridge Preventative Maintenance Program (Various Locations in Riverside County)**

FPN: BP MPL-5956(224)

Consultant: Group Delta Consultants, Inc.

Contract No.: \_\_\_\_\_

Date: 9/18/2019

Reproduction Cost Breakdown			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
			\$0.00
			\$0.00
SUBTOTAL COST			\$0.00
Mailing and Special Delivery Cost Breakdown			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
			\$0.00
			\$0.00
SUBTOTAL COST			\$0.00
Mileage & Travel			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
Mileage (2019 IRS Standard Rate)	\$0.580	2800	\$1,624.00
			\$0.00
TOTAL BUDGET			\$1,624.00
Miscellaneous			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
Exploratory Drilling	\$5,000.00	3	\$15,000.00
Traffic Control	\$600.00	16	\$9,600.00
			\$0.00
Permit Fees	\$500.00	3	\$1,500.00
Chemical Testing (Lead Samples)	\$160.00	25	\$4,000.00
Asbestos Analysis	\$30.00	15	\$450.00
Hazardous Work Truck	\$100.00	6	\$600.00
SUBTOTAL COST			\$31,150.00
TOTAL ODCs			\$32,774.00

NOTES:

1. ODC items should be based on actual costs and supported by historical data and other documentation.
2. ODC items that would be considered "tools of the trade" are not reimbursable.
3. ODC items should be consistently billed directly to all clients, not just when client will pay for them as a direct cost.
4. ODC items when incurred for the same purpose, in like circumstance, should not be included in any indirect cost pool or in overhead rate.



## Classification Hourly Rate Ranges

Bridge Preventative Maintenance Program (Various Locations in Riverside County)

FPN BPMPL-5956(224)

10/11/2019

Company: Group Delta Consultants

Position Title/Classification	Hourly Rate Range (Min. – Max.)
Principal-In-Charge	\$69.72 – \$119.87
Principal Engineer/Geologist	\$69.72 – \$119.87
Associate Engineer/Geologist	\$54.48 – \$75.86
Senior Engineer/Geologist	\$48.56 – \$60.10
Project Engineer/Geologist	\$37.02 – \$45.68
Staff Engineer/Geologist	\$24.50 – \$43.60
Technician - Geotechnical Laboratory	\$23.00 – \$40.00
Technician - Hazardous Materials	\$28.00 – \$43.71
CADD	\$33.68 – \$40.00

EXHIBIT 10-H1 COST PROPOSAL Page 3 of 3

**Certification of Direct Costs:**

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

1. Generally Accepted Accounting Principles (GAAP)
2. Terms and conditions of the contract
3. Title 23 United States Code Section 112 - Letting of Contracts
4. 48 Code of Federal Regulations Part 31 - Contract Cost Principles and Procedures
5. 23 Code of Federal Regulations Part 172 - Procurement, Management, and Administration of Engineering and Design Related Service
6. 48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement. Local governments are responsible for applying only cognizant agency approved or Caltrans accepted Indirect Cost Rate(s).

**Prime Consultant or Subconsultant Certifying:**

Name: Nikhila Srirangpatna Title \*: CFO

Signature : NLS Date of Certification (mm/dd/yyyy): 09/16/2019

Email: nikhilas@groupdelta.com Phone Number: 949-450-2100

Address: 32 Mauchly Suite B Irvine, CA 92618

\*An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:

**Geotechnical Investigations and Hazardous Materials**

**SUBCONSULTANT FEE PROPOSAL WORKSHEET**

COMPANY: <b>Group Delta Consultants (SubConsultant)</b>	SCOPE OF WORK: <b>Preliminary Engineering &amp; Environmental Clearance</b>	PHASE: <b>Phase I</b>
PROJECT: <b>Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPML-5956(224)</b>		DATE: <b>October 10, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT	
Curt Scheyhing, G.E. *	Principal In-Charge	16	@ \$69.72	\$1,115.52	
	Principal Engineer/Geologist		\$99.82		
	Associate Engineer/Geologist		\$65.62		
	Senior Engineer/Geologist		\$52.62		
	Project Engineer/Geologist	40	@ \$41.40	\$1,656.00	
	Staff Engineer/Geologist	40	@ \$32.04	\$1,281.60	
	Technician Geotechnical Laboratory		\$29.50		
	Technician Hazardous Materials		\$33.18		
	CADD		\$36.84		
		<b>TOTAL HOURS</b>	<b>96</b>	<b>TOTAL DIRECT LABOR</b>	<b>\$4,053.12</b>

