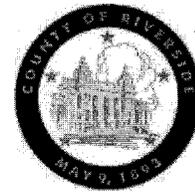


**SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**



**ITEM
3.34
(ID # 3320)**

MEETING DATE:

Tuesday, February 7, 2017

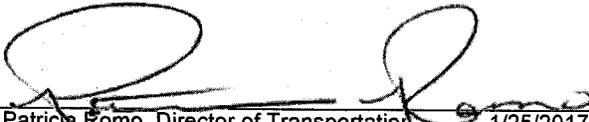
FROM : TLMA-TRANSPORTATION:

SUBJECT: TLMA - TRANSPORTATION: Approval of the Engineering Services Agreement between the County of Riverside and Dokken Engineering for Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024). All Covenants Set Forth in the Agreement Shall be Completed by February 23, 2022. 2nd District; [\$1,270,659 - Total Costs; Federal Funds 88.53% and Local Funds 11.47%]

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve the Agreement between the County of Riverside (County) and Dokken Engineering for Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024). All Covenants Set Forth in the Agreement Shall be Completed by February 23, 2022; and
2. Authorize the Chairman of the Board to execute the same.

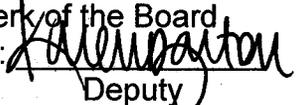
ACTION: Policy


Patricia Romo, Director of Transportation 1/25/2017

MINUTES OF THE BOARD OF SUPERVISORS

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

Ayes: Jeffries, Tavaglione, Washington and Ashley
Nays: None
Absent: None
Date: February 7, 2017
xc: Transp.

Kecia Harper-Ihem
Clerk of the Board
By: 
Deputy

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

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	\$190,000	\$450,000	\$1,270,659	\$ 0
NET COUNTY COST	\$ 0	\$ 0	\$ 0	\$ 0
SOURCE OF FUNDS: Federal (HBP) Highway Bridge Program (88.53%), City of Jurupa Valley funds (10.44%) and City of Riverside funds (1.03%). There are no General Funds used in this project			Budget Adjustment:	No
			For Fiscal Year:	16/17-19/20

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

The Market Street Bridge serves as a major link across the Santa Ana River for the residential and commercial communities in the northwestern Riverside County in the neighboring Cities of Jurupa Valley and Riverside.

Market Street is designated as an Arterial Highway in the County General Plan. It serves as part of an alternate local route connecting Interstate 10 (I-10) and State Route 60 (SR-60). The existing 2-lane bridge, which was constructed in 1953 and retrofitted for seismic safety in 2001, is on the Federal Eligible Bridge List (EBL). It qualifies to receive Federal Highway Bridge Program (HBP) funds for total replacement with a new 4-lane bridge because it is designated as Structurally Deficient and Functionally Obsolete with a current Sufficiency Rating (SR) of 45.1. Bridges with a sufficiency rating of less than 50 are eligible for total replacement.

The proposed Market Street Bridge Improvements Project (Project) will replace the existing 2-lane bridge, which is 1195 feet long, with a new state of the art 4-lane bridge and reconstruct the connecting approach roadways to mitigate geometric and structural deficiencies.

The existing bridge, with the exception of the easterly most end, is located in the City of Jurupa Valley. Since the bridge is located primarily within the City of Jurupa Valley, Jurupa Valley is the implementing agency responsible for sponsoring and funding the Project. The City of Riverside desires to cooperate, coordinate, and participate in funding the required local match for the portion of the Project in the City of Riverside's jurisdictional borders. Jurupa Valley will be the Lead Agency to consider and approve any and all environmental documents required by California Environmental Quality Act (CEQA). The City of Riverside will be a Responsible Agency to consider and approve any and all environmental documents required by CEQA as it pertains to the portions of the Project located within the City of Riverside's jurisdictional boundaries. Although the Project is located within the jurisdictional boundaries of the City of Jurupa Valley and the City of Riverside, the Cities have designated the County as the agency responsible for the overall development of the project in a Service Agreement approved by the Board of Supervisors on December 6, 2016 (Agenda Item 3-39). The County will therefore provide the administrative, technical, managerial, and support services necessary for the development of the Project.

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

The County advertised a Request for Proposals (RFP) to select three Consulting Engineering firms for three major transportation projects, Replacement of Market Street and Mission Boulevard Bridges at the Santa River, and the County-Wide Bridge Program. Twelve proposal packages were received in response to the RFP. After interviewing the eight short listed firms, the County selected Dokken Engineering as one of the three highest ranked firms to provide the necessary environmental and engineering services for the Market Street Bridge Project. The detailed scope and the negotiated fee for performing the preliminary engineering and environmental documentation to clear the bridge replacement project are provided in the Appendices "A" and "C" of the subject agreement.

County Counsel has approved the Agreement as to form.

Impact on Residents and Businesses

The current Annual Average Daily Traffic (AADT) of 17,821 vehicles is considered high for a two lane roadway. The new bridge will be constructed to accommodate four traffic lanes with standard shoulders, thus providing increased capacity and congestion relief particularly during peak hour traffic. The project is expected to have minimum impact on the surrounding environment and the community during the development and construction. The replacement bridge will be designed in accordance with the latest state of the art bridge design criteria, thus removing the structurally deficient fracture critical bridge from the inventory.

SUPPLEMENTAL:

Additional Fiscal Information

The consultant's proposed fee for preliminary engineering and environmental documentations is \$1,270,659. It will be funded using Federal HBP funds \$1,124,914 (88.53%) and \$145,745 (11.47%) matching funds from the City of Jurupa Valley and the City Riverside (City of Jurupa Valley 10.44% and City of Riverside 1.03% respectively). The Agreement shall be completed by February 23, 2022. There are no General funds used in this project.

The cost breakdown by fiscal year is:

- Current FY16/17 \$190,000
- FY17/18 \$450,000
- FY18/19 \$450,000
- FY19/20 \$180,659

Total Budget: \$1,270,659

Work Order No.: C0-0528

Contract History and Price Reasonableness

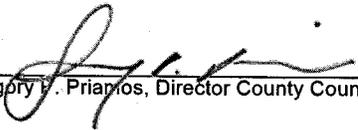
The consultant's negotiated fee proposal of \$1,270,659 is below the County's independent fee estimate and comparable to the previously completed Santa Ana River Bridges at River Road and Van Buren Boulevard.

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

ATTACHMENTS:

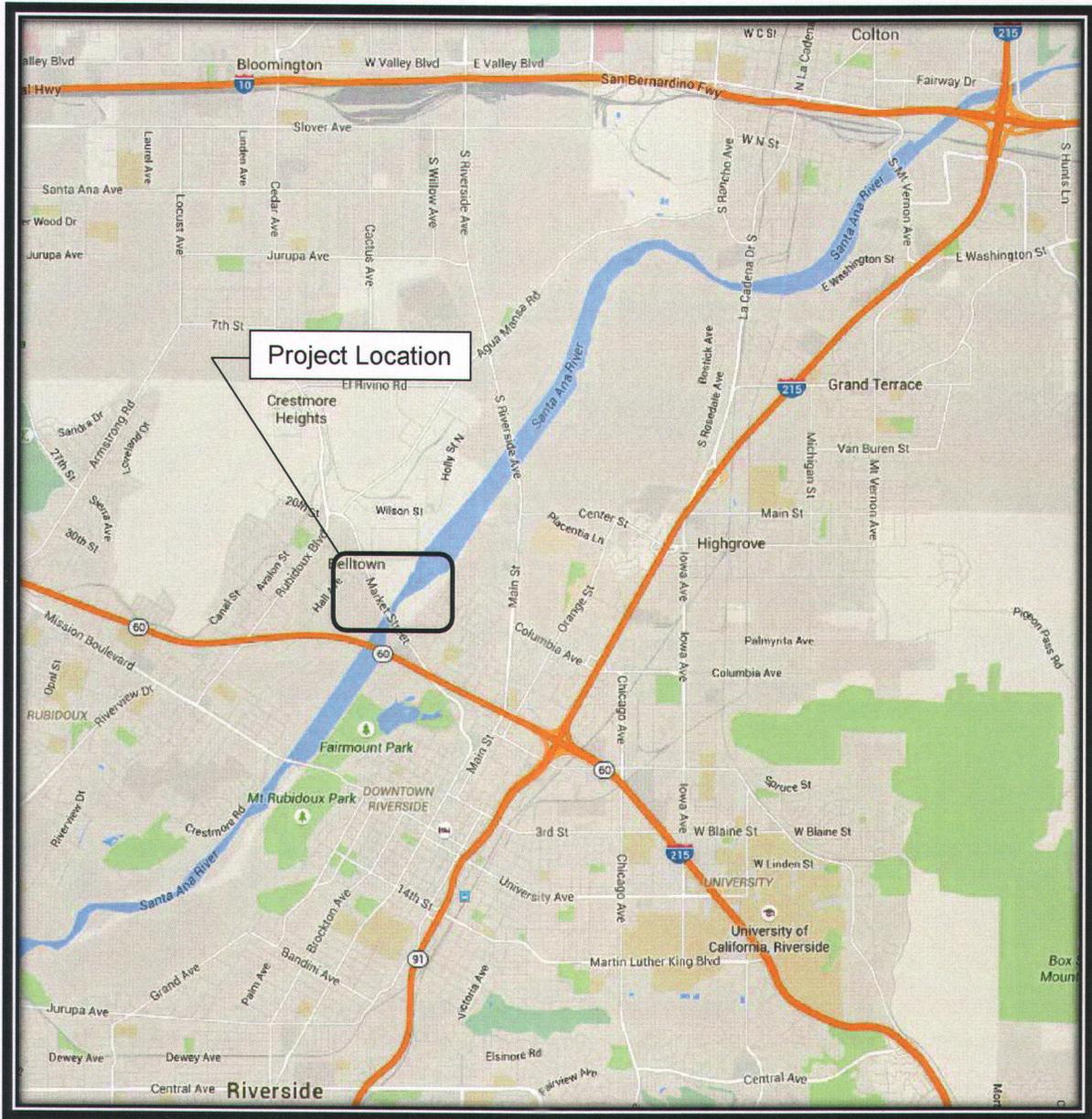
Vicinity Map

Agreement



Gregory P. Priamos, Director County Counsel 1/25/2017

Market Street Bridge Improvements at Santa Ana River



VICINITY MAP

SD 10/21/11 8:52

Federal Project No. BRLS-5956(200)

Advantage ID. 0812000213

Contract No. 16-12-002

Riverside County Transportation

ENGINEERING SERVICES AGREEMENT

for

**Replacement of Market Street Bridge
at Santa Ana River (Br. No. 56C-0024)**

between

County of Riverside • Transportation Department

and

Dokken Engineering



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Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)

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ENGINEERING SERVICES AGREEMENT

COUNTY OF RIVERSIDE, hereinafter referred to as "COUNTY", and DOKKEN ENGINEERING, hereinafter referred to as "ENGINEER", located at the following addresses:

County of Riverside • Transportation Department	DOKKEN ENGINEERING
4080 Lemon Street, 8 th Floor	110 Blue Ravine Road, Suite 200
Riverside, CA 92502	Folsom, CA 95630

do hereby agree as follows:

ARTICLE I • DESIGNATED CONTACTS

Coordination of ENGINEER, and COUNTY activities shall be accomplished through an ENGINEERING PROJECT MANAGER, and a COUNTY PROJECT MANAGER.

The ENGINEERING PROJECT MANAGER for ENGINEER shall be:

Juann Ramos, PE

The COUNTY PROJECT MANAGER for COUNTY shall be:

Tayfun Saglam, PE

ARTICLE II • PROJECT DEFINITION

ENGINEER shall furnish all technical and professional services including labor, material, equipment, transportation, supervision, and expertise to fully and adequately perform and complete the covenants set forth in Appendix A, Scope of Services, which is attached hereto and incorporated herein by reference. All services and deliverables associated with the performance and accomplishment of the covenants described in the Scope of Services is hereinafter collectively referred to as the "PROJECT".

ARTICLE III • COOPERATIVE AGENCIES

A. Lead Agency

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

B. Cooperative Agencies

The cooperating agencies are listed below and will hereinafter be collectively referred to as the "AGENCIES".

Federal Highway Administration (FHWA)

CALTRANS

1 Riverside County Departments

2 City of Riverside

3 City of Jurupa Valley

4 Utility Companies

5 Regulatory Agencies including:

6 U.S. Army Corps of Engineers (USACE)

7 U.S. Fish and Wildlife Service (USFWS)

8 California Department of Fish and Game (CDFG)

9 Regional Water Quality Control Board (RWQCB)

10 Riverside County Flood Control & Water Conservation District (RCFC & WCD)

11 **C. COUNTY/AGENCIES Standards**

12 All deliverables shall be prepared in accordance with the current COUNTY and AGENCIES practices,
13 regulations, policies, procedures, manuals and standards where applicable. All deliverables are subject
14 to review and approval by COUNTY.

15 **ARTICLE IV • CONDITIONS**

16 **A. Notifications**

17 All notices hereunder and communications regarding interpretation of the terms of this contract and
18 changes thereto shall be effected by the mailing thereof by registered or certified mail, return receipt
19 requested, postage prepaid and addressed to the attention of the ENGINEERING PROJECT MANAGER
20 or the COUNTY PROJECT MANAGER at the respective addresses provided on page one of this
21 contract.

22 **B. Assignment**

23 Without written consent of COUNTY, this contract is not assignable by ENGINEER either in whole or in
24 part.

25 **C. Subcontracts**

26 1. ENGINEER shall perform the services contemplated with resources available within its own organization.

27 No portion of the services pertinent to this contract shall be subcontracted without written authorization by
28 the COUNTY PROJECT MANAGER, except that which is expressly identified in this contract.

29 2. In the event ENGINEER subcontracts any portion of ENGINEER's duties under this contract, ENGINEER

1 shall require its subcontractors to comply with the terms of this contract in the same manner as required
2 of ENGINEER including, but not limited to; indemnification of the COUNTY, requiring the same insurance
3 of Subcontractors as required of ENGINEER, and having Subcontractor's insurance name the COUNTY
4 as Additional Insured for each type of insurance where this Agreement requires ENGINEER's insurance
5 to name COUNTY as Additional Insured.

6 **D. Modifications**

- 7 1. This contract may be amended or modified only by mutual written agreement of the parties. No alteration
8 or variation of the terms of this contract will be valid unless made in writing and signed by the parties
9 hereto and no oral understanding or agreement not incorporated herein, will be binding on any of the
10 parties hereto.
- 11 2. Minor modifications are changes that do not substantially affect the Scope of Service. Minor
12 modifications may be: a shift of funds between tasks within a budget category; the shifting of work
13 and/or funding from one phase to another; use of contingency pursuant to Article VI.B.1. All requests for
14 minor modifications must be approved in writing by the Director of Transportation, or his designee, prior to
15 implementing the change.
- 16 3. There shall be no change in the ENGINEERING PROJECT MANAGER or key members of the PROJECT
17 team without prior written approval by the COUNTY PROJECT MANAGER.
- 18 4. All modifications that do not fit within the definition of a minor modification to the contract shall be
19 considered a major change and must be approved in writing by the ENGINEER and COUNTY Board of
20 Supervisors prior to implementing the major change.

21 **E. COUNTY Directives**

22 ENGINEER shall receive contract directions and interpretations from the COUNTY PROJECT
23 MANAGER.

24 **F. Liability**

- 25 1. ENGINEER has total responsibility for the accuracy and completeness of all data, reports, plans,
26 specifications and estimates prepared for this PROJECT and shall check all such material accordingly.
27 COUNTY will review all work product deliverables. The responsibility for accuracy and completeness of
28 such items remains solely that of ENGINEER. Neither COUNTY'S review or approval shall give rise to
29 any liability or responsibility on the part of COUNTY, or waive any of COUNTY'S rights, or relieve

1 ENGINEER of its professional responsibilities or obligations under this contract.

- 2 2. The plans, designs, estimates, calculations, reports and other documents furnished in accordance with
3 the Scope of Services shall meet the criteria for acceptance and be a product of neat appearance, well
4 organized, technically and grammatically correct, checked and having the preparer and checker
5 identified. The minimum standard of appearance, organization and contents shall be of similar types
6 produced by COUNTY and AGENCIES. If any work product submitted is not complete and ready for use
7 by COUNTY, it shall be marked "Draft" or similar designation to indicate it is not ready for use by
8 COUNTY. COUNTY expects that all work product not so designated is ready for and can be used on
9 PROJECT.
- 10 3. The page identifying preparers of engineering reports, the title sheet for specifications and each sheet of
11 plans, shall bear the professional seal, certificate number, registration classification, expiration date of the
12 certificate, and signature of the professional engineer(s) responsible for their preparation.
- 13 4. COUNTY and ENGINEER agree that plans, drawings or other work products prepared by ENGINEER are
14 for the exclusive use of COUNTY and will be used by COUNTY for the project for which they were
15 specifically designed. ENGINEER shall not be responsible for use of such plans, drawings or other work
16 products if used on a different project without the written authorization or approval by ENGINEER.
- 17 5. ENGINEER acknowledges that the plans, drawings and/or other work products may be used by COUNTY
18 for the PROJECT regardless of any disputes that may develop between ENGINEER and COUNTY. All
19 plans, drawings, or other work product shall be deemed the sole and exclusive property of COUNTY and
20 ownership thereof is irrevocably vested in COUNTY whether the PROJECT is executed or not.
- 21 6. ENGINEER, and the agents and employees of ENGINEER, in the performance of this contract, shall act
22 in an independent capacity and not as officers, employees or agents of COUNTY.

23 **G. Indemnification and Defense**

- 24 1. The ENGINEER agrees to and shall indemnify and hold harmless the County of Riverside, its Agencies,
25 Districts, Departments and Special Districts, their respective directors, officers, Board of Supervisors,
26 elected and appointed officials, employees, agents and representatives (hereinafter individually and
27 collectively referred to as "Indemnitees") from all liability, including, but not limited to loss, suits, claims,
28 demands, actions, or proceedings caused by any alleged or actual negligence, recklessness, willful
29 misconduct, errors or omissions of ENGINEER, its directors, officers, partners, employees, agents or

1 representatives or any person or organization for whom ENGINEER is responsible, arising out of or from
2 the performance of services under this Agreement. To the extent a loss, suit, claim, demand, action, or
3 proceeding is based on actual or alleged acts or omissions of ENGINEER which are not design
4 professional services, ENGINEER shall indemnify Indemnitees whether or not ENGINEER is negligent.

- 5 2. The duty to indemnify does not include loss, suits, claims, demands, actions, or proceedings caused by
6 actual negligence of Indemnitees; however, any actual negligence of Indemnitees will only affect the duty
7 to indemnify for the specific act found to be negligence, and will not preclude a duty to indemnify for any
8 act or omission of ENGINEER.
- 9 3. ENGINEER shall defend and pay, at its sole expense, all costs and fees, including but not limited to
10 attorney fees, cost of investigation, and defense, in any loss, suits, claims, demands, actions, or
11 proceedings based or alleged to be based on any act or omission of ENGINEER arising out of or from the
12 performance of services under this contract. The duty to defend applies to any alleged or actual
13 negligence, recklessness, willful misconduct, error or omission of ENGINEER. The duty to defend shall
14 apply whether or not ENGINEER is a party to the lawsuit, and shall apply whether or not ENGINEER is
15 directly liable to the plaintiffs in the lawsuit. The duty to defend applies even if Indemnitees are alleged or
16 found to be actively negligent, unless the act or omission at issue was caused by the sole active
17 negligence of Indemnitees.
- 18 4. The specified insurance provisions and limits required in this contract shall in no way limit or circumscribe
19 ENGINEER'S obligations to indemnify and hold harmless Indemnitees from third party claims.
- 20 5. In the event there is conflict between the indemnity and defense provisions and California Civil Code
21 Sections 2782 and 2782.8, the indemnity and defense provisions shall be interpreted to comply with Civil
22 Code sections 2782 and 2782.8.

23 **H. Quality Control**

24 ENGINEER shall implement and maintain the following quality control procedures during the preparation
25 of the plans and documents relating to PROJECT. ENGINEER shall have a quality control plan in effect
26 during the entire time services are being performed under this contract. The plan shall establish a
27 process whereby calculations are independently checked, plans checked, corrected and back-checked,
28 and all job related correspondence and memoranda routed and received by affected persons and then
29 bound in appropriate job files. Where several drawings show different work in the same area, means

1 shall be provided to avoid conflicts and misalignment in both new and existing improvements. Evidence
2 that the quality control plan is functional may be requested by the COUNTY PROJECT MANAGER. All
3 plans, calculations documents and other items submitted to the COUNTY PROJECT MANAGER for
4 review shall be marked clearly as being fully checked and that the preparation of the material followed the
5 quality control plan established for the work.

6 **I. Value Engineering**

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

17 **J. Extra Work**

- 18 1. ENGINEER shall not perform Extra Work until receiving written authorization from the COUNTY
19 PROJECT MANAGER.
- 20 2. In the event that COUNTY directs ENGINEER to provide services constituting Extra Work, COUNTY shall
21 provide extra compensation to the ENGINEER. Allowable compensation for approved extra work will be
22 based on the provisions of Appendix C, Budget, which is attached hereto and incorporated herein by
23 reference.
- 24 3. An amendment to this contract providing for such compensation for Extra Work shall be issued by
25 COUNTY to ENGINEER. Such Amendment shall not be effective until executed by both parties.

26 **K. Disputes**

- 27 1. In the event ENGINEER considers any work demanded of him to be outside the requirements of the
28 contract, or if he considers any order, instruction, or decision of COUNTY to be unfair, he shall promptly
29 upon receipt of such order, instruction or decision, ask for a written confirmation of the same whereupon

1 he shall proceed without delay to perform the work or to conform to the order, instruction, or decision; but
2 unless ENGINEER finds such order, instruction, or decision satisfactory, he shall within 20 days after
3 receipt of same, file a written protest with COUNTY stating clearly and in detail his objections and reasons
4 therefore. Except for such protests or objections as are made of record in the manner specified and
5 within the time stated herein, and except for such instances where the basis of a protest could not
6 reasonably have been foreseen by ENGINEER within the time limit specified for protest, ENGINEER
7 hereby waives all grounds for protests or objections to the orders, instruction, or decisions of COUNTY
8 and hereby agrees that, as to all matters not included in such protests, the orders, instructions and
9 decisions of COUNTY will be limited to matters properly falling within COUNTY's authority.

- 10 2. Any controversy or claim arising out of or relating to this contract which cannot be resolved by mutual
11 agreement may be settled by arbitration in accordance with the rules of the American Arbitration
12 Association, provided that the parties mutually agree to submit to arbitration.
- 13 3. Neither the pendency of a dispute nor its consideration by arbitration will excuse ENGINEER from full and
14 timely performance in accordance with the terms of the contract.

15 **L. Termination Without Cause**

- 16 1. COUNTY reserves the right to terminate this contract at COUNTY's discretion and without cause, upon
17 thirty (30) calendar days written notice to ENGINEER.
- 18 2. In the event of termination of the Agreement, upon demand, ENGINEER shall deliver to COUNTY all field
19 notes, surveys, studies, reports, plans, drawings, specifications, and all other materials and documents
20 prepared by or provided to ENGINEER in the performance of this contract. All such documents and
21 materials shall be property of COUNTY.
- 22 3. In the event that this contract is terminated, ENGINEER is entitled to full payment for all services
23 performed up to the time written notice of contract cancellation is received by ENGINEER. Payment shall
24 be made for services performed to date based upon the percentage ratio that the basic services
25 performed bear to the services contracted for, less payments made to date; plus any amount for
26 authorized, but unpaid, extra work performed and costs incurred.

27 **M. Termination for Lack of Performance**

28 COUNTY may terminate this contract and be relieved of the payment of any consideration to ENGINEER
29 should ENGINEER fail to perform the covenants herein contained at the time and in the manner herein

1 provided. In the event of such termination, COUNTY may proceed with the work in any manner deemed
2 proper by COUNTY. In such event, ENGINEER shall be paid only for work completed and delivered to
3 COUNTY in a timely and successful manner.

4 **N. Insurance**

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

11 1. Workers' Compensation:

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

17 2. Commercial General Liability:

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

25 3. Vehicle Liability:

26 If vehicles or mobile equipment are used in the performance of the obligations under this Agreement, then
27 ENGINEER shall maintain liability insurance for all owned, non-owned or hired vehicles so used in an
28 amount not less than \$1,000,000 per occurrence combined single limit. If such insurance contains a
29 general aggregate limit, it shall apply separately to this agreement or be no less than two (2) times the

1 occurrence limit. Policy shall name the COUNTY as Additional Insureds.

2 4. Professional Liability

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

12 5. General Insurance Provisions - All lines:

13 a. Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of
14 California and have an A M BEST rating of not less than A: VIII (A:8) unless such requirements are
15 waived, in writing, by the County Risk Manager. If the County's Risk Manager waives a requirement
16 for a particular insurer such waiver is only valid for that specific insurer and only for one policy term.

17 b. The ENGINEER must declare its insurance self-insured retention for each coverage required herein.
18 If any such self-insured retention exceed \$500,000 per occurrence each such retention shall have the
19 prior written consent of the County Risk Manager before the commencement of operations under this
20 Agreement. Upon notification of self-insured retention unacceptable to the COUNTY, and at the
21 election of the Country's Risk Manager, ENGINEER'S carriers shall either; 1) reduce or eliminate
22 such self-insured retention as respects this Agreement with the COUNTY, or 2) procure a bond which
23 guarantees payment of losses and related investigations, claims administration, and defense costs
24 and expenses.

25 c. ENGINEER shall cause ENGINEER'S insurance carrier(s) to furnish the County of Riverside with
26 either 1) a properly executed original Certificate(s) of Insurance and certified original copies of
27 Endorsements effecting coverage as required herein, and 2) if requested to do so orally or in writing
28 by the County Risk Manager, provide original Certified copies of policies including all Endorsements
29 and all attachments thereto, showing such insurance is in full force and effect. Further, said

Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)

1 Certificate(s) and policies of insurance shall contain the covenant of the insurance carrier(s) that thirty
2 (30) days written notice shall be given to the County of Riverside prior to any material modification,
3 cancellation, expiration or reduction in coverage of such insurance. In the event of a material
4 modification, cancellation, expiration, or reduction in coverage, this Agreement shall terminate
5 forthwith, unless the County of Riverside receives, prior to such effective date, another properly
6 executed original Certificate of Insurance and original copies of endorsements or certified original
7 policies, including all endorsements and attachments thereto evidencing coverage's set forth herein
8 and the insurance required herein is in full force and effect. ENGINEER shall not commence
9 operations until the COUNTY has been furnished original Certificate (s) of Insurance and certified
10 original copies of endorsements and if requested, certified original policies of insurance including all
11 endorsements and any and all other attachments as required in this Section. An individual authorized
12 by the insurance carrier to do so on its behalf shall sign the original endorsements for each policy and
13 the Certificate of Insurance.

- 14 d. It is understood and agreed to by the parties hereto that the ENGINEER'S insurance shall be
15 construed as primary insurance, and the COUNTY'S insurance and/or deductibles and/or self-insured
16 retention's or self-insured programs shall not be construed as contributory.
- 17 e. If, during the term of this Agreement or any extension thereof, there is a material change in the scope
18 of services; or, there is a material change in the equipment to be used in the performance of the
19 scope of work; or, the term of this Agreement, including any extensions thereof, exceeds five (5)
20 years; the COUNTY reserves the right to adjust the types of insurance and the monetary limits of
21 liability required under this Agreement, if in the County Risk Manager's reasonable judgment, the
22 amount or type of insurance carried by the ENGINEER has become inadequate.
- 23 f. ENGINEER shall pass down the insurance obligations contained herein to all tiers of subconsultants
24 working under this Agreement.
- 25 g. The insurance requirements contained in this Agreement may be met with a program(s) of self-
26 insurance acceptable to the COUNTY.
- 27 h. ENGINEER agrees to notify COUNTY of any claim by a third party or any incident or event that may
28 give rise to a claim arising from the performance of this Agreement.