\* Key Personnel, \*\* Employees subject to prevailing wages

**MULTIPLIERS**

ESCALATION @	1.800%	(of Direct Labor)	\$72.96
FRINGE BENEFIT @	54.50%	(of Direct Labor + Escalation)	\$2,248.71
GENERAL AND ADMINISTRATIVE OVERHEAD @	88.80%	(of Direct Labor + Escalation)	\$3,663.96
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead )	\$1,003.87
<b>TOTAL MULTIPLIERS</b>			<b>\$6,989.50</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction		LS		
Mailing and Special Delivery		LS		
Mileage and Travel	1	LS @	\$1,624.000	\$1,624.00
Miscellaneous (Various Items)	1	LS @	\$31,150.00	\$31,150.00
<b>TOTAL ODC'S</b>				<b>\$32,774.00</b>

**TOTAL** **\$43,816.62**

**SUBCONSULTANT FEE PROPOSAL WORKSHEET**

COMPANY: Group Delta Consultants (SubConsultant)	SCOPE OF WORK: Plans, Specifications & Estimate (PS&E)	PHASE: Phase II
PROJECT: Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPML-5956(224)		DATE: October 10, 2019

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Curt Scheyhing, G.E. *	Principal In-Charge	24	@	\$69.72	\$1,673.28
	Principal Engineer/Geologist	2	@	\$99.82	\$199.64
	Associate Engineer/Geologist	8	@	\$65.62	\$524.96
	Senior Engineer/Geologist			\$52.62	
	Project Engineer/Geologist	48	@	\$41.40	\$1,987.20
	Staff Engineer/Geologist	186	@	\$32.04	\$5,959.44
	Technician Geotechnical Laboratory	60	@	\$29.50	\$1,770.00
	Technician Hazardous Materials	12	@	\$33.18	\$398.16
	CADD	16	@	\$36.84	\$589.44
		<b>TOTAL HOURS</b>			<b>\$13,102.12</b>

\* Key Personnel, \*\* Employees subject to prevailing wages

**MULTIPLIERS**

ESCALATION @	1.800%	(of Direct Labor)	\$235.84
FRINGE BENEFIT @	54.50%	(of Direct Labor + Escalation)	\$7,269.19
GENERAL AND ADMINISTRATIVE OVERHEAD @	88.80%	(of Direct Labor + Escalation)	\$11,844.11
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead )	\$3,245.13
<b>TOTAL MULTIPLIERS</b>			<b>\$22,594.26</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction		LS		
Mailing and Special Delivery		LS		
Mileage and Travel		LS		
Miscellaneous (Record Search and Field Supplies)		LS		
<b>TOTAL ODC'S</b>				

**TOTAL** **\$35,696.38**







**SUBCONSULTANT FEE PROPOSAL WORKSHEET**

COMPANY: <b>Aguilar Consulting Inc. (ACI) (SubConsultant)</b>	SCOPE OF WORK: <b>Channel Hydraulics and Water Quality Assessment</b>	PHASE: <b>All Phases</b>
PROJECT: <b>Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMPL-5956(224)</b>		DATE: <b>September 17, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Ceazar Aguilar *	Principal/Project Manager	152	@	\$71.94	\$10,934.88
Ruel Ituralde	Project Engineer	202	@	\$48.00	\$9,696.00
Christopher Aguilar	Design Engineer	132	@	\$30.00	\$3,960.00
* Key Personnel, ** Employees subject to prevailing wages					
		<b>TOTAL HOURS</b>		<b>486</b>	<b>TOTAL DIRECT LABOR</b>
					<b>\$24,590.88</b>