29 **O. Conflict of Interest**

1 ENGINEER warrants, by execution of this contract, that no person or selling agency has been employed
2 or retained to solicit or secure this contract upon an agreement or understanding for a commission,
3 percentage, brokerage or contingent fee, excepting bona fide employees or bona fide established
4 commercial or selling agencies maintained by ENGINEER for the purpose of securing business. For
5 breach or violation of this warranty, COUNTY has the right to annul this contract without liability, pay only
6 for the value of the work actually performed, or in its discretion to deduct from the contract price or
7 consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or
8 contingent fee. ENGINEER may be requested to complete a Conflict of Interest Statement prior to,
9 during, or after execution of this contract. ENGINEER understands that as a condition of this contract
10 ENGINEER agrees to complete the Conflict of Interest Statement when requested to do so by COUNTY.

11 **P. Legal Compliance**

12 ENGINEER shall comply with all Federal, State and local laws, statutes, ordinances, rules and
13 regulations, and the orders and decrees of any courts or administrative bodies or tribunals currently in
14 effect and in any manner affecting the performance of this contract, including, without limitation, workers'
15 compensation laws and licensing and regulations.

16 **Q. Nondiscrimination**

- 17 1. During the performance of this contract, ENGINEER and its Subcontractors shall not act unlawfully
18 against any employee or applicant for employment because of race, religion, color, national origin,
19 ancestry, physical handicap, medical condition, marital status, age or sex. ENGINEER and
20 Subcontractor shall comply with the provisions of the Fair Employment and Housing Act (Government
21 Code, Section 12900 et seq.) and applicable regulations promulgated thereunder (California
22 Administrative Code, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment
23 and Housing Commission implementing Government Code, Section 12900, set forth in Chapter 5 of
24 Division 4 of Title 2 of the California Administrative Code are incorporated into this contract by reference
25 and made a part hereof as if set forth in full. ENGINEER and its Subcontractors shall give written notice
26 of their obligations under this clause to labor organizations with which they have a collective bargaining or
27 other agreement.
- 28 2. ENGINEER will provide all information and reports required by the Regulations, or orders and instructions
29 issued pursuant thereto, and will permit access to its books, records, accounts, other sources of

1 information, and its facilities as may be determined by COUNTY or AGENCIES to be pertinent to
2 ascertain compliance with such Regulations, orders and instructions. Where any information required of
3 ENGINEER is in the exclusive possession of another who fails or refuses to furnish this information,
4 ENGINEER shall so certify to COUNTY, or the Federal Highway Administration as appropriate and shall
5 set forth what efforts he has made to obtain the information.

6 3. In the event of ENGINEER's noncompliance with the nondiscrimination provisions of this contract,
7 COUNTY shall impose such contract sanctions as it determines to be appropriate, including, but not
8 limited to:

- 9 • Withholding of payments to ENGINEER under the contract until ENGINEER complies;
- 10 • Cancellation, termination, or suspension of the contract in whole or in part.

11 4. ENGINEER shall include the nondiscrimination and compliance provisions of this clause in all
12 subcontracts to perform work under this contract.

13 5. ENGINEER shall comply with Title VI of the Civil Rights Act of 1964, as amended. Accordingly, 49 CFR
14 21 through Appendix H and 23 CFR 710.405(b) are applicable to this contract by reference.

15 **R. Labor Code and Prevailing Wages**

- 16 1. Certain Classifications of Labor under this contract may be subject to prevailing wage requirements.
- 17 2. Reference is made to Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with
18 Section 1720). By this reference said Chapter 1 is incorporated herein with like effect as if it were here
19 set forth in full. The parties recognize that said Chapter 1 deals, among other things with discrimination,
20 penalties and forfeitures, their disposition and enforcement, wages, working hours, and securing worker's
21 compensation insurance and directly effect the method of prosecution of the work by ENGINEER and
22 subject it under certain conditions to penalties and forfeitures. Execution of the contract by the parties
23 constitutes their agreement to abide by said Chapter 1, their stipulation as to all matters which they are
24 required to stipulate as to by the provisions of said Chapter 1, constitutes ENGINEER's certification that
25 he is aware of the provisions of said Chapter 1 and will comply with them and further constitutes
26 ENGINEER's certification as follows: "I am aware of the provisions of Section 3700 of the California Labor
27 Code which require every employer to be insured against liability for worker's compensation or to
28 undertake self-insurance in accordance with the provisions of that Code, and I will comply with such
29 provisions before commencing the performance of the work of this contract."

- 1 3. Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates, including the per diem
2 wages applicable to the work, and for holiday and overtime work, including employer payments for health
3 and welfare, pension, vacation, and similar purposes, in the county in which the work is to be done have
4 been determined by the Director of the California Department of Industrial Relations. These wages are
5 available from the California Department of Industrial Relations' Internet website at <http://www.dir.ca.gov>.
- 6 4. Should a portion of the project contain Federal funding, Federal minimum wages shall be used. The
7 Federal minimum wage rates for this project as determined by the United States Secretary of Labor are
8 available from the U.S Department of Labor, Employment Standards Administration, Wage and Hour
9 Division's Internet website at <http://www.access.gpo.gov/davisbacon>. If there is a difference between the
10 minimum wage rates determined by the Secretary of Labor and the general prevailing wage rates
11 determined by the Director of the California Department of Industrial Relations for similar classifications of
12 labor, the ENGINEER and subcontractors shall pay not less than the higher wage rate. The Department
13 will not accept lower State wage rates determinations. This includes "helper" (or other classifications
14 based on hours of experience) or any other classification not appearing in the Federal wage
15 determinations. Where Federal wage determinations do not contain the State wage rate determination
16 otherwise available for use by the ENGINEER and subcontractors, the ENGINEER and subcontractors
17 shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the
18 employees in question.

19 **S. Review and Inspection**

20 ENGINEER and any Subcontractors shall permit COUNTY and/or AGENCIES to review and inspect
21 PROJECT activities including review and inspection on a daily basis.

22 **T. Record Retention / Audits**

- 23 1. ENGINEER's and subconsultants' contracts, including cost proposals and indirect cost rates (ICR), are
24 subject to audits or reviews such as, but not limited to, a Contract Audit, an Incurred Cost Audit, an ICR
25 Audit, or a certified public accountant (CPA) ICR Audit Workpaper Review. If selected for audit or review,
26 the contract, cost proposal and ICR and related workpapers, if applicable, will be reviewed to verify
27 compliance with 48 CFR, Part 31 and other related laws and regulations. In the instances of a CPA ICR
28 Audit Workpaper Review, it is ENGINEER's responsibility to ensure federal, state, or local government
29 officials are allowed full access to the CPA's workpapers. The contract, cost proposal, and ICR shall be

1 adjusted by ENGINEER and approved by COUNTY contract manager to conform to the audit or review
2 recommendations. ENGINEER agrees that individual terms of costs identified in the audit report shall be
3 incorporated into the contract by this reference if directed by COUNTY at its sole discretion. Refusal by
4 ENGINEER to incorporate audit or review recommendations, or to ensure that the Federal, State, or local
5 governments have access to CPA workpapers, will be considered a breach of contract terms and cause
6 for termination of the contract and disallowance of prior reimbursed costs.

7 2. ENGINEER, Subcontractors, and COUNTY shall maintain all books, documents, papers, accounting
8 records, and other evidence pertaining to the performance of the contract, but not limited to, the costs of
9 administering the contract. All parties shall make such materials available at their respective offices at all
10 reasonable times during the contract period and for ten years from the date of final payment under the
11 contract or ten years from project closeout, whichever is later.

12 3. COUNTY, Caltrans, the State Auditor General, FHWA or any duly authorized representative of the
13 Federal Government shall have access to any books, records, and documents of ENGINEER that are
14 pertinent to the contract for audits, examinations, excerpts, and transactions, and copies thereof shall be
15 furnished if requested.

16 **U. Rebates, Kickbacks, or Other Unlawful Consideration**

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

22 **V. Prohibition of Expending Local Agency, State, or Federal Funds for Lobbying**

23 1. ENGINEER certifies to the best of his or her knowledge and belief that:
24 a. No state, federal or local agency appropriated funds have been paid, or will be paid by-or-on behalf of
25 ENGINEER to any person for influencing or attempting to influence an officer or employee of any
26 state or federal agency; a Member of the State Legislature or United States Congress; an officer or
27 employee of the Legislature or Congress; or any employee of a Member of the Legislature or
28 Congress, in connection with the awarding of any state or federal contract; the making of any state or
29 federal grant; the making of any state or federal loan; the entering into of any cooperative agreement,

1 and the extension, continuation, renewal, amendment, or modification of any state or federal contract,
2 grant, loan, or cooperative agreement.

3 b. If any funds other than federal appropriated funds have been paid, or will be paid to any person for
4 influencing or attempting to influence an officer or employee of any federal agency; a Member of
5 Congress; an officer or employee of Congress, or an employee of a Member of Congress; in
6 connection with this federal contract, grant, loan, or cooperative agreement; ENGINEER shall
7 complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with
8 its instructions.

9 2. This certification is a material representation of fact upon which reliance was placed when this transaction
10 was made or entered into. Submission of this certification is a prerequisite for making or entering into this
11 transaction imposed by Section 1352, Title 31, US. Code. Any person who fails to file the required
12 certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for
13 each such failure.

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

17 **W. Ownership of Data**

18 Ownership and title to all reports, documents, plans, specifications, and estimates produced as part of this
19 contract will automatically be vested in COUNTY and no further agreement will be necessary to transfer
20 ownership to COUNTY.

21 **X. Confidentiality of Data**

22 1. All financial, statistical, personal, technical or other data and information which is designated confidential
23 by COUNTY or AGENCIES, and made available to ENGINEER in order to carry out this contract, shall be
24 protected by ENGINEER from unauthorized use and disclosure.

25 2. Permission to disclose information on one occasion for a public hearing held by COUNTY or AGENCIES
26 relating to the contract shall not authorize ENGINEER to further disclose such information or disseminate
27 the same on any other occasion.

28 3. ENGINEER shall not comment publicly to the press or any other media regarding the contract, including
29 COUNTY or Agencies actions regarding this contract. Communication shall be limited to COUNTY,

1 Agency or ENGINEER's staff that are involved with the project, unless ENGINEER shall be requested by
2 COUTY to attend a public hearing or respond to questions from a Legislative committee.

3 4. Each subcontract shall contain provisions similar to the foregoing related to the confidentiality of data and
4 nondisclosure of the same.

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

8 **Y. Funding Requirements**

9 1. All obligations of COUNTY are subject to appropriation of resources by various Federal, State and local
10 agencies.

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

15 3. It is mutually agreed that if sufficient funds for the program are not appropriated, this contract will be
16 amended or terminated to reflect any reduction in funds.

17 **ARTICLE V • PERFORMANCE**

18 **A. Performance Period**

19 1. This contract shall begin upon notification to proceed by the COUNTY PROJECT MANAGER.

20 2. ENGINEER is advised that any recommendation for contract award is not binding on COUNTY until the
21 proposed contract is fully executed and approved by COUNTY.

22 3. ENGINEER shall perform PROJECT services in accordance with the provisions set forth in Appendix B,
23 Schedule of Services, which is attached hereto and incorporated herein by reference.

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

27 5. When COUNTY determines that ENGINEER has satisfactorily completed the PROJECT services,
28 COUNTY may give ENGINEER a written Notice of Final Acceptance. ENGINEER shall not incur any
29 further costs hereunder unless so specified in the Notice of Final Acceptance. ENGINEER may request a

1 Notice of Final Acceptance determination when, in its opinion, it has satisfactorily completed all covenants
2 as stipulated in this contract.

3 6. Time is of the essence in this contract.

4 **B. Time Extensions**

5 1. Any delay in providing PROJECT services required by this contract occasioned by causes beyond the
6 control and not due to the fault or negligence of ENGINEER, shall be the reason for granting an extension
7 of time for the completion of the aforesaid work. When such delay occurs, ENGINEER shall promptly
8 notify COUNTY in writing of the cause and of the extent of the delay whereupon COUNTY shall ascertain
9 the facts and the extent of the delay and grant an extension of time for the completion of the work when,
10 in COUNTY's judgment, their findings of fact justify such an extension of time.

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

13 **C. Reporting Progress**

14 1. As part of the monthly invoice ENGINEER shall submit a progress report in accordance with COUNTY
15 Engineering Services Progress Reporting Guidelines. Progress Reports shall indicate the progress
16 achieved during the previous month in relation to the Schedule of Services. Submission of such progress
17 report by ENGINEER shall be a condition precedent to receipt of payment from COUNTY for each
18 monthly invoice submitted.

19 2. To ensure understanding and performance of the contract objectives, meetings between COUNTY,
20 AGENCIES, and ENGINEER shall be held as often as deemed necessary. All work objectives,
21 ENGINEER's work schedule, the terms of the contract and any other related issues will be discussed
22 and/or resolved. ENGINEER shall keep minutes of meetings and distribute copies of minutes as
23 appropriate.

24 **D. Evaluation of ENGINEER**

25 ENGINEER's performance will be evaluated by COUNTY for future reference.

26 **ARTICLE VI • COMPENSATION**

27 **A. Work Authorization**

28 ENGINEER shall not commence performance of any work or project services until so directed by the
29 County Project Manager. No payment will be made prior to approval of this contract.

1 **B. Basis of Compensation**

2 1. PROJECT services as provided under this contract and as described in the Scope of Services, shall be
3 compensated for as defined in Appendix C, Budget, which is attached hereto and incorporated herein by
4 reference. The total amount of the contract is not to exceed \$1,270,659.23 and reimbursement is to be
5 made at actual cost plus fixed fee for the following contractors:

6	• Dokken Engineering	\$1,132,597.66
7	• Fehr & Peers	\$17,382.24
8	• Earth Mechanics, Inc.	\$50,781.22
9	• Wreco	\$30,427.36
10	• VMS	\$39,470.75

11 If a contingency budget is provided, COUNTY shall hold such contingency in reserve for unforeseen Extra
12 Work that may arise during the performance of this agreement. Contingency budget shall only be used at
13 the discretion of the COUNTY PROJECT MANAGER, and with prior written authorization by the COUNTY
14 PROJECT MANAGER.

15 No additional compensation for Extra Work will be paid except upon the issuance of an Extra Work Order
16 by COUNTY.

17 2. Prior authorization in writing by the COUNTY PROJECT MANAGER will be required before ENGINEER
18 enters into any non-budgeted purchase order or subcontract exceeding \$500 for supplies, equipment or
19 consultant services. ENGINEER shall provide an evaluation of the necessity or desirability of incurring
20 such costs.

21 3. For purchase of any item, service or consulting work not covered in ENGINEER's proposal and
22 exceeding \$500, with prior authorization by the COUNTY PROJECT MANAGER, three competitive
23 quotations shall be submitted with the request, or the absence of bidding shall be adequately justified.

24 4. Any equipment purchased as a result of this contract is subjected to the following: ENGINEER shall
25 maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a
26 useful life of at least two years and an acquisition cost of \$500 or more. If the purchased equipment
27 needs replacement and is sold or traded in, COUNTY shall receive a proper refund or credit. At the
28 conclusion of the contract or if the contract is terminated, ENGINEER may either keep the equipment and
29 credit COUNTY in an amount equal to its fair market value or sell such equipment at the best price

Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)

1 obtainable at a public or private sale in accordance with established COUNTY procedures and credit
2 COUNTY in an amount equal to the sales price. If ENGINEER elects to keep the equipment, fair market
3 value shall be determined, at ENGINEER's expense, on the basis of a competent independent appraisal
4 of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable by COUNTY, and
5 ENGINEER. If it is determined to sell the equipment, the terms and conditions of such sale must be
6 approved in advance by COUNTY and AGENCIES.

- 7 5. The consideration to be paid ENGINEER, as provided herein, shall be in compensation for all of
8 ENGINEER's expenses incurred in the performance hereof, including travel and per diem, unless
9 otherwise expressly so provided.
- 10 6. ENGINEER agrees that the Contract Cost Principles and Procedures, CFR 48, Federal Acquisition
11 Regulations Systems, Chapter 1, Part 31, shall be used to determine the allowability of individual items of
12 cost.
- 13 7. ENGINEER also agrees to comply with Federal procedures in accordance the Code of Federal
14 Regulations Section 49, Part 18, Uniform Administrative Requirements for Grants and Cooperative
15 Agreements to State and Local Governments.
- 16 8. In the event of errors or omissions in the plans for PROJECT, ENGINEER shall perform the necessary
17 engineering services required to correct such errors and omissions without additional charge to COUNTY.

18 **C. Progress Payments**

- 19 1. ENGINEER shall submit monthly invoices for PROJECT Services in accordance with Appendix C,
20 Budget, and in accordance with COUNTY Engineering Services Invoicing Procedures.
- 21 2. ENGINEER shall submit an invoice each month for PROJECT services performed during the preceding
22 month. Invoices shall be submitted to the COUNTY PROJECT MANAGER and shall be included with a
23 Progress Report covering the same period as the submitted invoice.
- 24 3. Progress payments will be based on PROJECT services provided and actual costs incurred. Payments
25 made prior to the completion of each phase will not exceed the amount allowed in ENGINEER's cost
26 proposal for the completion of that phase and prior phases, unless approved in writing by the COUNTY
27 PROJECT MANAGER..
- 28 4. Progress payments will be made as promptly as fiscal procedures will permit upon receipt by the
29 COUNTY PROJECT MANAGER of itemized invoices.

1 5. COUNTY will withhold the last 10 percent of the budget for preparation of 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
3 from each invoice. The amount retained will be paid to ENGINEER after COUNTY has approved
4 ENGINEER's plans, specifications and estimate.

5 **ARTICLE VII • GIS INFORMATION**

6 A. "GIS Information" shall include GIS digital files (including the information or data contained therein) and any
7 other information, data, or documentation from County GIS (regardless of medium or format) that is provided
8 pursuant to this contract.

9 B. ENGINEER acknowledges that the unauthorized use, transfer, assignment, sublicensing, or disclosure of the
10 GIS information, documentation, or copies thereof will substantially diminish their value to COUNTY.
11 ENGINEER acknowledges and agrees that COUNTY GIS information is a valuable proprietary product,
12 embodying substantial creative efforts, trade secrets, and confidential information and ideas. COUNTY GIS
13 information is and shall remain the sole property of COUNTY; and there is no intention of COUNTY to transfer
14 ownership of COUNTY GIS information.

15 C. COUNTY GIS information is made available to ENGINEER solely for use in the normal course of
16 ENGINEER's business to produce reports, analysis, maps and other deliverables only for this PROJECT and
17 as described within the Scope of Services.

18 D. ENGINEER agrees to indemnify and hold harmless COUNTY, its officers, employees and agents from any
19 and all liabilities, claims, actions, losses or damages relating to or arising from ENGINEER's use of COUNTY
20 GIS information.

21 E. GIS information cannot be used for all purposes; and GIS information may not be complete for all purposes.
22 Additional investigation or research by ENGINEER into other sources will be required. GIS information is
23 intended only as an information base and is not intended to replace any legal records. COUNTY has used
24 and will continue to use its best efforts to correctly input into COUNTY GIS the information contained in
25 various legal and other records; but COUNTY accepts no responsibility for any conflict with actual legal
26 records or for information not transferred from legal records to COUNTY GIS. COUNTY has attempted to
27 update GIS information as often as is practically feasible. However, ENGINEER should be aware that GIS
28 information may not be current and changes or additions to the information contained in COUNTY GIS may
29 not yet be reflected in COUNTY GIS.

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1 F. COUNTY accepts no responsibility for the use of GIS information; and COUNTY provides no warranty for the
2 use of COUNTY GIS or COUNTY GIS information by ENGINEER. THE WARRANTIES SPECIFICALLY SET
3 FORTH IN THIS AGREEMENT ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED,
4 INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE;
5 AND SUCH OTHER WARRANTIES ARE HEREBY EXCLUDED.

6 G. Final plans, drawings or PROJECT work products will be provided in an electronic format suitable for
7 inclusion within the COUNTY GIS or CADD Systems by ENGINEER and will contain the appropriate meta
8 data and will be geographically registered using a appropriate coordinate system such as the California State
9 Plane Coordinate System NAD 83.

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ARTICLE VIII • APPROVALS

COUNTY Approvals

RECOMMENDED FOR APPROVAL:

 Dated: 1-24-17

PATRICIA ROMO
Director of Transportation

APPROVED AS TO FORM:

GREGORY P. PRIAMOS, COUNTY COUNSEL

 Dated: 1/25/17

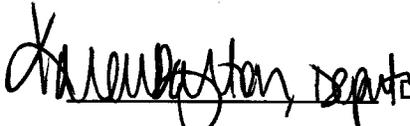
By Deputy

APPROVAL BY THE BOARD OF SUPERVISORS

 Dated: FEB 07 2017

JOHN TAVAGLIONE
Chairman, Riverside County Board of Supervisors

ATTEST:

 Dated: FEB 07 2017

KECIA HARPER-IHEM
Clerk of the Board (SEAL)

ENGINEER Approvals

ENGINEER:

 Dated: 12/7/16

RICHARD T. LIPTAK
PRINTED NAME

PRESIDENT
TITLE

ENGINEER:

 Dated: 12/7/2016

CATHY CHAN
PRINTED NAME

SECRETARY
TITLE

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APPENDIX A - SCOPE OF SERVICES

ARTICLE AI • INTRODUCTION

A. PROJECT DESCRIPTION

This PROJECT proposes to replace the existing 2 lane Market Street Bridge (Br. No. 56C-0024) over Santa Ana River in Riverside County with a new 4 lane bridge and reconstruct the connecting approach roadways. The existing bridge is eligible for bridge replacement funding through the Highway Bridge Program (HBP) with a current sufficiency rating of SR = 45.1 and a condition status of "Structurally Deficient". The structure is also considered functionally obsolete due to the deficient width of bridge relative to the approach roadway width, including no width for shoulders. The current Annual Average Daily Traffic (AADT) of 17,821 is very high for the two lane roadway. The ENGINEER shall perform professional and technical services to provide support to the County that is necessary to prepare Alternative Concepts, Environmental Clearance and Documentation, and Preliminary Engineering (35% Plans) necessary to clear the project and secure the permits for construction of the new bridge. The ENGINEER will prepare a technical report documenting all preliminary engineering work performed supporting the environmental documentation. This PROJECT is proposed to be primarily funded by Federal Highway Bridge Program (HBP) Funds and must therefore conform to process and procedures of the Caltrans Office of Local Programs.

The existing Market Street Bridge is 33'-8" wide and carries two-lanes of traffic over the Santa Ana River (1-lane in each direction) plus a sidewalk along the north side that is separated by a concrete barrier from the vehicular traffic. The bridge is a 12-span steel plate girder bridge with a total length of 1195 ft. It is supported on reinforced concrete pier walls founded on driven concrete piles. The existing structure was constructed in 1953 and retrofitted for seismic safety in 2001. The bridge is on the eligible bridge list for the Highway Bridge Program (HBP).

B. LOCATION

The PROJECT site is located on Market Street at the Santa Ana River approximately 1.5 miles west of State Route 91 and 0.25 miles north of State Route 60 in Riverside County. Attached is a vicinity map of the proposed PROJECT.

C. COORDINATION

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

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- 1 – Federal Highway Administration (FHWA)
- 2 – Caltrans
- 3 – Riverside County Departments
- 4 – City of Jurupa Valley
- 5 – City of Riverside
- 6 – Utility Companies

7 Regulatory Agencies including:

- 8 – U.S. Army Corps of Engineers (USACE)
- 9 – U.S. Fish and Wildlife Service (USFWS)
- 10 – California Department of Fish and Game (CDFG)
- 11 – Regional Water Quality Control Board (RWQCB)
- 12 – Riverside County Flood Control & Water Conservation District (RCFC & WCD)

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

19 **D. PHASES**

20 The services performed by ENGINEER shall include the following Phases:

21 Phase I – Preliminary Engineering / Environmental Clearance / Technical Report

22 Phase II – Plans, Specifications and Estimates (PS&E) (future agreement)

23 Phase III – Construction Bidding and Award Support (future agreement)

24 Phase IV - Design Support during Construction (future agreement)

25 This agreement covers only Phase I scope of services and fee, which will proceed upon written notice to
26 proceed by COUNTY. The subsequent phases will be covered in a future agreement and will not proceed
27 until authorized in writing by County.

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E. STANDARDS

The preliminary plans / technical report, and environmental document shall be prepared in accordance with current CALTRANS regulations, policies, procedures, manuals and standards including compliance with Federal Highway Administration (FHWA) requirements and/or COUNTY Road Standards as appropriate at the time of contract date. Caltrans guidelines for the technical studies and the environmental document will follow the guidance available as of contract date. The technical report prepared to support the environmental document will follow the format for Caltrans Project Reports. Improvements of local roads may be prepared in accordance with COUNTY standards in lieu of CALTRANS standards as directed by the COUNTY PROJECT MANAGER. ENGINEER will prepare fact sheets for County approval, documenting the exceptions to mandatory and advisory design standards. All documents shall be prepared using English Standard Units and dimensions.

1. Environmental

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

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

2. Preliminary Survey/Aerial Topographical Mapping

All preliminary surveys and aerial mapping shall be performed by COUNTY.

3. Design

Roadway design shall be in accordance with the current CALTRANS Highway Design Manual and its revisions and/or COUNTY Road Standards as appropriate. Traffic design shall be in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) and the California Supplement. Basic design shall be in accordance with the approved Technical Report and final Environmental Document including any

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1 supplements and/or updates. Microstation (compatible with current Caltrans version) software will be
2 used as the design software.

3 4. Project Files

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

5 **F. KEY PERSONNEL**

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

10	<u>Assignment</u>	<u>Key Personnel</u>
11	Principal in Charge / QA/QC Engineer	Richard Liptak, PE
12	Project Manager	Juann Ramos, PE
13	Structures Engineer	Martin Maechler, PE
14	Environmental Team Leader	Namat Hosseinion

15 **G. COUNTY RESPONSIBILITIES**

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

- 17 • Provide all current COUNTY standards, existing plans, and manuals (at CONSULTANT cost)
- 18 • Perform conformance review for all work and deliverables
- 19 • Attend project meetings
- 20 • Prepare topographic mapping in Caltrans format
- 21 • Obtain orthorectified aerial photograph in digital format
- 22 • Prepare existing R/W and parcel mapping in Caltrans format
- 23 • Perform field design surveys as requested by the CONSULTANT
- 24 • Coordinate Permits for Right of Entry with property owners
- 25 • Select Preferred Alternative
- 26 • Survey position and ground surface elevations at each boring location

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ARTICLE AII • PROJECT ADMINISTRATION

A. PROJECT MANAGEMENT

This task includes the day-to-day management of the PROJECT. PDT meetings with the COUNTY PROJECT MANAGER, the California Department of Transportation staff and other representatives from affected agencies will be held at least once a month. The environmental team leaders and/or subconsultants will attend PDT meetings as appropriate. The ENGINEER shall prepare meeting notes for each meeting and have these available for review at least one week prior to each succeeding meeting. The ENGINEER's Project Management Plan will include a communication plan. The communication plan will consist of a roster of staff involved in the PROJECT and multiple forms of contact for each team member (address, telephone number, e-mail, etc.). The communication plan will also identify lines of communication with levels of responsibility/authority for development of the PROJECT.

B. BUDGETING

The ENGINEER will prepare budgets for each task and milestone for the PROJECT. Such budgets will be entered in to the ENGINEER's Management Information System along with actual costs incurred and used as a basis for cost monitoring and control.

C. COST ACCOUNTING

The ENGINEER will prepare monthly reports of expenditures for the PROJECT by task and milestone. Expenditures will include direct labor costs, other direct costs and subconsultant costs. These reports will be included as supporting data for invoices presented to the COUNTY every month.