**MULTIPLIERS**

ESCALATION @	2.118%	(of Direct Labor)	\$520.83
FRINGE BENEFIT @	43.70%	(of Direct Labor + Escalation)	\$10,973.82
GENERAL AND ADMINISTRATIVE OVERHEAD @	78.30%	(of Direct Labor + Escalation)	\$19,662.47
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead)	\$5,574.80
<b>TOTAL MULTIPLIERS</b>			<b>\$36,731.93</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction	1	LS	@	\$739.20	\$739.20
Mailing and Special Delivery	1	LS	@	\$100.00	\$100.00
Mileage and Travel	1	LS	@	\$290.000	\$290.00
Miscellaneous (Various Items)		LS			
<b>TOTAL ODC'S</b>					<b>\$1,129.20</b>

**TOTAL** **\$62,452.01**



**EXHIBIT 10-H COST PROPOSAL**  
**ACTUAL COST-PLUS-FIXED FEE OR LUMP SUM (FIRM FIXED PRICE) CONTRACTS**  
**(CALCULATIONS FOR ANTICIPATED SALARY INCREASES)**

Consultant Aguilar Consulting, Inc. Contract No. \_\_\_\_\_ Date 9/16/2019

**1. Calculate Average Hourly Rate for 1st year of the contract (Direct Labor Subtotal divided by total hours)**

Direct Labor Subtotal per Cost Proposal	Total Hours per Cost Proposal	=	Avg Hourly Rate	5 Year Contract Duration
\$24,590.88	486	=	\$50.60	Year 1 Avg Hourly Rate

**2. Calculate hourly rate for all years (Increase the Average Hourly Rate for a year by proposed escalation %)**

	Avg Hourly Rate	+	Proposed Escalation	=	
Year 1	\$50.60	+	3.0%	=	\$52.12 Year 2 Avg Hourly Rate
Year 2	\$52.12	+	3.0%	=	\$53.68 Year 3 Avg Hourly Rate
Year 3	\$53.68	+	3.0%	=	\$55.29 Year 4 Avg Hourly Rate
Year 4	\$55.29	+	3.0%	=	\$56.95 Year 5 Avg Hourly Rate

**3. Calculate estimated hours per year (Multiply estimate % each year by total hours)**

	Estimated % Completed Each Year	*	Total Hours per Cost Proposal	=	Total Hours per Year
Year 1	50.00%	*	486.0	=	243.0 Estimated Hours Year 1
Year 2	30.00%	*	486.0	=	145.8 Estimated Hours Year 2
Year 3	20.00%	*	486.0	=	97.2 Estimated Hours Year 3
Year 4	0.00%	*	486.0	=	0.0 Estimated Hours Year 4
Year 5	0.00%	*	486.0	=	0.0 Estimated Hours Year 5
Total	100%		Total	=	486.0

**4. Calculate Total Costs including Escalation (Multiply Average Hourly Rate by the number of hours)**

	Avg Hourly Rate (calculated above)	*	Estimated hours (calculated above)	=	Cost per Year
Year 1	\$50.60	*	243	=	\$12,295.44 Estimated Hours Year 1
Year 2	\$52.12	*	146	=	\$7,598.58 Estimated Hours Year 2
Year 3	\$53.68	*	97	=	\$5,217.69 Estimated Hours Year 3
Year 4	\$55.29	*	0	=	\$0.00 Estimated Hours Year 4
Year 5	\$56.95	*	0	=	\$0.00 Estimated Hours Year 5
	Total Direct Labor Cost with Escalation			=	\$25,111.71
	Direct Labor Subtotal before Escalation			=	\$24,590.88
	Estimated total of Direct Labor Salary Increase (Dollar Amount)			=	\$520.83 Transfer to Page 1
	Estimated total of Direct Labor Salary Increase (%)			=	2.118% Transfer to Page 1

**NOTES:**

- This is not the only way to estimate salary increases. Other methods will be accepted if they clearly indicate the % increase, the # of years of the contract, and a breakdown of the labor to be performed each year.
- An estimation that is based on direct labor multiplied by salary increase % multiplied by the # of years is not acceptable. (i.e. \$250,000 x 2% x 5 yrs = \$25,000 is not an acceptable methodology)
- This assumes that one year will be worked at the rate on the cost proposal before salary increases are granted.

**ESTIMATE OF OTHER DIRECT COST (ODC) ITEMS**  
**Bridge Preventative Maintenance Program (Various Locations in Riverside County)**

FPN: BP MPL-5956(224)

Consultant: Aguilar Consulting, Inc. (ACI)

Contract No.: \_\_\_\_\_

Date: 9/18/2019

Reproduction Cost Breakdown			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
8.5"X11" B/W	\$0.05	1800	\$90.00
8.5"X11" COLOR	\$0.25	40	\$10.00
11"X17" COLOR	\$0.30	24	\$7.20
24"X36" B/W	\$8.00	40	\$320.00
30"X42" COLOR	\$8.00	24	\$192.00
3-RING BINDER	\$5.00	24	\$120.00
			\$0.00
			\$0.00
<b>SUBTOTAL COST</b>			<b>\$739.20</b>
Mailing and Special Delivery Cost Breakdown			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
Overnight Delivery	\$25.00	4	\$100.00
			\$0.00
			\$0.00
<b>SUBTOTAL COST</b>			<b>\$100.00</b>
Mileage & Travel			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
Mileage (2019 IRS Standard Rate)	\$0.580	500	\$290.00
			\$0.00
<b>TOTAL BUDGET</b>			<b>\$290.00</b>
Miscellaneous			
DESCRIPTION OF ITEMS	UNIT COST	ESTIMATED QUANTITY	TOTAL COST
			\$0.00
			\$0.00
			\$0.00
			\$0.00
			\$0.00
<b>SUBTOTAL COST</b>			<b>\$0.00</b>
<b>TOTAL ODCs</b>			<b>\$1,129.20</b>

**NOTES:**

1. ODC items should be based on actual costs and supported by historical data and other documentation.
2. ODC items that would be considered "tools of the trade" are not reimbursable.
3. ODC items should be consistently billed directly to all clients, not just when client will pay for them as a direct cost.
4. ODC items when incurred for the same purpose, in like circumstance, should not be included in any indirect cost pool or in overhead rate.

**Classification Hourly Rate Ranges**

Bridge Preventative Maintenance Program (Various Locations in Riverside County)

FPN BPMPL-5956(224)

9/17/2019

Company: Aguilar Consulting Inc. (ACI)

Position Title/Classification	Hourly Rate Range (Min. – Max.)
Project Manager	\$70.00 - \$75.00
Project Engineer	\$42.00 - \$55.00
Design Engineer	\$26.00 - \$34.00
CADD Designer	\$22.00 - \$30.00
Project Coordinator	\$14.00 - \$20.00

## EXHIBIT 10-H1 COST PROPOSAL Page 3 of 3

**Certification of Direct Costs:**

I, the undersigned, certify to the best of my knowledge and belief that all direct costs identified on the cost proposal(s) in this contract are actual, reasonable, allowable, and allocable to the contract in accordance with the contract terms and the following requirements:

1. Generally Accepted Accounting Principles (GAAP)
2. Terms and conditions of the contract
3. Title 23 United States Code Section 112 - Letting of Contracts
4. 48 Code of Federal Regulations Part 31 - Contract Cost Principles and Procedures
5. 23 Code of Federal Regulations Part 172 - Procurement, Management, and Administration of Engineering and Design Related Service
6. 48 Code of Federal Regulations Part 9904 - Cost Accounting Standards Board (when applicable)

All costs must be applied consistently and fairly to all contracts. All documentation of compliance must be retained in the project files and be in compliance with applicable federal and state requirements. Costs that are noncompliant with the federal and state requirements are not eligible for reimbursement. Local governments are responsible for applying only cognizant agency approved or Caltrans accepted Indirect Cost Rate(s).

**Prime Consultant or Subconsultant Certifying:**Name: Ceazar AguilarTitle \*: PresidentSignature : Date of Certification: 09/16/2019Email: caguilar@aguilarconsultinginc.comPhone Number: 909-709-4393Address: 2155 Chicago Avenue, Suite 304, Riverside, CA 92507

\*An individual executive or financial officer of the consultant's or subconsultant's organization at a level no lower than a Vice President or a Chief Financial Officer, or equivalent, who has authority to represent the financial information utilized to establish the cost proposal for the contract.