D. SCHEDULING

Within one month from the Notice to Proceed (NTP), the ENGINEER will provide a detailed project schedule, which indicates milestones, major activities and deliverables, to the COUNTY for review and comments. This schedule will reflect assumed review times necessary by all of the agencies involved. Review of the schedule will occur at subsequent trend meetings. Adjustments will be made, if necessary, due to changing circumstances.

E. PROGRESS REPORTING

Progress reports and invoices shall be prepared in accordance with COUNTY guidelines. Reports providing actual physical progress will be required monthly and shall be accompanied by an invoice.

F. CONTRACT ADMINISTRATION

The ENGINEER's PROJECT MANAGER shall maintain ongoing liaison with the COUNTY PROJECT MANAGER, AGENCY contacts and utility companies to promote effective coordination during the course of project development.

Progress meetings with ENGINEER's staff, subconsultants and the COUNTY PROJECT MANAGER shall be held regularly.

ARTICLE AIII • TASK PROJECT LIST

ENGINEER shall provide Project Approval and Environmental Documentation services for the PROJECT. The following task list is consistent with the project schedule.

PHASE 1 - PRELIMINARY ENGINEERING/ENVIRONMENTAL

TASK 1.0 PROJECT MANAGEMENT

Project Management shall be conducted to ensure a smooth flow of information between Project Development Team (PDT) members. A project schedule shall be developed and periodically updated. A comprehensive Quality Assurance/Quality Control (QA/QC) plan shall be implemented. Monthly PDT Meetings shall be held.

TASK 1.1 PROJECT KICKOFF AND PROJECT TEAM MEETINGS

Project Development Team

A Project Development Team (PDT), for the Preliminary Engineering & Environmental Services Phase, including representatives from the COUNTY, the City of Jurupa Valley, the City of Riverside, Caltrans Local Assistance, and other relevant agencies will be established within fifteen days after Notice to Proceed (NTP). A kick off meeting with the PDT will be held as soon as possible after NTP. PDT meetings with the COUNTY PROJECT MANAGER, and other representatives from affected agencies will be held at least once a month. The environmental team leaders will attend PDT meetings as appropriate. ENGINEER shall prepare minutes for each meeting and distribute the minutes to all attendees and other interested parties.

Kick-off Meeting

This meeting will include:

- Clearly defining work tasks to be accomplished.
- Finalizing the project schedule including critical milestones, and deliverables.

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1 - Identifying and discussing existing project constraints and concerns.

2 **TASK 1.2 QUALITY ASSURANCE / QUALITY CONTROL (QA/QC)**

3 ENGINEER shall have a quality control plan in effect during the entire course of the project.

4 ENGINEER shall develop a plan establishing a process to ensure design calculations are
5 independently checked. Exhibits and plans shall also be checked, corrected and back-checked for
6 accuracy and completeness. ENGINEER shall review Sub-consultant report submittals to ensure that
7 appropriate background information, study methodology, interpretation of data, format and content
8 are completed in accordance with current standards.

9 **TASK 2.0 RESEARCH AND DATA GATHERING**

10 **TASK 2.1 REVIEW EXISTING INFORMATION**

11 Existing topographic mapping, photos, bridge reports, maintenance reports, right-of-way maps, "as-built"
12 plans, record maps and surveys, study reports, assessor maps, contract documents, and any other data
13 will be obtained and reviewed.

14 **TASK 2.2 CONDUCT FIELD REVIEW**

15 A site visit, by all members of the team (including Caltrans Local Assistance, Caltrans Environmental,
16 FHWA, and the COUNTY), will be conducted to obtain information on current conditions, constraints and
17 potential solutions. ENGINEER will complete the Field Review paperwork and coordinate with Caltrans to
18 obtain approval.

19 **TASK 3.0 PRELIMINARY ENGINEERING**

20 **TASK 3.1 TRAFFIC STUDIES**

21 ENGINEER will contact the affected jurisdictions to obtain existing and forecast traffic volumes in the
22 project vicinity. ENGINEER will supplement this data with 24-hour machine counts. ENGINEER will
23 assess the proposed construction staging alternatives to ensure that sufficient roadway capacity will be
24 provided to accommodate traffic during construction.

25 The traffic operations analysis will examine existing and forecast future year conditions in the vicinity of
26 the Market Street Bridge. The future year conditions examined will be project opening year and
27 year 2038. The analysis will include examination of the following locations:

28 Traffic counts will be collected on the Market Street Bridge to assess existing conditions. These will be
29 directional volumes collected in 15 minute increments for a period of at least 24 hours. In addition, A.M.

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1 and P.M. peak period turn volume counts will be collected at Rivera Street/Market Street, SR-60/Market
2 Street, and Via Cerro/Market Street.

3 Existing peak hour traffic conditions and levels of service will be assessed for the locations identified for
4 examination. The levels of service will be calculated using Highway Capacity Manual (HCM)
5 methodologies.

6 Future traffic conditions will be developed using the Southern California Association of Governments
7 (SCAG) Comprehensive Transportation Plan (CTP) traffic model and will be reconciled with the RivTam
8 Model). The budget estimate for this task includes necessary modeling costs. Forecast year 2038 daily
9 and peak period volumes will be developed using the latest available data from the CTP traffic model.

10 The raw traffic model outputs for each of these scenarios will be post-processed according to
11 methodologies approved by SCAG and other regional transportation agencies. The post-processing will
12 include a procedure to extrapolate year 2018 data to year 2038 conditions. Year 2038 volumes will be
13 developed for up to three alternatives.

14 Opening year volumes will be developed by interpolating between existing traffic volumes and year 2038
15 projections.

16 The resulting opening year and year 2038 roadway and intersection levels of service will be calculated
17 using the HCM analysis methodologies.

18 Based on the future levels of service, intersection and mid-block lane geometries will be identified to
19 maintain minimum level of service standards.

20 The results of the traffic operations analysis will be presented in a technical study. This study will
21 document the methodologies used to develop forecast traffic volumes, the level of service analysis
22 methodologies employed, existing traffic conditions, forecast opening year traffic conditions, year 2038
23 traffic conditions, and improvements needed to maintain satisfactory operations under year. A final Traffic
24 Report will be completed to support the Environmental Document and Preliminary Engineering Report.

25 **TASK 3.2 PRELIMINARY UTILITY MAPPING**

26 ENGINEER shall perform a utility search for affected utilities in the project area. The search shall include
27 field review and review of available as-builts for the project area. ENGINEER shall research records for
28 both public and franchise utilities and shall plot the location of all existing facilities. ENGINEER shall
29 include preparation of a database of utility records indicating the type of utility, owner, drawing number,

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1 and other vital information. The identified utility companies shall be sent a letter requesting information
2 regarding existing and proposed utilities. Using the information obtained, ENGINEER shall prepare a
3 utility base map which shall be the basis of the Utility Information Sheet. ENGINEER shall prepare a
4 Utility Information Sheet. The names of all utilities and points of contact shall be developed. A description
5 of the location, existing facility and potential conflicts with the project shall be prepared. ENGINEER shall
6 coordinate with COUNTY and other agencies to arrange with the respective utility owner to pothole its
7 facility as required. ENGINEER shall coordinate the use of County field survey crews to locate potholed
8 utilities by coordinates and elevations based on the project's survey controls.

9 **TASK 3.3 PERMITS**

10 ENGINEER will coordinate with the COUNTY and all required agencies in order to obtain all required
11 encroachment permits and rights-of-entry needed for Phase I activities.

12 **TASK 3.4 SURVEYING AND RIGHT OF WAY MAPPING (by COUNTY)**

13 Surveying/Topographic and Right of Way mapping will be provided by COUNTY forces. ENGINEER is
14 available to provide any surveying/topographic services the COUNTY requires. The COUNTY surveyor
15 will provide the waterway surveyed cross-sections.

16 **TASK 3.5 PRELIMINARY GEOTECHNICAL STUDIES**

17 A preliminary geotechnical report will be prepared for use in the preliminary plans and environmental
18 documents. Initially, a geologic reconnaissance of the alignment will be made. Available existing
19 subsurface information for the project area will be collected, including as-built Logs of Test Borings
20 (LOTBs), geologic maps published by the California Division of Mines and Geology, geologic maps
21 published by the United States Geological Survey and ground water well information. Available aerial
22 photographs will be reviewed. Geologic and groundwater information on file with Riverside County and
23 the University of California at Riverside also will be researched.

24 Based on the review of available data, and the geologic reconnaissance, ENGINEER will provide seismic
25 and geologic information and groundwater data for preliminary plans and environmental documents.
26 ENGINEER will identify any seismic and geologic hazards that will have a significant impact on the design
27 and construction of the project. A report will be prepared documenting the results of the review.

28 Two 130-foot deep borings will be drilled from the banks of the riverbed: one boring will be drilled on the
29 paved trail below the southern bridge abutment, and the other boring will be drilled adjacent to the

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1 earthen levee near the northern bridge abutment. Boreholes will be excavated using a mud-rotary drill rig.
2 Spoils from the borehole excavations will be placed in drums at the bridge site, tested for contaminants,
3 and then removed from the bridge site.

4 Asphalt concrete cold-patch or quick-set Portland cement concrete will be used to replace paving that
5 may be removed to conduct the borehole drilling. Positions and ground surface elevations at the boring
6 will be surveyed by COUNTY surveyor, if required, and the information provided to EMI.

7 ENGINEER will prepare borehole location plans. These plans will be provided to COUNTY, prior to the
8 field investigation, for the purpose of securing the required encroachment permits.

9 ENGINEER will collect soil samples for laboratory testing, including bulk samples of near-surface soils
10 and small disturbed and relatively undisturbed ring samples of deeper soils. The small disturbed and
11 relatively undisturbed soil samples will be collected using split-spoon samplers at vertical intervals of 5
12 feet or 10 feet, alternating between the Standard Penetration Test (SPT) sampler and the Modified
13 California Drive (MCD) sampler. Samples of subsurface soils will be logged during the field investigation,
14 secured in their containers or collected in plastic bags, and transported to a laboratory.

15 Traffic control will be necessary at several locations in order to accomplish the drilling.

16 ENGINEER will observe the existing material type for pavement subgrade. ENGINEER will make a
17 recommendation of the subgrade R-value and determine a flexible pavement section using a traffic index
18 that corresponds to COUNTY standards.

19 Laboratory Testing

20 ENGINEER will select representative soil samples for laboratory testing. Various laboratory tests will be
21 performed to determine or derive physical and engineering characteristics of soils. The anticipated
22 laboratory soil tests include: in-place moisture and density, Passing #200 Sieve, grain size distribution,
23 direct shear tests, and soil corrosion tests. Tests will be conducted in general accordance with California
24 Test (CT) methods or American Society for Testing and Materials (ASTM) standards.

25 Geotechnical Engineering Analyses

26 Results obtained from the field investigation and laboratory testing will be used to characterize subsurface
27 soils and conditions and create idealized profiles for design purposes. The following analyses will be
28 performed for the project:

- 29 – Evaluate seismicity, estimate Peak Ground Accelerations, and determine an ARS curve.

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- 1 – Evaluate liquefaction potential and seismically-induced settlement.
- 2 – Determine axial and lateral capacity of bridge foundations.
- 3 – Evaluate soil corrosivity.

4 All of the above work will be included in the Structure Preliminary Geotechnical Report prepared by the
5 ENGINEER.

6 **TASK 3.6 RIGHT OF WAY REQUIREMENTS MAP**

7 ENGINEER shall prepare a map showing anticipated right of way requirements for each alternative
8 alignment. The right of way requirements map shall provide enough detail to support the decision making
9 process in selecting an alignment.

10 **TASK 3.7 CONCEPTUAL APPROVAL DRAWINGS**

11 Based upon the results of the traffic operational analysis, project mapping, geotechnical study, available
12 data, consultation with ENGINEER'S environmental team and with input from COUNTY, ENGINEER shall
13 develop up to three alternative alignments for the project. ENGINEER shall review with and obtain
14 comments from the County, Caltrans, City, and other stakeholders as approved by the COUNTY.
15 ENGINEER shall prepare a final preferred alignment drawing that will serve to establish the project
16 footprint for subsequent environmental studies. The Conceptual Approval Drawings will contain plan,
17 profile and typical cross sections for each alternative.

18 **TASK 3.8 GEOMETRIC DESIGN DRAWINGS**

19 ENGINEER shall develop base geometric design and cross sections for the preferred alignment.
20 Roadway and Bridge geometries will be developed to satisfy standards for design criteria and to satisfy
21 traffic demand requirements. Roadway geometries will be established to satisfy such requirements as
22 lane width, shoulder width and sight distance. Sight distance calculations will need to include both
23 horizontal and vertical design speed calculations. The establishment of the vertical profile will take into
24 account the depth of the new bridge structures to ensure that no portion of the bridge soffit, girders or
25 deck encroach below the 100-year flood event water surface profile for the Santa Ana River.
26 Development of project geometries will need to be performed to ensure the design is constructible while
27 maintaining existing traffic at all times. Geometric design data and key project features shall be depicted.
28 ENGINEER shall develop preliminary pavement delineation to aid in the analysis of the alternatives.
29 Typical cross sections will be provided. Original ground, traveled way, shoulders, cut/fill slopes and

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1 existing/proposed right-of-way shall be shown. The grading design shall aid in the development of the
2 project footprint, project cost, retaining wall locations, adherence to slope standards, drainage design and
3 direct/indirect project impacts.

4 **TASK 3.9 STAGE CONSTRUCTION DESIGN**

5 ENGINEER shall complete conceptual stage construction designs for the alternatives considered. The
6 stage construction design shall assist in determining constructability, staging sequence, potential detours,
7 construction schedule duration, costs, and temporary construction impacts associated with the project.

8 **TASK 3.10 STRUCTURES ADVANCE PLANNING STUDIES**

9 ENGINEER will provide general plans, bridge renderings and bridge cost estimates for three structural
10 alternatives. These will be compiled into a preliminary Structures Advance Planning Studies in
11 accordance to Caltrans guidelines for each alignment alternative to aid in selecting an alignment and
12 structure type and be used as the basis for environmental studies and geotechnical field work in
13 subsequent phases. The ENGINEER shall prepare the APS plan sheets using the standard Caltrans
14 Bridge General Plan sheet format.

15 ENGINEER shall prepare a Design Memo summarizing important assumptions and considerations
16 involved in the advance planning study alternatives. ENGINEER shall prepare a Preliminary Cost
17 Estimate for the bridge type based on approximate quantities and historical construction costs for similar
18 projects.

19 Construction staging will affect bridge type selection and layout. The original bridge structure consists of
20 a 12-span, simply supported riveted steel plate girders with reinforced concrete deck supported on pier
21 walls and short seat type abutments, all founded on concrete piles.

22 However, It is recommended that the new structure be a cast-in-place, post-tensioned box girder bridge
23 supported on circular columns, seat type concrete abutments, and founded on driven piles or large
24 diameter cast-in-drilled-hole concrete piles.

25 Bridge aesthetics will also be an important consideration. ENGINEER will produce renderings of a variety
26 of aesthetic treatment concepts to aid with the bridge type selection process.

27 **TASK 3.11 VALUE ANALYSIS STUDY**

28 Based on guidance in Chapter 19 of the PDPM, and detailed in the Caltrans VA Team Guide and Report
29 Guide, it suggests the ENGINEER conducts a VA Study. The VA Study shall be conducted over the

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1 course of a 5-day period. Tasks shall include: provide a qualified, independent Certified Value Specialist
2 (CVS) team leader to lead the VA Study in accordance with Caltrans Value methodology; provide VA
3 study documentation in accordance with the Caltrans VA Report Guide; ensure that applicable data and
4 correspondence and any other relevant information necessary for the VA study is collected, developed
5 and distributed; facilitate VA team meetings. The VA team leader shall be responsible for leading the
6 study meetings; developing the draft VA study charter; completing the Preliminary VA Report with
7 input/review of team and technical reviewers; submitting Preliminary VA Report; coordinate responses
8 to preliminary VA Report and prepare for an implementation meeting to resolve the disposition of
9 the VA alternatives; finalize the VA Study Report; submitting the final VA Report; scheduling an
10 implementation meeting. ENGINEER shall provide personnel to assist the VA Study team with CADD
11 support during the study. COUNTY will provide staff outside the project in support of the 5-day VA Study.

12 **TASK 3.12 PRELIMINARY HYDROLOGIC, HYDRAULIC, AND SCOUR STUDIES**

13 ENGINEER will perform a site reconnaissance survey and review all relevant hydrologic, hydraulic and
14 sedimentation data and studies of the Santa Ana River.

15 ENGINEER will research current FEMA data and coordinate with the Riverside County Flood Control &
16 Water Conservation District (FCD) and U.S. Army Corps of Engineers to obtain the design flows for the
17 Santa Ana River at the project site.

18 ENGINEER will perform the hydraulic analysis for the Santa Ana River at the proposed project site to
19 determine the flow characteristics of the design peak flows, including water surface elevations (flow
20 depths) and flow velocities. The analyses will be performed for both the existing and proposed
21 conditions.

22 ENGINEER will perform a floodplain risk assessment for the bridge site to address any potential project
23 impacts to the existing flooding and natural floodplain values. ENGINEER will prepare a Location
24 Hydraulic Study Report and a Flood Plain Evaluation Report (if required) to summarize our findings and
25 recommendations.

26 ENGINEER will perform a bridge scour analysis to determine the scour potential for each bridge crossing,
27 per the methodology specified in the FHWA's technical manuals (HEC-18 and HEC-23).

28 ENGINEER will prepare a Bridge Hydraulics Report to summarize the recommendations and results from
29 the hydraulic and scour analyses for the proposed bridge crossing.

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TASK 3.13 35% ROADWAY PLANS

ENGINEER will prepare 35% roadway plans for the project. The intent of the 35% plans is to gain consensus on project components and plan format, and include as an attachment with the Preliminary Engineering Report. ENGINEER will submit the 35% plans to the COUNTY for comments. The following plan sheets will be included in this submittal.

- Title Sheet
- Typical Cross Sections
- Combined Plan/Profile Sheets
- Utility Sheets
- Drainage Plans
- Pavement Delineation Plans

TASK 3.14 PRELIMINARY HYDROLOGY /DRAINAGE REPORT

ENGINEER shall analyze existing drainage systems for their ability to accommodate future design flows, including proposed improvements. Caltrans and County standards shall be followed for analysis and a Preliminary Hydrology/Drainage Report shall be prepared summarizing findings and proposed drainage improvements.

TASK 3.15 ADVISORY AND MANDATORY FACT SHEETS

ENGINEER shall complete all work necessary in the preparation of Fact Sheets for exceptions to advisory and mandatory design standards.

TASK 3.16 ENGINEER'S ESTIMATE

ENGINEER shall develop preliminary engineer's estimate for three alternatives. The estimate shall be in Caltrans estimate format using escalation cost factors.

TASK 3.17 PRELIMINARY ENGINEERING REPORT

ENGINEER shall prepare a Draft and Final Preliminary Engineering Report conforming to the requirements of the Caltrans PDPM and District 8 guidelines. The report will include as attachments: 35% Plans, Preliminary Stage Construction exhibit, Final Operations Report, Preliminary Hydrology/Drainage Report, Advance Planning Studies, Preliminary Geotechnical Report, Advisory and Mandatory Fact Sheets, and Engineer's Estimate.

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1 **TASK 4.0 ENVIRONMENTAL CLEARANCE & DOCUMENTATION**

2 ENGINEER will perform all required environmental research and analysis necessary for the Project,
3 pursuant to the CEQA and the NEPA requirements, as well as the policies and procedures contained in
4 Caltrans' Environmental Handbook and Local Programs Manual. To obtain environmental approval, key
5 issues to be addressed in the environmental studies include: biology, wetlands, water quality, air quality,
6 visual, hazardous waste, noise, and cultural resources. ENGINEER shall perform all environmental
7 documentation and coordination, which shall include the following:

8 **TASK 4.1 PROJECT INITIATION**

9 As part of project initiation, ENGINEER will coordinate an initial public information meeting to inform local
10 area residents and businesses about the project (this meeting will serve the same function as a scoping
11 meeting, although a scoping meeting is not required for an EA). ENGINEER will conduct all necessary
12 activities to prepare for the meeting in terms of preparing and circulating notices (mailing list of property
13 owners within a 300 foot radius of the project will be provided by the COUNTY), conducting team
14 meetings needed to prepare for the meeting, and making presentations at the meeting itself. COUNTY
15 staff will be responsible for obtaining a meeting location. ENGINEER will be responsible for preparing any
16 large scale exhibits of the project area for use in the meeting.

17 Following a scheduled field visit with the County and Caltrans, ENGINEER will prepare a PES form for the
18 California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) work
19 plan.

20 **TASK 4.2 PRELIMINARY ENVIRONMENTAL STUDY (PES)**

21 The ENGINEER shall prepare the PES Form. This form is considered as a scoping document for the
22 NEPA requirements from Caltrans Local Assistance. The PES Form will identify the recommended
23 federal environmental documentation, technical studies, surveys, approvals, agency coordination, and
24 permits required for the bridge and roadway work. An Area of Potential Effects (APE) boundary will be
25 created for each project alternative that is pursued.

26 During the preparation of the PES Form, the environmental team will review the alternative alignments
27 and identify the studies required and potential impacts for chosen alignment. The preliminary
28 environmental work will assist in determining which project alternative(s) have the least environmental

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1 impact. ENGINEER's internal environmental staff will work with project design staff to integrate
2 environmental concerns into the refinement of the alternatives

3 **TASK 4.3 TECHNICAL STUDIES**

4 ENGINEER shall coordinate the preparation of all necessary and required studies to be included in the
5 Initial Study (IS), leading to a Mitigated Negative Declaration (MND) and Environmental Assessment.
6 Unless otherwise noted, the deliverables for the technical studies will be a separate bound report
7 including a standardized project description, a methodology relevant to each topic area, description of the
8 affected environment, impact assessment and mitigation measures. Each screencheck technical study
9 will be submitted to the COUNTY (two copies) for review. Following COUNTY review the document will be
10 revised and a screencheck technical study will be provided to CALTRANS for review. Following
11 CALTRANS review, a Draft of each technical study will be submitted to the COUNTY and to CALTRANS
12 for concurrent review (all reviews following the screencheck review are assumed to be concurrent).
13 Following CALTRANS and COUNTY review, a second Draft of each technical study will be submitted to
14 the COUNTY and CALTRANS. Following CALTRANS and COUNTY review of the second draft it is
15 assumed that a revisions workshop will be held to address any outstanding comments, if any comments
16 remain. Following the revisions workshop a final version of each report will be prepared. The final
17 technical studies will be submitted following the workshop for final concurrence (no additional comments
18 are assumed to be received associated with the final concurrence review). If the revisions are required
19 due to the quality of the submittal made by CONSULTANT then these revisions would not be considered
20 out of scope.

21 Deliverables:

- 22 • Screencheck technical studies (submitted to COUNTY first then to CALTRANS) digital copy to
23 COUNTY
- 24 • Draft technical studies
- 25 • Second Draft technical studies
- 26 • Final technical studies for concurrence
- 27 • Final approved technical studies

28 Technical studies include the following:

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

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- 1 • Biological Resources
- 2 – Natural Environmental Study
- 3 – Wetlands Delineation
- 4 – Focused Wildlife Surveys
- 5 – Bat Daytime Habitat Assessment
- 6 – Bat Night Emergence Survey (OPTIONAL)
- 7 – MSHCP Consistency Finding
- 8 – Determination of Biologically Equivalent or Superior Preservation (DBESP) Report
- 9 – Endangered Species Act and Section 7 Consultation
- 10 • Cultural Resources
- 11 – Historical Property Survey/Historical Resource Evaluation/Archaeological Survey Report
- 12 – Historic Resources Evaluation Report (OPTIONAL)
- 13 • Air Quality Assessment
- 14 • Noise Analysis
- 15 – Noise Abatement Decision Report (OPTIONAL)
- 16 • Hazardous Waste Study
- 17 – Phase 2 Testing (OPTIONAL)
- 18 • Water Quality Assessment
- 19 • Section 4(f) Evaluation
- 20 • Paleontology Report
- 21 • Visual Impact Assessment

Biological Resources

23 Biological resource issues will be a key element in the design and approval of the Market Bridge project.
24 Wetlands, threatened and endangered species, and designated critical habitat are present in the
25 immediate vicinity of the project site. Potential project impacts to sensitive resources must be addressed
26 in accordance with applicable protocols, regulations, and permitting procedures. ENGINEER will conduct
27 necessary surveys, prepare appropriate documentation, and process permits with regulatory agencies for
28 an expeditious review and approval of the Market Bridge project. The project is a covered activity within

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1 existing Public/Quasi-Public Lands and impacts to covered species are permitted as long as the project is
2 consistent with all relevant MSHCP policies and procedures. Market Street Bridge is not in a criteria area
3 of the MSHCP. Replacement of the Market Street Bridge is a covered activity with special environmental
4 issues due to its location over the Santa Ana River. ENGINEER will utilize every aspect of the MSHCP to
5 simplify and expedite the environmental process for the bridge project.

6 The bridge replacement project may have the potential to impact protected species including the least
7 bell's vireo (*Vireo belli pusillus*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), Los Angeles
8 pocket mouse (*Perognathus longimembris brevinasus*), Santa Ana woolly star (*Eriastrum densifolium*
9 *sanctorum*), the Santa Ana sucker (*Catostomus santaanae*), and Santa Ana sucker Critical Habitat.
10 ENGINEER proposes to conduct focused surveys to allow sufficient time for Section 7 consultation. The
11 bridge replacement is a covered activity within the MSHCP (and covered under Section 10 of the ESA),
12 but they must also undergo Section 7 consultation (due to federal funding on the project) to ensure that
13 conditions of the MSHCP Biological Opinion adequately conserve covered species and habitats within the
14 project area.

15 **Natural Environmental Study (NES)**

16 ENGINEER will perform a literature search and records check for sensitive biological elements
17 reported in the project vicinity, conduct field surveys, and prepare the NES in accordance with
18 Caltrans' Guidance for Consultants. The NES will include an analysis of types and amount of habitats
19 present on site and the importance of these habitats in a regional context. The report will also assess
20 cumulative impacts to these resources based on development in surrounding areas and address
21 areas that may qualify as wetlands, waters of the U.S., or streambed(s). Impacts to wildlife movement
22 will also be assessed. ENGINEER will recommend mitigation measures for the impacts identified
23 during the study, including mitigation measures for impacts to sensitive biological elements.

24 **Wetland Delineation**

25 ENGINEER will complete a focused wetlands delineation and a jurisdictional "waters of the U.S."
26 determination according to the 2008 Corps of Engineers Wetland Delineation Manual Arid West
27 Supplement, the currently accepted methodology. ENGINEER will also determine the extent of any
28 streambed and associated riparian areas subject to review by CDFG under Section 1602 of the Fish
29 and Game Code. The delineation results will be presented in a detailed report with appropriate

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1 technical documentation for use in permit applications. Attendance at field meetings with regulatory
2 agencies for verifying the delineation and for making adjustments to the delineation as directed by the
3 Corps of Engineers may be required.

4 **Focused Wildlife Surveys**

5 A preliminary review of literature resources has identified the potential occurrence of sensitive wildlife
6 species in the project vicinity. The ENGINEER will conduct focused wildlife surveys that are
7 determined necessary during the initial biological reconnaissance and agency coordination; all
8 surveys conducted will be consistent with the Western Riverside County Multiple Species Habitat
9 Conservation Plan. ENGINEER will conduct a rare plant survey. The ENGINEER will conduct surveys
10 in accordance with the latest USFWS and CDFG survey protocols for these species. The following
11 species have a high potential for occurring on the proposed project site and requiring focused
12 surveys:

- 13 – Federal Endangered San Bernardino kangaroo rat (trapping)
- 14 – State Sensitive Species Los Angeles pocket mouse (trapping)
- 15 – Federal Endangered Santa Ana River woolly-star
- 16 – Federal Endangered and CNPS listed San Diego ambrosia
- 17 – Federal Candidate and CNPS listed Brand's Phacelia
- 18 – CNPS listed San Miguel savory
- 19 – Bat Habitat Assessment and optional Nighttime bat survey
- 20 – Santa Ana Sucker Habitat Suitability Assessment

21 **Bat Daytime Habitat Assessment**

22 ENGINEER shall conduct a visual survey of the bridge to identify and record potential day and/or
23 night-roost habitat. A habitat assessment report will be prepared for inclusion in the NES.