List services the consultant is providing under the proposed contract:

- Channel Hydraulics and Water Quality Assessment
- Preliminary Engineering and Environmental Clearance
- Plans, Specifications & Estimate (PS&E)

**SUBCONSULTANT FEE PROPOSAL WORK SHEET**

COMPANY: <b>Aguilar Consulting Inc. (ACI) (SubConsultant)</b>	SCOPE OF WORK: <b>Preliminary Engineering &amp; Environmental Clearance</b>	PHASE: <b>Phase I</b>
PROJECT: <b>Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMPL-5956(224)</b>		DATE: <b>September 17, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT	
Ceazar Aguilar *	Principal/Project Manager	108	@ \$71.94	\$7,769.52	
Ruel Ituralde	Project Engineer	78	@ \$48.00	\$3,744.00	
Christopher Aguilar	Design Engineer	108	@ \$30.00	\$3,240.00	
* Key Personnel, ** Employees subject to prevailing wages					
		<b>TOTAL HOURS</b>	<b>294</b>	<b>TOTAL DIRECT LABOR</b>	<b>\$14,753.52</b>

**MULTIPLIERS**

ESCALATION @	2.118%	(of Direct Labor)	\$312.48	
FRINGE BENEFIT @	43.70%	(of Direct Labor + Escalation)	\$6,583.84	
GENERAL AND ADMINISTRATIVE OVERHEAD @	78.30%	(of Direct Labor + Escalation)	\$11,796.68	
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead)	\$3,344.65	
			<b>TOTAL MULTIPLIERS</b>	<b>\$22,037.65</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction	1	LS @	\$739.20	\$739.20
Mailing and Special Delivery	1	LS @	\$100.00	\$100.00
Mileage and Travel	1	LS @	\$290.00	\$290.00
Miscellaneous (Various Items)		LS		

**TOTAL ODC'S** **\$1,129.20**

**TOTAL** **\$37,920.37**

**SUBCONSULTANT FEE PROPOSAL WORKSHEET**

COMPANY: <b>Aguilar Consulting Inc. (ACI) (SubConsultant)</b>	SCOPE OF WORK: <b>Plans, Specifications &amp; Estimate (PS&amp;E)</b>	PHASE: <b>Phase II</b>
PROJECT: <b>Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMPL-5956(224)</b>		DATE: <b>September 17, 2019</b>

**DIRECT LABOR**

PERSONNEL	POSITION	HOURS	RATE	AMOUNT
Ceazar Aguilar *	Principal/Project Manager	44	@ \$71.94	\$3,165.36
Ruel Ituralde	Project Engineer	124	@ \$48.00	\$5,952.00
Christopher Aguilar	Design Engineer	24	@ \$30.00	\$720.00
* Key Personnel, ** Employees subject to prevailing wages				
		<b>TOTAL HOURS</b>	<b>192</b>	<b>TOTAL DIRECT LABOR</b>
				<b>\$9,837.36</b>

**MULTIPLIERS**

ESCALATION @	2.118%	(of Direct Labor)	\$208.36
FRINGE BENEFIT @	43.70%	(of Direct Labor + Escalation)	\$4,389.98
GENERAL AND ADMINISTRATIVE OVERHEAD @	78.30%	(of Direct Labor + Escalation)	\$7,865.80
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead)	\$2,230.15
<b>TOTAL MULTIPLIERS</b>			<b>\$14,694.28</b>

**OTHER DIRECT COSTS**

\*\*\* Billed at Actual Cost (See ODC Cost Estimate Work Sheet) \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reproduction		LS		
Mailing and Special Delivery		LS		
Mileage and Travel		LS		
Miscellaneous (Record Search and Field Supplies)		LS		
<b>TOTAL ODC'S</b>				

**TOTAL** **\$24,531.64**

**SUBCONSULTANT MANHOURLY WORKSHEET SUMMARY**

COMPANY: Aguilera Consulting Inc. (ACI) (SubConsultant) PHASE: All Phases

PROJECT: Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMPL-5956(224) DATE: September 17, 2019

TASK	PRINCIPAL PROJECT MANAGER	PROJECT ENGINEER	DESIGN ENGINEER	HOURS

\$179.40 \$119.70 \$74.81

<b>PHASE TOTALS</b>	<b>152</b>	<b>202</b>	<b>132</b>	<b>486</b>
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PHASE I	108	78	108	294
PHASE II	44	124	24	192
PHASE III				
PHASE IV				