24 **Bat Night Emergence Survey (OPTIONAL)**

25 Should the habitat assessment identify the presence of day-roosting bats, ENGINEER shall conduct a
26 night emergence survey. Night vision and bioacoustics equipment shall be used to record bat activity
27 and develop data on species and approximate population. ENGINEER shall complete a report
28 documenting results.

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1 **MSHCP Consistency Finding**

2 ENGINEER will prepare information required for an MSHCP Consistency Finding from the Fish &
3 Wildlife Service and Fish & Game. This task will include a Joint Project Review (JPR) checklist. The
4 MSHCP Consistency Assessment will be included as a separate section in the NES.

5 **Determination of Biologically Equivalent or Superior Preservation (DBESP) Report**

6 Section 6.1.2 of the MSHCP describes procedures that ensure that the riparian habitat functions and
7 values in the Plan Area are maintained. A DBESP will be prepared to demonstrate consistency with
8 the Riparian/Riverine Guidelines and with the Additional Survey Needs and Procedures of the
9 MSHCP in Section 6.3.2., dependent on the results of the focused surveys.

10 **Endangered Species Act and Section 7 Consultation**

11 Section 7 consultation with the USFWS is expected since the project is within designated critical
12 habitat for the Santa Ana Sucker. The consultation will also address the presence of threatened or
13 endangered species. ENGINEER will coordinate with the project team and resource agencies to
14 complete the Section 7 consultation, including preparation of summary documentation and
15 attendance at meetings if required.

16 **Revegetation Plan**

17 To comply with requirements of regulatory agencies including USFWS, NOAA, and CDFG,
18 ENGINEER will develop a revegetation plan that will consist of the plant/seed species selected, a
19 planting plan sheet, and installation details.

20 **Cultural Resources**

21 ENGINEER shall prepare documentation in accordance with Section 106. This work shall include the
22 efforts to record archaeological and historical resources identified within the study area. A Historic
23 Property Survey Report (HPSR) will be prepared to identify and evaluate each cultural resource in the
24 project area and evaluate the potential for impacts this project could have on those resources.

25 **Historic Property Survey Report (HPSR) and Archaeological Survey Report (ASR)** – All cultural
26 resource efforts will be completed in compliance with Section 106 of the National Historic
27 Preservation Act (NHPA) and will follow the requirements set forth in the Caltrans Environmental
28 Handbook Volume II, Cultural Resources and the Programmatic Agreement among the Federal
29 Highway Administration, the Advisory Council on Historic Preservation, the California State Historic

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1 Preservation Officer (SHPO), and the Caltrans Regarding Compliance with Section 106 of the NHPA,
2 as it pertains to the administration of the Federal-aid Highway Program in California.

3 **Historic Resources Evaluation Report (HRER) (OPTIONAL)** – ENGINEER will prepare a Caltrans
4 formatted HRER to evaluate the structural resources within the project footprint, including structures
5 previously not evaluated. The report will evaluate the built environment for structures that are older
6 than 50 years and that have been previously listed on or are eligible for the National Register of
7 Historic Places (NRHP).

8 **Area of Potential Effects (APE) Map** – ENGINEER will coordinate with COUNTY and Caltrans to
9 develop the APE Map for review and approval.

10 **Research** – A cultural resource records search will be conducted at the Eastern Information Center
11 (EIC), located at the UC Riverside. The EIC is the state-designated repository for records concerning
12 cultural resources in Riverside County. The records search will provide information on known cultural
13 resources and on previous cultural resources investigations within a one-mile radius of the project
14 area. Data sources that will be consulted at the EIC include archaeological site and artifact records,
15 historic maps, reports from previous studies, and the state's Historic Resource Inventory for Riverside
16 County, which contains listings for National Register of Historic Places , California Register of
17 Historical Resources, California Historical Landmarks, and California Points of Historical Interest.

18 In addition, ENGINEER will complete research for the properties within the APE to determine built
19 dates for any buildings and structures. If any buildings/structures 30 years and older or archaeological
20 are located within the APE, additional tasks may be required.

21 **Native American Coordination** – ENGINEER will contact the Native American Heritage Commission
22 (NAHC). The NAHC will provide a list of Native American groups to contact regarding this project.
23 ENGINEER will coordinate with the County to consult with the tribes. With County approval,
24 ENGINEER will contact each tribe via certified mail. After 28 days, ENGINEER will follow up with
25 those groups that have not commented via telephone. ENGINEER will document all efforts to consult
26 with each tribe.

27 **Field Survey** – ENGINEER will conduct a systematic field survey of portions of the APE that are not
28 obscured by asphalt/concrete, specifically focusing on the Santa Ana River banks and terraces. The
29 ground surface will be visually examined by an archaeologist for evidence of prehistoric (Native

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1 American) or historic (non-Native American) archaeological materials and other potential historic
2 resources (e.g., buildings, bridges, railroads, mines, or canals). To meet State standards, any
3 previously unrecorded resources identified during the survey will be recorded on State of California
4 DPR 523 forms.

5 **Reports** – ENGINEER will prepare a Caltrans format Historic Property Survey Report (HPSR) and
6 Archaeological Survey Report (ASR) according to Caltrans specifications. The reports will describe:
7 1) the results of Native American Consultation, 2) research and field methods used in identifying
8 cultural resources, 3) the archaeological and historic resources identified in the project vicinity, and 4)
9 the potential of the project to adversely impact any archaeological or historic resources.

10 **Air Quality Impact Assessment**

11 ENGINEER will prepare an Air Quality Impact Assessment for the Project's operation and construction in
12 accordance with the Caltrans' Transportation Project Level Carbon Monoxide (CO) Protocol, the EPA's
13 fugitive dust conformity rule, and the Air Quality Management District's (AQMD) CEQA regulations for the
14 South Coast Air Basin (SCAB).

15 For the description of existing ambient air quality, the report will use baseline and project-setting
16 meteorological and air quality data in the SCAB area developed through the California Air Resources
17 Board (CARB), along with climatological and air quality profile data gathered by the AQMD. Air quality
18 data from the monitoring station (the nearest air quality monitoring station) will be included to help
19 highlight existing air quality local to the proposed project site. Other sources such as regulatory
20 documents, professional publications, and Dokken Engineering's experience in the project area will
21 supplement background information.

22 The project will be undergo Interagency Consultation with SCAG's Transportation Air Quality Conformity
23 Group to confirm it is not a Project of Air Quality Concern, per the Environmental Protection Agency's
24 Criteria for Projects of Air Quality Concern (40 CFR 93.123 (b)(1)). The proposed Project's impacts on the
25 local and regional fugitive dust emissions (PM2.5 and PM10) will be evaluated using the Environmental
26 Protection Agency's Transportation Conformity Guidelines for Qualitative Hot-spot Analyses in PM2.5 and
27 PM10 Nonattainment and Maintenance Areas. Carbon Monoxide hot-spot analysis will be performed
28 following Caltrans' Transportation Project-Level Carbon Monoxide Protocol. A separate Air Quality
29 Conformity Analysis will be prepared following public circulation of the Environmental Assessment and

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1 provided to FHWA for the final project-level conformity determination. ENGINEER will work with Caltrans
2 and the AQMD to identify feasible mitigation measures that will be developed as indicated in the impact
3 analysis.

4 **Noise Study Report**

5 ENGINEER will prepare a Noise Study Report that assesses the Project's potential effects on existing
6 and future noise conditions, including construction impacts. ENGINEER will review applicable State
7 (Caltrans) and County noise and land use compatibility criteria for the project area. Noise standards
8 regulating noise impacts, including Federal Highways (FHWA) Noise Abatement Criteria (NAC), and
9 standards included in the County's Noise Ordinance, will be discussed for land uses adjacent to the
10 Project. The areas with potential future noise impacts have been identified using land use information,
11 aerial photographs, and field reconnaissance. Existing roadway traffic noise will be calculated as
12 baseline conditions, using traffic data included in the traffic study for the proposed Project. Onsite noise
13 measurements will be taken to quantify existing ambient noise and to identify variations in sound levels
14 throughout a day.

15 A survey of existing ambient noise levels will be conducted to establish the character of the noise
16 environment at any sensitive receptor locations in the project area. Analysis requirements will be based
17 on the sensitivity of the area and the Noise Ordinance specifications of the County. The existing and
18 future noise levels will be assessed using the traffic noise impact screening procedure outlined in Section
19 N-4000 of the Caltrans Technical Noise Supplement (TeNS). If the proposed Project fails the screening
20 criteria, a detailed analysis will be performed as outlined in section N-5000 of the TeNS using the most
21 recent version of the Traffic Noise Model 2.5 (TNM 2.5). If the future with-project noise levels are
22 estimated to approach or exceed the Noise Abatement Criteria, noise abatement measures (such as
23 sound barriers) will be analyzed and any necessary abatement measures will be assessed for feasibility
24 and reasonableness. If both feasible and reasonable, abatement measures will be included in the Project
25 to reduce potential noise impacts to a less than significant level.

26 **Noise Abatement Decision Report (NADR) (OPTIONAL)** - Based on the Noise Study Report, if
27 noise impacts warrant abatement, ENGINEER will prepare a Noise Abatement Decision Report
28 (NADR). The NADR will be completed by the project design engineer and will evaluate the
29 reasonableness and feasibility of constructing the noise abatement. This will be based on

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1 constructability of the barrier, cost of building the barriers, and allotment of abatement cost per
2 resident. If a soundwall is evaluated as both reasonable and feasible, ENGINEER will coordinate with
3 the public to determine if they want the wall.

4 **Hazardous Waste (Initial Site Assessment)**

5 ENGINEER will prepare a Hazardous Waste Initial Site Assessment (ISA), including the tasks described
6 below. Complete a governmental records search to update the listing of properties or known incidents
7 shown on federal and State databases for hazardous waste sites within one-half mile of the project area
8 included in the previous ISA. Conduct a site visit to identify any visible exterior areas of potential
9 contamination that might impact the proposed project implementation. If hazardous waste sites are
10 identified within the project study area (via governmental records and/or the visual survey), ENGINEER
11 will determine the potential impact to the project, and will identify subsequent procedures to determine the
12 extent of contamination and remediation requirements.

13 **Phase 2 Testing (OPTIONAL)** – ENGINEER will perform a limited Phase II Environmental Site
14 Assessment to further evaluate any potential hazardous waste issues raised during the ISA. The
15 Phase II assessment includes collecting and analyzing soil/water samples and documenting the
16 conclusions and recommendations in a report.

17 **Water Quality Assessment**

18 ENGINEER will prepare a Water Quality Assessment Report in accordance with the current Caltrans
19 guidelines and outline in support of the NEPA document and utilize a Transportation Project Guidance
20 (TPG) and Transportation Project BMP Template to address the project impacts on water quality based
21 on current County guidelines (Santa Ana Region MS4 Permit Program). The reports will discuss
22 receiving water conditions, objectives, and beneficial uses, as well as standard best management
23 practices (BMPs) and project design features required in accordance with the current County and
24 Caltrans standards. Additionally, compliance with the National Pollution Discharge Elimination System
25 (NPDES) requirements from the WQCB, in accordance with the NPDES general construction activity
26 storm water discharge permit, will be identified. Likewise, compliance with Section 401 of the Clean
27 Water Act will ultimately be necessary (water quality certification). With the requirements and BMPs
28 specified in the Water Pollution Prevention, County of Riverside – Guidance and Standards, specific
29 mitigation measures will be identified that ensure no significant water quality impacts.

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1 **Section 4(f) Evaluation**

2 The project has the potential to impact Section 4(f) resources (public parklands, recreation facilities, and
3 sites listed on or eligible for listing on the National Register of Historic Places), including the Santa Ana
4 Regional trail on the south side of the river. ENGINEER will prepare a de minimis Section 4(f) Evaluation
5 to discuss minimization and avoidance measures and to document any impacts to the 4(f) resources.

6 **Paleontological Report**

7 ENGINEER will prepare a Caltrans format Paleontological Identification Report / Paleontological
8 Evaluation Report (PIR / PER) to evaluate the potential to encounter paleontological resources during
9 ground-disturbing activities.

10 **Visual Impact Assessment**

11 ENGINEER will assess existing visual resource conditions in the project area. The assessment will
12 include an inventory including photographic documentation of the following existing conditions:
13 viewpoints; notable visual resources; the vividness, intactness, and unity of the project area; and, the
14 site's landscape units. Photographs will be taken to be used in the analysis and for graphics.
15 ENGINEER will collect and review the appropriate municipal plans from the County. The plans will be
16 reviewed for applicable guidelines, policies, and objectives pertaining to highway facilities and visual
17 resources. The Visual Impact Assessment will be completed under the direction of a certified landscape
18 architect.

19 Pre-project conditions will include a definition of landscape units within the project area, a regulatory
20 setting, and explanation of the methodology used. The analysis will be performed using methods and
21 protocol developed by the FHWA and adopted by Caltrans, in combination with elements of other visual
22 resources assessment methods (including U.S. Forest Service and Bureau of Land Management). The
23 analysis will be performed using a matrix to compare visual resources within defined landscape units, and
24 will include: visual quality and character; the viewers and viewpoints; and, changes in vividness,
25 intactness, and unity. Photograph simulations will be prepared in order for the County, agencies, and
26 interested public to compare existing and proposed conditions of the project area.