**SUBCONSULTANT MANHOUR WORKSHEET**

COMPANY: **Aguilair Consulting Inc. (ACI) (SubConsultant)**      SCOPE OF WORK: **Preliminary Engineering & Environmental Clearance**      PHASE: **Phase 1**  
 PROJECT: **Bridge Preventative Maintenance Program (Various Locations in Riverside County), FPN BPMP-5956(224)**      DATE: **8/30/2017**

TASK	PRINCIPAL PROJECT MANAGER	PROJECT ENGINEER	DESIGN ENGINEER	HOURS	COST
	\$179.40	\$119.70	\$74.81		
	108	78	108		
	<b>Total Manhours</b>			<b>294</b>	

TASK	PRINCIPAL PROJECT MANAGER	PROJECT ENGINEER	DESIGN ENGINEER	HOURS	COST
1.1 Project Management					
1.2 Project Team Meetings	10			10	\$ 1,794
1.3 Quality Control and Quality Assurance (QC/QA)	8	2		10	\$ 1,675
2.0 Research and Data Gathering					
2.1 Collect and Review Existing Information	6		8	14	\$ 1,675
2.2 Conduct Field Review	4		4	8	\$ 1,017
3.0 Preliminary Engineering					
3.1 Permits					
3.2 Surveying and Right-of-Way Mapping (by County)					
3.3 Preliminary Geotechnical Studies					
3.4 Right-of-Way Requirements Map					
3.5 Structure Advance Planning Study					
3.6 Preliminary Hydraulics and Scour Study	16	28	40	84	\$ 9,214
3.7 Location Hydraulic Study (LHS) and Summary Floodplain Encroachment Report (SFER) (Step-2)	16	28	40	84	\$ 9,214
4.0 Environmental Clearance & Documentation					
4.1 Environmental Project Management and Meetings					
4.2 Preliminary Environmental Study (PES)					
4.3 Technical Studies and Environmental Document					
4.3.1 ISA Checklist and Preliminary Site Assessment					
4.3.2 Water Quality Questionnaire	48	20	16	84	\$ 12,202
4.3.3 Jurisdictional Delineation					
4.3.4 Natural Environmental Study (NES)					
4.3.5 Biological Assessment (Step-2)					
4.3.6 Historic Property Survey Report (Step-2)					
4.3.7 Air Quality Memorandum					
4.3.8 NEPA CE					





Attachment D- Caltrans LAPM: Exhibit 10-02 Consultant DBE Commitment

EXHIBIT 10-02 CONSULTANT CONTRACT DBE COMMITMENT

1. Local Agency: County of Riverside 2. Contract DBE Goal: 0%  
 3. Project Description: Bridge Preventative Maintenance Program  
 4. Project Location: Various Locations in Riverside County  
 5. Consultant's Name: CNS Engineers, Inc. 6. Prime Certified DBE:  7. Total Contract Award Amount: \$879,000.04  
 8. Total Dollar Amount for ALL Subconsultants: \$461,035.17 9. Total Number of ALL Subconsultants: 3

10. Description of Work, Service, or Materials Supplied	11. DBE Certification Number	12. DBE Contact Information	13. DBE Dollar Amount
Project Management and Professional Bridge Design	33395	James Lu, (951) 687-1005	\$417,964
<b>Local Agency to Complete this Section</b> 20. Local Agency Contract Number: <u>Cesar Tolentino</u> 21. Federal-Aid Project Number: <u>BP MPL-5956(224)</u> 22. Contract Execution Date: <u>12/17/2019</u> Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.  _____ 11/13/2019 23. Local Agency Representative's Signature 24. Date <u>Cesar Tolentino</u> 951-955-1520 25. Local Agency Representative's Name 26. Phone <u>Engineering Project Manager</u> 27. Local Agency Representative's Title			14. TOTAL CLAIMED DBE PARTICIPATION \$ 417,964 47 %
IMPORTANT: Identify all DBE firms being claimed for credit, regardless of tier. Written confirmation of each listed DBE is required.  _____ 10/23/2019 15. Preparer's Signature 16. Date <u>James Lu</u> (951) 687-1005 17. Preparer's Name 18. Phone <u>President/Structures Manag</u> 19. Preparer's Title			

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

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

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

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

LOCAL AGENCY SECTION

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