27 **TASK 4.4 ADMINISTRATIVE DRAFT IS/EA**

28 Concurrent with the preparation of the technical studies, ENGINEER shall prepare a comprehensive
29 Administrative Draft IS/EA for COUNTY, Caltrans, and FHWA review. The format shall be based on

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1 Caltrans/FHWA requirements and will also meet the COUNTY's CEQA compliance procedures The IS/EA
2 shall contain the following, consistent with Caltrans/FHWA requirements:

- 3 I. COVER SHEET
- 4 II. SUMMARY
- 5 III. TABLE OF CONTENTS
- 6 IV. PURPOSE AND NEED FOR PROJECT
- 7 V. DESCRIPTION OF PROPOSED PROJECT (INCLUDING ALTERNATIVES)
- 8 VI. AFFECTED ENVIRONMENT
- 9 VII. ENVIRONMENTAL EVALUATION
- 10 VIII. CONSULTATION AND COORDINATION
- 11 IX. LIST OF PREPARERS
- 12 X. DETERMINATION

13 **TASK 4.5 DRAFT IS/EA FOR PUBLIC REVIEW**

14 ENGINEER shall prepare and complete revisions to the Administrative Draft IS/EA pursuant to review
15 comments. Annotated copies of agency comments will be provided to document how each comment was
16 addressed. ENGINEER shall prepare and reproduce the Draft IS/EA for submittal to the COUNTY,
17 Caltrans, and FHWA for approval to circulate the Draft IS/EA for public review. Once approved,
18 ENGINEER will circulate the Draft IS/EA to a distribution list to be approved by the COUNTY and
19 Caltrans. Copies of the Draft IS/EA shall be circulated for public review. ENGINEER shall prepare a draft
20 public notice regarding the availability of the Draft IS/EA for public review. The ENGINEER shall be
21 responsible for preparing and publishing the final notice. In addition, ENGINEER will file a Notice of
22 Completion with the State Clearinghouse to begin the required public review period.

23 **TASK 4.6 PUBLIC REVIEW**

24 ENGINEER will coordinate a second public information meeting during the public review period. The
25 materials developed for the initial public meeting will be updated as necessary. A public hearing will be
26 scheduled as part of a regular Board of Supervisors meeting to receive any verbal public comments on
27 the project. ENGINEER will attend this hearing and will give a brief presentation on the environmental
28 document, if necessary.

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TASK 4.7 DRAFT MITIGATED NEGATIVE DECLARATION/FONSI (MND/FONSI)

ENGINEER will confer with COUNTY and Caltrans staff to review written comments and comments from public meetings and hearings to develop a general framework and strategies for preparation of responses. ENGINEER shall prepare written responses to comments received on the Draft IS/EA and prepare the Draft Mitigated Negative Declaration/Finding of No Significant Impact (ND/FONSI). ENGINEER shall submit copies of the comments received and draft responses as part of the Draft MND/FONSI.

TASK 4.8 FINAL ND/FONSI

ENGINEER will incorporate the final comments and responses into the MND/FONSI and will submit one master document for approval of the Mitigated Negative Declaration by the COUNTY, and the Finding of No Significant Impact by Caltrans and FHWA. As part of this task, ENGINEER will prepare a Mitigation Monitoring and Reporting Program (MMRP) /Environmental Commitments Record (ECR) consistent with the final mitigation measures identified in the MND/FONSI as required for CEQA. Following approval of the MND/FONSI, ENGINEER will submit copies of the approved document for distribution to the agencies that commented on the Draft IS/EA. These documents will be provided to commenting agencies at least 10 days prior to the Riverside County Board of Supervisors approval of the MND. ENGINEER shall prepare a draft Notice of Determination to be submitted to the State Clearinghouse following the Board's approval of the MND. Following approval of the MND, Caltrans will be responsible for approving the FONSI.

TASK 4.9 ENVIRONMENTAL PERMITS (GEOTECHNICAL FOR PHASE I)

Geotechnical Permits are necessary prior to geotechnical investigations being conducted within the Santa Ana River floodway. ENGINEER will prepare a General Section 401 Water Quality Certification Order Notification to comply with the Federal Clean Water Act. Geotechnical investigations are covered under the ACOE NWP 6 (Survey Activities); therefore, individual notification is not necessary. In addition, ENGINEER will prepare a Section 1602 Notification of Streambed Alteration for CDFG. ENGINEER will be responsible for providing checks to each permitting agency for their permit filing. Construction permits will be obtained in Phase II.

APPENDIX B – SCHEDULE OF SERVICES

ARTICLE BI • INTRODUCTION

The Engineer shall perform the covenants set forth in Appendix A, Scope of Services in accordance with the performance requirements of Article V of this agreement and with the following Schedule of Services. All Covenants set forth in this agreement shall be completed by February 23, 2022, unless extended by supplemental agreement.

A. PHASES

The Schedule is divided into the following Phase:

Phase I Preliminary Engineering/Environmental Clearance/Tech Report

B. GANTT CHART

A gantt chart is provided below that graphically illustrates the sequencing and completion time for the project phase.

Project / Task	Task Start	Task Finish	2017												2018												2019												2020											
			J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J						
Project Report / 30% PS&E	Feb 2017	Apr 2020	[Gantt bar spanning from Feb 2017 to Apr 2020]																																															
Environmental Document / Tech Studies (NEPA, CEQA)	Apr 2017	Feb 2020	[Gantt bar spanning from Apr 2017 to Feb 2020]																																															

Satisfactory performance and completion of the Services under this Agreement shall be compensated based upon actual costs plus a fixed fee. COUNTY will reimburse ENGINEER for actual costs (including labor costs, overhead, and other direct costs) incurred by ENGINEER in performance of the work, exclusive of any fixed fee. A prorata portion of ENGINEER's fixed fee shall be included in the progress payments. Actual costs shall not exceed the estimated costs without prior written agreement between COUNTY and ENGINEER.

APPENDIX C - BUDGET

ARTICLE CI • ELEMENTS OF COMPENSATION

Compensation for the Services 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 ENGINEER's personnel directly engaged in performance of the Services under the Agreement. Salary rates for specific employees shall be provided on the Fee Proposal Worksheets included in ARTICLE CV • COST PROPOSAL. All Salary rates shall be in effect for three years following the effective date of the Agreement. Thereafter, ENGINEER may request adjustments to individual rates on an annual basis. ENGINEER 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	76.88%
-------------------	--------

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	80.40%
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The decimal ratio of allowable Overhead Costs to ENGINEER firm's total direct salary costs. Allowable Overhead Costs include general, administrative and overhead costs of maintaining

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1 and operating established offices, and consistent with established firm policies, and as defined
2 in the Federal Acquisitions Regulations, Part 31.2.

3 TOTAL MULTIPLIER 157.28%

4 (sum of Payroll Additives and Overhead Costs)

5 **B. FIXED FEE**

- 6 1. The Total Fixed Fee payable to the ENGINEER is \$95,004 (PRIME CONSULTANT Profit)
7 2. A pro-rata share of the Fixed Fee shall be applied to the total Direct Labor Costs expended for
8 services each month, and shall be included on each monthly invoice.

9 **C. OTHER DIRECT EXPENSES**

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

12 Rates for identified Additional Direct Costs are as follows:

13	Item	Rate	Unit
14	ADL Report	\$10,000	Lump Sum
15	Paleontology Record Search	\$900	Lump Sum
16	EDR Report	\$600	Lump Sum
17	Protocol Level Surveys for Avian	\$18,000	Lump Sum
18	NOD fee	\$2,151	Lump Sum
19	Structure Aesthetics	\$15,000	Lump Sum
20	Utility Potholing	\$30,000	Lump Sum
21	VIA Review	\$5,000	Lump Sum
22	Geotech Permit Fee	\$5,000	Lump Sum
23	Cultural Record Search	\$900	Lump Sum

24 **D. OUTSIDE SERVICES**

25 Outside services shall be paid in accordance with the cost proposals submitted by each Subconsultant.
26 Billings for Outside Services shall be submitted along with the Prime Consultant's monthly
27 Progress Report/Billing submittals and shall be in conformance with the COUNTY Engineering Services
28 Invoicing Procedures.

ARTICLE CII- 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

Direct Salary Rates shown herein are in effect for the duration of the Agreement. In the event ENGINEER desires to adjust the rates as shown; ENGINEER shall notify COUNTY in writing requesting a change. All adjustments to the rates shall be subject to approval by the County Director of Transportation, or his designee.

POSITION OR CLASSIFICATION MAXIMUM HOURLY RATES

Principal in Charge	\$90.00 - \$130.00
Project Manager	\$50.00 - \$90.00
Project Engineer	\$45.00 - \$75.00
Senior Engineer	\$50.00 - \$90.00
Associate Engineer	\$35.00 - \$55.00
Assistant Engineer	\$25.00 - \$35.00
Senior Environmental Planner	\$40.00 - \$80.00
Associate Environmental Planner	\$35.00 - \$55.00
Environmental Planner	\$20.00 - \$40.00
Senior CAD/Detailer	\$40.00 - \$60.00
Engineering Technician	\$20.00 - \$40.00

The above rates are for ENGINEER only. All rates for subconsultants to ENGINEER will be in accordance with the subconsultant cost proposals.

ARTICLE CIII • INVOICING

ENGINEER shall submit invoices in accordance with the Engineering Services Agreement ARTICLE VI - COMPENSATION and with the following requirements.

1. Charges shall be billed in accordance with the terms and rates included herein, unless otherwise agreed in writing by the County Contract Administrator.
2. Base Work and Extra Work shall be charged separately, and the charges for each Phase listed in Appendix B, Schedule of Services, shall be listed separately. The charges for each individual assigned under this Agreement shall be listed separately.
3. Charges of \$500.00 or more for any one item of Additional Direct Costs shall be accompanied by substantiating documentation such as invoices, telephone logs, etc.
4. Each invoice shall indicate payments to DBE subconsultants or supplies by dollar amount and as a percentage of the total invoice and shall state the DBE goals as a percentage of Total Agreement Value.
5. Each invoice shall bear a certification signed by the Engineering Contract Manager or an officer of the firm which reads as follows:

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

ARTICLE CIV • PAYMENT

Progress payments shall be made in accordance with the Engineering Services, Agreement ARTICLE VI • COMPENSATIONS.

ARTICLE CV • COST PROPOSAL

The following cost proposal reflects the negotiated targeted contract amount. The cost proposal will serve as a guideline and reference document during the execution of this contract. ENGINEER shall be compensated in accordance with the rates provided. The total amount of the contract is not to exceed \$1,270,659.23. Reimbursement is to be made at actual cost plus fixed fee. However, billing shall not exceed the rates provided in Section B above or the rates provided in the attached Fee Proposal Worksheets below. Written approval from the COUNTY PROJECT MANAGER is required to expend any contingency funds.

**APPENDIX C1 • PRELIMINARY ENGINEERING & ENVIRONMENTAL
FEE PROPOSAL WORKSHEETS**

Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)

November 29, 2016

COMPANIES	PHASE I	PHASE II	PHASE III	PHASE IV	TOTAL
Dokken Engineering Prime	\$ 1,132,597.66				\$ 1,132,597.66
Earth Mechanics Inc. Geotech	\$ 50,781.22				\$ 50,781.22
Fehr & Peers Traffic	\$ 17,382.24				\$ 17,382.24
WRECO Hydraulics	\$ 30,427.36				\$ 30,427.36
VMS Value Analysis	\$ 39,470.75				\$ 39,470.75
TOTAL	\$ 1,270,659.23				\$ 1,270,659.23

Phase I **Preliminary Engineering & Environmental**

Phase II **Plans, Specs & Estimates**

Phase III **Bid Support**

Phase IV **Construction Support**

MANHOUR WORKSHEET

COMPANY:

Dokken Engineering

PROJECT:

Replacement of Market Street Bridge at Santa Ana River (Br. No. 56C-0024)

SCOPE OF WORK:

Preliminary Engineering & Environmental

Phase I

November 29, 2016

PRINCIPAL IN CHARGE	PROJECT MANAGER	STRUCTURES ENGINEER	SENIOR ENGINEER	SENIOR ENVIRON PLANNER	ASSOCIATE ENGINEER	ASSISTANT ENGINEER	ASSOC. ENV. PLANNER	ENV. PLANNER/BIOLOGIST	SR CAD/DRAWER	ENGINEERING TECHNICIAN	HOURS	COST
\$311.31	\$212.26	\$186.79	\$183.96	\$212.26	\$133.01	\$84.90	\$101.88	\$84.90	\$149.99	\$70.75		

Total Manhours

92	1,386	378	220	458	1,476	1,060	1,340	729	138	120	7,397	
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TASK 1 PROJECT MANAGEMENT

1.1 Project Kickoff and Project Team Meetings	12	860	160	16	80	160	64					1,352	\$ 263,888
1.2 QA/QC	80	80		80	36							276	\$ 64,243

TASK 2 RESEARCH AND DATA GATHERING

2.1 Review Existing Information	16	20		12	40	40						128	\$ 18,396
2.2 Conduct Field Review	40	20		12	20	8						100	\$ 18,113

TASK 3 PRELIMINARY ENGINEERING

3.1 Traffic Studies	40		40			110	40					230	\$ 33,876
3.2 Preliminary Utility Mapping	16					80	100					196	\$ 22,527
3.3 Permits	4					14						18	\$ 2,711
3.4 Surveying & Right of Way Mapping (by County)	8	2				16						26	\$ 4,200
3.5 Preliminary Geotechnical Studies	16	16				24						56	\$ 9,577
3.6 Right of Way Requirements Map	18					60	80			20		178	\$ 20,009
3.7 Conceptual Approval Drawings	24					110	140		8	20		302	\$ 34,227
3.8 Geometric Design Drawings	24	16				80	120			20		260	\$ 30,327
3.9 Stage Construction Design	24					80	80					184	\$ 22,527
3.10 Structures Advance Planning Studies	20	80				60	80		50			290	\$ 41,461
3.11 Value Analysis Study	20	24	40			40						124	\$ 21,407
3.12 Prelim. Hydrologic, Hydraulic, & Scour Studies	24	8	16			32	12					92	\$ 14,807
3.13 35% Roadway Plans	20	12	8			80	180			20		320	\$ 35,297
3.14 Preliminary Hydrology/Drainage Report	12		20			72	20			20		144	\$ 18,916
3.15 Advisory and Mandatory Fact Sheets	20					80	40			10		150	\$ 18,990
3.16 Engineer's Estimate	16	8				32	40			10		106	\$ 13,250
3.17 Preliminary Engineering Report	20	12				120	80					232	\$ 29,240

